**Supplementary Table 1. The gene information of bulk RNA-seq and single-cell RNA-seq from the GSE57691 and GSE47472 databases.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **GSE57691** | **title** | **geo\_accession** | **characteristics\_ch1** | **characteristics\_ch1.1** | **GEO** |
| GSM1386783 | small AAA\_Sample 1 | GSM1386783 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386784 | small AAA\_Sample 2 | GSM1386784 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386785 | small AAA\_Sample 3 | GSM1386785 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386786 | small AAA\_Sample 4 | GSM1386786 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386787 | small AAA\_Sample 5 | GSM1386787 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386788 | small AAA\_Sample 6 | GSM1386788 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386789 | small AAA\_Sample 7 | GSM1386789 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386790 | small AAA\_Sample 8 | GSM1386790 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386791 | small AAA\_Sample 9 | GSM1386791 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386792 | small AAA\_Sample 10 | GSM1386792 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386793 | small AAA\_Sample 11 | GSM1386793 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386794 | small AAA\_Sample 12 | GSM1386794 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386795 | small AAA\_Sample 13 | GSM1386795 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386796 | small AAA\_Sample 14 | GSM1386796 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386797 | small AAA\_Sample 15 | GSM1386797 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386798 | small AAA\_Sample 16 | GSM1386798 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386799 | small AAA\_Sample 17 | GSM1386799 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386800 | small AAA\_Sample 18 | GSM1386800 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386801 | small AAA\_Sample 19 | GSM1386801 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386802 | small AAA\_Sample 20 | GSM1386802 | disease state: small AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386803 | large AAA\_Sample 21 | GSM1386803 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386804 | large AAA\_Sample 22 | GSM1386804 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386805 | large AAA\_Sample 23 | GSM1386805 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386806 | large AAA\_Sample 24 | GSM1386806 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386807 | large AAA\_Sample 25 | GSM1386807 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386808 | large AAA\_Sample 26 | GSM1386808 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386809 | large AAA\_Sample 27 | GSM1386809 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386810 | large AAA\_Sample 28 | GSM1386810 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386811 | large AAA\_Sample 29 | GSM1386811 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386812 | large AAA\_Sample 30 | GSM1386812 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386813 | large AAA\_Sample 31 | GSM1386813 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386814 | large AAA\_Sample 32 | GSM1386814 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386815 | large AAA\_Sample 33 | GSM1386815 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386816 | large AAA\_Sample 34 | GSM1386816 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386817 | large AAA\_Sample 35 | GSM1386817 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386818 | large AAA\_Sample 36 | GSM1386818 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386819 | large AAA\_Sample 37 | GSM1386819 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386820 | large AAA\_Sample 38 | GSM1386820 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386821 | large AAA\_Sample 39 | GSM1386821 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386822 | large AAA\_Sample 40 | GSM1386822 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386823 | large AAA\_Sample 41 | GSM1386823 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386824 | large AAA\_Sample 42 | GSM1386824 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386825 | large AAA\_Sample 43 | GSM1386825 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386826 | large AAA\_Sample 44 | GSM1386826 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386827 | large AAA\_Sample 45 | GSM1386827 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386828 | large AAA\_Sample 46 | GSM1386828 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386829 | large AAA\_Sample 47 | GSM1386829 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386830 | large AAA\_Sample 48 | GSM1386830 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386831 | large AAA\_Sample 49 | GSM1386831 | disease state: large AAA | subjects: patients with AAA undergoing open surgery to treat AAA | GSE57691 |
| GSM1386841 | Donor\_Sample 59 | GSM1386841 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386842 | Donor\_Sample 60 | GSM1386842 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386843 | Donor\_Sample 61 | GSM1386843 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386844 | Donor\_Sample 62 | GSM1386844 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386845 | Donor\_Sample 63 | GSM1386845 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386846 | Donor\_Sample 64 | GSM1386846 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386847 | Donor\_Sample 65 | GSM1386847 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386848 | Donor\_Sample 66 | GSM1386848 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386849 | Donor\_Sample 67 | GSM1386849 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| GSM1386850 | Donor\_Sample 68 | GSM1386850 | disease state: control | subjects: heart-beating, brain-dead donors | GSE57691 |
| **GSE47472** | **title** | **geo\_accession** | **characteristics\_ch1** | **characteristics\_ch1.1** | **GEO** |
| GSM1150689 | AAA neck (Sample 1) | GSM1150689 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150690 | AAA neck (Sample 2) | GSM1150690 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150691 | AAA neck (Sample 3) | GSM1150691 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150692 | AAA neck (Sample 4) | GSM1150692 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150693 | AAA neck (Sample 5) | GSM1150693 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150694 | AAA neck (Sample 6) | GSM1150694 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150695 | AAA neck (Sample 7) | GSM1150695 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150696 | AAA neck (Sample 8) | GSM1150696 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150697 | AAA neck (Sample 9) | GSM1150697 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150698 | AAA neck (Sample 10) | GSM1150698 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150699 | AAA neck (Sample 11) | GSM1150699 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150700 | AAA neck (Sample 12) | GSM1150700 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150701 | AAA neck (Sample 13) | GSM1150701 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150702 | AAA neck (Sample 14) | GSM1150702 | subjects: patient with AAA undergoing open surgery to treat AAA | tissue type: non-aneurysmal AAA neck tissue | GSE47472 |
| GSM1150703 | Donor (Sample 15) | GSM1150703 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150704 | Donor (Sample 16) | GSM1150704 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150705 | Donor (Sample 17) | GSM1150705 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150706 | Donor (Sample 18) | GSM1150706 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150707 | Donor (Sample 19) | GSM1150707 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150708 | Donor (Sample 20) | GSM1150708 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150709 | Donor (Sample 21) | GSM1150709 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |
| GSM1150710 | Donor (Sample 22) | GSM1150710 | subjects: heart-beating, brain-dead donor | tissue type: normal aortic tissue | GSE47472 |

**Supplementary Table 3. The differential expression genes between AAA and normal patients from the AAA Combined Datasets.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **logFC** | **Average expression** | **T value** | **P. Value** | **Adjust P. Value** | **Bold** |
| ANGPTL6 | 0.867251 | -0.02187 | 9.240762 | 1.74E-14 | 2.73E-10 | 22.45267 |
| ADAMTS6 | 0.539117 | -0.04396 | 9.063432 | 3.98E-14 | 2.73E-10 | 21.66192 |
| PLXDC1 | 0.55632 | -0.02797 | 9.045036 | 4.33E-14 | 2.73E-10 | 21.57986 |
| R3HCC1 | -0.67499 | -0.07151 | -8.96438 | 6.31E-14 | 2.98E-10 | 21.22004 |
| HES6 | -0.79719 | 0.020628 | -8.79029 | 1.42E-13 | 5.38E-10 | 20.44325 |
| CSNK2A2 | -1.00844 | -0.05456 | -8.69043 | 2.27E-13 | 6.12E-10 | 19.99777 |
| ZNF354B | 0.776326 | -0.07601 | 8.665738 | 2.54E-13 | 6.12E-10 | 19.88759 |
| PVT1 | 0.786531 | -0.12826 | 8.661647 | 2.59E-13 | 6.12E-10 | 19.86934 |
| OR4D1 | 0.780202 | 0.020294 | 8.567942 | 4.01E-13 | 8.42E-10 | 19.4514 |
| LINC01210 | 1.031805 | -0.05193 | 8.496757 | 5.59E-13 | 1.06E-09 | 19.13401 |
| TBXA2R | -0.65615 | 0.299248 | -8.45777 | 6.70E-13 | 1.07E-09 | 18.96022 |
| KLF15 | -0.79723 | -0.11929 | -8.45504 | 6.78E-13 | 1.07E-09 | 18.94808 |
| ZNF462 | -1.46481 | -0.0982 | -8.36674 | 1.02E-12 | 1.49E-09 | 18.55462 |
| UBL5 | -0.66551 | 0.209138 | -8.32595 | 1.24E-12 | 1.67E-09 | 18.37296 |
| BTC | -0.75567 | -0.14906 | -8.13593 | 2.99E-12 | 3.54E-09 | 17.52755 |
| PPP1R12C | -1.17363 | 0.055226 | -8.02619 | 4.98E-12 | 5.29E-09 | 17.04005 |
| GUCY2F | 0.605424 | -0.09531 | 8.023871 | 5.03E-12 | 5.29E-09 | 17.02976 |
| FOXP4 | 0.520862 | 0.119129 | 7.969832 | 6.46E-12 | 6.36E-09 | 16.78996 |
| ZNF324B | 0.628616 | -0.08788 | 7.961009 | 6.73E-12 | 6.36E-09 | 16.75083 |
| HBA2 | 1.903505 | 0.271811 | 7.872515 | 1.01E-11 | 8.72E-09 | 16.3586 |
| EFCC1 | 0.765363 | -0.13263 | 7.823302 | 1.27E-11 | 1.05E-08 | 16.1407 |
| DKFZP564C152 | -0.91924 | -0.02439 | -7.79919 | 1.42E-11 | 1.12E-08 | 16.03401 |
| MELK | 0.7024 | 0.151969 | 7.752761 | 1.76E-11 | 1.33E-08 | 15.8287 |
| MRGBP | -0.74682 | -0.08106 | -7.70212 | 2.23E-11 | 1.62E-08 | 15.60496 |
| TRIM58 | 0.764203 | -0.02813 | 7.651266 | 2.82E-11 | 1.97E-08 | 15.38048 |
| HSBP1 | -0.70179 | -0.00622 | -7.61756 | 3.29E-11 | 2.20E-08 | 15.23184 |
| WDR82 | -1.64667 | -0.01773 | -7.612 | 3.37E-11 | 2.20E-08 | 15.20733 |
| METTL22 | -0.59952 | 0.018665 | -7.58464 | 3.83E-11 | 2.41E-08 | 15.08675 |
| CYP4F3 | 0.552942 | 0.138303 | 7.566301 | 4.16E-11 | 2.54E-08 | 15.00597 |
| C8orf59 | -1.17642 | -0.20017 | -7.47678 | 6.28E-11 | 3.60E-08 | 14.61213 |
| NDUFS3 | -0.81641 | -0.075 | -7.46948 | 6.50E-11 | 3.61E-08 | 14.58002 |
| NXPH3 | -0.83682 | -0.13054 | -7.42844 | 7.84E-11 | 4.24E-08 | 14.39978 |
| CLN5 | -0.92083 | -0.02056 | -7.40408 | 8.77E-11 | 4.60E-08 | 14.2929 |
| FGF9 | 0.578332 | 0.219723 | 7.351578 | 1.11E-10 | 5.57E-08 | 14.06271 |
| HBB | 1.731428 | -0.00287 | 7.350636 | 1.12E-10 | 5.57E-08 | 14.05858 |
| RSL1D1 | -0.71705 | -0.07672 | -7.30721 | 1.37E-10 | 6.45E-08 | 13.86843 |
| HDAC7 | 0.535361 | 0.010517 | 7.29927 | 1.42E-10 | 6.53E-08 | 13.8337 |
| MFHAS1 | -0.81993 | -0.02374 | -7.25872 | 1.70E-10 | 7.67E-08 | 13.6564 |
| EPB41L1 | 0.515388 | 0.150089 | 7.176766 | 2.48E-10 | 1.06E-07 | 13.29869 |
| ARG2 | -0.56981 | -0.08093 | -7.16428 | 2.62E-10 | 1.10E-07 | 13.24429 |
| TRPC1 | -0.86858 | -0.08145 | -7.12931 | 3.07E-10 | 1.24E-07 | 13.09195 |
| GFOD1 | -0.91518 | -0.14882 | -7.09052 | 3.66E-10 | 1.43E-07 | 12.92323 |
| COL13A1 | -0.96107 | -0.09875 | -7.08502 | 3.76E-10 | 1.43E-07 | 12.89928 |
| FOXO1 | -0.92497 | -0.01253 | -7.08297 | 3.79E-10 | 1.43E-07 | 12.89041 |
| NR2F6 | -1.06438 | -0.05617 | -7.05425 | 4.32E-10 | 1.60E-07 | 12.76561 |
| LOC101928030 | 0.513543 | -0.0152 | 7.042171 | 4.56E-10 | 1.63E-07 | 12.71318 |
| CDK19 | -0.88003 | -0.01552 | -7.0289 | 4.85E-10 | 1.70E-07 | 12.65558 |
| CTBP1 | -0.55041 | 0.215761 | -7.01786 | 5.10E-10 | 1.71E-07 | 12.60771 |
| ITGB1BP1 | -0.78374 | 0.218694 | -7.01701 | 5.12E-10 | 1.71E-07 | 12.60401 |
| GGNBP2 | -0.88894 | -0.04026 | -7.0158 | 5.14E-10 | 1.71E-07 | 12.59878 |
| GRK5 | -0.56777 | 0.121399 | -7.00727 | 5.35E-10 | 1.74E-07 | 12.56179 |
| MRPL24 | -0.61858 | 0.080137 | -6.99791 | 5.58E-10 | 1.76E-07 | 12.52119 |
| CXXC5 | -1.08325 | 0.010488 | -6.99768 | 5.58E-10 | 1.76E-07 | 12.52021 |
| COL9A3 | 0.536197 | -0.09515 | 6.981399 | 6.01E-10 | 1.86E-07 | 12.44966 |
| FXR2 | -0.50838 | -0.03461 | -6.93688 | 7.35E-10 | 2.21E-07 | 12.25699 |
| TMEM229B | 0.613096 | -0.08108 | 6.915926 | 8.08E-10 | 2.38E-07 | 12.16639 |
| ETFB | -0.53046 | 0.29403 | -6.91329 | 8.18E-10 | 2.38E-07 | 12.15501 |
| PDZK1IP1 | 0.520239 | -0.03611 | 6.90496 | 8.49E-10 | 2.39E-07 | 12.11902 |
| PAIP1 | 0.537551 | 0.19412 | 6.904498 | 8.51E-10 | 2.39E-07 | 12.11702 |
| VGF | 0.858927 | -0.02554 | 6.901778 | 8.61E-10 | 2.39E-07 | 12.10527 |
| SSTR3 | 0.554966 | 0.101844 | 6.897882 | 8.77E-10 | 2.40E-07 | 12.08844 |
| KDELR1 | -0.64815 | -0.09524 | -6.89319 | 8.95E-10 | 2.42E-07 | 12.06817 |
| MKRN2 | -0.82319 | -0.13206 | -6.85819 | 1.05E-09 | 2.75E-07 | 11.91717 |
| ACOT2 | -0.83476 | 0.312321 | -6.84728 | 1.10E-09 | 2.85E-07 | 11.87014 |
| CCDC155 | 0.528321 | -0.08671 | 6.842831 | 1.12E-09 | 2.87E-07 | 11.85095 |
| ZHX3 | -0.65083 | -0.04823 | -6.82792 | 1.20E-09 | 2.99E-07 | 11.7867 |
| KLLN | 0.730331 | -0.08082 | 6.809145 | 1.31E-09 | 3.17E-07 | 11.70588 |
| LGR5 | 0.708021 | -0.15805 | 6.805841 | 1.33E-09 | 3.18E-07 | 11.69166 |
| HMGB3 | 0.510212 | -0.04443 | 6.788276 | 1.44E-09 | 3.39E-07 | 11.61611 |
| LRRC8A | -0.61311 | -0.06659 | -6.75953 | 1.63E-09 | 3.77E-07 | 11.49257 |
| CARM1 | -1.07736 | 0.06846 | -6.74411 | 1.75E-09 | 3.98E-07 | 11.42633 |
| OR8B12 | 0.646404 | -0.07203 | 6.741684 | 1.77E-09 | 3.98E-07 | 11.41594 |
| ELOVL3 | 0.637541 | -0.13771 | 6.720278 | 1.95E-09 | 4.33E-07 | 11.32411 |
| FADS6 | 0.524481 | 0.013918 | 6.715451 | 1.99E-09 | 4.37E-07 | 11.30341 |
| CHCHD3 | -0.53545 | 0.016396 | -6.71085 | 2.03E-09 | 4.37E-07 | 11.28367 |
| NACC2 | -0.73641 | 0.273141 | -6.71057 | 2.03E-09 | 4.37E-07 | 11.28249 |
| NCK2 | -0.64804 | 0.353593 | -6.69882 | 2.14E-09 | 4.54E-07 | 11.23213 |
| SYNC | -0.91602 | 0.059444 | -6.69713 | 2.16E-09 | 4.54E-07 | 11.22488 |
| MPC2 | -0.8234 | -0.02027 | -6.67781 | 2.36E-09 | 4.84E-07 | 11.14217 |
| ZSWIM1 | -0.6017 | -0.0658 | -6.66664 | 2.48E-09 | 4.98E-07 | 11.09438 |
| ARHGEF12 | -0.63194 | -0.06495 | -6.62631 | 2.97E-09 | 5.78E-07 | 10.92196 |
| LINC00116 | -0.54341 | -0.05746 | -6.62333 | 3.01E-09 | 5.80E-07 | 10.90926 |
| HTR1F | 0.789823 | -0.14515 | 6.579391 | 3.66E-09 | 6.78E-07 | 10.7218 |
| CPNE8 | -0.63135 | 0.020022 | -6.56744 | 3.86E-09 | 7.08E-07 | 10.67088 |
| NCF1B | 0.638721 | -0.10522 | 6.563431 | 3.93E-09 | 7.14E-07 | 10.65381 |
| GPRC5C | -0.72628 | 0.406598 | -6.54786 | 4.21E-09 | 7.58E-07 | 10.58751 |
| RCN1 | -0.68668 | 0.34404 | -6.53445 | 4.47E-09 | 7.89E-07 | 10.53048 |
| ZC3H11A | 0.624865 | -0.14056 | 6.518548 | 4.79E-09 | 8.39E-07 | 10.46288 |
| LSM2 | -1.21993 | -0.03806 | -6.50922 | 5.00E-09 | 8.59E-07 | 10.42327 |
| FOXL1 | 0.831915 | -0.16022 | 6.498101 | 5.25E-09 | 8.94E-07 | 10.37603 |
| PAFAH2 | -0.56523 | -0.13723 | -6.49282 | 5.37E-09 | 9.03E-07 | 10.35363 |
| QARS | -0.64138 | 0.011711 | -6.49181 | 5.40E-09 | 9.03E-07 | 10.34931 |
| ECI1 | -0.56588 | -0.0402 | -6.47417 | 5.84E-09 | 9.63E-07 | 10.27448 |
| MT1M | -1.26228 | -0.00297 | -6.47342 | 5.86E-09 | 9.63E-07 | 10.27133 |
| C2CD2 | -0.55277 | 0.192088 | -6.46728 | 6.02E-09 | 9.81E-07 | 10.24529 |
| PRAMEF9 | 0.627477 | -0.1673 | 6.444698 | 6.65E-09 | 1.07E-06 | 10.14962 |
| RBM23 | -0.78784 | 0.086498 | -6.43655 | 6.90E-09 | 1.09E-06 | 10.11512 |
| ZBTB16 | -0.85056 | 0.331618 | -6.4223 | 7.35E-09 | 1.12E-06 | 10.05484 |
| OR2AG2 | 0.500375 | -0.08065 | 6.398941 | 8.14E-09 | 1.23E-06 | 9.956093 |
| LLGL1 | -0.79051 | -0.17235 | -6.33699 | 1.07E-08 | 1.56E-06 | 9.694817 |
| ATP6V1C1 | -0.5309 | 0.239663 | -6.31948 | 1.16E-08 | 1.67E-06 | 9.621117 |
| ITGB3BP | -0.52716 | 0.016372 | -6.30981 | 1.21E-08 | 1.73E-06 | 9.580453 |
| KLF9 | -0.89661 | -0.12781 | -6.30813 | 1.22E-08 | 1.73E-06 | 9.573376 |
| GBP5 | 0.840954 | 0.055912 | 6.296087 | 1.28E-08 | 1.81E-06 | 9.522768 |
| SMCO3 | 0.578479 | -0.07742 | 6.293659 | 1.30E-08 | 1.81E-06 | 9.512564 |
| ITGA10 | -1.02083 | -0.04068 | -6.27762 | 1.39E-08 | 1.89E-06 | 9.445216 |
| ATF4 | -0.50511 | 0.250577 | -6.2771 | 1.39E-08 | 1.89E-06 | 9.443038 |
| GABRR3 | 0.737396 | -0.07882 | 6.26686 | 1.46E-08 | 1.97E-06 | 9.40007 |
| LINC01144 | 0.691096 | -0.11465 | 6.24367 | 1.61E-08 | 2.15E-06 | 9.302854 |
| PMM1 | -0.59371 | -0.03416 | -6.22928 | 1.72E-08 | 2.27E-06 | 9.242616 |
| ENKD1 | -0.67813 | -0.03453 | -6.21684 | 1.81E-08 | 2.37E-06 | 9.190524 |
| BDKRB2 | 0.574207 | -0.06711 | 6.211284 | 1.86E-08 | 2.41E-06 | 9.167307 |
| LRFN3 | -0.73403 | -0.07448 | -6.20853 | 1.88E-08 | 2.41E-06 | 9.155784 |
| ARL17A | 1.170403 | 0.059691 | 6.206863 | 1.90E-08 | 2.41E-06 | 9.148822 |
| BBX | -0.85099 | -0.15071 | -6.20367 | 1.92E-08 | 2.42E-06 | 9.135459 |
| TSEN15 | -0.95107 | -0.02589 | -6.18559 | 2.08E-08 | 2.56E-06 | 9.05996 |
| TUFM | -0.61096 | -0.01601 | -6.17506 | 2.18E-08 | 2.66E-06 | 9.015995 |
| SPATA6L | 0.595492 | -0.05874 | 6.1706 | 2.22E-08 | 2.69E-06 | 8.99738 |
| PFDN1 | -0.72112 | -0.07263 | -6.1661 | 2.27E-08 | 2.73E-06 | 8.978605 |
| PRR7 | 0.561711 | -0.01582 | 6.162184 | 2.30E-08 | 2.74E-06 | 8.962281 |
| PCMT1 | -0.79509 | -0.07643 | -6.11306 | 2.85E-08 | 3.37E-06 | 8.757765 |
| OSBPL5 | -0.63925 | 0.092696 | -6.07325 | 3.39E-08 | 3.89E-06 | 8.592423 |
| GPR27 | 0.551535 | -0.08353 | 6.071606 | 3.42E-08 | 3.89E-06 | 8.58562 |
| SNU13 | -0.57253 | 0.192114 | -6.06429 | 3.53E-08 | 4.00E-06 | 8.555306 |
| HEATR9 | 0.724642 | -0.11633 | 6.055862 | 3.66E-08 | 4.03E-06 | 8.520362 |
| PIP4K2C | -0.54946 | -0.00178 | -6.05534 | 3.67E-08 | 4.03E-06 | 8.518196 |
| HK1 | -0.54392 | 0.380601 | -6.05089 | 3.74E-08 | 4.08E-06 | 8.499774 |
| TXNDC15 | -0.58046 | -0.05787 | -6.04787 | 3.79E-08 | 4.09E-06 | 8.487274 |
| NELL2 | 0.734237 | 0.02913 | 6.043287 | 3.87E-08 | 4.13E-06 | 8.468286 |
| TMEM14A | -0.88624 | 0.069237 | -6.04065 | 3.91E-08 | 4.15E-06 | 8.457366 |
| PLXNB1 | -0.67594 | -0.04614 | -6.02268 | 4.23E-08 | 4.37E-06 | 8.38302 |
| TRAPPC4 | -0.78093 | -0.23542 | -6.01223 | 4.42E-08 | 4.53E-06 | 8.33986 |
| PLA2G16 | -0.73531 | -0.0237 | -6.01147 | 4.44E-08 | 4.53E-06 | 8.336708 |
| SUN2 | -0.80054 | -0.16568 | -5.99598 | 4.74E-08 | 4.80E-06 | 8.272752 |
| C22orf23 | 0.564113 | -0.02846 | 5.990404 | 4.86E-08 | 4.86E-06 | 8.249733 |
| OR2A7 | -0.66712 | 0.064362 | -5.98647 | 4.94E-08 | 4.92E-06 | 8.233523 |
| DNTTIP1 | -0.54855 | -0.04063 | -5.98502 | 4.97E-08 | 4.92E-06 | 8.22754 |
| BIN2 | 0.514221 | -0.00749 | 5.977674 | 5.14E-08 | 5.06E-06 | 8.197235 |
| PLCH1 | 0.539983 | -0.11284 | 5.967387 | 5.37E-08 | 5.23E-06 | 8.154844 |
| KIAA1456 | 0.684634 | -0.12681 | 5.952652 | 5.72E-08 | 5.49E-06 | 8.094174 |
| DNM1L | -0.52842 | 0.212097 | -5.94513 | 5.91E-08 | 5.59E-06 | 8.06324 |
| RBPJL | 0.602921 | -0.10599 | 5.942804 | 5.97E-08 | 5.61E-06 | 8.053657 |
| MS4A10 | 0.598965 | -0.1119 | 5.940432 | 6.03E-08 | 5.64E-06 | 8.0439 |
| LOC100288893 | 0.824535 | -0.04493 | 5.939267 | 6.06E-08 | 5.64E-06 | 8.039111 |
| DIMT1 | -0.77127 | -0.06428 | -5.93041 | 6.30E-08 | 5.81E-06 | 8.002698 |
| TMED4 | -0.5519 | 0.109056 | -5.91953 | 6.60E-08 | 6.06E-06 | 7.958002 |
| PACSIN2 | -0.79443 | -0.19368 | -5.90943 | 6.89E-08 | 6.29E-06 | 7.916536 |
| TSPAN2 | -0.51018 | 0.127298 | -5.89818 | 7.23E-08 | 6.51E-06 | 7.870417 |
| MCAM | -0.95114 | 0.00629 | -5.89527 | 7.32E-08 | 6.56E-06 | 7.858453 |
| ZNF177 | 0.54228 | -0.0263 | 5.866107 | 8.30E-08 | 7.33E-06 | 7.739027 |
| MRPS16 | -0.60204 | -0.0838 | -5.85746 | 8.62E-08 | 7.54E-06 | 7.703661 |
| JAZF1 | -0.70468 | -0.08124 | -5.85516 | 8.70E-08 | 7.58E-06 | 7.694249 |
| DUSP3 | -0.89582 | -0.25761 | -5.8498 | 8.90E-08 | 7.69E-06 | 7.67235 |
| NABP2 | -0.64542 | -0.09993 | -5.84802 | 8.97E-08 | 7.71E-06 | 7.665091 |
| JAG1 | -0.98574 | -0.20499 | -5.8345 | 9.51E-08 | 8.02E-06 | 7.609846 |
| IL2RB | 0.871823 | 0.131334 | 5.826096 | 9.85E-08 | 8.24E-06 | 7.575549 |
| MTMR6 | -0.77623 | 0.005071 | -5.82409 | 9.94E-08 | 8.28E-06 | 7.567366 |
| HPS6 | -0.68317 | -0.18836 | -5.8161 | 1.03E-07 | 8.45E-06 | 7.534786 |
| ICMT | -0.58858 | -0.07991 | -5.81417 | 1.04E-07 | 8.49E-06 | 7.526893 |
| LSM3 | -0.80393 | 0.122427 | -5.81228 | 1.05E-07 | 8.52E-06 | 7.519222 |
| CLMP | -0.683 | 0.056925 | -5.80507 | 1.08E-07 | 8.75E-06 | 7.489824 |
| CNIH1 | -0.87469 | 0.262099 | -5.79162 | 1.14E-07 | 9.15E-06 | 7.435066 |
| LOC283713 | 0.652399 | -0.0757 | 5.787493 | 1.16E-07 | 9.27E-06 | 7.418264 |
| LGR6 | -0.54271 | 0.371862 | -5.78604 | 1.17E-07 | 9.29E-06 | 7.41234 |
| DEFB4A | 0.5332 | -0.13185 | 5.775441 | 1.22E-07 | 9.64E-06 | 7.369246 |
| AXIN2 | -0.70206 | -0.02152 | -5.76084 | 1.30E-07 | 1.02E-05 | 7.309906 |
| LINC00938 | -0.69972 | -0.15543 | -5.75813 | 1.32E-07 | 1.02E-05 | 7.298899 |
| ENAM | 0.509851 | -0.09174 | 5.752017 | 1.35E-07 | 1.04E-05 | 7.274102 |
| SUGT1P3 | 0.526322 | -0.07233 | 5.744569 | 1.40E-07 | 1.06E-05 | 7.243882 |
| TPTE2P5 | 0.526322 | -0.07233 | 5.744569 | 1.40E-07 | 1.06E-05 | 7.243882 |
| ZNF791 | -0.67035 | 0.025306 | -5.74186 | 1.41E-07 | 1.07E-05 | 7.232907 |
| MRAS | 0.602331 | -0.05188 | 5.736581 | 1.44E-07 | 1.09E-05 | 7.211491 |
| SOHLH1 | 0.562418 | -0.12085 | 5.730791 | 1.48E-07 | 1.11E-05 | 7.188025 |
| CBX6 | -0.88526 | -0.15437 | -5.72808 | 1.50E-07 | 1.11E-05 | 7.177037 |
| PHF2 | -0.59187 | 0.297083 | -5.7256 | 1.51E-07 | 1.12E-05 | 7.167008 |
| NFIA | -0.89463 | 0.13322 | -5.72391 | 1.52E-07 | 1.12E-05 | 7.160154 |
| ALOX15B | -0.98864 | 0.427409 | -5.71722 | 1.57E-07 | 1.14E-05 | 7.13307 |
| KATNBL1 | -0.60434 | 0.003936 | -5.71193 | 1.60E-07 | 1.16E-05 | 7.111648 |
| TLK1 | -0.62641 | -0.02977 | -5.71134 | 1.61E-07 | 1.16E-05 | 7.109267 |
| FGFBP2 | 0.761337 | 0.016842 | 5.706911 | 1.64E-07 | 1.17E-05 | 7.091349 |
| PCNT | -0.51638 | 0.03566 | -5.69229 | 1.74E-07 | 1.22E-05 | 7.032234 |
| OR1L8 | 0.561197 | -0.10911 | 5.690107 | 1.76E-07 | 1.23E-05 | 7.023424 |
| PSMC3 | -0.51793 | -0.13505 | -5.66135 | 1.99E-07 | 1.35E-05 | 6.907367 |
| FADD | -0.58154 | -0.09213 | -5.65821 | 2.01E-07 | 1.35E-05 | 6.894714 |
| ELK1 | -0.5529 | -0.043 | -5.64352 | 2.14E-07 | 1.41E-05 | 6.835548 |
| PSMG1 | -0.53542 | 0.070056 | -5.64189 | 2.16E-07 | 1.42E-05 | 6.828991 |
| DCUN1D3 | -0.79209 | 0.029849 | -5.62305 | 2.34E-07 | 1.51E-05 | 6.753223 |
| NARF | -0.55544 | -0.05045 | -5.61756 | 2.39E-07 | 1.52E-05 | 6.731178 |
| SMYD4 | -0.70996 | -0.00679 | -5.61403 | 2.43E-07 | 1.53E-05 | 6.717009 |
| H2AFJ | -0.60015 | -0.08313 | -5.60466 | 2.52E-07 | 1.58E-05 | 6.679373 |
| SHMT2 | -0.64462 | -0.11776 | -5.59667 | 2.61E-07 | 1.61E-05 | 6.64733 |
| CLASP1 | -0.72872 | -0.08208 | -5.58963 | 2.69E-07 | 1.65E-05 | 6.6191 |
| FEZ2 | -0.77873 | -0.00128 | -5.58919 | 2.69E-07 | 1.65E-05 | 6.617322 |
| CASKIN1 | 0.625952 | -0.08992 | 5.583574 | 2.76E-07 | 1.67E-05 | 6.594834 |
| FOXL2NB | 0.608543 | -0.0673 | 5.579788 | 2.80E-07 | 1.69E-05 | 6.579668 |
| TMEM181 | -0.94783 | -0.12481 | -5.57675 | 2.84E-07 | 1.70E-05 | 6.567499 |
| SETMAR | -0.5718 | -0.04862 | -5.57128 | 2.90E-07 | 1.71E-05 | 6.545606 |
| LOC100287837 | 0.567387 | -0.18831 | 5.57112 | 2.91E-07 | 1.71E-05 | 6.544966 |
| FBXO32 | -0.67366 | 0.407815 | -5.57111 | 2.91E-07 | 1.71E-05 | 6.544909 |
| ZFHX3 | -0.65035 | -0.04005 | -5.55768 | 3.08E-07 | 1.79E-05 | 6.491194 |
| FIGF | 0.599894 | -0.17475 | 5.555541 | 3.10E-07 | 1.80E-05 | 6.482654 |
| RRAGA | -0.64125 | -0.1076 | -5.5551 | 3.11E-07 | 1.80E-05 | 6.480872 |
| ANP32B | -0.64656 | -0.13453 | -5.55117 | 3.16E-07 | 1.82E-05 | 6.465188 |
| GNG10 | -0.68699 | 0.215972 | -5.55 | 3.18E-07 | 1.83E-05 | 6.46051 |
| DYNLRB1 | -0.6402 | 0.263272 | -5.54638 | 3.22E-07 | 1.85E-05 | 6.446036 |
| PGRMC2 | -0.68834 | -0.00252 | -5.54109 | 3.30E-07 | 1.88E-05 | 6.42491 |
| ADSL | -0.59624 | -0.07609 | -5.53014 | 3.45E-07 | 1.95E-05 | 6.381239 |
| MXD4 | -0.65644 | -0.10919 | -5.52487 | 3.53E-07 | 1.99E-05 | 6.360217 |
| MGMT | -0.63816 | -0.15937 | -5.51679 | 3.65E-07 | 2.05E-05 | 6.328004 |
| ATG14 | -0.69761 | -0.07169 | -5.50769 | 3.79E-07 | 2.12E-05 | 6.291745 |
| MRPS28 | -0.57943 | -0.19302 | -5.50654 | 3.81E-07 | 2.13E-05 | 6.28716 |
| TIMM22 | -0.63741 | -0.05081 | -5.48782 | 4.12E-07 | 2.26E-05 | 6.212725 |
| RAB11FIP3 | -0.69684 | -0.02591 | -5.48754 | 4.13E-07 | 2.26E-05 | 6.211598 |
| C3orf70 | -0.83631 | 0.209306 | -5.48582 | 4.16E-07 | 2.27E-05 | 6.204752 |
| DDRGK1 | -0.56678 | -0.12151 | -5.48112 | 4.24E-07 | 2.31E-05 | 6.186088 |
| ZNF260 | -0.52025 | -0.10728 | -5.48003 | 4.26E-07 | 2.31E-05 | 6.181774 |
| AFF4 | 0.774554 | 0.00774 | 5.478389 | 4.29E-07 | 2.32E-05 | 6.175237 |
| SLC30A7 | -0.58197 | -0.05311 | -5.4672 | 4.49E-07 | 2.42E-05 | 6.130837 |
| ANKRD46 | -0.77279 | -0.09652 | -5.4562 | 4.70E-07 | 2.51E-05 | 6.087175 |
| MRPL37 | -0.5006 | -0.1239 | -5.44585 | 4.91E-07 | 2.59E-05 | 6.04617 |
| DENND6B | 0.543728 | 0.005872 | 5.443387 | 4.96E-07 | 2.61E-05 | 6.036425 |
| THAP11 | -0.64979 | -0.16102 | -5.43884 | 5.05E-07 | 2.65E-05 | 6.018428 |
| TAAR9 | 0.674513 | -0.04012 | 5.437742 | 5.08E-07 | 2.65E-05 | 6.014076 |
| SERPINC1 | 0.604559 | -0.16115 | 5.433679 | 5.16E-07 | 2.69E-05 | 5.997998 |
| PTPRG | -0.50283 | -0.04024 | -5.4227 | 5.41E-07 | 2.78E-05 | 5.954589 |
| PHB | -0.55118 | -0.16353 | -5.41998 | 5.47E-07 | 2.81E-05 | 5.943835 |
| CASP14 | 0.599891 | -0.12564 | 5.41178 | 5.66E-07 | 2.86E-05 | 5.911433 |
| MSTN | -0.93634 | 0.128046 | -5.4114 | 5.67E-07 | 2.86E-05 | 5.909927 |
| DLX2 | 0.626684 | -0.11185 | 5.37796 | 6.51E-07 | 3.18E-05 | 5.778075 |
| DNLZ | -0.5261 | 0.007688 | -5.36802 | 6.78E-07 | 3.28E-05 | 5.738955 |
| ZFAND1 | -0.52216 | 0.122505 | -5.36745 | 6.80E-07 | 3.28E-05 | 5.736706 |
| DRG1 | -0.6229 | -0.18862 | -5.3639 | 6.90E-07 | 3.31E-05 | 5.722739 |
| CCK | 0.61311 | -0.01759 | 5.362486 | 6.94E-07 | 3.32E-05 | 5.717187 |
| PRKRA | -0.67275 | -0.093 | -5.35173 | 7.25E-07 | 3.44E-05 | 5.674899 |
| KLK4 | 0.565839 | -0.12303 | 5.345004 | 7.46E-07 | 3.49E-05 | 5.648504 |
| FAM210B | -0.62256 | -0.09969 | -5.34194 | 7.55E-07 | 3.52E-05 | 5.63648 |
| LRRC39 | 0.571791 | -0.00133 | 5.332452 | 7.86E-07 | 3.59E-05 | 5.599255 |
| TLE1 | -0.65155 | -0.00375 | -5.31748 | 8.36E-07 | 3.75E-05 | 5.540589 |
| ZNF233 | 0.50843 | -0.01898 | 5.315731 | 8.42E-07 | 3.75E-05 | 5.533739 |
| LRRC47 | -0.57292 | -0.11097 | -5.31164 | 8.56E-07 | 3.81E-05 | 5.517714 |
| OR2T3 | 0.646036 | -0.13578 | 5.31027 | 8.61E-07 | 3.81E-05 | 5.512363 |
| PADI3 | 0.53779 | -0.15439 | 5.302553 | 8.89E-07 | 3.91E-05 | 5.482175 |
| NSMCE4A | -0.66995 | -0.1244 | -5.29693 | 9.09E-07 | 3.98E-05 | 5.460187 |
| MRPS22 | -0.55281 | -0.06217 | -5.29389 | 9.21E-07 | 4.01E-05 | 5.448315 |
| NPTX2 | -0.9135 | 0.031199 | -5.27733 | 9.86E-07 | 4.21E-05 | 5.383644 |
| SLC16A12 | 0.530912 | 0.171827 | 5.272587 | 1.01E-06 | 4.25E-05 | 5.365149 |
| PIGK | -0.67484 | -0.00375 | -5.26831 | 1.02E-06 | 4.31E-05 | 5.348456 |
| CAND2 | -0.57917 | -0.0701 | -5.26631 | 1.03E-06 | 4.31E-05 | 5.340678 |
| UBQLN4 | -0.56989 | -0.03202 | -5.26595 | 1.03E-06 | 4.31E-05 | 5.339281 |
| HSPB2 | -0.63263 | -0.13401 | -5.26477 | 1.04E-06 | 4.32E-05 | 5.334693 |
| PGRMC1 | -0.77851 | -0.20856 | -5.2638 | 1.04E-06 | 4.33E-05 | 5.330886 |
| PRSS35 | 0.518973 | -0.06789 | 5.260332 | 1.06E-06 | 4.38E-05 | 5.317388 |
| SNHG10 | 0.631618 | -0.05063 | 5.258539 | 1.06E-06 | 4.39E-05 | 5.310404 |
| ADORA2A | 0.530283 | 0.102462 | 5.250532 | 1.10E-06 | 4.49E-05 | 5.279231 |
| SATB1 | 0.547929 | 0.065001 | 5.247904 | 1.11E-06 | 4.52E-05 | 5.269006 |
| FAM234A | -0.53152 | 0.010193 | -5.24643 | 1.12E-06 | 4.54E-05 | 5.263258 |
| RBM15B | 0.62963 | -0.07803 | 5.239955 | 1.15E-06 | 4.63E-05 | 5.238088 |
| ZNF581 | -0.60935 | 0.007395 | -5.23987 | 1.15E-06 | 4.63E-05 | 5.237775 |
| RNF220 | -0.55571 | -0.17264 | -5.23572 | 1.17E-06 | 4.67E-05 | 5.221621 |
| KIFC2 | 0.820219 | 0.065038 | 5.234584 | 1.17E-06 | 4.68E-05 | 5.217213 |
| CHCHD5 | -0.5126 | -0.15273 | -5.23203 | 1.19E-06 | 4.69E-05 | 5.207305 |
| AHR | 0.522528 | 0.193136 | 5.231004 | 1.19E-06 | 4.69E-05 | 5.203305 |
| TPRG1L | -0.55812 | -0.03422 | -5.22334 | 1.23E-06 | 4.81E-05 | 5.173532 |
| SRBD1 | -0.65035 | -0.02104 | -5.22197 | 1.24E-06 | 4.83E-05 | 5.16824 |
| P2RY8 | 0.788427 | 0.204755 | 5.220348 | 1.24E-06 | 4.84E-05 | 5.161932 |
| SGTA | -0.59806 | -0.01512 | -5.21959 | 1.25E-06 | 4.85E-05 | 5.158999 |
| RAB2B | -0.65141 | -0.00626 | -5.21463 | 1.27E-06 | 4.93E-05 | 5.139766 |
| COMTD1 | -0.62383 | 0.019746 | -5.20597 | 1.32E-06 | 5.06E-05 | 5.106182 |
| REXO4 | -0.54118 | -0.02091 | -5.19687 | 1.37E-06 | 5.22E-05 | 5.070933 |
| MECOM | -0.53568 | 0.282995 | -5.19487 | 1.38E-06 | 5.23E-05 | 5.063173 |
| CCDC102A | -0.76905 | -0.16232 | -5.19422 | 1.39E-06 | 5.24E-05 | 5.060653 |
| SPTSSA | -0.62284 | -0.16454 | -5.19267 | 1.39E-06 | 5.26E-05 | 5.054684 |
| SAMD4B | -0.51543 | -0.01567 | -5.19061 | 1.41E-06 | 5.29E-05 | 5.046704 |
| MAP3K5 | -0.57982 | -0.10455 | -5.19021 | 1.41E-06 | 5.29E-05 | 5.04514 |
| UQCRQ | -0.71165 | -0.17026 | -5.18938 | 1.41E-06 | 5.29E-05 | 5.041956 |
| GNB4 | -0.50597 | 0.096538 | -5.18914 | 1.41E-06 | 5.29E-05 | 5.041029 |
| ADGRE3 | 0.513538 | 0.185565 | 5.186332 | 1.43E-06 | 5.34E-05 | 5.030148 |
| FOXD1 | -0.54749 | -0.1423 | -5.18553 | 1.43E-06 | 5.35E-05 | 5.027054 |
| DRD3 | -0.5512 | 0.204385 | -5.17326 | 1.51E-06 | 5.57E-05 | 4.979608 |
| FZD8 | 0.549545 | -0.05906 | 5.172212 | 1.51E-06 | 5.58E-05 | 4.975571 |
| SPECC1L | -0.66687 | -0.1487 | -5.17154 | 1.52E-06 | 5.58E-05 | 4.972962 |
| SSFA2 | 0.653939 | -0.00489 | 5.168367 | 1.54E-06 | 5.63E-05 | 4.960725 |
| BACH2 | 0.687845 | 0.380011 | 5.168257 | 1.54E-06 | 5.63E-05 | 4.960298 |
| NDUFA9 | -0.53518 | -0.14766 | -5.16629 | 1.55E-06 | 5.66E-05 | 4.952699 |
| FAM214B | -0.52843 | 0.040811 | -5.16437 | 1.56E-06 | 5.69E-05 | 4.945309 |
| PADI4 | 0.984134 | 0.283965 | 5.163751 | 1.57E-06 | 5.69E-05 | 4.942906 |
| GTF2A2 | -0.56898 | -0.10149 | -5.16189 | 1.58E-06 | 5.71E-05 | 4.935715 |
| WDR36 | -0.56299 | -0.14549 | -5.15714 | 1.61E-06 | 5.80E-05 | 4.917406 |
| FAM50A | -0.55401 | -0.11676 | -5.15639 | 1.62E-06 | 5.81E-05 | 4.914492 |
| ESAM | -0.58133 | -0.07197 | -5.14044 | 1.72E-06 | 6.09E-05 | 4.853041 |
| LINC00626 | 0.584481 | 0.030441 | 5.138773 | 1.74E-06 | 6.12E-05 | 4.846629 |
| FKBP5 | -0.83968 | -0.01863 | -5.13063 | 1.79E-06 | 6.27E-05 | 4.815301 |
| SMUG1 | -0.55702 | -0.14372 | -5.12314 | 1.85E-06 | 6.38E-05 | 4.786485 |
| NAP1L4 | -0.52208 | -0.1015 | -5.1191 | 1.88E-06 | 6.46E-05 | 4.770966 |
| DAAM1 | -0.52533 | 0.195282 | -5.1154 | 1.91E-06 | 6.52E-05 | 4.75674 |
| AIF1L | -0.6788 | -0.00096 | -5.10551 | 1.99E-06 | 6.66E-05 | 4.718776 |
| PHRF1 | 0.602148 | 0.069854 | 5.105138 | 1.99E-06 | 6.66E-05 | 4.717361 |
| FABP3 | -0.57364 | -0.02068 | -5.09541 | 2.07E-06 | 6.85E-05 | 4.680069 |
| SERPINB4 | -0.52224 | -0.02637 | -5.07629 | 2.23E-06 | 7.31E-05 | 4.606844 |
| GALM | -0.60714 | -0.03223 | -5.06384 | 2.35E-06 | 7.63E-05 | 4.559247 |
| PNMA1 | -0.50929 | -0.05133 | -5.06213 | 2.37E-06 | 7.66E-05 | 4.552708 |
| PBX2 | -0.67379 | -0.17037 | -5.06199 | 2.37E-06 | 7.66E-05 | 4.552162 |
| HIGD1A | -0.73372 | 0.244125 | -5.06053 | 2.38E-06 | 7.70E-05 | 4.546618 |
| SLC34A1 | 0.656603 | 0.008035 | 5.059667 | 2.39E-06 | 7.71E-05 | 4.543309 |
| HDHD2 | -0.66623 | -0.05221 | -5.05193 | 2.47E-06 | 7.85E-05 | 4.513762 |
| ACADL | -0.578 | -0.10975 | -5.05147 | 2.47E-06 | 7.85E-05 | 4.512006 |
| FBXW7 | 0.529186 | 0.572918 | 5.050225 | 2.48E-06 | 7.87E-05 | 4.507268 |
| DPY19L1 | -0.53939 | -0.13974 | -5.04306 | 2.55E-06 | 8.06E-05 | 4.479927 |
| RNF170 | -0.68971 | -0.09711 | -5.029 | 2.70E-06 | 8.47E-05 | 4.426385 |
| PARVA | -0.67542 | -0.0854 | -5.02539 | 2.74E-06 | 8.54E-05 | 4.412643 |
| C12orf29 | -0.51769 | -0.05216 | -5.02357 | 2.76E-06 | 8.57E-05 | 4.405721 |
| TRIM44 | -0.78422 | -0.10014 | -5.02288 | 2.77E-06 | 8.57E-05 | 4.403082 |
| FHOD1 | -0.77483 | 0.112412 | -5.00599 | 2.96E-06 | 8.93E-05 | 4.338891 |
| RPUSD4 | -0.5574 | -0.09954 | -5.00188 | 3.01E-06 | 9.02E-05 | 4.323309 |
| LSM7 | -0.7198 | -0.19539 | -5.00108 | 3.02E-06 | 9.02E-05 | 4.320236 |
| INSIG2 | -0.72032 | -0.08909 | -4.98164 | 3.27E-06 | 9.64E-05 | 4.246551 |
| MOAP1 | -0.53982 | -0.04678 | -4.97921 | 3.30E-06 | 9.69E-05 | 4.237347 |
| NDUFB2 | -0.51928 | -0.08493 | -4.97827 | 3.31E-06 | 9.70E-05 | 4.233794 |
| TMEM261 | -0.54218 | -0.01007 | -4.97781 | 3.32E-06 | 9.70E-05 | 4.232058 |
| SPDYE2 | 0.514792 | -0.00915 | 4.975085 | 3.36E-06 | 9.77E-05 | 4.221729 |
| RAB5C | -0.77 | 0.146409 | -4.96273 | 3.52E-06 | 0.000102 | 4.17501 |
| SPNS3 | 0.675968 | 0.064748 | 4.959734 | 3.57E-06 | 0.000103 | 4.163675 |
| STX1A | 0.544994 | -0.01635 | 4.957949 | 3.59E-06 | 0.000103 | 4.15693 |
| APOA4 | -0.53112 | 0.050319 | -4.95386 | 3.65E-06 | 0.000104 | 4.141501 |
| XXYLT1 | -0.51231 | -0.07663 | -4.95328 | 3.66E-06 | 0.000104 | 4.139312 |
| GORASP2 | -0.56045 | -0.10584 | -4.93909 | 3.87E-06 | 0.000109 | 4.085741 |
| YIPF6 | -0.74643 | -0.1597 | -4.9356 | 3.93E-06 | 0.00011 | 4.072597 |
| RPL27A | -0.50399 | -0.19495 | -4.90177 | 4.49E-06 | 0.000122 | 3.945343 |
| ALDH1L1 | -0.60345 | -0.19602 | -4.89551 | 4.61E-06 | 0.000124 | 3.921841 |
| TBX2 | -0.53007 | -0.1204 | -4.88987 | 4.71E-06 | 0.000127 | 3.900711 |
| ADAM18 | -0.5461 | 0.00512 | -4.88946 | 4.72E-06 | 0.000127 | 3.899154 |
| ZSCAN18 | -0.63598 | -0.02044 | -4.88436 | 4.81E-06 | 0.000128 | 3.880032 |
| LOC105372672 | 0.507367 | -0.06365 | 4.881153 | 4.88E-06 | 0.00013 | 3.868026 |
| ACTG1 | -0.71579 | 0.416341 | -4.87945 | 4.91E-06 | 0.00013 | 3.861652 |
| PNISR | 0.773119 | 0.148452 | 4.875473 | 4.99E-06 | 0.000132 | 3.846754 |
| STARD8 | -0.51395 | -0.1203 | -4.87396 | 5.02E-06 | 0.000132 | 3.841086 |
| HSPB11 | -0.65334 | -0.22591 | -4.8727 | 5.04E-06 | 0.000133 | 3.836366 |
| ZMAT2 | -0.57763 | -0.09243 | -4.86877 | 5.12E-06 | 0.000134 | 3.821688 |
| KIAA1841 | 0.538913 | 0.002771 | 4.868593 | 5.12E-06 | 0.000134 | 3.821009 |
| ZNF689 | -0.53923 | -0.10326 | -4.86811 | 5.13E-06 | 0.000134 | 3.819198 |
| LSM14A | -0.57813 | -0.12444 | -4.86583 | 5.18E-06 | 0.000135 | 3.810692 |
| RASGRP4 | 0.517929 | 0.083637 | 4.84704 | 5.58E-06 | 0.000143 | 3.740485 |
| EEF2K | -0.53139 | -0.07218 | -4.83531 | 5.84E-06 | 0.000148 | 3.696743 |
| BTBD6 | -0.51237 | -0.12826 | -4.83318 | 5.89E-06 | 0.000149 | 3.688795 |
| H1F0 | -0.74109 | -0.01967 | -4.82846 | 6.00E-06 | 0.000151 | 3.671229 |
| SETD4 | 0.612765 | -0.10966 | 4.828275 | 6.01E-06 | 0.000151 | 3.670541 |
| CRYBA4 | 0.505366 | -0.0812 | 4.822779 | 6.14E-06 | 0.000153 | 3.650084 |
| OLIG1 | 0.607816 | -0.11201 | 4.816261 | 6.30E-06 | 0.000156 | 3.625837 |
| RPPH1 | 0.705614 | 0.052819 | 4.813257 | 6.37E-06 | 0.000157 | 3.614671 |
| KAAG1 | -0.8496 | -0.19583 | -4.81316 | 6.38E-06 | 0.000157 | 3.614321 |
| EDNRA | -0.64194 | -0.13588 | -4.80729 | 6.52E-06 | 0.000159 | 3.592516 |
| NKPD1 | 0.521533 | 0.162673 | 4.804122 | 6.61E-06 | 0.000161 | 3.580736 |
| CDS2 | -0.54707 | -0.036 | -4.80361 | 6.62E-06 | 0.000161 | 3.578828 |
| LINC00560 | 0.505978 | -0.11581 | 4.800057 | 6.71E-06 | 0.000162 | 3.565645 |
| CTSZ | -1.36377 | -0.44573 | -4.79216 | 6.92E-06 | 0.000167 | 3.536344 |
| ELP3 | -0.52286 | -0.07197 | -4.7913 | 6.95E-06 | 0.000167 | 3.533166 |
| MRPL40 | -0.51529 | -0.12705 | -4.78956 | 6.99E-06 | 0.000167 | 3.52672 |
| RIMS3 | -0.6162 | -0.07467 | -4.78801 | 7.04E-06 | 0.000168 | 3.520979 |
| POLR2H | -0.70697 | -0.14211 | -4.78745 | 7.05E-06 | 0.000168 | 3.518907 |
| TEX2 | -0.58262 | -0.113 | -4.78097 | 7.23E-06 | 0.000172 | 3.494906 |
| OR5T1 | 0.541506 | -0.07826 | 4.774528 | 7.42E-06 | 0.000175 | 3.471042 |
| ACVR1 | -0.6575 | -0.14641 | -4.77122 | 7.52E-06 | 0.000176 | 3.458795 |
| NR4A1 | 0.532162 | 0.173724 | 4.764869 | 7.71E-06 | 0.000179 | 3.435325 |
| CDH8 | 0.510904 | -0.13145 | 4.761519 | 7.81E-06 | 0.000181 | 3.422946 |
| WDR55 | -0.56091 | -0.05809 | -4.75013 | 8.16E-06 | 0.000187 | 3.380905 |
| SCARB2 | -0.57324 | -0.21267 | -4.7463 | 8.29E-06 | 0.00019 | 3.366763 |
| FAM188A | -0.55107 | -0.16942 | -4.7428 | 8.40E-06 | 0.000191 | 3.353852 |
| IFT74 | -0.53897 | -0.08982 | -4.73091 | 8.80E-06 | 0.000198 | 3.310067 |
| FHL5 | -0.76721 | -0.14337 | -4.72594 | 8.97E-06 | 0.0002 | 3.291784 |
| SERBP1 | -0.56694 | -0.05141 | -4.72478 | 9.01E-06 | 0.000201 | 3.287514 |
| PFKM | -0.5922 | -0.07385 | -4.72248 | 9.09E-06 | 0.000202 | 3.279046 |
| CTPS1 | -0.54824 | -0.04653 | -4.72097 | 9.14E-06 | 0.000202 | 3.273508 |
| ID3 | -0.57689 | -0.22072 | -4.71984 | 9.19E-06 | 0.000203 | 3.269347 |
| OR5B3 | 0.502043 | -0.12984 | 4.719359 | 9.20E-06 | 0.000203 | 3.267585 |
| PRF1 | 0.536117 | 0.03035 | 4.717552 | 9.27E-06 | 0.000204 | 3.260942 |
| CABP5 | 0.507167 | -0.13372 | 4.71251 | 9.45E-06 | 0.000208 | 3.24242 |
| COQ8A | -0.56211 | -0.11194 | -4.71071 | 9.52E-06 | 0.000209 | 3.23581 |
| NDUFA7 | -0.52342 | -0.16712 | -4.70916 | 9.58E-06 | 0.00021 | 3.230102 |
| FCHO1 | 0.508618 | 0.082626 | 4.70714 | 9.65E-06 | 0.000211 | 3.222702 |
| ASAP2 | -0.63396 | -0.16381 | -4.70563 | 9.71E-06 | 0.000211 | 3.217146 |
| HRCT1 | -0.74557 | 0.061868 | -4.70306 | 9.80E-06 | 0.000213 | 3.207735 |
| ZNF442 | 0.5024 | -0.02047 | 4.701333 | 9.87E-06 | 0.000214 | 3.201398 |
| KIAA1211 | 0.551553 | -0.0603 | 4.698415 | 9.98E-06 | 0.000216 | 3.190699 |
| CLDN22 | 0.580906 | -0.09846 | 4.693408 | 1.02E-05 | 0.000219 | 3.172347 |
| PMP22 | -0.60504 | 0.435159 | -4.69034 | 1.03E-05 | 0.000221 | 3.161122 |
| SNRPB2 | -0.59579 | 0.010075 | -4.68796 | 1.04E-05 | 0.000222 | 3.152402 |
| VASH1 | 0.612877 | 0.07503 | 4.686131 | 1.05E-05 | 0.000223 | 3.145694 |
| COX6A1 | -0.5254 | -0.08997 | -4.67678 | 1.09E-05 | 0.000229 | 3.1115 |
| GRASP | 0.800732 | 0.091877 | 4.674037 | 1.10E-05 | 0.000231 | 3.101456 |
| KCNS1 | 0.539971 | -0.0556 | 4.661869 | 1.15E-05 | 0.000238 | 3.057011 |
| IGSF9 | 0.513321 | -0.067 | 4.653997 | 1.19E-05 | 0.000244 | 3.028295 |
| LOC392196 | 0.560255 | -0.12923 | 4.640268 | 1.25E-05 | 0.000254 | 2.978278 |
| ATP1A2 | -0.83866 | 0.024553 | -4.63415 | 1.28E-05 | 0.00026 | 2.956029 |
| PTGIR | -0.55522 | -0.17649 | -4.63034 | 1.30E-05 | 0.000263 | 2.942168 |
| PIK3R2 | -0.59951 | -0.19036 | -4.62471 | 1.33E-05 | 0.000268 | 2.921708 |
| TMEM252 | -0.66203 | 0.019801 | -4.62457 | 1.33E-05 | 0.000268 | 2.921189 |
| ITK | 0.808646 | 0.364483 | 4.620095 | 1.35E-05 | 0.000271 | 2.904943 |
| POLR2F | -0.53317 | -0.09627 | -4.61302 | 1.39E-05 | 0.000276 | 2.879271 |
| ALDH6A1 | -0.56036 | 0.048259 | -4.60847 | 1.41E-05 | 0.000279 | 2.862786 |
| FAM136A | -0.52296 | -0.09377 | -4.60663 | 1.42E-05 | 0.00028 | 2.856091 |
| LEPR | -0.73026 | 0.603051 | -4.59956 | 1.46E-05 | 0.000286 | 2.830486 |
| CCDC107 | -0.58642 | -0.01277 | -4.598 | 1.47E-05 | 0.000288 | 2.824847 |
| TOX2 | -0.75626 | -0.0961 | -4.59646 | 1.48E-05 | 0.000289 | 2.819262 |
| RRP36 | -0.55792 | -0.08857 | -4.59188 | 1.51E-05 | 0.000293 | 2.802705 |
| MED1 | -0.55045 | -0.12126 | -4.59085 | 1.51E-05 | 0.000293 | 2.798971 |
| HAUS7 | -0.52924 | -0.13242 | -4.59079 | 1.51E-05 | 0.000293 | 2.798735 |
| DYSF | 0.566394 | 0.13622 | 4.587499 | 1.53E-05 | 0.000296 | 2.786847 |
| IL22RA1 | 0.525395 | 0.024561 | 4.579674 | 1.58E-05 | 0.000302 | 2.758568 |
| ZC2HC1A | -0.52949 | 0.133712 | -4.57843 | 1.59E-05 | 0.000302 | 2.754081 |
| SERGEF | -0.5251 | -0.03213 | -4.57666 | 1.60E-05 | 0.000304 | 2.747702 |
| CAV2 | -0.58546 | 0.365058 | -4.57172 | 1.63E-05 | 0.000308 | 2.729867 |
| E2F3 | -0.60354 | -0.05858 | -4.56218 | 1.69E-05 | 0.000318 | 2.695467 |
| COX16 | -0.55699 | -0.14493 | -4.56012 | 1.70E-05 | 0.00032 | 2.688033 |
| PREP | -0.55966 | -0.06869 | -4.54184 | 1.82E-05 | 0.000338 | 2.622258 |
| RDH11 | -0.55448 | 0.150836 | -4.53374 | 1.88E-05 | 0.000345 | 2.593156 |
| ZNF532 | -0.64863 | -0.1553 | -4.52089 | 1.98E-05 | 0.000361 | 2.54707 |
| UBE4A | -0.61319 | -0.04448 | -4.51667 | 2.01E-05 | 0.000366 | 2.531937 |
| TMED2 | -0.68233 | -0.15891 | -4.51638 | 2.01E-05 | 0.000366 | 2.530919 |
| MDH1 | -0.72342 | -0.13365 | -4.51043 | 2.06E-05 | 0.000372 | 2.509598 |
| ACPT | 0.597534 | 0.268131 | 4.508765 | 2.07E-05 | 0.000374 | 2.503643 |
| SEMA4A | 0.680198 | 0.208578 | 4.504106 | 2.11E-05 | 0.000379 | 2.486978 |
| TC2N | -0.68132 | -0.07866 | -4.50391 | 2.11E-05 | 0.000379 | 2.486283 |
| ZC3H12A | 0.738606 | 0.275011 | 4.503587 | 2.11E-05 | 0.00038 | 2.485124 |
| LAIR1 | 0.612161 | 0.465958 | 4.502011 | 2.12E-05 | 0.000381 | 2.479489 |
| UFSP2 | -0.51359 | -0.1351 | -4.50116 | 2.13E-05 | 0.000381 | 2.476443 |
| SNAI3 | 0.703223 | -0.04961 | 4.499329 | 2.14E-05 | 0.000382 | 2.4699 |
| PA2G4 | -0.721 | -0.00366 | -4.49932 | 2.14E-05 | 0.000382 | 2.469858 |
| DENND4C | -0.60639 | -0.07831 | -4.49907 | 2.15E-05 | 0.000382 | 2.468985 |
| SNORD27 | 0.510168 | -0.14084 | 4.498866 | 2.15E-05 | 0.000382 | 2.468248 |
| FOXD2 | -0.56101 | -0.05899 | -4.4966 | 2.17E-05 | 0.000385 | 2.460154 |
| RBPMS2 | -0.81361 | 0.010783 | -4.49248 | 2.20E-05 | 0.00039 | 2.445419 |
| COX5B | -0.89158 | -0.4154 | -4.4922 | 2.20E-05 | 0.00039 | 2.444437 |
| SMIM19 | -0.5552 | -0.0867 | -4.49096 | 2.21E-05 | 0.000391 | 2.439997 |
| TMEM43 | -0.54917 | -0.1243 | -4.49092 | 2.21E-05 | 0.000391 | 2.439865 |
| ZC3H8 | 0.563012 | -0.06368 | 4.489941 | 2.22E-05 | 0.000391 | 2.436372 |
| OLFM1 | -0.67103 | 0.163 | -4.48862 | 2.23E-05 | 0.000392 | 2.431643 |
| PCSK9 | 0.502901 | -0.07381 | 4.485178 | 2.26E-05 | 0.000396 | 2.419377 |
| CITED2 | -0.7321 | -0.04851 | -4.48272 | 2.28E-05 | 0.000399 | 2.410594 |
| G0S2 | 0.796316 | 0.246593 | 4.478759 | 2.32E-05 | 0.000403 | 2.396491 |
| CXCL5 | 0.599382 | 0.216764 | 4.474123 | 2.36E-05 | 0.000407 | 2.379975 |
| UBB | -0.74457 | 0.201694 | -4.46336 | 2.46E-05 | 0.000419 | 2.341668 |
| PLCG1 | -0.53588 | 0.26485 | -4.46146 | 2.48E-05 | 0.000422 | 2.334905 |
| MYO1D | -0.84565 | -0.1949 | -4.458 | 2.51E-05 | 0.000426 | 2.322628 |
| BTG2 | 0.808854 | 0.223557 | 4.453658 | 2.55E-05 | 0.00043 | 2.307189 |
| BTNL8 | -0.62881 | 0.293792 | -4.44932 | 2.59E-05 | 0.000436 | 2.291785 |
| ZNF503 | -0.60914 | -0.09353 | -4.4479 | 2.61E-05 | 0.000437 | 2.286756 |
| SARNP | -0.59385 | -0.17052 | -4.43226 | 2.76E-05 | 0.000458 | 2.231295 |
| INTS3 | -0.52548 | -0.02745 | -4.43166 | 2.77E-05 | 0.000458 | 2.229194 |
| ZNF831 | 0.604475 | 0.283583 | 4.42994 | 2.79E-05 | 0.00046 | 2.22309 |
| FOXJ2 | -0.51517 | -0.12337 | -4.41623 | 2.94E-05 | 0.000477 | 2.174604 |
| LYPD8 | 0.580867 | -0.07714 | 4.413098 | 2.97E-05 | 0.000479 | 2.163537 |
| PHF20 | -0.50596 | -0.08447 | -4.41145 | 2.99E-05 | 0.00048 | 2.157707 |
| RPLP0 | -1.22844 | 0.883525 | -4.41052 | 3.00E-05 | 0.000481 | 2.154418 |
| SESN1 | -0.59001 | -0.13367 | -4.41016 | 3.00E-05 | 0.000481 | 2.15318 |
| MED20 | -0.54799 | -0.15892 | -4.40967 | 3.01E-05 | 0.000481 | 2.151437 |
| CANX | -0.94714 | 0.218762 | -4.40822 | 3.03E-05 | 0.000483 | 2.146325 |
| COX7B | -0.56042 | -0.1865 | -4.40798 | 3.03E-05 | 0.000483 | 2.145455 |
| TPPP3 | 0.627813 | 0.271475 | 4.402344 | 3.09E-05 | 0.000491 | 2.125588 |
| SPINT2 | -0.60956 | -0.12313 | -4.40184 | 3.10E-05 | 0.000491 | 2.123813 |
| LCE1E | 0.504723 | 0.247549 | 4.401001 | 3.11E-05 | 0.000492 | 2.120852 |
| RAX2 | 0.709899 | 0.006082 | 4.399953 | 3.12E-05 | 0.000494 | 2.117157 |
| CHSY3 | -0.63647 | -0.24909 | -4.39827 | 3.14E-05 | 0.000496 | 2.111208 |
| COX6C | -0.62943 | -0.13374 | -4.39797 | 3.14E-05 | 0.000496 | 2.110167 |
| MRPL33 | -0.57125 | 4.65E-05 | -4.39524 | 3.18E-05 | 0.0005 | 2.100536 |
| TMEM115 | -0.58312 | -0.08725 | -4.39286 | 3.20E-05 | 0.000502 | 2.092162 |
| P3H3 | -0.6481 | 0.038547 | -4.38978 | 3.24E-05 | 0.000507 | 2.081334 |
| ATP6V1D | -0.59952 | -0.14807 | -4.38494 | 3.30E-05 | 0.000514 | 2.0643 |
| UBR4 | 0.66135 | 0.104312 | 4.381671 | 3.34E-05 | 0.000519 | 2.052791 |
| PNPO | -0.70031 | -0.12539 | -4.3791 | 3.37E-05 | 0.000522 | 2.04376 |
| SNURF | -0.56925 | 0.22107 | -4.37908 | 3.37E-05 | 0.000522 | 2.04367 |
| CLDN23 | -0.5601 | -0.13617 | -4.37019 | 3.49E-05 | 0.000537 | 2.012462 |
| AHCYL1 | -0.70744 | -0.05777 | -4.36712 | 3.53E-05 | 0.000541 | 2.001692 |
| MRPL13 | -0.50136 | -0.3202 | -4.35999 | 3.62E-05 | 0.000554 | 1.976689 |
| YIF1A | -0.51542 | -0.13631 | -4.35856 | 3.64E-05 | 0.000555 | 1.971681 |
| GPD1L | -0.69371 | -0.19049 | -4.35835 | 3.65E-05 | 0.000555 | 1.970923 |
| GSDMB | 0.672356 | 0.560551 | 4.357037 | 3.66E-05 | 0.000557 | 1.966328 |
| GALNT15 | -0.64476 | 0.033742 | -4.35366 | 3.71E-05 | 0.000561 | 1.954512 |
| UTP6 | -0.60389 | -0.20309 | -4.35325 | 3.72E-05 | 0.000561 | 1.953079 |
| KIAA1191 | -0.55254 | 0.109211 | -4.35214 | 3.73E-05 | 0.000562 | 1.949187 |
| IFIT3 | -0.52856 | 0.331342 | -4.35192 | 3.73E-05 | 0.000562 | 1.948394 |
| 10-Mar | -0.53186 | 0.027563 | -4.35064 | 3.75E-05 | 0.000563 | 1.943921 |
| SLC2A1 | -0.71732 | -0.06812 | -4.34833 | 3.79E-05 | 0.000567 | 1.935822 |
| S100A6 | -0.50466 | -0.08819 | -4.34293 | 3.86E-05 | 0.000574 | 1.916951 |
| ASNS | -0.61552 | 0.336559 | -4.33713 | 3.95E-05 | 0.000583 | 1.896687 |
| SEC22B | -0.52478 | -0.09757 | -4.33225 | 4.02E-05 | 0.000591 | 1.879646 |
| TMEM243 | -0.51464 | -0.07991 | -4.32735 | 4.09E-05 | 0.0006 | 1.862515 |
| CEACAM6 | 0.532318 | -0.05849 | 4.325231 | 4.12E-05 | 0.000601 | 1.85514 |
| SV2B | 0.518666 | -0.01401 | 4.316282 | 4.26E-05 | 0.000616 | 1.823947 |
| FGFR1 | 0.542908 | 0.239358 | 4.312902 | 4.32E-05 | 0.000623 | 1.81218 |
| WFS1 | -0.66352 | -0.2272 | -4.31247 | 4.32E-05 | 0.000623 | 1.810674 |
| FAM84A | 0.545255 | 0.013237 | 4.30821 | 4.39E-05 | 0.000631 | 1.795851 |
| SPEG | -0.58869 | -0.0435 | -4.30427 | 4.46E-05 | 0.000639 | 1.78216 |
| EVA1C | -0.56822 | 0.048278 | -4.30389 | 4.46E-05 | 0.000639 | 1.780823 |
| NCOA5 | -0.54659 | 0.101411 | -4.30132 | 4.51E-05 | 0.000644 | 1.771878 |
| LIN28A | 0.563986 | -0.10451 | 4.293598 | 4.64E-05 | 0.000657 | 1.745069 |
| TMED6 | 0.580706 | 0.050177 | 4.288153 | 4.73E-05 | 0.000667 | 1.726173 |
| SMU1 | -0.62571 | -0.0453 | -4.28772 | 4.74E-05 | 0.000667 | 1.72468 |
| GNS | -0.65683 | -0.12066 | -4.28677 | 4.76E-05 | 0.000669 | 1.721366 |
| EFNB2 | -0.68642 | -0.03355 | -4.27932 | 4.89E-05 | 0.000681 | 1.69554 |
| PPP1R2 | -0.51905 | -0.05302 | -4.27773 | 4.92E-05 | 0.000683 | 1.690036 |
| EPHB4 | -0.59853 | -0.05602 | -4.26497 | 5.16E-05 | 0.000704 | 1.645911 |
| JTB | -0.52258 | -0.14417 | -4.25638 | 5.32E-05 | 0.000723 | 1.616221 |
| BLVRA | -0.61264 | -0.22052 | -4.25377 | 5.37E-05 | 0.000728 | 1.607201 |
| PCYOX1 | -0.65341 | 0.135048 | -4.2532 | 5.38E-05 | 0.000729 | 1.605245 |
| KLHL9 | -0.79387 | 0.01087 | -4.24872 | 5.47E-05 | 0.000738 | 1.589788 |
| RASL11A | -0.54678 | -0.19282 | -4.24381 | 5.57E-05 | 0.000749 | 1.572875 |
| CERS6 | -0.57117 | -0.03004 | -4.24139 | 5.62E-05 | 0.000755 | 1.56451 |
| DNAJB6 | -0.50044 | 0.190172 | -4.23521 | 5.75E-05 | 0.000769 | 1.543262 |
| FBXO11 | -0.51275 | 0.167661 | -4.23366 | 5.78E-05 | 0.000771 | 1.537921 |
| BORCS8-MEF2B | 0.502137 | 0.004874 | 4.230454 | 5.85E-05 | 0.000779 | 1.526887 |
| TM9SF3 | -0.5113 | -0.09316 | -4.23015 | 5.86E-05 | 0.000779 | 1.525826 |
| NDUFA8 | -0.64139 | -0.15626 | -4.22792 | 5.91E-05 | 0.000783 | 1.518184 |
| CSPG4 | -0.73244 | -0.19441 | -4.22781 | 5.91E-05 | 0.000783 | 1.517785 |
| RB1CC1 | -0.52707 | -0.0399 | -4.21794 | 6.13E-05 | 0.000806 | 1.483888 |
| PREPL | -0.50378 | 0.191214 | -4.21581 | 6.18E-05 | 0.000811 | 1.476567 |
| PTEN | -0.52292 | -0.03475 | -4.20164 | 6.50E-05 | 0.000843 | 1.428009 |
| BTF3L4 | -0.59017 | 0.165681 | -4.19625 | 6.63E-05 | 0.000857 | 1.409578 |
| PSMG2 | -0.56758 | -0.23485 | -4.19056 | 6.77E-05 | 0.000869 | 1.390122 |
| NARS | -0.59018 | -0.19466 | -4.18992 | 6.79E-05 | 0.000869 | 1.387927 |
| CDC42EP4 | -0.533 | -0.04995 | -4.18612 | 6.88E-05 | 0.000878 | 1.374946 |
| GOLPH3 | -0.61454 | -0.12587 | -4.17945 | 7.05E-05 | 0.00089 | 1.352167 |
| PRMT1 | -0.54108 | -0.00026 | -4.17831 | 7.08E-05 | 0.000891 | 1.348283 |
| DHRS7 | -0.5595 | -0.21753 | -4.17778 | 7.10E-05 | 0.000891 | 1.346492 |
| VEZF1 | -0.61923 | -0.15236 | -4.17327 | 7.21E-05 | 0.000903 | 1.331081 |
| PLCB3 | 0.536952 | -0.07871 | 4.171609 | 7.26E-05 | 0.000907 | 1.325434 |
| IRF2BPL | -0.75054 | -0.06541 | -4.17027 | 7.29E-05 | 0.000911 | 1.320861 |
| RPA2 | -0.55294 | -0.10862 | -4.16529 | 7.43E-05 | 0.000924 | 1.303907 |
| NDUFAF2 | -0.50227 | -0.07753 | -4.16145 | 7.53E-05 | 0.000937 | 1.290838 |
| MAP1S | 0.546793 | -0.03261 | 4.158441 | 7.61E-05 | 0.000945 | 1.280606 |
| PEG3 | -0.50463 | 0.002682 | -4.15332 | 7.76E-05 | 0.000959 | 1.263206 |
| PXDN | -0.80319 | -0.14382 | -4.14821 | 7.90E-05 | 0.000972 | 1.245849 |
| SPIRE1 | -0.51719 | -0.17003 | -4.14781 | 7.91E-05 | 0.000972 | 1.244472 |
| LRRC10 | 0.706466 | -0.19484 | 4.145373 | 7.98E-05 | 0.00098 | 1.236208 |
| FAM46B | -0.63739 | -0.15552 | -4.14339 | 8.04E-05 | 0.000985 | 1.229495 |
| TAF13 | 0.592059 | 0.23425 | 4.142187 | 8.08E-05 | 0.000987 | 1.225399 |
| DEFB127 | 0.543473 | 0.00104 | 4.140386 | 8.13E-05 | 0.000992 | 1.219292 |
| CXCL1 | 0.514405 | 0.233926 | 4.139077 | 8.17E-05 | 0.000994 | 1.214852 |
| TIMP4 | -0.83318 | 0.105567 | -4.12542 | 8.58E-05 | 0.001037 | 1.168591 |
| ANKRD34C | 0.583451 | -0.17767 | 4.120925 | 8.72E-05 | 0.001047 | 1.153396 |
| CRBN | -0.52873 | 0.122018 | -4.11951 | 8.77E-05 | 0.001051 | 1.148597 |
| PIK3CD | 0.506204 | 0.034984 | 4.116737 | 8.86E-05 | 0.001058 | 1.139245 |
| LINC00901 | 0.6131 | -0.09624 | 4.115231 | 8.90E-05 | 0.001061 | 1.134158 |
| TSPYL1 | -0.52686 | -0.05281 | -4.11395 | 8.95E-05 | 0.001063 | 1.129826 |
| RNASEH1 | -0.5643 | -0.15996 | -4.10953 | 9.09E-05 | 0.001077 | 1.114913 |
| ATP13A1 | 0.593923 | 0.234366 | 4.105861 | 9.21E-05 | 0.00109 | 1.102531 |
| SPPL2A | -0.55994 | -0.13699 | -4.103 | 9.31E-05 | 0.001096 | 1.092879 |
| MAP3K6 | -0.63711 | -0.01614 | -4.09814 | 9.47E-05 | 0.00111 | 1.076514 |
| RNF150 | -0.57325 | -0.06878 | -4.09786 | 9.48E-05 | 0.00111 | 1.07557 |
| KLHDC2 | -0.68121 | -0.17948 | -4.09676 | 9.52E-05 | 0.001113 | 1.071859 |
| ZNF573 | -0.64066 | -0.02031 | -4.09431 | 9.60E-05 | 0.001121 | 1.063595 |
| DBI | -0.52229 | 0.031359 | -4.08672 | 9.87E-05 | 0.001139 | 1.038091 |
| DERL1 | -0.64362 | -0.1165 | -4.0843 | 9.95E-05 | 0.001148 | 1.029951 |
| LAMA5 | -0.54258 | -0.09804 | -4.08267 | 0.0001 | 0.001154 | 1.024471 |
| TRIP11 | -0.51956 | 0.003201 | -4.07928 | 0.000101 | 0.001165 | 1.013088 |
| SPATA31A3 | 0.545032 | -0.13216 | 4.07912 | 0.000101 | 0.001165 | 1.012541 |
| NDUFA12 | -0.65581 | -0.27453 | -4.06685 | 0.000106 | 0.001203 | 0.971389 |
| RBP1 | -0.52213 | -0.14459 | -4.06633 | 0.000106 | 0.001204 | 0.969642 |
| CCNI | -0.51912 | -0.16935 | -4.05632 | 0.00011 | 0.001239 | 0.936124 |
| 5-Sep | 0.501803 | 0.449129 | 4.052346 | 0.000112 | 0.00125 | 0.92283 |
| SMIM7 | -0.54285 | -0.06652 | -4.04324 | 0.000115 | 0.001284 | 0.892404 |
| UBE4B | -0.53199 | -0.1391 | -4.03574 | 0.000118 | 0.001309 | 0.867377 |
| WDR41 | -0.5333 | -0.07409 | -4.03153 | 0.00012 | 0.001324 | 0.853355 |
| SIK1 | 1.107399 | 0.478715 | 4.031174 | 0.00012 | 0.001324 | 0.852169 |
| PEBP1 | -0.65163 | -0.20303 | -4.02849 | 0.000122 | 0.001336 | 0.843234 |
| UQCRFS1 | -0.50358 | -0.09841 | -4.02101 | 0.000125 | 0.001362 | 0.818344 |
| CCR7 | 0.867436 | 0.420206 | 4.019021 | 0.000126 | 0.001369 | 0.81172 |
| CAMLG | -0.5503 | -0.24642 | -4.0177 | 0.000126 | 0.001374 | 0.807321 |
| ZNHIT3 | -0.53222 | 0.089027 | -4.01473 | 0.000128 | 0.001383 | 0.797469 |
| CAMK2G | -0.50508 | -0.08138 | -4.01431 | 0.000128 | 0.001383 | 0.796057 |
| GNL2 | -0.54748 | -0.19085 | -4.01244 | 0.000129 | 0.001389 | 0.789869 |
| CST6 | -0.61392 | -0.09827 | -4.00902 | 0.00013 | 0.001402 | 0.778505 |
| GMDS | -0.8111 | -0.27963 | -4.00874 | 0.00013 | 0.001403 | 0.777553 |
| AZIN2 | 0.622307 | 0.064849 | 4.008027 | 0.000131 | 0.001405 | 0.7752 |
| EIF2S3 | -0.52014 | -0.02554 | -4.00004 | 0.000135 | 0.001438 | 0.74871 |
| IARS2 | -0.55138 | -0.19314 | -3.99817 | 0.000135 | 0.001444 | 0.742515 |
| BRD3 | -0.51237 | -0.07397 | -3.99566 | 0.000137 | 0.001455 | 0.734215 |
| TTTY3 | 0.555362 | 0.053211 | 3.994433 | 0.000137 | 0.001459 | 0.730138 |
| MAP2K2 | -0.55786 | -0.06276 | -3.9941 | 0.000137 | 0.00146 | 0.72903 |
| DLST | -0.61724 | -0.27179 | -3.98887 | 0.00014 | 0.001483 | 0.711738 |
| ZNF575 | -0.60001 | -0.04449 | -3.9874 | 0.000141 | 0.001489 | 0.706864 |
| VPS29 | -0.57109 | -0.26388 | -3.98313 | 0.000143 | 0.001506 | 0.692752 |
| BOD1 | -0.55191 | -0.11695 | -3.97497 | 0.000147 | 0.001539 | 0.665809 |
| SUMF1 | -0.55528 | -0.12223 | -3.95746 | 0.000156 | 0.001615 | 0.608087 |
| HCK | 0.715676 | 0.057404 | 3.954481 | 0.000158 | 0.001627 | 0.598301 |
| ATOH8 | -0.58231 | -0.01124 | -3.94314 | 0.000165 | 0.001676 | 0.561048 |
| FCN1 | 0.812169 | 0.080154 | 3.941331 | 0.000166 | 0.001683 | 0.555105 |
| SNAI2 | -0.5111 | 0.165595 | -3.93944 | 0.000167 | 0.001689 | 0.548893 |
| ACO2 | 0.575808 | 0.095754 | 3.934265 | 0.00017 | 0.001714 | 0.531935 |
| DEFA1B | 0.611589 | 0.286176 | 3.931921 | 0.000171 | 0.001723 | 0.524255 |
| TCEA3 | -0.5618 | -0.07546 | -3.92397 | 0.000176 | 0.001755 | 0.498238 |
| COX7C | -0.71454 | -0.3548 | -3.91733 | 0.00018 | 0.001785 | 0.476521 |
| SAMD4A | 0.527306 | -0.09204 | 3.915052 | 0.000182 | 0.001794 | 0.469075 |
| ZBED5 | -0.54059 | 0.03541 | -3.91381 | 0.000182 | 0.001798 | 0.465014 |
| IL1B | 0.826498 | 0.394036 | 3.909164 | 0.000185 | 0.001817 | 0.449854 |
| APLNR | 0.579075 | 0.146137 | 3.908389 | 0.000186 | 0.001821 | 0.447327 |
| MRAP2 | -0.77689 | -0.16163 | -3.9015 | 0.00019 | 0.001857 | 0.424867 |
| LYRM2 | -0.52941 | -0.09849 | -3.90052 | 0.000191 | 0.001861 | 0.42168 |
| EFR3A | -0.51512 | -0.14005 | -3.89943 | 0.000192 | 0.001866 | 0.418111 |
| C5orf46 | -0.96996 | 0.036574 | -3.89106 | 0.000198 | 0.001904 | 0.390873 |
| TGFBR3 | -0.68934 | -0.07183 | -3.89095 | 0.000198 | 0.001904 | 0.39051 |
| HERC2 | -0.55904 | -0.02339 | -3.89074 | 0.000198 | 0.001904 | 0.389839 |
| RHOF | 0.502014 | -0.06028 | 3.884878 | 0.000202 | 0.001931 | 0.370783 |
| THY1 | 0.572989 | 0.147586 | 3.880827 | 0.000205 | 0.00195 | 0.357626 |
| PDE8B | -0.51136 | 0.101028 | -3.87643 | 0.000208 | 0.001972 | 0.34336 |
| PHGDH | -0.59188 | -0.08861 | -3.87228 | 0.000211 | 0.001995 | 0.329912 |
| ZNF25 | -0.56927 | -0.13413 | -3.86778 | 0.000214 | 0.002014 | 0.315328 |
| COQ9 | -0.50614 | -0.01074 | -3.86049 | 0.00022 | 0.002054 | 0.29172 |
| SNORD14A | 0.529405 | 0.071133 | 3.857028 | 0.000222 | 0.002069 | 0.28053 |
| CAP2 | -0.79153 | -0.2154 | -3.85505 | 0.000224 | 0.002078 | 0.274135 |
| AKT1S1 | -0.6252 | 0.116503 | -3.85238 | 0.000226 | 0.002094 | 0.26551 |
| COA5 | -0.5033 | -0.08519 | -3.85047 | 0.000228 | 0.002104 | 0.259349 |
| RPL13AP6 | -0.50765 | -0.17575 | -3.84732 | 0.00023 | 0.002121 | 0.249165 |
| RNA28S5 | -1.58302 | 0.452937 | -3.8404 | 0.000236 | 0.002159 | 0.226855 |
| METTL7A | -0.65817 | -0.26997 | -3.83582 | 0.000239 | 0.002184 | 0.212109 |
| SPRN | 0.525211 | 0.227778 | 3.833186 | 0.000242 | 0.002196 | 0.203619 |
| CST7 | 0.549173 | 0.060982 | 3.828514 | 0.000246 | 0.002224 | 0.18859 |
| PLIN3 | -0.52473 | -0.24496 | -3.8245 | 0.000249 | 0.00225 | 0.175672 |
| DCD | 0.543614 | -0.24594 | 3.818954 | 0.000254 | 0.002281 | 0.15787 |
| NUP88 | -0.64589 | -0.24885 | -3.81108 | 0.000261 | 0.002326 | 0.132627 |
| CSDC2 | -0.52916 | -0.16857 | -3.81101 | 0.000261 | 0.002326 | 0.132394 |
| NDN | -0.61653 | -0.18947 | -3.80412 | 0.000267 | 0.002362 | 0.110323 |
| LSM5 | -0.57859 | 0.134216 | -3.80337 | 0.000268 | 0.002367 | 0.107906 |
| XPA | -0.6515 | -0.14415 | -3.80266 | 0.000269 | 0.002369 | 0.105652 |
| NOTCH3 | -0.5285 | -0.19417 | -3.79917 | 0.000272 | 0.002386 | 0.094481 |
| SPARC | -0.75413 | -0.0431 | -3.79742 | 0.000273 | 0.002398 | 0.088877 |
| BARD1 | -0.53673 | -0.06709 | -3.78824 | 0.000282 | 0.002459 | 0.059554 |
| AKR1C3 | -0.63954 | -0.21011 | -3.78179 | 0.000289 | 0.002491 | 0.038971 |
| SCOC | -0.60955 | -0.15158 | -3.78138 | 0.000289 | 0.002493 | 0.037657 |
| APLF | 0.507265 | -0.07618 | 3.771692 | 0.000299 | 0.002557 | 0.006801 |
| HBD | 0.534828 | 0.112912 | 3.771626 | 0.000299 | 0.002557 | 0.006593 |
| CLLU1OS | 0.646478 | -0.00786 | 3.764045 | 0.000307 | 0.002604 | -0.01752 |
| HELZ2 | 0.532541 | 0.089251 | 3.763672 | 0.000307 | 0.002604 | -0.0187 |
| SPIB | 0.540642 | 0.149789 | 3.763041 | 0.000308 | 0.002607 | -0.02071 |
| C15orf52 | -0.58697 | -0.12213 | -3.7629 | 0.000308 | 0.002608 | -0.02116 |
| PTGS2 | 0.759874 | 0.347523 | 3.758758 | 0.000312 | 0.002633 | -0.03431 |
| ANP32AP1 | -0.85236 | -0.0079 | -3.75469 | 0.000317 | 0.002659 | -0.04721 |
| TACC1 | -0.51661 | -0.20345 | -3.75003 | 0.000322 | 0.002689 | -0.06201 |
| ACTN1 | -0.53844 | -0.28232 | -3.747 | 0.000325 | 0.002711 | -0.07158 |
| LIMCH1 | -0.79331 | -0.30463 | -3.7403 | 0.000333 | 0.002754 | -0.09281 |
| ETFA | -0.51228 | -0.12908 | -3.73893 | 0.000334 | 0.002762 | -0.09713 |
| ADAMTS8 | -0.59107 | 0.002418 | -3.73575 | 0.000338 | 0.002784 | -0.10719 |
| GAS1 | -0.68499 | 0.320123 | -3.73455 | 0.000339 | 0.002793 | -0.11098 |
| ADAM8 | 0.774386 | 0.229181 | 3.732798 | 0.000341 | 0.002807 | -0.11652 |
| HBEGF | 0.75986 | 0.188165 | 3.719611 | 0.000357 | 0.002904 | -0.15813 |
| ESYT2 | -0.68394 | -0.32499 | -3.71366 | 0.000364 | 0.002944 | -0.17689 |
| GNG12 | -0.53584 | -0.07846 | -3.71359 | 0.000364 | 0.002944 | -0.17708 |
| SNCG | -0.50996 | -0.07944 | -3.6998 | 0.000382 | 0.00305 | -0.22044 |
| MX1 | 0.696318 | -0.02914 | 3.699337 | 0.000382 | 0.003054 | -0.22189 |
| PHPT1 | -0.52443 | -0.14103 | -3.69495 | 0.000388 | 0.003085 | -0.23566 |
| KIAA1468 | 0.525916 | 0.083153 | 3.694263 | 0.000389 | 0.00309 | -0.23781 |
| CD300A | 0.649936 | -0.05415 | 3.69005 | 0.000395 | 0.003115 | -0.25102 |
| SPRYD3 | -0.51028 | -0.14361 | -3.67794 | 0.000411 | 0.003214 | -0.28892 |
| SLIRP | -0.67695 | -0.26827 | -3.67469 | 0.000416 | 0.00323 | -0.29909 |
| ZNF223 | 0.679312 | -0.01638 | 3.672826 | 0.000418 | 0.003247 | -0.3049 |
| HAUS2 | 0.607828 | -0.04208 | 3.669029 | 0.000424 | 0.003279 | -0.31675 |
| SORT1 | -0.55085 | -0.18617 | -3.66715 | 0.000426 | 0.003289 | -0.32262 |
| RAB10 | -0.52116 | -0.16023 | -3.65395 | 0.000446 | 0.003402 | -0.36373 |
| MT1X | -0.91996 | -0.38503 | -3.65303 | 0.000447 | 0.003405 | -0.3666 |
| CORO1C | -0.52537 | -0.12365 | -3.64843 | 0.000454 | 0.003451 | -0.38089 |
| ZBTB40 | -0.53331 | -0.11635 | -3.648 | 0.000455 | 0.003455 | -0.38223 |
| C2orf40 | -0.7611 | -0.06189 | -3.6442 | 0.00046 | 0.003487 | -0.39402 |
| MGST3 | -0.56987 | -0.21764 | -3.64369 | 0.000461 | 0.003488 | -0.39563 |
| NDUFB10 | -0.61143 | -0.16931 | -3.63779 | 0.000471 | 0.003541 | -0.41393 |
| ALPP | -0.51247 | -0.06638 | -3.63502 | 0.000475 | 0.003566 | -0.4225 |
| SGCA | -0.69593 | -0.18472 | -3.63223 | 0.000479 | 0.003593 | -0.43116 |
| CX3CR1 | 0.626333 | 0.504275 | 3.62735 | 0.000487 | 0.003637 | -0.44627 |
| BAG3 | -0.56451 | -0.08124 | -3.62713 | 0.000488 | 0.003637 | -0.44695 |
| RN7SL1 | 0.590986 | -0.06106 | 3.625931 | 0.00049 | 0.003648 | -0.45066 |
| CALU | -0.5283 | -0.18853 | -3.62253 | 0.000495 | 0.003683 | -0.46118 |
| NDUFA4 | -0.50166 | -0.19384 | -3.60942 | 0.000517 | 0.003794 | -0.50167 |
| PCNP | -0.53473 | -0.2072 | -3.60826 | 0.000519 | 0.003806 | -0.50525 |
| LPIN1 | -0.61556 | -0.18923 | -3.59842 | 0.000537 | 0.003907 | -0.53555 |
| TNNI3 | 0.50257 | -0.09956 | 3.595735 | 0.000542 | 0.003932 | -0.5438 |
| TM4SF5 | 0.606701 | 0.029509 | 3.580892 | 0.000569 | 0.004092 | -0.58938 |
| GSTCD | 0.614199 | 0.556649 | 3.579738 | 0.000571 | 0.004103 | -0.59291 |
| MANF | -0.54316 | -0.15057 | -3.57971 | 0.000571 | 0.004103 | -0.59299 |
| COX17 | -0.72454 | -0.42999 | -3.57544 | 0.000579 | 0.004151 | -0.60608 |
| FMOD | -0.56851 | -0.04729 | -3.57282 | 0.000584 | 0.004179 | -0.61411 |
| COX7A1 | -0.60493 | -0.18441 | -3.57223 | 0.000586 | 0.004186 | -0.61592 |
| P2RX6 | -0.50562 | 0.05746 | -3.56958 | 0.000591 | 0.004211 | -0.62403 |
| KIAA0355 | -0.51926 | -0.0941 | -3.56673 | 0.000596 | 0.004245 | -0.63274 |
| UCP2 | 0.743704 | 0.257083 | 3.562679 | 0.000604 | 0.004289 | -0.64511 |
| GLRX | -0.54313 | -0.10669 | -3.56127 | 0.000607 | 0.004303 | -0.64941 |
| GOLGA8A | 0.574938 | 0.110326 | 3.5603 | 0.000609 | 0.004312 | -0.65238 |
| KLHL42 | -0.53607 | -0.13118 | -3.55996 | 0.00061 | 0.004315 | -0.65342 |
| WDR74 | -0.54616 | -0.03077 | -3.5408 | 0.00065 | 0.004521 | -0.7118 |
| TSHZ2 | 0.672552 | 0.070511 | 3.536567 | 0.000659 | 0.004571 | -0.72465 |
| USF1 | -0.54956 | 0.040203 | -3.53317 | 0.000666 | 0.004612 | -0.73497 |
| MRPL20 | -0.67649 | 0.218362 | -3.53267 | 0.000667 | 0.004618 | -0.73649 |
| SSTR2 | -0.50723 | -0.15808 | -3.52995 | 0.000673 | 0.004651 | -0.74475 |
| RAB7B | 0.524571 | 0.02273 | 3.526734 | 0.000681 | 0.004691 | -0.75449 |
| SLC11A2 | -0.5149 | -0.10243 | -3.52659 | 0.000681 | 0.004691 | -0.75493 |
| ST13 | -0.50708 | -0.22796 | -3.52429 | 0.000686 | 0.004715 | -0.7619 |
| WAS | 0.529269 | 0.01031 | 3.51887 | 0.000698 | 0.004775 | -0.77832 |
| PARP4 | -0.52549 | -0.1166 | -3.51074 | 0.000717 | 0.004876 | -0.8029 |
| CD151 | -0.62184 | 0.395654 | -3.50925 | 0.000721 | 0.004895 | -0.8074 |
| RABGAP1 | -0.60688 | -0.20517 | -3.49527 | 0.000755 | 0.005067 | -0.84956 |
| SNX3 | -0.51346 | -0.17675 | -3.49373 | 0.000758 | 0.005083 | -0.85421 |
| OSM | 0.596556 | 0.279346 | 3.492558 | 0.000761 | 0.005089 | -0.85774 |
| SLC2A3 | 0.742341 | 0.34675 | 3.477664 | 0.000799 | 0.005278 | -0.9025 |
| GNG5 | 0.586434 | -0.01636 | 3.474912 | 0.000806 | 0.005312 | -0.91075 |
| NSMAF | -0.56726 | -0.00781 | -3.47456 | 0.000807 | 0.005315 | -0.91179 |
| CRYZ | -0.51552 | -0.11329 | -3.47139 | 0.000816 | 0.005353 | -0.92131 |
| SSR1 | -0.54364 | -0.15658 | -3.47096 | 0.000817 | 0.005359 | -0.9226 |
| HES3 | 0.679014 | -0.19462 | 3.469881 | 0.00082 | 0.005372 | -0.92583 |
| SOCS3 | 0.657104 | 0.541004 | 3.469488 | 0.000821 | 0.005377 | -0.927 |
| OTOF | 0.517783 | 0.343758 | 3.466835 | 0.000828 | 0.005417 | -0.93495 |
| CD3D | 0.516959 | 0.639281 | 3.46475 | 0.000834 | 0.005436 | -0.94119 |
| NUPR1 | -0.60679 | 0.055358 | -3.46195 | 0.000841 | 0.005471 | -0.94956 |
| GAL3ST4 | 0.577619 | -0.07359 | 3.460993 | 0.000844 | 0.005483 | -0.95243 |
| MEF2C | -0.63876 | -0.15934 | -3.45928 | 0.000849 | 0.005506 | -0.95753 |
| SERF2 | -0.51675 | -0.18324 | -3.44833 | 0.000879 | 0.005658 | -0.99023 |
| SLC25A44 | -0.6115 | 0.059733 | -3.43755 | 0.000911 | 0.0058 | -1.02233 |
| NDUFB5 | -0.51729 | -0.25496 | -3.43489 | 0.000918 | 0.005839 | -1.03023 |
| TUBB1 | 0.516369 | 0.098881 | 3.430554 | 0.000931 | 0.005899 | -1.04313 |
| OXR1 | -0.57149 | -0.23333 | -3.42951 | 0.000935 | 0.005913 | -1.04624 |
| MTHFD2 | -0.54828 | -0.10565 | -3.4287 | 0.000937 | 0.005921 | -1.04865 |
| GLDN | -0.67024 | -0.07731 | -3.41049 | 0.000994 | 0.006186 | -1.10257 |
| IGIP | -0.52886 | -0.15909 | -3.40851 | 0.001 | 0.006212 | -1.10845 |
| ACSL1 | -0.64924 | -0.01821 | -3.40661 | 0.001006 | 0.006233 | -1.11407 |
| ZYG11B | -0.51233 | -0.23821 | -3.40563 | 0.001009 | 0.006245 | -1.11695 |
| SRP14 | -0.52499 | -0.01609 | -3.39517 | 0.001044 | 0.006387 | -1.14782 |
| NDUFA3 | -0.55641 | -0.28203 | -3.39469 | 0.001046 | 0.006393 | -1.14922 |
| TREM2 | 0.649441 | 0.022418 | 3.38755 | 0.00107 | 0.006499 | -1.17024 |
| SERPINA3 | -0.69348 | -0.35297 | -3.3858 | 0.001076 | 0.006529 | -1.17538 |
| MAGOHB | -0.55199 | 0.06421 | -3.37262 | 0.001122 | 0.006725 | -1.21409 |
| SLC17A9 | 0.535792 | 0.081467 | 3.371638 | 0.001126 | 0.006742 | -1.21697 |
| KLHL30 | -0.53016 | -0.06441 | -3.35839 | 0.001174 | 0.006969 | -1.25576 |
| IL13RA1 | -0.54474 | -0.26876 | -3.34888 | 0.001211 | 0.007132 | -1.28352 |
| JAML | 0.533505 | -0.10501 | 3.348103 | 0.001214 | 0.007139 | -1.28578 |
| HOXA5 | -0.60424 | -0.18808 | -3.3439 | 0.00123 | 0.00721 | -1.29802 |
| RAMP1 | -0.53848 | -0.03815 | -3.34211 | 0.001237 | 0.007242 | -1.30323 |
| GFPT2 | 0.593554 | 0.352304 | 3.339099 | 0.001249 | 0.007296 | -1.31201 |
| TBCA | -0.5118 | -0.32903 | -3.32512 | 0.001306 | 0.00754 | -1.35261 |
| PPP1R3C | -0.83932 | -0.26338 | -3.32448 | 0.001308 | 0.007547 | -1.35448 |
| ZNF331 | 0.50176 | 0.543031 | 3.315993 | 0.001344 | 0.007701 | -1.37906 |
| BRCC3 | -0.5532 | -0.10332 | -3.30309 | 0.0014 | 0.007952 | -1.41635 |
| S100A12 | 0.532481 | 0.079728 | 3.301069 | 0.001409 | 0.007991 | -1.42218 |
| HBG2 | 0.924277 | 0.572848 | 3.293467 | 0.001443 | 0.008136 | -1.44409 |
| APP | -0.50238 | 0.363637 | -3.29235 | 0.001448 | 0.008157 | -1.44731 |
| CDH13 | -0.54094 | -0.18031 | -3.28803 | 0.001468 | 0.008252 | -1.45974 |
| FICD | -0.54571 | -0.12059 | -3.26717 | 0.001567 | 0.008671 | -1.51957 |
| RGS16 | 0.564427 | 0.251421 | 3.266604 | 0.00157 | 0.008677 | -1.5212 |
| CACNG8 | 0.613337 | 0.364468 | 3.254865 | 0.001629 | 0.008939 | -1.55474 |
| RPS19BP1 | 0.558833 | -0.23063 | 3.242174 | 0.001695 | 0.00922 | -1.5909 |
| MYOM1 | -0.56655 | -0.15133 | -3.23247 | 0.001747 | 0.009456 | -1.61848 |
| RPL24 | -0.85732 | -0.65752 | -3.22918 | 0.001765 | 0.009521 | -1.6278 |
| CPED1 | -0.65074 | -0.50056 | -3.22158 | 0.001807 | 0.00971 | -1.64933 |
| TMEM14B | -0.54113 | -0.09324 | -3.21198 | 0.001861 | 0.009933 | -1.67648 |
| HLA-G | 0.571876 | 0.030285 | 3.192238 | 0.001979 | 0.010389 | -1.7321 |
| SLMAP | -0.67949 | -0.34201 | -3.19093 | 0.001987 | 0.010425 | -1.73578 |
| ITGAL | 0.517351 | 0.062357 | 3.18257 | 0.002039 | 0.010624 | -1.75924 |
| CLEC14A | -0.50787 | -0.08471 | -3.17646 | 0.002077 | 0.010778 | -1.77636 |
| TMED10P1 | -0.52003 | -0.17844 | -3.16003 | 0.002185 | 0.011226 | -1.82227 |
| RPS21 | -0.55098 | -0.31003 | -3.15818 | 0.002197 | 0.011274 | -1.82741 |
| SLC26A3 | 0.50443 | -0.10242 | 3.14883 | 0.002261 | 0.01152 | -1.85345 |
| TMEM30B | -0.50496 | 0.028098 | -3.14717 | 0.002273 | 0.01156 | -1.85807 |
| VPS35 | -0.51292 | -0.15391 | -3.13858 | 0.002333 | 0.011804 | -1.88192 |
| MAOA | -0.67331 | -0.17524 | -3.13594 | 0.002352 | 0.011877 | -1.88924 |
| RAB11A | -0.54882 | -0.16436 | -3.13438 | 0.002363 | 0.011921 | -1.89356 |
| MRPL23 | -0.5572 | -0.28643 | -3.13209 | 0.00238 | 0.011976 | -1.8999 |
| PRUNE2 | -0.73956 | -0.28643 | -3.11365 | 0.002517 | 0.012541 | -1.95084 |
| RNF19B | 0.537039 | 0.166612 | 3.111937 | 0.00253 | 0.012586 | -1.95557 |
| C1R | -0.52125 | 0.755546 | -3.11003 | 0.002545 | 0.012639 | -1.96081 |
| FYCO1 | -0.51084 | -0.13626 | -3.10296 | 0.0026 | 0.012849 | -1.98026 |
| PALLD | -0.62129 | -0.42487 | -3.09918 | 0.00263 | 0.012953 | -1.99064 |
| LDHB | -0.50847 | -0.18001 | -3.09781 | 0.002641 | 0.012977 | -1.99442 |
| S100A8 | 0.768104 | -0.13515 | 3.065157 | 0.002915 | 0.013937 | -2.08367 |
| HADH | -0.50706 | -0.2399 | -3.06138 | 0.002948 | 0.014046 | -2.09396 |
| DUSP2 | 0.574532 | 0.338751 | 3.05779 | 0.00298 | 0.014159 | -2.1037 |
| CCL3 | 0.720827 | 0.191296 | 3.052862 | 0.003024 | 0.014336 | -2.11708 |
| CSRP1 | -0.55729 | -0.3185 | -3.02744 | 0.003263 | 0.015154 | -2.18584 |
| LMCD1 | -0.50991 | -0.13086 | -3.02259 | 0.003311 | 0.015288 | -2.1989 |
| MAP3K7CL | -0.52649 | -0.09664 | -3.01692 | 0.003367 | 0.01548 | -2.21415 |
| VAMP5 | -0.52862 | -0.19106 | -3.01496 | 0.003387 | 0.015545 | -2.2194 |
| ERGIC1 | -0.5031 | -0.20096 | -2.99544 | 0.003589 | 0.016197 | -2.27171 |
| CYP1B1 | -0.52447 | -0.00588 | -2.97395 | 0.003824 | 0.01706 | -2.32897 |
| PTPRCAP | 0.64426 | 0.186902 | 2.967221 | 0.003901 | 0.017307 | -2.34684 |
| NDUFA4L2 | -0.61536 | 0.014394 | -2.96524 | 0.003924 | 0.01738 | -2.3521 |
| IFI6 | -0.51743 | 0.245388 | -2.96455 | 0.003931 | 0.017407 | -2.35392 |
| RPL10A | -0.64052 | 0.495306 | -2.95277 | 0.00407 | 0.017853 | -2.38509 |
| NCF2 | 0.518748 | 0.075762 | 2.949795 | 0.004106 | 0.017966 | -2.39294 |
| SBSPON | -0.67903 | -0.33255 | -2.94961 | 0.004108 | 0.017969 | -2.39343 |
| TUBB4A | 0.508699 | -0.00865 | 2.927513 | 0.004382 | 0.018894 | -2.45157 |
| CR2 | 0.713119 | 0.797917 | 2.9261 | 0.0044 | 0.01895 | -2.45528 |
| HSPB7 | -0.56724 | -0.16399 | -2.92525 | 0.004411 | 0.018979 | -2.4575 |
| ISM1 | -0.52459 | -0.15973 | -2.91699 | 0.004518 | 0.019331 | -2.47913 |
| CARD8 | -0.50146 | 0.045633 | -2.90764 | 0.004643 | 0.019766 | -2.50356 |
| FAM180B | 0.516687 | 0.074527 | 2.907277 | 0.004648 | 0.019778 | -2.50451 |
| CPVL | 0.508391 | 0.007112 | 2.895024 | 0.004816 | 0.020383 | -2.53641 |
| DLD | 0.595079 | -0.121 | 2.881776 | 0.005004 | 0.020959 | -2.57079 |
| GANAB | -0.51984 | -0.39029 | -2.86931 | 0.005187 | 0.021501 | -2.60301 |
| SLC25A4 | -0.51463 | 0.007188 | -2.85854 | 0.00535 | 0.021957 | -2.63077 |
| HBG1 | 0.774402 | 0.563335 | 2.847484 | 0.005523 | 0.022512 | -2.65916 |
| MCM5 | 0.589567 | 0.051013 | 2.839134 | 0.005656 | 0.022903 | -2.68055 |
| MFAP4 | -0.54393 | -0.29542 | -2.82139 | 0.00595 | 0.023792 | -2.72583 |
| PPP1R14A | -0.62008 | -0.27611 | -2.79932 | 0.006335 | 0.024987 | -2.78182 |
| OLR1 | 0.615233 | 0.064652 | 2.792995 | 0.006449 | 0.025309 | -2.7978 |
| SELL | 0.56132 | 0.281412 | 2.787045 | 0.006558 | 0.025624 | -2.8128 |
| SLC1A3 | -0.53711 | -0.07864 | -2.78704 | 0.006558 | 0.025624 | -2.81282 |
| IL6 | 0.933859 | 0.527839 | 2.765349 | 0.006972 | 0.026799 | -2.86729 |
| SFRP4 | 0.502563 | 0.518991 | 2.761145 | 0.007054 | 0.027014 | -2.8778 |
| SCRG1 | -0.76796 | -0.20078 | -2.7533 | 0.007211 | 0.02747 | -2.8974 |
| NOV | -0.72698 | -0.45653 | -2.75298 | 0.007218 | 0.027489 | -2.89818 |
| ADH1A | -0.66784 | -0.38063 | -2.7452 | 0.007376 | 0.027948 | -2.91758 |
| DACT3 | -0.60501 | -0.27679 | -2.7423 | 0.007436 | 0.028119 | -2.92478 |
| RPL39 | -0.6728 | -0.63228 | -2.73082 | 0.007678 | 0.028796 | -2.95328 |
| SHROOM3 | -0.50645 | -0.17506 | -2.72493 | 0.007805 | 0.029117 | -2.96784 |
| CHURC1 | -0.53951 | -0.20932 | -2.67711 | 0.008909 | 0.032171 | -3.08523 |
| FRZB | -0.58678 | -0.27922 | -2.67693 | 0.008913 | 0.032171 | -3.08567 |
| CXCL8 | 0.70412 | 0.618409 | 2.671778 | 0.00904 | 0.032486 | -3.0982 |
| SMOC2 | -0.50931 | -0.34071 | -2.66846 | 0.009123 | 0.032709 | -3.10627 |
| SRPX | -0.53725 | -0.09051 | -2.63368 | 0.010031 | 0.035147 | -3.1903 |
| FOSB | 0.789282 | -0.10167 | 2.601866 | 0.010934 | 0.037537 | -3.26636 |
| RPL35A | -0.80295 | -0.68026 | -2.58377 | 0.011479 | 0.038943 | -3.30927 |
| PHLDA1 | 0.520898 | 0.326841 | 2.510599 | 0.013944 | 0.045026 | -3.48017 |
| RPL21 | -0.84487 | -0.62312 | -2.4746 | 0.015323 | 0.048269 | -3.56271 |
| SNAR-A1 | 0.679132 | 0.227435 | 2.453899 | 0.01617 | 0.050349 | -3.60969 |
| RPL26 | -0.92761 | -0.82149 | -2.43833 | 0.016835 | 0.051889 | -3.64481 |
| NDUFA1 | -0.53623 | -0.36829 | -2.42161 | 0.017576 | 0.053612 | -3.68231 |
| TIMM17A | 0.508856 | 0.11546 | 2.395391 | 0.018796 | 0.056352 | -3.74066 |
| TXNIP | -0.55839 | -0.3072 | -2.39432 | 0.018847 | 0.056488 | -3.74303 |
| IER3 | 0.541074 | 0.184301 | 2.38098 | 0.019498 | 0.057898 | -3.7725 |
| HSPA1A | -0.64087 | 0.037009 | -2.37221 | 0.019937 | 0.058813 | -3.7918 |
| SBDS | -0.50091 | -0.14725 | -2.36987 | 0.020056 | 0.059089 | -3.79694 |
| CIDEA | 0.685766 | 0.36582 | 2.356388 | 0.020751 | 0.060645 | -3.82644 |
| FCER1A | 0.511165 | 0.243635 | 2.332097 | 0.022057 | 0.06356 | -3.87924 |
| KCNMB1 | -0.56206 | -0.45673 | -2.33125 | 0.022105 | 0.063667 | -3.88108 |
| HLA-DRB6 | 0.507438 | 0.437824 | 2.301613 | 0.0238 | 0.067049 | -3.94483 |
| MYH10 | -0.52099 | -0.51747 | -2.29352 | 0.024282 | 0.068083 | -3.9621 |
| RPL7A | -0.58125 | -0.5432 | -2.27433 | 0.025462 | 0.070746 | -4.00288 |
| MYL9 | -0.5127 | 0.333281 | -2.12243 | 0.036707 | 0.093177 | -4.31482 |
| SERPINE1 | 0.597974 | 0.119455 | 2.081048 | 0.040435 | 0.100284 | -4.39647 |
| COL1A1 | 0.521966 | 0.253644 | 2.042748 | 0.044172 | 0.107327 | -4.47074 |
| BCYRN1 | 0.543447 | 0.076478 | 2.034189 | 0.045046 | 0.108726 | -4.48717 |

**Supplementary Table 4. The results of GSVA enrichment analysis of the differential expression genes from the high and low PRGs groups patients.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **logFC** | **Average expression** | **T value** | **P. Value** | **Adjust P. Value** | **Bold** |
| PID\_INTEGRIN2\_PATHWAY | 0.261795 | -0.00905 | 5.31748 | 1.35E-06 | 0.008582 | 4.942713 |
| WP\_LUNG\_FIBROSIS | 0.166207 | -0.22089 | 4.982884 | 4.80E-06 | 0.010915 | 3.833902 |
| WP\_CILIOPATHIES | -0.16847 | -0.03351 | -4.94834 | 5.47E-06 | 0.010915 | 3.720971 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_CELLS\_UP | 0.155771 | -0.13724 | 4.887533 | 6.86E-06 | 0.010915 | 3.522969 |
| ONDER\_CDH1\_TARGETS\_2\_DN | 0.106112 | -0.07719 | 4.326263 | 5.26E-05 | 0.042781 | 1.74746 |
| REACTOME\_CLASS\_I\_PEROXISOMAL\_MEMBRANE\_PROTEIN\_IMPORT | -0.22933 | -0.05282 | -4.3249 | 5.29E-05 | 0.042781 | 1.743284 |
| GHANDHI\_DIRECT\_IRRADIATION\_UP | 0.181662 | -0.14928 | 4.322154 | 5.34E-05 | 0.042781 | 1.734849 |
| AUJLA\_IL22\_AND\_IL17A\_SIGNALING | 0.229701 | -0.20924 | 4.316181 | 5.45E-05 | 0.042781 | 1.716527 |
| BIOCARTA\_STEM\_PATHWAY | 0.337421 | 0.014618 | 4.27338 | 6.34E-05 | 0.042781 | 1.585619 |
| ONDER\_CDH1\_TARGETS\_3\_DN | 0.21645 | -0.02557 | 4.25661 | 6.72E-05 | 0.042781 | 1.534512 |
| ABBUD\_LIF\_SIGNALING\_2\_DN | 0.262061 | -0.11591 | 4.160369 | 9.40E-05 | 0.054379 | 1.243284 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_D\_UP | 0.14196 | -0.06144 | 4.082082 | 0.000123 | 0.065289 | 1.009053 |
| LIAN\_LIPA\_TARGETS\_6M | 0.182402 | -0.16258 | 4.010856 | 0.000157 | 0.068325 | 0.798104 |
| HASEGAWA\_TUMORIGENESIS\_BY\_RET\_C634R | 0.273557 | -0.10805 | 3.978081 | 0.000175 | 0.068325 | 0.701743 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_6HR\_DN | 0.192329 | -0.10115 | 3.957499 | 0.000188 | 0.068325 | 0.641461 |
| BIOCARTA\_DC\_PATHWAY | 0.244759 | -0.01638 | 3.954575 | 0.00019 | 0.068325 | 0.632913 |
| WP\_GLIAL\_CELL\_DIFFERENTIATION | 0.264407 | -0.00582 | 3.94093 | 0.000199 | 0.068325 | 0.593067 |
| CHARAFE\_BREAST\_CANCER\_BASAL\_VS\_MESENCHYMAL\_UP | 0.118989 | -0.07807 | 3.900593 | 0.000228 | 0.068325 | 0.47574 |
| REACTOME\_CHYLOMICRON\_CLEARANCE | 0.260301 | -0.00764 | 3.895779 | 0.000232 | 0.068325 | 0.461785 |
| BIOCARTA\_NOS1\_PATHWAY | -0.20515 | -0.06251 | -3.86982 | 0.000253 | 0.068325 | 0.386716 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C2 | 0.302067 | -0.02042 | 3.86206 | 0.000259 | 0.068325 | 0.364328 |
| GALINDO\_IMMUNE\_RESPONSE\_TO\_ENTEROTOXIN | 0.196313 | -0.22596 | 3.857572 | 0.000263 | 0.068325 | 0.351393 |
| GRAHAM\_CML\_QUIESCENT\_VS\_CML\_DIVIDING\_UP | 0.250295 | -0.07605 | 3.85234 | 0.000268 | 0.068325 | 0.336327 |
| WP\_HEMATOPOIETIC\_STEM\_CELL\_DIFFERENTIATION | 0.158711 | -0.13586 | 3.849977 | 0.00027 | 0.068325 | 0.329525 |
| ALTEMEIER\_RESPONSE\_TO\_LPS\_WITH\_MECHANICAL\_VENTILATION | 0.192058 | -0.11874 | 3.834868 | 0.000284 | 0.068325 | 0.2861 |
| REACTOME\_HDL\_REMODELING | 0.267421 | -0.00679 | 3.828238 | 0.00029 | 0.068325 | 0.267077 |
| PIONTEK\_PKD1\_TARGETS\_UP | 0.142793 | -0.17038 | 3.81592 | 0.000302 | 0.068325 | 0.231787 |
| VILIMAS\_NOTCH1\_TARGETS\_DN | 0.198269 | -0.20865 | 3.808593 | 0.000309 | 0.068325 | 0.210827 |
| THILLAINADESAN\_ZNF217\_TARGETS\_DN | -0.37043 | -0.01947 | -3.80679 | 0.000311 | 0.068325 | 0.205675 |
| ZWANG\_DOWN\_BY\_2ND\_EGF\_PULSE | -0.09718 | -0.0917 | -3.77813 | 0.000342 | 0.06892 | 0.123941 |
| REACTOME\_BBSOME\_MEDIATED\_CARGO\_TARGETING\_TO\_CILIUM | -0.27289 | -0.01151 | -3.77481 | 0.000346 | 0.06892 | 0.114508 |
| REACTOME\_SCAVENGING\_OF\_HEME\_FROM\_PLASMA | 0.260666 | 0.003048 | 3.762843 | 0.00036 | 0.06892 | 0.080508 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_10D\_DN | 0.151514 | -0.15208 | 3.754941 | 0.000369 | 0.06892 | 0.058097 |
| KEGG\_BASAL\_TRANSCRIPTION\_FACTORS | -0.18024 | -0.20424 | -3.75344 | 0.000371 | 0.06892 | 0.053833 |
| BAFNA\_MUC4\_TARGETS\_UP | 0.406131 | 0.004633 | 3.741257 | 0.000386 | 0.06892 | 0.019356 |
| JEPSEN\_SMRT\_TARGETS | 0.171563 | -0.00978 | 3.730367 | 0.0004 | 0.06892 | -0.01141 |
| XU\_HGF\_TARGETS\_REPRESSED\_BY\_AKT1\_UP | 0.281532 | -0.03015 | 3.726803 | 0.000405 | 0.06892 | -0.02147 |
| WP\_GENES\_RELATED\_TO\_PRIMARY\_CILIUM\_DEVELOPMENT\_BASED\_ON\_CRISPR | -0.17137 | -0.02522 | -3.72196 | 0.000412 | 0.06892 | -0.03514 |
| BLANCO\_MELO\_COVID19\_BRONCHIAL\_EPITHELIAL\_CELLS\_SARS\_COV\_2\_INFECTION\_UP | 0.124097 | -0.22415 | 3.707209 | 0.000432 | 0.070465 | -0.07666 |
| HESS\_TARGETS\_OF\_HOXA9\_AND\_MEIS1\_DN | 0.203236 | -0.04896 | 3.684384 | 0.000465 | 0.074004 | -0.14072 |
| REACTOME\_SYNTHESIS\_OF\_PI | 0.262288 | -0.01841 | 3.668905 | 0.000489 | 0.075429 | -0.18403 |
| WP\_IL1\_AND\_MEGAKARYOCYTES\_IN\_OBESITY | 0.269263 | -0.00295 | 3.647239 | 0.000525 | 0.075429 | -0.24445 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_3 | 0.238269 | -0.01636 | 3.638118 | 0.00054 | 0.075429 | -0.26981 |
| NAKAMURA\_BRONCHIAL\_AND\_BRONCHIOLAR\_EPITHELIA | 0.306714 | 0.005757 | 3.635732 | 0.000545 | 0.075429 | -0.27644 |
| LIANG\_SILENCED\_BY\_METHYLATION\_2 | 0.164253 | -0.09191 | 3.629347 | 0.000556 | 0.075429 | -0.29417 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_A | 0.17407 | -0.17498 | 3.628338 | 0.000558 | 0.075429 | -0.29697 |
| REACTOME\_CHEMOKINE\_RECEPTORS\_BIND\_CHEMOKINES | 0.147869 | -0.126 | 3.623185 | 0.000567 | 0.075429 | -0.31126 |
| WARTERS\_IR\_RESPONSE\_5GY | 0.121908 | -0.1555 | 3.621586 | 0.00057 | 0.075429 | -0.31569 |
| MIKKELSEN\_ES\_LCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.331727 | -0.09352 | 3.60969 | 0.000592 | 0.075429 | -0.34862 |
| REACTOME\_THE\_FATTY\_ACID\_CYCLING\_MODEL | 0.305098 | -0.02151 | 3.60215 | 0.000607 | 0.075429 | -0.36946 |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_B\_ALL\_DN | 0.280697 | -0.00789 | 3.59737 | 0.000616 | 0.075429 | -0.38265 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_UP | 0.127939 | -0.47134 | 3.581574 | 0.000648 | 0.075429 | -0.42618 |
| KRIEG\_HYPOXIA\_VIA\_KDM3A | 0.209741 | -0.04997 | 3.578416 | 0.000655 | 0.075429 | -0.43486 |
| AGARWAL\_AKT\_PATHWAY\_TARGETS | 0.321381 | -0.0265 | 3.576269 | 0.000659 | 0.075429 | -0.44076 |
| WP\_NUCLEAR\_RECEPTORS\_METAPATHWAY | 0.095694 | -0.13158 | 3.56862 | 0.000675 | 0.075429 | -0.46177 |
| REACTOME\_DEFECTS\_IN\_BIOTIN\_BTN\_METABOLISM | -0.31221 | -0.11211 | -3.56569 | 0.000682 | 0.075429 | -0.46981 |
| WP\_KETONE\_BODIES\_SYNTHESIS\_AND\_DEGRADATION | -0.3201 | -0.15278 | -3.56351 | 0.000686 | 0.075429 | -0.47579 |
| BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_UP | 0.139616 | -0.13177 | 3.560556 | 0.000693 | 0.075429 | -0.4839 |
| REACTOME\_BINDING\_AND\_UPTAKE\_OF\_LIGANDS\_BY\_SCAVENGER\_RECEPTORS | 0.198336 | -0.05407 | 3.554731 | 0.000706 | 0.075429 | -0.49985 |
| WP\_TP53\_NETWORK | 0.184605 | -0.00196 | 3.549849 | 0.000717 | 0.075429 | -0.51322 |
| HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_UP | 0.197611 | -0.0502 | 3.546432 | 0.000725 | 0.075429 | -0.52256 |
| BIOCARTA\_LYM\_PATHWAY | 0.208517 | -0.00366 | 3.54214 | 0.000735 | 0.075429 | -0.53429 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_POS\_PATIENT\_LUNG\_TISSUE\_UP | 0.140858 | -0.12254 | 3.534986 | 0.000752 | 0.075939 | -0.55382 |
| WP\_PLATELETMEDIATED\_INTERACTIONS\_WITH\_VASCULAR\_AND\_CIRCULATING\_CELLS | 0.199276 | -0.06249 | 3.522206 | 0.000783 | 0.076433 | -0.58865 |
| WP\_OVERVIEW\_OF\_PROINFLAMMATORY\_AND\_PROFIBROTIC\_MEDIATORS | 0.140426 | -0.17707 | 3.522188 | 0.000783 | 0.076433 | -0.58869 |
| ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_UP | 0.149356 | -0.10892 | 3.514296 | 0.000803 | 0.076433 | -0.61016 |
| REACTOME\_CHYLOMICRON\_REMODELING | 0.262578 | 0.011779 | 3.509049 | 0.000816 | 0.076433 | -0.62441 |
| LIU\_IL13\_MEMORY\_MODEL\_UP | 0.238961 | -0.06276 | 3.508844 | 0.000817 | 0.076433 | -0.62497 |
| REACTOME\_ACTIVATION\_OF\_MATRIX\_METALLOPROTEINASES | 0.19406 | -0.1071 | 3.478005 | 0.0009 | 0.082036 | -0.70846 |
| REACTOME\_HYALURONAN\_BIOSYNTHESIS\_AND\_EXPORT | 0.267042 | 0.010864 | 3.477229 | 0.000902 | 0.082036 | -0.71055 |
| WANG\_TNF\_TARGETS | 0.206482 | -0.08844 | 3.455797 | 0.000965 | 0.086235 | -0.76828 |
| WP\_STATIN\_INHIBITION\_OF\_CHOLESTEROL\_PRODUCTION | 0.134712 | -0.10908 | 3.452362 | 0.000976 | 0.086235 | -0.77751 |
| REACTOME\_INTERLEUKIN\_10\_SIGNALING | 0.158109 | -0.22562 | 3.447616 | 0.00099 | 0.086327 | -0.79025 |
| BARRIER\_CANCER\_RELAPSE\_TUMOR\_SAMPLE\_DN | 0.236438 | 0.025241 | 3.435459 | 0.001029 | 0.088461 | -0.82284 |
| BIOCARTA\_IL5\_PATHWAY | 0.096977 | -0.55481 | 3.424806 | 0.001063 | 0.089416 | -0.85133 |
| REACTOME\_DECTIN\_2\_FAMILY | 0.163871 | -0.08314 | 3.419347 | 0.001082 | 0.089416 | -0.86591 |
| WU\_ALZHEIMER\_DISEASE\_UP | 0.26905 | 0.00075 | 3.419286 | 0.001082 | 0.089416 | -0.86607 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | 0.170456 | -0.07262 | 3.40839 | 0.001119 | 0.09053 | -0.89512 |
| ZHAN\_VARIABLE\_EARLY\_DIFFERENTIATION\_GENES\_UP | 0.158867 | -0.23234 | 3.40707 | 0.001124 | 0.09053 | -0.89864 |
| STEARMAN\_TUMOR\_FIELD\_EFFECT\_UP | 0.202262 | -0.17973 | 3.391154 | 0.001181 | 0.092412 | -0.94095 |
| BIOCARTA\_TERC\_PATHWAY | -0.32994 | -0.02823 | -3.38889 | 0.001189 | 0.092412 | -0.94695 |
| REACTOME\_PTK6\_PROMOTES\_HIF1A\_STABILIZATION | 0.269932 | -0.00388 | 3.378114 | 0.001229 | 0.092412 | -0.97551 |
| KEGG\_CYTOKINE\_CYTOKINE\_RECEPTOR\_INTERACTION | 0.10533 | -0.11921 | 3.376426 | 0.001236 | 0.092412 | -0.97998 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_CALU3\_CELLS\_UP | 0.111753 | -0.14048 | 3.375109 | 0.001241 | 0.092412 | -0.98346 |
| REACTOME\_CARGO\_TRAFFICKING\_TO\_THE\_PERICILIARY\_MEMBRANE | -0.21755 | -0.02956 | -3.37293 | 0.001249 | 0.092412 | -0.98922 |
| WP\_TYROBP\_CAUSAL\_NETWORK\_IN\_MICROGLIA | 0.215322 | -0.15387 | 3.368771 | 0.001265 | 0.092412 | -1.00022 |
| BIOCARTA\_NEUTROPHIL\_PATHWAY | 0.322003 | -0.01405 | 3.366389 | 0.001275 | 0.092412 | -1.00651 |
| HINATA\_NFKB\_TARGETS\_KERATINOCYTE\_UP | 0.167558 | -0.17554 | 3.363915 | 0.001285 | 0.092412 | -1.01304 |
| BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_INFECTION\_UP | 0.098988 | -0.19807 | 3.361956 | 0.001292 | 0.092412 | -1.01822 |
| MISHRA\_CARCINOMA\_ASSOCIATED\_FIBROBLAST\_UP | 0.234776 | -0.05442 | 3.353401 | 0.001327 | 0.093036 | -1.04077 |
| PID\_FRA\_PATHWAY | 0.21781 | -0.04223 | 3.342696 | 0.001371 | 0.093036 | -1.06894 |
| WORSCHECH\_TUMOR\_EVASION\_AND\_TOLEROGENICITY\_UP | 0.167392 | -0.06261 | 3.341013 | 0.001378 | 0.093036 | -1.07336 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BONE\_DN | 0.085299 | -0.13338 | 3.340624 | 0.00138 | 0.093036 | -1.07438 |
| BIOCARTA\_FIBRINOLYSIS\_PATHWAY | 0.248488 | -0.01049 | 3.340071 | 0.001382 | 0.093036 | -1.07583 |
| AMIT\_EGF\_RESPONSE\_120\_HELA | 0.191795 | -0.11199 | 3.338587 | 0.001389 | 0.093036 | -1.07973 |
| GOLUB\_ALL\_VS\_AML\_DN | 0.202581 | -0.18231 | 3.333014 | 0.001413 | 0.093657 | -1.09436 |
| VALK\_AML\_CLUSTER\_5 | 0.147208 | -0.34146 | 3.324766 | 0.001449 | 0.095067 | -1.11598 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_1 | 0.221174 | -0.0089 | 3.308007 | 0.001525 | 0.097031 | -1.15979 |
| WP\_KREBS\_CYCLE\_DISORDERS | -0.39597 | -0.04502 | -3.30741 | 0.001528 | 0.097031 | -1.16134 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_HSC\_DN | 0.126572 | -0.10043 | 3.306703 | 0.001531 | 0.097031 | -1.16319 |
| XIE\_LT\_HSC\_S1PR3\_OE\_UP | 0.184854 | -0.01031 | 3.304883 | 0.00154 | 0.097031 | -1.16794 |
| BROWNE\_HCMV\_INFECTION\_2HR\_UP | 0.186896 | -0.06417 | 3.291952 | 0.001602 | 0.099476 | -1.20161 |
| WP\_VITAMIN\_A\_AND\_CAROTENOID\_METABOLISM | 0.139603 | -0.13898 | 3.287378 | 0.001624 | 0.099476 | -1.21351 |
| BIOCARTA\_RHO\_PATHWAY | 0.204928 | -0.05582 | 3.287127 | 0.001626 | 0.099476 | -1.21416 |
| RASHI\_NFKB1\_TARGETS | 0.213031 | -0.14832 | 3.277709 | 0.001673 | 0.101225 | -1.2386 |
| REACTOME\_SMAC\_XIAP\_REGULATED\_APOPTOTIC\_RESPONSE | -0.29099 | 0.005566 | -3.27499 | 0.001687 | 0.101225 | -1.24566 |
| MARSON\_FOXP3\_CORE\_DIRECT\_TARGETS | 0.195641 | -0.04613 | 3.269315 | 0.001716 | 0.101225 | -1.26035 |
| MUELLER\_METHYLATED\_IN\_GLIOBLASTOMA | 0.134274 | -0.15985 | 3.266579 | 0.00173 | 0.101225 | -1.26743 |
| FONTAINE\_PAPILLARY\_THYROID\_CARCINOMA\_DN | 0.098128 | -0.08757 | 3.263722 | 0.001745 | 0.101225 | -1.27482 |
| REACTOME\_OTHER\_SEMAPHORIN\_INTERACTIONS | 0.135614 | -0.09159 | 3.262936 | 0.00175 | 0.101225 | -1.27685 |
| MIKKELSEN\_MEF\_LCP\_WITH\_H3K4ME3 | 0.112941 | -0.17884 | 3.257264 | 0.00178 | 0.102053 | -1.29151 |
| ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_DN | -0.13469 | -0.01942 | -3.25149 | 0.001811 | 0.102925 | -1.3064 |
| WP\_BURN\_WOUND\_HEALING | 0.12692 | -0.10518 | 3.241695 | 0.001866 | 0.105081 | -1.33163 |
| DALESSIO\_TSA\_RESPONSE | 0.20221 | -0.15234 | 3.229995 | 0.001933 | 0.107058 | -1.3617 |
| HINATA\_NFKB\_TARGETS\_KERATINOCYTE\_DN | 0.137045 | -0.03008 | 3.229702 | 0.001935 | 0.107058 | -1.36246 |
| CHO\_NR4A1\_TARGETS | 0.137826 | -0.06771 | 3.210128 | 0.002052 | 0.112573 | -1.41259 |
| XU\_HGF\_TARGETS\_INDUCED\_BY\_AKT1\_48HR\_UP | 0.240143 | -0.02227 | 3.205524 | 0.00208 | 0.113165 | -1.42435 |
| WP\_MITOCHONDRIAL\_FATTY\_ACID\_SYNTHESIS\_PATHWAY | -0.28182 | -0.15556 | -3.20268 | 0.002098 | 0.113167 | -1.43161 |
| PID\_ERB\_GENOMIC\_PATHWAY | -0.18299 | -0.12611 | -3.19928 | 0.00212 | 0.113367 | -1.44029 |
| SWEET\_KRAS\_TARGETS\_DN | 0.105567 | -0.04868 | 3.191202 | 0.002172 | 0.114456 | -1.46085 |
| HANSON\_HRAS\_SIGNALING\_VIA\_NFKB | 0.19268 | -0.04573 | 3.190518 | 0.002176 | 0.114456 | -1.4626 |
| WP\_OREXIN\_RECEPTOR\_PATHWAY | 0.106476 | -0.11623 | 3.180542 | 0.002242 | 0.116954 | -1.48795 |
| AIGNER\_ZEB1\_TARGETS | 0.130689 | -0.08347 | 3.17184 | 0.002301 | 0.117388 | -1.51002 |
| WP\_CYTOKINES\_AND\_INFLAMMATORY\_RESPONSE | 0.115589 | -0.42441 | 3.170179 | 0.002312 | 0.117388 | -1.51423 |
| LIEN\_BREAST\_CARCINOMA\_METAPLASTIC\_VS\_DUCTAL\_UP | 0.170605 | -0.02547 | 3.168475 | 0.002324 | 0.117388 | -1.51855 |
| REACTOME\_DEFECTS\_IN\_VITAMIN\_AND\_COFACTOR\_METABOLISM | -0.20614 | -0.05715 | -3.16695 | 0.002335 | 0.117388 | -1.5224 |
| WP\_SARSCOV2\_ALTERING\_ANGIOGENESIS\_VIA\_NRP1 | 0.281775 | -0.02179 | 3.165834 | 0.002343 | 0.117388 | -1.52523 |
| MATTHEWS\_SKIN\_CARCINOGENESIS\_VIA\_JUN | 0.18935 | -0.00991 | 3.142794 | 0.002509 | 0.120022 | -1.58339 |
| REACTOME\_CELL\_SURFACE\_INTERACTIONS\_AT\_THE\_VASCULAR\_WALL | 0.0976 | -0.08635 | 3.142194 | 0.002513 | 0.120022 | -1.5849 |
| LIAN\_LIPA\_TARGETS\_3M | 0.157755 | -0.18198 | 3.135817 | 0.002561 | 0.120022 | -1.60094 |
| REACTOME\_SYNTHESIS\_OF\_DIPHTHAMIDE\_EEF2 | -0.28638 | -0.00467 | -3.13483 | 0.002569 | 0.120022 | -1.60343 |
| MARTIN\_NFKB\_TARGETS\_UP | 0.164654 | -0.03217 | 3.134738 | 0.002569 | 0.120022 | -1.60365 |
| MARTINELLI\_IMMATURE\_NEUTROPHIL\_DN | 0.266146 | -0.0161 | 3.134382 | 0.002572 | 0.120022 | -1.60454 |
| KANG\_GLIS3\_TARGETS | 0.138894 | -0.09297 | 3.133953 | 0.002575 | 0.120022 | -1.60562 |
| REACTOME\_DISSOLUTION\_OF\_FIBRIN\_CLOT | 0.23116 | -0.08451 | 3.133639 | 0.002578 | 0.120022 | -1.60641 |
| PHONG\_TNF\_TARGETS\_UP | 0.204888 | -0.15295 | 3.132522 | 0.002586 | 0.120022 | -1.60922 |
| REACTOME\_MODULATION\_BY\_MTB\_OF\_HOST\_IMMUNE\_SYSTEM | 0.275832 | -0.11315 | 3.130403 | 0.002602 | 0.120022 | -1.61454 |
| KIM\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_UP | 0.094841 | -0.06851 | 3.130375 | 0.002603 | 0.120022 | -1.61461 |
| REACTOME\_SCAVENGING\_BY\_CLASS\_B\_RECEPTORS | 0.235066 | -0.00645 | 3.121515 | 0.002672 | 0.121339 | -1.63683 |
| LEE\_AGING\_CEREBELLUM\_DN | 0.094775 | -0.05848 | 3.11539 | 0.00272 | 0.121339 | -1.65216 |
| WP\_VITAMIN\_D\_RECEPTOR\_PATHWAY | 0.080357 | -0.14995 | 3.115285 | 0.002721 | 0.121339 | -1.65242 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_INITIATION\_FROM\_TYPE\_3\_PROMOTER | -0.22866 | -0.04944 | -3.11521 | 0.002722 | 0.121339 | -1.65262 |
| XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_6HR | 0.192001 | -0.10794 | 3.114631 | 0.002727 | 0.121339 | -1.65406 |
| REACTOME\_REGULATION\_OF\_GENE\_EXPRESSION\_IN\_ENDOCRINE\_COMMITTED\_NEUROG3\_PROGENITOR\_CELLS | 0.333608 | 0.033323 | 3.105201 | 0.002803 | 0.123892 | -1.67762 |
| WP\_VITAMIN\_D\_METABOLISM | 0.152875 | -0.3123 | 3.093817 | 0.002899 | 0.125386 | -1.70599 |
| REACTOME\_DISEASES\_OF\_DNA\_REPAIR | -0.15475 | -0.02335 | -3.09229 | 0.002912 | 0.125386 | -1.7098 |
| MARIADASON\_RESPONSE\_TO\_BUTYRATE\_CURCUMIN\_SULINDAC\_TSA\_1 | 0.262943 | -0.03415 | 3.087167 | 0.002956 | 0.125386 | -1.72253 |
| RODRIGUES\_NTN1\_TARGETS\_UP | -0.1763 | 0.000895 | -3.08651 | 0.002962 | 0.125386 | -1.72417 |
| TORCHIA\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_TOP20\_UP | 0.123587 | -0.08535 | 3.086503 | 0.002962 | 0.125386 | -1.72418 |
| PARENT\_MTOR\_SIGNALING\_DN | 0.132328 | -0.02392 | 3.085862 | 0.002967 | 0.125386 | -1.72578 |
| GHANDHI\_BYSTANDER\_IRRADIATION\_UP | 0.157488 | -0.0179 | 3.083834 | 0.002985 | 0.125386 | -1.73082 |
| SATO\_SILENCED\_EPIGENETICALLY\_IN\_PANCREATIC\_CANCER | 0.110136 | -0.2461 | 3.082714 | 0.002995 | 0.125386 | -1.7336 |
| WP\_BIOTIN\_METABOLISM\_INCLUDING\_IEMS | -0.22044 | -0.24786 | -3.0793 | 0.003025 | 0.125783 | -1.74207 |
| VILIMAS\_NOTCH1\_TARGETS\_UP | 0.189384 | -0.14549 | 3.077173 | 0.003044 | 0.125783 | -1.74734 |
| TARTE\_PLASMA\_CELL\_VS\_PLASMABLAST\_UP | 0.070808 | -0.21505 | 3.073189 | 0.003079 | 0.126437 | -1.75722 |
| WP\_INTRAFLAGELLAR\_TRANSPORT\_PROTEINS\_BINDING\_TO\_DYNEIN | -0.22441 | 0.00081 | -3.06828 | 0.003124 | 0.126688 | -1.76937 |
| FERRANDO\_TAL1\_NEIGHBORS | 0.198102 | -0.00737 | 3.065036 | 0.003154 | 0.126688 | -1.7774 |
| SCIAN\_INVERSED\_TARGETS\_OF\_TP53\_AND\_TP73\_UP | 0.210665 | 0.023273 | 3.062046 | 0.003181 | 0.126688 | -1.78478 |
| BIOCARTA\_LEPTIN\_PATHWAY | -0.20422 | -0.08754 | -3.0607 | 0.003194 | 0.126688 | -1.78811 |
| NABA\_ECM\_AFFILIATED | 0.094726 | -0.16471 | 3.059918 | 0.003201 | 0.126688 | -1.79004 |
| ABE\_VEGFA\_TARGETS\_30MIN | 0.133496 | -0.18576 | 3.059512 | 0.003205 | 0.126688 | -1.79104 |
| RICKMAN\_METASTASIS\_UP | -0.1483 | -0.08727 | -3.0527 | 0.003269 | 0.128432 | -1.80785 |
| NABA\_ECM\_REGULATORS | 0.120045 | -0.09247 | 3.046565 | 0.003328 | 0.129932 | -1.82296 |
| YAMASHITA\_METHYLATED\_IN\_PROSTATE\_CANCER | 0.121674 | -0.02174 | 3.044496 | 0.003348 | 0.129932 | -1.82805 |
| SEKI\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 0.177972 | -0.10006 | 3.038646 | 0.003406 | 0.131107 | -1.84244 |
| MCLACHLAN\_DENTAL\_CARIES\_UP | 0.131773 | -0.28509 | 3.034254 | 0.00345 | 0.131107 | -1.85322 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_5 | 0.17297 | -0.00347 | 3.031656 | 0.003476 | 0.131107 | -1.85959 |
| ONO\_AML1\_TARGETS\_DN | 0.156986 | -0.04846 | 3.031612 | 0.003476 | 0.131107 | -1.8597 |
| FONTAINE\_THYROID\_TUMOR\_UNCERTAIN\_MALIGNANCY\_DN | 0.129971 | -0.10175 | 3.031061 | 0.003482 | 0.131107 | -1.86106 |
| SA\_MMP\_CYTOKINE\_CONNECTION | 0.142511 | -0.31824 | 3.026234 | 0.003531 | 0.132173 | -1.87288 |
| REACTOME\_TRANSPORT\_OF\_NUCLEOTIDE\_SUGARS | -0.24876 | -0.01142 | -3.0205 | 0.00359 | 0.133142 | -1.88692 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_G2\_G3\_DN | 0.253478 | -0.00329 | 3.019675 | 0.003598 | 0.133142 | -1.88894 |
| REACTOME\_PEPTIDE\_LIGAND\_BINDING\_RECEPTORS | 0.145842 | -0.0505 | 3.013483 | 0.003663 | 0.134764 | -1.90407 |
| AZARE\_NEOPLASTIC\_TRANSFORMATION\_BY\_STAT3\_DN | 0.161942 | 0.007445 | 3.009351 | 0.003707 | 0.135446 | -1.91416 |
| MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_DN | 0.125254 | -0.06646 | 3.007757 | 0.003725 | 0.135446 | -1.91804 |
| LU\_TUMOR\_ANGIOGENESIS\_UP | 0.185407 | -0.00156 | 2.999493 | 0.003814 | 0.137021 | -1.93817 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_TERMINATION | -0.23078 | -0.01751 | -2.99712 | 0.003841 | 0.137021 | -1.94394 |
| NOJIMA\_SFRP2\_TARGETS\_DN | 0.163537 | -0.0083 | 2.997064 | 0.003841 | 0.137021 | -1.94408 |
| REACTOME\_SENSORY\_PROCESSING\_OF\_SOUND\_BY\_OUTER\_HAIR\_CELLS\_OF\_THE\_COCHLEA | 0.137439 | 0.010433 | 2.995913 | 0.003854 | 0.137021 | -1.94688 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 0.086717 | -0.11866 | 2.98276 | 0.004003 | 0.141515 | -1.97881 |
| WP\_APOE\_AND\_MIR146\_IN\_INFLAMMATION\_AND\_ATHEROSCLEROSIS | 0.269345 | -0.00659 | 2.978868 | 0.004048 | 0.142314 | -1.98824 |
| KANG\_AR\_TARGETS\_DN | 0.188202 | -0.01242 | 2.976356 | 0.004077 | 0.142557 | -1.99432 |
| DOANE\_BREAST\_CANCER\_ESR1\_DN | 0.129402 | -0.05005 | 2.971336 | 0.004136 | 0.143834 | -2.00646 |
| SAENZ\_DETOX\_PATHWAY\_AND\_CARCINOGENESIS\_DN | 0.150533 | -0.28733 | 2.969013 | 0.004164 | 0.144007 | -2.01207 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_G1\_CELL\_CYCLE\_ARREST | 0.162205 | 0.004418 | 2.96535 | 0.004208 | 0.144739 | -2.02091 |
| REACTOME\_DEFECTIVE\_CSF2RB\_CAUSES\_SMDP5 | 0.301396 | 0.015071 | 2.96222 | 0.004245 | 0.145256 | -2.02846 |
| CHEOK\_RESPONSE\_TO\_HD\_MTX\_UP | 0.156806 | -0.12417 | 2.955045 | 0.004333 | 0.147473 | -2.04575 |
| BROWNE\_HCMV\_INFECTION\_30MIN\_DN | 0.073156 | -0.14157 | 2.950868 | 0.004385 | 0.148449 | -2.05579 |
| WP\_FOLATE\_METABOLISM | 0.106023 | -0.14835 | 2.948876 | 0.00441 | 0.148505 | -2.06058 |
| REACTOME\_ORGANELLE\_BIOGENESIS\_AND\_MAINTENANCE | -0.12526 | -0.07617 | -2.93359 | 0.004607 | 0.154295 | -2.09723 |
| LIN\_TUMOR\_ESCAPE\_FROM\_IMMUNE\_ATTACK | 0.159345 | -0.00297 | 2.931646 | 0.004632 | 0.15434 | -2.1019 |
| PID\_IL23\_PATHWAY | 0.128324 | -0.166 | 2.925527 | 0.004713 | 0.156229 | -2.11653 |
| PID\_REG\_GR\_PATHWAY | 0.109193 | -0.05735 | 2.908954 | 0.00494 | 0.161503 | -2.15603 |
| REACTOME\_TOXICITY\_OF\_BOTULINUM\_TOXIN\_TYPE\_D\_BOTD | -0.29441 | -0.00844 | -2.90776 | 0.004957 | 0.161503 | -2.15886 |
| WANG\_ESOPHAGUS\_CANCER\_PROGRESSION\_UP | 0.245013 | 0.010304 | 2.907476 | 0.004961 | 0.161503 | -2.15955 |
| HOLLEMAN\_DAUNORUBICIN\_B\_ALL\_UP | 0.200435 | -0.01014 | 2.906149 | 0.004979 | 0.161503 | -2.1627 |
| AMUNDSON\_DNA\_DAMAGE\_RESPONSE\_TP53 | 0.20764 | -0.00016 | 2.904729 | 0.004999 | 0.161503 | -2.16607 |
| REACTOME\_TRNA\_MODIFICATION\_IN\_THE\_MITOCHONDRION | -0.30764 | 0.00188 | -2.90184 | 0.00504 | 0.16183 | -2.17294 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_CLEARANCE | 0.167389 | -0.01169 | 2.90044 | 0.00506 | 0.16183 | -2.17626 |
| REACTOME\_SCAVENGING\_BY\_CLASS\_A\_RECEPTORS | 0.214531 | -0.01036 | 2.894244 | 0.00515 | 0.163747 | -2.19095 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_PLEURA\_DN | 0.087306 | -0.39743 | 2.892721 | 0.005172 | 0.163747 | -2.19456 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_DN | 0.108523 | -0.07981 | 2.889974 | 0.005212 | 0.164203 | -2.20107 |
| WP\_METABOLIC\_PATHWAY\_OF\_LDL\_HDL\_AND\_TG\_INCLUDING\_DISEASES | 0.138244 | 0.003852 | 2.886637 | 0.005261 | 0.16483 | -2.20896 |
| ANDERSEN\_CHOLANGIOCARCINOMA\_CLASS2 | 0.112275 | -0.10265 | 2.884768 | 0.005289 | 0.16483 | -2.21338 |
| BROWNE\_HCMV\_INFECTION\_6HR\_UP | 0.091288 | -0.15712 | 2.883384 | 0.00531 | 0.16483 | -2.21665 |
| SAGIV\_CD24\_TARGETS\_UP | -0.18299 | -0.05216 | -2.87736 | 0.0054 | 0.166832 | -2.23087 |
| WP\_GLUCOCORTICOID\_RECEPTOR\_PATHWAY | 0.140131 | -0.11163 | 2.867937 | 0.005545 | 0.170393 | -2.25308 |
| REACTOME\_MOLYBDENUM\_COFACTOR\_BIOSYNTHESIS | -0.27581 | 0.010603 | -2.86447 | 0.005599 | 0.170393 | -2.26124 |
| LIM\_MAMMARY\_LUMINAL\_PROGENITOR\_UP | 0.107803 | -0.03276 | 2.863888 | 0.005608 | 0.170393 | -2.2626 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_4 | 0.155232 | -0.07769 | 2.862977 | 0.005623 | 0.170393 | -2.26474 |
| REACTOME\_RNA\_POLYMERASE\_III\_CHAIN\_ELONGATION | -0.23265 | -0.01806 | -2.85599 | 0.005734 | 0.172933 | -2.28114 |
| MIKKELSEN\_MCV6\_LCP\_WITH\_H3K4ME3 | 0.074042 | -0.21589 | 2.854176 | 0.005763 | 0.172994 | -2.2854 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G4 | 0.198995 | -0.11462 | 2.849815 | 0.005834 | 0.173183 | -2.29562 |
| HUNSBERGER\_EXERCISE\_REGULATED\_GENES | 0.153886 | -0.07428 | 2.849487 | 0.005839 | 0.173183 | -2.29639 |
| REACTOME\_RECYCLING\_OF\_EIF2\_GDP | -0.30825 | -0.01169 | -2.84876 | 0.005851 | 0.173183 | -2.2981 |
| SUZUKI\_RESPONSE\_TO\_TSA | -0.16506 | 0.00521 | -2.84579 | 0.0059 | 0.173317 | -2.30505 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_1 | 0.213429 | 0.0123 | 2.845164 | 0.00591 | 0.173317 | -2.30651 |
| REACTOME\_ACTIVATION\_OF\_CASPASES\_THROUGH\_APOPTOSOME\_MEDIATED\_CLEAVAGE | -0.24923 | 0.009476 | -2.84144 | 0.005971 | 0.174323 | -2.31521 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY\_REMODELING\_AND\_CLEARANCE | 0.11531 | -0.02333 | 2.838572 | 0.006019 | 0.17492 | -2.32191 |
| WP\_NRF2\_PATHWAY | 0.080697 | -0.16737 | 2.834982 | 0.00608 | 0.175399 | -2.33029 |
| SATO\_SILENCED\_BY\_DEACETYLATION\_IN\_PANCREATIC\_CANCER | 0.119402 | -0.09304 | 2.832335 | 0.006125 | 0.175399 | -2.33646 |
| SMID\_BREAST\_CANCER\_BASAL\_UP | 0.070383 | -0.11445 | 2.831641 | 0.006137 | 0.175399 | -2.33808 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_1 | 0.173527 | -0.00419 | 2.828857 | 0.006184 | 0.175399 | -2.34457 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_3 | 0.153384 | 0.000518 | 2.828014 | 0.006199 | 0.175399 | -2.34653 |
| TIAN\_TNF\_SIGNALING\_VIA\_NFKB | 0.244401 | -0.00012 | 2.827878 | 0.006201 | 0.175399 | -2.34684 |
| BIOCARTA\_BLYMPHOCYTE\_PATHWAY | 0.088306 | -0.54408 | 2.819985 | 0.006339 | 0.177709 | -2.3652 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_UP | -0.13281 | -0.04087 | -2.81854 | 0.006364 | 0.177709 | -2.36856 |
| REACTOME\_RNA\_POLYMERASE\_I\_PROMOTER\_ESCAPE | -0.13695 | -0.25993 | -2.8184 | 0.006367 | 0.177709 | -2.36889 |
| WP\_VITAMIN\_B12\_METABOLISM | 0.104886 | -0.16585 | 2.81287 | 0.006465 | 0.179566 | -2.38172 |
| REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION\_TERMINATION | -0.1357 | -0.24632 | -2.81124 | 0.006494 | 0.179566 | -2.38549 |
| REACTOME\_CILIUM\_ASSEMBLY | -0.11527 | -0.09113 | -2.80993 | 0.006518 | 0.179566 | -2.38853 |
| REACTOME\_INTERLEUKIN\_4\_AND\_INTERLEUKIN\_13\_SIGNALING | 0.13144 | -0.06358 | 2.806563 | 0.006579 | 0.180465 | -2.39633 |
| DIRMEIER\_LMP1\_RESPONSE\_EARLY | 0.128444 | -0.32578 | 2.801087 | 0.006679 | 0.18168 | -2.409 |
| WORSCHECH\_TUMOR\_EVASION\_AND\_TOLEROGENICITY\_DN | 0.173862 | -0.06334 | 2.799813 | 0.006703 | 0.18168 | -2.41194 |
| JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_DN | 0.13123 | -0.07473 | 2.799489 | 0.006709 | 0.18168 | -2.41269 |
| LEE\_LIVER\_CANCER\_MYC\_E2F1\_DN | 0.091839 | -0.07918 | 2.795995 | 0.006774 | 0.182226 | -2.42076 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_PUBERTY\_STAGE\_2\_OF\_4 | 0.233191 | -0.02372 | 2.795334 | 0.006786 | 0.182226 | -2.42228 |
| WP\_LET7\_INHIBITION\_OF\_ES\_CELL\_REPROGRAMMING | 0.201548 | -0.4471 | 2.790556 | 0.006876 | 0.183868 | -2.4333 |
| REACTOME\_SULFUR\_AMINO\_ACID\_METABOLISM | -0.19463 | -0.01323 | -2.77656 | 0.007146 | 0.190014 | -2.46548 |
| WP\_MIRNA\_BIOGENESIS | -0.29883 | -0.00514 | -2.77493 | 0.007178 | 0.190014 | -2.46923 |
| ODONNELL\_TFRC\_TARGETS\_UP | 0.062879 | -0.16997 | 2.774054 | 0.007196 | 0.190014 | -2.47124 |
| HAN\_JNK\_SINGALING\_DN | 0.143501 | -0.05107 | 2.771387 | 0.007249 | 0.190621 | -2.47736 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | 0.094681 | -0.20808 | 2.76736 | 0.007329 | 0.190698 | -2.48659 |
| LEI\_HOXC8\_TARGETS\_UP | 0.165889 | -0.07518 | 2.766627 | 0.007344 | 0.190698 | -2.48827 |
| BIOCARTA\_EPONFKB\_PATHWAY | 0.203019 | -0.01901 | 2.765648 | 0.007364 | 0.190698 | -2.49051 |
| NAKAJIMA\_MAST\_CELL | 0.156475 | -0.0895 | 2.765262 | 0.007371 | 0.190698 | -2.49139 |
| CHIBA\_RESPONSE\_TO\_TSA\_UP | 0.109992 | -0.22325 | 2.757036 | 0.007539 | 0.193879 | -2.51019 |
| WANG\_METHYLATED\_IN\_BREAST\_CANCER | 0.162995 | -0.20424 | 2.756265 | 0.007555 | 0.193879 | -2.51195 |
| KIM\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_DN | -0.16487 | 0.002069 | -2.75361 | 0.00761 | 0.194507 | -2.51801 |
| REACTOME\_ERYTHROCYTES\_TAKE\_UP\_CARBON\_DIOXIDE\_AND\_RELEASE\_OXYGEN | 0.184917 | 0.008656 | 2.750054 | 0.007685 | 0.195081 | -2.52612 |
| REACTOME\_INTESTINAL\_ABSORPTION | 0.23644 | 0.020332 | 2.749605 | 0.007694 | 0.195081 | -2.52714 |
| DELPUECH\_FOXO3\_TARGETS\_UP | 0.123738 | -0.09792 | 2.744606 | 0.0078 | 0.196977 | -2.53852 |
| DASU\_IL6\_SIGNALING\_UP | 0.104687 | -0.29262 | 2.738547 | 0.00793 | 0.197572 | -2.5523 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREEN\_DN | -0.14402 | -0.19408 | -2.73852 | 0.00793 | 0.197572 | -2.55236 |
| MAHAJAN\_RESPONSE\_TO\_IL1A\_UP | 0.110671 | -0.05138 | 2.737665 | 0.007949 | 0.197572 | -2.5543 |
| REACTOME\_PHOSPHATE\_BOND\_HYDROLYSIS\_BY\_NUDT\_PROTEINS | -0.29794 | -0.0182 | -2.73657 | 0.007973 | 0.197572 | -2.55679 |
| KHETCHOUMIAN\_TRIM24\_TARGETS\_UP | 0.171924 | -0.00486 | 2.734989 | 0.008007 | 0.197572 | -2.56038 |
| REACTOME\_UBIQUINOL\_BIOSYNTHESIS | -0.25905 | -0.01463 | -2.73326 | 0.008045 | 0.197572 | -2.5643 |
| BIOCARTA\_IL17\_PATHWAY | 0.194044 | -0.0174 | 2.728044 | 0.00816 | 0.197572 | -2.57612 |
| XU\_AKT1\_TARGETS\_48HR | -0.1673 | -0.09549 | -2.72781 | 0.008165 | 0.197572 | -2.57665 |
| OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_UP | -0.13084 | -0.13515 | -2.72725 | 0.008177 | 0.197572 | -2.57792 |
| REACTOME\_DEGRADATION\_OF\_THE\_EXTRACELLULAR\_MATRIX | 0.124326 | -0.06237 | 2.726453 | 0.008195 | 0.197572 | -2.57972 |
| IYENGAR\_RESPONSE\_TO\_ADIPOCYTE\_FACTORS | 0.185282 | -0.09973 | 2.725182 | 0.008223 | 0.197572 | -2.5826 |
| WP\_OXIDATION\_BY\_CYTOCHROME\_P450 | 0.114228 | -0.08719 | 2.724964 | 0.008228 | 0.197572 | -2.58309 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_2 | 0.123387 | -0.10456 | 2.723506 | 0.008261 | 0.197572 | -2.58639 |
| BILD\_HRAS\_ONCOGENIC\_SIGNATURE | 0.118739 | -0.05632 | 2.722947 | 0.008273 | 0.197572 | -2.58765 |
| REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNEALING\_SSA | -0.14577 | -0.05692 | -2.72218 | 0.008291 | 0.197572 | -2.58939 |
| DELYS\_THYROID\_CANCER\_UP | 0.103635 | -0.11142 | 2.720875 | 0.00832 | 0.197572 | -2.59234 |
| REACTOME\_PTK6\_REGULATES\_RTKS\_AND\_THEIR\_EFFECTORS\_AKT1\_AND\_DOK1 | 0.218725 | 0.006954 | 2.71657 | 0.008418 | 0.198791 | -2.60206 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_UP | 0.081205 | -0.15939 | 2.715867 | 0.008434 | 0.198791 | -2.60365 |
| PARK\_APL\_PATHOGENESIS\_DN | 0.128573 | -0.2184 | 2.714054 | 0.008475 | 0.199033 | -2.60774 |
| REACTOME\_MITOCHONDRIAL\_BIOGENESIS | -0.14034 | -0.03547 | -2.70927 | 0.008586 | 0.200884 | -2.61851 |
| CROMER\_TUMORIGENESIS\_UP | 0.161992 | -0.09756 | 2.704703 | 0.008693 | 0.20205 | -2.6288 |
| SMID\_BREAST\_CANCER\_NORMAL\_LIKE\_DN | 0.256652 | 0.001315 | 2.704426 | 0.008699 | 0.20205 | -2.62942 |
| MIKKELSEN\_IPS\_LCP\_WITH\_H3K4ME3 | 0.077477 | -0.20642 | 2.700952 | 0.008781 | 0.202151 | -2.63723 |
| CROMER\_TUMORIGENESIS\_DN | 0.100814 | -0.22547 | 2.700551 | 0.008791 | 0.202151 | -2.63813 |
| REACTOME\_DAG\_AND\_IP3\_SIGNALING | -0.11736 | -0.05946 | -2.70021 | 0.008799 | 0.202151 | -2.6389 |
| WP\_COMPLEMENT\_SYSTEM | 0.082282 | -0.17008 | 2.694743 | 0.00893 | 0.204419 | -2.65117 |
| REACTOME\_PLATELET\_ADHESION\_TO\_EXPOSED\_COLLAGEN | 0.139821 | -0.35625 | 2.692854 | 0.008975 | 0.204575 | -2.65541 |
| CERVERA\_SDHB\_TARGETS\_1\_UP | 0.097987 | -0.04743 | 2.690783 | 0.009026 | 0.204575 | -2.66005 |
| STARK\_HYPPOCAMPUS\_22Q11\_DELETION\_DN | -0.15175 | -0.01359 | -2.69048 | 0.009033 | 0.204575 | -2.66073 |
| LIU\_SMARCA4\_TARGETS | 0.145203 | -0.05494 | 2.688143 | 0.00909 | 0.205136 | -2.66596 |
| SALVADOR\_MARTIN\_PEDIATRIC\_TBD\_ANTI\_TNF\_THERAPY\_NONRESPONDER\_POST\_TREATMENT\_UP | 0.120231 | -0.34986 | 2.684044 | 0.009191 | 0.206314 | -2.67513 |
| WP\_MITOCHONDRIAL\_COMPLEX\_II\_ASSEMBLY | -0.28432 | -0.13697 | -2.68339 | 0.009207 | 0.206314 | -2.6766 |
| SANA\_TNF\_SIGNALING\_UP | 0.121043 | -0.28172 | 2.679888 | 0.009294 | 0.207112 | -2.68442 |
| WP\_PROSTAGLANDIN\_SIGNALING | 0.116669 | -0.2256 | 2.679345 | 0.009308 | 0.207112 | -2.68563 |
| AMIT\_EGF\_RESPONSE\_240\_MCF10A | 0.19611 | -0.01043 | 2.676295 | 0.009384 | 0.207506 | -2.69244 |
| WP\_SARSCOV2\_AND\_COVID19\_PATHWAY | 0.175994 | -0.01798 | 2.676043 | 0.009391 | 0.207506 | -2.693 |
| HUMMERICH\_MALIGNANT\_SKIN\_TUMOR\_UP | 0.170768 | 0.011021 | 2.674034 | 0.009441 | 0.207906 | -2.69748 |
| REACTOME\_BASIGIN\_INTERACTIONS | 0.115821 | -0.03911 | 2.67069 | 0.009526 | 0.208954 | -2.70493 |
| PLASARI\_TGFB1\_TARGETS\_10HR\_UP | 0.113754 | -0.06547 | 2.66959 | 0.009555 | 0.208954 | -2.70738 |
| REACTOME\_MITOCHONDRIAL\_UNCOUPLING | 0.233455 | -0.01692 | 2.667335 | 0.009613 | 0.209501 | -2.7124 |
| BERGER\_MBD2\_TARGETS | 0.204348 | -0.00754 | 2.664514 | 0.009685 | 0.209835 | -2.71868 |
| KORKOLA\_CORRELATED\_WITH\_POU5F1 | 0.081617 | -0.33073 | 2.663274 | 0.009718 | 0.209835 | -2.72143 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION | -0.18505 | -0.03645 | -2.66256 | 0.009736 | 0.209835 | -2.72301 |
| MIKKELSEN\_ES\_LCP\_WITH\_H3K4ME3 | 0.066923 | -0.24709 | 2.66166 | 0.00976 | 0.209835 | -2.72502 |
| PID\_INTEGRIN\_A9B1\_PATHWAY | 0.180852 | -0.08772 | 2.658768 | 0.009836 | 0.210674 | -2.73144 |
| REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION\_INITIATION | -0.12161 | -0.26488 | -2.65765 | 0.009865 | 0.210674 | -2.73392 |
| EHLERS\_ANEUPLOIDY\_UP | -0.20807 | -0.08508 | -2.65282 | 0.009993 | 0.212496 | -2.74462 |
| GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | 0.137241 | -0.06065 | 2.651925 | 0.010017 | 0.212496 | -2.74661 |
| NABA\_MATRISOME\_ASSOCIATED | 0.096036 | -0.12281 | 2.649347 | 0.010086 | 0.213252 | -2.75232 |
| REACTOME\_KETONE\_BODY\_METABOLISM | -0.16247 | -0.08202 | -2.64366 | 0.01024 | 0.2145 | -2.7649 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP | -0.15804 | -0.05367 | -2.64352 | 0.010244 | 0.2145 | -2.7652 |
| SPIRA\_SMOKERS\_LUNG\_CANCER\_DN | -0.16569 | 0.015639 | -2.64344 | 0.010246 | 0.2145 | -2.76538 |
| WP\_COVID19\_ADVERSE\_OUTCOME\_PATHWAY | 0.123884 | -0.36357 | 2.637141 | 0.01042 | 0.216096 | -2.77928 |
| BIOCARTA\_PEPI\_PATHWAY | 0.177409 | -0.0964 | 2.636959 | 0.010425 | 0.216096 | -2.77968 |
| ZHENG\_IL22\_SIGNALING\_UP | 0.097964 | -0.21301 | 2.635537 | 0.010464 | 0.216096 | -2.78282 |
| LEE\_LIVER\_CANCER\_ACOX1\_UP | 0.118151 | -0.06156 | 2.63475 | 0.010486 | 0.216096 | -2.78455 |
| KOHOUTEK\_CCNT2\_TARGETS | 0.075176 | -0.24812 | 2.633397 | 0.010524 | 0.216096 | -2.78753 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C5 | 0.184809 | -0.0049 | 2.632307 | 0.010555 | 0.216096 | -2.78994 |
| REACTOME\_G\_ALPHA\_I\_SIGNALLING\_EVENTS | 0.077172 | -0.1223 | 2.632101 | 0.01056 | 0.216096 | -2.79039 |
| WP\_MICROGLIA\_PATHOGEN\_PHAGOCYTOSIS\_PATHWAY | 0.213945 | -0.01856 | 2.628367 | 0.010666 | 0.21755 | -2.79861 |
| GROSS\_HIF1A\_TARGETS\_UP | 0.190477 | -0.00686 | 2.625981 | 0.010733 | 0.218234 | -2.80385 |
| SCHLESINGER\_METHYLATED\_DE\_NOVO\_IN\_CANCER | 0.120509 | -0.0652 | 2.623 | 0.010819 | 0.219266 | -2.8104 |
| BIOCARTA\_ACTINY\_PATHWAY | -0.19973 | -0.00016 | -2.62124 | 0.010869 | 0.219593 | -2.81427 |
| REACTOME\_NR1H2\_AND\_NR1H3\_MEDIATED\_SIGNALING | 0.115536 | -0.12842 | 2.616028 | 0.01102 | 0.22194 | -2.82569 |
| REACTOME\_CONVERSION\_FROM\_APC\_C\_CDC20\_TO\_APC\_C\_CDH1\_IN\_LATE\_ANAPHASE | -0.1783 | -0.00915 | -2.61159 | 0.01115 | 0.223854 | -2.83541 |
| AMIT\_EGF\_RESPONSE\_120\_MCF10A | 0.176078 | -0.03291 | 2.605971 | 0.011317 | 0.226087 | -2.84769 |
| HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_UP | 0.113929 | -0.01056 | 2.60513 | 0.011342 | 0.226087 | -2.84953 |
| PID\_DELTA\_NP63\_PATHWAY | 0.097793 | -0.02177 | 2.604169 | 0.011371 | 0.226087 | -2.85163 |
| REACTOME\_BIOTIN\_TRANSPORT\_AND\_METABOLISM | -0.18703 | -0.09546 | -2.60308 | 0.011404 | 0.226087 | -2.854 |
| NAKAMURA\_METASTASIS\_MODEL\_DN | 0.127224 | -0.07551 | 2.599797 | 0.011503 | 0.227348 | -2.86117 |
| INAMURA\_LUNG\_CANCER\_SCC\_UP | 0.173111 | -0.00782 | 2.597393 | 0.011576 | 0.228085 | -2.86641 |
| WANG\_BARRETTS\_ESOPHAGUS\_UP | 0.098328 | -0.09987 | 2.59408 | 0.011678 | 0.229374 | -2.87362 |
| WP\_LTF\_DANGER\_SIGNAL\_RESPONSE\_PATHWAY | 0.117085 | -0.39739 | 2.591002 | 0.011773 | 0.23022 | -2.88032 |
| REACTOME\_GLYOXYLATE\_METABOLISM\_AND\_GLYCINE\_DEGRADATION | -0.10932 | -0.0039 | -2.58932 | 0.011825 | 0.23022 | -2.88398 |
| WP\_VITAMIN\_B6DEPENDENT\_AND\_RESPONSIVE\_DISORDERS | -0.27142 | -0.02128 | -2.58835 | 0.011855 | 0.23022 | -2.88608 |
| LEIN\_CHOROID\_PLEXUS\_MARKERS | 0.076081 | -0.05572 | 2.587028 | 0.011896 | 0.23022 | -2.88895 |
| WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK | -0.13589 | -0.09245 | -2.58686 | 0.011902 | 0.23022 | -2.88932 |
| REACTOME\_ERYTHROCYTES\_TAKE\_UP\_OXYGEN\_AND\_RELEASE\_CARBON\_DIOXIDE | 0.230817 | -0.01331 | 2.585524 | 0.011944 | 0.23033 | -2.89222 |
| NABA\_MATRISOME | 0.092124 | -0.11462 | 2.583775 | 0.011999 | 0.230692 | -2.89601 |
| HOLLEMAN\_DAUNORUBICIN\_ALL\_UP | 0.175637 | -0.00743 | 2.580831 | 0.012092 | 0.231781 | -2.9024 |
| REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_EXIT\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS | -0.18462 | -0.00883 | -2.57867 | 0.01216 | 0.2324 | -2.90708 |
| PALOMERO\_GSI\_SENSITIVITY\_DN | -0.3101 | 0.012347 | -2.57666 | 0.012225 | 0.232929 | -2.91143 |
| BIOCARTA\_ASBCELL\_PATHWAY | 0.082063 | -0.51649 | 2.571833 | 0.01238 | 0.23459 | -2.92187 |
| WP\_MITOCHONDRIAL\_COMPLEX\_IV\_ASSEMBLY | -0.24012 | -0.0451 | -2.57053 | 0.012423 | 0.23459 | -2.92469 |
| WP\_DEVELOPMENT\_OF\_PULMONARY\_DENDRITIC\_CELLS\_AND\_MACROPHAGE\_SUBSETS | 0.204606 | -0.08346 | 2.570434 | 0.012426 | 0.23459 | -2.9249 |
| BYSTRYKH\_SCP2\_QTL | -0.16605 | -0.26733 | -2.5694 | 0.012459 | 0.23459 | -2.92713 |
| FUJIWARA\_PARK2\_IN\_LIVER\_CANCER\_UP | 0.192435 | -0.00734 | 2.567558 | 0.01252 | 0.23503 | -2.93111 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_MYELOID\_DN | -0.17282 | -0.11112 | -2.56542 | 0.01259 | 0.235651 | -2.93572 |
| NAKAJIMA\_EOSINOPHIL | 0.096229 | -0.19121 | 2.563037 | 0.012669 | 0.235784 | -2.94086 |
| PID\_LPA4\_PATHWAY | -0.14983 | -0.11067 | -2.56296 | 0.012671 | 0.235784 | -2.94102 |
| BIOCARTA\_RECK\_PATHWAY | 0.208424 | -0.09463 | 2.55961 | 0.012782 | 0.237165 | -2.94824 |
| NAGASHIMA\_NRG1\_SIGNALING\_UP | 0.166216 | -0.08316 | 2.557642 | 0.012848 | 0.237693 | -2.95248 |
| MARTIN\_VIRAL\_GPCR\_SIGNALING\_UP | 0.096587 | -0.01208 | 2.555197 | 0.012931 | 0.238326 | -2.95774 |
| ONGUSAHA\_BRCA1\_TARGETS\_UP | 0.208534 | -0.09135 | 2.5544 | 0.012957 | 0.238326 | -2.95945 |
| REACTOME\_DAP12\_INTERACTIONS | 0.085402 | -0.37387 | 2.552642 | 0.013017 | 0.238731 | -2.96323 |
| REACTOME\_AMINO\_ACID\_TRANSPORT\_ACROSS\_THE\_PLASMA\_MEMBRANE | 0.116161 | -0.02976 | 2.546037 | 0.013243 | 0.242176 | -2.97741 |
| REACTOME\_HDL\_CLEARANCE | 0.234088 | -0.0158 | 2.54342 | 0.013333 | 0.243131 | -2.98302 |
| MOREIRA\_RESPONSE\_TO\_TSA\_DN | 0.138864 | -0.00465 | 2.540388 | 0.013439 | 0.243625 | -2.98951 |
| SHANK\_TAL1\_TARGETS\_DN | 0.185364 | 0.006308 | 2.539843 | 0.013458 | 0.243625 | -2.99067 |
| DELACROIX\_RAR\_TARGETS\_UP | 0.129783 | -0.09408 | 2.538309 | 0.013512 | 0.243625 | -2.99396 |
| KEGG\_REGULATION\_OF\_AUTOPHAGY | -0.08917 | 0.002119 | -2.53766 | 0.013534 | 0.243625 | -2.99535 |
| SUMI\_HNF4A\_TARGETS | 0.173896 | -0.02132 | 2.536234 | 0.013585 | 0.243625 | -2.99839 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_INVOLUTION\_STAGE\_4\_OF\_4 | 0.207998 | -0.02818 | 2.536078 | 0.01359 | 0.243625 | -2.99873 |
| RICKMAN\_METASTASIS\_DN | 0.096713 | -0.1019 | 2.533334 | 0.013687 | 0.244677 | -3.00459 |
| WP\_LIVER\_X\_RECEPTOR\_PATHWAY | 0.159596 | -0.08798 | 2.527215 | 0.013906 | 0.247892 | -3.01764 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_3D\_DN | 0.136348 | -0.03443 | 2.526056 | 0.013948 | 0.247943 | -3.02011 |
| BIOCARTA\_BARD1\_PATHWAY | -0.19208 | 0.010293 | -2.52345 | 0.014042 | 0.248923 | -3.02565 |
| RAY\_ALZHEIMERS\_DISEASE | 0.098768 | -0.45538 | 2.520808 | 0.014138 | 0.249817 | -3.03128 |
| WP\_RIBOFLAVIN\_AND\_COQ\_DISORDERS | -0.1966 | -0.05425 | -2.51992 | 0.014171 | 0.249817 | -3.03317 |
| WP\_TRANSCRIPTIONAL\_CASCADE\_REGULATING\_ADIPOGENESIS | 0.206413 | -0.01213 | 2.517753 | 0.014251 | 0.250526 | -3.03778 |
| NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA1\_UP | 0.105667 | -0.37876 | 2.515619 | 0.014329 | 0.250931 | -3.04231 |
| REACTOME\_SULFIDE\_OXIDATION\_TO\_SULFATE | -0.23442 | -0.02097 | -2.51499 | 0.014352 | 0.250931 | -3.04364 |
| PID\_VEGF\_VEGFR\_PATHWAY | 0.18545 | -0.02229 | 2.512158 | 0.014458 | 0.251566 | -3.04966 |
| PEPPER\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_UP | 0.097292 | -0.51841 | 2.511642 | 0.014477 | 0.251566 | -3.05075 |
| REACTOME\_ALPHA\_OXIDATION\_OF\_PHYTANATE | -0.27731 | -0.01477 | -2.51084 | 0.014507 | 0.251566 | -3.05246 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_DN | -0.1805 | -0.05701 | -2.50973 | 0.014549 | 0.251598 | -3.0548 |
| BOSCO\_EPITHELIAL\_DIFFERENTIATION\_MODULE | 0.11705 | -0.21723 | 2.506932 | 0.014654 | 0.252582 | -3.06073 |
| REACTOME\_DISEASES\_ASSOCIATED\_WITH\_SURFACTANT\_METABOLISM | 0.223132 | 0.019077 | 2.506113 | 0.014685 | 0.252582 | -3.06247 |
| KEGG\_JAK\_STAT\_SIGNALING\_PATHWAY | 0.076398 | -0.0246 | 2.50123 | 0.014871 | 0.254467 | -3.07279 |
| OHGUCHI\_LIVER\_HNF4A\_TARGETS\_DN | 0.100699 | -0.11398 | 2.501131 | 0.014875 | 0.254467 | -3.073 |
| MANN\_RESPONSE\_TO\_AMIFOSTINE\_DN | -0.22429 | 0.008058 | -2.49691 | 0.015037 | 0.256556 | -3.08192 |
| BIOCARTA\_GRANULOCYTES\_PATHWAY | 0.116497 | -0.30342 | 2.492689 | 0.015201 | 0.258659 | -3.09082 |
| REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE | -0.13618 | -0.05425 | -2.49017 | 0.015299 | 0.259639 | -3.09612 |
| WP\_TUMOR\_SUPPRESSOR\_ACTIVITY\_OF\_SMARCB1 | -0.1429 | -0.0313 | -2.48803 | 0.015384 | 0.260375 | -3.10063 |
| WP\_COVID19\_THROMBOSIS\_AND\_ANTICOAGULATION | 0.230012 | 0.004712 | 2.485026 | 0.015503 | 0.261301 | -3.10695 |
| NUMATA\_CSF3\_SIGNALING\_VIA\_STAT3 | 0.126608 | 0.003389 | 2.484579 | 0.01552 | 0.261301 | -3.10789 |
| KEGG\_HEMATOPOIETIC\_CELL\_LINEAGE | 0.097108 | -0.21988 | 2.481863 | 0.015629 | 0.26243 | -3.1136 |
| REACTOME\_VXPX\_CARGO\_TARGETING\_TO\_CILIUM | -0.16561 | -0.04911 | -2.48067 | 0.015677 | 0.26254 | -3.1161 |
| SMIRNOV\_CIRCULATING\_ENDOTHELIOCYTES\_IN\_CANCER\_DN | 0.239946 | 0.003018 | 2.478399 | 0.015768 | 0.263309 | -3.12087 |
| BARIS\_THYROID\_CANCER\_UP | -0.19646 | -0.01273 | -2.47666 | 0.015838 | 0.263309 | -3.12451 |
| REACTOME\_P75NTR\_RECRUITS\_SIGNALLING\_COMPLEXES | 0.189925 | -0.0833 | 2.474988 | 0.015906 | 0.263309 | -3.12802 |
| RODRIGUES\_NTN1\_TARGETS\_DN | 0.062837 | -0.14346 | 2.474801 | 0.015914 | 0.263309 | -3.12841 |
| REACTOME\_MITOCHONDRIAL\_TRANSLATION | -0.21445 | -0.10317 | -2.47355 | 0.015965 | 0.263309 | -3.13104 |
| REACTOME\_GENE\_SILENCING\_BY\_RNA | -0.15734 | -0.03634 | -2.47313 | 0.015982 | 0.263309 | -3.13191 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_REMODELING | 0.126815 | 0.005644 | 2.472388 | 0.016012 | 0.263309 | -3.13347 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_MAGENTA\_DN | -0.22391 | 0.00432 | -2.4699 | 0.016114 | 0.264306 | -3.13868 |
| JAZAG\_TGFB1\_SIGNALING\_VIA\_SMAD4\_UP | 0.071741 | -0.13313 | 2.465325 | 0.016303 | 0.265052 | -3.14824 |
| KEGG\_VASCULAR\_SMOOTH\_MUSCLE\_CONTRACTION | -0.08878 | -0.04347 | -2.46486 | 0.016323 | 0.265052 | -3.14921 |
| ACEVEDO\_LIVER\_CANCER\_WITH\_H3K9ME3\_UP | 0.082948 | -0.21281 | 2.464577 | 0.016334 | 0.265052 | -3.1498 |
| TAYLOR\_METHYLATED\_IN\_ACUTE\_LYMPHOBLASTIC\_LEUKEMIA | -0.10393 | -0.12024 | -2.46403 | 0.016357 | 0.265052 | -3.15093 |
| NOJIMA\_SFRP2\_TARGETS\_UP | 0.131776 | -0.20711 | 2.461761 | 0.016452 | 0.265052 | -3.15568 |
| REACTOME\_MATURATION\_OF\_SARS\_COV\_1\_SPIKE\_PROTEIN | 0.210738 | -0.16968 | 2.460577 | 0.016502 | 0.265052 | -3.15814 |
| LENAOUR\_DENDRITIC\_CELL\_MATURATION\_UP | 0.105123 | -0.15947 | 2.458998 | 0.016568 | 0.265052 | -3.16144 |
| REACTOME\_DEFECTIVE\_F9\_ACTIVATION | 0.253574 | 0.017465 | 2.458187 | 0.016602 | 0.265052 | -3.16313 |
| REACTOME\_CYTOCHROME\_C\_MEDIATED\_APOPTOTIC\_RESPONSE | -0.23074 | -0.01804 | -2.4556 | 0.016712 | 0.265052 | -3.16852 |
| REACTOME\_HATS\_ACETYLATE\_HISTONES | -0.16793 | -0.05341 | -2.45542 | 0.01672 | 0.265052 | -3.16889 |
| TURJANSKI\_MAPK7\_TARGETS | 0.23777 | -0.00925 | 2.455389 | 0.016721 | 0.265052 | -3.16896 |
| REACTOME\_LEISHMANIA\_INFECTION | 0.056869 | -0.04516 | 2.454524 | 0.016758 | 0.265052 | -3.17076 |
| WP\_NAD\_BIOSYNTHESIS\_II\_FROM\_TRYPTOPHAN | 0.173651 | -0.11065 | 2.454287 | 0.016768 | 0.265052 | -3.17125 |
| WP\_NUCLEOTIDEBINDING\_OLIGOMERIZATION\_DOMAIN\_NOD\_PATHWAY | 0.079491 | -0.3441 | 2.452589 | 0.01684 | 0.265052 | -3.17478 |
| HUMMERICH\_BENIGN\_SKIN\_TUMOR\_UP | 0.145983 | 0.007183 | 2.451994 | 0.016866 | 0.265052 | -3.17602 |
| WP\_CELLULAR\_PROTEOSTASIS | -0.18795 | -0.35469 | -2.4516 | 0.016883 | 0.265052 | -3.17684 |
| BIERIE\_INFLAMMATORY\_RESPONSE\_TGFB1 | 0.296474 | 0.003314 | 2.451082 | 0.016905 | 0.265052 | -3.17792 |
| MEISSNER\_BRAIN\_HCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.078869 | -0.05515 | 2.448236 | 0.017028 | 0.265052 | -3.18383 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_8 | 0.140238 | -0.03782 | 2.448213 | 0.017029 | 0.265052 | -3.18388 |
| MISHRA\_CARCINOMA\_ASSOCIATED\_FIBROBLAST\_DN | 0.127224 | -0.14658 | 2.448154 | 0.017031 | 0.265052 | -3.184 |
| KEGG\_GLYCOSAMINOGLYCAN\_DEGRADATION | 0.142766 | -0.00498 | 2.447511 | 0.017059 | 0.265052 | -3.18534 |
| REACTOME\_SENSORY\_PROCESSING\_OF\_SOUND | 0.107626 | 0.013453 | 2.44712 | 0.017076 | 0.265052 | -3.18615 |
| REACTOME\_SIGNALING\_BY\_TYPE\_1\_INSULIN\_LIKE\_GROWTH\_FACTOR\_1\_RECEPTOR\_IGF1R | -0.09524 | -0.00723 | -2.44574 | 0.017136 | 0.265322 | -3.18902 |
| STARK\_BRAIN\_22Q11\_DELETION | 0.165667 | -0.08582 | 2.4448 | 0.017177 | 0.265322 | -3.19096 |
| PID\_ATR\_PATHWAY | -0.13611 | -0.02859 | -2.44311 | 0.01725 | 0.265814 | -3.19446 |
| XIE\_ST\_HSC\_S1PR3\_OE\_DN | 0.156597 | 0.00644 | 2.440653 | 0.017358 | 0.26683 | -3.19956 |
| TESAR\_ALK\_AND\_JAK\_TARGETS\_MOUSE\_ES\_D4\_UP | 0.262534 | -0.01274 | 2.436965 | 0.017521 | 0.268418 | -3.20719 |
| BIOCARTA\_MSP\_PATHWAY | 0.128944 | -0.51498 | 2.436121 | 0.017559 | 0.268418 | -3.20894 |
| SUH\_COEXPRESSED\_WITH\_ID1\_AND\_ID2\_UP | 0.203873 | -0.10257 | 2.435001 | 0.017608 | 0.268418 | -3.21126 |
| JOHNSTONE\_PARVB\_TARGETS\_2\_UP | 0.101648 | -0.19728 | 2.434511 | 0.01763 | 0.268418 | -3.21227 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_8 | 0.150854 | -0.22771 | 2.432388 | 0.017725 | 0.269218 | -3.21666 |
| REACTOME\_HEMOSTASIS | 0.063588 | -0.05622 | 2.430143 | 0.017826 | 0.270024 | -3.22129 |
| KAMIKUBO\_MYELOID\_CEBPA\_NETWORK | 0.168358 | -0.04781 | 2.429321 | 0.017863 | 0.270024 | -3.22299 |
| DURCHDEWALD\_SKIN\_CARCINOGENESIS\_UP | -0.09096 | -0.04466 | -2.42687 | 0.017974 | 0.271053 | -3.22804 |
| LEE\_LIVER\_CANCER\_MYC\_DN | 0.086264 | -0.09007 | 2.423212 | 0.01814 | 0.271726 | -3.23559 |
| REACTOME\_SYNTHESIS\_OF\_BILE\_ACIDS\_AND\_BILE\_SALTS\_VIA\_24\_HYDROXYCHOLESTEROL | 0.142601 | 0.000682 | 2.41943 | 0.018314 | 0.271726 | -3.24337 |
| YOSHIMURA\_MAPK8\_TARGETS\_UP | 0.060997 | -0.14048 | 2.41861 | 0.018352 | 0.271726 | -3.24506 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_4\_UP | 0.126614 | -0.25564 | 2.41665 | 0.018443 | 0.271726 | -3.24909 |
| REACTOME\_CLASS\_A\_1\_RHODOPSIN\_LIKE\_RECEPTORS | 0.121724 | -0.04127 | 2.415994 | 0.018473 | 0.271726 | -3.25043 |
| REACTOME\_COLLAGEN\_DEGRADATION | 0.1358 | -0.11255 | 2.415707 | 0.018487 | 0.271726 | -3.25102 |
| WP\_TRIACYLGLYCERIDE\_SYNTHESIS | 0.109968 | -0.2629 | 2.41207 | 0.018657 | 0.271726 | -3.25849 |
| WP\_CIRCADIAN\_RHYTHM\_GENES | 0.06735 | -0.0437 | 2.411647 | 0.018676 | 0.271726 | -3.25936 |
| FREDERICK\_PRKCI\_TARGETS | 0.144579 | -0.37653 | 2.411172 | 0.018699 | 0.271726 | -3.26033 |
| REACTOME\_HDR\_THROUGH\_MMEJ\_ALT\_NHEJ | -0.20249 | -0.01039 | -2.4108 | 0.018716 | 0.271726 | -3.26109 |
| REACTOME\_ALTERNATIVE\_COMPLEMENT\_ACTIVATION | 0.117434 | -0.53527 | 2.410241 | 0.018743 | 0.271726 | -3.26224 |
| BRUINS\_UVC\_RESPONSE\_EARLY\_LATE | -0.10366 | -0.12386 | -2.41007 | 0.01875 | 0.271726 | -3.26258 |
| LI\_INDUCED\_T\_TO\_NATURAL\_KILLER\_UP | 0.090962 | -0.19154 | 2.409502 | 0.018777 | 0.271726 | -3.26376 |
| KUUSELO\_PANCREATIC\_CANCER\_19Q13\_AMPLIFICATION | 0.087853 | -0.19227 | 2.409016 | 0.0188 | 0.271726 | -3.26475 |
| WENDT\_COHESIN\_TARGETS\_UP | -0.19066 | -0.0142 | -2.40887 | 0.018807 | 0.271726 | -3.26504 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_E | 0.13545 | -0.1006 | 2.407584 | 0.018868 | 0.271726 | -3.26769 |
| LIU\_IL13\_MEMORY\_MODEL\_DN | 0.180707 | 0.007572 | 2.407335 | 0.01888 | 0.271726 | -3.2682 |
| WP\_MACROPHAGE\_MARKERS | 0.266054 | 0.015586 | 2.406559 | 0.018917 | 0.271726 | -3.26979 |
| WP\_CELL\_DIFFERENTIATION\_EXPANDED\_INDEX | 0.15262 | -0.00345 | 2.403731 | 0.019052 | 0.271726 | -3.27558 |
| WP\_MELATONIN\_METABOLISM\_AND\_EFFECTS | 0.091861 | -0.11098 | 2.403056 | 0.019084 | 0.271726 | -3.27696 |
| WP\_EUKARYOTIC\_TRANSCRIPTION\_INITIATION | -0.15414 | -0.20402 | -2.40297 | 0.019088 | 0.271726 | -3.27714 |
| REACTOME\_PHENYLALANINE\_AND\_TYROSINE\_METABOLISM | 0.136269 | -0.0026 | 2.402387 | 0.019116 | 0.271726 | -3.27833 |
| REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION | -0.11011 | -0.2507 | -2.402 | 0.019135 | 0.271726 | -3.27912 |
| REACTOME\_PROTEIN\_METHYLATION | -0.21457 | -0.00311 | -2.40189 | 0.01914 | 0.271726 | -3.27935 |
| SABATES\_COLORECTAL\_ADENOMA\_UP | 0.096923 | -0.07012 | 2.400432 | 0.01921 | 0.271726 | -3.28232 |
| HOFFMAN\_CLOCK\_TARGETS\_DN | 0.154833 | -0.1406 | 2.399973 | 0.019232 | 0.271726 | -3.28326 |
| LI\_PROSTATE\_CANCER\_EPIGENETIC | 0.109254 | -0.00228 | 2.399689 | 0.019246 | 0.271726 | -3.28384 |
| DORSEY\_GAB2\_TARGETS | 0.13683 | -0.06911 | 2.399467 | 0.019256 | 0.271726 | -3.28429 |
| REACTOME\_HIV\_TRANSCRIPTION\_INITIATION | -0.14696 | -0.18248 | -2.3968 | 0.019386 | 0.271726 | -3.28975 |
| WP\_MITOCHONDRIAL\_COMPLEX\_III\_ASSEMBLY | -0.25779 | -0.00735 | -2.39651 | 0.019399 | 0.271726 | -3.29032 |
| FERRARI\_RESPONSE\_TO\_FENRETINIDE\_UP | 0.210621 | -0.0164 | 2.396116 | 0.019419 | 0.271726 | -3.29114 |
| LEIN\_PONS\_MARKERS | 0.079432 | -0.04857 | 2.395783 | 0.019435 | 0.271726 | -3.29181 |
| WAGNER\_APO2\_SENSITIVITY | 0.118496 | -0.06408 | 2.395038 | 0.019471 | 0.271726 | -3.29333 |
| REACTOME\_MICRORNA\_MIRNA\_BIOGENESIS | -0.22976 | -0.02283 | -2.39489 | 0.019478 | 0.271726 | -3.29363 |
| VERNOCHET\_ADIPOGENESIS | 0.148893 | -0.00109 | 2.394185 | 0.019513 | 0.271726 | -3.29507 |
| TIAN\_TNF\_SIGNALING\_NOT\_VIA\_NFKB | 0.121785 | -0.34395 | 2.392938 | 0.019574 | 0.27198 | -3.29762 |
| REACTOME\_NR1H2\_NR1H3\_REGULATE\_GENE\_EXPRESSION\_TO\_CONTROL\_BILE\_ACID\_HOMEOSTASIS | 0.11977 | -0.33931 | 2.390147 | 0.019711 | 0.272616 | -3.3033 |
| STOSSI\_RESPONSE\_TO\_ESTRADIOL | 0.094505 | -0.07248 | 2.388974 | 0.019769 | 0.272616 | -3.30569 |
| WP\_PROXIMAL\_TUBULE\_TRANSPORT | 0.102099 | -0.04416 | 2.388938 | 0.01977 | 0.272616 | -3.30576 |
| WILENSKY\_RESPONSE\_TO\_DARAPLADIB | 0.153035 | -0.2883 | 2.387271 | 0.019853 | 0.272616 | -3.30916 |
| VALK\_AML\_WITH\_11Q23\_REARRANGED | 0.109779 | -0.04361 | 2.386676 | 0.019882 | 0.272616 | -3.31037 |
| REACTOME\_DEGRADATION\_OF\_CYSTEINE\_AND\_HOMOCYSTEINE | -0.17122 | -0.01388 | -2.38638 | 0.019897 | 0.272616 | -3.31098 |
| NAKAMURA\_CANCER\_MICROENVIRONMENT\_UP | 0.112502 | -0.12082 | 2.385934 | 0.019919 | 0.272616 | -3.31187 |
| KUWANO\_RNA\_STABILIZED\_BY\_NO | 0.240575 | -0.14149 | 2.382951 | 0.020068 | 0.273483 | -3.31794 |
| REACTOME\_TACHYKININ\_RECEPTORS\_BIND\_TACHYKININS | 0.261595 | 0.046942 | 2.382942 | 0.020069 | 0.273483 | -3.31796 |
| SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_2 | 0.09536 | -0.16925 | 2.38045 | 0.020194 | 0.27393 | -3.32302 |
| HUMMEL\_BURKITTS\_LYMPHOMA\_DN | 0.216134 | -0.05554 | 2.379534 | 0.02024 | 0.27393 | -3.32487 |
| ABE\_VEGFA\_TARGETS\_2HR | 0.11058 | -0.18529 | 2.37888 | 0.020273 | 0.27393 | -3.3262 |
| FURUKAWA\_DUSP6\_TARGETS\_PCI35\_UP | 0.08025 | -0.18909 | 2.377752 | 0.02033 | 0.27393 | -3.32849 |
| PASINI\_SUZ12\_TARGETS\_UP | 0.063152 | -0.09905 | 2.377645 | 0.020335 | 0.27393 | -3.32871 |
| REACTOME\_SYNTHESIS\_OF\_PC | -0.10804 | -0.2822 | -2.37717 | 0.02036 | 0.27393 | -3.32968 |
| WP\_MATRIX\_METALLOPROTEINASES | 0.083896 | -0.37413 | 2.375795 | 0.020429 | 0.27407 | -3.33246 |
| KEGG\_SELENOAMINO\_ACID\_METABOLISM | -0.15431 | -0.0057 | -2.37496 | 0.020472 | 0.27407 | -3.33414 |
| YANG\_BREAST\_CANCER\_ESR1\_BULK\_DN | 0.13435 | -0.07903 | 2.374423 | 0.020499 | 0.27407 | -3.33524 |
| GARCIA\_TARGETS\_OF\_FLI1\_AND\_DAX1\_DN | -0.09187 | -0.07114 | -2.37115 | 0.020667 | 0.275734 | -3.34187 |
| ZHOU\_PANCREATIC\_ENDOCRINE\_PROGENITOR | 0.154779 | -0.03511 | 2.366265 | 0.020919 | 0.277184 | -3.35173 |
| MARIADASON\_RESPONSE\_TO\_BUTYRATE\_SULINDAC\_4 | -0.16392 | -0.06567 | -2.36598 | 0.020934 | 0.277184 | -3.3523 |
| WILSON\_PROTEASES\_AT\_TUMOR\_BONE\_INTERFACE\_DN | 0.171806 | -0.18831 | 2.365708 | 0.020948 | 0.277184 | -3.35286 |
| REACTOME\_ANTIMICROBIAL\_PEPTIDES | 0.107368 | -0.20682 | 2.365675 | 0.02095 | 0.277184 | -3.35292 |
| KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR | -0.1427 | -0.17777 | -2.36395 | 0.02104 | 0.277597 | -3.35641 |
| WIKMAN\_ASBESTOS\_LUNG\_CANCER\_UP | -0.14371 | -0.26368 | -2.36339 | 0.021069 | 0.277597 | -3.35754 |
| PID\_NFAT\_TFPATHWAY | 0.105608 | -0.17296 | 2.3621 | 0.021137 | 0.277597 | -3.36014 |
| WORSCHECH\_TUMOR\_REJECTION\_UP | 0.105527 | -0.06117 | 2.361275 | 0.02118 | 0.277597 | -3.3618 |
| HUMMERICH\_SKIN\_CANCER\_PROGRESSION\_UP | 0.138014 | -0.05645 | 2.360908 | 0.021199 | 0.277597 | -3.36254 |
| SENGUPTA\_EBNA1\_ANTICORRELATED | 0.077494 | -0.17226 | 2.359353 | 0.021281 | 0.277908 | -3.36568 |
| SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_1 | 0.053066 | -0.2462 | 2.3588 | 0.02131 | 0.277908 | -3.36679 |
| LUDWICZEK\_TREATING\_IRON\_OVERLOAD | 0.182319 | -0.02636 | 2.357623 | 0.021373 | 0.27815 | -3.36916 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_HD\_MTX\_DN | -0.13202 | -0.17537 | -2.35531 | 0.021495 | 0.279175 | -3.37381 |
| PID\_FANCONI\_PATHWAY | -0.12096 | -0.07274 | -2.35308 | 0.021614 | 0.280149 | -3.37829 |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_WITH\_LMP1\_DN | 0.082228 | -0.12286 | 2.352107 | 0.021667 | 0.280201 | -3.38025 |
| LEE\_LIVER\_CANCER\_MYC\_TGFA\_UP | 0.132096 | -0.06243 | 2.351365 | 0.021706 | 0.280201 | -3.38175 |
| WP\_PPARALPHA\_PATHWAY | 0.095513 | 0.001985 | 2.34811 | 0.021882 | 0.281081 | -3.38828 |
| SMID\_BREAST\_CANCER\_ERBB2\_UP | 0.06474 | -0.13538 | 2.347117 | 0.021936 | 0.281081 | -3.39027 |
| HOEGERKORP\_CD44\_TARGETS\_DIRECT\_UP | 0.117244 | -0.03554 | 2.347045 | 0.021939 | 0.281081 | -3.39042 |
| BROWN\_MYELOID\_CELL\_DEVELOPMENT\_UP | 0.122353 | -0.13176 | 2.346631 | 0.021962 | 0.281081 | -3.39125 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_DN | -0.10613 | -0.09329 | -2.34573 | 0.022011 | 0.281081 | -3.39306 |
| JAZAG\_TGFB1\_SIGNALING\_VIA\_SMAD4\_DN | 0.067366 | -0.17214 | 2.345203 | 0.022039 | 0.281081 | -3.39411 |
| KIM\_ALL\_DISORDERS\_CALB1\_CORR\_DN | 0.125096 | -0.08016 | 2.343503 | 0.022132 | 0.281698 | -3.39752 |
| KEGG\_GLYCEROLIPID\_METABOLISM | 0.076104 | -0.16832 | 2.342664 | 0.022178 | 0.281719 | -3.3992 |
| SERVITJA\_ISLET\_HNF1A\_TARGETS\_DN | 0.078799 | -0.17877 | 2.339126 | 0.022372 | 0.283584 | -3.40628 |
| WP\_CELL\_DIFFERENTIATION\_INDEX | 0.1662 | 0.00234 | 2.337483 | 0.022463 | 0.283584 | -3.40956 |
| AMIT\_SERUM\_RESPONSE\_40\_MCF10A | 0.183675 | -0.0175 | 2.337124 | 0.022483 | 0.283584 | -3.41028 |
| REACTOME\_RORA\_ACTIVATES\_GENE\_EXPRESSION | -0.18413 | -0.01021 | -2.33676 | 0.022503 | 0.283584 | -3.411 |
| REACTOME\_CHYLOMICRON\_ASSEMBLY | 0.148779 | 0.01245 | 2.33511 | 0.022595 | 0.283697 | -3.41431 |
| REACTOME\_POLYMERASE\_SWITCHING | -0.18954 | -0.00464 | -2.335 | 0.022601 | 0.283697 | -3.41453 |
| REACTOME\_CREB1\_PHOSPHORYLATION\_THROUGH\_NMDA\_RECEPTOR\_MEDIATED\_ACTIVATION\_OF\_RAS\_SIGNALING | -0.11039 | -0.05249 | -2.3298 | 0.022892 | 0.286786 | -3.42491 |
| REACTOME\_DEACTIVATION\_OF\_THE\_BETA\_CATENIN\_TRANSACTIVATING\_COMPLEX | -0.10269 | -0.01748 | -2.32826 | 0.022979 | 0.287305 | -3.42797 |
| LIU\_LIVER\_CANCER | 0.072258 | -0.1562 | 2.327123 | 0.023043 | 0.287544 | -3.43024 |
| REACTOME\_CREB1\_PHOSPHORYLATION\_THROUGH\_THE\_ACTIVATION\_OF\_ADENYLATE\_CYCLASE | -0.14174 | -0.14036 | -2.32545 | 0.023138 | 0.288161 | -3.43356 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_DN | -0.08519 | -0.04431 | -2.32311 | 0.023271 | 0.289162 | -3.43822 |
| KOHOUTEK\_CCNT1\_TARGETS | 0.096495 | -0.08104 | 2.32245 | 0.023309 | 0.289162 | -3.43953 |
| WHITEHURST\_PACLITAXEL\_SENSITIVITY | 0.092236 | -0.04542 | 2.320464 | 0.023423 | 0.289618 | -3.44348 |
| PID\_RHOA\_REG\_PATHWAY | 0.088024 | -0.09921 | 2.319845 | 0.023459 | 0.289618 | -3.44471 |
| NAGY\_STAGA\_COMPONENTS\_HUMAN | -0.1653 | -0.00408 | -2.31943 | 0.023483 | 0.289618 | -3.44554 |
| REACTOME\_REVERSIBLE\_HYDRATION\_OF\_CARBON\_DIOXIDE | 0.19355 | -0.00571 | 2.317887 | 0.023572 | 0.290154 | -3.4486 |
| SMIRNOV\_CIRCULATING\_ENDOTHELIOCYTES\_IN\_CANCER\_UP | 0.129757 | -0.05837 | 2.315856 | 0.023689 | 0.291039 | -3.45263 |
| REACTOME\_FORMATION\_OF\_APOPTOSOME | -0.23505 | -0.0265 | -2.31249 | 0.023886 | 0.292886 | -3.45931 |
| MCDOWELL\_ACUTE\_LUNG\_INJURY\_UP | 0.156162 | -0.03504 | 2.309606 | 0.024054 | 0.294389 | -3.46501 |
| FUNG\_IL2\_SIGNALING\_2 | 0.137265 | -0.1497 | 2.308229 | 0.024136 | 0.294566 | -3.46774 |
| WP\_HIF1A\_AND\_PPARG\_REGULATION\_OF\_GLYCOLYSIS | 0.203386 | -0.1119 | 2.306157 | 0.024258 | 0.294566 | -3.47184 |
| BIOCARTA\_PLCD\_PATHWAY | -0.23568 | -0.0207 | -2.30432 | 0.024367 | 0.294566 | -3.47546 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G6 | -0.13015 | -0.09056 | -2.30324 | 0.024431 | 0.294566 | -3.4776 |
| MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_UP | -0.2047 | -0.00543 | -2.30286 | 0.024454 | 0.294566 | -3.47835 |
| TESAR\_ALK\_TARGETS\_HUMAN\_ES\_5D\_UP | 0.233426 | 0.015467 | 2.302163 | 0.024496 | 0.294566 | -3.47972 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_3 | 0.156533 | 0.000706 | 2.301614 | 0.024529 | 0.294566 | -3.48081 |
| WP\_LEPTIN\_AND\_ADIPONECTIN | -0.17259 | -0.17603 | -2.30101 | 0.024565 | 0.294566 | -3.48199 |
| JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_UP | 0.119474 | -0.19071 | 2.300101 | 0.024619 | 0.294566 | -3.48379 |
| WESTON\_VEGFA\_TARGETS\_12HR | 0.127946 | -0.19272 | 2.300096 | 0.02462 | 0.294566 | -3.4838 |
| WP\_NUCLEOTIDE\_EXCISION\_REPAIR | -0.14018 | -0.18176 | -2.29998 | 0.024626 | 0.294566 | -3.48403 |
| REACTOME\_P75NTR\_REGULATES\_AXONOGENESIS | 0.167425 | -0.00823 | 2.299153 | 0.024676 | 0.294566 | -3.48566 |
| REACTOME\_ATTACHMENT\_AND\_ENTRY | 0.213649 | -0.00465 | 2.298857 | 0.024694 | 0.294566 | -3.48625 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_ADDITIONAL\_CELL\_CYCLE\_GENES\_WHOSE\_EXACT\_ROLE\_IN\_THE\_P53\_PATHWAY\_REMAIN\_UNCERTAIN | 0.121984 | -0.28492 | 2.29848 | 0.024717 | 0.294566 | -3.48699 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_ERYTHROCYTE\_UP | 0.098925 | -0.2198 | 2.297274 | 0.02479 | 0.294716 | -3.48936 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_16D\_DN | 0.072605 | -0.14058 | 2.296737 | 0.024822 | 0.294716 | -3.49042 |
| BIOCARTA\_ERBB4\_PATHWAY | -0.164 | -0.01063 | -2.29543 | 0.024901 | 0.294788 | -3.493 |
| DACOSTA\_ERCC3\_ALLELE\_XPCS\_VS\_TTD\_UP | 0.109051 | -0.04271 | 2.295109 | 0.024921 | 0.294788 | -3.49363 |
| BIOCARTA\_PLK3\_PATHWAY | 0.162659 | 0.002405 | 2.293285 | 0.025032 | 0.295551 | -3.49722 |
| JAEGER\_METASTASIS\_DN | 0.087397 | -0.03251 | 2.291689 | 0.025129 | 0.296151 | -3.50036 |
| TOMIDA\_METASTASIS\_DN | 0.180783 | -0.02202 | 2.287729 | 0.025372 | 0.298189 | -3.50814 |
| LU\_TUMOR\_VASCULATURE\_UP | 0.14889 | -0.00496 | 2.28649 | 0.025449 | 0.298189 | -3.51057 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_NMDA\_RECEPTOR\_MEDIATED\_NEURONAL\_TRANSMISSION | -0.14231 | 0.000672 | -2.28494 | 0.025545 | 0.298189 | -3.5136 |
| WENG\_POR\_DOSAGE | 0.115672 | -0.05018 | 2.284732 | 0.025558 | 0.298189 | -3.51402 |
| SCIAN\_CELL\_CYCLE\_TARGETS\_OF\_TP53\_AND\_TP73\_UP | 0.195069 | -0.14003 | 2.284598 | 0.025566 | 0.298189 | -3.51428 |
| PARK\_TRETINOIN\_RESPONSE\_AND\_PML\_RARA\_FUSION | 0.1318 | -0.17411 | 2.284322 | 0.025583 | 0.298189 | -3.51482 |
| REACTOME\_MITOCHONDRIAL\_PROTEIN\_IMPORT | -0.17883 | -0.07354 | -2.27841 | 0.025953 | 0.301944 | -3.5264 |
| FOSTER\_KDM1A\_TARGETS\_DN | -0.07901 | -0.07854 | -2.27507 | 0.026163 | 0.303291 | -3.53293 |
| MACLACHLAN\_BRCA1\_TARGETS\_DN | 0.132138 | -0.25052 | 2.275068 | 0.026164 | 0.303291 | -3.53294 |
| REACTOME\_INTERLEUKIN\_2\_FAMILY\_SIGNALING | 0.107787 | -0.03404 | 2.273741 | 0.026248 | 0.303714 | -3.53553 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_DN | 0.090089 | -0.12228 | 2.266148 | 0.026735 | 0.307145 | -3.55034 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_INITIATION\_FROM\_TYPE\_1\_PROMOTER | -0.16404 | -0.05237 | -2.26573 | 0.026762 | 0.307145 | -3.55116 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_ONLY\_UP | 0.156941 | -0.06686 | 2.264856 | 0.026818 | 0.307145 | -3.55286 |
| REACTOME\_SIGNALING\_BY\_ERBB2\_ECD\_MUTANTS | -0.14094 | -0.05065 | -2.26303 | 0.026937 | 0.307145 | -3.55641 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G5 | 0.183167 | -0.08148 | 2.262451 | 0.026974 | 0.307145 | -3.55754 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_DN | 0.154292 | 0.010213 | 2.261796 | 0.027017 | 0.307145 | -3.55881 |
| MEISSNER\_NPC\_HCP\_WITH\_H3\_UNMETHYLATED | 0.086504 | -0.07944 | 2.261517 | 0.027035 | 0.307145 | -3.55935 |
| REACTOME\_TRNA\_PROCESSING | -0.12983 | -0.13982 | -2.26138 | 0.027044 | 0.307145 | -3.55962 |
| XU\_GH1\_EXOGENOUS\_TARGETS\_UP | 0.11362 | -0.16858 | 2.261236 | 0.027054 | 0.307145 | -3.5599 |
| REACTOME\_FATTY\_ACIDS | 0.213672 | -0.03771 | 2.261143 | 0.02706 | 0.307145 | -3.56008 |
| KONDO\_HYPOXIA | 0.174758 | -0.02019 | 2.2609 | 0.027076 | 0.307145 | -3.56056 |
| REACTOME\_BETA\_OXIDATION\_OF\_BUTANOYL\_COA\_TO\_ACETYL\_COA | -0.16498 | -0.02098 | -2.25879 | 0.027214 | 0.308104 | -3.56465 |
| BIOCARTA\_AKAP95\_PATHWAY | -0.1545 | -0.07432 | -2.25813 | 0.027257 | 0.308104 | -3.56593 |
| HOLLERN\_SOLID\_NODULAR\_BREAST\_TUMOR\_DN | 0.120286 | -0.01379 | 2.254501 | 0.027496 | 0.309968 | -3.57298 |
| REACTOME\_MET\_RECEPTOR\_ACTIVATION | 0.181342 | 0.006258 | 2.254156 | 0.027519 | 0.309968 | -3.57365 |
| REACTOME\_CAMK\_IV\_MEDIATED\_PHOSPHORYLATION\_OF\_CREB | -0.15194 | 0.022365 | -2.25127 | 0.027711 | 0.311119 | -3.57923 |
| REACTOME\_SIGNALING\_BY\_FGFR4\_IN\_DISEASE | -0.14365 | -0.06961 | -2.25044 | 0.027766 | 0.311119 | -3.58085 |
| CALVET\_IRINOTECAN\_SENSITIVE\_VS\_RESISTANT\_UP | -0.19991 | 0.004341 | -2.25041 | 0.027768 | 0.311119 | -3.5809 |
| VERHAAK\_GLIOBLASTOMA\_MESENCHYMAL | 0.139701 | -0.10023 | 2.246512 | 0.02803 | 0.313124 | -3.58845 |
| PID\_AMB2\_NEUTROPHILS\_PATHWAY | 0.097593 | -0.25223 | 2.246281 | 0.028045 | 0.313124 | -3.5889 |
| REACTOME\_ROLE\_OF\_SECOND\_MESSENGERS\_IN\_NETRIN\_1\_SIGNALING | -0.14426 | 0.013853 | -2.24473 | 0.02815 | 0.313325 | -3.5919 |
| ZHAN\_MULTIPLE\_MYELOMA\_MF\_UP | 0.092376 | -0.06407 | 2.244556 | 0.028162 | 0.313325 | -3.59223 |
| NIKOLSKY\_BREAST\_CANCER\_15Q26\_AMPLICON | 0.103264 | -0.01321 | 2.242832 | 0.028279 | 0.314075 | -3.59556 |
| HARRIS\_HYPOXIA | 0.145387 | -0.04047 | 2.239031 | 0.028538 | 0.3164 | -3.60289 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_4\_UP | -0.05473 | -0.26716 | -2.23629 | 0.028726 | 0.317095 | -3.60818 |
| LEE\_LIVER\_CANCER\_ACOX1\_DN | 0.079069 | -0.11245 | 2.235991 | 0.028746 | 0.317095 | -3.60875 |
| FONTAINE\_PAPILLARY\_THYROID\_CARCINOMA\_UP | 0.085215 | -0.02558 | 2.235599 | 0.028773 | 0.317095 | -3.60951 |
| POS\_HISTAMINE\_RESPONSE\_NETWORK | 0.128586 | -0.14059 | 2.233479 | 0.02892 | 0.317095 | -3.61359 |
| BIOCARTA\_DNAFRAGMENT\_PATHWAY | -0.19962 | -0.00279 | -2.23281 | 0.028966 | 0.317095 | -3.61488 |
| REACTOME\_ALPHA\_DEFENSINS | 0.101934 | -0.3639 | 2.232715 | 0.028973 | 0.317095 | -3.61506 |
| REACTOME\_FORMATION\_OF\_THE\_BETA\_CATENIN\_TCF\_TRANSACTIVATING\_COMPLEX | -0.13247 | -0.0304 | -2.23224 | 0.029005 | 0.317095 | -3.61596 |
| HOLLEMAN\_DAUNORUBICIN\_ALL\_DN | -0.20091 | -0.10029 | -2.2314 | 0.029064 | 0.317095 | -3.61759 |
| ISHIDA\_TARGETS\_OF\_SYT\_SSX\_FUSIONS | 0.204625 | -0.16998 | 2.231149 | 0.029081 | 0.317095 | -3.61807 |
| MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_UP | 0.089072 | -0.23409 | 2.230903 | 0.029099 | 0.317095 | -3.61854 |
| NAGY\_TFTC\_COMPONENTS\_HUMAN | -0.14866 | -0.06254 | -2.23006 | 0.029157 | 0.317193 | -3.62017 |
| BIOCARTA\_PGC1A\_PATHWAY | -0.15454 | -0.05812 | -2.22912 | 0.029223 | 0.317359 | -3.62196 |
| MOOTHA\_VOXPHOS | -0.15462 | -0.16484 | -2.2265 | 0.029407 | 0.318275 | -3.627 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_5 | 0.09058 | -0.26012 | 2.226493 | 0.029407 | 0.318275 | -3.62701 |
| GOZGIT\_ESR1\_TARGETS\_UP | 0.064219 | -0.11754 | 2.225182 | 0.029499 | 0.318731 | -3.62953 |
| SILIGAN\_TARGETS\_OF\_EWS\_FLI1\_FUSION\_DN | -0.19592 | -0.05899 | -2.2228 | 0.029668 | 0.320007 | -3.6341 |
| VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_DN | 0.092535 | -0.04734 | 2.218856 | 0.029948 | 0.321703 | -3.64164 |
| REACTOME\_PKA\_MEDIATED\_PHOSPHORYLATION\_OF\_CREB | -0.11216 | -0.12757 | -2.21855 | 0.02997 | 0.321703 | -3.64223 |
| RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_UP | 0.126658 | -0.1169 | 2.218455 | 0.029976 | 0.321703 | -3.64241 |
| WP\_TRYPTOPHAN\_CATABOLISM\_LEADING\_TO\_NAD\_PRODUCTION | 0.106382 | -0.11372 | 2.21712 | 0.030072 | 0.322185 | -3.64497 |
| DUAN\_PRDM5\_TARGETS | 0.062682 | -0.20451 | 2.215824 | 0.030165 | 0.322278 | -3.64744 |
| REACTOME\_STIMULI\_SENSING\_CHANNELS | 0.080589 | -0.05556 | 2.215448 | 0.030192 | 0.322278 | -3.64816 |
| PID\_UPA\_UPAR\_PATHWAY | 0.137155 | -0.07181 | 2.213812 | 0.03031 | 0.322278 | -3.65129 |
| ZHANG\_BREAST\_CANCER\_PROGENITORS\_UP | -0.13236 | -0.05149 | -2.21352 | 0.030331 | 0.322278 | -3.65183 |
| AMIT\_DELAYED\_EARLY\_GENES | 0.20734 | -0.00693 | 2.213479 | 0.030334 | 0.322278 | -3.65192 |
| ISSAEVA\_MLL2\_TARGETS | 0.125774 | -0.00167 | 2.212129 | 0.030431 | 0.322776 | -3.6545 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_3\_UP | 0.074187 | -0.08873 | 2.208856 | 0.030669 | 0.324149 | -3.66074 |
| WANG\_RECURRENT\_LIVER\_CANCER\_UP | -0.13986 | -0.00552 | -2.20883 | 0.030671 | 0.324149 | -3.66079 |
| REACTOME\_INHIBITION\_OF\_THE\_PROTEOLYTIC\_ACTIVITY\_OF\_APC\_C\_REQUIRED\_FOR\_THE\_ONSET\_OF\_ANAPHASE\_BY\_MITOTIC\_SPINDLE\_CHECKPOINT\_COMPONENTS | -0.16228 | -0.0182 | -2.20825 | 0.030714 | 0.324149 | -3.6619 |
| REACTOME\_ROBO\_RECEPTORS\_BIND\_AKAP5 | -0.15904 | -0.10427 | -2.2068 | 0.030819 | 0.32437 | -3.66465 |
| WP\_BLADDER\_CANCER | 0.111458 | -0.04253 | 2.206566 | 0.030837 | 0.32437 | -3.6651 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP | -0.16448 | -0.00992 | -2.20536 | 0.030925 | 0.32476 | -3.66739 |
| SCHOEN\_NFKB\_SIGNALING | 0.173496 | -0.00232 | 2.2045 | 0.030988 | 0.324847 | -3.66904 |
| WATANABE\_ULCERATIVE\_COLITIS\_WITH\_CANCER\_UP | -0.17188 | -0.11025 | -2.20365 | 0.03105 | 0.324847 | -3.67065 |
| REACTOME\_MITOTIC\_TELOPHASE\_CYTOKINESIS | -0.21954 | -0.00933 | -2.20317 | 0.031086 | 0.324847 | -3.67156 |
| REACTOME\_REPRESSION\_OF\_WNT\_TARGET\_GENES | -0.1291 | 0.006717 | -2.20219 | 0.031159 | 0.32507 | -3.67343 |
| REACTOME\_NEDDYLATION | -0.10582 | -0.10504 | -2.20066 | 0.031272 | 0.32572 | -3.67634 |
| YAMASHITA\_LIVER\_CANCER\_STEM\_CELL\_UP | 0.082217 | -0.21956 | 2.191688 | 0.031943 | 0.332169 | -3.69336 |
| REN\_MIF\_TARGETS\_DN | 0.165662 | -0.17104 | 2.189282 | 0.032126 | 0.333347 | -3.69791 |
| BURTON\_ADIPOGENESIS\_12 | -0.14316 | -0.05126 | -2.18881 | 0.032161 | 0.333347 | -3.6988 |
| CHOI\_ATL\_ACUTE\_STAGE | 0.070534 | -0.80814 | 2.18526 | 0.032432 | 0.335223 | -3.70551 |
| REACTOME\_RMTS\_METHYLATE\_HISTONE\_ARGININES | -0.15998 | -0.04228 | -2.18506 | 0.032448 | 0.335223 | -3.70589 |
| WP\_PEPTIDE\_GPCRS | 0.134394 | -0.00788 | 2.181987 | 0.032684 | 0.336562 | -3.71169 |
| WP\_MIR124\_PREDICTED\_INTERACTIONS\_WITH\_CELL\_CYCLE\_AND\_DIFFERENTIATION | -0.20592 | -0.02516 | -2.18093 | 0.032765 | 0.336562 | -3.71368 |
| BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_DN | 0.098958 | -0.18794 | 2.180075 | 0.032831 | 0.336562 | -3.71529 |
| TAGHAVI\_NEOPLASTIC\_TRANSFORMATION | 0.154819 | -0.06313 | 2.179636 | 0.032865 | 0.336562 | -3.71612 |
| WP\_NETWORK\_MAP\_OF\_SARSCOV2\_SIGNALING\_PATHWAY | 0.075265 | -0.17577 | 2.179056 | 0.03291 | 0.336562 | -3.71721 |
| SHIRAISHI\_PLZF\_TARGETS\_DN | -0.15114 | 0.009197 | -2.17843 | 0.032959 | 0.336562 | -3.7184 |
| REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT | -0.16603 | -0.1243 | -2.17819 | 0.032977 | 0.336562 | -3.71884 |
| GINESTIER\_BREAST\_CANCER\_ZNF217\_AMPLIFIED\_UP | -0.16486 | -0.01107 | -2.17789 | 0.033 | 0.336562 | -3.7194 |
| MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_UP | 0.072298 | -0.22458 | 2.17584 | 0.033161 | 0.337538 | -3.72327 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_UP | 0.09424 | -0.08361 | 2.174773 | 0.033244 | 0.337538 | -3.72528 |
| HINATA\_NFKB\_TARGETS\_FIBROBLAST\_UP | 0.091074 | -0.21251 | 2.174608 | 0.033257 | 0.337538 | -3.72559 |
| NAGY\_PCAF\_COMPONENTS\_HUMAN | -0.16868 | -0.00977 | -2.17323 | 0.033365 | 0.337538 | -3.72818 |
| REACTOME\_PHOSPHORYLATION\_OF\_THE\_APC\_C | -0.16034 | -0.00815 | -2.17226 | 0.033441 | 0.337538 | -3.73 |
| BIOCARTA\_THELPER\_PATHWAY | 0.211449 | -0.08996 | 2.172151 | 0.03345 | 0.337538 | -3.73021 |
| REACTOME\_BETA\_OXIDATION\_OF\_VERY\_LONG\_CHAIN\_FATTY\_ACIDS | -0.15021 | -0.07656 | -2.17154 | 0.033498 | 0.337538 | -3.73136 |
| REACTOME\_RRNA\_PROCESSING\_IN\_THE\_MITOCHONDRION | -0.19549 | -0.08767 | -2.17041 | 0.033587 | 0.337538 | -3.73347 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_2\_UP | -0.11401 | -0.04204 | -2.16995 | 0.033623 | 0.337538 | -3.73434 |
| VERRECCHIA\_EARLY\_RESPONSE\_TO\_TGFB1 | 0.146764 | -0.03542 | 2.168237 | 0.033759 | 0.337538 | -3.73756 |
| REACTOME\_NR1H2\_NR1H3\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_LIPOGENESIS | 0.130761 | -0.32399 | 2.166129 | 0.033926 | 0.337538 | -3.74151 |
| WARTERS\_RESPONSE\_TO\_IR\_SKIN | 0.066664 | -0.10528 | 2.165426 | 0.033982 | 0.337538 | -3.74283 |
| WAGSCHAL\_EHMT2\_TARGETS\_UP | 0.170309 | 0.013812 | 2.165125 | 0.034006 | 0.337538 | -3.74339 |
| BASSO\_CD40\_SIGNALING\_UP | 0.077741 | -0.40264 | 2.165031 | 0.034014 | 0.337538 | -3.74357 |
| REACTOME\_RAF\_ACTIVATION | -0.14937 | -0.02173 | -2.16442 | 0.034063 | 0.337538 | -3.74471 |
| DAUER\_STAT3\_TARGETS\_UP | 0.157247 | -0.02904 | 2.163564 | 0.034131 | 0.337538 | -3.74631 |
| NADLER\_OBESITY\_UP | 0.156135 | -0.09424 | 2.163029 | 0.034174 | 0.337538 | -3.74732 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFKB\_SURVIVAL\_SIGNALING | 0.129658 | -0.18739 | 2.162459 | 0.03422 | 0.337538 | -3.74838 |
| NAGASHIMA\_EGF\_SIGNALING\_UP | 0.158583 | -0.14477 | 2.161842 | 0.034269 | 0.337538 | -3.74954 |
| REACTOME\_TRANSCRIPTIONAL\_ACTIVATION\_OF\_MITOCHONDRIAL\_BIOGENESIS | -0.12214 | -0.04799 | -2.16006 | 0.034413 | 0.337538 | -3.75288 |
| REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIPTION | -0.07692 | -0.10083 | -2.15961 | 0.034449 | 0.337538 | -3.75371 |
| CHESLER\_BRAIN\_D6MIT150\_QTL\_CIS | -0.16849 | -0.0083 | -2.15787 | 0.03459 | 0.337538 | -3.75697 |
| WP\_MALE\_INFERTILITY | 0.046784 | -0.22286 | 2.157621 | 0.03461 | 0.337538 | -3.75743 |
| AMIT\_SERUM\_RESPONSE\_240\_MCF10A | 0.10428 | -0.07842 | 2.157388 | 0.034629 | 0.337538 | -3.75787 |
| KEGG\_PENTOSE\_AND\_GLUCURONATE\_INTERCONVERSIONS | 0.126683 | -0.06726 | 2.157322 | 0.034634 | 0.337538 | -3.75799 |
| REACTOME\_NF\_KB\_IS\_ACTIVATED\_AND\_SIGNALS\_SURVIVAL | 0.166611 | -0.0799 | 2.155679 | 0.034767 | 0.337538 | -3.76106 |
| REACTOME\_COENZYME\_A\_BIOSYNTHESIS | -0.15326 | -0.10577 | -2.15563 | 0.034771 | 0.337538 | -3.76114 |
| GERY\_CEBP\_TARGETS | 0.102308 | -0.10023 | 2.155187 | 0.034807 | 0.337538 | -3.76198 |
| WP\_FRAGILE\_X\_SYNDROME | -0.0704 | -0.04946 | -2.15479 | 0.03484 | 0.337538 | -3.76272 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_LIVER\_UP | 0.176868 | -0.00486 | 2.154644 | 0.034852 | 0.337538 | -3.76299 |
| REACTOME\_SENSORY\_PERCEPTION | 0.083699 | -0.18995 | 2.154119 | 0.034895 | 0.337538 | -3.76397 |
| REACTOME\_CYP2E1\_REACTIONS | 0.18925 | -0.06473 | 2.15391 | 0.034912 | 0.337538 | -3.76436 |
| CADWELL\_ATG16L1\_TARGETS\_UP | 0.070684 | -0.10781 | 2.152996 | 0.034986 | 0.337538 | -3.76606 |
| WP\_CONTROL\_OF\_IMMUNE\_TOLERANCE\_BY\_VASOACTIVE\_INTESTINAL\_PEPTIDE | 0.145072 | -0.00137 | 2.152878 | 0.034996 | 0.337538 | -3.76628 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_THE\_AP\_2\_TFAP2\_FAMILY\_OF\_TRANSCRIPTION\_FACTORS | 0.087244 | 0.003782 | 2.152857 | 0.034998 | 0.337538 | -3.76632 |
| GABRIELY\_MIR21\_TARGETS | -0.14023 | -0.02029 | -2.15276 | 0.035006 | 0.337538 | -3.7665 |
| WIERENGA\_STAT5A\_TARGETS\_GROUP1 | 0.103151 | -0.09551 | 2.150918 | 0.035157 | 0.337735 | -3.76994 |
| REACTOME\_NTRK2\_ACTIVATES\_RAC1 | 0.205644 | -0.02146 | 2.150525 | 0.035189 | 0.337735 | -3.77067 |
| SUZUKI\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_1A | 0.135262 | -0.01724 | 2.150177 | 0.035218 | 0.337735 | -3.77132 |
| NAISHIRO\_CTNNB1\_TARGETS\_WITH\_LEF1\_MOTIF | 0.163703 | 0.008616 | 2.149122 | 0.035305 | 0.337735 | -3.77328 |
| HAMAI\_APOPTOSIS\_VIA\_TRAIL\_DN | 0.066014 | -0.1248 | 2.149062 | 0.035309 | 0.337735 | -3.77339 |
| DISTECHE\_ESCAPED\_FROM\_X\_INACTIVATION | -0.16942 | 0.007861 | -2.14864 | 0.035344 | 0.337735 | -3.77418 |
| WHITFIELD\_CELL\_CYCLE\_G1\_S | -0.10837 | -0.04767 | -2.14779 | 0.035415 | 0.3379 | -3.77577 |
| FINAK\_BREAST\_CANCER\_SDPP\_SIGNATURE | 0.145897 | -0.07644 | 2.146722 | 0.035503 | 0.338233 | -3.77775 |
| MATZUK\_OVULATION | 0.134253 | -0.08145 | 2.143529 | 0.035768 | 0.340033 | -3.78368 |
| LEE\_LIVER\_CANCER\_E2F1\_DN | 0.067411 | -0.07957 | 2.143167 | 0.035799 | 0.340033 | -3.78436 |
| GAL\_LEUKEMIC\_STEM\_CELL\_DN | 0.0745 | -0.14987 | 2.141764 | 0.035916 | 0.340638 | -3.78696 |
| WIERENGA\_STAT5A\_TARGETS\_GROUP2 | 0.143673 | -0.06128 | 2.138313 | 0.036206 | 0.342874 | -3.79336 |
| REACTOME\_PURINERGIC\_SIGNALING\_IN\_LEISHMANIASIS\_INFECTION | 0.155932 | -0.04665 | 2.137677 | 0.036259 | 0.342874 | -3.79454 |
| KOBAYASHI\_EGFR\_SIGNALING\_6HR\_DN | 0.116473 | -0.28143 | 2.136973 | 0.036319 | 0.342927 | -3.79585 |
| MARTENS\_TRETINOIN\_RESPONSE\_UP | 0.102083 | -0.09896 | 2.135907 | 0.036409 | 0.343269 | -3.79782 |
| REACTOME\_ACTIVATION\_OF\_GENE\_EXPRESSION\_BY\_SREBF\_SREBP | -0.16605 | -0.02371 | -2.13006 | 0.036907 | 0.347449 | -3.80863 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_UNANNOTATED\_UP | 0.066341 | -0.10994 | 2.127999 | 0.037084 | 0.348603 | -3.81245 |
| BIOCARTA\_CYTOKINE\_PATHWAY | 0.097179 | -0.27601 | 2.127061 | 0.037165 | 0.348847 | -3.81418 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_CALU3\_CELLS\_DN | 0.140661 | 0.025792 | 2.126249 | 0.037235 | 0.34899 | -3.81567 |
| KORKOLA\_CHORIOCARCINOMA\_UP | 0.231189 | -0.0006 | 2.124827 | 0.037358 | 0.349618 | -3.8183 |
| WP\_GABA\_METABOLISM\_AKA\_GHB | -0.19114 | -0.02039 | -2.12421 | 0.037412 | 0.349618 | -3.81944 |
| REACTOME\_RUNX1\_INTERACTS\_WITH\_CO\_FACTORS\_WHOSE\_PRECISE\_EFFECT\_ON\_RUNX1\_TARGETS\_IS\_NOT\_KNOWN | -0.11827 | -0.24538 | -2.12146 | 0.037651 | 0.351337 | -3.82451 |
| WP\_OLIGODENDROCYTE\_SPECIFICATION\_AND\_DIFFERENTIATION\_LEADING\_TO\_MYELIN\_COMPONENTS\_FOR\_CNS | 0.083436 | -0.33888 | 2.120453 | 0.037739 | 0.351633 | -3.82635 |
| WP\_SELENIUM\_MICRONUTRIENT\_NETWORK | 0.079041 | -0.12174 | 2.119828 | 0.037793 | 0.351633 | -3.82751 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_INDEPENDENT | 0.146043 | -0.097 | 2.118953 | 0.03787 | 0.351831 | -3.82911 |
| TERAO\_AOX4\_TARGETS\_SKIN\_DN | -0.1056 | -0.09124 | -2.11764 | 0.037986 | 0.352391 | -3.83154 |
| REACTOME\_FORMATION\_OF\_FIBRIN\_CLOT\_CLOTTING\_CASCADE | 0.088565 | -0.02915 | 2.115409 | 0.038182 | 0.353695 | -3.83563 |
| REACTOME\_MUSCARINIC\_ACETYLCHOLINE\_RECEPTORS | 0.247468 | 0.016794 | 2.114486 | 0.038263 | 0.353935 | -3.83732 |
| BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NS1\_INFECTION\_UP | 0.066605 | -0.19335 | 2.112146 | 0.038471 | 0.354945 | -3.84162 |
| ZERBINI\_RESPONSE\_TO\_SULINDAC\_UP | 0.176353 | -0.01895 | 2.111785 | 0.038503 | 0.354945 | -3.84228 |
| REACTOME\_MRNA\_CAPPING | -0.1455 | -0.24078 | -2.1112 | 0.038554 | 0.354945 | -3.84335 |
| REACTOME\_LAGGING\_STRAND\_SYNTHESIS | -0.18069 | 0.001525 | -2.11074 | 0.038596 | 0.354945 | -3.84419 |
| CHEN\_METABOLIC\_SYNDROM\_NETWORK | 0.081756 | -0.1066 | 2.108977 | 0.038753 | 0.355881 | -3.84743 |
| TURASHVILI\_BREAST\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_DN | -0.17848 | 0.00671 | -2.10835 | 0.03881 | 0.355885 | -3.84858 |
| REACTOME\_CD22\_MEDIATED\_BCR\_REGULATION | 0.247063 | -0.03103 | 2.106324 | 0.038991 | 0.356872 | -3.85229 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_B | 0.125435 | -0.16139 | 2.105042 | 0.039107 | 0.356872 | -3.85463 |
| LEE\_LIVER\_CANCER\_CIPROFIBRATE\_DN | 0.094293 | -0.1014 | 2.104479 | 0.039157 | 0.356872 | -3.85566 |
| TSAI\_DNAJB4\_TARGETS\_UP | 0.153779 | -0.13353 | 2.102345 | 0.03935 | 0.356872 | -3.85956 |
| KANG\_CISPLATIN\_RESISTANCE\_DN | -0.19163 | -0.09878 | -2.10218 | 0.039365 | 0.356872 | -3.85986 |
| WP\_ENDOCHONDRAL\_OSSIFICATION | 0.08383 | -0.04569 | 2.101765 | 0.039403 | 0.356872 | -3.86062 |
| WP\_ENDOCHONDRAL\_OSSIFICATION\_WITH\_SKELETAL\_DYSPLASIAS | 0.08383 | -0.04569 | 2.101765 | 0.039403 | 0.356872 | -3.86062 |
| KEGG\_O\_GLYCAN\_BIOSYNTHESIS | 0.097027 | -0.09659 | 2.101624 | 0.039416 | 0.356872 | -3.86088 |
| FAELT\_B\_CLL\_WITH\_VH3\_21\_DN | -0.15608 | -0.17116 | -2.10135 | 0.039441 | 0.356872 | -3.86139 |
| REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT\_ATP\_SYNTHESIS\_BY\_CHEMIOSMOTIC\_COUPLING\_AND\_HEAT\_PRODUCTION\_BY\_UNCOUPLING\_PROTEINS | -0.15196 | -0.11837 | -2.10031 | 0.039535 | 0.356872 | -3.86327 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_UP | -0.09912 | -0.09529 | -2.09994 | 0.039568 | 0.356872 | -3.86394 |
| MIKKELSEN\_IPS\_LCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.207732 | 0.030805 | 2.099706 | 0.03959 | 0.356872 | -3.86438 |
| BIOCARTA\_INFLAM\_PATHWAY | 0.066634 | -0.44429 | 2.096554 | 0.039878 | 0.357868 | -3.87013 |
| WP\_LIPID\_METABOLISM\_PATHWAY | -0.0917 | -0.11968 | -2.0957 | 0.039957 | 0.357868 | -3.87169 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_WITHOUT\_MGMT\_48HR\_UP | 0.081262 | -0.16804 | 2.095182 | 0.040004 | 0.357868 | -3.87263 |
| MCBRYAN\_PUBERTAL\_BREAST\_3\_4WK\_UP | 0.069543 | -0.08841 | 2.095153 | 0.040007 | 0.357868 | -3.87268 |
| LEE\_LIVER\_CANCER\_MYC\_E2F1\_UP | 0.097542 | -0.04058 | 2.095092 | 0.040012 | 0.357868 | -3.87279 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_ERYTHROID\_DN | -0.06855 | -0.12982 | -2.09481 | 0.040038 | 0.357868 | -3.8733 |
| REACTOME\_SEMA3A\_PAK\_DEPENDENT\_AXON\_REPULSION | 0.163794 | -0.01754 | 2.092496 | 0.040252 | 0.358776 | -3.87752 |
| WP\_ARACHIDONATE\_EPOXYGENASE\_EPOXIDE\_HYDROLASE | -0.16863 | -0.00428 | -2.09171 | 0.040324 | 0.358776 | -3.87895 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_5 | -0.06721 | -0.12357 | -2.09146 | 0.040348 | 0.358776 | -3.87941 |
| REACTOME\_FORMATION\_OF\_THE\_EARLY\_ELONGATION\_COMPLEX | -0.12461 | -0.2936 | -2.09127 | 0.040365 | 0.358776 | -3.87975 |
| REACTOME\_AMYLOID\_FIBER\_FORMATION | 0.098808 | -0.02082 | 2.089551 | 0.040525 | 0.359693 | -3.88288 |
| BIOCARTA\_BBCELL\_PATHWAY | 0.068976 | -0.58674 | 2.087523 | 0.040714 | 0.360866 | -3.88656 |
| HASINA\_NOL7\_TARGETS\_UP | 0.189272 | -0.0052 | 2.085359 | 0.040916 | 0.361219 | -3.89049 |
| AMIT\_EGF\_RESPONSE\_480\_MCF10A | 0.108349 | -0.09569 | 2.084718 | 0.040976 | 0.361219 | -3.89165 |
| REACTOME\_DARPP\_32\_EVENTS | -0.11553 | -0.0685 | -2.08434 | 0.041011 | 0.361219 | -3.89233 |
| WP\_UREA\_CYCLE\_AND\_ASSOCIATED\_PATHWAYS | -0.12779 | -0.00514 | -2.0843 | 0.041015 | 0.361219 | -3.8924 |
| MULLIGHAN\_NPM1\_MUTATED\_SIGNATURE\_2\_UP | -0.07755 | -0.05103 | -2.08363 | 0.041079 | 0.361219 | -3.89363 |
| REACTOME\_REGULATION\_OF\_CHOLESTEROL\_BIOSYNTHESIS\_BY\_SREBP\_SREBF | -0.16784 | -0.01954 | -2.08346 | 0.041094 | 0.361219 | -3.89392 |
| WIERENGA\_STAT5A\_TARGETS\_UP | 0.108264 | -0.07829 | 2.082802 | 0.041156 | 0.361268 | -3.89512 |
| LU\_TUMOR\_ENDOTHELIAL\_MARKERS\_UP | 0.146813 | -0.00455 | 2.081509 | 0.041278 | 0.36184 | -3.89747 |
| BIOCARTA\_VEGF\_PATHWAY | -0.13654 | -0.04548 | -2.08046 | 0.041377 | 0.362209 | -3.89936 |
| NICK\_RESPONSE\_TO\_PROC\_TREATMENT\_DN | -0.12801 | -0.23232 | -2.07954 | 0.041465 | 0.3624 | -3.90104 |
| BRUNEAU\_HEART\_GREAT\_VESSELS\_AND\_VALVULOGENESIS | -0.14357 | -0.01227 | -2.07903 | 0.041513 | 0.3624 | -3.90195 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_POLYSOMY7\_DN | -0.11733 | -0.00299 | -2.07833 | 0.041579 | 0.36248 | -3.90321 |
| DIRMEIER\_LMP1\_RESPONSE\_LATE\_UP | 0.150005 | -0.01241 | 2.07671 | 0.041734 | 0.362641 | -3.90615 |
| DING\_LUNG\_CANCER\_EXPRESSION\_BY\_COPY\_NUMBER | -0.16802 | -0.04791 | -2.0761 | 0.041792 | 0.362641 | -3.90725 |
| REACTOME\_G\_ALPHA\_Q\_SIGNALLING\_EVENTS | 0.068724 | -0.02555 | 2.075678 | 0.041832 | 0.362641 | -3.90802 |
| NUYTTEN\_EZH2\_TARGETS\_DN | -0.10084 | -0.10679 | -2.07537 | 0.041862 | 0.362641 | -3.90856 |
| KEGG\_HISTIDINE\_METABOLISM | -0.11484 | -0.03105 | -2.07515 | 0.041883 | 0.362641 | -3.90896 |
| REACTOME\_GLOBAL\_GENOME\_NUCLEOTIDE\_EXCISION\_REPAIR\_GG\_NER | -0.13425 | -0.18793 | -2.07408 | 0.041985 | 0.362771 | -3.9109 |
| ROZANOV\_MMP14\_CORRELATED | -0.20566 | -0.00648 | -2.0729 | 0.042099 | 0.362771 | -3.91304 |
| BIOCARTA\_CARM1\_PATHWAY | -0.14062 | -0.07018 | -2.07287 | 0.042101 | 0.362771 | -3.91308 |
| REACTOME\_INOSITOL\_PHOSPHATE\_METABOLISM | -0.07221 | -0.08704 | -2.07262 | 0.042126 | 0.362771 | -3.91354 |
| TURASHVILI\_BREAST\_NORMAL\_DUCTAL\_VS\_LOBULAR\_DN | -0.18838 | -0.01077 | -2.0711 | 0.042272 | 0.363326 | -3.91627 |
| REACTOME\_SHC\_RELATED\_EVENTS\_TRIGGERED\_BY\_IGF1R | -0.15767 | -0.0922 | -2.06997 | 0.042381 | 0.363326 | -3.91831 |
| REACTOME\_RELEASE\_OF\_APOPTOTIC\_FACTORS\_FROM\_THE\_MITOCHONDRIA | -0.1692 | -0.17445 | -2.06995 | 0.042383 | 0.363326 | -3.91834 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G28 | 0.125619 | -0.27248 | 2.069582 | 0.042419 | 0.363326 | -3.91902 |
| BOYERINAS\_ONCOFETAL\_TARGETS\_OF\_LET7A1 | -0.11892 | -0.07069 | -2.06834 | 0.042538 | 0.363681 | -3.92124 |
| REACTOME\_REGULATION\_OF\_INSULIN\_LIKE\_GROWTH\_FACTOR\_IGF\_TRANSPORT\_AND\_UPTAKE\_BY\_INSULIN\_LIKE\_GROWTH\_FACTOR\_BINDING\_PROTEINS\_IGFBPS | 0.090634 | -0.03026 | 2.067975 | 0.042574 | 0.363681 | -3.92191 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_DN | 0.107949 | -0.05334 | 2.066803 | 0.042688 | 0.364164 | -3.92402 |
| MILI\_PSEUDOPODIA\_HAPTOTAXIS\_UP | -0.14836 | -0.06343 | -2.06526 | 0.042838 | 0.364482 | -3.9268 |
| WP\_ALTERNATIVE\_PATHWAY\_OF\_FETAL\_ANDROGEN\_SYNTHESIS | 0.134321 | -0.07338 | 2.065245 | 0.04284 | 0.364482 | -3.92683 |
| MATZUK\_SPERMATID\_DIFFERENTIATION | -0.06905 | -0.07657 | -2.06441 | 0.042922 | 0.364691 | -3.92833 |
| HOFFMANN\_IMMATURE\_TO\_MATURE\_B\_LYMPHOCYTE\_UP | 0.087872 | -0.26752 | 2.062915 | 0.043068 | 0.365443 | -3.93102 |
| ZAIDI\_OSTEOBLAST\_TRANSCRIPTION\_FACTORS | 0.159662 | 0.000641 | 2.06146 | 0.04321 | 0.366166 | -3.93363 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_UP | -0.12977 | 0.009623 | -2.06074 | 0.043281 | 0.366195 | -3.93492 |
| REACTOME\_SIGNALING\_BY\_GPCR | 0.070584 | -0.08599 | 2.060256 | 0.043329 | 0.366195 | -3.93579 |
| REACTOME\_CREATION\_OF\_C4\_AND\_C2\_ACTIVATORS | 0.13507 | -0.01263 | 2.057226 | 0.043628 | 0.368237 | -3.94123 |
| REACTOME\_TRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL | -0.13964 | -0.00279 | -2.05549 | 0.043801 | 0.368646 | -3.94435 |
| REACTOME\_ASPARTATE\_AND\_ASPARAGINE\_METABOLISM | -0.16635 | -0.10132 | -2.0553 | 0.043819 | 0.368646 | -3.94468 |
| BIOCARTA\_RANKL\_PATHWAY | 0.104636 | -0.0663 | 2.054988 | 0.043851 | 0.368646 | -3.94524 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY | 0.1082 | -0.057 | 2.054175 | 0.043932 | 0.368839 | -3.94669 |
| REACTOME\_IRS\_MEDIATED\_SIGNALLING | -0.08002 | -0.00703 | -2.053 | 0.044049 | 0.369254 | -3.94879 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_MGMT\_48HR\_DN | 0.055011 | -0.15026 | 2.052518 | 0.044097 | 0.369254 | -3.94966 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_HIF1\_SURVIVAL\_SIGNALING | 0.132476 | -0.05832 | 2.051048 | 0.044244 | 0.369904 | -3.95229 |
| LIU\_VAV3\_PROSTATE\_CARCINOGENESIS\_UP | 0.074607 | -0.27336 | 2.050583 | 0.044291 | 0.369904 | -3.95312 |
| MA\_MYELOID\_DIFFERENTIATION\_DN | 0.104899 | -0.07003 | 2.048665 | 0.044484 | 0.370221 | -3.95655 |
| RIEGE\_DELTANP63\_DIRECT\_TARGETS\_UP | 0.059102 | -0.04178 | 2.048637 | 0.044487 | 0.370221 | -3.9566 |
| REACTOME\_PROTEIN\_LOCALIZATION | -0.12021 | -0.09834 | -2.04763 | 0.044589 | 0.370221 | -3.9584 |
| REACTOME\_RUNX2\_REGULATES\_GENES\_INVOLVED\_IN\_CELL\_MIGRATION | 0.17258 | -0.09066 | 2.047438 | 0.044608 | 0.370221 | -3.95874 |
| REACTOME\_CELL\_CELL\_JUNCTION\_ORGANIZATION | 0.089999 | -0.01772 | 2.047319 | 0.04462 | 0.370221 | -3.95895 |
| SU\_PLACENTA | 0.13851 | -0.09206 | 2.045102 | 0.044844 | 0.371119 | -3.96291 |
| PID\_AP1\_PATHWAY | 0.103889 | -0.11306 | 2.045099 | 0.044845 | 0.371119 | -3.96292 |
| REACTOME\_MISCELLANEOUS\_SUBSTRATES | 0.161521 | -0.05499 | 2.04121 | 0.045241 | 0.373521 | -3.96985 |
| NAKAMURA\_LUNG\_CANCER\_DIFFERENTIATION\_MARKERS | 0.111009 | -0.34376 | 2.041097 | 0.045252 | 0.373521 | -3.97005 |
| REACTOME\_SMALL\_INTERFERING\_RNA\_SIRNA\_BIOGENESIS | -0.19952 | -0.02576 | -2.03882 | 0.045486 | 0.374506 | -3.9741 |
| REACTOME\_SYNTHESIS\_OF\_PIPS\_AT\_THE\_LATE\_ENDOSOME\_MEMBRANE | -0.12825 | -0.08174 | -2.03837 | 0.045532 | 0.374506 | -3.9749 |
| REACTOME\_TIE2\_SIGNALING | -0.14844 | -0.03742 | -2.03801 | 0.045568 | 0.374506 | -3.97553 |
| BIOCARTA\_WNT\_LRP6\_PATHWAY | 0.187113 | 0.019251 | 2.037641 | 0.045607 | 0.374506 | -3.9762 |
| REACTOME\_DEFENSINS | 0.08326 | -0.31236 | 2.033227 | 0.046063 | 0.376645 | -3.98404 |
| REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_MITOCHONDRION | -0.19719 | -0.13129 | -2.03256 | 0.046133 | 0.376645 | -3.98522 |
| REACTOME\_MITOTIC\_SPINDLE\_CHECKPOINT | -0.12019 | -0.04247 | -2.03249 | 0.04614 | 0.376645 | -3.98534 |
| REACTOME\_SNRNP\_ASSEMBLY | -0.15362 | -0.06162 | -2.03235 | 0.046154 | 0.376645 | -3.98559 |
| TESAR\_ALK\_TARGETS\_EPISC\_4D\_UP | 0.208873 | -0.0035 | 2.031841 | 0.046208 | 0.376645 | -3.9865 |
| VANTVEER\_BREAST\_CANCER\_ESR1\_UP | -0.09178 | -0.07353 | -2.0314 | 0.046254 | 0.376645 | -3.98729 |
| ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_UP | 0.115983 | -0.16562 | 2.031129 | 0.046282 | 0.376645 | -3.98776 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_UP | 0.053685 | -0.16336 | 2.030223 | 0.046376 | 0.376933 | -3.98937 |
| REACTOME\_VLDL\_CLEARANCE | 0.171654 | 0.015296 | 2.029526 | 0.046449 | 0.376933 | -3.9906 |
| STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_DN | 0.10012 | -0.18821 | 2.028563 | 0.04655 | 0.376933 | -3.99231 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_4\_DN | 0.113025 | -0.05698 | 2.028525 | 0.046554 | 0.376933 | -3.99238 |
| BILANGES\_SERUM\_SENSITIVE\_VIA\_TSC1 | 0.120676 | -0.14102 | 2.02752 | 0.046659 | 0.377274 | -3.99416 |
| REACTOME\_P75NTR\_SIGNALS\_VIA\_NF\_KB | 0.16064 | -0.06304 | 2.026331 | 0.046784 | 0.377274 | -3.99626 |
| BIOCARTA\_LYMPHOCYTE\_PATHWAY | 0.179473 | -0.01436 | 2.025892 | 0.046831 | 0.377274 | -3.99704 |
| KEGG\_UBIQUITIN\_MEDIATED\_PROTEOLYSIS | -0.11524 | -0.03923 | -2.02587 | 0.046833 | 0.377274 | -3.99708 |
| REACTOME\_METHIONINE\_SALVAGE\_PATHWAY | -0.22999 | -0.0121 | -2.0253 | 0.046893 | 0.37728 | -3.99809 |
| MATZUK\_SPERMATOGONIA | 0.09667 | -0.03195 | 2.023749 | 0.047057 | 0.377567 | -4.00083 |
| BEGUM\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_DN | 0.112163 | -0.05926 | 2.023278 | 0.047107 | 0.377567 | -4.00166 |
| SCHAVOLT\_TARGETS\_OF\_TP53\_AND\_TP63 | 0.100106 | -0.0013 | 2.023275 | 0.047107 | 0.377567 | -4.00166 |
| REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES\_THROUGH\_SYNTHESIS\_DEPENDENT\_STRAND\_ANNEALING\_SDSA | -0.12047 | -0.03055 | -2.02203 | 0.047239 | 0.378032 | -4.00387 |
| STARK\_PREFRONTAL\_CORTEX\_22Q11\_DELETION\_DN | -0.13681 | -0.07548 | -2.0211 | 0.047338 | 0.378032 | -4.0055 |
| REACTOME\_CROSS\_PRESENTATION\_OF\_PARTICULATE\_EXOGENOUS\_ANTIGENS\_PHAGOSOMES | 0.194589 | -0.00318 | 2.02105 | 0.047343 | 0.378032 | -4.0056 |
| LEIN\_ASTROCYTE\_MARKERS | 0.084239 | -0.06737 | 2.019667 | 0.04749 | 0.378732 | -4.00804 |
| REACTOME\_O\_LINKED\_GLYCOSYLATION\_OF\_MUCINS | 0.07866 | -0.07855 | 2.018327 | 0.047633 | 0.379398 | -4.0104 |
| REACTOME\_APEX1\_INDEPENDENT\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_SINGLE\_NUCLEOTIDE\_REPLACEMENT\_PATHWAY | -0.2097 | 0.003091 | -2.01763 | 0.047708 | 0.379517 | -4.01163 |
| BROWNE\_HCMV\_INFECTION\_6HR\_DN | -0.08223 | -0.11664 | -2.01659 | 0.04782 | 0.379593 | -4.01347 |
| HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_UP | 0.060786 | -0.16342 | 2.015858 | 0.047898 | 0.379593 | -4.01475 |
| ISHIKAWA\_STING\_SIGNALING | 0.099278 | -0.2262 | 2.015702 | 0.047915 | 0.379593 | -4.01503 |
| WP\_MED\_AND\_PSEUDOACHONDROPLASIA\_GENES | 0.200116 | 0.020997 | 2.015316 | 0.047956 | 0.379593 | -4.01571 |
| HOLLERN\_MICROACINAR\_BREAST\_TUMOR\_DN | 0.126424 | -0.0618 | 2.014699 | 0.048023 | 0.379647 | -4.01679 |
| REACTOME\_INTERLEUKIN\_1\_PROCESSING | 0.163218 | -0.09602 | 2.013873 | 0.048111 | 0.379878 | -4.01825 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_SCP2\_QTL\_TRANS | 0.083852 | -0.00831 | 2.011979 | 0.048316 | 0.38057 | -4.02158 |
| BIOCARTA\_AGPCR\_PATHWAY | -0.12789 | -0.08947 | -2.01171 | 0.048345 | 0.38057 | -4.02205 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_UP | -0.1036 | -0.07539 | -2.01121 | 0.0484 | 0.38057 | -4.02294 |
| REACTOME\_CRMPS\_IN\_SEMA3A\_SIGNALING | 0.142186 | -0.00198 | 2.010851 | 0.048438 | 0.38057 | -4.02356 |
| DIAZ\_CHRONIC\_MYELOGENOUS\_LEUKEMIA\_DN | 0.099323 | -0.14647 | 2.008196 | 0.048727 | 0.382329 | -4.02823 |
| SESTO\_RESPONSE\_TO\_UV\_C4 | -0.1515 | 0.000455 | -2.00677 | 0.048883 | 0.382329 | -4.03073 |
| REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIBES\_SNRNA\_GENES | -0.15932 | -0.03205 | -2.00669 | 0.048891 | 0.382329 | -4.03087 |
| CHEN\_HOXA5\_TARGETS\_6HR\_UP | 0.182913 | -0.09934 | 2.006587 | 0.048903 | 0.382329 | -4.03105 |
| REACTOME\_CONSTITUTIVE\_SIGNALING\_BY\_EGFRVIII | -0.12947 | -0.05789 | -2.00496 | 0.04908 | 0.383249 | -4.0339 |
| WP\_HFE\_EFFECT\_ON\_HEPCIDIN\_PRODUCTION | 0.180533 | -0.00938 | 2.002774 | 0.049321 | 0.384527 | -4.03773 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_DN\_CTNNB1\_DEPENDENT | 0.079917 | -0.21951 | 2.002375 | 0.049365 | 0.384527 | -4.03843 |
| KEGG\_PRIMARY\_BILE\_ACID\_BIOSYNTHESIS | 0.104799 | -0.0525 | 1.999595 | 0.049672 | 0.38611 | -4.0433 |
| TERAO\_AOX4\_TARGETS\_HG\_DN | 0.186001 | -0.00619 | 1.999439 | 0.04969 | 0.38611 | -4.04357 |
| SA\_G1\_AND\_S\_PHASES | 0.106616 | -0.15864 | 1.997946 | 0.049855 | 0.386926 | -4.04618 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_5 | 0.077132 | -0.32333 | 1.99691 | 0.04997 | 0.387347 | -4.04799 |
| BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP | 0.080881 | -0.07917 | 1.995819 | 0.050092 | 0.387818 | -4.0499 |
| ZHONG\_RESPONSE\_TO\_AZACITIDINE\_AND\_TSA\_DN | -0.12189 | -0.02434 | -1.99402 | 0.050293 | 0.388643 | -4.05304 |
| JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_DN | 0.118617 | -0.02274 | 1.993775 | 0.050321 | 0.388643 | -4.05346 |
| REACTOME\_CRISTAE\_FORMATION | -0.17882 | -0.01163 | -1.99101 | 0.050631 | 0.389613 | -4.05828 |
| WP\_GPCRS\_OTHER | 0.09408 | -0.10888 | 1.990495 | 0.050689 | 0.389613 | -4.05918 |
| REACTOME\_ANTI\_INFLAMMATORY\_RESPONSE\_FAVOURING\_LEISHMANIA\_PARASITE\_INFECTION | 0.061613 | -0.04845 | 1.989979 | 0.050748 | 0.389613 | -4.06008 |
| REACTOME\_FREE\_FATTY\_ACID\_RECEPTORS | 0.211381 | 0.006125 | 1.98965 | 0.050785 | 0.389613 | -4.06065 |
| REACTOME\_RUNX3\_REGULATES\_CDKN1A\_TRANSCRIPTION | 0.173834 | -0.01503 | 1.988558 | 0.050908 | 0.389613 | -4.06256 |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION | -0.09404 | -0.0889 | -1.98849 | 0.050916 | 0.389613 | -4.06267 |
| REACTOME\_VEGF\_LIGAND\_RECEPTOR\_INTERACTIONS | 0.154434 | -0.02864 | 1.98847 | 0.050918 | 0.389613 | -4.06271 |
| REACTOME\_PLATELET\_ACTIVATION\_SIGNALING\_AND\_AGGREGATION | 0.071003 | -0.07828 | 1.988311 | 0.050936 | 0.389613 | -4.06299 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C3 | 0.163493 | -0.06228 | 1.986954 | 0.05109 | 0.390321 | -4.06535 |
| BIOCARTA\_PLCE\_PATHWAY | -0.13535 | -0.08489 | -1.98537 | 0.05127 | 0.391228 | -4.0681 |
| LOPES\_METHYLATED\_IN\_COLON\_CANCER\_UP | 0.085254 | -0.07541 | 1.984353 | 0.051386 | 0.391642 | -4.06987 |
| CHEN\_HOXA5\_TARGETS\_9HR\_DN | -0.12297 | -0.0505 | -1.9838 | 0.051449 | 0.391655 | -4.07083 |
| REACTOME\_COMPLEX\_I\_BIOGENESIS | -0.12583 | -0.18718 | -1.98305 | 0.051535 | 0.391835 | -4.07213 |
| REACTOME\_TRANSPORT\_OF\_NUCLEOSIDES\_AND\_FREE\_PURINE\_AND\_PYRIMIDINE\_BASES\_ACROSS\_THE\_PLASMA\_MEMBRANE | 0.110779 | -0.00762 | 1.981135 | 0.051754 | 0.393036 | -4.07546 |
| REACTOME\_APOPTOTIC\_FACTOR\_MEDIATED\_RESPONSE | -0.14679 | -0.06542 | -1.97999 | 0.051886 | 0.393404 | -4.07745 |
| REACTOME\_ANTIGEN\_PROCESSING\_UBIQUITINATION\_PROTEASOME\_DEGRADATION | -0.09523 | -0.09098 | -1.97964 | 0.051926 | 0.393404 | -4.07805 |
| ZHAN\_MULTIPLE\_MYELOMA\_DN | 0.091868 | -0.26244 | 1.978742 | 0.05203 | 0.393717 | -4.0796 |
| KERLEY\_RESPONSE\_TO\_CISPLATIN\_UP | 0.100287 | -0.13766 | 1.977572 | 0.052165 | 0.39393 | -4.08163 |
| SCHMIDT\_POR\_TARGETS\_IN\_LIMB\_BUD\_DN | 0.138619 | -0.17545 | 1.976717 | 0.052264 | 0.39393 | -4.08311 |
| PID\_CMYB\_PATHWAY | 0.102437 | -0.03734 | 1.976562 | 0.052281 | 0.39393 | -4.08338 |
| WP\_METAPATHWAY\_BIOTRANSFORMATION\_PHASE\_I\_AND\_II | 0.069729 | -0.08935 | 1.976357 | 0.052305 | 0.39393 | -4.08374 |
| REACTOME\_REMOVAL\_OF\_AMINOTERMINAL\_PROPEPTIDES\_FROM\_GAMMA\_CARBOXYLATED\_PROTEINS | 0.148283 | 0.014551 | 1.974967 | 0.052466 | 0.394677 | -4.08614 |
| REACTOME\_HEME\_BIOSYNTHESIS | -0.13741 | 0.008797 | -1.97372 | 0.052611 | 0.394886 | -4.0883 |
| JOHNSTONE\_PARVB\_TARGETS\_3\_DN | -0.11793 | -0.10831 | -1.97366 | 0.052618 | 0.394886 | -4.0884 |
| REACTOME\_NEUROFASCIN\_INTERACTIONS | 0.144753 | -0.00128 | 1.97251 | 0.052752 | 0.394943 | -4.09039 |
| SU\_TESTIS | -0.08634 | -0.07031 | -1.97216 | 0.052794 | 0.394943 | -4.091 |
| ZWANG\_CLASS\_3\_TRANSIENTLY\_INDUCED\_BY\_EGF | 0.119714 | -0.07876 | 1.971998 | 0.052812 | 0.394943 | -4.09127 |
| PLASARI\_TGFB1\_TARGETS\_1HR\_UP | 0.123261 | -0.2017 | 1.970714 | 0.052962 | 0.395601 | -4.09349 |
| SANSOM\_APC\_TARGETS\_DN | 0.058048 | -0.13225 | 1.968107 | 0.053268 | 0.397005 | -4.09799 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_9 | -0.21503 | -0.00277 | -1.96805 | 0.053275 | 0.397005 | -4.09809 |
| VARELA\_ZMPSTE24\_TARGETS\_DN | 0.073996 | -0.05677 | 1.966693 | 0.053435 | 0.397731 | -4.10043 |
| REACTOME\_CA\_DEPENDENT\_EVENTS | -0.08556 | -0.06938 | -1.96476 | 0.053663 | 0.398623 | -4.10376 |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_35D\_UP | 0.072037 | -0.3355 | 1.963983 | 0.053755 | 0.398623 | -4.1051 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP | 0.090028 | -0.06628 | 1.963715 | 0.053787 | 0.398623 | -4.10556 |
| REACTOME\_PREGNENOLONE\_BIOSYNTHESIS | 0.113745 | -0.06815 | 1.963382 | 0.053827 | 0.398623 | -4.10613 |
| WP\_BENZENE\_METABOLISM | 0.161926 | -0.01626 | 1.963033 | 0.053868 | 0.398623 | -4.10673 |
| REACTOME\_NUCLEOTIDE\_EXCISION\_REPAIR | -0.13156 | -0.15189 | -1.96192 | 0.054 | 0.398689 | -4.10864 |
| LINDGREN\_BLADDER\_CANCER\_WITH\_LOH\_IN\_CHR9Q | -0.14477 | -0.00626 | -1.96191 | 0.054002 | 0.398689 | -4.10868 |
| VANDESLUIS\_NORMAL\_EMBRYOS\_DN | 0.124619 | -0.00614 | 1.96034 | 0.054189 | 0.399603 | -4.11137 |
| WEBER\_METHYLATED\_HCP\_IN\_SPERM\_UP | 0.150093 | -0.04884 | 1.959243 | 0.05432 | 0.400106 | -4.11325 |
| REACTOME\_ELECTRIC\_TRANSMISSION\_ACROSS\_GAP\_JUNCTIONS | 0.175773 | -0.16739 | 1.958441 | 0.054416 | 0.400118 | -4.11463 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_CTNNB1\_DN | 0.090357 | -0.02305 | 1.957547 | 0.054523 | 0.400118 | -4.11617 |
| REACTOME\_TRNA\_PROCESSING\_IN\_THE\_NUCLEUS | -0.10164 | -0.22526 | -1.95735 | 0.054547 | 0.400118 | -4.11651 |
| WP\_FIBRIN\_COMPLEMENT\_RECEPTOR\_3\_SIGNALING\_PATHWAY | 0.099855 | -0.13878 | 1.955363 | 0.054786 | 0.400118 | -4.11991 |
| REACTOME\_ASSEMBLY\_OF\_THE\_ORC\_COMPLEX\_AT\_THE\_ORIGIN\_OF\_REPLICATION | -0.14839 | -0.00061 | -1.95481 | 0.054853 | 0.400118 | -4.12086 |
| POOLA\_INVASIVE\_BREAST\_CANCER\_UP | 0.099873 | -0.19003 | 1.954717 | 0.054864 | 0.400118 | -4.12102 |
| SHEPARD\_BMYB\_MORPHOLINO\_DN | 0.057907 | -0.11218 | 1.954276 | 0.054917 | 0.400118 | -4.12178 |
| KERLEY\_RESPONSE\_TO\_CISPLATIN\_DN | -0.16357 | -0.00575 | -1.95425 | 0.05492 | 0.400118 | -4.12183 |
| BIOCARTA\_MONOCYTE\_PATHWAY | 0.177702 | -0.00605 | 1.954048 | 0.054944 | 0.400118 | -4.12217 |
| BIOCARTA\_ACH\_PATHWAY | -0.14068 | -0.05563 | -1.954 | 0.05495 | 0.400118 | -4.12225 |
| REACTOME\_METABOLISM\_OF\_FAT\_SOLUBLE\_VITAMINS | 0.080479 | -0.09456 | 1.953128 | 0.055056 | 0.400427 | -4.12374 |
| HOUSTIS\_ROS | 0.12181 | -0.06947 | 1.951635 | 0.055237 | 0.401055 | -4.1263 |
| MATHEW\_FANCONI\_ANEMIA\_GENES | -0.15388 | 0.01035 | -1.9511 | 0.055301 | 0.401055 | -4.12721 |
| REACTOME\_TNFS\_BIND\_THEIR\_PHYSIOLOGICAL\_RECEPTORS | 0.106307 | -0.08225 | 1.950857 | 0.055331 | 0.401055 | -4.12763 |
| MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_DN | -0.14122 | -0.06944 | -1.9498 | 0.055459 | 0.401239 | -4.12944 |
| GALI\_TP53\_TARGETS\_APOPTOTIC\_DN | 0.145149 | -0.01074 | 1.949181 | 0.055535 | 0.401239 | -4.1305 |
| GOUYER\_TUMOR\_INVASIVENESS | 0.13873 | -0.01319 | 1.949095 | 0.055546 | 0.401239 | -4.13065 |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_2 | -0.04673 | -0.0292 | -1.94831 | 0.055642 | 0.401477 | -4.13199 |
| WANG\_ESOPHAGUS\_CANCER\_VS\_NORMAL\_UP | 0.084583 | -0.1949 | 1.947358 | 0.055758 | 0.401859 | -4.13362 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_13 | -0.12083 | -0.1956 | -1.94545 | 0.055991 | 0.40248 | -4.13687 |
| MIKKELSEN\_MCV6\_LCP\_WITH\_H3K27ME3 | 0.137699 | -0.07058 | 1.945257 | 0.056015 | 0.40248 | -4.13721 |
| REACTOME\_MITOTIC\_PROMETAPHASE | -0.09704 | -0.09586 | -1.94511 | 0.056033 | 0.40248 | -4.13746 |
| WP\_INTERLEUKIN1\_INDUCED\_ACTIVATION\_OF\_NFKB | 0.128358 | -0.10687 | 1.942545 | 0.056349 | 0.40359 | -4.14183 |
| WP\_IL18\_SIGNALING\_PATHWAY | 0.062934 | -0.18965 | 1.942013 | 0.056415 | 0.40359 | -4.14274 |
| WP\_PROTEOGLYCAN\_BIOSYNTHESIS | -0.17277 | -0.06887 | -1.94139 | 0.056491 | 0.40359 | -4.1438 |
| REACTOME\_PROTON\_COUPLED\_MONOCARBOXYLATE\_TRANSPORT | 0.176423 | -0.15141 | 1.941099 | 0.056528 | 0.40359 | -4.1443 |
| BIOCARTA\_PLATELETAPP\_PATHWAY | 0.128174 | -0.00095 | 1.941035 | 0.056536 | 0.40359 | -4.14441 |
| KEGG\_RNA\_POLYMERASE | -0.14743 | -0.08305 | -1.94059 | 0.056591 | 0.40359 | -4.14517 |
| MALIK\_REPRESSED\_BY\_ESTROGEN | 0.146539 | -0.01175 | 1.939631 | 0.05671 | 0.40359 | -4.1468 |
| WP\_SELECTIVE\_EXPRESSION\_OF\_CHEMOKINE\_RECEPTORS\_DURING\_TCELL\_POLARIZATION | 0.096415 | -0.14464 | 1.939506 | 0.056725 | 0.40359 | -4.14701 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINDED\_IN\_ERYTHROCYTE\_UP | 0.095439 | -0.17569 | 1.939235 | 0.056759 | 0.40359 | -4.14747 |
| PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_UP | 0.138685 | -0.14631 | 1.93636 | 0.057117 | 0.405513 | -4.15236 |
| REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH | -0.15425 | -0.00491 | -1.93593 | 0.057171 | 0.405513 | -4.1531 |
| REACTOME\_SYNTHESIS\_OF\_KETONE\_BODIES | -0.12986 | -0.1 | -1.93553 | 0.05722 | 0.405513 | -4.15377 |
| REACTOME\_GPCR\_LIGAND\_BINDING | 0.091449 | -0.09157 | 1.934316 | 0.057372 | 0.406138 | -4.15584 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_HIGH\_RISK\_UP | -0.13177 | 0.009782 | -1.9327 | 0.057576 | 0.407123 | -4.15859 |
| REACTOME\_THE\_CANONICAL\_RETINOID\_CYCLE\_IN\_RODS\_TWILIGHT\_VISION | 0.093185 | -0.06491 | 1.931919 | 0.057674 | 0.407363 | -4.15991 |
| REACTOME\_ADHERENS\_JUNCTIONS\_INTERACTIONS | 0.102562 | 0.009952 | 1.931044 | 0.057784 | 0.407604 | -4.16139 |
| WP\_VASOPRESSINREGULATED\_WATER\_REABSORPTION | -0.10097 | -0.07101 | -1.93063 | 0.057836 | 0.407604 | -4.16209 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_UP | 0.128972 | -0.21637 | 1.928486 | 0.058107 | 0.407793 | -4.16573 |
| NIKOLSKY\_BREAST\_CANCER\_16Q24\_AMPLICON | 0.105413 | -0.007 | 1.928453 | 0.058111 | 0.407793 | -4.16579 |
| WP\_TGFBETA\_SIGNALING\_IN\_THYROID\_CELLS\_FOR\_EPITHELIALMESENCHYMAL\_TRANSITION | 0.144747 | -0.0032 | 1.928178 | 0.058146 | 0.407793 | -4.16625 |
| WP\_INSULIN\_SIGNALING\_IN\_ADIPOCYTES\_DIABETIC\_CONDITION | -0.14624 | -0.09094 | -1.92726 | 0.058263 | 0.407793 | -4.16781 |
| WP\_INSULIN\_SIGNALING\_IN\_ADIPOCYTES\_NORMAL\_CONDITION | -0.14624 | -0.09094 | -1.92726 | 0.058263 | 0.407793 | -4.16781 |
| REACTOME\_ACTIVATION\_OF\_PPARGC1A\_PGC\_1ALPHA\_BY\_PHOSPHORYLATION | -0.12347 | 0.014871 | -1.92665 | 0.05834 | 0.407793 | -4.16884 |
| PID\_TCR\_CALCIUM\_PATHWAY | 0.100222 | -0.0595 | 1.925704 | 0.05846 | 0.407793 | -4.17044 |
| WP\_CCL18\_SIGNALING\_PATHWAY | 0.118393 | -0.06365 | 1.925481 | 0.058489 | 0.407793 | -4.17082 |
| KEGG\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI\_ANCHOR\_BIOSYNTHESIS | -0.13383 | -0.07442 | -1.92547 | 0.05849 | 0.407793 | -4.17083 |
| HOLLERN\_SQUAMOUS\_BREAST\_TUMOR | 0.08689 | -0.13476 | 1.925368 | 0.058503 | 0.407793 | -4.17101 |
| YANAGISAWA\_LUNG\_CANCER\_RECURRENCE | -0.19672 | -0.02101 | -1.92397 | 0.058681 | 0.408586 | -4.17337 |
| BILANGES\_SERUM\_SENSITIVE\_GENES | 0.060826 | -0.2569 | 1.923354 | 0.05876 | 0.40869 | -4.17441 |
| REACTOME\_GPVI\_MEDIATED\_ACTIVATION\_CASCADE | 0.105656 | -0.20049 | 1.921989 | 0.058935 | 0.408801 | -4.17672 |
| REACTOME\_DUAL\_INCISION\_IN\_TC\_NER | -0.13026 | -0.12591 | -1.92192 | 0.058944 | 0.408801 | -4.17684 |
| NIKOLSKY\_BREAST\_CANCER\_17P11\_AMPLICON | -0.12439 | 0.009415 | -1.92173 | 0.058969 | 0.408801 | -4.17717 |
| LEE\_LIVER\_CANCER\_HEPATOBLAST | 0.146473 | -0.06236 | 1.920681 | 0.059103 | 0.409059 | -4.17893 |
| BIOCARTA\_TCYTOTOXIC\_PATHWAY | 0.190235 | -0.08561 | 1.920369 | 0.059143 | 0.409059 | -4.17946 |
| REACTOME\_M\_PHASE | -0.10743 | -0.1131 | -1.91993 | 0.059199 | 0.409059 | -4.18019 |
| REACTOME\_METABOLISM\_OF\_COFACTORS | -0.13724 | -0.01824 | -1.91774 | 0.059482 | 0.41057 | -4.18389 |
| REACTOME\_INTERLEUKIN\_9\_SIGNALING | 0.132532 | -0.00648 | 1.917129 | 0.059561 | 0.410669 | -4.18492 |
| LEE\_AGING\_MUSCLE\_DN | -0.07686 | -0.19076 | -1.91629 | 0.05967 | 0.410732 | -4.18634 |
| REACTOME\_TICAM1\_DEPENDENT\_ACTIVATION\_OF\_IRF3\_IRF7 | 0.150087 | -0.07059 | 1.915563 | 0.059764 | 0.410732 | -4.18756 |
| WANG\_NEOPLASTIC\_TRANSFORMATION\_BY\_CCND1\_MYC | 0.104971 | -0.00867 | 1.915322 | 0.059795 | 0.410732 | -4.18796 |
| KIM\_WT1\_TARGETS\_UP | 0.109991 | -0.05919 | 1.915067 | 0.059828 | 0.410732 | -4.18839 |
| CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_DN | 0.123127 | -0.2497 | 1.914286 | 0.05993 | 0.410986 | -4.18971 |
| FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_UP | -0.12858 | -0.04471 | -1.91215 | 0.060209 | 0.412291 | -4.1933 |
| BIOCARTA\_FEEDER\_PATHWAY | 0.123858 | -0.01476 | 1.911832 | 0.06025 | 0.412291 | -4.19384 |
| KEGG\_OOCYTE\_MEIOSIS | -0.08396 | -0.05129 | -1.91109 | 0.060347 | 0.412512 | -4.19509 |
| REACTOME\_POSTMITOTIC\_NUCLEAR\_PORE\_COMPLEX\_NPC\_REFORMATION | -0.16623 | -0.00629 | -1.90956 | 0.060548 | 0.413002 | -4.19766 |
| MCGOWAN\_RSP6\_TARGETS\_UP | 0.093645 | -0.1295 | 1.909339 | 0.060576 | 0.413002 | -4.19803 |
| WP\_REGULATION\_OF\_APOPTOSIS\_BY\_PARATHYROID\_HORMONERELATED\_PROTEIN | 0.109502 | -0.02873 | 1.909057 | 0.060613 | 0.413002 | -4.1985 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_OF\_ACTIVATED\_FGFR4 | -0.08518 | -0.03167 | -1.90734 | 0.06084 | 0.4141 | -4.20139 |
| REACTOME\_RAS\_ACTIVATION\_UPON\_CA2\_INFLUX\_THROUGH\_NMDA\_RECEPTOR | -0.1107 | -0.03967 | -1.90425 | 0.061247 | 0.41643 | -4.20656 |
| REACTOME\_ESTABLISHMENT\_OF\_SISTER\_CHROMATID\_COHESION | -0.20157 | -0.00421 | -1.90266 | 0.061459 | 0.417001 | -4.20923 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_LIVER\_DN | -0.11158 | -0.34044 | -1.90263 | 0.061462 | 0.417001 | -4.20928 |
| REACTOME\_DEFECTS\_IN\_COBALAMIN\_B12\_METABOLISM | -0.11427 | -0.00479 | -1.90196 | 0.061552 | 0.417163 | -4.2104 |
| REACTOME\_DNA\_REPAIR | -0.09701 | -0.1091 | -1.90075 | 0.061712 | 0.417807 | -4.21242 |
| MCMURRAY\_TP53\_HRAS\_COOPERATION\_RESPONSE\_UP | 0.091482 | -0.06946 | 1.899324 | 0.061903 | 0.418258 | -4.21481 |
| CONRAD\_GERMLINE\_STEM\_CELL | 0.132418 | -0.00831 | 1.899267 | 0.061911 | 0.418258 | -4.2149 |
| AMIT\_SERUM\_RESPONSE\_20\_MCF10A | 0.091027 | 0.007731 | 1.898751 | 0.06198 | 0.418281 | -4.21576 |
| MARTIN\_NFKB\_TARGETS\_DN | -0.12736 | 0.003064 | -1.89763 | 0.06213 | 0.418424 | -4.21764 |
| KASLER\_HDAC7\_TARGETS\_2\_UP | 0.173408 | 0.004468 | 1.89761 | 0.062132 | 0.418424 | -4.21767 |
| NATSUME\_RESPONSE\_TO\_INTERFERON\_BETA\_UP | 0.065083 | -0.1491 | 1.897014 | 0.062212 | 0.41852 | -4.21866 |
| REACTOME\_ESTROGEN\_STIMULATED\_SIGNALING\_THROUGH\_PRKCZ | -0.17108 | -0.10686 | -1.89613 | 0.062331 | 0.41854 | -4.22014 |
| REACTOME\_RUNX3\_REGULATES\_YAP1\_MEDIATED\_TRANSCRIPTION | -0.15332 | -0.0029 | -1.89601 | 0.062347 | 0.41854 | -4.22034 |
| REACTOME\_NR1H3\_NR1H2\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_CHOLESTEROL\_TRANSPORT\_AND\_EFFLUX | 0.094533 | -0.15977 | 1.893955 | 0.062624 | 0.419723 | -4.22377 |
| PETRETTO\_HEART\_MASS\_QTL\_CIS\_DN | -0.12934 | -0.08494 | -1.89373 | 0.062655 | 0.419723 | -4.22415 |
| PHONG\_TNF\_RESPONSE\_VIA\_P38\_PARTIAL | 0.101883 | -0.11556 | 1.892356 | 0.06284 | 0.419769 | -4.22643 |
| BIOCARTA\_NKT\_PATHWAY | 0.096244 | -0.16317 | 1.89224 | 0.062856 | 0.419769 | -4.22663 |
| WP\_ONECARBON\_METABOLISM\_AND\_RELATED\_PATHWAYS | 0.068187 | -0.07509 | 1.892213 | 0.06286 | 0.419769 | -4.22667 |
| KEGG\_NITROGEN\_METABOLISM | 0.098996 | -0.0419 | 1.890566 | 0.063083 | 0.420819 | -4.22942 |
| REACTOME\_CREB1\_PHOSPHORYLATION\_THROUGH\_THE\_ACTIVATION\_OF\_CAMKII\_CAMKK\_CAMKIV\_CASCASDE | -0.15307 | 0.010292 | -1.88961 | 0.063214 | 0.421247 | -4.23101 |
| FAELT\_B\_CLL\_WITH\_VH3\_21\_UP | 0.078969 | -0.34865 | 1.888852 | 0.063316 | 0.42139 | -4.23227 |
| BIOCARTA\_FXR\_PATHWAY | 0.140427 | -0.02995 | 1.888477 | 0.063367 | 0.42139 | -4.23289 |
| REACTOME\_PEROXISOMAL\_LIPID\_METABOLISM | -0.10853 | -0.03494 | -1.8863 | 0.063665 | 0.422639 | -4.23651 |
| BIOCARTA\_FOSB\_PATHWAY | 0.164703 | 0.012008 | 1.88613 | 0.063688 | 0.422639 | -4.23679 |
| REACTOME\_ERCC6\_CSB\_AND\_EHMT2\_G9A\_POSITIVELY\_REGULATE\_RRNA\_EXPRESSION | -0.11458 | -0.25195 | -1.8851 | 0.06383 | 0.422836 | -4.23851 |
| PID\_DNA\_PK\_PATHWAY | -0.11321 | -0.27712 | -1.88484 | 0.063865 | 0.422836 | -4.23893 |
| WP\_G\_PROTEIN\_SIGNALING\_PATHWAYS | -0.0734 | -0.06248 | -1.88424 | 0.063948 | 0.422836 | -4.23994 |
| VALK\_AML\_WITH\_T\_8\_21\_TRANSLOCATION | -0.16537 | -0.1512 | -1.88398 | 0.063984 | 0.422836 | -4.24037 |
| REACTOME\_TRNA\_PROCESSING\_IN\_THE\_MITOCHONDRION | -0.22662 | 0.00754 | -1.88295 | 0.064125 | 0.423033 | -4.24208 |
| KONDO\_PROSTATE\_CANCER\_WITH\_H3K27ME3 | 0.10239 | -0.12775 | 1.882795 | 0.064146 | 0.423033 | -4.24233 |
| WANG\_CLASSIC\_ADIPOGENIC\_TARGETS\_OF\_PPARG | 0.131815 | -0.11303 | 1.880962 | 0.064399 | 0.424261 | -4.24537 |
| WP\_MITOCHONDRIAL\_COMPLEX\_I\_ASSEMBLY\_MODEL\_OXPHOS\_SYSTEM | -0.11404 | -0.19904 | -1.88032 | 0.064488 | 0.424405 | -4.24643 |
| REACTOME\_TANDEM\_PORE\_DOMAIN\_POTASSIUM\_CHANNELS | 0.127109 | 0.015293 | 1.87971 | 0.064572 | 0.424523 | -4.24744 |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_ALL\_UP | -0.13453 | -0.1318 | -1.87701 | 0.064947 | 0.426126 | -4.25191 |
| WP\_INTERACTIONS\_BETWEEN\_IMMUNE\_CELLS\_AND\_MICRORNAS\_IN\_TUMOR\_MICROENVIRONMENT | 0.111884 | -0.07014 | 1.876849 | 0.06497 | 0.426126 | -4.25218 |
| MEISSNER\_BRAIN\_HCP\_WITH\_H3\_UNMETHYLATED | 0.149665 | -0.0054 | 1.87651 | 0.065017 | 0.426126 | -4.25274 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_E2F6 | -0.08805 | -0.24062 | -1.87463 | 0.065279 | 0.427403 | -4.25584 |
| MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_DN | 0.096752 | -0.06363 | 1.873512 | 0.065436 | 0.42799 | -4.25769 |
| REACTOME\_DUAL\_INCISION\_IN\_GG\_NER | -0.12153 | -0.16962 | -1.87244 | 0.065586 | 0.428385 | -4.25946 |
| VERHAAK\_AML\_WITH\_NPM1\_MUTATED\_UP | 0.080327 | -0.22341 | 1.871732 | 0.065686 | 0.428385 | -4.26063 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINED\_IN\_MONOCYTE\_UP | 0.127649 | -0.00173 | 1.871643 | 0.065698 | 0.428385 | -4.26078 |
| REACTOME\_SYNTHESIS\_OF\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI | -0.13851 | -0.05514 | -1.87105 | 0.065782 | 0.42849 | -4.26176 |
| WP\_GLYCOGEN\_SYNTHESIS\_AND\_DEGRADATION | -0.10603 | -0.04427 | -1.8694 | 0.066014 | 0.42849 | -4.26447 |
| BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_UP | 0.062109 | -0.15556 | 1.869308 | 0.066027 | 0.42849 | -4.26463 |
| REACTOME\_TRANSCRIPTION\_OF\_THE\_HIV\_GENOME | -0.11508 | -0.19098 | -1.86805 | 0.066205 | 0.42849 | -4.2667 |
| LIAN\_NEUTROPHIL\_GRANULE\_CONSTITUENTS | 0.125213 | -0.09975 | 1.86798 | 0.066215 | 0.42849 | -4.26681 |
| BUCKANOVICH\_T\_LYMPHOCYTE\_HOMING\_ON\_TUMOR\_DN | -0.12817 | -0.0033 | -1.86752 | 0.06628 | 0.42849 | -4.26757 |
| KORKOLA\_SEMINOMA\_DN | 0.186787 | 0.045549 | 1.867348 | 0.066304 | 0.42849 | -4.26785 |
| KEGG\_MISMATCH\_REPAIR | -0.13287 | -0.05931 | -1.86703 | 0.06635 | 0.42849 | -4.26839 |
| PLASARI\_TGFB1\_TARGETS\_1HR\_DN | -0.18583 | -0.02887 | -1.86684 | 0.066377 | 0.42849 | -4.2687 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_4 | 0.063172 | -0.10259 | 1.86647 | 0.066429 | 0.42849 | -4.2693 |
| REACTOME\_MITOCHONDRIAL\_IRON\_SULFUR\_CLUSTER\_BIOGENESIS | -0.15051 | -0.00722 | -1.86583 | 0.06652 | 0.42849 | -4.27035 |
| SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_UP | 0.091976 | -0.22533 | 1.865811 | 0.066522 | 0.42849 | -4.27039 |
| WP\_EXRNA\_MECHANISM\_OF\_ACTION\_AND\_BIOGENESIS | -0.16623 | -0.00225 | -1.86395 | 0.066787 | 0.429665 | -4.27344 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_3\_DN | 0.085955 | -0.03875 | 1.86327 | 0.066884 | 0.429665 | -4.27456 |
| KEGG\_PROXIMAL\_TUBULE\_BICARBONATE\_RECLAMATION | 0.079901 | -0.12324 | 1.863077 | 0.066912 | 0.429665 | -4.27488 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_FLT3 | 0.145763 | 0.003074 | 1.862635 | 0.066975 | 0.429665 | -4.27561 |
| WP\_FOXA2\_PATHWAY | -0.08939 | -0.04525 | -1.8615 | 0.067137 | 0.429935 | -4.27747 |
| REACTOME\_G2\_PHASE | -0.15425 | 0.007966 | -1.86139 | 0.067152 | 0.429935 | -4.27765 |
| REACTOME\_NEF\_MEDIATED\_DOWNREGULATION\_OF\_MHC\_CLASS\_I\_COMPLEX\_CELL\_SURFACE\_EXPRESSION | 0.150735 | -0.14827 | 1.860776 | 0.067241 | 0.429935 | -4.27866 |
| REACTOME\_ASSEMBLY\_OF\_ACTIVE\_LPL\_AND\_LIPC\_LIPASE\_COMPLEXES | 0.119627 | 0.0097 | 1.860454 | 0.067287 | 0.429935 | -4.27919 |
| REACTOME\_FGFR3B\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.164809 | 0.020369 | 1.859972 | 0.067356 | 0.42994 | -4.27998 |
| REACTOME\_RUNX1\_REGULATES\_EXPRESSION\_OF\_COMPONENTS\_OF\_TIGHT\_JUNCTIONS | -0.15653 | -0.13374 | -1.85951 | 0.067423 | 0.42994 | -4.28074 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_DEPENDENT | 0.099276 | -0.05259 | 1.85881 | 0.067523 | 0.430095 | -4.28188 |
| BREDEMEYER\_RAG\_SIGNALING\_NOT\_VIA\_ATM\_UP | -0.06893 | -0.01087 | -1.8584 | 0.067583 | 0.430095 | -4.28256 |
| SIMBULAN\_UV\_RESPONSE\_NORMAL\_UP | 0.144141 | -0.11488 | 1.85689 | 0.0678 | 0.430347 | -4.28503 |
| VANLOO\_SP3\_TARGETS\_DN | 0.072749 | -0.09982 | 1.856853 | 0.067805 | 0.430347 | -4.28509 |
| WP\_BLOOD\_CLOTTING\_CASCADE | 0.099739 | -0.04169 | 1.856703 | 0.067827 | 0.430347 | -4.28534 |
| REACTOME\_ACTIVATED\_NTRK3\_SIGNALS\_THROUGH\_PI3K | -0.18786 | 0.034503 | -1.85625 | 0.067893 | 0.430347 | -4.28608 |
| WP\_ENERGY\_METABOLISM | -0.10939 | -0.00521 | -1.85383 | 0.068243 | 0.432136 | -4.29004 |
| WHITFIELD\_CELL\_CYCLE\_S | -0.10016 | -0.00986 | -1.85302 | 0.06836 | 0.432292 | -4.29136 |
| CHANG\_IMMORTALIZED\_BY\_HPV31\_DN | 0.063213 | -0.0344 | 1.852725 | 0.068403 | 0.432292 | -4.29185 |
| REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER | -0.13014 | -0.10749 | -1.85204 | 0.068503 | 0.432413 | -4.29297 |
| BUYTAERT\_PHOTODYNAMIC\_THERAPY\_STRESS\_DN | -0.0853 | -0.13209 | -1.85128 | 0.068613 | 0.432413 | -4.29421 |
| RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_DN | -0.09536 | -0.04066 | -1.85017 | 0.068776 | 0.432413 | -4.29603 |
| MIKKELSEN\_NPC\_ICP\_WITH\_H3K4ME3 | -0.05233 | -0.13123 | -1.85005 | 0.068794 | 0.432413 | -4.29623 |
| WP\_TRANSCRIPTION\_FACTORS\_REGULATE\_MIRNAS\_RELATED\_TO\_CARDIAC\_HYPERTROPHY | 0.100769 | -0.0081 | 1.849636 | 0.068854 | 0.432413 | -4.29689 |
| ZHAN\_MULTIPLE\_MYELOMA\_SUBGROUPS | -0.12187 | -0.16796 | -1.84941 | 0.068887 | 0.432413 | -4.29726 |
| SCIAN\_INVERSED\_TARGETS\_OF\_TP53\_AND\_TP73\_DN | 0.14101 | -0.02053 | 1.849334 | 0.068898 | 0.432413 | -4.29739 |
| KEGG\_PROGESTERONE\_MEDIATED\_OOCYTE\_MATURATION | -0.07477 | -0.0519 | -1.84713 | 0.069221 | 0.433988 | -4.30099 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G12\_UP | -0.11805 | -0.08086 | -1.84659 | 0.0693 | 0.433988 | -4.30186 |
| REACTOME\_GDP\_FUCOSE\_BIOSYNTHESIS | -0.1743 | -0.00317 | -1.8457 | 0.069432 | 0.433988 | -4.30332 |
| KEGG\_CHEMOKINE\_SIGNALING\_PATHWAY | 0.063401 | -0.10223 | 1.845575 | 0.06945 | 0.433988 | -4.30352 |
| ZHAN\_MULTIPLE\_MYELOMA\_SPIKED | 0.078566 | -0.26061 | 1.845303 | 0.06949 | 0.433988 | -4.30396 |
| REACTOME\_INSULIN\_RECEPTOR\_SIGNALLING\_CASCADE | -0.06888 | -0.00682 | -1.84463 | 0.06959 | 0.434184 | -4.30506 |
| LEIN\_MIDBRAIN\_MARKERS | 0.068844 | -0.03281 | 1.843349 | 0.069778 | 0.434649 | -4.30714 |
| REACTOME\_TCF\_DEPENDENT\_SIGNALING\_IN\_RESPONSE\_TO\_WNT | -0.07268 | -0.1461 | -1.8432 | 0.069801 | 0.434649 | -4.30739 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_DN | -0.0745 | -0.09575 | -1.84196 | 0.069985 | 0.435369 | -4.30941 |
| REACTOME\_REGULATION\_OF\_KIT\_SIGNALING | 0.139041 | -0.01697 | 1.840871 | 0.070146 | 0.435945 | -4.31118 |
| REACTOME\_METABOLISM\_OF\_ANGIOTENSINOGEN\_TO\_ANGIOTENSINS | 0.123468 | -0.04621 | 1.840088 | 0.070262 | 0.436241 | -4.31245 |
| PETRETTO\_HEART\_MASS\_QTL\_CIS\_UP | -0.11479 | -0.25235 | -1.83954 | 0.070343 | 0.436242 | -4.31333 |
| WP\_ANTIVIRAL\_AND\_ANTIINFLAMMATORY\_EFFECTS\_OF\_NRF2\_ON\_SARSCOV2\_PATHWAY | 0.090076 | -0.2192 | 1.839167 | 0.070399 | 0.436242 | -4.31394 |
| BIOCARTA\_SALMONELLA\_PATHWAY | -0.17911 | 0.003939 | -1.83752 | 0.070645 | 0.4371 | -4.31661 |
| REACTOME\_FATTY\_ACIDS\_BOUND\_TO\_GPR40\_FFAR1\_REGULATE\_INSULIN\_SECRETION | 0.110611 | 0.006282 | 1.83719 | 0.070694 | 0.4371 | -4.31715 |
| REACTOME\_EGFR\_INTERACTS\_WITH\_PHOSPHOLIPASE\_C\_GAMMA | 0.142227 | 0.001134 | 1.83615 | 0.07085 | 0.4371 | -4.31884 |
| REACTOME\_O\_LINKED\_GLYCOSYLATION | 0.070545 | -0.06892 | 1.83557 | 0.070937 | 0.4371 | -4.31978 |
| SASAI\_TARGETS\_OF\_CXCR6\_AND\_PTCH1\_UP | 0.114902 | 0.010913 | 1.835436 | 0.070957 | 0.4371 | -4.32 |
| WANG\_THOC1\_TARGETS\_DN | 0.098904 | -0.02709 | 1.835007 | 0.071021 | 0.4371 | -4.32069 |
| WP\_COHESIN\_COMPLEX\_CORNELIA\_DE\_LANGE\_SYNDROME | -0.11898 | -0.03645 | -1.83498 | 0.071026 | 0.4371 | -4.32074 |
| REACTOME\_TRANSPORT\_OF\_CONNEXONS\_TO\_THE\_PLASMA\_MEMBRANE | 0.108769 | -0.01522 | 1.834517 | 0.071095 | 0.4371 | -4.32149 |
| MODY\_HIPPOCAMPUS\_POSTNATAL | 0.089865 | -0.00873 | 1.83411 | 0.071156 | 0.4371 | -4.32215 |
| PID\_IL8\_CXCR2\_PATHWAY | 0.130153 | 0.003894 | 1.833319 | 0.071275 | 0.437133 | -4.32343 |
| OUILLETTE\_CLL\_13Q14\_DELETION\_UP | -0.09652 | -0.01684 | -1.83288 | 0.071341 | 0.437133 | -4.32414 |
| REACTOME\_HIV\_TRANSCRIPTION\_ELONGATION | -0.11226 | -0.25831 | -1.83226 | 0.071434 | 0.437133 | -4.32514 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_G\_DN | -0.0875 | -0.10421 | -1.83186 | 0.071494 | 0.437133 | -4.32578 |
| REACTOME\_ACTIVATED\_NTRK2\_SIGNALS\_THROUGH\_FRS2\_AND\_FRS3 | -0.11859 | -0.06536 | -1.8318 | 0.071505 | 0.437133 | -4.3259 |
| AMIT\_EGF\_RESPONSE\_60\_HELA | 0.140927 | -0.02599 | 1.83033 | 0.071726 | 0.437298 | -4.32827 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_AND\_CD2\_UP | -0.10887 | -0.03817 | -1.82999 | 0.071778 | 0.437298 | -4.32882 |
| WONG\_MITOCHONDRIA\_GENE\_MODULE | -0.12497 | -0.11282 | -1.82983 | 0.071801 | 0.437298 | -4.32907 |
| MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_UP | 0.043638 | -0.20586 | 1.8293 | 0.071882 | 0.437298 | -4.32993 |
| KEGG\_BLADDER\_CANCER | 0.098684 | -0.06261 | 1.82902 | 0.071925 | 0.437298 | -4.33038 |
| TCGA\_GLIOBLASTOMA\_COPY\_NUMBER\_DN | -0.09968 | -0.07195 | -1.82872 | 0.071969 | 0.437298 | -4.33086 |
| ROVERSI\_GLIOMA\_COPY\_NUMBER\_UP | 0.050732 | -0.05172 | 1.82844 | 0.072013 | 0.437298 | -4.33132 |
| WP\_INFLAMMATORY\_RESPONSE\_PATHWAY | 0.106317 | -0.01256 | 1.827802 | 0.07211 | 0.437469 | -4.33235 |
| REACTOME\_EICOSANOIDS | 0.142295 | 0.013976 | 1.827267 | 0.072191 | 0.437546 | -4.33322 |
| RODWELL\_AGING\_KIDNEY\_DN | -0.07169 | -0.04073 | -1.8261 | 0.072368 | 0.438201 | -4.33509 |
| WP\_GPR143\_IN\_MELANOCYTES\_AND\_RETINAL\_PIGMENT\_EPITHELIUM\_CELLS | 0.065882 | -0.09235 | 1.825414 | 0.072473 | 0.438273 | -4.33621 |
| PID\_HNF3B\_PATHWAY | 0.07485 | -0.05823 | 1.825023 | 0.072533 | 0.438273 | -4.33684 |
| BIOCARTA\_EOSINOPHILS\_PATHWAY | 0.0533 | -0.60929 | 1.824674 | 0.072586 | 0.438273 | -4.3374 |
| RAMALHO\_STEMNESS\_DN | 0.073351 | -0.22249 | 1.823673 | 0.072739 | 0.438781 | -4.33902 |
| MOOTHA\_GLYCOLYSIS | 0.114296 | -0.05142 | 1.822486 | 0.072921 | 0.439463 | -4.34093 |
| THUM\_SYSTOLIC\_HEART\_FAILURE\_DN | -0.07399 | -0.10543 | -1.82182 | 0.073024 | 0.439663 | -4.342 |
| WP\_NUCLEOTIDE\_EXCISION\_REPAIR\_IN\_XERODERMA\_PIGMENTOSUM | -0.10683 | -0.14207 | -1.81892 | 0.073471 | 0.441567 | -4.34668 |
| WP\_HEDGEHOG\_SIGNALING\_PATHWAY\_WP47 | -0.13761 | 0.009452 | -1.81886 | 0.073479 | 0.441567 | -4.34676 |
| REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR | -0.09455 | -0.03767 | -1.81813 | 0.073592 | 0.44183 | -4.34793 |
| REACTOME\_SCAVENGING\_BY\_CLASS\_F\_RECEPTORS | 0.136575 | -0.24311 | 1.816806 | 0.073797 | 0.442634 | -4.35007 |
| LIU\_IL13\_PRIMING\_MODEL | 0.1021 | -0.05979 | 1.816369 | 0.073865 | 0.442634 | -4.35077 |
| IVANOVA\_HEMATOPOIESIS\_INTERMEDIATE\_PROGENITOR | -0.12407 | -0.0698 | -1.8148 | 0.074109 | 0.443231 | -4.35329 |
| REACTOME\_SIGNALING\_BY\_FGFR2\_IN\_DISEASE | -0.0779 | -0.02309 | -1.81471 | 0.074123 | 0.443231 | -4.35343 |
| HOWLIN\_CITED1\_TARGETS\_1\_UP | 0.062566 | -0.30279 | 1.814321 | 0.074183 | 0.443231 | -4.35406 |
| WINNEPENNINCKX\_MELANOMA\_METASTASIS\_DN | 0.069417 | -0.271 | 1.813366 | 0.074332 | 0.443231 | -4.35559 |
| MANALO\_HYPOXIA\_DN | -0.11843 | -0.03661 | -1.81331 | 0.074341 | 0.443231 | -4.35568 |
| BROWNE\_HCMV\_INFECTION\_10HR\_DN | -0.10282 | -0.05106 | -1.81304 | 0.074383 | 0.443231 | -4.35611 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_17 | -0.1255 | -0.13645 | -1.81173 | 0.074587 | 0.443742 | -4.35821 |
| WINTER\_HYPOXIA\_METAGENE | 0.104246 | -0.07872 | 1.811601 | 0.074608 | 0.443742 | -4.35842 |
| REACTOME\_KERATINIZATION | 0.129571 | -0.11653 | 1.809692 | 0.074907 | 0.444544 | -4.36148 |
| REACTOME\_ACTIVATED\_TAK1\_MEDIATES\_P38\_MAPK\_ACTIVATION | 0.108402 | 0.005045 | 1.809385 | 0.074955 | 0.444544 | -4.36197 |
| WP\_DOPAMINERGIC\_NEUROGENESIS | 0.128606 | -0.05256 | 1.808575 | 0.075082 | 0.444544 | -4.36326 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_1\_DN | -0.11009 | -0.0699 | -1.80828 | 0.075129 | 0.444544 | -4.36374 |
| REACTOME\_MET\_INTERACTS\_WITH\_TNS\_PROTEINS | 0.151582 | 2.82E-05 | 1.808123 | 0.075154 | 0.444544 | -4.36399 |
| VANTVEER\_BREAST\_CANCER\_POOR\_PROGNOSIS | -0.09207 | -0.05214 | -1.80802 | 0.075169 | 0.444544 | -4.36415 |
| REACTOME\_CONDENSATION\_OF\_PROPHASE\_CHROMOSOMES | -0.1331 | -0.09043 | -1.80763 | 0.075232 | 0.444544 | -4.36478 |
| DEBOSSCHER\_NFKB\_TARGETS\_REPRESSED\_BY\_GLUCOCORTICOIDS | 0.077591 | -0.27239 | 1.807111 | 0.075313 | 0.444612 | -4.36561 |
| WALLACE\_PROSTATE\_CANCER\_UP | 0.095718 | -0.05008 | 1.806161 | 0.075463 | 0.445083 | -4.36712 |
| REACTOME\_AMINO\_ACID\_CONJUGATION | 0.190104 | 0.025908 | 1.805423 | 0.075579 | 0.445227 | -4.3683 |
| CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_3\_UP | 0.170188 | 3.75E-05 | 1.805122 | 0.075627 | 0.445227 | -4.36878 |
| REACTOME\_ACROSOME\_REACTION\_AND\_SPERM\_OOCYTE\_MEMBRANE\_BINDING | 0.173759 | -0.13771 | 1.804005 | 0.075804 | 0.445506 | -4.37057 |
| TESAR\_ALK\_TARGETS\_EPISC\_3D\_UP | 0.170103 | 0.008529 | 1.802661 | 0.076017 | 0.445506 | -4.37271 |
| MEBARKI\_HCC\_PROGENITOR\_FZD8CRD\_DN | 0.05877 | -0.1228 | 1.802531 | 0.076038 | 0.445506 | -4.37292 |
| KEGG\_METABOLISM\_OF\_XENOBIOTICS\_BY\_CYTOCHROME\_P450 | 0.082338 | -0.05188 | 1.802246 | 0.076083 | 0.445506 | -4.37337 |
| REACTOME\_NETRIN\_1\_SIGNALING | -0.08636 | -0.00774 | -1.80218 | 0.076094 | 0.445506 | -4.37349 |
| REACTOME\_BMAL1\_CLOCK\_NPAS2\_ACTIVATES\_CIRCADIAN\_GENE\_EXPRESSION | -0.10749 | -0.01055 | -1.80217 | 0.076095 | 0.445506 | -4.37349 |
| SIMBULAN\_UV\_RESPONSE\_NORMAL\_DN | 0.125244 | -0.05439 | 1.801512 | 0.0762 | 0.445713 | -4.37455 |
| REACTOME\_FANCONI\_ANEMIA\_PATHWAY | -0.10738 | -0.02928 | -1.80092 | 0.076294 | 0.445853 | -4.37549 |
| REACTOME\_DISEASES\_OF\_MITOTIC\_CELL\_CYCLE | -0.10844 | -0.104 | -1.79995 | 0.076448 | 0.446346 | -4.37703 |
| WP\_16P112\_DISTAL\_DELETION\_SYNDROME | 0.076067 | -0.02996 | 1.798479 | 0.076684 | 0.44731 | -4.37938 |
| WP\_PREIMPLANTATION\_EMBRYO | 0.086735 | -0.10175 | 1.798042 | 0.076754 | 0.44731 | -4.38007 |
| REACTOME\_BETA\_DEFENSINS | 0.083654 | -0.29327 | 1.796725 | 0.076965 | 0.448062 | -4.38217 |
| REACTOME\_TICAM1\_RIP1\_MEDIATED\_IKK\_COMPLEX\_RECRUITMENT | 0.128932 | -0.04305 | 1.79526 | 0.077201 | 0.448062 | -4.3845 |
| WP\_FGF23\_SIGNALING\_IN\_HYPOPHOSPHATEMIC\_RICKETS\_AND\_RELATED\_DISORDERS | 0.091389 | -0.11468 | 1.795217 | 0.077208 | 0.448062 | -4.38457 |
| CERIBELLI\_GENES\_INACTIVE\_AND\_BOUND\_BY\_NFY | 0.100081 | 0.004169 | 1.794572 | 0.077311 | 0.448062 | -4.38559 |
| REACTOME\_SIGNALING\_BY\_FGFR3\_FUSIONS\_IN\_CANCER | -0.124 | -0.05608 | -1.7943 | 0.077356 | 0.448062 | -4.38603 |
| REACTOME\_PASSIVE\_TRANSPORT\_BY\_AQUAPORINS | 0.1406 | 0.021262 | 1.794182 | 0.077374 | 0.448062 | -4.38621 |
| IVANOVA\_HEMATOPOIESIS\_EARLY\_PROGENITOR | -0.07587 | -0.10325 | -1.79403 | 0.077399 | 0.448062 | -4.38646 |
| HAMAI\_APOPTOSIS\_VIA\_TRAIL\_UP | -0.11976 | -0.05355 | -1.79373 | 0.077446 | 0.448062 | -4.38692 |
| WP\_FATTY\_ACID\_OMEGAOXIDATION | 0.093822 | -0.22685 | 1.792499 | 0.077646 | 0.448809 | -4.38888 |
| BRUNEAU\_SEPTATION\_ATRIAL | 0.183097 | -0.1163 | 1.791926 | 0.077739 | 0.448937 | -4.38979 |
| BIOCARTA\_MITOCHONDRIA\_PATHWAY | -0.12255 | 0.006886 | -1.7889 | 0.078229 | 0.451361 | -4.39459 |
| WP\_GPCRS\_CLASS\_A\_RHODOPSINLIKE | 0.071187 | -0.25019 | 1.788107 | 0.078359 | 0.45157 | -4.39585 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_FOREVER\_UP | 0.161919 | 0.006677 | 1.787809 | 0.078407 | 0.45157 | -4.39632 |
| REACTOME\_DNA\_REPLICATION | -0.10984 | -0.13009 | -1.78481 | 0.078898 | 0.452995 | -4.40107 |
| REACTOME\_CELL\_CYCLE\_MITOTIC | -0.09511 | -0.09544 | -1.78459 | 0.078933 | 0.452995 | -4.40141 |
| KEGG\_PEROXISOME | -0.07819 | -0.09619 | -1.78451 | 0.078947 | 0.452995 | -4.40155 |
| KIM\_LIVER\_CANCER\_POOR\_SURVIVAL\_DN | 0.064867 | -0.06109 | 1.783471 | 0.079117 | 0.452995 | -4.40318 |
| REACTOME\_SYNTHESIS\_OF\_WYBUTOSINE\_AT\_G37\_OF\_TRNA\_PHE | -0.15693 | -0.00638 | -1.7832 | 0.079162 | 0.452995 | -4.40361 |
| XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_48HR\_UP | 0.096575 | -0.20891 | 1.783082 | 0.079181 | 0.452995 | -4.4038 |
| BIOCARTA\_CACAM\_PATHWAY | -0.12596 | 0.014929 | -1.78301 | 0.079193 | 0.452995 | -4.40391 |
| REACTOME\_IMMUNOREGULATORY\_INTERACTIONS\_BETWEEN\_A\_LYMPHOID\_AND\_A\_NON\_LYMPHOID\_CELL | 0.035009 | -0.54361 | 1.78282 | 0.079224 | 0.452995 | -4.40421 |
| DELLA\_RESPONSE\_TO\_TSA\_AND\_BUTYRATE | 0.072749 | -0.33962 | 1.782382 | 0.079296 | 0.453 | -4.4049 |
| PEDERSEN\_TARGETS\_OF\_611CTF\_ISOFORM\_OF\_ERBB2 | 0.093878 | -0.05924 | 1.781739 | 0.079402 | 0.453198 | -4.40592 |
| REACTOME\_FORMATION\_OF\_THE\_CORNIFIED\_ENVELOPE | 0.128763 | -0.06776 | 1.779875 | 0.07971 | 0.454546 | -4.40886 |
| REACTOME\_RESPONSE\_TO\_ELEVATED\_PLATELET\_CYTOSOLIC\_CA2 | 0.075942 | -0.0751 | 1.777808 | 0.080052 | 0.455851 | -4.41212 |
| MAINA\_VHL\_TARGETS\_DN | 0.122619 | -0.07339 | 1.777585 | 0.080089 | 0.455851 | -4.41247 |
| WP\_ELECTRON\_TRANSPORT\_CHAIN\_OXPHOS\_SYSTEM\_IN\_MITOCHONDRIA | -0.12433 | -0.15531 | -1.77653 | 0.080264 | 0.455851 | -4.41413 |
| LY\_AGING\_MIDDLE\_UP | 0.165036 | -0.00749 | 1.776199 | 0.080319 | 0.455851 | -4.41465 |
| REACTOME\_THE\_CITRIC\_ACID\_TCA\_CYCLE\_AND\_RESPIRATORY\_ELECTRON\_TRANSPORT | -0.12202 | -0.09117 | -1.7754 | 0.080452 | 0.455851 | -4.41591 |
| MIDORIKAWA\_AMPLIFIED\_IN\_LIVER\_CANCER | -0.04816 | -0.27185 | -1.77516 | 0.080492 | 0.455851 | -4.41628 |
| BLANCO\_MELO\_HUMAN\_PARAINFLUENZA\_VIRUS\_3\_INFECTION\_A594\_CELLS\_UP | 0.084966 | -0.16742 | 1.774774 | 0.080557 | 0.455851 | -4.41689 |
| MACLACHLAN\_BRCA1\_TARGETS\_UP | 0.126001 | 0.002689 | 1.774666 | 0.080575 | 0.455851 | -4.41706 |
| REACTOME\_O\_GLYCOSYLATION\_OF\_TSR\_DOMAIN\_CONTAINING\_PROTEINS | 0.099746 | -0.04372 | 1.774613 | 0.080583 | 0.455851 | -4.41715 |
| KYNG\_DNA\_DAMAGE\_BY\_4NQO | -0.13462 | -0.05283 | -1.77416 | 0.08066 | 0.455878 | -4.41787 |
| WP\_HIPPOYAP\_SIGNALING\_PATHWAY | -0.09568 | -0.03823 | -1.77306 | 0.080842 | 0.456053 | -4.41958 |
| REACTOME\_ACTIVATION\_OF\_ANTERIOR\_HOX\_GENES\_IN\_HINDBRAIN\_DEVELOPMENT\_DURING\_EARLY\_EMBRYOGENESIS | -0.09561 | -0.02404 | -1.77304 | 0.080846 | 0.456053 | -4.41962 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_2 | 0.091413 | -0.06517 | 1.772684 | 0.080906 | 0.456053 | -4.42018 |
| REACTOME\_RECEPTOR\_MEDIATED\_MITOPHAGY | -0.14291 | -0.31202 | -1.77172 | 0.081067 | 0.456137 | -4.42169 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | 0.058251 | -0.14801 | 1.771457 | 0.081111 | 0.456137 | -4.42211 |
| BIOCARTA\_TNFR1\_PATHWAY | -0.11606 | -0.17719 | -1.77103 | 0.081184 | 0.456137 | -4.42279 |
| REACTOME\_REGULATION\_OF\_PTEN\_STABILITY\_AND\_ACTIVITY | -0.09022 | -0.29328 | -1.77088 | 0.081207 | 0.456137 | -4.42301 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G56\_UP | 0.094419 | -0.00824 | 1.769829 | 0.081385 | 0.45673 | -4.42466 |
| REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL | -0.11307 | -0.21542 | -1.76935 | 0.081466 | 0.456782 | -4.42542 |
| GERHOLD\_ADIPOGENESIS\_UP | 0.1293 | -0.05862 | 1.768485 | 0.081611 | 0.457193 | -4.42677 |
| FOSTER\_TOLERANT\_MACROPHAGE\_UP | 0.072671 | -0.12002 | 1.76685 | 0.081887 | 0.457942 | -4.42934 |
| GAJATE\_RESPONSE\_TO\_TRABECTEDIN\_DN | -0.12875 | -0.05674 | -1.76684 | 0.081889 | 0.457942 | -4.42935 |
| MOOTHA\_MITOCHONDRIA | -0.10705 | -0.08167 | -1.76624 | 0.08199 | 0.458107 | -4.43029 |
| WP\_CATALYTIC\_CYCLE\_OF\_MAMMALIAN\_FLAVINCONTAINING\_MONOOXYGENASES\_FMOS | -0.19749 | 0.017651 | -1.76491 | 0.082214 | 0.458883 | -4.43237 |
| REACTOME\_CONSTITUTIVE\_SIGNALING\_BY\_OVEREXPRESSED\_ERBB2 | -0.14716 | -0.0606 | -1.76457 | 0.082273 | 0.458883 | -4.43291 |
| REACTOME\_SYNTHESIS\_OF\_PG | 0.125967 | -0.00104 | 1.763469 | 0.08246 | 0.459523 | -4.43463 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_OF\_ACTIVATED\_FGFR1 | -0.0874 | -0.02733 | -1.76247 | 0.082629 | 0.459694 | -4.43618 |
| GEORGES\_TARGETS\_OF\_MIR192\_AND\_MIR215 | -0.07713 | -0.08364 | -1.76169 | 0.082763 | 0.459694 | -4.43741 |
| EBAUER\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_UP | 0.051485 | -0.06004 | 1.761512 | 0.082793 | 0.459694 | -4.43769 |
| HENDRICKS\_SMARCA4\_TARGETS\_DN | 0.080603 | -0.17864 | 1.761443 | 0.082805 | 0.459694 | -4.4378 |
| BENPORATH\_EED\_TARGETS | 0.064608 | -0.09454 | 1.761168 | 0.082852 | 0.459694 | -4.43823 |
| REACTOME\_MITOTIC\_METAPHASE\_AND\_ANAPHASE | -0.10475 | -0.09806 | -1.7599 | 0.083069 | 0.46034 | -4.44021 |
| JAIN\_NFKB\_SIGNALING | -0.08567 | -0.22015 | -1.75957 | 0.083125 | 0.46034 | -4.44072 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_A\_DN | 0.051589 | -0.20907 | 1.759218 | 0.083185 | 0.46034 | -4.44127 |
| REACTOME\_DEFECTIVE\_INTRINSIC\_PATHWAY\_FOR\_APOPTOSIS | 0.081164 | -0.04145 | 1.758539 | 0.083302 | 0.460583 | -4.44233 |
| MOOTHA\_HUMAN\_MITODB\_6\_2002 | -0.10567 | -0.09559 | -1.757 | 0.083566 | 0.461405 | -4.44474 |
| DORN\_ADENOVIRUS\_INFECTION\_24HR\_UP | 0.131269 | -0.08637 | 1.756107 | 0.083719 | 0.461405 | -4.44612 |
| LIU\_CDX2\_TARGETS\_UP | 0.059942 | -0.28231 | 1.755937 | 0.083749 | 0.461405 | -4.44639 |
| REACTOME\_COHESIN\_LOADING\_ONTO\_CHROMATIN | -0.20757 | -0.0126 | -1.75587 | 0.083761 | 0.461405 | -4.4465 |
| WP\_AEROBIC\_GLYCOLYSIS | 0.143404 | -0.13381 | 1.755206 | 0.083875 | 0.461405 | -4.44753 |
| GAL\_LEUKEMIC\_STEM\_CELL\_UP | -0.04845 | -0.11509 | -1.7551 | 0.083893 | 0.461405 | -4.44769 |
| WP\_SOMATROPH\_AXIS\_GH\_AND\_ITS\_RELATIONSHIP\_TO\_DIETARY\_RESTRICTION\_AND\_AGING | -0.15757 | -0.1583 | -1.75472 | 0.083958 | 0.461405 | -4.44828 |
| MATZUK\_POSTIMPLANTATION\_AND\_POSTPARTUM | 0.08945 | -0.07674 | 1.752037 | 0.084422 | 0.463439 | -4.45246 |
| SANCHEZ\_MDM2\_TARGETS | 0.159099 | 0.013771 | 1.751742 | 0.084473 | 0.463439 | -4.45292 |
| HADDAD\_T\_LYMPHOCYTE\_AND\_NK\_PROGENITOR\_DN | 0.064634 | -0.27314 | 1.750406 | 0.084706 | 0.464312 | -4.45499 |
| WP\_IL10\_ANTIINFLAMMATORY\_SIGNALING\_PATHWAY | 0.156606 | -0.00093 | 1.749431 | 0.084875 | 0.464841 | -4.45651 |
| MATZUK\_EARLY\_ANTRAL\_FOLLICLE | -0.10084 | -0.00041 | -1.74898 | 0.084954 | 0.464871 | -4.45721 |
| REACTOME\_CHROMATIN\_MODIFYING\_ENZYMES | -0.09383 | -0.07721 | -1.74845 | 0.085045 | 0.464972 | -4.45802 |
| REACTOME\_SODIUM\_COUPLED\_SULPHATE\_DI\_AND\_TRI\_CARBOXYLATE\_TRANSPORTERS | 0.198566 | 0.026374 | 1.747892 | 0.085143 | 0.46511 | -4.4589 |
| PID\_SYNDECAN\_1\_PATHWAY | 0.095675 | -0.15775 | 1.746222 | 0.085435 | 0.466305 | -4.46149 |
| BIOCARTA\_LIS1\_PATHWAY | -0.10159 | -0.00593 | -1.74574 | 0.08552 | 0.466367 | -4.46224 |
| KEGG\_GLYCOSPHINGOLIPID\_BIOSYNTHESIS\_GLOBO\_SERIES | 0.11443 | -0.01611 | 1.744916 | 0.085664 | 0.466564 | -4.46351 |
| WP\_GABA\_RECEPTOR\_SIGNALING | 0.102729 | -0.1888 | 1.744479 | 0.085741 | 0.466564 | -4.46419 |
| WP\_AFLATOXIN\_B1\_METABOLISM | -0.10555 | -0.01395 | -1.74428 | 0.085776 | 0.466564 | -4.4645 |
| REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR | -0.08074 | -0.09851 | -1.74355 | 0.085905 | 0.466733 | -4.46563 |
| FERRANDO\_T\_ALL\_WITH\_MLL\_ENL\_FUSION\_UP | 0.074951 | -0.23185 | 1.743267 | 0.085954 | 0.466733 | -4.46606 |
| REACTOME\_INTERLEUKIN\_18\_SIGNALING | 0.131663 | -0.11108 | 1.741933 | 0.086189 | 0.46761 | -4.46813 |
| REN\_BOUND\_BY\_E2F | -0.11116 | -0.13735 | -1.74035 | 0.086468 | 0.468722 | -4.47057 |
| MARKEY\_RB1\_ACUTE\_LOF\_UP | -0.10489 | -0.06523 | -1.73864 | 0.086771 | 0.469314 | -4.47321 |
| REACTOME\_INTERCONVERSION\_OF\_NUCLEOTIDE\_DI\_AND\_TRIPHOSPHATES | -0.12431 | -0.0346 | -1.73784 | 0.086914 | 0.469314 | -4.47446 |
| GENTILE\_UV\_HIGH\_DOSE\_UP | 0.121673 | -0.00054 | 1.737745 | 0.08693 | 0.469314 | -4.4746 |
| WP\_OXIDATIVE\_STRESS\_RESPONSE | 0.100494 | -0.04351 | 1.737258 | 0.087017 | 0.469314 | -4.47535 |
| OKUMURA\_INFLAMMATORY\_RESPONSE\_LPS | 0.062262 | -0.12316 | 1.736956 | 0.08707 | 0.469314 | -4.47582 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_2 | -0.1489 | -0.05092 | -1.7367 | 0.087117 | 0.469314 | -4.47622 |
| REACTOME\_ACTIVATED\_NTRK2\_SIGNALS\_THROUGH\_CDK5 | 0.126909 | 0.00068 | 1.73628 | 0.087191 | 0.469314 | -4.47686 |
| REACTOME\_TGF\_BETA\_RECEPTOR\_SIGNALING\_IN\_EMT\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION | 0.122115 | -0.07615 | 1.735911 | 0.087256 | 0.469314 | -4.47743 |
| VETTER\_TARGETS\_OF\_PRKCA\_AND\_ETS1\_DN | 0.07281 | -0.29281 | 1.735687 | 0.087296 | 0.469314 | -4.47777 |
| VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_UP | -0.11152 | -0.07519 | -1.73559 | 0.087314 | 0.469314 | -4.47793 |
| REACTOME\_COMMON\_PATHWAY\_OF\_FIBRIN\_CLOT\_FORMATION | 0.098288 | -0.0531 | 1.73462 | 0.087486 | 0.469694 | -4.47942 |
| GRAESSMANN\_RESPONSE\_TO\_MC\_AND\_DOXORUBICIN\_DN | -0.09027 | -0.11913 | -1.73436 | 0.087532 | 0.469694 | -4.47982 |
| WANG\_LSD1\_TARGETS\_UP | 0.097231 | -0.0453 | 1.732225 | 0.087915 | 0.470254 | -4.48311 |
| KINSEY\_TARGETS\_OF\_EWSR1\_FLII\_FUSION\_UP | -0.09664 | -0.07193 | -1.73222 | 0.087915 | 0.470254 | -4.48311 |
| REACTOME\_DNA\_STRAND\_ELONGATION | -0.14229 | -0.0028 | -1.73199 | 0.087957 | 0.470254 | -4.48347 |
| GAURNIER\_PSMD4\_TARGETS | 0.033233 | -0.645 | 1.731888 | 0.087975 | 0.470254 | -4.48363 |
| URS\_ADIPOCYTE\_DIFFERENTIATION\_DN | 0.121565 | -0.00681 | 1.731227 | 0.088094 | 0.470254 | -4.48464 |
| AMIT\_SERUM\_RESPONSE\_60\_MCF10A | 0.126336 | -0.01069 | 1.730951 | 0.088144 | 0.470254 | -4.48507 |
| QI\_PLASMACYTOMA\_UP | 0.075207 | -0.19378 | 1.730892 | 0.088154 | 0.470254 | -4.48516 |
| WP\_NUCLEAR\_RECEPTORS\_IN\_LIPID\_METABOLISM\_AND\_TOXICITY | 0.102704 | -0.03886 | 1.730064 | 0.088303 | 0.470654 | -4.48643 |
| REACTOME\_FORMATION\_OF\_INCISION\_COMPLEX\_IN\_GG\_NER | -0.11467 | -0.1746 | -1.72899 | 0.088497 | 0.471294 | -4.48809 |
| REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES | -0.09602 | -0.02113 | -1.72741 | 0.088782 | 0.472282 | -4.49051 |
| REACTOME\_REGULATION\_OF\_RUNX1\_EXPRESSION\_AND\_ACTIVITY | -0.12263 | -0.04951 | -1.72666 | 0.088918 | 0.472282 | -4.49167 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_DN | 0.069017 | -0.21824 | 1.725864 | 0.089061 | 0.472282 | -4.49288 |
| NADLER\_HYPERGLYCEMIA\_AT\_OBESITY | 0.063898 | -0.16725 | 1.725261 | 0.08917 | 0.472282 | -4.4938 |
| MIKKELSEN\_NPC\_HCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.078223 | -0.0639 | 1.725204 | 0.089181 | 0.472282 | -4.49389 |
| KEGG\_ECM\_RECEPTOR\_INTERACTION | 0.073694 | -0.20371 | 1.725048 | 0.089209 | 0.472282 | -4.49413 |
| MCBRYAN\_PUBERTAL\_BREAST\_4\_5WK\_UP | 0.059312 | -0.09955 | 1.72471 | 0.08927 | 0.472282 | -4.49465 |
| DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_DN | 0.137481 | -0.05182 | 1.724678 | 0.089276 | 0.472282 | -4.4947 |
| SMID\_BREAST\_CANCER\_LUMINAL\_B\_DN | 0.05945 | -0.14296 | 1.723519 | 0.089487 | 0.473002 | -4.49648 |
| REACTOME\_CITRIC\_ACID\_CYCLE\_TCA\_CYCLE | -0.17532 | 0.006831 | -1.72265 | 0.089646 | 0.473157 | -4.49781 |
| RIZ\_ERYTHROID\_DIFFERENTIATION | -0.07567 | -0.16221 | -1.72232 | 0.089705 | 0.473157 | -4.49831 |
| REACTOME\_CDC6\_ASSOCIATION\_WITH\_THE\_ORC\_ORIGIN\_COMPLEX | -0.09469 | -0.0686 | -1.72172 | 0.089815 | 0.473157 | -4.49923 |
| JI\_CARCINOGENESIS\_BY\_KRAS\_AND\_STK11\_UP | 0.142836 | 0.01291 | 1.720512 | 0.090035 | 0.473157 | -4.50108 |
| KEGG\_HOMOLOGOUS\_RECOMBINATION | -0.09253 | -0.07829 | -1.7204 | 0.090056 | 0.473157 | -4.50126 |
| REACTOME\_OVARIAN\_TUMOR\_DOMAIN\_PROTEASES | 0.085219 | -0.02473 | 1.720283 | 0.090077 | 0.473157 | -4.50143 |
| WU\_CELL\_MIGRATION | 0.087922 | -0.00506 | 1.720098 | 0.090111 | 0.473157 | -4.50171 |
| NABA\_SECRETED\_FACTORS | 0.07278 | -0.11386 | 1.72001 | 0.090127 | 0.473157 | -4.50185 |
| REACTOME\_TRANSLATION | -0.13598 | -0.1016 | -1.71969 | 0.090185 | 0.473157 | -4.50233 |
| REACTOME\_MECP2\_REGULATES\_NEURONAL\_RECEPTORS\_AND\_CHANNELS | 0.098181 | -0.00568 | 1.718115 | 0.090474 | 0.473906 | -4.50474 |
| PID\_IL3\_PATHWAY | 0.095383 | -0.03229 | 1.717898 | 0.090514 | 0.473906 | -4.50507 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D6 | -0.13158 | -0.07492 | -1.71718 | 0.090646 | 0.473906 | -4.50617 |
| SAGIV\_CD24\_TARGETS\_DN | 0.084455 | -0.04224 | 1.716873 | 0.090702 | 0.473906 | -4.50664 |
| REACTOME\_REGULATION\_OF\_MECP2\_EXPRESSION\_AND\_ACTIVITY | -0.08597 | -0.07669 | -1.71647 | 0.090777 | 0.473906 | -4.50726 |
| PANGAS\_TUMOR\_SUPPRESSION\_BY\_SMAD1\_AND\_SMAD5\_DN | -0.06265 | -0.11371 | -1.71639 | 0.090792 | 0.473906 | -4.50738 |
| TIMOFEEVA\_GROWTH\_STRESS\_VIA\_STAT1\_DN | -0.12169 | -0.10676 | -1.71583 | 0.090895 | 0.473906 | -4.50824 |
| PID\_RAC1\_REG\_PATHWAY | 0.07198 | -0.12294 | 1.715671 | 0.090924 | 0.473906 | -4.50847 |
| REACTOME\_ANCHORING\_OF\_THE\_BASAL\_BODY\_TO\_THE\_PLASMA\_MEMBRANE | -0.07328 | -0.11541 | -1.71481 | 0.091083 | 0.474345 | -4.50979 |
| DEMAGALHAES\_AGING\_UP | 0.101102 | -0.18387 | 1.714299 | 0.091177 | 0.474448 | -4.51057 |
| FOROUTAN\_INTEGRATED\_TGFB\_EMT\_DN | 0.055623 | -0.12664 | 1.713269 | 0.091367 | 0.474858 | -4.51214 |
| PID\_BARD1\_PATHWAY | -0.09074 | -0.00717 | -1.71286 | 0.091443 | 0.474858 | -4.51276 |
| REACTOME\_INTRACELLULAR\_SIGNALING\_BY\_SECOND\_MESSENGERS | -0.06317 | -0.12946 | -1.71266 | 0.09148 | 0.474858 | -4.51306 |
| WP\_LNCRNAMEDIATED\_MECHANISMS\_OF\_THERAPEUTIC\_RESISTANCE | 0.127939 | -0.01777 | 1.712217 | 0.091562 | 0.474899 | -4.51374 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BRAIN\_UP | 0.061651 | -0.08848 | 1.711299 | 0.091732 | 0.475013 | -4.51514 |
| VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP | -0.09021 | -0.13466 | -1.71101 | 0.091787 | 0.475013 | -4.51558 |
| BIDUS\_METASTASIS\_UP | -0.113 | -0.03147 | -1.71075 | 0.091834 | 0.475013 | -4.51597 |
| BARRIER\_CANCER\_RELAPSE\_TUMOR\_SAMPLE\_UP | -0.17459 | -0.01305 | -1.71035 | 0.09191 | 0.475013 | -4.51659 |
| ADDYA\_ERYTHROID\_DIFFERENTIATION\_BY\_HEMIN | 0.083888 | -0.15279 | 1.710089 | 0.091957 | 0.475013 | -4.51698 |
| KAAB\_FAILED\_HEART\_ATRIUM\_UP | 0.062526 | -0.2403 | 1.708146 | 0.092319 | 0.476382 | -4.51993 |
| YAMANAKA\_GLIOBLASTOMA\_SURVIVAL\_UP | 0.140032 | 0.004209 | 1.706947 | 0.092543 | 0.476382 | -4.52175 |
| BIOCARTA\_DSP\_PATHWAY | 0.104633 | -0.19439 | 1.706841 | 0.092563 | 0.476382 | -4.52192 |
| MIKKELSEN\_MCV6\_ICP\_WITH\_H3K27ME3 | 0.069971 | -0.24232 | 1.706725 | 0.092585 | 0.476382 | -4.52209 |
| WP\_NEURODEGENERATION\_WITH\_BRAIN\_IRON\_ACCUMULATION\_NBIA\_SUBTYPES\_PATHWAY | -0.09597 | -0.07352 | -1.70617 | 0.092689 | 0.476382 | -4.52294 |
| GRAESSMANN\_APOPTOSIS\_BY\_DOXORUBICIN\_DN | -0.09068 | -0.10505 | -1.70599 | 0.092722 | 0.476382 | -4.52321 |
| ONO\_FOXP3\_TARGETS\_UP | 0.096388 | 0.007261 | 1.705672 | 0.092782 | 0.476382 | -4.52369 |
| LUI\_THYROID\_CANCER\_PAX8\_PPARG\_UP | 0.073685 | -0.13284 | 1.705245 | 0.092862 | 0.476382 | -4.52434 |
| REACTOME\_HDACS\_DEACETYLATE\_HISTONES | -0.12026 | -0.06223 | -1.7049 | 0.092927 | 0.476382 | -4.52487 |
| RODRIGUES\_THYROID\_CARCINOMA\_POORLY\_DIFFERENTIATED\_UP | -0.11363 | -0.04292 | -1.7045 | 0.093001 | 0.476382 | -4.52547 |
| URS\_ADIPOCYTE\_DIFFERENTIATION\_UP | 0.069523 | -0.18595 | 1.703722 | 0.093148 | 0.476382 | -4.52665 |
| REACTOME\_COMPLEMENT\_CASCADE | 0.049342 | -0.25432 | 1.703543 | 0.093181 | 0.476382 | -4.52692 |
| REACTOME\_INACTIVATION\_OF\_CDC42\_AND\_RAC1 | -0.14392 | 0.00493 | -1.70347 | 0.093195 | 0.476382 | -4.52703 |
| LASTOWSKA\_NEUROBLASTOMA\_COPY\_NUMBER\_DN | -0.10359 | -0.04152 | -1.70246 | 0.093386 | 0.476972 | -4.52857 |
| CHEN\_ETV5\_TARGETS\_SERTOLI | 0.111038 | -0.04615 | 1.701402 | 0.093585 | 0.477436 | -4.53016 |
| REACTOME\_RUNX1\_REGULATES\_ESTROGEN\_RECEPTOR\_MEDIATED\_TRANSCRIPTION | -0.18155 | -0.01199 | -1.70097 | 0.093667 | 0.477436 | -4.53082 |
| SEMBA\_FHIT\_TARGETS\_UP | 0.13809 | 0.015277 | 1.700122 | 0.093826 | 0.477436 | -4.5321 |
| PETRETTO\_LEFT\_VENTRICLE\_MASS\_QTL\_CIS\_UP | -0.15331 | -0.19837 | -1.69928 | 0.093986 | 0.477436 | -4.53337 |
| REACTOME\_DOWNREGULATION\_OF\_ERBB2\_SIGNALING | 0.078293 | -0.04065 | 1.699164 | 0.094008 | 0.477436 | -4.53355 |
| KEGG\_LONG\_TERM\_POTENTIATION | -0.06897 | -0.05439 | -1.69877 | 0.094082 | 0.477436 | -4.53414 |
| REACTOME\_ENDOSOMAL\_VACUOLAR\_PATHWAY | 0.039719 | -0.72792 | 1.698726 | 0.094091 | 0.477436 | -4.53421 |
| WP\_DDX1\_AS\_A\_REGULATORY\_COMPONENT\_OF\_THE\_DROSHA\_MICROPROCESSOR | -0.16177 | -0.02889 | -1.6986 | 0.094114 | 0.477436 | -4.5344 |
| PETROVA\_PROX1\_TARGETS\_UP | -0.07875 | -0.04713 | -1.69797 | 0.094235 | 0.477436 | -4.53536 |
| REACTOME\_PKA\_ACTIVATION\_IN\_GLUCAGON\_SIGNALLING | -0.08444 | -0.14555 | -1.6973 | 0.094362 | 0.477436 | -4.53637 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_CYTOCHROME\_C\_RELEASE | 0.087441 | -0.01064 | 1.697037 | 0.094411 | 0.477436 | -4.53677 |
| REACTOME\_SYNTHESIS\_OF\_DNA | -0.1041 | -0.13229 | -1.6969 | 0.094438 | 0.477436 | -4.53698 |
| REACTOME\_OTHER\_INTERLEUKIN\_SIGNALING | 0.113071 | -0.02866 | 1.696825 | 0.094452 | 0.477436 | -4.53709 |
| REACTOME\_PIWI\_INTERACTING\_RNA\_PIRNA\_BIOGENESIS | -0.08299 | -0.04366 | -1.69418 | 0.094956 | 0.4792 | -4.54108 |
| BENPORATH\_ES\_1 | -0.06775 | -0.0705 | -1.69377 | 0.095034 | 0.4792 | -4.5417 |
| REACTOME\_HCMV\_LATE\_EVENTS | -0.13681 | -0.0339 | -1.69348 | 0.09509 | 0.4792 | -4.54214 |
| BIOCARTA\_CPSF\_PATHWAY | -0.15618 | -0.08712 | -1.69337 | 0.095111 | 0.4792 | -4.5423 |
| MEISSNER\_NPC\_ICP\_WITH\_H3\_UNMETHYLATED | 0.10303 | -0.03934 | 1.692991 | 0.095183 | 0.4792 | -4.54287 |
| DACOSTA\_LOW\_DOSE\_UV\_RESPONSE\_VIA\_ERCC3\_XPCS\_UP | 0.097075 | 0.012158 | 1.692627 | 0.095253 | 0.4792 | -4.54342 |
| ZIRN\_TRETINOIN\_RESPONSE\_WT1\_DN | -0.15198 | 0.014921 | -1.69143 | 0.095481 | 0.479893 | -4.54522 |
| REACTOME\_EXTRACELLULAR\_MATRIX\_ORGANIZATION | 0.074383 | -0.05159 | 1.691122 | 0.095541 | 0.479893 | -4.54569 |
| REACTOME\_ANDROGEN\_BIOSYNTHESIS | 0.130635 | 0.007884 | 1.690333 | 0.095693 | 0.480116 | -4.54687 |
| BIOCARTA\_CREM\_PATHWAY | -0.1331 | 0.018097 | -1.68869 | 0.096009 | 0.480116 | -4.54935 |
| REACTOME\_FGFR2\_ALTERNATIVE\_SPLICING | -0.12477 | -0.07843 | -1.68867 | 0.096013 | 0.480116 | -4.54938 |
| JIANG\_TIP30\_TARGETS\_DN | 0.090006 | -0.15639 | 1.688638 | 0.096019 | 0.480116 | -4.54942 |
| WP\_CARDIAC\_HYPERTROPHIC\_RESPONSE | -0.08073 | -0.14393 | -1.68838 | 0.096069 | 0.480116 | -4.54982 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_BLOCKED\_BY\_FZD8CRD | 0.075427 | -0.06363 | 1.688017 | 0.096139 | 0.480116 | -4.55036 |
| SHEN\_SMARCA2\_TARGETS\_UP | -0.15158 | -0.0461 | -1.68782 | 0.096176 | 0.480116 | -4.55065 |
| WIEMANN\_TELOMERE\_SHORTENING\_AND\_CHRONIC\_LIVER\_DAMAGE\_UP | 0.091739 | -0.24649 | 1.68755 | 0.096229 | 0.480116 | -4.55106 |
| CHEMNITZ\_RESPONSE\_TO\_PROSTAGLANDIN\_E2\_DN | -0.04582 | -0.09234 | -1.68736 | 0.096265 | 0.480116 | -4.55134 |
| REACTOME\_HCMV\_INFECTION | -0.10818 | -0.05649 | -1.68652 | 0.096429 | 0.480558 | -4.55262 |
| REACTOME\_ACTIVATED\_NTRK3\_SIGNALS\_THROUGH\_RAS | -0.14185 | -0.08592 | -1.68424 | 0.096869 | 0.480764 | -4.55603 |
| PID\_HIF1\_TFPATHWAY | 0.115037 | -0.02894 | 1.683779 | 0.096959 | 0.480764 | -4.55672 |
| WANG\_LSD1\_TARGETS\_DN | 0.087747 | -0.02933 | 1.683314 | 0.09705 | 0.480764 | -4.55742 |
| CAVARD\_LIVER\_CANCER\_MALIGNANT\_VS\_BENIGN | 0.05244 | -0.31759 | 1.683176 | 0.097076 | 0.480764 | -4.55763 |
| REACTOME\_SERINE\_BIOSYNTHESIS | 0.126444 | -0.00726 | 1.68315 | 0.097081 | 0.480764 | -4.55767 |
| REACTOME\_SURFACTANT\_METABOLISM | 0.081038 | 0.001998 | 1.682901 | 0.09713 | 0.480764 | -4.55804 |
| KAUFFMANN\_DNA\_REPLICATION\_GENES | -0.08576 | -0.06964 | -1.68247 | 0.097213 | 0.480764 | -4.55868 |
| CHASSOT\_SKIN\_WOUND | 0.203503 | 0.02767 | 1.682373 | 0.097232 | 0.480764 | -4.55883 |
| NIKOLSKY\_BREAST\_CANCER\_8Q12\_Q22\_AMPLICON | -0.07458 | -0.01015 | -1.68222 | 0.097263 | 0.480764 | -4.55907 |
| MCMURRAY\_TP53\_HRAS\_COOPERATION\_RESPONSE\_DN | 0.06119 | -0.01252 | 1.681792 | 0.097346 | 0.480764 | -4.5597 |
| BROWNE\_HCMV\_INFECTION\_4HR\_DN | -0.05242 | -0.11176 | -1.6816 | 0.097382 | 0.480764 | -4.55998 |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY | -0.07383 | -0.11472 | -1.68087 | 0.097526 | 0.480764 | -4.56109 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G23\_DN | -0.14353 | -0.07838 | -1.68035 | 0.097628 | 0.480764 | -4.56186 |
| MOOTHA\_PYR | -0.16351 | -0.02031 | -1.68026 | 0.097645 | 0.480764 | -4.562 |
| BIOCARTA\_IGF1MTOR\_PATHWAY | -0.11821 | -0.06141 | -1.67977 | 0.097741 | 0.480764 | -4.56273 |
| KEGG\_GLYCOSAMINOGLYCAN\_BIOSYNTHESIS\_HEPARAN\_SULFATE | -0.07123 | -0.04201 | -1.6795 | 0.097794 | 0.480764 | -4.56314 |
| REACTOME\_APOPTOSIS\_INDUCED\_DNA\_FRAGMENTATION | -0.18812 | 0.014154 | -1.6794 | 0.097813 | 0.480764 | -4.56328 |
| WP\_PARKINSONS\_DISEASE\_PATHWAY | -0.08971 | -0.03056 | -1.67931 | 0.09783 | 0.480764 | -4.56341 |
| MIKKELSEN\_MEF\_HCP\_WITH\_H3\_UNMETHYLATED | 0.105612 | -0.05754 | 1.678467 | 0.097996 | 0.480987 | -4.56468 |
| AMIT\_SERUM\_RESPONSE\_480\_MCF10A | -0.08836 | -0.0484 | -1.67807 | 0.098074 | 0.480987 | -4.56527 |
| SENESE\_HDAC1\_AND\_HDAC2\_TARGETS\_UP | 0.071922 | -0.09233 | 1.677924 | 0.098102 | 0.480987 | -4.56549 |
| REACTOME\_PHENYLALANINE\_METABOLISM | 0.125187 | -0.00478 | 1.675667 | 0.098546 | 0.481973 | -4.56886 |
| REACTOME\_PROSTANOID\_LIGAND\_RECEPTORS | -0.1131 | 0.003095 | -1.67564 | 0.098551 | 0.481973 | -4.56891 |
| MURATA\_VIRULENCE\_OF\_H\_PILORI | 0.078619 | -0.14716 | 1.675265 | 0.098625 | 0.481973 | -4.56946 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_6\_DN | 0.073417 | -0.16376 | 1.67471 | 0.098734 | 0.481973 | -4.57029 |
| WP\_OVERVIEW\_OF\_NANOPARTICLE\_EFFECTS | 0.071996 | -0.2917 | 1.674672 | 0.098742 | 0.481973 | -4.57035 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_D | 0.071163 | -0.24139 | 1.674591 | 0.098757 | 0.481973 | -4.57047 |
| LIN\_SILENCED\_BY\_TUMOR\_MICROENVIRONMENT | 0.061609 | -0.04261 | 1.673424 | 0.098988 | 0.482632 | -4.57221 |
| NIKOLSKY\_BREAST\_CANCER\_20P13\_AMPLICON | -0.11871 | 0.009123 | -1.67293 | 0.099085 | 0.482632 | -4.57295 |
| KIM\_WT1\_TARGETS\_DN | -0.09057 | -0.13093 | -1.67222 | 0.099225 | 0.482632 | -4.574 |
| MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_DN | -0.12576 | -0.09491 | -1.6721 | 0.09925 | 0.482632 | -4.57418 |
| KEGG\_VASOPRESSIN\_REGULATED\_WATER\_REABSORPTION | -0.09064 | -0.07171 | -1.67162 | 0.099344 | 0.482632 | -4.57489 |
| REACTOME\_VISUAL\_PHOTOTRANSDUCTION | 0.05718 | -0.0792 | 1.671606 | 0.099348 | 0.482632 | -4.57492 |
| WP\_HEME\_BIOSYNTHESIS | -0.14241 | 0.00846 | -1.66951 | 0.099763 | 0.484279 | -4.57804 |
| POS\_RESPONSE\_TO\_HISTAMINE\_DN | -0.12736 | -0.01443 | -1.6688 | 0.099904 | 0.484373 | -4.5791 |
| PID\_EPHA\_FWDPATHWAY | 0.06568 | -0.05818 | 1.668652 | 0.099934 | 0.484373 | -4.57932 |
| BIOCARTA\_ETS\_PATHWAY | 0.115797 | -0.05672 | 1.667083 | 0.100247 | 0.485242 | -4.58165 |
| BORLAK\_LIVER\_CANCER\_EGF\_UP | 0.070048 | -0.22807 | 1.666988 | 0.100266 | 0.485242 | -4.58179 |
| REACTOME\_GAP\_JUNCTION\_TRAFFICKING\_AND\_REGULATION | 0.07286 | -0.04693 | 1.666184 | 0.100427 | 0.48548 | -4.58299 |
| REACTOME\_HCMV\_EARLY\_EVENTS | -0.10155 | -0.05361 | -1.66581 | 0.100501 | 0.48548 | -4.58354 |
| KINNEY\_DNMT1\_METHYLATION\_TARGETS | 0.146482 | 0.037841 | 1.665598 | 0.100544 | 0.48548 | -4.58386 |
| REACTOME\_SEPARATION\_OF\_SISTER\_CHROMATIDS | -0.09533 | -0.10749 | -1.66397 | 0.100869 | 0.486682 | -4.58627 |
| BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_INFECTION\_DN | 0.075881 | -0.03648 | 1.662685 | 0.101128 | 0.487151 | -4.58818 |
| NIKOLSKY\_BREAST\_CANCER\_14Q22\_AMPLICON | -0.11704 | -0.00757 | -1.6624 | 0.101186 | 0.487151 | -4.58861 |
| REACTOME\_SIGNALING\_BY\_NTRK3\_TRKC | -0.10693 | -0.03792 | -1.66235 | 0.101196 | 0.487151 | -4.58868 |
| WP\_REGULATION\_OF\_WNT\_BCATENIN\_SIGNALING\_BY\_SMALL\_MOLECULE\_COMPOUNDS | 0.090767 | -0.06324 | 1.661513 | 0.101364 | 0.487279 | -4.58992 |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_ACETYLATION | -0.10435 | -0.09979 | -1.66137 | 0.101394 | 0.487279 | -4.59014 |
| REACTOME\_GLYCOGEN\_BREAKDOWN\_GLYCOGENOLYSIS | -0.12852 | -0.0111 | -1.66107 | 0.101453 | 0.487279 | -4.59057 |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_D7\_UP | 0.048331 | -0.425 | 1.660511 | 0.101566 | 0.487395 | -4.5914 |
| REACTOME\_XENOBIOTICS | 0.138806 | -0.01637 | 1.660194 | 0.10163 | 0.487395 | -4.59187 |
| MARKEY\_RB1\_CHRONIC\_LOF\_DN | 0.088896 | -0.06244 | 1.659213 | 0.101828 | 0.487978 | -4.59332 |
| XU\_RESPONSE\_TO\_TRETINOIN\_UP | 0.100575 | -0.30713 | 1.657871 | 0.1021 | 0.488912 | -4.59531 |
| IVANOVA\_HEMATOPOIESIS\_STEM\_CELL\_AND\_PROGENITOR | -0.05171 | -0.08105 | -1.65737 | 0.102202 | 0.489034 | -4.59606 |
| WP\_SPINAL\_CORD\_INJURY | 0.055116 | -0.2162 | 1.656953 | 0.102286 | 0.489067 | -4.59667 |
| KEGG\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | 0.04748 | -0.27227 | 1.655587 | 0.102563 | 0.489913 | -4.59869 |
| BIOCARTA\_IGF1\_PATHWAY | -0.14002 | -0.03698 | -1.65506 | 0.102671 | 0.489913 | -4.59947 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_DN | -0.06369 | -0.03506 | -1.65495 | 0.102694 | 0.489913 | -4.59963 |
| CAIRO\_LIVER\_DEVELOPMENT\_DN | 0.039376 | -0.13947 | 1.653741 | 0.102939 | 0.490717 | -4.60141 |
| STAMBOLSKY\_RESPONSE\_TO\_VITAMIN\_D3\_DN | -0.06952 | -0.04212 | -1.65295 | 0.103101 | 0.490981 | -4.60258 |
| VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP | -0.0814 | -0.03443 | -1.65223 | 0.103247 | 0.490981 | -4.60364 |
| GLASS\_IGF2BP1\_CLIP\_TARGETS\_KNOCKDOWN\_DN | -0.11719 | -0.00997 | -1.65216 | 0.103263 | 0.490981 | -4.60374 |
| REACTOME\_NUCLEAR\_EVENTS\_KINASE\_AND\_TRANSCRIPTION\_FACTOR\_ACTIVATION | 0.085926 | -0.03218 | 1.651499 | 0.103398 | 0.490981 | -4.60472 |
| MARSON\_FOXP3\_TARGETS\_STIMULATED\_UP | 0.076293 | -0.10165 | 1.650874 | 0.103526 | 0.490981 | -4.60564 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_YELLOW\_DN | -0.1134 | -0.0788 | -1.65087 | 0.103526 | 0.490981 | -4.60564 |
| REACTOME\_TRANSLATION\_OF\_REPLICASE\_AND\_ASSEMBLY\_OF\_THE\_REPLICATION\_TRANSCRIPTION\_COMPLEX | -0.14049 | -0.08009 | -1.65036 | 0.10363 | 0.490981 | -4.60639 |
| PID\_IL5\_PATHWAY | 0.12681 | -0.00807 | 1.650145 | 0.103675 | 0.490981 | -4.60671 |
| BENPORATH\_SUZ12\_TARGETS | 0.076093 | -0.03013 | 1.649387 | 0.103831 | 0.490981 | -4.60783 |
| NELSON\_RESPONSE\_TO\_ANDROGEN\_DN | -0.11085 | -0.0023 | -1.64918 | 0.103874 | 0.490981 | -4.60814 |
| REACTOME\_ACETYLCHOLINE\_REGULATES\_INSULIN\_SECRETION | 0.107525 | -0.01038 | 1.648497 | 0.104014 | 0.490981 | -4.60914 |
| CROONQUIST\_STROMAL\_STIMULATION\_UP | 0.099842 | -0.16249 | 1.647815 | 0.104154 | 0.490981 | -4.61014 |
| REACTOME\_STING\_MEDIATED\_INDUCTION\_OF\_HOST\_IMMUNE\_RESPONSES | 0.131379 | -0.0093 | 1.647252 | 0.10427 | 0.490981 | -4.61097 |
| REACTOME\_SIGNALING\_BY\_FGFR | -0.06999 | -0.03503 | -1.64643 | 0.104439 | 0.490981 | -4.61217 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_SMALL\_RNAS | -0.14437 | -0.03394 | -1.64633 | 0.10446 | 0.490981 | -4.61232 |
| IGLESIAS\_E2F\_TARGETS\_DN | 0.110103 | -0.00828 | 1.646271 | 0.104473 | 0.490981 | -4.61241 |
| GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_DN | 0.071329 | -0.21759 | 1.645631 | 0.104605 | 0.490981 | -4.61335 |
| REACTOME\_FORMATION\_OF\_TC\_NER\_PRE\_INCISION\_COMPLEX | -0.11756 | -0.14543 | -1.64491 | 0.104754 | 0.490981 | -4.61441 |
| REACTOME\_SIGNALING\_BY\_FGFR\_IN\_DISEASE | -0.07372 | -0.01822 | -1.64466 | 0.104806 | 0.490981 | -4.61478 |
| REACTOME\_RETROGRADE\_TRANSPORT\_AT\_THE\_TRANS\_GOLGI\_NETWORK | -0.10346 | -0.14136 | -1.64463 | 0.104812 | 0.490981 | -4.61482 |
| WP\_THERMOGENESIS | -0.04661 | -0.04367 | -1.64387 | 0.104968 | 0.490981 | -4.61593 |
| REACTOME\_REGULATION\_OF\_LIPID\_METABOLISM\_BY\_PPARALPHA | -0.07471 | -0.07788 | -1.64368 | 0.105009 | 0.490981 | -4.61622 |
| DURAND\_STROMA\_NS\_UP | 0.047508 | -0.08545 | 1.643298 | 0.105088 | 0.490981 | -4.61678 |
| GERHOLD\_RESPONSE\_TO\_TZD\_DN | 0.13746 | -0.06973 | 1.643102 | 0.105128 | 0.490981 | -4.61706 |
| WEBER\_METHYLATED\_HCP\_IN\_FIBROBLAST\_DN | 0.133419 | -0.00823 | 1.642217 | 0.105312 | 0.490981 | -4.61836 |
| ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_DN | 0.069171 | -0.10971 | 1.641701 | 0.105419 | 0.490981 | -4.61912 |
| JOSEPH\_RESPONSE\_TO\_SODIUM\_BUTYRATE\_DN | 0.081905 | -0.01079 | 1.641626 | 0.105435 | 0.490981 | -4.61923 |
| REACTOME\_FORMATION\_OF\_RNA\_POL\_II\_ELONGATION\_COMPLEX | -0.09943 | -0.20655 | -1.64155 | 0.105451 | 0.490981 | -4.61934 |
| REACTOME\_CELL\_CYCLE | -0.08055 | -0.10734 | -1.64146 | 0.105469 | 0.490981 | -4.61947 |
| HALMOS\_CEBPA\_TARGETS\_DN | 0.087334 | -0.03026 | 1.641358 | 0.105491 | 0.490981 | -4.61962 |
| NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 0.078984 | -0.27162 | 1.641141 | 0.105536 | 0.490981 | -4.61994 |
| BENPORATH\_PRC2\_TARGETS | 0.088592 | -0.03057 | 1.64078 | 0.105611 | 0.490981 | -4.62047 |
| KIM\_ALL\_DISORDERS\_DURATION\_CORR\_UP | -0.12869 | 0.001778 | -1.64044 | 0.105682 | 0.490981 | -4.62097 |
| ZHENG\_IL22\_SIGNALING\_DN | -0.05846 | 0.005753 | -1.64038 | 0.105694 | 0.490981 | -4.62105 |
| WU\_HBX\_TARGETS\_3\_DN | 0.097666 | -0.00296 | 1.640377 | 0.105695 | 0.490981 | -4.62106 |
| REACTOME\_IRF3\_MEDIATED\_INDUCTION\_OF\_TYPE\_I\_IFN | 0.119872 | -0.00625 | 1.63957 | 0.105863 | 0.491018 | -4.62224 |
| REACTOME\_S\_PHASE | -0.09755 | -0.11129 | -1.63895 | 0.105993 | 0.491018 | -4.62315 |
| MARSHALL\_VIRAL\_INFECTION\_RESPONSE\_DN | 0.104005 | -0.13324 | 1.638671 | 0.106051 | 0.491018 | -4.62355 |
| NOUZOVA\_TRETINOIN\_AND\_H4\_ACETYLATION | -0.09891 | -0.17325 | -1.63854 | 0.106078 | 0.491018 | -4.62374 |
| REACTOME\_METABOLISM\_OF\_STEROID\_HORMONES | 0.075826 | -0.15763 | 1.638351 | 0.106118 | 0.491018 | -4.62402 |
| ROPERO\_HDAC2\_TARGETS | 0.037333 | -0.29386 | 1.638121 | 0.106166 | 0.491018 | -4.62436 |
| REACTOME\_TRANSPORT\_OF\_INORGANIC\_CATIONS\_ANIONS\_AND\_AMINO\_ACIDS\_OLIGOPEPTIDES | 0.061536 | -0.02384 | 1.63748 | 0.1063 | 0.491281 | -4.6253 |
| REACTOME\_METABOLISM\_OF\_RNA | -0.09685 | -0.16943 | -1.63597 | 0.106617 | 0.491852 | -4.62751 |
| HUMMEL\_BURKITTS\_LYMPHOMA\_UP | -0.08542 | -0.06076 | -1.63584 | 0.106643 | 0.491852 | -4.62769 |
| REACTOME\_GP1B\_IX\_V\_ACTIVATION\_SIGNALLING | 0.12735 | -0.0076 | 1.63547 | 0.106722 | 0.491852 | -4.62823 |
| KUROZUMI\_RESPONSE\_TO\_ONCOCYTIC\_VIRUS | 0.062221 | -0.33845 | 1.635417 | 0.106733 | 0.491852 | -4.62831 |
| SOUCEK\_MYC\_TARGETS | 0.083751 | -0.32568 | 1.634368 | 0.106953 | 0.492456 | -4.62984 |
| ABBUD\_LIF\_SIGNALING\_1\_UP | 0.079147 | -0.25375 | 1.634058 | 0.107019 | 0.492456 | -4.6303 |
| WP\_SUDDEN\_INFANT\_DEATH\_SYNDROME\_SIDS\_SUSCEPTIBILITY\_PATHWAYS | 0.045233 | -0.16613 | 1.633172 | 0.107205 | 0.492502 | -4.63159 |
| WIEMANN\_TELOMERE\_SHORTENING\_AND\_CHRONIC\_LIVER\_DAMAGE\_DN | 0.124221 | -0.16887 | 1.633107 | 0.107219 | 0.492502 | -4.63168 |
| WP\_HAIR\_FOLLICLE\_DEVELOPMENT\_CYTODIFFERENTIATION\_PART\_3\_OF\_3 | 0.062027 | -0.01035 | 1.632497 | 0.107348 | 0.492502 | -4.63257 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_6 | 0.078058 | -0.09178 | 1.632331 | 0.107383 | 0.492502 | -4.63281 |
| KALMA\_E2F1\_TARGETS | -0.19167 | -0.00792 | -1.63217 | 0.107416 | 0.492502 | -4.63304 |
| REACTOME\_RELAXIN\_RECEPTORS | 0.155236 | -0.18195 | 1.631425 | 0.107574 | 0.492874 | -4.63414 |
| CAIRO\_HEPATOBLASTOMA\_CLASSES\_UP | -0.10303 | -0.10991 | -1.63077 | 0.107712 | 0.493148 | -4.63508 |
| REACTOME\_PEPTIDE\_HORMONE\_BIOSYNTHESIS | 0.149645 | 0.035425 | 1.629738 | 0.107931 | 0.493798 | -4.63659 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_BCR\_SIGNALING | -0.16265 | -0.00834 | -1.62936 | 0.108012 | 0.493815 | -4.63715 |
| HANN\_RESISTANCE\_TO\_BCL2\_INHIBITOR\_UP | 0.071999 | -0.01176 | 1.628515 | 0.108191 | 0.493973 | -4.63837 |
| HOLLEMAN\_VINCRISTINE\_RESISTANCE\_B\_ALL\_UP | -0.10254 | -0.03486 | -1.62846 | 0.108202 | 0.493973 | -4.63845 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C2 | -0.1427 | -0.0089 | -1.62762 | 0.10838 | 0.494431 | -4.63967 |
| DAVICIONI\_MOLECULAR\_ARMS\_VS\_ERMS\_UP | -0.06733 | -0.12301 | -1.62682 | 0.108552 | 0.494746 | -4.64084 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINED\_IN\_MONOCYTE\_DN | 0.091567 | -0.40903 | 1.625891 | 0.108749 | 0.494746 | -4.64219 |
| KEGG\_NOD\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 0.077078 | -0.14999 | 1.62561 | 0.108809 | 0.494746 | -4.6426 |
| REACTOME\_INTERLEUKIN\_36\_PATHWAY | 0.173164 | 0.038475 | 1.625281 | 0.108879 | 0.494746 | -4.64307 |
| ROY\_WOUND\_BLOOD\_VESSEL\_DN | 0.104946 | -0.02186 | 1.624954 | 0.108949 | 0.494746 | -4.64355 |
| REACTOME\_TYSND1\_CLEAVES\_PEROXISOMAL\_PROTEINS | -0.14947 | -0.00171 | -1.62459 | 0.109027 | 0.494746 | -4.64408 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_7 | 0.084542 | -0.00084 | 1.62458 | 0.109029 | 0.494746 | -4.64409 |
| GALE\_APL\_WITH\_FLT3\_MUTATED\_UP | -0.12245 | -0.03305 | -1.62427 | 0.109094 | 0.494746 | -4.64453 |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_1 | -0.06691 | -0.09583 | -1.62402 | 0.109149 | 0.494746 | -4.64491 |
| CASTELLANO\_HRAS\_TARGETS\_DN | 0.13339 | -0.20815 | 1.62331 | 0.109301 | 0.495081 | -4.64593 |
| WUNDER\_INFLAMMATORY\_RESPONSE\_AND\_CHOLESTEROL\_DN | 0.074405 | -0.42425 | 1.622919 | 0.109384 | 0.495108 | -4.6465 |
| REACTOME\_ABC\_FAMILY\_PROTEINS\_MEDIATED\_TRANSPORT | -0.07571 | -0.24405 | -1.62227 | 0.109524 | 0.495111 | -4.64744 |
| WEBER\_METHYLATED\_ICP\_IN\_FIBROBLAST | 0.122626 | -0.18888 | 1.622191 | 0.109541 | 0.495111 | -4.64756 |
| REACTOME\_VIRAL\_MESSENGER\_RNA\_SYNTHESIS | -0.14989 | -0.01325 | -1.62178 | 0.109629 | 0.495159 | -4.64815 |
| ZWANG\_TRANSIENTLY\_UP\_BY\_2ND\_EGF\_PULSE\_ONLY | 0.061557 | -0.15428 | 1.620965 | 0.109804 | 0.495597 | -4.64933 |
| BIOCARTA\_PCAF\_PATHWAY | 0.111729 | -0.076 | 1.619423 | 0.110136 | 0.496275 | -4.65157 |
| REACTOME\_DISORDERS\_OF\_TRANSMEMBRANE\_TRANSPORTERS | -0.05978 | -0.14308 | -1.61926 | 0.11017 | 0.496275 | -4.6518 |
| SCHLINGEMANN\_SKIN\_CARCINOGENESIS\_TPA\_DN | 0.068553 | -0.05152 | 1.618748 | 0.110281 | 0.496275 | -4.65254 |
| XIE\_ST\_HSC\_S1PR3\_OE\_UP | 0.075749 | -0.00518 | 1.618321 | 0.110373 | 0.496275 | -4.65316 |
| MAINA\_HYPOXIA\_VHL\_TARGETS\_UP | 0.133552 | -0.1501 | 1.618131 | 0.110414 | 0.496275 | -4.65344 |
| REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS | -0.12321 | -0.03604 | -1.61799 | 0.110445 | 0.496275 | -4.65364 |
| BIOCARTA\_P53\_PATHWAY | 0.111822 | -0.00325 | 1.617312 | 0.110591 | 0.496275 | -4.65462 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_EARLY\_DN | 0.143681 | 0.002222 | 1.61696 | 0.110667 | 0.496275 | -4.65513 |
| PID\_AURORA\_B\_PATHWAY | -0.10259 | -0.01329 | -1.61676 | 0.11071 | 0.496275 | -4.65542 |
| REACTOME\_CELL\_CELL\_COMMUNICATION | 0.051045 | -0.02274 | 1.616653 | 0.110734 | 0.496275 | -4.65557 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_1HR\_DN | -0.0856 | -0.06291 | -1.61582 | 0.110914 | 0.496469 | -4.65678 |
| REACTOME\_DNA\_DAMAGE\_REVERSAL | -0.18776 | -0.05387 | -1.61551 | 0.110981 | 0.496469 | -4.65722 |
| WP\_LIPID\_PARTICLES\_COMPOSITION | 0.098621 | -0.01268 | 1.615074 | 0.111076 | 0.496469 | -4.65785 |
| JOHANSSON\_GLIOMAGENESIS\_BY\_PDGFB\_DN | -0.08236 | 0.006585 | -1.61501 | 0.111089 | 0.496469 | -4.65794 |
| ODONNELL\_TFRC\_TARGETS\_DN | -0.07925 | -0.05779 | -1.61355 | 0.111406 | 0.496718 | -4.66005 |
| PACHER\_TARGETS\_OF\_IGF1\_AND\_IGF2\_UP | 0.076777 | -0.04274 | 1.613392 | 0.111441 | 0.496718 | -4.66028 |
| PID\_P53\_DOWNSTREAM\_PATHWAY | 0.067433 | -0.07564 | 1.6132 | 0.111483 | 0.496718 | -4.66056 |
| BIOCARTA\_GPCR\_PATHWAY | -0.09905 | -0.08676 | -1.613 | 0.111526 | 0.496718 | -4.66084 |
| KEGG\_NICOTINATE\_AND\_NICOTINAMIDE\_METABOLISM | 0.083592 | -0.01268 | 1.611852 | 0.111777 | 0.496718 | -4.6625 |
| FISCHER\_DREAM\_TARGETS | -0.08804 | -0.09828 | -1.61153 | 0.111846 | 0.496718 | -4.66296 |
| WP\_ENDOPLASMIC\_RETICULUM\_STRESS\_RESPONSE\_IN\_CORONAVIRUS\_INFECTION | -0.06467 | -0.24448 | -1.61132 | 0.111892 | 0.496718 | -4.66326 |
| REACTOME\_CYTOPROTECTION\_BY\_HMOX1 | -0.09616 | -0.18095 | -1.61069 | 0.112031 | 0.496718 | -4.66418 |
| THILLAINADESAN\_ZNF217\_TARGETS\_UP | -0.07325 | -0.02555 | -1.61054 | 0.112062 | 0.496718 | -4.66439 |
| ENGELMANN\_CANCER\_PROGENITORS\_DN | 0.056051 | -0.04534 | 1.610419 | 0.11209 | 0.496718 | -4.66457 |
| REACTOME\_SIRT1\_NEGATIVELY\_REGULATES\_RRNA\_EXPRESSION | -0.16787 | -0.01951 | -1.61032 | 0.11211 | 0.496718 | -4.6647 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D5 | -0.1016 | -0.02968 | -1.60991 | 0.112202 | 0.496718 | -4.66531 |
| REACTOME\_CELL\_CYCLE\_CHECKPOINTS | -0.08214 | -0.12112 | -1.60935 | 0.112323 | 0.496718 | -4.6661 |
| ROESSLER\_LIVER\_CANCER\_METASTASIS\_DN | -0.09437 | -0.12616 | -1.60862 | 0.112484 | 0.496718 | -4.66716 |
| REACTOME\_INTERACTION\_BETWEEN\_L1\_AND\_ANKYRINS | 0.099074 | 0.004024 | 1.608368 | 0.112538 | 0.496718 | -4.66752 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_7\_UP | -0.06204 | -0.06086 | -1.60802 | 0.112614 | 0.496718 | -4.66802 |
| REACTOME\_ZINC\_EFFLUX\_AND\_COMPARTMENTALIZATION\_BY\_THE\_SLC30\_FAMILY | -0.11392 | -0.0168 | -1.60761 | 0.112705 | 0.496718 | -4.66861 |
| PID\_HDAC\_CLASSII\_PATHWAY | -0.09935 | -0.02852 | -1.60743 | 0.112744 | 0.496718 | -4.66886 |
| REACTOME\_ARYL\_HYDROCARBON\_RECEPTOR\_SIGNALLING | -0.11937 | -0.0038 | -1.60732 | 0.112769 | 0.496718 | -4.66903 |
| KRIGE\_AMINO\_ACID\_DEPRIVATION | 0.107255 | -0.0385 | 1.607072 | 0.112823 | 0.496718 | -4.66938 |
| WP\_PI3KAKTMTOR\_VITD3\_SIGNALING | 0.090364 | -0.24214 | 1.607068 | 0.112824 | 0.496718 | -4.66939 |
| REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES | -0.13382 | -0.00582 | -1.60689 | 0.112862 | 0.496718 | -4.66964 |
| WIELAND\_UP\_BY\_HBV\_INFECTION | 0.053411 | -0.49489 | 1.60641 | 0.112968 | 0.496741 | -4.67033 |
| REACTOME\_TYROSINE\_CATABOLISM | 0.12461 | 0.018173 | 1.606072 | 0.113043 | 0.496741 | -4.67082 |
| ACEVEDO\_LIVER\_CANCER\_WITH\_H3K9ME3\_DN | -0.04152 | -0.16692 | -1.60579 | 0.113105 | 0.496741 | -4.67122 |
| KUMAMOTO\_RESPONSE\_TO\_NUTLIN\_3A\_UP | 0.138233 | 0.005024 | 1.605126 | 0.113251 | 0.496741 | -4.67218 |
| FALVELLA\_SMOKERS\_WITH\_LUNG\_CANCER | 0.084026 | -0.05079 | 1.604847 | 0.113313 | 0.496741 | -4.67258 |
| REACTOME\_DNA\_DAMAGE\_RECOGNITION\_IN\_GG\_NER | -0.12519 | -0.19364 | -1.60474 | 0.113336 | 0.496741 | -4.67273 |
| WINNEPENNINCKX\_MELANOMA\_METASTASIS\_UP | -0.11163 | -0.03246 | -1.60407 | 0.113484 | 0.497002 | -4.67369 |
| PEREZ\_TP63\_TARGETS | 0.048425 | -0.10787 | 1.603766 | 0.113551 | 0.497002 | -4.67413 |
| REACTOME\_GAP\_JUNCTION\_ASSEMBLY | 0.089763 | -0.02769 | 1.602075 | 0.113925 | 0.498004 | -4.67655 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_SEVERAL\_ADDITIONAL\_CELL\_DEATH\_GENES\_WHOSE\_SPECIFIC\_ROLES\_IN\_P53\_DEPENDENT\_APOPTOSIS\_REMAIN\_UNCERTAIN | 0.085741 | -0.11935 | 1.602023 | 0.113937 | 0.498004 | -4.67663 |
| LASTOWSKA\_COAMPLIFIED\_WITH\_MYCN | -0.06249 | -0.07993 | -1.60061 | 0.114249 | 0.498562 | -4.67865 |
| REACTOME\_INTERLEUKIN\_3\_INTERLEUKIN\_5\_AND\_GM\_CSF\_SIGNALING | 0.089012 | -0.03876 | 1.600455 | 0.114284 | 0.498562 | -4.67887 |
| RAMJAUN\_APOPTOSIS\_BY\_TGFB1\_VIA\_SMAD4\_DN | 0.100146 | -0.08228 | 1.600387 | 0.114299 | 0.498562 | -4.67897 |
| SCHLESINGER\_H3K27ME3\_IN\_NORMAL\_AND\_METHYLATED\_IN\_CANCER | 0.116763 | -0.05877 | 1.599569 | 0.114481 | 0.498769 | -4.68014 |
| FUJIWARA\_PARK2\_HEPATOCYTE\_PROLIFERATION\_DN | 0.102877 | -0.1142 | 1.599468 | 0.114504 | 0.498769 | -4.68029 |
| WP\_OVARIAN\_INFERTILITY | 0.061016 | -0.2052 | 1.598782 | 0.114656 | 0.499091 | -4.68127 |
| WP\_KALLMANN\_SYNDROME | 0.059402 | -0.03374 | 1.597762 | 0.114883 | 0.499456 | -4.68273 |
| REACTOME\_SIGNALING\_BY\_MAPK\_MUTANTS | 0.094678 | -0.30114 | 1.597702 | 0.114897 | 0.499456 | -4.68281 |
| KEGG\_PPAR\_SIGNALING\_PATHWAY | 0.063868 | -0.08781 | 1.596666 | 0.115128 | 0.500072 | -4.68429 |
| REACTOME\_HEME\_DEGRADATION | 0.110435 | -0.05842 | 1.595759 | 0.115331 | 0.500072 | -4.68559 |
| REACTOME\_BASE\_EXCISION\_REPAIR | -0.12168 | -0.02883 | -1.59507 | 0.115485 | 0.500072 | -4.68657 |
| GREGORY\_SYNTHETIC\_LETHAL\_WITH\_IMATINIB | -0.07064 | -0.12193 | -1.59424 | 0.115671 | 0.500072 | -4.68776 |
| PID\_EPHB\_FWD\_PATHWAY | -0.10226 | -0.02537 | -1.59409 | 0.115705 | 0.500072 | -4.68798 |
| REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS | -0.10125 | -0.16729 | -1.59408 | 0.115708 | 0.500072 | -4.68799 |
| REACTOME\_OREXIN\_AND\_NEUROPEPTIDES\_FF\_AND\_QRFP\_BIND\_TO\_THEIR\_RESPECTIVE\_RECEPTORS | 0.164342 | 0.040489 | 1.593977 | 0.11573 | 0.500072 | -4.68813 |
| REACTOME\_ACTIVATION\_OF\_RAS\_IN\_B\_CELLS | -0.16602 | -0.1452 | -1.59392 | 0.115744 | 0.500072 | -4.68822 |
| PID\_P38\_MK2\_PATHWAY | 0.098626 | -0.09411 | 1.593906 | 0.115746 | 0.500072 | -4.68824 |
| WP\_CARDIAC\_PROGENITOR\_DIFFERENTIATION | 0.078956 | -0.11458 | 1.593035 | 0.115941 | 0.500376 | -4.68948 |
| WP\_EXTRACELLULAR\_VESICLES\_IN\_THE\_CROSSTALK\_OF\_CARDIAC\_CELLS | 0.097435 | -0.11391 | 1.592892 | 0.115973 | 0.500376 | -4.68968 |
| REACTOME\_ENDOSOMAL\_SORTING\_COMPLEX\_REQUIRED\_FOR\_TRANSPORT\_ESCRT | -0.13511 | -0.04918 | -1.59202 | 0.11617 | 0.500612 | -4.69093 |
| DORMOY\_ELAVL1\_TARGETS | -0.08442 | -0.1022 | -1.59195 | 0.116185 | 0.500612 | -4.69103 |
| REACTOME\_EXPORT\_OF\_VIRAL\_RIBONUCLEOPROTEINS\_FROM\_NUCLEUS | -0.12949 | -0.10496 | -1.59115 | 0.116366 | 0.501052 | -4.69217 |
| MIKKELSEN\_MCV6\_HCP\_WITH\_H3K27ME3 | 0.096021 | -0.04196 | 1.589049 | 0.116839 | 0.502378 | -4.69515 |
| REACTOME\_VOLTAGE\_GATED\_POTASSIUM\_CHANNELS | 0.132737 | 0.028854 | 1.58891 | 0.11687 | 0.502378 | -4.69535 |
| REACTOME\_FCGR\_ACTIVATION | 0.145121 | ####### | 1.588359 | 0.116995 | 0.502378 | -4.69613 |
| JU\_AGING\_TERC\_TARGETS\_UP | 0.132576 | 0.01932 | 1.588339 | 0.117 | 0.502378 | -4.69616 |
| BOUDOUKHA\_BOUND\_BY\_IGF2BP2 | -0.11405 | -0.03289 | -1.58803 | 0.117069 | 0.502378 | -4.6966 |
| MIKKELSEN\_ES\_ICP\_WITH\_H3K27ME3 | 0.070434 | -0.20246 | 1.587158 | 0.117267 | 0.502671 | -4.69784 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX4\_UP | -0.15064 | 0.015965 | -1.58703 | 0.117295 | 0.502671 | -4.69802 |
| KIM\_BIPOLAR\_DISORDER\_OLIGODENDROCYTE\_DENSITY\_CORR\_DN | 0.052401 | -0.30844 | 1.586608 | 0.117392 | 0.502746 | -4.69862 |
| AMIT\_EGF\_RESPONSE\_480\_HELA | 0.090195 | -0.08578 | 1.585434 | 0.117658 | 0.503289 | -4.70029 |
| MARCHINI\_TRABECTEDIN\_RESISTANCE\_DN | 0.097647 | -0.12507 | 1.585043 | 0.117747 | 0.503289 | -4.70085 |
| HENDRICKS\_SMARCA4\_TARGETS\_UP | 0.079249 | -0.05583 | 1.58495 | 0.117768 | 0.503289 | -4.70098 |
| REACTOME\_ABC\_TRANSPORTER\_DISORDERS | -0.07978 | -0.24933 | -1.58466 | 0.117835 | 0.503289 | -4.70139 |
| PID\_TGFBR\_PATHWAY | -0.08047 | -0.11291 | -1.58411 | 0.117959 | 0.50348 | -4.70216 |
| MEISSNER\_NPC\_HCP\_WITH\_H3K4ME2\_AND\_H3K27ME3 | 0.096287 | -0.04371 | 1.583712 | 0.11805 | 0.503533 | -4.70273 |
| BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_DN | 0.067664 | -0.05429 | 1.582602 | 0.118303 | 0.50367 | -4.70431 |
| BEGUM\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_UP | -0.10295 | -0.05908 | -1.5824 | 0.118348 | 0.50367 | -4.70459 |
| VETTER\_TARGETS\_OF\_PRKCA\_AND\_ETS1\_UP | -0.09863 | -0.00757 | -1.58232 | 0.118368 | 0.50367 | -4.70471 |
| REACTOME\_DIGESTION\_AND\_ABSORPTION | 0.098806 | 0.012106 | 1.581997 | 0.118441 | 0.50367 | -4.70516 |
| REACTOME\_FORMATION\_OF\_XYLULOSE\_5\_PHOSPHATE | 0.135357 | -0.03612 | 1.581289 | 0.118603 | 0.50367 | -4.70617 |
| REACTOME\_DEPOSITION\_OF\_NEW\_CENPA\_CONTAINING\_NUCLEOSOMES\_AT\_THE\_CENTROMERE | -0.09509 | -0.03364 | -1.58126 | 0.11861 | 0.50367 | -4.70621 |
| ZEILSTRA\_CD44\_TARGETS\_UP | 0.132828 | -0.11358 | 1.581074 | 0.118652 | 0.50367 | -4.70647 |
| WP\_TGIF\_DISRUPTION\_OF\_SHH\_SIGNALING | 0.139411 | -0.01021 | 1.580715 | 0.118735 | 0.50367 | -4.70698 |
| DIRMEIER\_LMP1\_RESPONSE\_LATE\_DN | 0.054764 | -0.47784 | 1.580379 | 0.118811 | 0.50367 | -4.70746 |
| MAYBURD\_RESPONSE\_TO\_L663536\_DN | -0.11866 | -0.05161 | -1.57956 | 0.118999 | 0.50367 | -4.70862 |
| BIOCARTA\_TCAPOPTOSIS\_PATHWAY | 0.152288 | -0.01513 | 1.579398 | 0.119036 | 0.50367 | -4.70884 |
| REACTOME\_RESOLUTION\_OF\_SISTER\_CHROMATID\_COHESION | -0.08947 | -0.03785 | -1.57908 | 0.11911 | 0.50367 | -4.7093 |
| REACTOME\_ACTIVATED\_NTRK2\_SIGNALS\_THROUGH\_RAS | -0.11389 | -0.09564 | -1.57907 | 0.119111 | 0.50367 | -4.70931 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BRAIN\_DN | -0.04544 | -0.18125 | -1.57852 | 0.119239 | 0.503875 | -4.71009 |
| TIEN\_INTESTINE\_PROBIOTICS\_24HR\_UP | -0.11277 | -0.05916 | -1.578 | 0.119358 | 0.503939 | -4.71083 |
| REACTOME\_NEF\_MEDIATES\_DOWN\_MODULATION\_OF\_CELL\_SURFACE\_RECEPTORS\_BY\_RECRUITING\_THEM\_TO\_CLATHRIN\_ADAPTERS | 0.116786 | -0.08361 | 1.577424 | 0.11949 | 0.503939 | -4.71163 |
| WP\_IRON\_METABOLISM\_IN\_PLACENTA | 0.146003 | -0.02087 | 1.577417 | 0.119491 | 0.503939 | -4.71164 |
| MOTAMED\_RESPONSE\_TO\_ANDROGEN\_DN | -0.13662 | -0.00143 | -1.57585 | 0.119853 | 0.505128 | -4.71386 |
| REACTOME\_PTEN\_REGULATION | -0.07522 | -0.20848 | -1.57242 | 0.120646 | 0.506926 | -4.7187 |
| ZHAN\_MULTIPLE\_MYELOMA\_HP\_UP | -0.08424 | -0.00029 | -1.5724 | 0.120651 | 0.506926 | -4.71873 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_5\_DN | 0.06012 | -0.11211 | 1.572306 | 0.120672 | 0.506926 | -4.71886 |
| KAUFFMANN\_DNA\_REPAIR\_GENES | -0.06964 | -0.10052 | -1.57225 | 0.120685 | 0.506926 | -4.71893 |
| GRABARCZYK\_BCL11B\_TARGETS\_UP | -0.09659 | -0.03071 | -1.57219 | 0.120699 | 0.506926 | -4.71902 |
| REACTOME\_REGULATION\_OF\_GENE\_EXPRESSION\_IN\_LATE\_STAGE\_BRANCHING\_MORPHOGENESIS\_PANCREATIC\_BUD\_PRECURSOR\_CELLS | 0.069288 | -0.10019 | 1.571938 | 0.120757 | 0.506926 | -4.71937 |
| LOCKWOOD\_AMPLIFIED\_IN\_LUNG\_CANCER | -0.08738 | -0.07342 | -1.57096 | 0.120984 | 0.507302 | -4.72075 |
| BIOCARTA\_NUCLEARRS\_PATHWAY | 0.094636 | -0.03521 | 1.570639 | 0.121059 | 0.507302 | -4.7212 |
| KLEIN\_TARGETS\_OF\_BCR\_ABL1\_FUSION | 0.103421 | -0.04315 | 1.570523 | 0.121086 | 0.507302 | -4.72137 |
| WP\_PYRIMIDINE\_METABOLISM | -0.0957 | -0.032 | -1.56946 | 0.121333 | 0.507834 | -4.72286 |
| BIOCARTA\_HES\_PATHWAY | 0.086987 | -0.07979 | 1.569043 | 0.121431 | 0.507834 | -4.72345 |
| REACTOME\_LTC4\_CYSLTR\_MEDIATED\_IL4\_PRODUCTION | 0.129337 | 0.004488 | 1.568649 | 0.121522 | 0.507834 | -4.724 |
| WP\_NANOPARTICLE\_TRIGGERED\_AUTOPHAGIC\_CELL\_DEATH | -0.09815 | -0.05783 | -1.56861 | 0.121532 | 0.507834 | -4.72406 |
| REACTOME\_COOPERATION\_OF\_PDCL\_PHLP1\_AND\_TRIC\_CCT\_IN\_G\_PROTEIN\_BETA\_FOLDING | -0.08138 | -0.14987 | -1.56806 | 0.12166 | 0.508035 | -4.72483 |
| WANG\_LMO4\_TARGETS\_DN | -0.1007 | -0.08448 | -1.56757 | 0.121775 | 0.50818 | -4.72552 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_REVERSIBLY\_UP | 0.082847 | -0.17451 | 1.567177 | 0.121866 | 0.508228 | -4.72607 |
| MATZUK\_FERTILIZATION | 0.097586 | -0.09952 | 1.56675 | 0.121966 | 0.508311 | -4.72667 |
| REACTOME\_PROCESSING\_OF\_INTRONLESS\_PRE\_MRNAS | -0.13035 | -0.06375 | -1.56613 | 0.122112 | 0.508586 | -4.72754 |
| DODD\_NASOPHARYNGEAL\_CARCINOMA\_DN | -0.09531 | -0.06797 | -1.56411 | 0.122585 | 0.510222 | -4.73037 |
| REACTOME\_PROTEIN\_REPAIR | -0.18854 | -0.13267 | -1.56317 | 0.122804 | 0.510351 | -4.73168 |
| WP\_PPAR\_SIGNALING\_PATHWAY | 0.063486 | -0.08879 | 1.563102 | 0.122821 | 0.510351 | -4.73179 |
| BIOCARTA\_AKAP13\_PATHWAY | -0.07814 | -0.08852 | -1.56295 | 0.122856 | 0.510351 | -4.73199 |
| WALLACE\_PROSTATE\_CANCER\_RACE\_UP | 0.065937 | -0.25841 | 1.560891 | 0.123343 | 0.512023 | -4.73488 |
| REACTOME\_TRANSPORT\_OF\_ORGANIC\_ANIONS | 0.114339 | 0.004424 | 1.560564 | 0.12342 | 0.512023 | -4.73534 |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_B\_ALL\_UP | -0.11987 | -0.11689 | -1.5593 | 0.123719 | 0.512224 | -4.73711 |
| DAZARD\_RESPONSE\_TO\_UV\_NHEK\_DN | -0.08827 | -0.08855 | -1.55808 | 0.124008 | 0.512224 | -4.73882 |
| REACTOME\_MTOR\_SIGNALLING | -0.10569 | -0.00436 | -1.55806 | 0.124013 | 0.512224 | -4.73884 |
| HU\_GENOTOXIN\_ACTION\_DIRECT\_VS\_INDIRECT\_4HR | -0.0836 | -0.02865 | -1.55722 | 0.124211 | 0.512224 | -4.74001 |
| REACTOME\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1 | -0.10203 | -0.19154 | -1.55718 | 0.12422 | 0.512224 | -4.74006 |
| WP\_PURINERGIC\_SIGNALING | 0.071159 | 0.011888 | 1.556879 | 0.124292 | 0.512224 | -4.74049 |
| CHYLA\_CBFA2T3\_TARGETS\_DN | 0.042605 | -0.10538 | 1.556803 | 0.12431 | 0.512224 | -4.7406 |
| TENEDINI\_MEGAKARYOCYTE\_MARKERS | 0.060681 | -0.13865 | 1.556708 | 0.124333 | 0.512224 | -4.74073 |
| REACTOME\_HUR\_ELAVL1\_BINDS\_AND\_STABILIZES\_MRNA | -0.1672 | -0.00931 | -1.55669 | 0.124336 | 0.512224 | -4.74075 |
| HECKER\_IFNB1\_TARGETS | 0.083803 | -0.09448 | 1.556387 | 0.124409 | 0.512224 | -4.74118 |
| BIOCARTA\_CHREBP\_PATHWAY | -0.08315 | -0.04956 | -1.55593 | 0.124518 | 0.512224 | -4.74182 |
| FUNG\_IL2\_TARGETS\_WITH\_STAT5\_BINDING\_SITES\_T1 | 0.087929 | -0.18253 | 1.555883 | 0.124529 | 0.512224 | -4.74188 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_RUNX1 | 0.092596 | 0.012047 | 1.55568 | 0.124577 | 0.512224 | -4.74216 |
| WP\_DNA\_IRDOUBLE\_STRAND\_BREAKS\_AND\_CELLULAR\_RESPONSE\_VIA\_ATM | -0.05474 | -0.18111 | -1.55559 | 0.124598 | 0.512224 | -4.74229 |
| ZHAN\_MULTIPLE\_MYELOMA\_MS\_DN | -0.0816 | -0.04983 | -1.55527 | 0.124676 | 0.512224 | -4.74274 |
| MOLENAAR\_TARGETS\_OF\_CCND1\_AND\_CDK4\_DN | -0.08338 | -0.01844 | -1.55434 | 0.124897 | 0.512647 | -4.74403 |
| RODRIGUES\_THYROID\_CARCINOMA\_UP | -0.13104 | -0.00758 | -1.55416 | 0.12494 | 0.512647 | -4.74428 |
| WEBER\_METHYLATED\_LCP\_IN\_FIBROBLAST\_UP | 0.153357 | 0.010066 | 1.552438 | 0.12535 | 0.513929 | -4.74668 |
| REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK | -0.11153 | -0.00715 | -1.55217 | 0.125414 | 0.513929 | -4.74705 |
| PUJANA\_BRCA2\_PCC\_NETWORK | -0.09207 | -0.1094 | -1.55143 | 0.125591 | 0.514162 | -4.74808 |
| REACTOME\_CD163\_MEDIATING\_AN\_ANTI\_INFLAMMATORY\_RESPONSE | 0.111249 | 0.007079 | 1.551154 | 0.125657 | 0.514162 | -4.74847 |
| PAL\_PRMT5\_TARGETS\_UP | -0.09113 | -0.13193 | -1.55092 | 0.125713 | 0.514162 | -4.74879 |
| CHEMNITZ\_RESPONSE\_TO\_PROSTAGLANDIN\_E2\_UP | -0.07498 | -0.11505 | -1.54986 | 0.125967 | 0.514461 | -4.75027 |
| RYAN\_MANTLE\_CELL\_LYMPHOMA\_NOTCH\_DIRECT\_UP | 0.078239 | -0.09714 | 1.549656 | 0.126017 | 0.514461 | -4.75055 |
| REACTOME\_SIGNALING\_BY\_FGFR2\_IIIA\_TM | -0.14966 | -0.01232 | -1.54961 | 0.126028 | 0.514461 | -4.75062 |
| REACTOME\_SOS\_MEDIATED\_SIGNALLING | -0.14182 | -0.09368 | -1.54877 | 0.126229 | 0.514878 | -4.75178 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G5\_DN | 0.079436 | -0.32257 | 1.548314 | 0.126339 | 0.514878 | -4.75241 |
| PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_UP | -0.06331 | -0.08182 | -1.54736 | 0.126568 | 0.514878 | -4.75374 |
| PID\_TAP63\_PATHWAY | 0.063048 | -0.01865 | 1.546195 | 0.12685 | 0.514878 | -4.75536 |
| NIKOLSKY\_BREAST\_CANCER\_19P13\_AMPLICON | -0.13749 | -0.00884 | -1.5459 | 0.12692 | 0.514878 | -4.75576 |
| LIANG\_SILENCED\_BY\_METHYLATION\_UP | 0.068749 | -0.14088 | 1.545771 | 0.126952 | 0.514878 | -4.75594 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_DEATH\_RECEPTORS\_AND\_LIGANDS | 0.103766 | -0.01252 | 1.54517 | 0.127097 | 0.514878 | -4.75678 |
| WONG\_PROTEASOME\_GENE\_MODULE | -0.10997 | -0.1795 | -1.54484 | 0.127178 | 0.514878 | -4.75724 |
| WONG\_ENDMETRIUM\_CANCER\_UP | 0.082346 | 0.010222 | 1.544008 | 0.127379 | 0.514878 | -4.75839 |
| KIM\_WT1\_TARGETS\_8HR\_DN | -0.04955 | -0.19576 | -1.54372 | 0.127448 | 0.514878 | -4.75879 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_4 | 0.091188 | 0.009627 | 1.543672 | 0.12746 | 0.514878 | -4.75885 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CELL\_CYCLE\_GENES | 0.073138 | -0.14709 | 1.543559 | 0.127487 | 0.514878 | -4.75901 |
| REACTOME\_POTASSIUM\_CHANNELS | 0.087354 | -0.04811 | 1.543375 | 0.127532 | 0.514878 | -4.75927 |
| MCBRYAN\_PUBERTAL\_BREAST\_5\_6WK\_DN | -0.05824 | -0.15772 | -1.54328 | 0.127554 | 0.514878 | -4.75939 |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_HEAT\_STRESS | -0.09365 | -0.11712 | -1.54294 | 0.127637 | 0.514878 | -4.75987 |
| SANSOM\_APC\_TARGETS\_REQUIRE\_MYC | -0.06565 | -0.0966 | -1.54263 | 0.127712 | 0.514878 | -4.76029 |
| TCGA\_GLIOBLASTOMA\_COPY\_NUMBER\_UP | -0.06948 | -0.04382 | -1.54254 | 0.127735 | 0.514878 | -4.76042 |
| TURASHVILI\_BREAST\_NORMAL\_DUCTAL\_VS\_LOBULAR\_UP | -0.08453 | -0.03252 | -1.54242 | 0.127763 | 0.514878 | -4.76059 |
| BIOCARTA\_NO2IL12\_PATHWAY | 0.139912 | -0.0165 | 1.542028 | 0.127859 | 0.514878 | -4.76113 |
| BENPORATH\_ES\_WITH\_H3K27ME3 | 0.06576 | -0.0897 | 1.541781 | 0.127919 | 0.514878 | -4.76147 |
| REACTOME\_MITOTIC\_PROPHASE | -0.11924 | -0.02794 | -1.54135 | 0.128024 | 0.514878 | -4.76207 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_UP | 0.105145 | -0.01047 | 1.541275 | 0.128042 | 0.514878 | -4.76217 |
| WP\_ACTIVATION\_OF\_NLRP3\_INFLAMMASOME\_BY\_SARSCOV2 | 0.151318 | 0.03417 | 1.541212 | 0.128057 | 0.514878 | -4.76226 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_TTD\_UP | 0.064798 | -0.12986 | 1.541148 | 0.128072 | 0.514878 | -4.76235 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_OF\_ACTIVATED\_FGFR3 | -0.06405 | -0.0262 | -1.54022 | 0.128297 | 0.515457 | -4.76362 |
| PID\_P38\_ALPHA\_BETA\_PATHWAY | 0.06583 | -0.12782 | 1.539578 | 0.128455 | 0.515517 | -4.76452 |
| KEGG\_PARKINSONS\_DISEASE | -0.09542 | -0.13033 | -1.5395 | 0.128474 | 0.515517 | -4.76463 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G3\_UP | -0.1094 | -0.11089 | -1.53874 | 0.12866 | 0.515935 | -4.76568 |
| QI\_HYPOXIA\_TARGETS\_OF\_HIF1A\_AND\_FOXA2 | 0.05525 | -0.39394 | 1.538179 | 0.128796 | 0.516157 | -4.76645 |
| SHEDDEN\_LUNG\_CANCER\_GOOD\_SURVIVAL\_A5 | -0.06318 | -0.05845 | -1.53583 | 0.12937 | 0.517643 | -4.76968 |
| REACTOME\_ERKS\_ARE\_INACTIVATED | 0.108512 | 0.006617 | 1.5356 | 0.129427 | 0.517643 | -4.77001 |
| EPPERT\_PROGENITOR | -0.08384 | -0.0498 | -1.53554 | 0.129441 | 0.517643 | -4.77008 |
| MUNSHI\_MULTIPLE\_MYELOMA\_UP | 0.07964 | -0.12239 | 1.534916 | 0.129595 | 0.517643 | -4.77095 |
| REACTOME\_SIGNALING\_BY\_INTERLEUKINS | 0.064638 | -0.09654 | 1.534378 | 0.129727 | 0.517643 | -4.77169 |
| HOEGERKORP\_CD44\_TARGETS\_TEMPORAL\_UP | 0.081648 | 0.021182 | 1.534107 | 0.129794 | 0.517643 | -4.77206 |
| PID\_SYNDECAN\_2\_PATHWAY | 0.067609 | -0.08073 | 1.533935 | 0.129836 | 0.517643 | -4.7723 |
| WINZEN\_DEGRADED\_VIA\_KHSRP | 0.076565 | -0.11258 | 1.533691 | 0.129896 | 0.517643 | -4.77264 |
| REACTOME\_ACTIVATION\_OF\_PUMA\_AND\_TRANSLOCATION\_TO\_MITOCHONDRIA | 0.094111 | -0.01011 | 1.533075 | 0.130048 | 0.517643 | -4.77348 |
| RAO\_BOUND\_BY\_SALL4\_ISOFORM\_B | -0.04942 | -0.09193 | -1.53238 | 0.130218 | 0.517643 | -4.77444 |
| REACTOME\_DIGESTION\_OF\_DIETARY\_LIPID | 0.159713 | 0.020374 | 1.532223 | 0.130257 | 0.517643 | -4.77466 |
| WP\_TCA\_CYCLE\_AND\_DEFICIENCY\_OF\_PYRUVATE\_DEHYDROGENASE\_COMPLEX\_PDHC | -0.1513 | -0.00152 | -1.53217 | 0.13027 | 0.517643 | -4.77472 |
| ABDELMOHSEN\_ELAVL4\_TARGETS | -0.12699 | -0.13278 | -1.53194 | 0.130327 | 0.517643 | -4.77504 |
| TSUNODA\_CISPLATIN\_RESISTANCE\_DN | 0.056169 | -0.25731 | 1.531653 | 0.130398 | 0.517643 | -4.77544 |
| WEBER\_METHYLATED\_ICP\_IN\_SPERM\_DN | 0.125252 | -0.22163 | 1.531381 | 0.130465 | 0.517643 | -4.77581 |
| MALTA\_CURATED\_STEMNESS\_MARKERS | 0.082453 | -0.20222 | 1.531369 | 0.130468 | 0.517643 | -4.77583 |
| LEE\_LIVER\_CANCER\_E2F1\_UP | 0.081448 | -0.05495 | 1.530307 | 0.13073 | 0.517732 | -4.77729 |
| MEISSNER\_BRAIN\_HCP\_WITH\_H3K4ME2\_AND\_H3K27ME3 | 0.083259 | -0.0506 | 1.530138 | 0.130772 | 0.517732 | -4.77752 |
| MARKEY\_RB1\_ACUTE\_LOF\_DN | 0.066545 | -0.24905 | 1.529867 | 0.130839 | 0.517732 | -4.77789 |
| KIM\_GERMINAL\_CENTER\_T\_HELPER\_UP | -0.12879 | -0.02467 | -1.52973 | 0.130873 | 0.517732 | -4.77808 |
| LEIN\_LOCALIZED\_TO\_PROXIMAL\_DENDRITES | 0.065528 | -0.11446 | 1.529632 | 0.130897 | 0.517732 | -4.77822 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_PURPLE\_DN | 0.109976 | 0.02366 | 1.528784 | 0.131107 | 0.518096 | -4.77938 |
| REACTOME\_ABORTIVE\_ELONGATION\_OF\_HIV\_1\_TRANSCRIPT\_IN\_THE\_ABSENCE\_OF\_TAT | -0.124 | -0.17793 | -1.5286 | 0.131152 | 0.518096 | -4.77963 |
| REACTOME\_TRYPTOPHAN\_CATABOLISM | 0.089193 | -0.05318 | 1.528026 | 0.131295 | 0.518225 | -4.78042 |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_2\_UP | 0.08129 | -0.1389 | 1.527585 | 0.131404 | 0.518225 | -4.78103 |
| KEGG\_PORPHYRIN\_AND\_CHLOROPHYLL\_METABOLISM | 0.066751 | -0.07844 | 1.527414 | 0.131447 | 0.518225 | -4.78126 |
| REACTOME\_HIV\_LIFE\_CYCLE | -0.10342 | -0.1099 | -1.52716 | 0.131511 | 0.518225 | -4.78161 |
| VALK\_AML\_CLUSTER\_8 | -0.08911 | -0.03739 | -1.5261 | 0.131774 | 0.518692 | -4.78306 |
| BHAT\_ESR1\_TARGETS\_NOT\_VIA\_AKT1\_UP | 0.048969 | -0.03675 | 1.526025 | 0.131792 | 0.518692 | -4.78317 |
| WP\_NEURAL\_CREST\_DIFFERENTIATION | 0.053962 | -0.13352 | 1.525327 | 0.131966 | 0.518862 | -4.78412 |
| REACTOME\_SIGNALING\_BY\_WNT | -0.05873 | -0.11302 | -1.5252 | 0.131998 | 0.518862 | -4.7843 |
| REACTOME\_SWITCHING\_OF\_ORIGINS\_TO\_A\_POST\_REPLICATIVE\_STATE | -0.09123 | -0.16403 | -1.52332 | 0.132467 | 0.519754 | -4.78687 |
| WP\_REGULATION\_OF\_SISTER\_CHROMATID\_SEPARATION\_AT\_THE\_METAPHASEANAPHASE\_TRANSITION | -0.12871 | -0.01115 | -1.52291 | 0.132568 | 0.519754 | -4.78742 |
| REACTOME\_NR1H2\_NR1H3\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_TRIGLYCERIDE\_LIPOLYSIS\_IN\_ADIPOSE | 0.091718 | -0.45904 | 1.522781 | 0.132601 | 0.519754 | -4.78761 |
| REACTOME\_TRANSLATION\_OF\_SARS\_COV\_1\_STRUCTURAL\_PROTEINS | 0.086893 | -0.04056 | 1.521671 | 0.132879 | 0.519754 | -4.78912 |
| MUELLER\_PLURINET | -0.08603 | -0.09549 | -1.52162 | 0.132893 | 0.519754 | -4.7892 |
| JEON\_SMAD6\_TARGETS\_UP | 0.064564 | -0.3452 | 1.521334 | 0.132963 | 0.519754 | -4.78958 |
| REACTOME\_REGULATION\_OF\_GLUCOKINASE\_BY\_GLUCOKINASE\_REGULATORY\_PROTEIN | -0.12263 | -0.00043 | -1.52123 | 0.13299 | 0.519754 | -4.78973 |
| REACTOME\_FOLDING\_OF\_ACTIN\_BY\_CCT\_TRIC | -0.17289 | 0.001768 | -1.52041 | 0.133194 | 0.519754 | -4.79084 |
| LEE\_AGING\_CEREBELLUM\_UP | 0.072345 | -0.10129 | 1.520354 | 0.133209 | 0.519754 | -4.79092 |
| LIU\_TARGETS\_OF\_VMYB\_VS\_CMYB\_UP | 0.083912 | -0.06124 | 1.519659 | 0.133383 | 0.519754 | -4.79187 |
| WP\_HIJACK\_OF\_UBIQUITINATION\_BY\_SARSCOV2 | -0.19326 | -0.0358 | -1.51953 | 0.133415 | 0.519754 | -4.79204 |
| WP\_GLYCOSAMINOGLYCAN\_DEGRADATION | 0.104901 | -0.00642 | 1.519348 | 0.133461 | 0.519754 | -4.7923 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_DN | 0.084028 | -0.09677 | 1.519332 | 0.133466 | 0.519754 | -4.79232 |
| REACTOME\_POU5F1\_OCT4\_SOX2\_NANOG\_ACTIVATE\_GENES\_RELATED\_TO\_PROLIFERATION | 0.08884 | -0.32026 | 1.519022 | 0.133543 | 0.519754 | -4.79274 |
| FOSTER\_KDM1A\_TARGETS\_UP | 0.03867 | -0.12099 | 1.518935 | 0.133565 | 0.519754 | -4.79286 |
| BIOCARTA\_IL3\_PATHWAY | 0.100925 | -0.05445 | 1.517867 | 0.133834 | 0.519754 | -4.79432 |
| REACTOME\_REGULATION\_OF\_HSF1\_MEDIATED\_HEAT\_SHOCK\_RESPONSE | -0.09281 | -0.14199 | -1.51759 | 0.133904 | 0.519754 | -4.7947 |
| MOLENAAR\_TARGETS\_OF\_CCND1\_AND\_CDK4\_UP | -0.06973 | -0.071 | -1.51742 | 0.133947 | 0.519754 | -4.79493 |
| TAVAZOIE\_METASTASIS | 0.053707 | -0.03557 | 1.517383 | 0.133956 | 0.519754 | -4.79498 |
| REACTOME\_BIOLOGICAL\_OXIDATIONS | 0.043134 | -0.04757 | 1.517198 | 0.134003 | 0.519754 | -4.79523 |
| WILLIAMS\_ESR2\_TARGETS\_DN | -0.14983 | -0.02402 | -1.51706 | 0.134037 | 0.519754 | -4.79542 |
| REACTOME\_INACTIVATION\_OF\_CSF3\_G\_CSF\_SIGNALING | 0.120899 | 0.009689 | 1.516746 | 0.134117 | 0.519754 | -4.79584 |
| BIOCARTA\_PITX2\_PATHWAY | 0.077226 | -0.01632 | 1.516648 | 0.134141 | 0.519754 | -4.79598 |
| BOGNI\_TREATMENT\_RELATED\_MYELOID\_LEUKEMIA\_UP | 0.059887 | -0.11486 | 1.516473 | 0.134185 | 0.519754 | -4.79622 |
| OHGUCHI\_LIVER\_HNF4A\_TARGETS\_UP | 0.058966 | -0.1523 | 1.515631 | 0.134398 | 0.520261 | -4.79736 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_UNANNOTATED\_DN | -0.11732 | -0.10143 | -1.51443 | 0.134702 | 0.520872 | -4.799 |
| CHEN\_LVAD\_SUPPORT\_OF\_FAILING\_HEART\_DN | 0.088762 | -0.04171 | 1.514126 | 0.134779 | 0.520872 | -4.79941 |
| WP\_STEROID\_BIOSYNTHESIS | 0.122112 | 0.005766 | 1.514037 | 0.134801 | 0.520872 | -4.79953 |
| BASSO\_HAIRY\_CELL\_LEUKEMIA\_DN | -0.15985 | -0.00613 | -1.51253 | 0.135184 | 0.521809 | -4.80158 |
| DESERT\_PERIVENOUS\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | -0.08135 | -0.00205 | -1.51213 | 0.135284 | 0.521809 | -4.80212 |
| PEREZ\_TP53\_AND\_TP63\_TARGETS | 0.048303 | -0.06597 | 1.511884 | 0.135347 | 0.521809 | -4.80246 |
| BALLIF\_DEVELOPMENTAL\_DISABILITY\_P16\_P12\_DELETION | 0.099164 | -0.06695 | 1.51141 | 0.135468 | 0.521809 | -4.8031 |
| LU\_EZH2\_TARGETS\_UP | -0.06021 | -0.18782 | -1.51125 | 0.135508 | 0.521809 | -4.80332 |
| MARIADASON\_RESPONSE\_TO\_BUTYRATE\_SULINDAC\_6 | -0.07849 | -0.06869 | -1.51092 | 0.135591 | 0.521809 | -4.80376 |
| REACTOME\_DEFECTIVE\_CHST3\_CAUSES\_SEDCJD | 0.129073 | -0.01822 | 1.510436 | 0.135716 | 0.521809 | -4.80443 |
| SHIPP\_DLBCL\_CURED\_VS\_FATAL\_UP | 0.075603 | -0.16844 | 1.510295 | 0.135751 | 0.521809 | -4.80462 |
| REACTOME\_REGULATION\_OF\_BETA\_CELL\_DEVELOPMENT | 0.07622 | -0.06747 | 1.510176 | 0.135782 | 0.521809 | -4.80478 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_UP | 0.048575 | -0.12946 | 1.50937 | 0.135987 | 0.522283 | -4.80587 |
| MIKKELSEN\_IPS\_ICP\_WITH\_H3K4ME3\_AND\_H327ME3 | 0.053425 | -0.15134 | 1.508901 | 0.136107 | 0.522428 | -4.80651 |
| PURBEY\_TARGETS\_OF\_CTBP1\_NOT\_SATB1\_UP | -0.05402 | -0.09489 | -1.50672 | 0.136665 | 0.522986 | -4.80947 |
| WP\_GDNFRET\_SIGNALING\_AXIS | 0.067848 | -0.14729 | 1.506559 | 0.136706 | 0.522986 | -4.80968 |
| WANG\_RESPONSE\_TO\_FORSKOLIN\_DN | -0.15398 | -0.01674 | -1.50639 | 0.136748 | 0.522986 | -4.80991 |
| REACTOME\_CONDENSATION\_OF\_PROMETAPHASE\_CHROMOSOMES | -0.13425 | -0.2991 | -1.50618 | 0.136802 | 0.522986 | -4.81019 |
| REACTOME\_ION\_CHANNEL\_TRANSPORT | 0.041111 | -0.07655 | 1.506113 | 0.13682 | 0.522986 | -4.81029 |
| WP\_TCA\_CYCLE\_AKA\_KREBS\_OR\_CITRIC\_ACID\_CYCLE | -0.16147 | 0.013935 | -1.50608 | 0.136827 | 0.522986 | -4.81033 |
| HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_DN | -0.08527 | -0.07225 | -1.50585 | 0.136887 | 0.522986 | -4.81064 |
| REACTOME\_UCH\_PROTEINASES | -0.08416 | -0.25702 | -1.50576 | 0.13691 | 0.522986 | -4.81076 |
| MIZUKAMI\_HYPOXIA\_DN | 0.152367 | 0.014333 | 1.505045 | 0.137094 | 0.523105 | -4.81173 |
| NABA\_COLLAGENS | 0.099001 | -0.11305 | 1.505 | 0.137105 | 0.523105 | -4.81179 |
| TOYOTA\_TARGETS\_OF\_MIR34B\_AND\_MIR34C | -0.05548 | -0.16424 | -1.50467 | 0.137189 | 0.52311 | -4.81223 |
| REACTOME\_NUCLEAR\_PORE\_COMPLEX\_NPC\_DISASSEMBLY | -0.12638 | -0.00138 | -1.50423 | 0.137302 | 0.523228 | -4.81283 |
| REACTOME\_CHROMOSOME\_MAINTENANCE | -0.09 | -0.06355 | -1.5037 | 0.137439 | 0.523437 | -4.81355 |
| HUMMERICH\_MALIGNANT\_SKIN\_TUMOR\_DN | 0.077513 | -0.17222 | 1.502792 | 0.137673 | 0.524014 | -4.81478 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_2\_UP | 0.129634 | 0.002063 | 1.501058 | 0.13812 | 0.524854 | -4.81712 |
| REACTOME\_PEPTIDE\_HORMONE\_METABOLISM | 0.048169 | -0.0197 | 1.500816 | 0.138183 | 0.524854 | -4.81745 |
| LOPEZ\_MESOTELIOMA\_SURVIVAL\_TIME\_DN | 0.159579 | 0.001676 | 1.500687 | 0.138216 | 0.524854 | -4.81762 |
| LEIN\_MEDULLA\_MARKERS | 0.043504 | -0.10535 | 1.500656 | 0.138224 | 0.524854 | -4.81766 |
| OSMAN\_BLADDER\_CANCER\_DN | -0.09082 | -0.07904 | -1.50011 | 0.138366 | 0.524854 | -4.8184 |
| REACTOME\_PLATELET\_SENSITIZATION\_BY\_LDL | -0.10183 | 0.006871 | -1.49975 | 0.138458 | 0.524854 | -4.81888 |
| GRYDER\_PAX3FOXO1\_ENHANCERS\_IN\_TADS | -0.08527 | -0.04931 | -1.49937 | 0.138555 | 0.524854 | -4.81939 |
| HORIUCHI\_WTAP\_TARGETS\_DN | -0.08978 | -0.06447 | -1.49929 | 0.138578 | 0.524854 | -4.81951 |
| UDAYAKUMAR\_MED1\_TARGETS\_UP | -0.0881 | -0.03956 | -1.49891 | 0.138676 | 0.524854 | -4.82002 |
| REACTOME\_MIRO\_GTPASE\_CYCLE | -0.11013 | -0.08932 | -1.49874 | 0.138719 | 0.524854 | -4.82024 |
| WP\_CODEINE\_AND\_MORPHINE\_METABOLISM | 0.103119 | -0.23843 | 1.496966 | 0.13918 | 0.526286 | -4.82263 |
| KANNAN\_TP53\_TARGETS\_UP | 0.069247 | -0.07139 | 1.496647 | 0.139263 | 0.526287 | -4.82307 |
| KRIEG\_KDM3A\_TARGETS\_NOT\_HYPOXIA | -0.09902 | -0.07603 | -1.49615 | 0.139392 | 0.526377 | -4.82374 |
| WP\_MIRNAS\_INVOLVED\_IN\_DNA\_DAMAGE\_RESPONSE | 0.096284 | -0.00359 | 1.495919 | 0.139452 | 0.526377 | -4.82404 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_DN | -0.10429 | -0.05067 | -1.49534 | 0.139602 | 0.526387 | -4.82482 |
| BIOCARTA\_NKCELLS\_PATHWAY | 0.072796 | -0.28468 | 1.49512 | 0.13966 | 0.526387 | -4.82512 |
| PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_DN | -0.05218 | -0.05645 | -1.49496 | 0.139703 | 0.526387 | -4.82534 |
| REACTOME\_INHIBITION\_OF\_DNA\_RECOMBINATION\_AT\_TELOMERE | -0.11249 | -0.17804 | -1.49378 | 0.14001 | 0.526745 | -4.82693 |
| LENAOUR\_DENDRITIC\_CELL\_MATURATION\_DN | 0.071597 | -0.26299 | 1.493699 | 0.14003 | 0.526745 | -4.82703 |
| BIOCARTA\_DREAM\_PATHWAY | -0.0716 | -0.06675 | -1.4936 | 0.140056 | 0.526745 | -4.82716 |
| WEBER\_METHYLATED\_HCP\_IN\_FIBROBLAST\_UP | 0.13128 | -0.0104 | 1.49325 | 0.140147 | 0.526745 | -4.82763 |
| PID\_CONE\_PATHWAY | 0.121038 | -0.04847 | 1.491963 | 0.140484 | 0.526745 | -4.82936 |
| MIKKELSEN\_NPC\_ICP\_WITH\_H3K27ME3 | 0.101388 | -0.33724 | 1.491495 | 0.140606 | 0.526745 | -4.82999 |
| CHYLA\_CBFA2T3\_TARGETS\_UP | 0.042536 | -0.04592 | 1.490787 | 0.140792 | 0.526745 | -4.83094 |
| REACTOME\_MRNA\_SPLICING | -0.10074 | -0.14232 | -1.49057 | 0.140848 | 0.526745 | -4.83123 |
| REACTOME\_SUMOYLATION\_OF\_UBIQUITINYLATION\_PROTEINS | -0.09728 | -0.1007 | -1.49005 | 0.140986 | 0.526745 | -4.83193 |
| WP\_SYNAPTIC\_SIGNALING\_PATHWAYS\_ASSOCIATED\_WITH\_AUTISM\_SPECTRUM\_DISORDER | -0.04987 | -0.09239 | -1.48956 | 0.141115 | 0.526745 | -4.83259 |
| DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA | -0.10366 | -0.0234 | -1.48881 | 0.14131 | 0.526745 | -4.83359 |
| HEIDENBLAD\_AMPLICON\_12P11\_12\_UP | -0.0842 | -0.07371 | -1.48874 | 0.141329 | 0.526745 | -4.83368 |
| VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_UP | 0.054767 | -0.11387 | 1.48871 | 0.141337 | 0.526745 | -4.83372 |
| DELACROIX\_RARG\_BOUND\_MEF | 0.052132 | -0.10587 | 1.488401 | 0.141418 | 0.526745 | -4.83413 |
| REACTOME\_CONSTITUTIVE\_SIGNALING\_BY\_ABERRANT\_PI3K\_IN\_CANCER | 0.050084 | 0.002139 | 1.487982 | 0.141529 | 0.526745 | -4.8347 |
| REACTOME\_SIGNALING\_BY\_ROBO\_RECEPTORS | -0.08907 | -0.13497 | -1.48753 | 0.141646 | 0.526745 | -4.83529 |
| BIOCARTA\_ION\_PATHWAY | -0.1464 | -0.01295 | -1.48715 | 0.141746 | 0.526745 | -4.8358 |
| BAKER\_HEMATOPOESIS\_STAT5\_TARGETS | 0.146701 | 0.018979 | 1.486693 | 0.141868 | 0.526745 | -4.83642 |
| MARSON\_BOUND\_BY\_E2F4\_UNSTIMULATED | -0.06034 | -0.19672 | -1.48659 | 0.141894 | 0.526745 | -4.83655 |
| GARY\_CD5\_TARGETS\_DN | -0.10134 | -0.10909 | -1.48594 | 0.142067 | 0.526745 | -4.83743 |
| DARWICHE\_SKIN\_TUMOR\_PROMOTER\_UP | 0.057089 | -0.04176 | 1.485748 | 0.142117 | 0.526745 | -4.83768 |
| REACTOME\_ASSEMBLY\_OF\_COLLAGEN\_FIBRILS\_AND\_OTHER\_MULTIMERIC\_STRUCTURES | 0.093964 | -0.07656 | 1.48559 | 0.142159 | 0.526745 | -4.83789 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_CDC25\_UP | 0.067657 | -0.13904 | 1.485239 | 0.142252 | 0.526745 | -4.83836 |
| BIOCARTA\_NDKDYNAMIN\_PATHWAY | -0.14116 | -0.00271 | -1.48512 | 0.142283 | 0.526745 | -4.83852 |
| REACTOME\_RSK\_ACTIVATION | -0.12721 | -0.1105 | -1.48504 | 0.142306 | 0.526745 | -4.83864 |
| JOHNSTONE\_PARVB\_TARGETS\_1\_DN | -0.09447 | -0.12214 | -1.48446 | 0.142458 | 0.526745 | -4.83941 |
| WP\_GASTRIC\_CANCER\_NETWORK\_2 | -0.09314 | -0.03681 | -1.48429 | 0.142503 | 0.526745 | -4.83963 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_WITHOUT\_MGMT\_24HR\_DN | -0.10982 | -0.00157 | -1.48402 | 0.142574 | 0.526745 | -4.83999 |
| AMIT\_SERUM\_RESPONSE\_120\_MCF10A | 0.090124 | -0.07324 | 1.483779 | 0.142638 | 0.526745 | -4.84031 |
| MARZEC\_IL2\_SIGNALING\_UP | 0.066617 | -0.12269 | 1.483623 | 0.142679 | 0.526745 | -4.84052 |
| JOHNSTONE\_PARVB\_TARGETS\_2\_DN | -0.08611 | -0.15581 | -1.48301 | 0.142841 | 0.526745 | -4.84134 |
| REACTOME\_SLC\_MEDIATED\_TRANSMEMBRANE\_TRANSPORT | 0.047341 | -0.073 | 1.482634 | 0.142941 | 0.526745 | -4.84184 |
| DUNNE\_TARGETS\_OF\_AML1\_MTG8\_FUSION\_UP | 0.07772 | -0.17717 | 1.482344 | 0.143018 | 0.526745 | -4.84223 |
| PUJANA\_CHEK2\_PCC\_NETWORK | -0.09682 | -0.12041 | -1.48214 | 0.143072 | 0.526745 | -4.8425 |
| CLIMENT\_BREAST\_CANCER\_COPY\_NUMBER\_DN | 0.106351 | -0.10019 | 1.481935 | 0.143127 | 0.526745 | -4.84278 |
| REACTOME\_TYPE\_I\_HEMIDESMOSOME\_ASSEMBLY | 0.111013 | 0.026148 | 1.481874 | 0.143143 | 0.526745 | -4.84286 |
| BAUS\_TFF2\_TARGETS\_DN | 0.098362 | -0.34329 | 1.481637 | 0.143206 | 0.526745 | -4.84317 |
| REACTOME\_ACTIVATED\_PKN1\_STIMULATES\_TRANSCRIPTION\_OF\_AR\_ANDROGEN\_RECEPTOR\_REGULATED\_GENES\_KLK2\_AND\_KLK3 | 0.111772 | -0.00375 | 1.48144 | 0.143259 | 0.526745 | -4.84344 |
| REACTOME\_PRE\_NOTCH\_PROCESSING\_IN\_THE\_ENDOPLASMIC\_RETICULUM | -0.1117 | -0.29278 | -1.48139 | 0.143271 | 0.526745 | -4.8435 |
| WP\_SCFA\_AND\_SKELETAL\_MUSCLE\_SUBSTRATE\_METABOLISM | 0.134844 | -0.12686 | 1.480805 | 0.143427 | 0.526745 | -4.84428 |
| LEE\_AGING\_NEOCORTEX\_UP | 0.072877 | -0.18173 | 1.480805 | 0.143427 | 0.526745 | -4.84428 |
| REACTOME\_GAMMA\_CARBOXYLATION\_HYPUSINE\_FORMATION\_AND\_ARYLSULFATASE\_ACTIVATION | -0.07148 | -0.02459 | -1.48008 | 0.143621 | 0.526745 | -4.84525 |
| REACTOME\_NUCLEAR\_ENVELOPE\_NE\_REASSEMBLY | -0.09645 | -0.02839 | -1.47985 | 0.143681 | 0.526745 | -4.84555 |
| REACTOME\_DEFECTIVE\_CHSY1\_CAUSES\_TPBS | 0.125793 | -0.02321 | 1.479741 | 0.14371 | 0.526745 | -4.8457 |
| PID\_INTEGRIN1\_PATHWAY | 0.096273 | -0.08458 | 1.479498 | 0.143775 | 0.526745 | -4.84602 |
| BIOCARTA\_P27\_PATHWAY | -0.13545 | -0.0822 | -1.47948 | 0.143779 | 0.526745 | -4.84604 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_2\_DN | 0.099508 | -0.02808 | 1.47905 | 0.143895 | 0.526745 | -4.84662 |
| WP\_HOMOLOGOUS\_RECOMBINATION | -0.10459 | 0.00328 | -1.47873 | 0.14398 | 0.526745 | -4.84704 |
| MATZUK\_EMBRYONIC\_GERM\_CELL | -0.07475 | -0.05512 | -1.47867 | 0.143996 | 0.526745 | -4.84713 |
| SANSOM\_APC\_TARGETS | -0.03977 | -0.05304 | -1.4784 | 0.144067 | 0.526745 | -4.84748 |
| REACTOME\_SODIUM\_PROTON\_EXCHANGERS | 0.081887 | -0.00936 | 1.47825 | 0.144108 | 0.526745 | -4.84768 |
| YAMANAKA\_GLIOBLASTOMA\_SURVIVAL\_DN | 0.068975 | -0.4495 | 1.477969 | 0.144183 | 0.526745 | -4.84806 |
| BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_DN | -0.08675 | -0.11173 | -1.47796 | 0.144184 | 0.526745 | -4.84806 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_HD\_MTX\_UP | -0.12215 | -0.00982 | -1.47668 | 0.144528 | 0.527698 | -4.84978 |
| HOUNKPE\_HOUSEKEEPING\_GENES | -0.1123 | -0.10602 | -1.47578 | 0.144768 | 0.52818 | -4.85096 |
| BARRIER\_COLON\_CANCER\_RECURRENCE\_UP | -0.12288 | -0.03214 | -1.47556 | 0.144826 | 0.52818 | -4.85125 |
| REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE | -0.10456 | -0.04276 | -1.47341 | 0.145403 | 0.529741 | -4.85411 |
| REACTOME\_ACTIVATED\_NTRK2\_SIGNALS\_THROUGH\_FYN | 0.106142 | -0.01952 | 1.473349 | 0.145421 | 0.529741 | -4.85419 |
| REACTOME\_PROCESSING\_OF\_CAPPED\_INTRON\_CONTAINING\_PRE\_MRNA | -0.09728 | -0.13725 | -1.47192 | 0.145804 | 0.530152 | -4.85608 |
| MIKKELSEN\_MEF\_HCP\_WITH\_H3K27ME3 | 0.0956 | -0.07762 | 1.471762 | 0.145848 | 0.530152 | -4.8563 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D9 | -0.13498 | -0.04078 | -1.47149 | 0.145922 | 0.530152 | -4.85666 |
| WP\_GPCRS\_CLASS\_C\_METABOTROPIC\_GLUTAMATE\_PHEROMONE | 0.108125 | -0.23668 | 1.4714 | 0.145946 | 0.530152 | -4.85678 |
| REACTOME\_RECRUITMENT\_OF\_MITOTIC\_CENTROSOME\_PROTEINS\_AND\_COMPLEXES | -0.06688 | -0.13311 | -1.47121 | 0.145997 | 0.530152 | -4.85703 |
| REACTOME\_SUMOYLATION\_OF\_SUMOYLATION\_PROTEINS | -0.12026 | 0.000325 | -1.47107 | 0.146033 | 0.530152 | -4.85721 |
| REACTOME\_LDL\_REMODELING | -0.10403 | -0.00299 | -1.47051 | 0.146185 | 0.530398 | -4.85795 |
| RODRIGUES\_THYROID\_CARCINOMA\_ANAPLASTIC\_DN | -0.07892 | -0.06137 | -1.46845 | 0.146742 | 0.532116 | -4.86068 |
| REACTOME\_ION\_HOMEOSTASIS | -0.06312 | -0.01229 | -1.46781 | 0.146915 | 0.532442 | -4.86153 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_LATE\_UP | 0.104901 | -0.01554 | 1.466874 | 0.14717 | 0.53306 | -4.86276 |
| REACTOME\_SIGNALING\_BY\_FGFR2 | -0.06413 | -0.03962 | -1.46594 | 0.147423 | 0.533576 | -4.864 |
| REACTOME\_PHOSPHATE\_BOND\_HYDROLYSIS\_BY\_NTPDASE\_PROTEINS | 0.098178 | 0.023918 | 1.465732 | 0.14748 | 0.533576 | -4.86427 |
| WHITESIDE\_CISPLATIN\_RESISTANCE\_UP | 0.118569 | -0.00802 | 1.464949 | 0.147693 | 0.534043 | -4.86531 |
| KEGG\_VALINE\_LEUCINE\_AND\_ISOLEUCINE\_DEGRADATION | -0.12411 | -0.05351 | -1.4645 | 0.147816 | 0.534055 | -4.8659 |
| BIOCARTA\_P38MAPK\_PATHWAY | -0.09051 | -0.12526 | -1.46416 | 0.147908 | 0.534055 | -4.86635 |
| REACTOME\_FOXO\_MEDIATED\_TRANSCRIPTION\_OF\_CELL\_DEATH\_GENES | -0.10315 | -0.00387 | -1.46399 | 0.147954 | 0.534055 | -4.86657 |
| WP\_MFAP5MEDIATED\_OVARIAN\_CANCER\_CELL\_MOTILITY\_AND\_INVASIVENESS | -0.12655 | -0.01899 | -1.46371 | 0.148031 | 0.534055 | -4.86695 |
| REACTOME\_INTERACTIONS\_OF\_REV\_WITH\_HOST\_CELLULAR\_PROTEINS | -0.12617 | -0.00143 | -1.46317 | 0.148177 | 0.534278 | -4.86765 |
| WEBER\_METHYLATED\_HCP\_IN\_SPERM\_DN | 0.127328 | 0.017045 | 1.462241 | 0.148431 | 0.53489 | -4.86888 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_F\_DN | 0.056215 | -0.05312 | 1.461299 | 0.148689 | 0.535514 | -4.87012 |
| REACTOME\_SYNTHESIS\_OF\_PIPS\_AT\_THE\_ER\_MEMBRANE | -0.17313 | 0.004791 | -1.46061 | 0.148877 | 0.535889 | -4.87102 |
| WP\_AMPACTIVATED\_PROTEIN\_KINASE\_AMPK\_SIGNALING | -0.05585 | -0.05363 | -1.46017 | 0.148998 | 0.535904 | -4.8716 |
| DONATO\_CELL\_CYCLE\_TRETINOIN | 0.126959 | 0.009635 | 1.459858 | 0.149083 | 0.535904 | -4.87201 |
| HEIDENBLAD\_AMPLICON\_12P11\_12\_DN | -0.07866 | -0.03593 | -1.45967 | 0.149134 | 0.535904 | -4.87225 |
| WEI\_MIR34A\_TARGETS | -0.08633 | -0.02418 | -1.45891 | 0.149343 | 0.536073 | -4.87326 |
| KANG\_DOXORUBICIN\_RESISTANCE\_DN | -0.10761 | -0.1073 | -1.45889 | 0.149349 | 0.536073 | -4.87329 |
| CHEN\_LIVER\_METABOLISM\_QTL\_CIS | -0.07919 | -0.03579 | -1.45794 | 0.149609 | 0.536704 | -4.87453 |
| MCCABE\_HOXC6\_TARGETS\_UP | 0.102455 | 0.019693 | 1.457401 | 0.149758 | 0.536935 | -4.87524 |
| WP\_BIOGENIC\_AMINE\_SYNTHESIS | 0.109518 | 0.018278 | 1.456442 | 0.150022 | 0.537419 | -4.8765 |
| WP\_DEVELOPMENT\_AND\_HETEROGENEITY\_OF\_THE\_ILC\_FAMILY | 0.060401 | -0.17932 | 1.456297 | 0.150062 | 0.537419 | -4.87669 |
| KEGG\_PROPANOATE\_METABOLISM | -0.12398 | -0.06497 | -1.45591 | 0.150168 | 0.537495 | -4.87719 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_UP | 0.059788 | -0.05816 | 1.45462 | 0.150524 | 0.538469 | -4.87889 |
| LI\_LUNG\_CANCER | 0.074411 | -0.17207 | 1.453596 | 0.150807 | 0.53878 | -4.88023 |
| REACTOME\_EPHA\_MEDIATED\_GROWTH\_CONE\_COLLAPSE | 0.063827 | -0.06057 | 1.453589 | 0.150809 | 0.53878 | -4.88024 |
| REACTOME\_TRANSPORT\_OF\_MATURE\_MRNAS\_DERIVED\_FROM\_INTRONLESS\_TRANSCRIPTS | -0.11783 | -0.02874 | -1.4533 | 0.150889 | 0.53878 | -4.88062 |
| WP\_NEURAL\_CREST\_CELL\_MIGRATION\_IN\_CANCER | 0.065243 | -0.04162 | 1.452974 | 0.150979 | 0.53878 | -4.88105 |
| SA\_REG\_CASCADE\_OF\_CYCLIN\_EXPR | 0.067237 | -0.18122 | 1.452521 | 0.151105 | 0.53878 | -4.88164 |
| REACTOME\_ACTIVATION\_OF\_NIMA\_KINASES\_NEK9\_NEK6\_NEK7 | -0.13645 | -0.01458 | -1.45247 | 0.151119 | 0.53878 | -4.88171 |
| REACTOME\_SYNTHESIS\_OF\_LEUKOTRIENES\_LT\_AND\_EOXINS\_EX | 0.07589 | -0.08168 | 1.451954 | 0.151262 | 0.538829 | -4.88238 |
| PID\_HEDGEHOG\_GLI\_PATHWAY | -0.08565 | -0.01352 | -1.45181 | 0.151302 | 0.538829 | -4.88257 |
| REACTOME\_DNA\_REPLICATION\_PRE\_INITIATION | -0.09159 | -0.1791 | -1.45123 | 0.151464 | 0.539102 | -4.88333 |
| ONGUSAHA\_TP53\_TARGETS | 0.059163 | -0.25802 | 1.450403 | 0.151692 | 0.539614 | -4.88441 |
| MANNE\_COVID19\_ICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP | 0.061352 | -0.00105 | 1.449497 | 0.151944 | 0.540034 | -4.88559 |
| REACTOME\_CA2\_PATHWAY | -0.05676 | -0.03421 | -1.44937 | 0.15198 | 0.540034 | -4.88576 |
| REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS | -0.06984 | -0.14636 | -1.44872 | 0.15216 | 0.54037 | -4.8866 |
| WP\_NEPHROTIC\_SYNDROME | -0.05928 | -0.02224 | -1.44781 | 0.152415 | 0.540432 | -4.8878 |
| FEVR\_CTNNB1\_TARGETS\_DN | -0.07753 | -0.10691 | -1.44767 | 0.152454 | 0.540432 | -4.88798 |
| REACTOME\_NEUROTOXICITY\_OF\_CLOSTRIDIUM\_TOXINS | -0.09985 | 0.007647 | -1.44733 | 0.152549 | 0.540432 | -4.88842 |
| STANELLE\_E2F1\_TARGETS | 0.070558 | -0.05488 | 1.447118 | 0.152607 | 0.540432 | -4.8887 |
| CROONQUIST\_NRAS\_SIGNALING\_DN | -0.09608 | -0.06338 | -1.44657 | 0.152759 | 0.540432 | -4.88941 |
| STAMBOLSKY\_TARGETS\_OF\_MUTATED\_TP53\_DN | 0.070871 | -0.18441 | 1.44653 | 0.152772 | 0.540432 | -4.88946 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_DEPENDENT\_BLOCKED\_BY\_FZD8CRD | 0.087482 | -0.03893 | 1.446304 | 0.152835 | 0.540432 | -4.88976 |
| REACTOME\_ROS\_AND\_RNS\_PRODUCTION\_IN\_PHAGOCYTES | 0.073872 | -0.16534 | 1.446226 | 0.152856 | 0.540432 | -4.88986 |
| DASU\_IL6\_SIGNALING\_SCAR\_UP | 0.066039 | -0.09139 | 1.445589 | 0.153034 | 0.540762 | -4.89069 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_FORMINS | -0.07252 | -0.02903 | -1.44507 | 0.153179 | 0.540902 | -4.89136 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_DN\_CTNNB1\_DEPENDENT\_BLOCKED\_BY\_FZD8CRD | 0.078597 | -0.19804 | 1.444457 | 0.153351 | 0.540902 | -4.89217 |
| REACTOME\_STAT3\_NUCLEAR\_EVENTS\_DOWNSTREAM\_OF\_ALK\_SIGNALING | 0.158205 | -0.00473 | 1.444041 | 0.153468 | 0.540902 | -4.89271 |
| QUINTENS\_EMBRYONIC\_BRAIN\_RESPONSE\_TO\_IR | 0.042033 | -0.10146 | 1.443807 | 0.153534 | 0.540902 | -4.89301 |
| LUI\_THYROID\_CANCER\_CLUSTER\_2 | 0.069223 | -0.03056 | 1.443724 | 0.153557 | 0.540902 | -4.89312 |
| PID\_IL8\_CXCR1\_PATHWAY | 0.097975 | -0.0055 | 1.443628 | 0.153584 | 0.540902 | -4.89325 |
| DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA\_E2 | -0.06677 | -0.1018 | -1.44263 | 0.153863 | 0.541132 | -4.89454 |
| WP\_FOXP3\_IN\_COVID19 | 0.103276 | -0.06766 | 1.442404 | 0.153928 | 0.541132 | -4.89484 |
| BIOCARTA\_TH1TH2\_PATHWAY | 0.052777 | -0.42065 | 1.442373 | 0.153936 | 0.541132 | -4.89488 |
| WP\_CEREBRAL\_ORGANIC\_ACIDURIAS\_INCLUDING\_DISEASES | -0.14161 | -0.00303 | -1.44217 | 0.153992 | 0.541132 | -4.89514 |
| KEGG\_DRUG\_METABOLISM\_OTHER\_ENZYMES | 0.080883 | -0.0715 | 1.441763 | 0.154108 | 0.541132 | -4.89567 |
| HOLLERN\_EMT\_BREAST\_TUMOR\_DN | 0.061843 | -0.12871 | 1.441551 | 0.154167 | 0.541132 | -4.89595 |
| BIOCARTA\_FLUMAZENIL\_PATHWAY | 0.102392 | -0.0142 | 1.441158 | 0.154278 | 0.541132 | -4.89646 |
| REACTOME\_TFAP2\_AP\_2\_FAMILY\_REGULATES\_TRANSCRIPTION\_OF\_GROWTH\_FACTORS\_AND\_THEIR\_RECEPTORS | 0.072269 | 0.017838 | 1.440975 | 0.15433 | 0.541132 | -4.8967 |
| WP\_TRANSLATION\_FACTORS | -0.11267 | -0.07878 | -1.44011 | 0.154573 | 0.541461 | -4.89782 |
| JOHANSSON\_BRAIN\_CANCER\_EARLY\_VS\_LATE\_UP | 0.104319 | -0.00932 | 1.440038 | 0.154594 | 0.541461 | -4.89791 |
| FINETTI\_BREAST\_CANCER\_KINOME\_RED | -0.14919 | -0.03497 | -1.43926 | 0.154814 | 0.541889 | -4.89892 |
| HOLLMANN\_APOPTOSIS\_VIA\_CD40\_DN | -0.07268 | -0.23243 | -1.439 | 0.154886 | 0.541889 | -4.89926 |
| MEISSNER\_NPC\_HCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.072438 | -0.03356 | 1.43869 | 0.154974 | 0.541899 | -4.89966 |
| WP\_CANONICAL\_AND\_NONCANONICAL\_TGFB\_SIGNALING | -0.09977 | -0.10982 | -1.43701 | 0.15545 | 0.542808 | -4.90184 |
| PID\_TXA2PATHWAY | 0.064923 | -0.03675 | 1.436906 | 0.155479 | 0.542808 | -4.90197 |
| KORKOLA\_EMBRYONAL\_CARCINOMA\_DN | 0.139491 | 0.03572 | 1.436866 | 0.15549 | 0.542808 | -4.90203 |
| WP\_FATTY\_ACID\_BIOSYNTHESIS | -0.12156 | -0.09287 | -1.43612 | 0.155701 | 0.543152 | -4.90299 |
| SEAVEY\_EPITHELIOID\_HEMANGIOENDOTHELIOMA | 0.060621 | -0.00343 | 1.435507 | 0.155875 | 0.543152 | -4.90379 |
| MIKKELSEN\_ES\_ICP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.058593 | -0.10151 | 1.435171 | 0.155971 | 0.543152 | -4.90422 |
| RAMALHO\_STEMNESS\_UP | -0.09465 | -0.08775 | -1.43502 | 0.156012 | 0.543152 | -4.90441 |
| BENPORATH\_NANOG\_TARGETS | -0.07247 | -0.12236 | -1.43501 | 0.156015 | 0.543152 | -4.90442 |
| NIKOLSKY\_BREAST\_CANCER\_8P12\_P11\_AMPLICON | -0.04711 | -0.07372 | -1.43367 | 0.156399 | 0.544189 | -4.90617 |
| WONG\_EMBRYONIC\_STEM\_CELL\_CORE | -0.09533 | -0.09337 | -1.43262 | 0.156697 | 0.544838 | -4.90752 |
| KEGG\_STARCH\_AND\_SUCROSE\_METABOLISM | 0.055692 | -0.11181 | 1.432409 | 0.156756 | 0.544838 | -4.90779 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_DN | 0.093852 | -0.33708 | 1.431672 | 0.156967 | 0.545161 | -4.90875 |
| NABA\_CORE\_MATRISOME | 0.066399 | -0.08437 | 1.431483 | 0.157021 | 0.545161 | -4.90899 |
| UZONYI\_RESPONSE\_TO\_LEUKOTRIENE\_AND\_THROMBIN | 0.147673 | -0.01157 | 1.430828 | 0.157208 | 0.545512 | -4.90983 |
| REACTOME\_SENSORY\_PERCEPTION\_OF\_TASTE | 0.063579 | -0.27961 | 1.430286 | 0.157362 | 0.545752 | -4.91053 |
| WANG\_METASTASIS\_OF\_BREAST\_CANCER\_ESR1\_UP | -0.10771 | -0.01723 | -1.42955 | 0.157574 | 0.546033 | -4.91149 |
| REACTOME\_INTEGRIN\_CELL\_SURFACE\_INTERACTIONS | 0.071396 | -0.00359 | 1.429403 | 0.157615 | 0.546033 | -4.91167 |
| REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE | -0.12146 | -0.04663 | -1.42878 | 0.157794 | 0.546354 | -4.91248 |
| REACTOME\_NA\_CL\_DEPENDENT\_NEUROTRANSMITTER\_TRANSPORTERS | 0.122418 | -0.02545 | 1.428314 | 0.157927 | 0.546449 | -4.91308 |
| LEE\_BMP2\_TARGETS\_DN | -0.08268 | -0.06872 | -1.42801 | 0.158014 | 0.546449 | -4.91347 |
| KEGG\_AMINOACYL\_TRNA\_BIOSYNTHESIS | -0.07925 | -0.2368 | -1.42779 | 0.158079 | 0.546449 | -4.91376 |
| REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_LAGGING\_STRAND | -0.13223 | 0.00803 | -1.42746 | 0.158173 | 0.546479 | -4.91418 |
| NIKOLSKY\_BREAST\_CANCER\_8Q23\_Q24\_AMPLICON | -0.03472 | -0.15894 | -1.4265 | 0.158449 | 0.547133 | -4.91542 |
| REACTOME\_MUCOPOLYSACCHARIDOSES | 0.110487 | -0.01561 | 1.425103 | 0.15885 | 0.547456 | -4.91721 |
| KEGG\_OXIDATIVE\_PHOSPHORYLATION | -0.08551 | -0.18219 | -1.42499 | 0.158881 | 0.547456 | -4.91735 |
| KEGG\_INSULIN\_SIGNALING\_PATHWAY | -0.0542 | -0.11299 | -1.42463 | 0.158987 | 0.547456 | -4.91782 |
| REACTOME\_THE\_ROLE\_OF\_NEF\_IN\_HIV\_1\_REPLICATION\_AND\_DISEASE\_PATHOGENESIS | 0.105948 | -0.06298 | 1.424127 | 0.159131 | 0.547456 | -4.91846 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_UP | -0.10651 | -0.06915 | -1.42356 | 0.159295 | 0.547456 | -4.91919 |
| SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_DN | -0.07627 | -0.15045 | -1.42308 | 0.159433 | 0.547456 | -4.91981 |
| REACTOME\_METABOLISM\_OF\_INGESTED\_SEMET\_SEC\_MESEC\_INTO\_H2SE | -0.10099 | -0.0003 | -1.42308 | 0.159434 | 0.547456 | -4.91981 |
| REACTOME\_TRANSPORT\_OF\_SMALL\_MOLECULES | 0.027909 | -0.10185 | 1.42276 | 0.159525 | 0.547456 | -4.92022 |
| WP\_NEURAL\_CREST\_CELL\_MIGRATION\_DURING\_DEVELOPMENT | 0.061102 | -0.04329 | 1.422388 | 0.159633 | 0.547456 | -4.9207 |
| JIANG\_TIP30\_TARGETS\_UP | -0.10474 | -0.13864 | -1.42142 | 0.159912 | 0.547456 | -4.92193 |
| REACTOME\_BETA\_OXIDATION\_OF\_DECANOYL\_COA\_TO\_OCTANOYL\_COA\_COA | -0.16124 | 0.000314 | -1.42133 | 0.159938 | 0.547456 | -4.92205 |
| COLIN\_PILOCYTIC\_ASTROCYTOMA\_VS\_GLIOBLASTOMA\_UP | 0.07205 | -0.19715 | 1.421295 | 0.159949 | 0.547456 | -4.9221 |
| REACTOME\_TRNA\_AMINOACYLATION | -0.10925 | -0.08488 | -1.42127 | 0.159956 | 0.547456 | -4.92213 |
| REICHERT\_MITOSIS\_LIN9\_TARGETS | -0.12167 | -0.02698 | -1.42084 | 0.160082 | 0.547456 | -4.92269 |
| WP\_CANCER\_IMMUNOTHERAPY\_BY\_PD1\_BLOCKADE | 0.064785 | -0.35759 | 1.420514 | 0.160175 | 0.547456 | -4.9231 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_DN | -0.09767 | -0.05084 | -1.41997 | 0.160334 | 0.547456 | -4.9238 |
| ABE\_VEGFA\_TARGETS | 0.103686 | -0.00484 | 1.41981 | 0.16038 | 0.547456 | -4.924 |
| MEISSNER\_NPC\_HCP\_WITH\_H3K4ME2 | 0.047488 | -0.04724 | 1.419589 | 0.160444 | 0.547456 | -4.92429 |
| REACTOME\_HDMS\_DEMETHYLATE\_HISTONES | 0.104879 | -0.00124 | 1.419569 | 0.16045 | 0.547456 | -4.92431 |
| BOYLAN\_MULTIPLE\_MYELOMA\_D\_CLUSTER\_UP | -0.07691 | -0.00461 | -1.41947 | 0.160479 | 0.547456 | -4.92444 |
| KANG\_IMMORTALIZED\_BY\_TERT\_UP | 0.056242 | -0.03558 | 1.418936 | 0.160633 | 0.547456 | -4.92512 |
| NABA\_PROTEOGLYCANS | 0.076374 | -0.02556 | 1.418731 | 0.160693 | 0.547456 | -4.92539 |
| BIOCARTA\_BTG2\_PATHWAY | 0.076709 | -0.00857 | 1.41849 | 0.160763 | 0.547456 | -4.92569 |
| VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_DN | -0.10784 | -0.13192 | -1.41846 | 0.16077 | 0.547456 | -4.92573 |
| KEGG\_NEUROACTIVE\_LIGAND\_RECEPTOR\_INTERACTION | 0.089083 | -0.05436 | 1.418457 | 0.160772 | 0.547456 | -4.92574 |
| VARELA\_ZMPSTE24\_TARGETS\_UP | 0.088408 | -0.04493 | 1.418436 | 0.160778 | 0.547456 | -4.92576 |
| REACTOME\_COLLAGEN\_CHAIN\_TRIMERIZATION | 0.094383 | -0.08282 | 1.417577 | 0.161028 | 0.547946 | -4.92686 |
| KEGG\_BUTANOATE\_METABOLISM | -0.08673 | -0.0352 | -1.41735 | 0.161095 | 0.547946 | -4.92715 |
| LIU\_SOX4\_TARGETS\_DN | -0.0697 | -0.12081 | -1.41687 | 0.161235 | 0.547952 | -4.92777 |
| BLALOCK\_ALZHEIMERS\_DISEASE\_DN | -0.08803 | -0.09174 | -1.41675 | 0.161269 | 0.547952 | -4.92792 |
| REACTOME\_NGF\_STIMULATED\_TRANSCRIPTION | 0.085759 | -0.02759 | 1.416199 | 0.16143 | 0.548206 | -4.92862 |
| REACTOME\_THE\_RETINOID\_CYCLE\_IN\_CONES\_DAYLIGHT\_VISION | 0.121613 | 0.02202 | 1.415723 | 0.161569 | 0.548271 | -4.92923 |
| PID\_BMP\_PATHWAY | -0.07022 | -0.06687 | -1.41507 | 0.161759 | 0.548271 | -4.93007 |
| APPEL\_IMATINIB\_RESPONSE | 0.095558 | -0.24432 | 1.414934 | 0.161799 | 0.548271 | -4.93024 |
| BIOCARTA\_SLRP\_PATHWAY | 0.148711 | -0.02419 | 1.414737 | 0.161857 | 0.548271 | -4.93049 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_7\_DN | 0.148357 | 0.035569 | 1.414348 | 0.16197 | 0.548271 | -4.93099 |
| CAIRO\_HEPATOBLASTOMA\_DN | 0.036339 | -0.06811 | 1.41378 | 0.162136 | 0.548271 | -4.93171 |
| MATTHEWS\_AP1\_TARGETS | 0.111639 | 0.007481 | 1.412931 | 0.162385 | 0.548271 | -4.9328 |
| BOYLAN\_MULTIPLE\_MYELOMA\_PCA3\_DN | -0.06528 | -0.04315 | -1.41289 | 0.162398 | 0.548271 | -4.93285 |
| REACTOME\_ADENYLATE\_CYCLASE\_ACTIVATING\_PATHWAY | -0.09443 | -0.08881 | -1.4128 | 0.162422 | 0.548271 | -4.93296 |
| REACTOME\_BRANCHED\_CHAIN\_AMINO\_ACID\_CATABOLISM | -0.12501 | -0.01012 | -1.41279 | 0.162425 | 0.548271 | -4.93297 |
| WP\_MIRNA\_TARGETS\_IN\_ECM\_AND\_MEMBRANE\_RECEPTORS | 0.11824 | -0.23802 | 1.412277 | 0.162577 | 0.548271 | -4.93363 |
| REACTOME\_SIGNALING\_BY\_NTRK2\_TRKB | -0.06119 | -0.03248 | -1.41164 | 0.162762 | 0.548271 | -4.93444 |
| MORI\_IMMATURE\_B\_LYMPHOCYTE\_UP | 0.066809 | -0.311 | 1.411599 | 0.162775 | 0.548271 | -4.9345 |
| BIOCARTA\_INSULIN\_PATHWAY | -0.10734 | -0.07492 | -1.41159 | 0.162778 | 0.548271 | -4.93451 |
| ACEVEDO\_METHYLATED\_IN\_LIVER\_CANCER\_DN | 0.043107 | -0.13183 | 1.411476 | 0.162812 | 0.548271 | -4.93465 |
| PID\_MYC\_ACTIV\_PATHWAY | 0.063844 | -0.2872 | 1.411414 | 0.16283 | 0.548271 | -4.93473 |
| WP\_TRANSSULFURATION\_PATHWAY | -0.14153 | -0.0033 | -1.41048 | 0.163103 | 0.548271 | -4.93592 |
| VERHAAK\_GLIOBLASTOMA\_NEURAL | -0.06097 | -0.03299 | -1.41043 | 0.16312 | 0.548271 | -4.93599 |
| WANG\_MLL\_TARGETS | 0.049986 | -0.0841 | 1.410151 | 0.163201 | 0.548271 | -4.93634 |
| REACTOME\_NS1\_MEDIATED\_EFFECTS\_ON\_HOST\_PATHWAYS | -0.11362 | -0.02132 | -1.40996 | 0.163258 | 0.548271 | -4.93659 |
| BIOCARTA\_CFTR\_PATHWAY | -0.07892 | -0.07713 | -1.40978 | 0.163309 | 0.548271 | -4.93681 |
| REACTOME\_HYDROLYSIS\_OF\_LPC | 0.129754 | -0.01502 | 1.409589 | 0.163366 | 0.548271 | -4.93706 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_RED\_DN | -0.10864 | -0.07447 | -1.40904 | 0.163526 | 0.548271 | -4.93775 |
| BIOCARTA\_STATHMIN\_PATHWAY | -0.10201 | -0.06104 | -1.40856 | 0.16367 | 0.548271 | -4.93837 |
| FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_UP | 0.066425 | 0.013778 | 1.408517 | 0.163682 | 0.548271 | -4.93842 |
| HANN\_RESISTANCE\_TO\_BCL2\_INHIBITOR\_DN | 0.048428 | -0.13749 | 1.408494 | 0.163689 | 0.548271 | -4.93845 |
| MURAKAMI\_UV\_RESPONSE\_1HR\_DN | 0.094552 | -0.01454 | 1.407711 | 0.163919 | 0.548298 | -4.93944 |
| WP\_MIRNA\_REGULATION\_OF\_PROSTATE\_CANCER\_SIGNALING\_PATHWAYS | 0.07429 | -0.05965 | 1.407608 | 0.16395 | 0.548298 | -4.93958 |
| KEGG\_PYRIMIDINE\_METABOLISM | -0.07968 | -0.03848 | -1.40759 | 0.163955 | 0.548298 | -4.9396 |
| WP\_ARYL\_HYDROCARBON\_RECEPTOR\_PATHWAY\_WP2873 | 0.05331 | -0.12837 | 1.406582 | 0.164253 | 0.549005 | -4.94088 |
| STEIN\_ESRRA\_TARGETS\_DN | -0.0903 | -0.15109 | -1.40583 | 0.164474 | 0.549328 | -4.94183 |
| ONKEN\_UVEAL\_MELANOMA\_DN | -0.09103 | -0.08654 | -1.40548 | 0.164578 | 0.549328 | -4.94227 |
| REACTOME\_NR1H2\_NR1H3\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_GLUCONEOGENESIS | 0.093814 | -0.46027 | 1.404961 | 0.164732 | 0.549328 | -4.94294 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_7 | -0.04831 | -0.23479 | -1.40482 | 0.164774 | 0.549328 | -4.94311 |
| WP\_SEROTONIN\_RECEPTOR\_467\_AND\_NR3C\_SIGNALING | -0.10075 | 0.005702 | -1.4048 | 0.164781 | 0.549328 | -4.94315 |
| SU\_SALIVARY\_GLAND | 0.124746 | 0.037538 | 1.404294 | 0.16493 | 0.549537 | -4.94378 |
| SERVITJA\_ISLET\_HNF1A\_TARGETS\_UP | 0.063607 | -0.05661 | 1.403749 | 0.165092 | 0.549545 | -4.94447 |
| REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_Y\_FAMILY\_DNA\_POLYMERASES\_BYPASSES\_LESIONS\_ON\_DNA\_TEMPLATE | -0.09728 | 0.00127 | -1.4037 | 0.165105 | 0.549545 | -4.94453 |
| STEGER\_ADIPOGENESIS\_UP | 0.116881 | -0.02783 | 1.402872 | 0.165352 | 0.549719 | -4.94559 |
| REACTOME\_PROPIONYL\_COA\_CATABOLISM | -0.1744 | -0.02432 | -1.40269 | 0.165407 | 0.549719 | -4.94582 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_DN | -0.08076 | -0.06051 | -1.40265 | 0.165417 | 0.549719 | -4.94586 |
| REACTOME\_LGI\_ADAM\_INTERACTIONS | 0.112323 | 0.024665 | 1.401328 | 0.165811 | 0.550742 | -4.94754 |
| ELVIDGE\_HIF1A\_AND\_HIF2A\_TARGETS\_DN | 0.086446 | -0.06551 | 1.400554 | 0.166042 | 0.55089 | -4.94852 |
| IKEDA\_MIR1\_TARGETS\_DN | -0.12037 | -0.00805 | -1.40055 | 0.166044 | 0.55089 | -4.94853 |
| REACTOME\_ACETYLCHOLINE\_INHIBITS\_CONTRACTION\_OF\_OUTER\_HAIR\_CELLS | 0.125633 | 0.006834 | 1.399902 | 0.166236 | 0.55089 | -4.94935 |
| ZHU\_CMV\_8\_HR\_UP | 0.060206 | -0.26299 | 1.399835 | 0.166256 | 0.55089 | -4.94943 |
| OUYANG\_PROSTATE\_CANCER\_PROGRESSION\_UP | 0.103589 | -0.10029 | 1.399566 | 0.166336 | 0.55089 | -4.94977 |
| RUNNE\_GENDER\_EFFECT\_UP | -0.14181 | -0.01545 | -1.39944 | 0.166375 | 0.55089 | -4.94993 |
| WP\_OXYSTEROLS\_DERIVED\_FROM\_CHOLESTEROL | 0.056319 | -0.02193 | 1.398212 | 0.16674 | 0.551242 | -4.95148 |
| REACTOME\_SIGNAL\_REGULATORY\_PROTEIN\_FAMILY\_INTERACTIONS | 0.100593 | -0.00546 | 1.397408 | 0.166981 | 0.551242 | -4.9525 |
| HELLER\_SILENCED\_BY\_METHYLATION\_UP | 0.039251 | -0.29719 | 1.397338 | 0.167002 | 0.551242 | -4.95259 |
| REACTOME\_CELL\_JUNCTION\_ORGANIZATION | 0.058476 | -0.01303 | 1.397286 | 0.167018 | 0.551242 | -4.95265 |
| REACTOME\_REGULATION\_OF\_PTEN\_GENE\_TRANSCRIPTION | -0.07507 | -0.09532 | -1.39689 | 0.167137 | 0.551242 | -4.95315 |
| SAKAI\_TUMOR\_INFILTRATING\_MONOCYTES\_DN | -0.11765 | -0.03929 | -1.39675 | 0.167178 | 0.551242 | -4.95333 |
| REACTOME\_DNA\_DAMAGE\_BYPASS | -0.09564 | -0.0028 | -1.39657 | 0.167231 | 0.551242 | -4.95355 |
| REACTOME\_ACYL\_CHAIN\_REMODELING\_OF\_DAG\_AND\_TAG | 0.099051 | -0.11726 | 1.396554 | 0.167237 | 0.551242 | -4.95357 |
| BENNETT\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS | 0.076567 | -0.2753 | 1.396436 | 0.167272 | 0.551242 | -4.95372 |
| CAIRO\_HEPATOBLASTOMA\_UP | -0.08531 | -0.12797 | -1.39618 | 0.167348 | 0.551242 | -4.95404 |
| ZWANG\_CLASS\_1\_TRANSIENTLY\_INDUCED\_BY\_EGF | 0.056533 | -0.09978 | 1.395524 | 0.167546 | 0.551609 | -4.95487 |
| BIOCARTA\_IGF1R\_PATHWAY | -0.08269 | -0.10124 | -1.39521 | 0.167638 | 0.551629 | -4.95526 |
| LAMB\_CCND1\_TARGETS | 0.054022 | -0.32449 | 1.394462 | 0.167865 | 0.552039 | -4.95621 |
| BIOCARTA\_SHH\_PATHWAY | -0.08676 | -0.10267 | -1.39422 | 0.167936 | 0.552039 | -4.95651 |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_4 | -0.05695 | -0.0879 | -1.39372 | 0.168088 | 0.55208 | -4.95715 |
| SARTIPY\_NORMAL\_AT\_INSULIN\_RESISTANCE\_UP | 0.122732 | -0.01373 | 1.393512 | 0.16815 | 0.55208 | -4.95741 |
| REACTOME\_SEMA3A\_PLEXIN\_REPULSION\_SIGNALING\_BY\_INHIBITING\_INTEGRIN\_ADHESION | 0.109171 | -0.00336 | 1.393316 | 0.168209 | 0.55208 | -4.95766 |
| REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK | -0.12776 | -0.00447 | -1.39288 | 0.16834 | 0.552224 | -4.9582 |
| ROSS\_LEUKEMIA\_WITH\_MLL\_FUSIONS | -0.07593 | -0.09597 | -1.39249 | 0.168459 | 0.552252 | -4.9587 |
| PID\_IL4\_2PATHWAY | 0.07221 | -0.08717 | 1.39217 | 0.168555 | 0.552252 | -4.9591 |
| ALONSO\_METASTASIS\_UP | -0.10906 | -0.06043 | -1.39144 | 0.168775 | 0.552252 | -4.96002 |
| MIKKELSEN\_NPC\_LCP\_WITH\_H3K4ME3 | 0.047609 | -0.22023 | 1.391286 | 0.168821 | 0.552252 | -4.96021 |
| WANG\_ADIPOGENIC\_GENES\_REPRESSED\_BY\_SIRT1 | 0.093564 | -0.10199 | 1.391234 | 0.168837 | 0.552252 | -4.96027 |
| PID\_ATF2\_PATHWAY | 0.077962 | -0.04424 | 1.391127 | 0.168869 | 0.552252 | -4.96041 |
| REACTOME\_SYNTHESIS\_OF\_IP3\_AND\_IP4\_IN\_THE\_CYTOSOL | -0.06334 | -0.10937 | -1.39083 | 0.168959 | 0.552263 | -4.96078 |
| REACTOME\_SYNTHESIS\_OF\_PIPS\_AT\_THE\_PLASMA\_MEMBRANE | -0.06984 | -0.07536 | -1.39002 | 0.169202 | 0.552476 | -4.96179 |
| REACTOME\_PROCESSING\_OF\_SMDT1 | -0.13014 | -0.12869 | -1.38992 | 0.169233 | 0.552476 | -4.96192 |
| WAESCH\_ANAPHASE\_PROMOTING\_COMPLEX | -0.12661 | -0.0152 | -1.38956 | 0.169341 | 0.552476 | -4.96237 |
| PID\_NEPHRIN\_NEPH1\_PATHWAY | -0.09097 | -0.02167 | -1.38938 | 0.169398 | 0.552476 | -4.96261 |
| LI\_DCP2\_BOUND\_MRNA | -0.10763 | -0.07083 | -1.38917 | 0.169461 | 0.552476 | -4.96287 |
| DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_UP | 0.069582 | -0.31081 | 1.388716 | 0.169598 | 0.552476 | -4.96344 |
| CASORELLI\_ACUTE\_PROMYELOCYTIC\_LEUKEMIA\_DN | -0.08174 | -0.09386 | -1.38856 | 0.169644 | 0.552476 | -4.96363 |
| TSUNODA\_CISPLATIN\_RESISTANCE\_UP | 0.110984 | -0.06888 | 1.387997 | 0.169816 | 0.552476 | -4.96434 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_DN | 0.086842 | -0.01247 | 1.387667 | 0.169916 | 0.552476 | -4.96475 |
| PID\_ERBB\_NETWORK\_PATHWAY | 0.104885 | 0.010623 | 1.387625 | 0.169929 | 0.552476 | -4.96481 |
| WP\_VITAMIN\_DSENSITIVE\_CALCIUM\_SIGNALING\_IN\_DEPRESSION | 0.044859 | -0.08929 | 1.38695 | 0.170134 | 0.552476 | -4.96565 |
| PID\_ERBB1\_RECEPTOR\_PROXIMAL\_PATHWAY | -0.09742 | -0.02431 | -1.38691 | 0.170145 | 0.552476 | -4.9657 |
| WP\_GLYCEROLIPIDS\_AND\_GLYCEROPHOSPHOLIPIDS | 0.070896 | -0.1224 | 1.386887 | 0.170153 | 0.552476 | -4.96573 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_DN | 0.055835 | -0.0581 | 1.385757 | 0.170496 | 0.553093 | -4.96715 |
| WP\_FTO\_OBESITY\_VARIANT\_MECHANISM | 0.114707 | -0.00048 | 1.385427 | 0.170596 | 0.553093 | -4.96756 |
| REACTOME\_TERMINATION\_OF\_O\_GLYCAN\_BIOSYNTHESIS | 0.082298 | -0.08723 | 1.384541 | 0.170866 | 0.553093 | -4.96867 |
| VERNELL\_RETINOBLASTOMA\_PATHWAY\_DN | 0.116485 | -0.0063 | 1.384384 | 0.170914 | 0.553093 | -4.96887 |
| WP\_CORI\_CYCLE | 0.079822 | -0.16715 | 1.384372 | 0.170918 | 0.553093 | -4.96888 |
| SASAI\_TARGETS\_OF\_CXCR6\_AND\_PTCH1\_DN | 0.111352 | -0.00631 | 1.384371 | 0.170918 | 0.553093 | -4.96888 |
| LOPEZ\_MBD\_TARGETS\_IMPRINTED\_AND\_X\_LINKED | -0.09671 | 9.36E-05 | -1.38399 | 0.171033 | 0.553093 | -4.96935 |
| REACTOME\_VEGFR2\_MEDIATED\_CELL\_PROLIFERATION | -0.09977 | -0.04228 | -1.38398 | 0.171038 | 0.553093 | -4.96938 |
| KEGG\_LEUKOCYTE\_TRANSENDOTHELIAL\_MIGRATION | 0.048639 | -0.05333 | 1.38316 | 0.171287 | 0.553617 | -4.9704 |
| FINETTI\_BREAST\_CANCERS\_KINOME\_BLUE | -0.06834 | 0.005367 | -1.38274 | 0.171417 | 0.553754 | -4.97093 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX1 | -0.06869 | -0.15872 | -1.38183 | 0.171692 | 0.554314 | -4.97205 |
| BONOME\_OVARIAN\_CANCER\_POOR\_SURVIVAL\_UP | -0.11368 | -0.00463 | -1.3816 | 0.171764 | 0.554314 | -4.97235 |
| WP\_TYPE\_2\_PAPILLARY\_RENAL\_CELL\_CARCINOMA | 0.096417 | -0.00907 | 1.3794 | 0.172438 | 0.555641 | -4.97509 |
| CAIRO\_LIVER\_DEVELOPMENT\_UP | -0.07605 | -0.04932 | -1.37915 | 0.172514 | 0.555641 | -4.9754 |
| REACTOME\_MRNA\_SPLICING\_MINOR\_PATHWAY | -0.10103 | -0.12553 | -1.37909 | 0.172534 | 0.555641 | -4.97548 |
| REACTOME\_P75\_NTR\_RECEPTOR\_MEDIATED\_SIGNALLING | 0.054633 | -0.06967 | 1.379071 | 0.172539 | 0.555641 | -4.9755 |
| WATANABE\_COLON\_CANCER\_MSI\_VS\_MSS\_UP | -0.05699 | -0.07122 | -1.37883 | 0.172612 | 0.555641 | -4.9758 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_CCNE1 | -0.06328 | -0.1548 | -1.37851 | 0.172711 | 0.555679 | -4.9762 |
| REACTOME\_PLATELET\_HOMEOSTASIS | -0.04314 | -0.00735 | -1.37813 | 0.172827 | 0.555767 | -4.97667 |
| HUMMERICH\_BENIGN\_SKIN\_TUMOR\_DN | 0.082608 | -0.13781 | 1.377645 | 0.172977 | 0.555767 | -4.97728 |
| REACTOME\_METABOLISM\_OF\_AMINO\_ACIDS\_AND\_DERIVATIVES | -0.0634 | -0.10648 | -1.37743 | 0.173044 | 0.555767 | -4.97755 |
| HEIDENBLAD\_AMPLIFIED\_IN\_PANCREATIC\_CANCER | -0.05399 | -0.33469 | -1.37722 | 0.173108 | 0.555767 | -4.97781 |
| CHESLER\_BRAIN\_HIGHEST\_EXPRESSION | 0.061986 | -0.02784 | 1.376827 | 0.173228 | 0.555767 | -4.9783 |
| WP\_ACETYLCHOLINE\_SYNTHESIS | 0.111474 | 0.016615 | 1.376703 | 0.173266 | 0.555767 | -4.97845 |
| LIN\_NPAS4\_TARGETS\_DN | 0.060844 | -0.01847 | 1.376257 | 0.173404 | 0.555767 | -4.97901 |
| REACTOME\_REGULATION\_OF\_INNATE\_IMMUNE\_RESPONSES\_TO\_CYTOSOLIC\_DNA | 0.11473 | 0.00117 | 1.375994 | 0.173485 | 0.555767 | -4.97934 |
| GRANDVAUX\_IRF3\_TARGETS\_DN | 0.078473 | -0.05187 | 1.375866 | 0.173524 | 0.555767 | -4.97949 |
| NIKOLSKY\_BREAST\_CANCER\_7Q21\_Q22\_AMPLICON | -0.05185 | -0.01698 | -1.37528 | 0.173705 | 0.555896 | -4.98022 |
| LANDEMAINE\_LUNG\_METASTASIS | 0.059278 | -0.08921 | 1.375169 | 0.173739 | 0.555896 | -4.98036 |
| WP\_CANONICAL\_AND\_NONCANONICAL\_NOTCH\_SIGNALING | -0.06063 | -0.21657 | -1.37469 | 0.173887 | 0.556074 | -4.98096 |
| KEGG\_N\_GLYCAN\_BIOSYNTHESIS | -0.10315 | -0.01938 | -1.37442 | 0.17397 | 0.556074 | -4.98129 |
| MIKKELSEN\_ES\_HCP\_WITH\_H3\_UNMETHYLATED | 0.093599 | -0.04005 | 1.373986 | 0.174105 | 0.556117 | -4.98183 |
| BIOCARTA\_ERYTH\_PATHWAY | 0.080721 | -0.12045 | 1.372859 | 0.174453 | 0.556117 | -4.98323 |
| REACTOME\_LDL\_CLEARANCE | 0.097133 | 0.000503 | 1.372449 | 0.17458 | 0.556117 | -4.98374 |
| ELVIDGE\_HIF1A\_AND\_HIF2A\_TARGETS\_UP | -0.0944 | 0.009045 | -1.37225 | 0.174643 | 0.556117 | -4.98399 |
| WP\_OSTEOBLAST\_SIGNALING | 0.09192 | -0.00814 | 1.372203 | 0.174656 | 0.556117 | -4.98405 |
| REACTOME\_DEGRADATION\_OF\_BETA\_CATENIN\_BY\_THE\_DESTRUCTION\_COMPLEX | -0.08107 | -0.17228 | -1.37175 | 0.174797 | 0.556117 | -4.98461 |
| REACTOME\_NUCLEAR\_IMPORT\_OF\_REV\_PROTEIN | -0.11471 | -0.00257 | -1.37173 | 0.174804 | 0.556117 | -4.98464 |
| SONG\_TARGETS\_OF\_IE86\_CMV\_PROTEIN | -0.08855 | -0.0375 | -1.3717 | 0.174812 | 0.556117 | -4.98467 |
| SEITZ\_NEOPLASTIC\_TRANSFORMATION\_BY\_8P\_DELETION\_DN | 0.050777 | -0.20187 | 1.371426 | 0.174897 | 0.556117 | -4.98501 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_ENDOTHELIUM | 0.053055 | -0.29645 | 1.370362 | 0.175227 | 0.556117 | -4.98633 |
| VANASSE\_BCL2\_TARGETS\_UP | -0.05802 | -0.2467 | -1.37008 | 0.175314 | 0.556117 | -4.98668 |
| WP\_UREA\_CYCLE\_AND\_RELATED\_DISEASES | -0.11005 | 0.008269 | -1.36978 | 0.175407 | 0.556117 | -4.98705 |
| REACTOME\_RHOBTB3\_ATPASE\_CYCLE | -0.10171 | -0.00433 | -1.36953 | 0.175485 | 0.556117 | -4.98736 |
| REACTOME\_PHOSPHORYLATION\_OF\_EMI1 | -0.12962 | -0.02403 | -1.36941 | 0.175523 | 0.556117 | -4.98751 |
| COLIN\_PILOCYTIC\_ASTROCYTOMA\_VS\_GLIOBLASTOMA\_DN | 0.107797 | -0.03983 | 1.369317 | 0.175552 | 0.556117 | -4.98762 |
| HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_DN | 0.046265 | -0.36693 | 1.369308 | 0.175555 | 0.556117 | -4.98763 |
| REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY | -0.13154 | -0.01178 | -1.36916 | 0.175602 | 0.556117 | -4.98782 |
| WP\_CELL\_MIGRATION\_AND\_INVASION\_THROUGH\_P75NTR | 0.069062 | -0.06438 | 1.369128 | 0.175611 | 0.556117 | -4.98786 |
| CROONQUIST\_IL6\_DEPRIVATION\_UP | 0.085244 | -0.07639 | 1.369022 | 0.175644 | 0.556117 | -4.98799 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_AND\_BRAIN\_QTL\_CIS | -0.10904 | -0.08702 | -1.36835 | 0.175854 | 0.556506 | -4.98882 |
| BIOCARTA\_VDR\_PATHWAY | -0.11676 | -0.01279 | -1.36772 | 0.176049 | 0.556693 | -4.9896 |
| HONRADO\_BREAST\_CANCER\_BRCA1\_VS\_BRCA2 | 0.066908 | -0.05582 | 1.367596 | 0.176088 | 0.556693 | -4.98975 |
| MITSIADES\_RESPONSE\_TO\_APLIDIN\_DN | -0.08947 | -0.07766 | -1.36706 | 0.176253 | 0.55694 | -4.99041 |
| REACTOME\_INTRAFLAGELLAR\_TRANSPORT | -0.0757 | 0.000993 | -1.36605 | 0.17657 | 0.55741 | -4.99166 |
| BIOCARTA\_SM\_PATHWAY | -0.13167 | 0.011813 | -1.36539 | 0.176777 | 0.55741 | -4.99248 |
| REACTOME\_TNF\_RECEPTOR\_SUPERFAMILY\_TNFSF\_MEMBERS\_MEDIATING\_NON\_CANONICAL\_NF\_KB\_PATHWAY | 0.067223 | -0.33929 | 1.36526 | 0.176817 | 0.55741 | -4.99264 |
| MARTINELLI\_IMMATURE\_NEUTROPHIL\_UP | 0.07374 | -0.25857 | 1.365181 | 0.176842 | 0.55741 | -4.99274 |
| PANGAS\_TUMOR\_SUPPRESSION\_BY\_SMAD1\_AND\_SMAD5\_UP | 0.056425 | -0.05302 | 1.365005 | 0.176897 | 0.55741 | -4.99296 |
| PID\_INTEGRIN3\_PATHWAY | 0.086903 | -0.0077 | 1.364892 | 0.176932 | 0.55741 | -4.9931 |
| CASTELLANO\_HRAS\_AND\_NRAS\_TARGETS\_DN | -0.11989 | -0.0078 | -1.36459 | 0.177027 | 0.55741 | -4.99347 |
| VANTVEER\_BREAST\_CANCER\_METASTASIS\_UP | -0.07571 | -0.00751 | -1.36404 | 0.177199 | 0.55741 | -4.99415 |
| REACTOME\_RAS\_PROCESSING | -0.09723 | -0.04322 | -1.36345 | 0.177382 | 0.55741 | -4.99487 |
| PATIL\_LIVER\_CANCER | -0.05989 | -0.16854 | -1.36315 | 0.177478 | 0.55741 | -4.99525 |
| REACTOME\_GOLGI\_CISTERNAE\_PERICENTRIOLAR\_STACK\_REORGANIZATION | -0.13148 | -0.01462 | -1.36296 | 0.177537 | 0.55741 | -4.99548 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_D\_DN | 0.049418 | -0.1277 | 1.362876 | 0.177564 | 0.55741 | -4.99558 |
| TURJANSKI\_MAPK14\_TARGETS | 0.091314 | -0.00385 | 1.362677 | 0.177626 | 0.55741 | -4.99583 |
| SHEPARD\_BMYB\_TARGETS | 0.06182 | -0.11199 | 1.362669 | 0.177629 | 0.55741 | -4.99584 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD2\_DN | -0.06903 | -0.08628 | -1.36126 | 0.178072 | 0.558525 | -4.99758 |
| REACTOME\_TRAF6\_MEDIATED\_IRF7\_ACTIVATION\_IN\_TLR7\_8\_OR\_9\_SIGNALING | 0.106889 | -0.06421 | 1.36087 | 0.178194 | 0.558633 | -4.99806 |
| REACTOME\_UREA\_CYCLE | -0.09867 | -0.09306 | -1.36016 | 0.178416 | 0.558641 | -4.99893 |
| REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS | -0.07675 | -0.03956 | -1.35986 | 0.178512 | 0.558641 | -4.9993 |
| REACTOME\_INTRINSIC\_PATHWAY\_FOR\_APOPTOSIS | -0.07282 | -0.05452 | -1.35975 | 0.178545 | 0.558641 | -4.99943 |
| PELLICCIOTTA\_HDAC\_IN\_ANTIGEN\_PRESENTATION\_UP | -0.10592 | -0.09265 | -1.35888 | 0.178819 | 0.558641 | -5.0005 |
| ANDERSEN\_CHOLANGIOCARCINOMA\_CLASS1 | 0.052144 | -0.14703 | 1.35887 | 0.178824 | 0.558641 | -5.00052 |
| WP\_STEROL\_REGULATORY\_ELEMENTBINDING\_PROTEINS\_SREBP\_SIGNALING | -0.08611 | -0.05322 | -1.35837 | 0.17898 | 0.558641 | -5.00113 |
| BIOCARTA\_BCELLSURVIVAL\_PATHWAY | -0.09541 | 0.012223 | -1.3582 | 0.179035 | 0.558641 | -5.00134 |
| SASAKI\_ADULT\_T\_CELL\_LEUKEMIA | -0.07994 | -0.10754 | -1.35814 | 0.179055 | 0.558641 | -5.00142 |
| REACTOME\_TRP\_CHANNELS | 0.078756 | -0.02726 | 1.358126 | 0.179058 | 0.558641 | -5.00143 |
| TIEN\_INTESTINE\_PROBIOTICS\_2HR\_DN | -0.08403 | -0.03891 | -1.35791 | 0.179127 | 0.558641 | -5.0017 |
| REACTOME\_HEDGEHOG\_ON\_STATE | -0.06435 | -0.18666 | -1.3578 | 0.179162 | 0.558641 | -5.00183 |
| MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_DN | -0.08083 | -0.13555 | -1.35709 | 0.179385 | 0.558738 | -5.0027 |
| CHOI\_ATL\_STAGE\_PREDICTOR | -0.13173 | -0.01548 | -1.35702 | 0.179409 | 0.558738 | -5.00279 |
| REACTOME\_NUCLEAR\_ENVELOPE\_BREAKDOWN | -0.1134 | -0.02966 | -1.35649 | 0.179574 | 0.558738 | -5.00344 |
| SANSOM\_APC\_MYC\_TARGETS | -0.05443 | -0.0831 | -1.35597 | 0.179739 | 0.558738 | -5.00408 |
| BIOCARTA\_CTBP1\_PATHWAY | -0.08993 | 0.016371 | -1.35541 | 0.179916 | 0.558738 | -5.00476 |
| PUJANA\_BRCA1\_PCC\_NETWORK | -0.0758 | -0.13995 | -1.35514 | 0.180002 | 0.558738 | -5.00509 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_D\_UP | -0.04042 | -0.1034 | -1.35514 | 0.180003 | 0.558738 | -5.0051 |
| RUAN\_RESPONSE\_TO\_TNF\_TROGLITAZONE\_DN | 0.067288 | -0.05385 | 1.355089 | 0.180019 | 0.558738 | -5.00516 |
| KANG\_IMMORTALIZED\_BY\_TERT\_DN | 0.04065 | -0.07044 | 1.354855 | 0.180093 | 0.558738 | -5.00545 |
| BIOCARTA\_ACETAMINOPHEN\_PATHWAY | 0.108541 | -0.02159 | 1.354726 | 0.180134 | 0.558738 | -5.00561 |
| MOOTHA\_GLYCOGEN\_METABOLISM | -0.07542 | -0.09474 | -1.35446 | 0.180219 | 0.558738 | -5.00593 |
| KONG\_E2F3\_TARGETS | -0.08173 | -0.09312 | -1.35437 | 0.180247 | 0.558738 | -5.00604 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_TTD\_DN | -0.07483 | -0.0523 | -1.35393 | 0.180385 | 0.558896 | -5.00658 |
| BRUECKNER\_TARGETS\_OF\_MIRLET7A3\_DN | 0.083155 | -0.01842 | 1.353359 | 0.180568 | 0.559092 | -5.00728 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_2\_UP | -0.05329 | -0.10194 | -1.35318 | 0.180624 | 0.559092 | -5.0075 |
| BYSTROEM\_CORRELATED\_WITH\_IL5\_UP | 0.072657 | -0.12578 | 1.352706 | 0.180776 | 0.559288 | -5.00808 |
| BIOCARTA\_FBW7\_PATHWAY | -0.10638 | -0.01162 | -1.35223 | 0.180927 | 0.559427 | -5.00866 |
| BONOME\_OVARIAN\_CANCER\_SURVIVAL\_OPTIMAL\_DEBULKING | -0.05157 | -0.15466 | -1.35201 | 0.180996 | 0.559427 | -5.00893 |
| HOLLERN\_EMT\_BREAST\_TUMOR\_UP | 0.071871 | -0.03855 | 1.351535 | 0.181149 | 0.559502 | -5.00951 |
| VECCHI\_GASTRIC\_CANCER\_ADVANCED\_VS\_EARLY\_DN | 0.036376 | -0.10994 | 1.350871 | 0.18136 | 0.559502 | -5.01033 |
| IVANOVA\_HEMATOPOIESIS\_STEM\_CELL\_SHORT\_TERM | -0.06747 | -0.08329 | -1.35017 | 0.181584 | 0.559502 | -5.01118 |
| CHOW\_RASSF1\_TARGETS\_DN | -0.09201 | -0.08389 | -1.3499 | 0.181671 | 0.559502 | -5.01152 |
| ZWANG\_CLASS\_2\_TRANSIENTLY\_INDUCED\_BY\_EGF | 0.057963 | -0.47363 | 1.349603 | 0.181764 | 0.559502 | -5.01188 |
| WP\_MICRORNA\_FOR\_TARGETING\_CANCER\_GROWTH\_AND\_VASCULARIZATION\_IN\_GLIOBLASTOMA | 0.144761 | 0.000842 | 1.349517 | 0.181792 | 0.559502 | -5.01198 |
| WP\_OSTEOBLAST\_DIFFERENTIATION\_AND\_RELATED\_DISEASES | -0.03811 | -0.09432 | -1.34944 | 0.181817 | 0.559502 | -5.01208 |
| SA\_PTEN\_PATHWAY | -0.07808 | -0.10766 | -1.34914 | 0.181912 | 0.559502 | -5.01244 |
| REACTOME\_GABA\_B\_RECEPTOR\_ACTIVATION | 0.042696 | -0.1508 | 1.349025 | 0.181949 | 0.559502 | -5.01258 |
| REACTOME\_MITOTIC\_G1\_PHASE\_AND\_G1\_S\_TRANSITION | -0.07519 | -0.1243 | -1.34852 | 0.18211 | 0.559502 | -5.0132 |
| REACTOME\_CONJUGATION\_OF\_BENZOATE\_WITH\_GLYCINE | 0.147688 | 0.022702 | 1.348338 | 0.182169 | 0.559502 | -5.01342 |
| MORI\_LARGE\_PRE\_BII\_LYMPHOCYTE\_DN | 0.064372 | -0.34319 | 1.34832 | 0.182175 | 0.559502 | -5.01344 |
| REACTOME\_GABA\_RECEPTOR\_ACTIVATION | 0.057646 | -0.10636 | 1.348157 | 0.182227 | 0.559502 | -5.01364 |
| MMS\_MOUSE\_LYMPH\_HIGH\_4HRS\_UP | -0.11859 | -0.01296 | -1.34808 | 0.182251 | 0.559502 | -5.01374 |
| WP\_GLIOBLASTOMA\_SIGNALING\_PATHWAYS | -0.07111 | -0.03415 | -1.34773 | 0.182362 | 0.559572 | -5.01416 |
| LEE\_LIVER\_CANCER\_MYC\_TGFA\_DN | 0.045032 | -0.13858 | 1.347176 | 0.182541 | 0.559768 | -5.01484 |
| WP\_BREAST\_CANCER\_PATHWAY | -0.03556 | -0.13139 | -1.34699 | 0.182602 | 0.559768 | -5.01507 |
| REACTOME\_HIV\_ELONGATION\_ARREST\_AND\_RECOVERY | -0.10873 | -0.14475 | -1.34659 | 0.182727 | 0.559833 | -5.01555 |
| JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_UP | -0.06649 | -0.05507 | -1.34634 | 0.182808 | 0.559833 | -5.01585 |
| OUELLET\_CULTURED\_OVARIAN\_CANCER\_INVASIVE\_VS\_LMP\_DN | 0.064331 | 0.002986 | 1.345879 | 0.182957 | 0.559833 | -5.01642 |
| SCHLOSSER\_MYC\_TARGETS\_REPRESSED\_BY\_SERUM | -0.11735 | -0.02363 | -1.34582 | 0.182975 | 0.559833 | -5.01649 |
| REACTOME\_VITAMIN\_B5\_PANTOTHENATE\_METABOLISM | -0.08059 | -0.05071 | -1.34518 | 0.18318 | 0.559962 | -5.01727 |
| BIOCARTA\_LDL\_PATHWAY | 0.132509 | -0.00354 | 1.345142 | 0.183193 | 0.559962 | -5.01732 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G6\_UP | -0.06185 | -0.00291 | -1.34424 | 0.183482 | 0.560158 | -5.01841 |
| REACTOME\_ACTIVATION\_OF\_SMO | -0.08372 | 0.012608 | -1.34405 | 0.183543 | 0.560158 | -5.01864 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_UP | -0.11987 | -0.07631 | -1.3439 | 0.183591 | 0.560158 | -5.01882 |
| REACTOME\_SYNTHESIS\_OF\_ACTIVE\_UBIQUITIN\_ROLES\_OF\_E1\_AND\_E2\_ENZYMES | -0.10129 | 0.004789 | -1.3431 | 0.183851 | 0.560158 | -5.01981 |
| LASTOWSKA\_NEUROBLASTOMA\_COPY\_NUMBER\_UP | -0.0588 | -0.08427 | -1.3426 | 0.184012 | 0.560158 | -5.02042 |
| SIG\_IL4RECEPTOR\_IN\_B\_LYPHOCYTES | -0.08306 | -0.06174 | -1.34193 | 0.184227 | 0.560158 | -5.02122 |
| WP\_MICRORNAS\_IN\_CARDIOMYOCYTE\_HYPERTROPHY | -0.04997 | -0.13029 | -1.34184 | 0.184257 | 0.560158 | -5.02134 |
| REACTOME\_BASE\_EXCISION\_REPAIR\_AP\_SITE\_FORMATION | -0.08917 | -0.04715 | -1.3407 | 0.184624 | 0.560158 | -5.02272 |
| COULOUARN\_TEMPORAL\_TGFB1\_SIGNATURE\_DN | 0.054234 | -0.05748 | 1.340656 | 0.184639 | 0.560158 | -5.02277 |
| RAMJAUN\_APOPTOSIS\_BY\_TGFB1\_VIA\_MAPK1\_UP | -0.09344 | -0.34986 | -1.34014 | 0.184805 | 0.560158 | -5.0234 |
| REACTOME\_SYNAPTIC\_ADHESION\_LIKE\_MOLECULES | -0.06001 | -0.21116 | -1.34002 | 0.184843 | 0.560158 | -5.02354 |
| EBAUER\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_DN | 0.047213 | -0.02298 | 1.339997 | 0.184852 | 0.560158 | -5.02357 |
| BAELDE\_DIABETIC\_NEPHROPATHY\_UP | 0.05513 | -0.15672 | 1.339693 | 0.18495 | 0.560158 | -5.02394 |
| OUYANG\_PROSTATE\_CANCER\_MARKERS | 0.073588 | -0.05983 | 1.339574 | 0.184988 | 0.560158 | -5.02409 |
| REACTOME\_NEGATIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION | -0.0749 | -0.16228 | -1.33955 | 0.184995 | 0.560158 | -5.02411 |
| WP\_TYPE\_I\_INTERFERON\_INDUCTION\_AND\_SIGNALING\_DURING\_SARSCOV2\_INFECTION | 0.093031 | -0.05824 | 1.339187 | 0.185114 | 0.560158 | -5.02456 |
| STEIN\_ESRRA\_TARGETS | -0.07762 | -0.09553 | -1.33913 | 0.185132 | 0.560158 | -5.02463 |
| KEGG\_BIOSYNTHESIS\_OF\_UNSATURATED\_FATTY\_ACIDS | -0.09861 | -0.04143 | -1.33908 | 0.185147 | 0.560158 | -5.02468 |
| REACTOME\_INSULIN\_PROCESSING | -0.07463 | -0.00985 | -1.33867 | 0.185282 | 0.560158 | -5.02519 |
| VALK\_AML\_CLUSTER\_3 | 0.087811 | -0.00883 | 1.338546 | 0.185321 | 0.560158 | -5.02533 |
| KEGG\_ONE\_CARBON\_POOL\_BY\_FOLATE | -0.0897 | -0.17126 | -1.33842 | 0.185362 | 0.560158 | -5.02549 |
| REACTOME\_DOWNSTREAM\_SIGNAL\_TRANSDUCTION | -0.09685 | -0.02846 | -1.33831 | 0.185398 | 0.560158 | -5.02562 |
| REACTOME\_INTRA\_GOLGI\_AND\_RETROGRADE\_GOLGI\_TO\_ER\_TRAFFIC | -0.07035 | -0.06204 | -1.33812 | 0.185461 | 0.560158 | -5.02585 |
| WP\_GLUTATHIONE\_METABOLISM | 0.082783 | -0.05782 | 1.337979 | 0.185505 | 0.560158 | -5.02602 |
| WEI\_MYCN\_TARGETS\_WITH\_E\_BOX | -0.08116 | -0.06754 | -1.33798 | 0.185505 | 0.560158 | -5.02602 |
| ZHANG\_GATA6\_TARGETS\_UP | 0.089833 | -0.00276 | 1.337535 | 0.185649 | 0.560158 | -5.02656 |
| WP\_MRNA\_PROTEIN\_AND\_METABOLITE\_INDUCATION\_PATHWAY\_BY\_CYCLOSPORIN\_A | 0.116847 | -0.00167 | 1.336701 | 0.18592 | 0.560158 | -5.02757 |
| REACTOME\_NGF\_INDEPENDANT\_TRKA\_ACTIVATION | 0.124184 | -0.01004 | 1.336573 | 0.185961 | 0.560158 | -5.02772 |
| BIOCARTA\_RAC1\_PATHWAY | 0.083893 | -0.00282 | 1.336553 | 0.185968 | 0.560158 | -5.02775 |
| CHEN\_ETV5\_TARGETS\_TESTIS | -0.07404 | 0.005397 | -1.33641 | 0.186013 | 0.560158 | -5.02792 |
| OSADA\_ASCL1\_TARGETS\_DN | 0.080367 | -0.04674 | 1.336258 | 0.186064 | 0.560158 | -5.0281 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_D | 0.065692 | -0.2657 | 1.336034 | 0.186137 | 0.560158 | -5.02838 |
| REACTOME\_TELOMERE\_MAINTENANCE | -0.08716 | -0.07904 | -1.33578 | 0.18622 | 0.560158 | -5.02869 |
| WEBER\_METHYLATED\_ICP\_IN\_SPERM\_UP | 0.120384 | -0.10744 | 1.335685 | 0.18625 | 0.560158 | -5.0288 |
| PHONG\_TNF\_RESPONSE\_NOT\_VIA\_P38 | 0.056538 | -0.16335 | 1.335298 | 0.186376 | 0.560273 | -5.02927 |
| PYEON\_HPV\_POSITIVE\_TUMORS\_UP | -0.05914 | -0.07395 | -1.33484 | 0.186525 | 0.560456 | -5.02982 |
| PID\_THROMBIN\_PAR4\_PATHWAY | 0.091003 | -0.00196 | 1.334344 | 0.186687 | 0.560677 | -5.03042 |
| YANG\_BREAST\_CANCER\_ESR1\_UP | 0.059789 | -0.07454 | 1.333332 | 0.187017 | 0.561403 | -5.03164 |
| FAELT\_B\_CLL\_WITH\_VH\_REARRANGEMENTS\_DN | -0.11358 | -0.05873 | -1.3324 | 0.187321 | 0.561937 | -5.03277 |
| KRIGE\_RESPONSE\_TO\_TOSEDOSTAT\_24HR\_DN | -0.06496 | -0.10124 | -1.33206 | 0.187431 | 0.561937 | -5.03318 |
| WP\_CYSTEINE\_AND\_METHIONINE\_CATABOLISM | -0.09424 | -0.00668 | -1.33198 | 0.18746 | 0.561937 | -5.03328 |
| WANG\_LMO4\_TARGETS\_UP | -0.06932 | -0.06799 | -1.33147 | 0.187626 | 0.561997 | -5.0339 |
| REACTOME\_SELECTIVE\_AUTOPHAGY | -0.08019 | -0.10066 | -1.33137 | 0.187656 | 0.561997 | -5.03401 |
| REACTOME\_NRCAM\_INTERACTIONS | 0.112029 | 0.025825 | 1.330964 | 0.187791 | 0.562135 | -5.0345 |
| BONOME\_OVARIAN\_CANCER\_SURVIVAL\_SUBOPTIMAL\_DEBULKING | -0.05907 | -0.08369 | -1.3299 | 0.188139 | 0.562715 | -5.03578 |
| KONG\_E2F1\_TARGETS | 0.094929 | 0.00467 | 1.32977 | 0.188182 | 0.562715 | -5.03594 |
| WP\_NANOMATERIAL\_INDUCED\_APOPTOSIS | -0.09292 | 0.004093 | -1.32956 | 0.188249 | 0.562715 | -5.03619 |
| KEGG\_REGULATION\_OF\_ACTIN\_CYTOSKELETON | 0.043713 | -0.03818 | 1.328151 | 0.188713 | 0.563797 | -5.03789 |
| REACTOME\_VITAMIN\_C\_ASCORBATE\_METABOLISM | 0.11159 | -0.01225 | 1.327219 | 0.189019 | 0.563797 | -5.03901 |
| MIKKELSEN\_NPC\_HCP\_WITH\_H3K27ME3 | 0.08522 | -0.03066 | 1.326338 | 0.189309 | 0.563797 | -5.04007 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_OF\_ACTIVATED\_FGFR2 | -0.06168 | -0.0247 | -1.3263 | 0.189321 | 0.563797 | -5.04011 |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_ALL\_DN | 0.06422 | -0.73056 | 1.325983 | 0.189426 | 0.563797 | -5.0405 |
| ZHENG\_FOXP3\_TARGETS\_IN\_THYMUS\_DN | 0.08389 | -0.01011 | 1.32589 | 0.189457 | 0.563797 | -5.04061 |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S2 | -0.08838 | -0.09682 | -1.32562 | 0.189545 | 0.563797 | -5.04093 |
| TSAI\_RESPONSE\_TO\_IONIZING\_RADIATION | 0.066265 | -0.10463 | 1.325415 | 0.189613 | 0.563797 | -5.04118 |
| REACTOME\_CLEC7A\_DECTIN\_1\_INDUCES\_NFAT\_ACTIVATION | -0.12844 | -0.00231 | -1.32535 | 0.189634 | 0.563797 | -5.04125 |
| REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR | -0.12858 | -0.00847 | -1.32462 | 0.189874 | 0.563797 | -5.04213 |
| PRAMOONJAGO\_SOX4\_TARGETS\_UP | 0.091829 | -0.13508 | 1.324551 | 0.189898 | 0.563797 | -5.04222 |
| REACTOME\_DISEASES\_OF\_BASE\_EXCISION\_REPAIR | -0.13042 | -0.01134 | -1.32444 | 0.189936 | 0.563797 | -5.04235 |
| BRACHAT\_RESPONSE\_TO\_CAMPTOTHECIN\_DN | -0.08467 | -0.16986 | -1.32419 | 0.190018 | 0.563797 | -5.04265 |
| WAKABAYASHI\_ADIPOGENESIS\_PPARG\_BOUND\_8D | -0.0612 | -0.07879 | -1.32411 | 0.190043 | 0.563797 | -5.04274 |
| REACTOME\_ASYMMETRIC\_LOCALIZATION\_OF\_PCP\_PROTEINS | -0.07748 | -0.23259 | -1.32404 | 0.190068 | 0.563797 | -5.04283 |
| FU\_INTERACT\_WITH\_ALKBH8 | -0.14948 | -0.00812 | -1.32371 | 0.190176 | 0.563797 | -5.04322 |
| REACTOME\_NECTIN\_NECL\_TRANS\_HETERODIMERIZATION | 0.103638 | 0.005641 | 1.323711 | 0.190176 | 0.563797 | -5.04322 |
| WP\_MIRNAS\_INVOLVEMENT\_IN\_THE\_IMMUNE\_RESPONSE\_IN\_SEPSIS | 0.06499 | -0.24952 | 1.323615 | 0.190208 | 0.563797 | -5.04334 |
| WP\_CLASSICAL\_PATHWAY\_OF\_STEROIDOGENESIS\_WITH\_GLUCOCORTICOID\_AND\_MINERALOCORTICOID\_METABOLISM | 0.080706 | -0.25123 | 1.323351 | 0.190295 | 0.563797 | -5.04366 |
| BENPORATH\_CYCLING\_GENES | -0.06328 | -0.12468 | -1.32232 | 0.190635 | 0.564027 | -5.04489 |
| MURAKAMI\_UV\_RESPONSE\_1HR\_UP | 0.066146 | -0.06543 | 1.322148 | 0.190693 | 0.564027 | -5.0451 |
| DELASERNA\_MYOD\_TARGETS\_UP | -0.04062 | -0.08334 | -1.32153 | 0.190898 | 0.564027 | -5.04584 |
| REACTOME\_RECRUITMENT\_OF\_NUMA\_TO\_MITOTIC\_CENTROSOMES | -0.05624 | -0.119 | -1.32136 | 0.190954 | 0.564027 | -5.04604 |
| ACEVEDO\_LIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_UP | -0.09964 | -0.15803 | -1.32122 | 0.191 | 0.564027 | -5.04621 |
| BURTON\_ADIPOGENESIS\_1 | 0.09713 | -0.18132 | 1.321204 | 0.191005 | 0.564027 | -5.04623 |
| REACTOME\_ACTIVATION\_OF\_RAC1\_DOWNSTREAM\_OF\_NMDARS | -0.12639 | -0.00216 | -1.32106 | 0.191054 | 0.564027 | -5.04641 |
| WILCOX\_RESPONSE\_TO\_PROGESTERONE\_DN | 0.059617 | -0.11361 | 1.320874 | 0.191115 | 0.564027 | -5.04662 |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_DN | 0.047296 | -0.11839 | 1.320708 | 0.19117 | 0.564027 | -5.04682 |
| WP\_GENES\_ASSOCIATED\_WITH\_THE\_DEVELOPMENT\_OF\_RHEUMATOID\_ARTHRITIS | 0.073981 | -0.27618 | 1.319615 | 0.191533 | 0.56439 | -5.04813 |
| REACTOME\_TP53\_REGULATES\_METABOLIC\_GENES | -0.08686 | -0.06305 | -1.31954 | 0.191556 | 0.56439 | -5.04822 |
| BARRIER\_CANCER\_RELAPSE\_NORMAL\_SAMPLE\_UP | -0.07792 | -0.04879 | -1.31923 | 0.191662 | 0.56439 | -5.0486 |
| LEE\_LIVER\_CANCER\_SURVIVAL\_DN | -0.07468 | -0.20615 | -1.31905 | 0.19172 | 0.56439 | -5.04881 |
| REACTOME\_CYTOCHROME\_P450\_ARRANGED\_BY\_SUBSTRATE\_TYPE | 0.0684 | -0.07894 | 1.318815 | 0.191799 | 0.56439 | -5.04909 |
| REACTOME\_INITIAL\_TRIGGERING\_OF\_COMPLEMENT | 0.03774 | -0.44432 | 1.318735 | 0.191825 | 0.56439 | -5.04918 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_8 | 0.081287 | 0.007416 | 1.317288 | 0.192307 | 0.5655 | -5.05091 |
| LEE\_CALORIE\_RESTRICTION\_MUSCLE\_UP | 0.061478 | -0.20349 | 1.317068 | 0.19238 | 0.5655 | -5.05117 |
| REACTOME\_RAP1\_SIGNALLING | -0.07749 | -0.04338 | -1.31585 | 0.192785 | 0.566429 | -5.05262 |
| KEGG\_PANTOTHENATE\_AND\_COA\_BIOSYNTHESIS | -0.0911 | -0.05527 | -1.31557 | 0.192879 | 0.566442 | -5.05296 |
| REACTOME\_SIGNALING\_BY\_FGFR4 | -0.05628 | -0.02089 | -1.31514 | 0.193023 | 0.566604 | -5.05347 |
| KAUFFMANN\_MELANOMA\_RELAPSE\_UP | -0.07939 | -0.06407 | -1.31485 | 0.19312 | 0.566626 | -5.05382 |
| PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_DN | 0.093057 | -0.04883 | 1.314422 | 0.193264 | 0.566789 | -5.05433 |
| CHEBOTAEV\_GR\_TARGETS\_DN | -0.04857 | -0.11992 | -1.3139 | 0.193439 | 0.567042 | -5.05496 |
| REACTOME\_SYNTHESIS\_OF\_IP2\_IP\_AND\_INS\_IN\_THE\_CYTOSOL | -0.07316 | -0.06951 | -1.31258 | 0.19388 | 0.567656 | -5.05652 |
| REACTOME\_PI\_METABOLISM | -0.06552 | -0.06073 | -1.31226 | 0.193988 | 0.567656 | -5.05691 |
| WP\_PATHOGENESIS\_OF\_SARSCOV2\_MEDIATED\_BY\_NSP9NSP10\_COMPLEX | 0.061636 | -0.3583 | 1.312214 | 0.194003 | 0.567656 | -5.05696 |
| FONTAINE\_THYROID\_TUMOR\_UNCERTAIN\_MALIGNANCY\_UP | 0.053217 | -0.0283 | 1.312207 | 0.194006 | 0.567656 | -5.05697 |
| REACTOME\_SEMAPHORIN\_INTERACTIONS | 0.07207 | -0.04935 | 1.31189 | 0.194112 | 0.567706 | -5.05735 |
| REACTOME\_DEFECTIVE\_CFTR\_CAUSES\_CYSTIC\_FIBROSIS | -0.07792 | -0.28534 | -1.31107 | 0.194386 | 0.568246 | -5.05832 |
| WP\_PLURIPOTENT\_STEM\_CELL\_DIFFERENTIATION\_PATHWAY | 0.068622 | -0.0063 | 1.310072 | 0.194723 | 0.5686 | -5.05951 |
| PID\_SYNDECAN\_3\_PATHWAY | 0.069476 | -0.04968 | 1.309929 | 0.194771 | 0.5686 | -5.05968 |
| WANG\_IMMORTALIZED\_BY\_HOXA9\_AND\_MEIS1\_UP | 0.05131 | -0.11831 | 1.309917 | 0.194775 | 0.5686 | -5.05969 |
| FONTAINE\_FOLLICULAR\_THYROID\_ADENOMA\_DN | 0.05439 | -0.08061 | 1.30872 | 0.195178 | 0.569515 | -5.06111 |
| KRISHNAN\_FURIN\_TARGETS\_DN | -0.1061 | -0.00891 | -1.30801 | 0.195416 | 0.569565 | -5.06195 |
| JAERVINEN\_AMPLIFIED\_IN\_LARYNGEAL\_CANCER | -0.08552 | -0.13091 | -1.30796 | 0.195436 | 0.569565 | -5.06202 |
| REACTOME\_FGFRL1\_MODULATION\_OF\_FGFR1\_SIGNALING | 0.091592 | 0.008503 | 1.307872 | 0.195464 | 0.569565 | -5.06212 |
| BHAT\_ESR1\_TARGETS\_VIA\_AKT1\_UP | 0.044565 | -0.09226 | 1.30698 | 0.195765 | 0.570182 | -5.06318 |
| TORCHIA\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_TOP20\_DN | -0.09312 | -0.01129 | -1.30671 | 0.195855 | 0.570185 | -5.06349 |
| REACTOME\_IL\_6\_TYPE\_CYTOKINE\_RECEPTOR\_LIGAND\_INTERACTIONS | 0.072047 | 0.003621 | 1.306422 | 0.195953 | 0.570209 | -5.06384 |
| WNT\_SIGNALING | -0.04287 | -0.04713 | -1.30554 | 0.196251 | 0.570644 | -5.06488 |
| WAKASUGI\_HAVE\_ZNF143\_BINDING\_SITES | -0.06314 | -0.19145 | -1.30545 | 0.196282 | 0.570644 | -5.06499 |
| MORI\_LARGE\_PRE\_BII\_LYMPHOCYTE\_UP | -0.07934 | -0.10512 | -1.30485 | 0.196484 | 0.570796 | -5.06569 |
| WP\_SYNAPTIC\_VESICLE\_PATHWAY | 0.047614 | -0.08359 | 1.304765 | 0.196514 | 0.570796 | -5.0658 |
| LEE\_TARGETS\_OF\_PTCH1\_AND\_SUFU\_DN | 0.047484 | -0.06326 | 1.303464 | 0.196955 | 0.570839 | -5.06734 |
| NIKOLSKY\_BREAST\_CANCER\_21Q22\_AMPLICON | -0.05837 | -0.21091 | -1.30321 | 0.197039 | 0.570839 | -5.06763 |
| REACTOME\_DISEASES\_ASSOCIATED\_WITH\_O\_GLYCOSYLATION\_OF\_PROTEINS | 0.051659 | -0.11157 | 1.302934 | 0.197135 | 0.570839 | -5.06796 |
| FEVR\_CTNNB1\_TARGETS\_UP | 0.034727 | -0.18489 | 1.302911 | 0.197142 | 0.570839 | -5.06799 |
| REACTOME\_PROLACTIN\_RECEPTOR\_SIGNALING | -0.05962 | -0.00145 | -1.30278 | 0.197186 | 0.570839 | -5.06814 |
| REACTOME\_SELENOAMINO\_ACID\_METABOLISM | -0.09113 | -0.13699 | -1.30271 | 0.19721 | 0.570839 | -5.06823 |
| REACTOME\_APC\_CDC20\_MEDIATED\_DEGRADATION\_OF\_NEK2A | -0.09753 | -0.01 | -1.3025 | 0.197282 | 0.570839 | -5.06848 |
| REACTOME\_HYALURONAN\_METABOLISM | 0.085662 | 0.000948 | 1.301976 | 0.19746 | 0.570839 | -5.0691 |
| WP\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | 0.041473 | -0.28004 | 1.301821 | 0.197513 | 0.570839 | -5.06928 |
| KEGG\_DNA\_REPLICATION | -0.10888 | -0.03499 | -1.30182 | 0.197514 | 0.570839 | -5.06928 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_25 | -0.08617 | -0.01783 | -1.30181 | 0.197515 | 0.570839 | -5.06929 |
| WP\_PKCGAMMA\_CALCIUM\_SIGNALING\_PATHWAY\_IN\_ATAXIA | 0.074922 | 0.015649 | 1.301359 | 0.19767 | 0.571027 | -5.06983 |
| WP\_STING\_PATHWAY\_IN\_KAWASAKILIKE\_DISEASE\_AND\_COVID19 | 0.106635 | -0.04905 | 1.300556 | 0.197943 | 0.571522 | -5.07077 |
| BIOCARTA\_KREB\_PATHWAY | -0.14595 | 0.024097 | -1.30024 | 0.19805 | 0.571522 | -5.07114 |
| REACTOME\_HEDGEHOG\_LIGAND\_BIOGENESIS | -0.07677 | -0.22617 | -1.30006 | 0.198111 | 0.571522 | -5.07135 |
| SARTIPY\_BLUNTED\_BY\_INSULIN\_RESISTANCE\_UP | 0.108466 | -0.06146 | 1.299589 | 0.198273 | 0.57173 | -5.07191 |
| FARDIN\_HYPOXIA\_9 | -0.11947 | 0.002761 | -1.29885 | 0.198523 | 0.57201 | -5.07278 |
| REACTOME\_SIGNALING\_BY\_FGFR1\_IN\_DISEASE | -0.05651 | -0.02333 | -1.29878 | 0.19855 | 0.57201 | -5.07287 |
| MIKKELSEN\_ES\_HCP\_WITH\_H3K27ME3 | 0.091112 | -0.00434 | 1.297815 | 0.198878 | 0.572481 | -5.074 |
| WP\_TRANSCRIPTION\_COFACTORS\_SKI\_AND\_SKIL\_PROTEIN\_PARTNERS | -0.09405 | -0.00249 | -1.29777 | 0.198893 | 0.572481 | -5.07405 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_3 | -0.10561 | -0.07165 | -1.29688 | 0.199198 | 0.572704 | -5.07511 |
| STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_DN | -0.05972 | -0.17083 | -1.29677 | 0.199235 | 0.572704 | -5.07523 |
| WP\_METABOLISM\_OF\_SPINGOLIPIDS\_IN\_ER\_AND\_GOLGI\_APPARATUS | 0.057406 | -0.04056 | 1.296755 | 0.199241 | 0.572704 | -5.07525 |
| REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS | -0.08293 | -0.16486 | -1.2964 | 0.199363 | 0.572798 | -5.07567 |
| JACKSON\_DNMT1\_TARGETS\_UP | 0.0634 | -0.13863 | 1.295413 | 0.1997 | 0.573248 | -5.07683 |
| REACTOME\_G\_PROTEIN\_MEDIATED\_EVENTS | -0.05471 | -0.04759 | -1.29526 | 0.199754 | 0.573248 | -5.07702 |
| CUI\_GLUCOSE\_DEPRIVATION | 0.052512 | -0.17165 | 1.295151 | 0.19979 | 0.573248 | -5.07714 |
| REACTOME\_RHOT1\_GTPASE\_CYCLE | -0.10933 | -0.14693 | -1.29407 | 0.200162 | 0.573907 | -5.07841 |
| WP\_SPHINGOLIPID\_PATHWAY | 0.059603 | -0.03119 | 1.293752 | 0.20027 | 0.573907 | -5.07878 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX5\_UP | -0.13395 | -0.06996 | -1.29356 | 0.200336 | 0.573907 | -5.079 |
| NOUSHMEHR\_GBM\_SILENCED\_BY\_METHYLATION | 0.063346 | -0.0854 | 1.293431 | 0.200381 | 0.573907 | -5.07916 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_1 | 0.082135 | -0.11941 | 1.292999 | 0.200529 | 0.574074 | -5.07966 |
| REACTOME\_TRANSPORT\_OF\_THE\_SLBP\_DEPENDANT\_MATURE\_MRNA | -0.10663 | -0.00745 | -1.29231 | 0.200768 | 0.574097 | -5.08048 |
| REACTOME\_PROTEIN\_UBIQUITINATION | -0.08265 | -0.02637 | -1.29219 | 0.200808 | 0.574097 | -5.08062 |
| WALLACE\_PROSTATE\_CANCER\_RACE\_DN | -0.03922 | -0.11656 | -1.29211 | 0.200834 | 0.574097 | -5.08071 |
| FLORIO\_HUMAN\_NEOCORTEX | 0.096408 | 0.021341 | 1.291927 | 0.200898 | 0.574097 | -5.08092 |
| KEGG\_RETINOL\_METABOLISM | 0.070316 | -0.08382 | 1.291655 | 0.200992 | 0.574107 | -5.08124 |
| REACTOME\_CGMP\_EFFECTS | -0.08738 | 0.01126 | -1.29123 | 0.201138 | 0.574267 | -5.08174 |
| WP\_ADIPOGENESIS | 0.052506 | -0.1106 | 1.290384 | 0.20143 | 0.574598 | -5.08273 |
| MIKI\_COEXPRESSED\_WITH\_CYP19A1 | 0.105072 | 0.016477 | 1.29037 | 0.201434 | 0.574598 | -5.08275 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_2FC\_UP | 0.069162 | -0.01492 | 1.289668 | 0.201677 | 0.575031 | -5.08357 |
| WP\_1Q211\_COPY\_NUMBER\_VARIATION\_SYNDROME | -0.05777 | -0.08597 | -1.28919 | 0.20184 | 0.575079 | -5.08412 |
| REACTOME\_MRNA\_DECAY\_BY\_3\_TO\_5\_EXORIBONUCLEASE | -0.11368 | -0.21058 | -1.28881 | 0.201974 | 0.575079 | -5.08458 |
| REACTOME\_PHASE\_1\_INACTIVATION\_OF\_FAST\_NA\_CHANNELS | -0.13119 | 0.011532 | -1.28864 | 0.202033 | 0.575079 | -5.08478 |
| WP\_P53\_TRANSCRIPTIONAL\_GENE\_NETWORK | 0.059272 | -0.05077 | 1.288367 | 0.202126 | 0.575079 | -5.08509 |
| SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_DN | -0.08712 | -0.03456 | -1.28831 | 0.202145 | 0.575079 | -5.08515 |
| YU\_MYC\_TARGETS\_UP | -0.11188 | -0.01487 | -1.28794 | 0.202276 | 0.575114 | -5.0856 |
| REACTOME\_AKT\_PHOSPHORYLATES\_TARGETS\_IN\_THE\_NUCLEUS | -0.07693 | -0.07903 | -1.28758 | 0.202399 | 0.575114 | -5.08601 |
| REACTOME\_MTORC1\_MEDIATED\_SIGNALLING | -0.10033 | -0.0089 | -1.28749 | 0.202428 | 0.575114 | -5.08611 |
| RUTELLA\_RESPONSE\_TO\_HGF\_VS\_CSF2RB\_AND\_IL4\_UP | 0.071554 | -0.15786 | 1.287038 | 0.202587 | 0.575191 | -5.08664 |
| BIOCARTA\_AHSP\_PATHWAY | 0.088721 | 0.004967 | 1.286894 | 0.202636 | 0.575191 | -5.08681 |
| WP\_THYROXINE\_THYROID\_HORMONE\_PRODUCTION | 0.130787 | -0.1231 | 1.285787 | 0.20302 | 0.575538 | -5.0881 |
| NABA\_ECM\_GLYCOPROTEINS | 0.058368 | -0.08565 | 1.285715 | 0.203045 | 0.575538 | -5.08819 |
| WANG\_CLIM2\_TARGETS\_DN | -0.06728 | -0.11107 | -1.28492 | 0.203321 | 0.575538 | -5.08912 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_PREGNANCY\_AND\_LACTATION\_STAGE\_3\_OF\_4 | 0.060791 | -0.02345 | 1.284866 | 0.20334 | 0.575538 | -5.08918 |
| DIAZ\_CHRONIC\_MYELOGENOUS\_LEUKEMIA\_UP | -0.09654 | -0.06813 | -1.2848 | 0.203364 | 0.575538 | -5.08926 |
| HOLLEMAN\_DAUNORUBICIN\_B\_ALL\_DN | -0.12643 | -0.0806 | -1.28449 | 0.203469 | 0.575538 | -5.08961 |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_CHEMICAL\_STRESS | -0.07689 | -0.15246 | -1.28426 | 0.20355 | 0.575538 | -5.08988 |
| REACTOME\_PROCESSING\_OF\_CAPPED\_INTRONLESS\_PRE\_MRNA | -0.10356 | -0.0463 | -1.28409 | 0.203611 | 0.575538 | -5.09009 |
| MATZUK\_SPERMATOZOA | 0.033199 | -0.11719 | 1.283983 | 0.203647 | 0.575538 | -5.09021 |
| WEST\_ADRENOCORTICAL\_CARCINOMA\_VS\_ADENOMA\_UP | 0.057456 | -0.00023 | 1.283936 | 0.203663 | 0.575538 | -5.09026 |
| RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_DN | -0.09038 | -0.11162 | -1.28336 | 0.203864 | 0.57585 | -5.09094 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G2 | 0.065013 | -0.34743 | 1.282657 | 0.204108 | 0.576196 | -5.09175 |
| GRYDER\_PAX3FOXO1\_TOP\_ENHANCERS | -0.07432 | -0.05136 | -1.28249 | 0.204168 | 0.576196 | -5.09195 |
| IWANAGA\_E2F1\_TARGETS\_INDUCED\_BY\_SERUM | -0.10364 | -0.002 | -1.28083 | 0.204747 | 0.576668 | -5.09388 |
| PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP | -0.11254 | -0.01712 | -1.28074 | 0.204779 | 0.576668 | -5.09399 |
| GOLUB\_ALL\_VS\_AML\_UP | -0.12831 | 0.000868 | -1.28046 | 0.204877 | 0.576668 | -5.09432 |
| WP\_SPHINGOLIPID\_METABOLISM\_INTEGRATED\_PATHWAY | 0.060561 | -0.03362 | 1.280099 | 0.205001 | 0.576668 | -5.09473 |
| SIG\_PIP3\_SIGNALING\_IN\_B\_LYMPHOCYTES | -0.05643 | -0.23719 | -1.28005 | 0.205017 | 0.576668 | -5.09478 |
| WP\_TYPE\_II\_INTERFERON\_SIGNALING\_IFNG | 0.060482 | -0.35348 | 1.280028 | 0.205026 | 0.576668 | -5.09481 |
| REACTOME\_TBC\_RABGAPS | -0.09824 | -0.00836 | -1.27993 | 0.20506 | 0.576668 | -5.09492 |
| BENPORATH\_PROLIFERATION | -0.09385 | -0.02292 | -1.27986 | 0.205086 | 0.576668 | -5.09501 |
| BIOCARTA\_GABA\_PATHWAY | -0.08121 | -0.13898 | -1.27885 | 0.205439 | 0.576668 | -5.09618 |
| PARK\_TRETINOIN\_RESPONSE\_AND\_RARA\_PLZF\_FUSION | 0.084972 | -0.18189 | 1.278376 | 0.205604 | 0.576668 | -5.09673 |
| REACTOME\_METABOLISM\_OF\_STEROIDS | -0.04044 | -0.05862 | -1.27831 | 0.205628 | 0.576668 | -5.09681 |
| VANOEVELEN\_MYOGENESIS\_SIN3A\_TARGETS | -0.05097 | -0.19468 | -1.27813 | 0.20569 | 0.576668 | -5.09701 |
| DE\_YY1\_TARGETS\_DN | -0.08326 | -0.03635 | -1.27812 | 0.205694 | 0.576668 | -5.09703 |
| ROZANOV\_MMP14\_TARGETS\_SUBSET | 0.104597 | -0.00824 | 1.278105 | 0.205699 | 0.576668 | -5.09705 |
| DARWICHE\_SKIN\_TUMOR\_PROMOTER\_DN | -0.04031 | -0.06831 | -1.27762 | 0.205868 | 0.576668 | -5.0976 |
| WILLIAMS\_ESR2\_TARGETS\_UP | -0.08117 | -0.09979 | -1.27751 | 0.205907 | 0.576668 | -5.09773 |
| REACTOME\_HIV\_INFECTION | -0.08132 | -0.14349 | -1.27748 | 0.205918 | 0.576668 | -5.09777 |
| TONG\_INTERACT\_WITH\_PTTG1 | -0.06597 | -0.17977 | -1.27709 | 0.206054 | 0.576668 | -5.09822 |
| REACTOME\_BUDDING\_AND\_MATURATION\_OF\_HIV\_VIRION | -0.10355 | -0.05941 | -1.2769 | 0.206122 | 0.576668 | -5.09845 |
| TAVOR\_CEBPA\_TARGETS\_UP | 0.069721 | -0.161 | 1.276827 | 0.206147 | 0.576668 | -5.09853 |
| BROWNE\_HCMV\_INFECTION\_10HR\_UP | 0.045613 | -0.16743 | 1.275824 | 0.206499 | 0.577158 | -5.09969 |
| BIOCARTA\_ERBB3\_PATHWAY | 0.154343 | 0.016209 | 1.275205 | 0.206717 | 0.577158 | -5.10041 |
| REACTOME\_DEGRADATION\_OF\_AXIN | -0.07749 | -0.24657 | -1.27513 | 0.206744 | 0.577158 | -5.1005 |
| GUTIERREZ\_WALDENSTROEMS\_MACROGLOBULINEMIA\_1\_DN | 0.128059 | 0.006423 | 1.275075 | 0.206763 | 0.577158 | -5.10056 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_UP | 0.066216 | -0.06003 | 1.274995 | 0.206791 | 0.577158 | -5.10065 |
| REACTOME\_GROWTH\_HORMONE\_RECEPTOR\_SIGNALING | 0.077525 | -0.00557 | 1.274781 | 0.206866 | 0.577158 | -5.1009 |
| ENK\_UV\_RESPONSE\_KERATINOCYTE\_DN | -0.09325 | -0.05607 | -1.27441 | 0.206995 | 0.577264 | -5.10132 |
| MCBRYAN\_TERMINAL\_END\_BUD\_DN | 0.125291 | -0.00811 | 1.273766 | 0.207224 | 0.577649 | -5.10207 |
| YAGI\_AML\_SURVIVAL | -0.06542 | -0.06699 | -1.27336 | 0.207366 | 0.577793 | -5.10254 |
| ONDER\_CDH1\_TARGETS\_1\_DN | 0.058111 | -0.0407 | 1.272749 | 0.207582 | 0.577934 | -5.10325 |
| VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN | -0.08153 | -0.04357 | -1.27244 | 0.207689 | 0.577934 | -5.1036 |
| WP\_ULTRACONSERVED\_REGION\_339\_MODULATION\_OF\_TUMOR\_SUPPRESSOR\_MICRORNAS\_IN\_CANCER | 0.146386 | 0.0375 | 1.272445 | 0.207689 | 0.577934 | -5.1036 |
| CERIBELLI\_PROMOTERS\_INACTIVE\_AND\_BOUND\_BY\_NFY | 0.064038 | -0.07201 | 1.272072 | 0.207821 | 0.577991 | -5.10403 |
| REACTOME\_ACTIVATION\_OF\_TRKA\_RECEPTORS | 0.112237 | -0.00835 | 1.271841 | 0.207902 | 0.577991 | -5.1043 |
| LINSLEY\_MIR16\_TARGETS | -0.05633 | -0.17043 | -1.27154 | 0.208008 | 0.577991 | -5.10464 |
| FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_DN | -0.09916 | -0.00592 | -1.27122 | 0.208124 | 0.577991 | -5.10502 |
| MORI\_EMU\_MYC\_LYMPHOMA\_BY\_ONSET\_TIME\_UP | -0.07085 | -0.08151 | -1.27096 | 0.208213 | 0.577991 | -5.10531 |
| WEBER\_METHYLATED\_LCP\_IN\_SPERM\_DN | 0.140817 | 0.017035 | 1.270657 | 0.208321 | 0.577991 | -5.10567 |
| REACTOME\_DEFECTIVE\_RIPK1\_MEDIATED\_REGULATED\_NECROSIS | -0.12617 | 0.035577 | -1.27059 | 0.208346 | 0.577991 | -5.10575 |
| KEGG\_HUNTINGTONS\_DISEASE | -0.06808 | -0.10841 | -1.26983 | 0.208612 | 0.578139 | -5.10661 |
| STEIN\_ESRRA\_TARGETS\_UP | -0.07388 | -0.07078 | -1.26975 | 0.208642 | 0.578139 | -5.10671 |
| WP\_15Q112\_COPY\_NUMBER\_VARIATION\_SYNDROME | -0.06452 | -0.39759 | -1.26967 | 0.208671 | 0.578139 | -5.10681 |
| TERAO\_AOX4\_TARGETS\_SKIN\_UP | 0.04368 | -0.33381 | 1.269173 | 0.208847 | 0.578153 | -5.10738 |
| MAGRANGEAS\_MULTIPLE\_MYELOMA\_IGLL\_VS\_IGLK\_DN | 0.054513 | -0.30695 | 1.26914 | 0.208858 | 0.578153 | -5.10741 |
| MEISSNER\_NPC\_HCP\_WITH\_H3K27ME3 | 0.082896 | -0.0234 | 1.268482 | 0.209092 | 0.578509 | -5.10817 |
| BOSCO\_TH1\_CYTOTOXIC\_MODULE | 0.057927 | -0.04637 | 1.268265 | 0.209169 | 0.578509 | -5.10842 |
| PID\_HIV\_NEF\_PATHWAY | -0.07699 | -0.24326 | -1.2668 | 0.20969 | 0.579568 | -5.11011 |
| ZEILSTRA\_CD44\_TARGETS\_DN | 0.061363 | -0.43828 | 1.266673 | 0.209734 | 0.579568 | -5.11026 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_DN | 0.044203 | -0.09456 | 1.265405 | 0.210185 | 0.580559 | -5.11171 |
| WP\_MYD88\_DISTINCT\_INPUTOUTPUT\_PATHWAY | 0.103215 | -0.00421 | 1.264796 | 0.210402 | 0.580559 | -5.11241 |
| REACTOME\_REGULATION\_OF\_HMOX1\_EXPRESSION\_AND\_ACTIVITY | -0.07492 | -0.2688 | -1.26465 | 0.210453 | 0.580559 | -5.11258 |
| BIOCARTA\_IL10\_PATHWAY | 0.07798 | -0.33452 | 1.264238 | 0.210601 | 0.580559 | -5.11306 |
| REACTOME\_MITOCHONDRIAL\_TRNA\_AMINOACYLATION | -0.10571 | -0.10509 | -1.26413 | 0.210639 | 0.580559 | -5.11318 |
| REACTOME\_SIGNALING\_BY\_PDGFRA\_TRANSMEMBRANE\_JUXTAMEMBRANE\_AND\_KINASE\_DOMAIN\_MUTANTS | -0.11233 | -0.05384 | -1.26413 | 0.210639 | 0.580559 | -5.11318 |
| WP\_SPHINGOLIPID\_METABOLISM\_OVERVIEW | 0.060586 | -0.03733 | 1.26376 | 0.210771 | 0.580576 | -5.11361 |
| REACTOME\_CLASS\_I\_MHC\_MEDIATED\_ANTIGEN\_PROCESSING\_PRESENTATION | -0.06039 | -0.17626 | -1.2636 | 0.210828 | 0.580576 | -5.11379 |
| SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_DN | 0.067991 | -0.09413 | 1.263141 | 0.210992 | 0.580776 | -5.11431 |
| MIKKELSEN\_ES\_LCP\_WITH\_H3K27ME3 | 0.114735 | -0.00075 | 1.262339 | 0.211279 | 0.580796 | -5.11524 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFE2L2\_NRF2\_SURVIVAL\_SIGNALING | 0.068464 | -0.10682 | 1.262209 | 0.211325 | 0.580796 | -5.11538 |
| LOPES\_METHYLATED\_IN\_COLON\_CANCER\_DN | -0.05361 | -0.0295 | -1.26198 | 0.211407 | 0.580796 | -5.11565 |
| HOEGERKORP\_CD44\_TARGETS\_DIRECT\_DN | 0.085105 | -0.06399 | 1.261683 | 0.211513 | 0.580796 | -5.11599 |
| REACTOME\_INTERLEUKIN\_RECEPTOR\_SHC\_SIGNALING | 0.057784 | -0.04098 | 1.261507 | 0.211576 | 0.580796 | -5.11619 |
| KEGG\_WNT\_SIGNALING\_PATHWAY | -0.03983 | -0.09036 | -1.26135 | 0.211634 | 0.580796 | -5.11637 |
| CUI\_TCF21\_TARGETS\_2\_DN | -0.07092 | -0.06886 | -1.2612 | 0.211685 | 0.580796 | -5.11654 |
| REACTOME\_CHAPERONE\_MEDIATED\_AUTOPHAGY | 0.09891 | 0.005703 | 1.261079 | 0.211729 | 0.580796 | -5.11668 |
| DODD\_NASOPHARYNGEAL\_CARCINOMA\_UP | 0.033125 | -0.08262 | 1.260605 | 0.211899 | 0.580833 | -5.11722 |
| REACTOME\_NUCLEAR\_RECEPTOR\_TRANSCRIPTION\_PATHWAY | 0.054731 | -0.07812 | 1.260386 | 0.211978 | 0.580833 | -5.11747 |
| HAN\_JNK\_SINGALING\_UP | 0.067259 | -0.10485 | 1.260167 | 0.212056 | 0.580833 | -5.11773 |
| PARK\_HSC\_AND\_MULTIPOTENT\_PROGENITORS | -0.09636 | -0.0501 | -1.26002 | 0.212108 | 0.580833 | -5.11789 |
| REACTOME\_NONSENSE\_MEDIATED\_DECAY\_NMD | -0.09383 | -0.11291 | -1.25941 | 0.212328 | 0.581186 | -5.11859 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_TCF\_DEPENDENT\_SIGNALING\_BY\_WNT\_LIGAND\_ANTAGONISTS | -0.07717 | -0.0523 | -1.25911 | 0.212436 | 0.58123 | -5.11894 |
| CAMPS\_COLON\_CANCER\_COPY\_NUMBER\_UP | 0.03701 | -0.1659 | 1.25863 | 0.212608 | 0.58145 | -5.11948 |
| LEE\_CALORIE\_RESTRICTION\_NEOCORTEX\_DN | -0.0512 | -0.04407 | -1.25767 | 0.212954 | 0.582113 | -5.12059 |
| IIZUKA\_LIVER\_CANCER\_EARLY\_RECURRENCE | 0.105438 | -0.321 | 1.257447 | 0.213033 | 0.582113 | -5.12084 |
| LIN\_NPAS4\_TARGETS\_UP | -0.05625 | -0.16705 | -1.25653 | 0.213363 | 0.582158 | -5.12189 |
| CHICAS\_RB1\_TARGETS\_GROWING | -0.06242 | -0.04527 | -1.25648 | 0.213382 | 0.582158 | -5.12195 |
| DER\_IFN\_ALPHA\_RESPONSE\_DN | -0.16728 | -0.04593 | -1.25601 | 0.213551 | 0.582158 | -5.12248 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TAN\_DN | -0.11541 | -0.02344 | -1.25596 | 0.213568 | 0.582158 | -5.12253 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C4 | 0.070145 | -0.17799 | 1.255901 | 0.213589 | 0.582158 | -5.1226 |
| REACTOME\_DEGRADATION\_OF\_GLI1\_BY\_THE\_PROTEASOME | -0.07661 | -0.23957 | -1.25588 | 0.213598 | 0.582158 | -5.12263 |
| YEMELYANOV\_GR\_TARGETS\_DN | 0.091336 | -0.07121 | 1.254966 | 0.213926 | 0.582803 | -5.12367 |
| REACTOME\_COPI\_MEDIATED\_ANTEROGRADE\_TRANSPORT | -0.07912 | -0.02208 | -1.25435 | 0.214148 | 0.583157 | -5.12437 |
| BIOCARTA\_CALCINEURIN\_PATHWAY | -0.09967 | -0.0493 | -1.25401 | 0.21427 | 0.583239 | -5.12475 |
| REACTOME\_ESTROGEN\_DEPENDENT\_GENE\_EXPRESSION | -0.08496 | -0.021 | -1.25311 | 0.214598 | 0.583882 | -5.12579 |
| REACTOME\_PREVENTION\_OF\_PHAGOSOMAL\_LYSOSOMAL\_FUSION | 0.131538 | 0.004278 | 1.252517 | 0.214811 | 0.584128 | -5.12646 |
| ELVIDGE\_HYPOXIA\_BY\_DMOG\_UP | 0.083396 | -0.05656 | 1.252139 | 0.214948 | 0.584128 | -5.12689 |
| PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_DN | -0.10385 | -0.10323 | -1.25169 | 0.215109 | 0.584128 | -5.1274 |
| BIOCARTA\_HBX\_PATHWAY | -0.10476 | -0.10767 | -1.25164 | 0.215128 | 0.584128 | -5.12746 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_C | 0.054015 | -0.14771 | 1.25159 | 0.215147 | 0.584128 | -5.12752 |
| HASLINGER\_B\_CLL\_WITH\_6Q21\_DELETION | -0.10838 | -0.06684 | -1.25032 | 0.215608 | 0.585057 | -5.12896 |
| NIKOLSKY\_BREAST\_CANCER\_1Q32\_AMPLICON | 0.088094 | -0.00269 | 1.250002 | 0.215723 | 0.585057 | -5.12932 |
| PID\_RET\_PATHWAY | -0.07234 | -0.07722 | -1.24945 | 0.215921 | 0.585057 | -5.12994 |
| REACTOME\_ER\_QUALITY\_CONTROL\_COMPARTMENT\_ERQC | -0.0885 | -0.21433 | -1.24918 | 0.216022 | 0.585057 | -5.13026 |
| WP\_PI3KAKT\_SIGNALING\_PATHWAY | 0.030395 | -0.05443 | 1.249136 | 0.216037 | 0.585057 | -5.1303 |
| WP\_AIRWAY\_SMOOTH\_MUSCLE\_CELL\_CONTRACTION | -0.09264 | 0.004867 | -1.24913 | 0.216041 | 0.585057 | -5.13032 |
| PID\_LKB1\_PATHWAY | 0.058928 | -0.07809 | 1.247915 | 0.216481 | 0.585795 | -5.13169 |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_8HR | 0.080446 | -0.02675 | 1.247528 | 0.216622 | 0.585795 | -5.13213 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_5 | -0.09767 | -0.06414 | -1.24734 | 0.21669 | 0.585795 | -5.13234 |
| REACTOME\_PI3K\_AKT\_ACTIVATION | -0.10936 | -0.00142 | -1.24698 | 0.21682 | 0.585795 | -5.13275 |
| PID\_RHODOPSIN\_PATHWAY | 0.077303 | -0.09285 | 1.246564 | 0.216973 | 0.585795 | -5.13322 |
| REACTOME\_RHOG\_GTPASE\_CYCLE | 0.049102 | -0.03933 | 1.246295 | 0.217071 | 0.585795 | -5.13353 |
| BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_DN | 0.084265 | -0.06305 | 1.246227 | 0.217096 | 0.585795 | -5.1336 |
| REACTOME\_SUMOYLATION\_OF\_RNA\_BINDING\_PROTEINS | -0.07676 | -0.11882 | -1.24608 | 0.217149 | 0.585795 | -5.13377 |
| STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_UP | -0.08281 | -0.07862 | -1.24596 | 0.217192 | 0.585795 | -5.1339 |
| KAMMINGA\_EZH2\_TARGETS | -0.11962 | -0.0245 | -1.24585 | 0.217234 | 0.585795 | -5.13403 |
| REACTOME\_MAPK6\_MAPK4\_SIGNALING | -0.06634 | -0.20128 | -1.24559 | 0.217327 | 0.585799 | -5.13432 |
| YANG\_BCL3\_TARGETS\_DN | 0.073882 | -0.00981 | 1.244864 | 0.217594 | 0.58619 | -5.13515 |
| HALMOS\_CEBPA\_TARGETS\_UP | 0.074325 | -0.00322 | 1.244476 | 0.217735 | 0.58619 | -5.13559 |
| REACTOME\_TRANSPORT\_OF\_MATURE\_TRANSCRIPT\_TO\_CYTOPLASM | -0.08778 | -0.07948 | -1.24444 | 0.217749 | 0.58619 | -5.13563 |
| BIOCARTA\_CIRCADIAN\_PATHWAY | 0.114281 | -0.00591 | 1.244172 | 0.217846 | 0.586204 | -5.13593 |
| RODRIGUES\_NTN1\_AND\_DCC\_TARGETS | 0.068621 | -0.0624 | 1.243039 | 0.218261 | 0.587032 | -5.13721 |
| REACTOME\_RRNA\_PROCESSING | -0.08213 | -0.13754 | -1.24283 | 0.218338 | 0.587032 | -5.13745 |
| FUJII\_YBX1\_TARGETS\_DN | -0.05467 | -0.17183 | -1.24245 | 0.218477 | 0.587157 | -5.13788 |
| REACTOME\_ATF6\_ATF6\_ALPHA\_ACTIVATES\_CHAPERONES | -0.12727 | ####### | -1.24204 | 0.218626 | 0.587199 | -5.13834 |
| SANDERSON\_PPARA\_TARGETS | -0.09879 | -0.07245 | -1.2419 | 0.218677 | 0.587199 | -5.1385 |
| REACTOME\_LIGAND\_RECEPTOR\_INTERACTIONS | -0.10932 | -0.01859 | -1.24066 | 0.219135 | 0.58818 | -5.1399 |
| KUNINGER\_IGF1\_VS\_PDGFB\_TARGETS\_DN | 0.058232 | -0.04493 | 1.240286 | 0.21927 | 0.588295 | -5.14032 |
| LEE\_LIVER\_CANCER\_DENA\_DN | 0.04723 | -0.05723 | 1.237732 | 0.22021 | 0.590568 | -5.1432 |
| YANG\_BREAST\_CANCER\_ESR1\_LASER\_UP | -0.06102 | -0.03557 | -1.23712 | 0.220435 | 0.590736 | -5.14389 |
| SETLUR\_PROSTATE\_CANCER\_TMPRSS2\_ERG\_FUSION\_UP | -0.06322 | -0.06022 | -1.23706 | 0.220458 | 0.590736 | -5.14396 |
| REACTOME\_INTERFERON\_GAMMA\_SIGNALING | 0.033777 | -0.47473 | 1.236491 | 0.220668 | 0.591048 | -5.14459 |
| WP\_REGULATION\_OF\_ACTIN\_CYTOSKELETON | 0.036753 | -0.03874 | 1.235691 | 0.220963 | 0.591427 | -5.14549 |
| WP\_OSTEOCLAST\_SIGNALING | 0.084918 | -0.05597 | 1.235468 | 0.221046 | 0.591427 | -5.14574 |
| KEGG\_SNARE\_INTERACTIONS\_IN\_VESICULAR\_TRANSPORT | -0.08583 | -0.01016 | -1.23535 | 0.221088 | 0.591427 | -5.14587 |
| MENSE\_HYPOXIA\_UP | 0.078279 | -0.05106 | 1.234864 | 0.221269 | 0.591662 | -5.14642 |
| REACTOME\_CYCLIN\_A\_CDK2\_ASSOCIATED\_EVENTS\_AT\_S\_PHASE\_ENTRY | -0.07176 | -0.1866 | -1.23413 | 0.221541 | 0.591664 | -5.14725 |
| KEGG\_DRUG\_METABOLISM\_CYTOCHROME\_P450 | 0.048976 | -0.11121 | 1.23362 | 0.221729 | 0.591664 | -5.14782 |
| WANG\_BARRETTS\_ESOPHAGUS\_AND\_ESOPHAGUS\_CANCER\_UP | 0.043392 | -0.32862 | 1.233343 | 0.221832 | 0.591664 | -5.14813 |
| ELVIDGE\_HYPOXIA\_UP | 0.072336 | -0.07985 | 1.233061 | 0.221936 | 0.591664 | -5.14845 |
| REACTOME\_BETA\_OXIDATION\_OF\_OCTANOYL\_COA\_TO\_HEXANOYL\_COA | -0.16543 | -0.01072 | -1.23298 | 0.221967 | 0.591664 | -5.14854 |
| REACTOME\_SYNTHESIS\_OF\_PE | -0.09188 | 0.009195 | -1.23295 | 0.221977 | 0.591664 | -5.14857 |
| BAKER\_HEMATOPOIESIS\_STAT3\_TARGETS | 0.100617 | -0.00188 | 1.232939 | 0.221982 | 0.591664 | -5.14858 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_DN | -0.10645 | -0.02683 | -1.23285 | 0.222014 | 0.591664 | -5.14868 |
| KEGG\_OLFACTORY\_TRANSDUCTION | 0.070664 | -0.25241 | 1.232507 | 0.222142 | 0.591758 | -5.14907 |
| MEISSNER\_ES\_ICP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.095905 | 0.009527 | 1.232226 | 0.222246 | 0.591788 | -5.14938 |
| HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_DN | 0.090097 | 0.012296 | 1.231455 | 0.222532 | 0.592198 | -5.15025 |
| REACTOME\_REGULATION\_OF\_PTEN\_MRNA\_TRANSLATION | -0.0882 | -0.08417 | -1.23103 | 0.22269 | 0.592198 | -5.15072 |
| HATADA\_METHYLATED\_IN\_LUNG\_CANCER\_DN | 0.078364 | -0.07312 | 1.230603 | 0.222849 | 0.592198 | -5.1512 |
| BIOCARTA\_TUBBY\_PATHWAY | 0.130195 | -0.00463 | 1.230594 | 0.222852 | 0.592198 | -5.15121 |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_WITH\_LMP1\_UP | -0.04954 | -0.04131 | -1.23034 | 0.222945 | 0.592198 | -5.15149 |
| REACTOME\_INNATE\_IMMUNE\_SYSTEM | 0.045857 | -0.16736 | 1.230309 | 0.222958 | 0.592198 | -5.15153 |
| MATZUK\_PREOVULATORY\_FOLLICLE | -0.08931 | -0.00524 | -1.22968 | 0.223192 | 0.59238 | -5.15223 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_DNA\_REPAIR\_GENES | -0.05802 | -0.27176 | -1.22962 | 0.223213 | 0.59238 | -5.1523 |
| MARSON\_FOXP3\_TARGETS\_DN | 0.084395 | -0.06279 | 1.227583 | 0.223973 | 0.593568 | -5.15458 |
| REACTOME\_INTERLEUKIN\_17\_SIGNALING | 0.055302 | -0.00891 | 1.227173 | 0.224126 | 0.593568 | -5.15504 |
| REACTOME\_GLUCAGON\_SIGNALING\_IN\_METABOLIC\_REGULATION | -0.04429 | -0.10596 | -1.22709 | 0.224157 | 0.593568 | -5.15513 |
| BIOCARTA\_LAIR\_PATHWAY | 0.062568 | -0.27407 | 1.226981 | 0.224198 | 0.593568 | -5.15525 |
| WP\_CELLS\_AND\_MOLECULES\_INVOLVED\_IN\_LOCAL\_ACUTE\_INFLAMMATORY\_RESPONSE | 0.062568 | -0.27407 | 1.226981 | 0.224198 | 0.593568 | -5.15525 |
| REACTOME\_CREB\_PHOSPHORYLATION | -0.08698 | -0.09315 | -1.22692 | 0.22422 | 0.593568 | -5.15532 |
| KEGG\_SPHINGOLIPID\_METABOLISM | 0.043416 | -0.21412 | 1.225695 | 0.224679 | 0.594204 | -5.15669 |
| REACTOME\_NRAGE\_SIGNALS\_DEATH\_THROUGH\_JNK | 0.038812 | -0.08003 | 1.225562 | 0.224728 | 0.594204 | -5.15683 |
| PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_DN | 0.093105 | -0.01468 | 1.225529 | 0.224741 | 0.594204 | -5.15687 |
| LEE\_CALORIE\_RESTRICTION\_MUSCLE\_DN | -0.07426 | -0.02583 | -1.22436 | 0.225178 | 0.59491 | -5.15817 |
| REACTOME\_MISMATCH\_REPAIR | -0.09724 | -0.01034 | -1.22411 | 0.22527 | 0.59491 | -5.15845 |
| LIU\_TARGETS\_OF\_VMYB\_VS\_CMYB\_DN | 0.062072 | -0.02355 | 1.223974 | 0.225323 | 0.59491 | -5.1586 |
| REACTOME\_INTERACTIONS\_OF\_VPR\_WITH\_HOST\_CELLULAR\_PROTEINS | -0.10396 | 0.001592 | -1.22362 | 0.225457 | 0.59491 | -5.159 |
| RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_DN | 0.064386 | -0.17383 | 1.223568 | 0.225475 | 0.59491 | -5.15906 |
| ZHAN\_MULTIPLE\_MYELOMA\_HP\_DN | -0.08441 | -0.09758 | -1.22332 | 0.225569 | 0.594912 | -5.15934 |
| REACTOME\_OPIOID\_SIGNALLING | -0.04556 | -0.03918 | -1.22256 | 0.225854 | 0.595351 | -5.16018 |
| YAGI\_AML\_WITH\_T\_9\_11\_TRANSLOCATION | -0.06592 | -0.06646 | -1.22231 | 0.225947 | 0.595351 | -5.16046 |
| BURTON\_ADIPOGENESIS\_11 | -0.10184 | -0.02371 | -1.22209 | 0.22603 | 0.595351 | -5.1607 |
| COULOUARN\_TEMPORAL\_TGFB1\_SIGNATURE\_UP | 0.051683 | -0.11843 | 1.221567 | 0.226226 | 0.595351 | -5.16128 |
| GESERICK\_TERT\_TARGETS\_DN | 0.101418 | -0.21959 | 1.221263 | 0.226341 | 0.595351 | -5.16162 |
| IWANAGA\_CARCINOGENESIS\_BY\_KRAS\_PTEN\_DN | -0.04283 | -0.05939 | -1.22101 | 0.226437 | 0.595351 | -5.16191 |
| REACTOME\_AUTOPHAGY | -0.07298 | -0.07069 | -1.22095 | 0.22646 | 0.595351 | -5.16197 |
| EPPERT\_LSC\_R | -0.07432 | -0.14017 | -1.2208 | 0.226514 | 0.595351 | -5.16213 |
| REACTOME\_ECM\_PROTEOGLYCANS | 0.070213 | -0.02703 | 1.220633 | 0.226578 | 0.595351 | -5.16232 |
| WP\_NUCLEAR\_RECEPTORS | 0.053749 | -0.111 | 1.219977 | 0.226824 | 0.59564 | -5.16305 |
| OUILLETTE\_CLL\_13Q14\_DELETION\_DN | -0.03476 | -0.17351 | -1.21984 | 0.226875 | 0.59564 | -5.1632 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_18 | -0.14522 | -0.0326 | -1.21938 | 0.227048 | 0.595848 | -5.16371 |
| KEGG\_RENIN\_ANGIOTENSIN\_SYSTEM | 0.075691 | -0.04458 | 1.218412 | 0.227414 | 0.596564 | -5.16479 |
| PID\_RXR\_VDR\_PATHWAY | 0.036253 | -0.33234 | 1.21799 | 0.227574 | 0.596736 | -5.16525 |
| WP\_TRANSLATION\_INHIBITORS\_IN\_CHRONICALLY\_ACTIVATED\_PDGFRA\_CELLS | -0.07172 | -0.05872 | -1.21769 | 0.227687 | 0.596789 | -5.16559 |
| LUI\_THYROID\_CANCER\_CLUSTER\_4 | 0.028833 | -0.74971 | 1.217291 | 0.227838 | 0.596936 | -5.16603 |
| WP\_SLEEP\_REGULATION | 0.053421 | 0.006332 | 1.216255 | 0.228229 | 0.597686 | -5.16717 |
| REACTOME\_CS\_DS\_DEGRADATION | 0.078545 | -0.01496 | 1.216037 | 0.228312 | 0.597686 | -5.16742 |
| REACTOME\_RAF\_INDEPENDENT\_MAPK1\_3\_ACTIVATION | 0.075947 | -0.11409 | 1.2147 | 0.228818 | 0.598738 | -5.1689 |
| WP\_MITOCHONDRIAL\_GENE\_EXPRESSION | -0.08507 | -0.00523 | -1.21448 | 0.228902 | 0.598738 | -5.16914 |
| REACTOME\_POSITIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION | -0.07895 | -0.11404 | -1.2129 | 0.229503 | 0.600063 | -5.17089 |
| STEINER\_ERYTHROCYTE\_MEMBRANE\_GENES | 0.070558 | -0.00753 | 1.21264 | 0.229599 | 0.60007 | -5.17117 |
| BIOCARTA\_PTEN\_PATHWAY | -0.07639 | -0.10297 | -1.21181 | 0.229915 | 0.600361 | -5.17209 |
| MAHADEVAN\_GIST\_MORPHOLOGICAL\_SWITCH | 0.091637 | -0.01743 | 1.211609 | 0.229992 | 0.600361 | -5.17231 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_TP53 | -0.05506 | -0.14211 | -1.2116 | 0.229994 | 0.600361 | -5.17232 |
| BIOCARTA\_CTL\_PATHWAY | 0.083129 | -0.33151 | 1.210934 | 0.230248 | 0.600377 | -5.17305 |
| XU\_AKT1\_TARGETS\_6HR | -0.0781 | -0.07533 | -1.21072 | 0.230329 | 0.600377 | -5.17329 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_UP | 0.068654 | -0.24734 | 1.21051 | 0.23041 | 0.600377 | -5.17352 |
| KANG\_FLUOROURACIL\_RESISTANCE\_UP | -0.09006 | -0.03855 | -1.21043 | 0.230442 | 0.600377 | -5.17361 |
| REACTOME\_PHASE\_I\_FUNCTIONALIZATION\_OF\_COMPOUNDS | 0.044941 | -0.06997 | 1.209722 | 0.23071 | 0.600377 | -5.17439 |
| BIOCARTA\_PPARG\_PATHWAY | -0.13097 | -0.03095 | -1.20932 | 0.230865 | 0.600377 | -5.17484 |
| INGRAM\_SHH\_TARGETS\_UP | 0.040809 | -0.09945 | 1.209057 | 0.230964 | 0.600377 | -5.17512 |
| REACTOME\_SIGNALING\_BY\_HEDGEHOG | -0.04846 | -0.13596 | -1.20865 | 0.23112 | 0.600377 | -5.17557 |
| PARK\_TRETINOIN\_RESPONSE | 0.1119 | 0.008309 | 1.208621 | 0.23113 | 0.600377 | -5.1756 |
| REACTOME\_NOTCH\_HLH\_TRANSCRIPTION\_PATHWAY | -0.06142 | -0.11839 | -1.20836 | 0.231232 | 0.600377 | -5.17589 |
| DUNNE\_TARGETS\_OF\_AML1\_MTG8\_FUSION\_DN | 0.093254 | -0.01362 | 1.208282 | 0.23126 | 0.600377 | -5.17597 |
| WP\_GENES\_TARGETED\_BY\_MIRNAS\_IN\_ADIPOCYTES | -0.07103 | -0.07981 | -1.20827 | 0.231263 | 0.600377 | -5.17598 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_WITHOUT\_MGMT\_24HR\_UP | -0.07513 | -0.00421 | -1.20822 | 0.231283 | 0.600377 | -5.17604 |
| MCGOWAN\_RSP6\_TARGETS\_DN | -0.14121 | -0.15878 | -1.20812 | 0.231321 | 0.600377 | -5.17615 |
| HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BII\_LYMPHOCYTE\_UP | -0.05915 | -0.1472 | -1.20734 | 0.231619 | 0.600411 | -5.17701 |
| KEGG\_ALZHEIMERS\_DISEASE | -0.06071 | -0.1367 | -1.2072 | 0.231672 | 0.600411 | -5.17716 |
| BENPORATH\_MYC\_MAX\_TARGETS | -0.07096 | -0.14157 | -1.20666 | 0.231879 | 0.600411 | -5.17776 |
| WU\_HBX\_TARGETS\_2\_UP | 0.062728 | -0.19814 | 1.206292 | 0.232021 | 0.600411 | -5.17816 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_OF\_WHITE\_ADIPOCYTE\_DIFFERENTIATION | -0.06202 | -0.11163 | -1.20621 | 0.232051 | 0.600411 | -5.17825 |
| PID\_HIF1A\_PATHWAY | 0.096125 | 0.004895 | 1.206096 | 0.232096 | 0.600411 | -5.17838 |
| AKL\_HTLV1\_INFECTION\_UP | -0.09405 | -0.14831 | -1.20606 | 0.23211 | 0.600411 | -5.17842 |
| KONDO\_COLON\_CANCER\_HCP\_WITH\_H3K27ME1 | 0.053947 | -0.0047 | 1.205173 | 0.232449 | 0.600411 | -5.17939 |
| SCHLOSSER\_SERUM\_RESPONSE\_DN | -0.08027 | -0.07766 | -1.2051 | 0.232478 | 0.600411 | -5.17947 |
| REACTOME\_INTERLEUKIN\_27\_SIGNALING | 0.092773 | -0.17458 | 1.205093 | 0.23248 | 0.600411 | -5.17948 |
| HOFFMANN\_SMALL\_PRE\_BII\_TO\_IMMATURE\_B\_LYMPHOCYTE\_UP | 0.041786 | -0.34082 | 1.205069 | 0.232489 | 0.600411 | -5.17951 |
| REACTOME\_CDT1\_ASSOCIATION\_WITH\_THE\_CDC6\_ORC\_ORIGIN\_COMPLEX | -0.0727 | -0.23097 | -1.20497 | 0.232526 | 0.600411 | -5.17961 |
| AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_UP | -0.04244 | -0.19386 | -1.20477 | 0.232604 | 0.600411 | -5.17983 |
| DELACROIX\_RAR\_TARGETS\_DN | 0.063986 | -0.07854 | 1.204607 | 0.232666 | 0.600411 | -5.18001 |
| ZHAN\_MULTIPLE\_MYELOMA\_PR\_DN | -0.06506 | -0.06642 | -1.20439 | 0.232749 | 0.600411 | -5.18025 |
| NUYTTEN\_NIPP1\_TARGETS\_UP | -0.06154 | -0.06663 | -1.20391 | 0.232935 | 0.600466 | -5.18078 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_2B | 0.058602 | -0.15731 | 1.203564 | 0.233067 | 0.600466 | -5.18116 |
| REACTOME\_PD\_1\_SIGNALING | 0.037209 | -0.58435 | 1.203304 | 0.233167 | 0.600466 | -5.18144 |
| YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_UP | -0.08821 | -0.01592 | -1.20268 | 0.233406 | 0.600466 | -5.18212 |
| IVANOVA\_HEMATOPOIESIS\_STEM\_CELL\_LONG\_TERM | -0.04146 | -0.08463 | -1.20266 | 0.233413 | 0.600466 | -5.18214 |
| ACEVEDO\_LIVER\_CANCER\_UP | -0.09312 | -0.14612 | -1.20261 | 0.233435 | 0.600466 | -5.18221 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_EVENTS\_OF\_B\_CELL\_RECEPTOR\_BCR | -0.07837 | -0.19288 | -1.20225 | 0.23357 | 0.600466 | -5.18259 |
| HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_UP | 0.042214 | -0.13069 | 1.202037 | 0.233654 | 0.600466 | -5.18283 |
| REACTOME\_RECEPTOR\_TYPE\_TYROSINE\_PROTEIN\_PHOSPHATASES | -0.06579 | -0.06027 | -1.20202 | 0.23366 | 0.600466 | -5.18285 |
| WP\_OVERLAP\_BETWEEN\_SIGNAL\_TRANSDUCTION\_PATHWAYS\_CONTRIBUTING\_TO\_LMNA\_LAMINOPATHIES | 0.062435 | -0.02242 | 1.201818 | 0.233738 | 0.600466 | -5.18307 |
| REACTOME\_ACYL\_CHAIN\_REMODELLING\_OF\_PE | 0.054644 | -0.04127 | 1.201347 | 0.233919 | 0.600466 | -5.18358 |
| REACTOME\_ORC1\_REMOVAL\_FROM\_CHROMATIN | -0.07411 | -0.20035 | -1.20127 | 0.233948 | 0.600466 | -5.18367 |
| SENESE\_HDAC2\_TARGETS\_DN | 0.0574 | -0.04792 | 1.200989 | 0.234057 | 0.600466 | -5.18398 |
| WP\_JOUBERT\_SYNDROME | -0.05716 | -0.02669 | -1.20016 | 0.234377 | 0.600466 | -5.18488 |
| WP\_METHIONINE\_METABOLISM\_LEADING\_TO\_SULFUR\_AMINO\_ACIDS\_AND\_RELATED\_DISORDERS | -0.08701 | 0.001405 | -1.20006 | 0.234415 | 0.600466 | -5.18499 |
| GRYDER\_PAX3FOXO1\_ENHANCERS\_KO\_DOWN | -0.06347 | -0.0535 | -1.19971 | 0.234549 | 0.600466 | -5.18537 |
| TSAI\_RESPONSE\_TO\_RADIATION\_THERAPY | 0.087766 | -0.16154 | 1.199527 | 0.234621 | 0.600466 | -5.18557 |
| PID\_S1P\_S1P4\_PATHWAY | -0.09709 | 0.004727 | -1.19945 | 0.234651 | 0.600466 | -5.18566 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_APOBEC2 | 0.069612 | -0.02084 | 1.199442 | 0.234654 | 0.600466 | -5.18567 |
| REACTOME\_NOSTRIN\_MEDIATED\_ENOS\_TRAFFICKING | -0.13521 | 0.005781 | -1.19943 | 0.234657 | 0.600466 | -5.18568 |
| LIU\_VMYB\_TARGETS\_UP | -0.06413 | -0.05823 | -1.19877 | 0.234913 | 0.600879 | -5.1864 |
| REACTOME\_SIGNALING\_BY\_RNF43\_MUTANTS | -0.09298 | -0.10245 | -1.19774 | 0.235311 | 0.601656 | -5.18752 |
| LANDIS\_ERBB2\_BREAST\_PRENEOPLASTIC\_UP | 0.063567 | -0.00071 | 1.1973 | 0.235482 | 0.601778 | -5.18801 |
| WP\_DNA\_REPLICATION | -0.08288 | -0.01838 | -1.19713 | 0.235548 | 0.601778 | -5.18819 |
| FORTSCHEGGER\_PHF8\_TARGETS\_UP | -0.05613 | -0.03986 | -1.19678 | 0.235682 | 0.601879 | -5.18857 |
| BIOCARTA\_MITR\_PATHWAY | 0.091702 | -0.01928 | 1.196243 | 0.235891 | 0.60208 | -5.18916 |
| CAFFAREL\_RESPONSE\_TO\_THC\_24HR\_3\_UP | -0.13382 | -0.00728 | -1.19609 | 0.23595 | 0.60208 | -5.18933 |
| WAKABAYASHI\_ADIPOGENESIS\_PPARG\_BOUND\_36HR | -0.08283 | -0.0063 | -1.19565 | 0.236119 | 0.602269 | -5.1898 |
| REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION | -0.09152 | -0.12098 | -1.19472 | 0.236483 | 0.602758 | -5.19082 |
| REACTOME\_LOSS\_OF\_FUNCTION\_OF\_MECP2\_IN\_RETT\_SYNDROME | -0.07982 | -0.11565 | -1.19408 | 0.236731 | 0.602758 | -5.19152 |
| GINESTIER\_BREAST\_CANCER\_20Q13\_AMPLIFICATION\_UP | -0.07302 | -0.03404 | -1.19405 | 0.23674 | 0.602758 | -5.19154 |
| OSWALD\_HEMATOPOIETIC\_STEM\_CELL\_IN\_COLLAGEN\_GEL\_UP | 0.05605 | -0.08945 | 1.1931 | 0.237111 | 0.602758 | -5.19258 |
| CHEN\_LUNG\_CANCER\_SURVIVAL | 0.070522 | -0.03396 | 1.193093 | 0.237114 | 0.602758 | -5.19259 |
| REACTOME\_VASOPRESSIN\_LIKE\_RECEPTORS | 0.11684 | 0.022803 | 1.192948 | 0.23717 | 0.602758 | -5.19274 |
| SINGH\_NFE2L2\_TARGETS | 0.097755 | 0.007705 | 1.192705 | 0.237265 | 0.602758 | -5.19301 |
| TANAKA\_METHYLATED\_IN\_ESOPHAGEAL\_CARCINOMA | 0.033907 | -0.07689 | 1.192617 | 0.237299 | 0.602758 | -5.1931 |
| PID\_INTEGRIN5\_PATHWAY | 0.086855 | 0.00596 | 1.192579 | 0.237314 | 0.602758 | -5.19314 |
| BIOCARTA\_EFP\_PATHWAY | 0.073072 | -0.13034 | 1.19251 | 0.237341 | 0.602758 | -5.19322 |
| KEGG\_ARACHIDONIC\_ACID\_METABOLISM | 0.047291 | -0.09166 | 1.192398 | 0.237384 | 0.602758 | -5.19334 |
| OSADA\_ASCL1\_TARGETS\_UP | 0.040941 | -0.1501 | 1.192235 | 0.237447 | 0.602758 | -5.19352 |
| LIN\_MELANOMA\_COPY\_NUMBER\_DN | -0.0872 | -0.08121 | -1.1915 | 0.237732 | 0.603067 | -5.19431 |
| WP\_INTRACELLULAR\_TRAFFICKING\_PROTEINS\_INVOLVED\_IN\_CMT\_NEUROPATHY | 0.061684 | 0.001196 | 1.191436 | 0.237759 | 0.603067 | -5.19439 |
| WP\_MICRORNA\_NETWORK\_ASSOCIATED\_WITH\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA | 0.126881 | 0.010561 | 1.190649 | 0.238065 | 0.603514 | -5.19524 |
| VALK\_AML\_CLUSTER\_16 | 0.056 | -0.00575 | 1.190389 | 0.238167 | 0.603514 | -5.19552 |
| ZHAN\_V1\_LATE\_DIFFERENTIATION\_GENES\_UP | 0.084883 | -0.18446 | 1.190255 | 0.238219 | 0.603514 | -5.19567 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_3 | -0.11203 | -0.01564 | -1.18969 | 0.23844 | 0.603832 | -5.19628 |
| REACTOME\_INTRA\_GOLGI\_TRAFFIC | -0.06107 | -0.05617 | -1.18943 | 0.238541 | 0.603848 | -5.19656 |
| KUROZUMI\_RESPONSE\_TO\_ONCOCYTIC\_VIRUS\_AND\_CYCLIC\_RGD | 0.065165 | -0.21214 | 1.189004 | 0.238708 | 0.603888 | -5.19702 |
| PID\_ATM\_PATHWAY | -0.05381 | -0.24994 | -1.1889 | 0.238747 | 0.603888 | -5.19713 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_2 | 0.041121 | -0.15581 | 1.188177 | 0.239031 | 0.604367 | -5.19792 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_UV\_IN\_WS | 0.076032 | -0.06804 | 1.187771 | 0.23919 | 0.604529 | -5.19836 |
| CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_UP | 0.062241 | -0.09985 | 1.1871 | 0.239453 | 0.604898 | -5.19909 |
| REACTOME\_SYNTHESIS\_OF\_BILE\_ACIDS\_AND\_BILE\_SALTS\_VIA\_27\_HYDROXYCHOLESTEROL | 0.076189 | -0.00672 | 1.186912 | 0.239526 | 0.604898 | -5.19929 |
| REACTOME\_ESR\_MEDIATED\_SIGNALING | -0.06366 | -0.02987 | -1.18504 | 0.240262 | 0.606417 | -5.20131 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_6 | 0.066619 | -0.01162 | 1.184784 | 0.240361 | 0.606417 | -5.20159 |
| KRIGE\_RESPONSE\_TO\_TOSEDOSTAT\_6HR\_DN | -0.05726 | -0.1042 | -1.18465 | 0.240413 | 0.606417 | -5.20173 |
| NADERI\_BREAST\_CANCER\_PROGNOSIS\_UP | -0.06475 | -0.03061 | -1.1835 | 0.240867 | 0.607321 | -5.20298 |
| NGUYEN\_NOTCH1\_TARGETS\_DN | 0.04928 | -0.30977 | 1.182707 | 0.241178 | 0.607503 | -5.20383 |
| KEGG\_BASE\_EXCISION\_REPAIR | -0.09921 | -0.00173 | -1.18261 | 0.241215 | 0.607503 | -5.20393 |
| FISCHER\_G1\_S\_CELL\_CYCLE | -0.05103 | -0.06282 | -1.18258 | 0.241226 | 0.607503 | -5.20396 |
| REACTOME\_TRAFFICKING\_AND\_PROCESSING\_OF\_ENDOSOMAL\_TLR | 0.104153 | -0.04867 | 1.182107 | 0.241414 | 0.607737 | -5.20448 |
| LI\_ADIPOGENESIS\_BY\_ACTIVATED\_PPARG | 0.064525 | -0.15301 | 1.181464 | 0.241667 | 0.60796 | -5.20517 |
| WP\_GLUCURONIDATION | 0.069536 | -0.08013 | 1.181366 | 0.241706 | 0.60796 | -5.20527 |
| MARKS\_HDAC\_TARGETS\_UP | 0.059035 | -0.0081 | 1.181154 | 0.241789 | 0.60796 | -5.2055 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_MECP2 | 0.03599 | -0.07006 | 1.180693 | 0.241971 | 0.608177 | -5.206 |
| NAKAMURA\_ALVEOLAR\_EPITHELIUM | -0.10729 | -0.15504 | -1.18013 | 0.242193 | 0.608495 | -5.2066 |
| BIOCARTA\_S1P\_PATHWAY | -0.10823 | 0.014106 | -1.1789 | 0.242682 | 0.609385 | -5.20793 |
| BRUINS\_UVC\_RESPONSE\_LATE | -0.0542 | -0.08902 | -1.17875 | 0.242739 | 0.609385 | -5.20809 |
| REACTOME\_SHC1\_EVENTS\_IN\_EGFR\_SIGNALING | 0.067309 | -0.06957 | 1.178442 | 0.242861 | 0.609451 | -5.20842 |
| BIOCARTA\_MELANOCYTE\_PATHWAY | -0.10178 | -0.11217 | -1.17795 | 0.243056 | 0.609701 | -5.20895 |
| ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_2HR | -0.09047 | -0.00559 | -1.17747 | 0.243244 | 0.609762 | -5.20946 |
| GNATENKO\_PLATELET\_SIGNATURE | 0.059147 | -0.2563 | 1.177113 | 0.243387 | 0.609762 | -5.20985 |
| REACTOME\_ZINC\_INFLUX\_INTO\_CELLS\_BY\_THE\_SLC39\_GENE\_FAMILY | 0.067316 | -0.29077 | 1.176657 | 0.243568 | 0.609762 | -5.21033 |
| REACTOME\_INFLUENZA\_INFECTION | -0.08577 | -0.12028 | -1.17642 | 0.243663 | 0.609762 | -5.21059 |
| SMID\_BREAST\_CANCER\_LUMINAL\_A\_DN | 0.086009 | -0.02045 | 1.17636 | 0.243686 | 0.609762 | -5.21065 |
| WP\_GLYCOSYLATION\_AND\_RELATED\_CONGENITAL\_DEFECTS | -0.09594 | 0.002114 | -1.17628 | 0.243718 | 0.609762 | -5.21074 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_ONLY\_DN | -0.07814 | -0.02603 | -1.17619 | 0.243753 | 0.609762 | -5.21084 |
| KIM\_MYC\_AMPLIFICATION\_TARGETS\_UP | -0.06975 | -0.06389 | -1.17595 | 0.243847 | 0.609762 | -5.21109 |
| ZHOU\_PANCREATIC\_EXOCRINE\_PROGENITOR | 0.088747 | -0.06864 | 1.174501 | 0.244424 | 0.61018 | -5.21265 |
| BLANCO\_MELO\_HUMAN\_PARAINFLUENZA\_VIRUS\_3\_INFECTION\_A594\_CELLS\_DN | 0.044042 | -0.23935 | 1.174424 | 0.244455 | 0.61018 | -5.21273 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_DN | -0.08201 | -0.04581 | -1.17436 | 0.244479 | 0.61018 | -5.21279 |
| WP\_NRF2ARE\_REGULATION | 0.071996 | -0.00301 | 1.174098 | 0.244584 | 0.61018 | -5.21308 |
| BIOCARTA\_CK1\_PATHWAY | -0.06417 | -0.06045 | -1.17392 | 0.244653 | 0.61018 | -5.21326 |
| BIOCARTA\_ARAP\_PATHWAY | 0.095302 | 0.009996 | 1.1739 | 0.244663 | 0.61018 | -5.21329 |
| PID\_GMCSF\_PATHWAY | 0.079944 | -0.042 | 1.173678 | 0.244751 | 0.61018 | -5.21353 |
| KEGG\_FATTY\_ACID\_METABOLISM | -0.08041 | -0.00684 | -1.17343 | 0.244851 | 0.61018 | -5.21379 |
| PYEON\_HPV\_POSITIVE\_TUMORS\_DN | 0.072196 | -0.16976 | 1.173285 | 0.244907 | 0.61018 | -5.21395 |
| REACTOME\_OLFACTORY\_SIGNALING\_PATHWAY | 0.050166 | -0.39423 | 1.172893 | 0.245064 | 0.61018 | -5.21437 |
| REACTOME\_NEUTROPHIL\_DEGRANULATION | 0.055385 | -0.1689 | 1.172675 | 0.24515 | 0.61018 | -5.2146 |
| HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_DN | -0.09991 | -0.04556 | -1.17184 | 0.245483 | 0.61018 | -5.21549 |
| KAAB\_HEART\_ATRIUM\_VS\_VENTRICLE\_DN | -0.0631 | -0.08304 | -1.17184 | 0.245483 | 0.61018 | -5.21549 |
| BIOCARTA\_MALATEX\_PATHWAY | -0.12524 | 0.009492 | -1.17174 | 0.245524 | 0.61018 | -5.2156 |
| ZHAN\_MULTIPLE\_MYELOMA\_LB\_UP | -0.04054 | -0.02294 | -1.17129 | 0.245703 | 0.61018 | -5.21608 |
| WP\_RAS\_AND\_BRADYKININ\_PATHWAYS\_IN\_COVID19 | 0.049929 | -0.21275 | 1.171287 | 0.245704 | 0.61018 | -5.21608 |
| FARDIN\_HYPOXIA\_11 | 0.09115 | -0.0691 | 1.171015 | 0.245812 | 0.61018 | -5.21637 |
| MIKKELSEN\_MEF\_ICP\_WITH\_H3K27ME3 | 0.051023 | -0.20842 | 1.171012 | 0.245814 | 0.61018 | -5.21638 |
| BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_DN | -0.04947 | -0.15324 | -1.17096 | 0.245836 | 0.61018 | -5.21644 |
| BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_UP | 0.053503 | -0.21085 | 1.170471 | 0.246029 | 0.610316 | -5.21695 |
| MACAEVA\_PBMC\_RESPONSE\_TO\_IR | -0.05523 | -0.08008 | -1.17027 | 0.246111 | 0.610316 | -5.21717 |
| REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIPTION\_TERMINATION | -0.08196 | -0.09819 | -1.16963 | 0.246365 | 0.610316 | -5.21785 |
| SENESE\_HDAC3\_TARGETS\_DN | -0.04336 | -0.08733 | -1.16959 | 0.24638 | 0.610316 | -5.21789 |
| WEBER\_METHYLATED\_LCP\_IN\_SPERM\_UP | 0.110322 | -0.00193 | 1.169438 | 0.246442 | 0.610316 | -5.21806 |
| WP\_IL17\_SIGNALING\_PATHWAY | 0.058912 | -0.05917 | 1.169165 | 0.246552 | 0.610316 | -5.21835 |
| CHIARETTI\_T\_ALL\_REFRACTORY\_TO\_THERAPY | 0.054791 | -0.03094 | 1.169039 | 0.246602 | 0.610316 | -5.21848 |
| GOUYER\_TATI\_TARGETS\_UP | 0.079364 | -0.36768 | 1.168558 | 0.246794 | 0.610316 | -5.21899 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_16D\_UP | 0.03615 | -0.17602 | 1.168477 | 0.246827 | 0.610316 | -5.21908 |
| REACTOME\_TRIGLYCERIDE\_CATABOLISM | -0.0535 | -0.04058 | -1.16842 | 0.24685 | 0.610316 | -5.21914 |
| LIM\_MAMMARY\_STEM\_CELL\_DN | -0.04222 | -0.13033 | -1.16801 | 0.247015 | 0.610357 | -5.21958 |
| LEIN\_OLIGODENDROCYTE\_MARKERS | 0.044541 | -0.11741 | 1.167899 | 0.247058 | 0.610357 | -5.2197 |
| SAKAI\_CHRONIC\_HEPATITIS\_VS\_LIVER\_CANCER\_UP | -0.07077 | -0.26986 | -1.16627 | 0.247712 | 0.61157 | -5.22143 |
| WP\_DNA\_MISMATCH\_REPAIR | -0.09496 | -0.0132 | -1.16606 | 0.247797 | 0.61157 | -5.22166 |
| BORCZUK\_MALIGNANT\_MESOTHELIOMA\_UP | -0.09775 | -0.02484 | -1.16596 | 0.247837 | 0.61157 | -5.22176 |
| RUAN\_RESPONSE\_TO\_TROGLITAZONE\_UP | 0.071121 | -0.23168 | 1.165329 | 0.248089 | 0.611612 | -5.22243 |
| REACTOME\_ERYTHROPOIETIN\_ACTIVATES\_STAT5 | 0.103856 | -0.02223 | 1.165065 | 0.248196 | 0.611612 | -5.22271 |
| REACTOME\_CYTOSOLIC\_TRNA\_AMINOACYLATION | -0.09831 | 0.003832 | -1.16478 | 0.248311 | 0.611612 | -5.22302 |
| WP\_INHIBITION\_OF\_EXOSOME\_BIOGENESIS\_AND\_SECRETION\_BY\_MANUMYCIN\_A\_IN\_CRPC\_CELLS | -0.09783 | -0.11265 | -1.16473 | 0.248329 | 0.611612 | -5.22306 |
| MULLIGHAN\_NPM1\_SIGNATURE\_3\_UP | -0.04014 | -0.09146 | -1.16472 | 0.248335 | 0.611612 | -5.22308 |
| WANG\_BARRETTS\_ESOPHAGUS\_AND\_ESOPHAGUS\_CANCER\_DN | 0.050109 | -0.15473 | 1.16444 | 0.248447 | 0.611649 | -5.22337 |
| WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER | -0.08756 | -0.02842 | -1.16381 | 0.248698 | 0.611938 | -5.22404 |
| REACTOME\_MRNA\_EDITING\_C\_TO\_U\_CONVERSION | 0.094381 | -0.09354 | 1.163671 | 0.248756 | 0.611938 | -5.22419 |
| REACTOME\_ACTIVATION\_OF\_THE\_MRNA\_UPON\_BINDING\_OF\_THE\_CAP\_BINDING\_COMPLEX\_AND\_EIFS\_AND\_SUBSEQUENT\_BINDING\_TO\_43S | -0.08421 | -0.20473 | -1.16337 | 0.248878 | 0.612001 | -5.22451 |
| REACTOME\_G2\_M\_CHECKPOINTS | -0.05914 | -0.18908 | -1.16291 | 0.249064 | 0.612222 | -5.225 |
| KEGG\_GLIOMA | -0.05589 | -0.05321 | -1.16207 | 0.249401 | 0.612543 | -5.22589 |
| WP\_HIPPO\_SIGNALING\_REGULATION\_PATHWAYS | -0.03461 | -0.02663 | -1.16192 | 0.249461 | 0.612543 | -5.22605 |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_UP | -0.05698 | -0.06151 | -1.16153 | 0.249617 | 0.612543 | -5.22646 |
| PUJANA\_XPRSS\_INT\_NETWORK | -0.07479 | -0.15183 | -1.16142 | 0.249662 | 0.612543 | -5.22658 |
| BILANGES\_RAPAMYCIN\_SENSITIVE\_VIA\_TSC1\_AND\_TSC2 | -0.06699 | -0.20718 | -1.16118 | 0.249759 | 0.612543 | -5.22683 |
| REACTOME\_SIGNALING\_BY\_NOTCH1\_T\_7\_9\_NOTCH1\_M1580\_K2555\_TRANSLOCATION\_MUTANT | -0.09839 | -0.10937 | -1.16112 | 0.249785 | 0.612543 | -5.2269 |
| ZIRN\_TRETINOIN\_RESPONSE\_WT1\_UP | -0.08404 | -0.04369 | -1.16091 | 0.249868 | 0.612543 | -5.22712 |
| REACTOME\_DEADENYLATION\_DEPENDENT\_MRNA\_DECAY | -0.06309 | -0.28827 | -1.15998 | 0.250246 | 0.612893 | -5.22811 |
| GOBERT\_OLIGODENDROCYTE\_DIFFERENTIATION\_UP | -0.05128 | -0.1125 | -1.15969 | 0.250361 | 0.612893 | -5.22841 |
| REACTOME\_METABOLISM\_OF\_NUCLEOTIDES | -0.05584 | -0.03426 | -1.15968 | 0.250365 | 0.612893 | -5.22842 |
| WP\_PATHWAYS\_OF\_NUCLEIC\_ACID\_METABOLISM\_AND\_INNATE\_IMMUNE\_SENSING | 0.079823 | -0.00098 | 1.159606 | 0.250396 | 0.612893 | -5.2285 |
| BOYLAN\_MULTIPLE\_MYELOMA\_PCA3\_UP | 0.055305 | -0.00646 | 1.158441 | 0.250868 | 0.61318 | -5.22973 |
| REACTOME\_DOPAMINE\_RECEPTORS | 0.115452 | -0.15445 | 1.158368 | 0.250897 | 0.61318 | -5.22981 |
| BIOCARTA\_RHODOPSIN\_PATHWAY | 0.084324 | -0.2012 | 1.158194 | 0.250968 | 0.61318 | -5.22999 |
| REACTOME\_RET\_SIGNALING | -0.04487 | -0.02444 | -1.15786 | 0.251102 | 0.61318 | -5.23034 |
| ONO\_FOXP3\_TARGETS\_DN | 0.069351 | -0.02785 | 1.157834 | 0.251114 | 0.61318 | -5.23037 |
| SCHAEFFER\_SOX9\_TARGETS\_IN\_PROSTATE\_DEVELOPMENT\_UP | -0.07164 | 0.001324 | -1.15769 | 0.251173 | 0.61318 | -5.23053 |
| KEGG\_SPLICEOSOME | -0.06441 | -0.26627 | -1.15765 | 0.251188 | 0.61318 | -5.23057 |
| ZHANG\_RESPONSE\_TO\_CANTHARIDIN\_DN | -0.08529 | -0.09891 | -1.15705 | 0.251432 | 0.61336 | -5.2312 |
| WP\_NITRIC\_OXIDE\_METABOLISM\_IN\_CYSTIC\_FIBROSIS | -0.05988 | -0.29757 | -1.15676 | 0.251551 | 0.61336 | -5.23151 |
| REACTOME\_DECTIN\_1\_MEDIATED\_NONCANONICAL\_NF\_KB\_SIGNALING | -0.0729 | -0.21964 | -1.15665 | 0.251592 | 0.61336 | -5.23162 |
| REACTOME\_NONHOMOLOGOUS\_END\_JOINING\_NHEJ | -0.05404 | -0.19329 | -1.15652 | 0.251647 | 0.61336 | -5.23176 |
| PIEPOLI\_LGI1\_TARGETS\_DN | -0.06582 | -0.07963 | -1.156 | 0.251858 | 0.613638 | -5.23231 |
| LEE\_METASTASIS\_AND\_ALTERNATIVE\_SPLICING\_UP | 0.052256 | -0.099 | 1.154621 | 0.252418 | 0.614554 | -5.23376 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_LD\_MTX\_DN | 0.052359 | -0.13746 | 1.1546 | 0.252427 | 0.614554 | -5.23378 |
| BIOCARTA\_G2\_PATHWAY | 0.058626 | -0.08057 | 1.153984 | 0.252677 | 0.6147 | -5.23443 |
| PID\_CDC42\_REG\_PATHWAY | 0.052121 | -0.06338 | 1.153717 | 0.252786 | 0.6147 | -5.23471 |
| CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_3\_DN | -0.11768 | 0.015214 | -1.15359 | 0.252838 | 0.6147 | -5.23485 |
| REACTOME\_REGULATION\_OF\_MRNA\_STABILITY\_BY\_PROTEINS\_THAT\_BIND\_AU\_RICH\_ELEMENTS | -0.0759 | -0.21128 | -1.1535 | 0.252873 | 0.6147 | -5.23494 |
| KYNG\_DNA\_DAMAGE\_BY\_UV | 0.049755 | -0.01804 | 1.152893 | 0.253122 | 0.61507 | -5.23558 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINED\_IN\_GRANULOCYTE\_UP | 0.080303 | 0.008334 | 1.15254 | 0.253266 | 0.615184 | -5.23595 |
| BIOCARTA\_CDC42RAC\_PATHWAY | -0.13153 | -0.0157 | -1.15129 | 0.253775 | 0.616187 | -5.23726 |
| WP\_CILIARY\_LANDSCAPE | -0.06978 | -0.02048 | -1.14953 | 0.254495 | 0.617639 | -5.23911 |
| BIOCARTA\_EEA1\_PATHWAY | 0.097643 | -0.00606 | 1.149354 | 0.254567 | 0.617639 | -5.2393 |
| REACTOME\_HEME\_SIGNALING | -0.06695 | -0.01295 | -1.14904 | 0.254696 | 0.617715 | -5.23963 |
| ELVIDGE\_HIF1A\_TARGETS\_UP | -0.08673 | -0.01392 | -1.14858 | 0.254883 | 0.617934 | -5.24011 |
| HUI\_MAPK14\_TARGETS\_UP | -0.04847 | -0.166 | -1.14781 | 0.255199 | 0.618463 | -5.24091 |
| AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_DN | -0.0463 | -0.22625 | -1.14724 | 0.255435 | 0.618801 | -5.24152 |
| YU\_MYC\_TARGETS\_DN | 0.036233 | -0.45068 | 1.146551 | 0.255716 | 0.619245 | -5.24223 |
| SWEET\_LUNG\_CANCER\_KRAS\_UP | 0.049818 | -0.14575 | 1.145909 | 0.25598 | 0.619648 | -5.24291 |
| JOHANSSON\_GLIOMAGENESIS\_BY\_PDGFB\_UP | 0.054303 | -0.20221 | 1.145456 | 0.256166 | 0.619862 | -5.24338 |
| MANNE\_COVID19\_COMBINED\_COHORT\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP | 0.045374 | -0.00475 | 1.144375 | 0.25661 | 0.620639 | -5.24451 |
| BIOCARTA\_RACC\_PATHWAY | 0.093849 | -0.05267 | 1.144093 | 0.256726 | 0.620639 | -5.2448 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_DN | -0.06541 | -0.00661 | -1.14384 | 0.256829 | 0.620639 | -5.24507 |
| CAFFAREL\_RESPONSE\_TO\_THC\_24HR\_5\_DN | -0.08308 | 0.004812 | -1.14373 | 0.256877 | 0.620639 | -5.24519 |
| WOO\_LIVER\_CANCER\_RECURRENCE\_UP | 0.066344 | -0.07831 | 1.142324 | 0.257456 | 0.620903 | -5.24665 |
| KEGG\_FRUCTOSE\_AND\_MANNOSE\_METABOLISM | 0.06219 | 0.001695 | 1.142262 | 0.257481 | 0.620903 | -5.24671 |
| JI\_METASTASIS\_REPRESSED\_BY\_STK11 | 0.05317 | -0.03156 | 1.141687 | 0.257718 | 0.620903 | -5.24731 |
| REACTOME\_THROMBOXANE\_SIGNALLING\_THROUGH\_TP\_RECEPTOR | 0.05031 | -0.04358 | 1.141167 | 0.257933 | 0.620903 | -5.24786 |
| ZHAN\_MULTIPLE\_MYELOMA\_MS\_UP | -0.06762 | -0.0693 | -1.14095 | 0.258024 | 0.620903 | -5.24809 |
| WEST\_ADRENOCORTICAL\_TUMOR\_MARKERS\_DN | 0.070937 | -0.10055 | 1.140767 | 0.258099 | 0.620903 | -5.24827 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D8 | -0.09303 | 0.002473 | -1.14067 | 0.258138 | 0.620903 | -5.24837 |
| BRUINS\_UVC\_RESPONSE\_VIA\_TP53\_GROUP\_C | 0.035696 | -0.10958 | 1.140629 | 0.258156 | 0.620903 | -5.24842 |
| HOFFMANN\_PRE\_BI\_TO\_LARGE\_PRE\_BII\_LYMPHOCYTE\_DN | 0.038145 | -0.18398 | 1.140543 | 0.258191 | 0.620903 | -5.24851 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_OF\_TESTIS\_DIFFERENTIATION | 0.096332 | -0.05336 | 1.140456 | 0.258227 | 0.620903 | -5.2486 |
| PID\_ERBB2\_ERBB3\_PATHWAY | -0.0615 | -0.05703 | -1.14027 | 0.258304 | 0.620903 | -5.24879 |
| PID\_PLK1\_PATHWAY | -0.07879 | -0.01146 | -1.14023 | 0.258321 | 0.620903 | -5.24883 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P3 | 0.034463 | -0.02664 | 1.140163 | 0.258348 | 0.620903 | -5.2489 |
| AMIT\_EGF\_RESPONSE\_60\_MCF10A | 0.069879 | -0.18001 | 1.140154 | 0.258352 | 0.620903 | -5.24891 |
| BRUINS\_UVC\_RESPONSE\_MIDDLE | -0.0398 | -0.10977 | -1.13959 | 0.258585 | 0.621228 | -5.2495 |
| REACTOME\_MET\_ACTIVATES\_PTK2\_SIGNALING | 0.078351 | -0.12046 | 1.138165 | 0.259175 | 0.622369 | -5.25098 |
| REACTOME\_TOLL\_LIKE\_RECEPTOR\_CASCADES | 0.055921 | -0.0718 | 1.137603 | 0.259408 | 0.622369 | -5.25156 |
| RODRIGUES\_THYROID\_CARCINOMA\_POORLY\_DIFFERENTIATED\_DN | -0.05382 | -0.09573 | -1.13756 | 0.259428 | 0.622369 | -5.25161 |
| PID\_ARF6\_DOWNSTREAM\_PATHWAY | 0.08024 | -0.0713 | 1.137501 | 0.259451 | 0.622369 | -5.25167 |
| REACTOME\_INSERTION\_OF\_TAIL\_ANCHORED\_PROTEINS\_INTO\_THE\_ENDOPLASMIC\_RETICULUM\_MEMBRANE | -0.09505 | -0.18215 | -1.13689 | 0.259706 | 0.622516 | -5.25231 |
| LI\_WILMS\_TUMOR\_ANAPLASTIC\_UP | -0.08258 | -0.01183 | -1.13603 | 0.26006 | 0.622516 | -5.25319 |
| WP\_RELATIONSHIP\_BETWEEN\_INFLAMMATION\_COX2\_AND\_EGFR | -0.059 | -0.10315 | -1.13596 | 0.260091 | 0.622516 | -5.25327 |
| REACTOME\_AMPK\_INHIBITS\_CHREBP\_TRANSCRIPTIONAL\_ACTIVATION\_ACTIVITY | 0.076199 | -0.12794 | 1.13593 | 0.260103 | 0.622516 | -5.2533 |
| REACTOME\_REGULATION\_OF\_GLYCOLYSIS\_BY\_FRUCTOSE\_2\_6\_BISPHOSPHATE\_METABOLISM | 0.059538 | -0.08484 | 1.135858 | 0.260133 | 0.622516 | -5.25337 |
| RODWELL\_AGING\_KIDNEY\_UP | 0.049068 | -0.26069 | 1.135731 | 0.260185 | 0.622516 | -5.25351 |
| WP\_TAMOXIFEN\_METABOLISM | 0.066621 | -0.2031 | 1.135704 | 0.260197 | 0.622516 | -5.25353 |
| PUJANA\_BRCA\_CENTERED\_NETWORK | -0.07401 | -0.16752 | -1.13471 | 0.260608 | 0.622887 | -5.25456 |
| KIM\_MYCN\_AMPLIFICATION\_TARGETS\_DN | -0.06076 | -0.009 | -1.13466 | 0.260631 | 0.622887 | -5.25462 |
| MILICIC\_FAMILIAL\_ADENOMATOUS\_POLYPOSIS\_DN | 0.10487 | -0.00974 | 1.134517 | 0.260691 | 0.622887 | -5.25476 |
| KEGG\_LIMONENE\_AND\_PINENE\_DEGRADATION | -0.12667 | 0.003846 | -1.13439 | 0.260743 | 0.622887 | -5.2549 |
| BREDEMEYER\_RAG\_SIGNALING\_VIA\_ATM\_NOT\_VIA\_NFKB\_DN | -0.07418 | -0.01628 | -1.13355 | 0.261094 | 0.623346 | -5.25577 |
| REACTOME\_NOD1\_2\_SIGNALING\_PATHWAY | 0.074759 | -0.00382 | 1.133458 | 0.261132 | 0.623346 | -5.25586 |
| BIOCARTA\_TCRA\_PATHWAY | 0.04458 | -0.54181 | 1.132292 | 0.261617 | 0.623831 | -5.25707 |
| REACTOME\_CELLULAR\_RESPONSES\_TO\_STIMULI | -0.06272 | -0.10797 | -1.13224 | 0.261641 | 0.623831 | -5.25712 |
| KIM\_MYC\_AMPLIFICATION\_TARGETS\_DN | -0.03812 | -0.14257 | -1.13184 | 0.261807 | 0.623831 | -5.25754 |
| WP\_HEDGEHOG\_SIGNALING\_PATHWAY\_WP4249 | -0.05347 | -0.04476 | -1.13181 | 0.261821 | 0.623831 | -5.25757 |
| WP\_SULINDAC\_METABOLIC\_PATHWAY | -0.11334 | -0.17255 | -1.1317 | 0.261866 | 0.623831 | -5.25768 |
| JIANG\_HYPOXIA\_VIA\_VHL | -0.0927 | 0.001565 | -1.13148 | 0.261957 | 0.623831 | -5.25791 |
| MEISSNER\_BRAIN\_ICP\_WITH\_H3K4ME3 | -0.03801 | -0.34301 | -1.13133 | 0.262021 | 0.623831 | -5.25807 |
| MULLIGHAN\_NPM1\_MUTATED\_SIGNATURE\_1\_UP | -0.03737 | -0.08311 | -1.13098 | 0.262167 | 0.623942 | -5.25843 |
| GRAESSMANN\_RESPONSE\_TO\_MC\_AND\_SERUM\_DEPRIVATION\_DN | 0.045042 | -0.0382 | 1.130697 | 0.262284 | 0.623942 | -5.25872 |
| DITTMER\_PTHLH\_TARGETS\_UP | -0.07565 | -0.09958 | -1.13034 | 0.262433 | 0.623942 | -5.25909 |
| EHRLICH\_ICF\_SYNDROM\_UP | 0.100061 | -0.01726 | 1.130174 | 0.262502 | 0.623942 | -5.25926 |
| LEIN\_CEREBELLUM\_MARKERS | 0.040356 | -0.06262 | 1.130042 | 0.262558 | 0.623942 | -5.25939 |
| MARTENS\_TRETINOIN\_RESPONSE\_DN | -0.05403 | -0.09765 | -1.12954 | 0.262767 | 0.624045 | -5.25991 |
| SERVITJA\_LIVER\_HNF1A\_TARGETS\_DN | 0.035458 | -0.14103 | 1.129425 | 0.262816 | 0.624045 | -5.26003 |
| HOLLERN\_MICROACINAR\_BREAST\_TUMOR\_UP | 0.039737 | -0.18794 | 1.129235 | 0.262895 | 0.624045 | -5.26022 |
| REACTOME\_DEFECTIVE\_C1GALT1C1\_CAUSES\_TNPS | 0.071422 | -0.1623 | 1.128723 | 0.263109 | 0.624217 | -5.26075 |
| REACTOME\_ERYTHROPOIETIN\_ACTIVATES\_PHOSPHOLIPASE\_C\_GAMMA\_PLCG | 0.107657 | -0.02102 | 1.128144 | 0.263352 | 0.624217 | -5.26135 |
| REACTOME\_GLUCAGON\_LIKE\_PEPTIDE\_1\_GLP1\_REGULATES\_INSULIN\_SECRETION | -0.03772 | -0.06421 | -1.12812 | 0.263361 | 0.624217 | -5.26137 |
| REACTOME\_STABILIZATION\_OF\_P53 | -0.07151 | -0.24031 | -1.12801 | 0.263408 | 0.624217 | -5.26149 |
| PID\_IL12\_2PATHWAY | 0.055692 | -0.21818 | 1.12771 | 0.263534 | 0.624217 | -5.2618 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_UP | -0.04877 | -0.09331 | -1.12766 | 0.263556 | 0.624217 | -5.26185 |
| FARMER\_BREAST\_CANCER\_APOCRINE\_VS\_BASAL | -0.04947 | -0.05778 | -1.12684 | 0.2639 | 0.624591 | -5.26269 |
| REACTOME\_FERTILIZATION | 0.072294 | -0.12518 | 1.126728 | 0.263946 | 0.624591 | -5.26281 |
| PID\_INTEGRIN\_A4B1\_PATHWAY | 0.059834 | -0.05442 | 1.12658 | 0.264008 | 0.624591 | -5.26296 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_DIFFERENTIATION\_OF\_HSCS | -0.06684 | -0.21129 | -1.12619 | 0.264173 | 0.624631 | -5.26336 |
| PID\_HNF3A\_PATHWAY | 0.050909 | -0.03173 | 1.126072 | 0.264222 | 0.624631 | -5.26348 |
| BIOCARTA\_LECTIN\_PATHWAY | -0.03541 | -0.53936 | -1.1248 | 0.264755 | 0.625523 | -5.26479 |
| REACTOME\_SCF\_SKP2\_MEDIATED\_DEGRADATION\_OF\_P27\_P21 | -0.07185 | -0.22678 | -1.12471 | 0.264796 | 0.625523 | -5.26488 |
| KEGG\_TERPENOID\_BACKBONE\_BIOSYNTHESIS | -0.09097 | 0.003907 | -1.12436 | 0.264943 | 0.62564 | -5.26524 |
| REACTOME\_ACYL\_CHAIN\_REMODELLING\_OF\_PS | 0.059938 | -0.05519 | 1.123711 | 0.265215 | 0.626049 | -5.26591 |
| REACTOME\_CHL1\_INTERACTIONS | -0.0886 | -0.01184 | -1.12328 | 0.265397 | 0.626143 | -5.26635 |
| REACTOME\_DEFECTIVE\_B4GALT1\_CAUSES\_B4GALT1\_CDG\_CDG\_2D | 0.09751 | -0.0039 | 1.122995 | 0.265517 | 0.626143 | -5.26664 |
| REACTOME\_G\_ALPHA\_S\_SIGNALLING\_EVENTS | 0.049224 | -0.03453 | 1.122917 | 0.26555 | 0.626143 | -5.26672 |
| SMID\_BREAST\_CANCER\_ERBB2\_DN | 0.104582 | 0.017413 | 1.122105 | 0.265892 | 0.626496 | -5.26755 |
| REACTOME\_DEUBIQUITINATION | -0.05795 | -0.11663 | -1.1221 | 0.265897 | 0.626496 | -5.26757 |
| BIOCARTA\_AKAPCENTROSOME\_PATHWAY | -0.05961 | -0.06698 | -1.12169 | 0.266066 | 0.626663 | -5.26798 |
| LEE\_DOUBLE\_POLAR\_THYMOCYTE | 0.052163 | -0.04008 | 1.120968 | 0.266372 | 0.627033 | -5.26872 |
| WEST\_ADRENOCORTICAL\_TUMOR\_UP | -0.07127 | -0.07831 | -1.12059 | 0.266533 | 0.627033 | -5.26911 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_14 | -0.07052 | -0.16282 | -1.12034 | 0.26664 | 0.627033 | -5.26937 |
| BROWNE\_HCMV\_INFECTION\_1HR\_UP | 0.046127 | -0.01379 | 1.119781 | 0.266874 | 0.627033 | -5.26993 |
| BIOCARTA\_AT1R\_PATHWAY | -0.09028 | -0.03492 | -1.11966 | 0.266925 | 0.627033 | -5.27006 |
| REACTOME\_REGULATION\_OF\_SIGNALING\_BY\_CBL | 0.096393 | 0.014713 | 1.119635 | 0.266936 | 0.627033 | -5.27008 |
| REACTOME\_LOSS\_OF\_MECP2\_BINDING\_ABILITY\_TO\_THE\_NCOR\_SMRT\_COMPLEX | -0.10384 | -0.11871 | -1.11956 | 0.266969 | 0.627033 | -5.27016 |
| GEORGES\_CELL\_CYCLE\_MIR192\_TARGETS | -0.06882 | -0.04805 | -1.11897 | 0.267216 | 0.627033 | -5.27076 |
| XU\_GH1\_EXOGENOUS\_TARGETS\_DN | 0.028399 | -0.14288 | 1.118476 | 0.267427 | 0.627033 | -5.27127 |
| PID\_ECADHERIN\_NASCENT\_AJ\_PATHWAY | -0.06935 | -0.17902 | -1.1182 | 0.267543 | 0.627033 | -5.27155 |
| XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_48HR\_DN | -0.07163 | -0.01327 | -1.11807 | 0.267599 | 0.627033 | -5.27168 |
| REACTOME\_APOPTOTIC\_CLEAVAGE\_OF\_CELLULAR\_PROTEINS | 0.036525 | -0.07591 | 1.117422 | 0.267874 | 0.627033 | -5.27235 |
| HOOI\_ST7\_TARGETS\_UP | -0.05039 | -0.04612 | -1.11736 | 0.267901 | 0.627033 | -5.27241 |
| REACTOME\_SIGNALING\_BY\_PTK6 | 0.053089 | -0.02313 | 1.117345 | 0.267907 | 0.627033 | -5.27242 |
| ROSS\_AML\_WITH\_CBFB\_MYH11\_FUSION | 0.074938 | -0.0523 | 1.117081 | 0.268018 | 0.627033 | -5.27269 |
| BIOCARTA\_EGF\_PATHWAY | -0.08822 | -0.02943 | -1.11682 | 0.26813 | 0.627033 | -5.27296 |
| REACTOME\_GLYCOGEN\_METABOLISM | -0.07969 | ####### | -1.11678 | 0.268146 | 0.627033 | -5.273 |
| MALONEY\_RESPONSE\_TO\_17AAG\_UP | 0.060116 | -0.11362 | 1.116656 | 0.268199 | 0.627033 | -5.27313 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_DN | 0.029128 | -0.50752 | 1.116367 | 0.268322 | 0.627033 | -5.27342 |
| RAY\_TUMORIGENESIS\_BY\_ERBB2\_CDC25A\_DN | -0.04598 | -0.09461 | -1.11612 | 0.268427 | 0.627033 | -5.27367 |
| BLANCO\_MELO\_INFLUENZA\_A\_INFECTION\_A594\_CELLS\_UP | 0.07386 | -0.02429 | 1.116065 | 0.26845 | 0.627033 | -5.27373 |
| REACTOME\_CHOLESTEROL\_BIOSYNTHESIS | -0.1037 | 0.005418 | -1.11594 | 0.268503 | 0.627033 | -5.27386 |
| WP\_MRNA\_PROCESSING | -0.07211 | -0.1744 | -1.11585 | 0.268542 | 0.627033 | -5.27395 |
| CADWELL\_ATG16L1\_TARGETS\_DN | -0.03993 | -0.15402 | -1.11495 | 0.268926 | 0.627033 | -5.27487 |
| BERENJENO\_ROCK\_SIGNALING\_NOT\_VIA\_RHOA\_UP | 0.035333 | -0.40439 | 1.114579 | 0.269082 | 0.627033 | -5.27524 |
| NAKAMURA\_LUNG\_CANCER | 0.082636 | -0.18584 | 1.114535 | 0.2691 | 0.627033 | -5.27529 |
| WP\_CHEMOKINE\_SIGNALING\_PATHWAY | 0.043369 | -0.06883 | 1.114522 | 0.269106 | 0.627033 | -5.2753 |
| REACTOME\_ADORA2B\_MEDIATED\_ANTI\_INFLAMMATORY\_CYTOKINES\_PRODUCTION | 0.050468 | -0.05295 | 1.114507 | 0.269112 | 0.627033 | -5.27532 |
| WP\_AUTOPHAGY | -0.0752 | -0.04406 | -1.1143 | 0.269202 | 0.627033 | -5.27553 |
| MARTINEZ\_RESPONSE\_TO\_TRABECTEDIN\_DN | -0.07929 | -0.06534 | -1.11426 | 0.269216 | 0.627033 | -5.27556 |
| REACTOME\_CHONDROITIN\_SULFATE\_BIOSYNTHESIS | 0.075578 | -0.00597 | 1.11412 | 0.269277 | 0.627033 | -5.27571 |
| WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53 | -0.08997 | -0.02983 | -1.11337 | 0.269595 | 0.627544 | -5.27647 |
| REACTOME\_COPII\_MEDIATED\_VESICLE\_TRANSPORT | -0.06917 | -0.0516 | -1.11218 | 0.270105 | 0.628501 | -5.27769 |
| LUCAS\_HNF4A\_TARGETS\_UP | -0.05297 | -0.13422 | -1.11168 | 0.270318 | 0.628767 | -5.2782 |
| XU\_HGF\_TARGETS\_REPRESSED\_BY\_AKT1\_DN | -0.03262 | -0.06597 | -1.11115 | 0.270543 | 0.62906 | -5.27873 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_B\_DN | -0.07069 | -0.01068 | -1.11089 | 0.270655 | 0.629091 | -5.279 |
| REACTOME\_UB\_SPECIFIC\_PROCESSING\_PROTEASES | -0.0603 | -0.10554 | -1.11052 | 0.270814 | 0.629183 | -5.27937 |
| SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP | -0.07639 | -0.0826 | -1.11033 | 0.270893 | 0.629183 | -5.27956 |
| SEIDEN\_MET\_SIGNALING | -0.12245 | -0.01509 | -1.10947 | 0.271261 | 0.629632 | -5.28043 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_CELLS\_DN | 0.046537 | -0.17236 | 1.109058 | 0.271439 | 0.629632 | -5.28085 |
| REACTOME\_BINDING\_OF\_TCF\_LEF\_CTNNB1\_TO\_TARGET\_GENE\_PROMOTERS | -0.08091 | 0.002618 | -1.10891 | 0.271501 | 0.629632 | -5.281 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_10HR\_DN | 0.06015 | -0.02651 | 1.108873 | 0.271518 | 0.629632 | -5.28104 |
| MIZUKAMI\_HYPOXIA\_UP | 0.085547 | -0.00564 | 1.108727 | 0.271581 | 0.629632 | -5.28119 |
| REACTOME\_TRANSPORT\_OF\_FATTY\_ACIDS | 0.096785 | -0.01717 | 1.107941 | 0.271917 | 0.63002 | -5.28199 |
| REACTOME\_TRIGLYCERIDE\_BIOSYNTHESIS | 0.0684 | -0.06421 | 1.107657 | 0.272039 | 0.63002 | -5.28227 |
| WP\_PHOSPHOINOSITIDES\_METABOLISM | -0.05735 | -0.13088 | -1.10743 | 0.272135 | 0.63002 | -5.2825 |
| RORIE\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_UP | -0.05296 | -0.41176 | -1.10741 | 0.272144 | 0.63002 | -5.28252 |
| WP\_HEART\_DEVELOPMENT | 0.0575 | -0.04932 | 1.107033 | 0.272307 | 0.630167 | -5.2829 |
| MIZUSHIMA\_AUTOPHAGOSOME\_FORMATION | -0.08764 | -0.01313 | -1.1066 | 0.272493 | 0.630176 | -5.28334 |
| REACTOME\_ER\_TO\_GOLGI\_ANTEROGRADE\_TRANSPORT | -0.06623 | -0.02332 | -1.1064 | 0.272579 | 0.630176 | -5.28355 |
| BROWNE\_HCMV\_INFECTION\_8HR\_DN | 0.050893 | -0.05716 | 1.106269 | 0.272635 | 0.630176 | -5.28368 |
| MIYAGAWA\_TARGETS\_OF\_EWSR1\_ETS\_FUSIONS\_UP | 0.038339 | -0.06711 | 1.106102 | 0.272706 | 0.630176 | -5.28385 |
| REACTOME\_DEX\_H\_BOX\_HELICASES\_ACTIVATE\_TYPE\_I\_IFN\_AND\_INFLAMMATORY\_CYTOKINES\_PRODUCTION | 0.109091 | -0.10679 | 1.105374 | 0.273019 | 0.630656 | -5.28458 |
| REACTOME\_TOLL\_LIKE\_RECEPTOR\_TLR1\_TLR2\_CASCADE | 0.050663 | -0.07053 | 1.105158 | 0.273112 | 0.630656 | -5.2848 |
| REACTOME\_EPIGENETIC\_REGULATION\_OF\_GENE\_EXPRESSION | -0.05807 | -0.15902 | -1.10426 | 0.273498 | 0.631317 | -5.28571 |
| REACTOME\_TRANSCRIPTION\_OF\_E2F\_TARGETS\_UNDER\_NEGATIVE\_CONTROL\_BY\_P107\_RBL1\_AND\_P130\_RBL2\_IN\_COMPLEX\_WITH\_HDAC1 | -0.07231 | -0.00269 | -1.10287 | 0.274099 | 0.632474 | -5.28711 |
| BIOCARTA\_P35ALZHEIMERS\_PATHWAY | 0.091687 | -0.00636 | 1.102119 | 0.274421 | 0.632914 | -5.28787 |
| KEGG\_TYPE\_II\_DIABETES\_MELLITUS | 0.034706 | -0.16958 | 1.10171 | 0.274598 | 0.632914 | -5.28828 |
| GU\_PDEF\_TARGETS\_UP | 0.067959 | -0.017 | 1.101505 | 0.274686 | 0.632914 | -5.28848 |
| WP\_DNA\_IRDAMAGE\_AND\_CELLULAR\_RESPONSE\_VIA\_ATR | -0.04923 | -0.1615 | -1.1015 | 0.274687 | 0.632914 | -5.28849 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_MGMT\_24HR\_UP | -0.0889 | -0.01967 | -1.1002 | 0.27525 | 0.633981 | -5.2898 |
| CHOW\_RASSF1\_TARGETS\_UP | -0.09289 | -0.05037 | -1.09972 | 0.275459 | 0.634229 | -5.29028 |
| PID\_RAS\_PATHWAY | -0.04485 | -0.06446 | -1.09949 | 0.275557 | 0.634229 | -5.29051 |
| BIOCARTA\_SKP2E2F\_PATHWAY | -0.08197 | -0.0121 | -1.09913 | 0.275714 | 0.634276 | -5.29088 |
| REACTOME\_VASOPRESSIN\_REGULATES\_RENAL\_WATER\_HOMEOSTASIS\_VIA\_AQUAPORINS | -0.03501 | -0.08138 | -1.09898 | 0.275777 | 0.634276 | -5.29102 |
| VALK\_AML\_WITH\_CEBPA | 0.05142 | -0.05455 | 1.097643 | 0.276357 | 0.635165 | -5.29237 |
| ZHANG\_RESPONSE\_TO\_CANTHARIDIN\_UP | 0.091646 | 0.004892 | 1.097631 | 0.276363 | 0.635165 | -5.29238 |
| KEGG\_CITRATE\_CYCLE\_TCA\_CYCLE | -0.09807 | -0.03499 | -1.0972 | 0.276552 | 0.635166 | -5.29282 |
| REACTOME\_INTERLEUKIN\_6\_FAMILY\_SIGNALING | 0.069334 | 0.004036 | 1.09717 | 0.276563 | 0.635166 | -5.29284 |
| BOSCO\_ALLERGEN\_INDUCED\_TH2\_ASSOCIATED\_MODULE | 0.058724 | -0.03036 | 1.096184 | 0.276991 | 0.63592 | -5.29383 |
| MARTIN\_VIRAL\_GPCR\_SIGNALING\_DN | 0.031916 | -0.22385 | 1.095661 | 0.277218 | 0.636211 | -5.29435 |
| REACTOME\_PYRIMIDINE\_CATABOLISM | 0.063573 | -0.0144 | 1.09419 | 0.277858 | 0.637386 | -5.29583 |
| NICK\_RESPONSE\_TO\_PROC\_TREATMENT\_UP | -0.10919 | -0.00251 | -1.09402 | 0.27793 | 0.637386 | -5.29599 |
| WP\_WNT\_SIGNALING\_IN\_KIDNEY\_DISEASE | -0.04291 | -0.10143 | -1.09215 | 0.278746 | 0.639014 | -5.29787 |
| REACTOME\_AUF1\_HNRNP\_D0\_BINDS\_AND\_DESTABILIZES\_MRNA | -0.06755 | -0.28563 | -1.09139 | 0.279077 | 0.639014 | -5.29862 |
| WP\_SARSCOV2\_INNATE\_IMMUNITY\_EVASION\_AND\_CELLSPECIFIC\_IMMUNE\_RESPONSE | 0.047424 | -0.16021 | 1.091059 | 0.279223 | 0.639014 | -5.29896 |
| WP\_PHYSIOLOGICAL\_AND\_PATHOLOGICAL\_HYPERTROPHY\_OF\_THE\_HEART | -0.05501 | -0.07876 | -1.09087 | 0.279304 | 0.639014 | -5.29914 |
| REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR | -0.0483 | -0.08108 | -1.09085 | 0.279312 | 0.639014 | -5.29916 |
| WP\_OXIDATIVE\_PHOSPHORYLATION | -0.06261 | -0.24352 | -1.09074 | 0.279363 | 0.639014 | -5.29928 |
| WP\_SULFATION\_BIOTRANSFORMATION\_REACTION | 0.063359 | 0.016714 | 1.0906 | 0.279423 | 0.639014 | -5.29941 |
| CHESLER\_BRAIN\_D6MIT150\_QTL\_TRANS | 0.0704 | -0.01057 | 1.090353 | 0.279531 | 0.639014 | -5.29966 |
| PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_UP | -0.05114 | -0.11693 | -1.09033 | 0.279543 | 0.639014 | -5.29969 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_DN | -0.08447 | -0.08067 | -1.09001 | 0.279681 | 0.639099 | -5.3 |
| FOROUTAN\_PRODRANK\_TGFB\_EMT\_UP | 0.068712 | -0.05958 | 1.08922 | 0.280027 | 0.639659 | -5.30079 |
| BIOCARTA\_DICER\_PATHWAY | -0.12072 | -0.00539 | -1.08857 | 0.28031 | 0.640076 | -5.30143 |
| BIOCARTA\_NO1\_PATHWAY | -0.05516 | -0.0459 | -1.0881 | 0.280516 | 0.640223 | -5.3019 |
| WP\_BDNFTRKB\_SIGNALING | -0.05736 | -0.08152 | -1.08771 | 0.280687 | 0.640223 | -5.30229 |
| HADDAD\_B\_LYMPHOCYTE\_PROGENITOR | -0.04604 | -0.1347 | -1.08767 | 0.280706 | 0.640223 | -5.30233 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_3\_UP | -0.02916 | -0.08618 | -1.08751 | 0.280777 | 0.640223 | -5.30249 |
| ZHANG\_INTERFERON\_RESPONSE | 0.085688 | -0.08095 | 1.086681 | 0.281139 | 0.64082 | -5.30332 |
| REACTOME\_SIGNALING\_BY\_INSULIN\_RECEPTOR | -0.03998 | -0.08365 | -1.08618 | 0.28136 | 0.641038 | -5.30382 |
| DIERICK\_SEROTONIN\_FUNCTION\_GENES | -0.04878 | -0.45999 | -1.08563 | 0.2816 | 0.641038 | -5.30436 |
| REACTOME\_ACTIVATION\_OF\_NMDA\_RECEPTORS\_AND\_POSTSYNAPTIC\_EVENTS | -0.0391 | -0.05244 | -1.08557 | 0.281627 | 0.641038 | -5.30442 |
| BIOCARTA\_STRESS\_PATHWAY | -0.06657 | -0.23444 | -1.08526 | 0.281761 | 0.641038 | -5.30472 |
| REACTOME\_DISEASES\_OF\_MISMATCH\_REPAIR\_MMR | -0.10431 | 0.027212 | -1.08518 | 0.281798 | 0.641038 | -5.30481 |
| SA\_B\_CELL\_RECEPTOR\_COMPLEXES | 0.075043 | -0.06923 | 1.085087 | 0.281839 | 0.641038 | -5.3049 |
| REACTOME\_HSP90\_CHAPERONE\_CYCLE\_FOR\_STEROID\_HORMONE\_RECEPTORS\_SHR\_IN\_THE\_PRESENCE\_OF\_LIGAND | -0.06423 | -0.16184 | -1.08438 | 0.282149 | 0.641435 | -5.3056 |
| REACTOME\_CYTOKINE\_SIGNALING\_IN\_IMMUNE\_SYSTEM | 0.039457 | -0.17748 | 1.084232 | 0.282215 | 0.641435 | -5.30575 |
| BIOCARTA\_ERAD\_PATHWAY | -0.08627 | -0.06039 | -1.08387 | 0.282373 | 0.641512 | -5.3061 |
| WP\_LINOLEIC\_ACID\_METABOLISM\_AFFECTED\_BY\_CORONAVIRUS\_INFECTION | -0.10253 | 0.012368 | -1.08369 | 0.282456 | 0.641512 | -5.30629 |
| SAKAI\_TUMOR\_INFILTRATING\_MONOCYTES\_UP | -0.05525 | -0.09923 | -1.0831 | 0.282713 | 0.641512 | -5.30687 |
| ABBUD\_LIF\_SIGNALING\_2\_UP | 0.081031 | 0.007159 | 1.082537 | 0.282962 | 0.641512 | -5.30743 |
| BROWNE\_HCMV\_INFECTION\_1HR\_DN | -0.02403 | -0.15549 | -1.08248 | 0.282988 | 0.641512 | -5.30749 |
| GOTTWEIN\_TARGETS\_OF\_KSHV\_MIR\_K12\_11 | -0.07504 | -0.02124 | -1.08231 | 0.283061 | 0.641512 | -5.30765 |
| WP\_FACTORS\_AND\_PATHWAYS\_AFFECTING\_INSULINLIKE\_GROWTH\_FACTOR\_IGF1AKT\_SIGNALING | -0.06165 | -0.03466 | -1.08226 | 0.283083 | 0.641512 | -5.3077 |
| RAO\_BOUND\_BY\_SALL4\_ISOFORM\_A | -0.02734 | -0.06804 | -1.08212 | 0.283147 | 0.641512 | -5.30784 |
| VALK\_AML\_CLUSTER\_7 | 0.061611 | -0.20038 | 1.081934 | 0.283228 | 0.641512 | -5.30802 |
| BYSTROEM\_CORRELATED\_WITH\_IL5\_DN | -0.08025 | -0.02315 | -1.08187 | 0.283257 | 0.641512 | -5.30809 |
| TOMLINS\_PROSTATE\_CANCER\_DN | -0.09264 | -0.01404 | -1.08087 | 0.283698 | 0.642143 | -5.30908 |
| HOELZEL\_NF1\_TARGETS\_UP | 0.037652 | -0.04945 | 1.080778 | 0.283738 | 0.642143 | -5.30917 |
| EPPERT\_CE\_HSC\_LSC | -0.06281 | -0.05377 | -1.08018 | 0.284 | 0.642509 | -5.30976 |
| REACTOME\_INFECTION\_WITH\_MYCOBACTERIUM\_TUBERCULOSIS | 0.065685 | -0.19208 | 1.079754 | 0.28419 | 0.64271 | -5.31018 |
| PAL\_PRMT5\_TARGETS\_DN | 0.038877 | -0.32721 | 1.079255 | 0.284411 | 0.642981 | -5.31067 |
| REACTOME\_REGULATION\_OF\_PLK1\_ACTIVITY\_AT\_G2\_M\_TRANSITION | -0.0556 | -0.12423 | -1.07836 | 0.284809 | 0.643521 | -5.31156 |
| CHEN\_PDGF\_TARGETS | 0.095165 | -0.01255 | 1.078259 | 0.284852 | 0.643521 | -5.31166 |
| GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP | -0.06301 | -0.04856 | -1.07787 | 0.285026 | 0.643541 | -5.31204 |
| REACTOME\_TRANSPORT\_TO\_THE\_GOLGI\_AND\_SUBSEQUENT\_MODIFICATION | -0.0572 | -0.03467 | -1.07747 | 0.285201 | 0.643541 | -5.31243 |
| EGUCHI\_CELL\_CYCLE\_RB1\_TARGETS | -0.09179 | -0.02889 | -1.07735 | 0.285254 | 0.643541 | -5.31255 |
| REACTOME\_FCERI\_MEDIATED\_NF\_KB\_ACTIVATION | -0.06814 | -0.17923 | -1.07733 | 0.285266 | 0.643541 | -5.31258 |
| LANDIS\_BREAST\_CANCER\_PROGRESSION\_UP | 0.057296 | -0.04459 | 1.077095 | 0.285368 | 0.643544 | -5.3128 |
| WP\_OMEGA3\_OMEGA6\_FATTY\_ACID\_SYNTHESIS | -0.0809 | 0.000971 | -1.07685 | 0.285477 | 0.643562 | -5.31305 |
| STEGER\_ADIPOGENESIS\_DN | 0.096949 | 0.002211 | 1.076542 | 0.285613 | 0.64364 | -5.31335 |
| BENPORATH\_ES\_CORE\_NINE | 0.080067 | -0.00303 | 1.07556 | 0.286049 | 0.644394 | -5.31431 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C4 | 0.082223 | -0.08182 | 1.074991 | 0.286302 | 0.64464 | -5.31488 |
| KAPOSI\_LIVER\_CANCER\_MET\_UP | -0.09055 | -0.00266 | -1.07469 | 0.286434 | 0.64464 | -5.31517 |
| WP\_AMINO\_ACID\_METABOLISM | -0.05715 | -0.05795 | -1.07443 | 0.286553 | 0.64464 | -5.31543 |
| REACTOME\_ABC\_TRANSPORTERS\_IN\_LIPID\_HOMEOSTASIS | -0.0513 | 0.004551 | -1.07427 | 0.28662 | 0.64464 | -5.31558 |
| GENTLES\_LEUKEMIC\_STEM\_CELL\_DN | 0.064057 | -0.08349 | 1.074175 | 0.286664 | 0.64464 | -5.31568 |
| REACTOME\_RUNX3\_REGULATES\_IMMUNE\_RESPONSE\_AND\_CELL\_MIGRATION | 0.104672 | 0.009498 | 1.073434 | 0.286994 | 0.644709 | -5.31641 |
| BIOCARTA\_AKT\_PATHWAY | -0.08377 | 0.004617 | -1.0734 | 0.287008 | 0.644709 | -5.31644 |
| KEGG\_PROTEASOME | -0.06645 | -0.29874 | -1.07332 | 0.287047 | 0.644709 | -5.31652 |
| REACTOME\_TRAIL\_SIGNALING | 0.087894 | 0.00137 | 1.073195 | 0.2871 | 0.644709 | -5.31664 |
| TAKAYAMA\_BOUND\_BY\_AR | 0.083791 | -0.02173 | 1.072907 | 0.287229 | 0.64476 | -5.31692 |
| KORKOLA\_EMBRYONAL\_CARCINOMA | -0.02376 | -0.70125 | -1.07256 | 0.287384 | 0.64476 | -5.31727 |
| REACTOME\_RAB\_GERANYLGERANYLATION | -0.0578 | -0.02791 | -1.07246 | 0.287427 | 0.64476 | -5.31736 |
| WP\_BASE\_EXCISION\_REPAIR | -0.08955 | -0.00214 | -1.0717 | 0.287768 | 0.645107 | -5.31811 |
| VALK\_AML\_WITH\_FLT3\_ITD | -0.05011 | 7.64E-05 | -1.07166 | 0.287784 | 0.645107 | -5.31815 |
| BIOCARTA\_NPP1\_PATHWAY | 0.079958 | -0.01011 | 1.070277 | 0.288402 | 0.645982 | -5.3195 |
| GOLDRATH\_HOMEOSTATIC\_PROLIFERATION | -0.07689 | -0.05553 | -1.06931 | 0.288832 | 0.645982 | -5.32045 |
| BURTON\_ADIPOGENESIS\_10 | -0.0896 | -0.19447 | -1.06904 | 0.288956 | 0.645982 | -5.32072 |
| REACTOME\_NADE\_MODULATES\_DEATH\_SIGNALLING | -0.08981 | -0.13649 | -1.06898 | 0.28898 | 0.645982 | -5.32077 |
| REACTOME\_ADENYLATE\_CYCLASE\_INHIBITORY\_PATHWAY | -0.0646 | -0.0743 | -1.06869 | 0.289111 | 0.645982 | -5.32106 |
| GEISS\_RESPONSE\_TO\_DSRNA\_UP | 0.064261 | -0.18113 | 1.068487 | 0.289202 | 0.645982 | -5.32125 |
| REACTOME\_TRAF3\_DEPENDENT\_IRF\_ACTIVATION\_PATHWAY | 0.07691 | -0.07289 | 1.068456 | 0.289216 | 0.645982 | -5.32128 |
| BROWNE\_HCMV\_INFECTION\_18HR\_UP | -0.05072 | -0.11088 | -1.06835 | 0.289262 | 0.645982 | -5.32139 |
| WP\_PDGFRBETA\_PATHWAY | -0.09612 | -0.01863 | -1.06829 | 0.28929 | 0.645982 | -5.32145 |
| COATES\_MACROPHAGE\_M1\_VS\_M2\_DN | 0.045938 | -0.20812 | 1.068188 | 0.289335 | 0.645982 | -5.32155 |
| MOOTHA\_ROS | -0.1103 | -0.09818 | -1.06794 | 0.289448 | 0.645982 | -5.32179 |
| BIOCARTA\_MHC\_PATHWAY | 0.019159 | -0.79043 | 1.0679 | 0.289465 | 0.645982 | -5.32183 |
| MOOTHA\_GLUCONEOGENESIS | 0.059973 | -0.09342 | 1.067834 | 0.289494 | 0.645982 | -5.32189 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_G\_UP | -0.02348 | -0.09055 | -1.06733 | 0.289722 | 0.646195 | -5.32239 |
| MCCABE\_HOXC6\_TARGETS\_CANCER\_DN | -0.05902 | -0.34883 | -1.06664 | 0.290027 | 0.646195 | -5.32305 |
| THEILGAARD\_NEUTROPHIL\_AT\_SKIN\_WOUND\_UP | 0.054677 | -0.2285 | 1.066555 | 0.290067 | 0.646195 | -5.32314 |
| KEGG\_MATURITY\_ONSET\_DIABETES\_OF\_THE\_YOUNG | 0.080834 | -0.04778 | 1.066363 | 0.290153 | 0.646195 | -5.32333 |
| HELLER\_HDAC\_TARGETS\_UP | 0.035433 | -0.19427 | 1.066268 | 0.290196 | 0.646195 | -5.32342 |
| REACTOME\_REGULATION\_OF\_INSULIN\_SECRETION | 0.033853 | -0.05218 | 1.066034 | 0.290301 | 0.646195 | -5.32365 |
| RAMASWAMY\_METASTASIS\_UP | -0.06313 | -0.11195 | -1.06584 | 0.29039 | 0.646195 | -5.32384 |
| DAZARD\_RESPONSE\_TO\_UV\_NHEK\_UP | 0.041485 | -0.18333 | 1.065809 | 0.290402 | 0.646195 | -5.32387 |
| RAO\_BOUND\_BY\_SALL4 | -0.03497 | -0.068 | -1.06516 | 0.290695 | 0.64624 | -5.32451 |
| HEIDENBLAD\_AMPLICON\_8Q24\_UP | -0.03909 | -0.12322 | -1.06514 | 0.290704 | 0.64624 | -5.32453 |
| BIOCARTA\_GHRELIN\_PATHWAY | 0.066886 | -0.01813 | 1.065085 | 0.290727 | 0.64624 | -5.32458 |
| REACTOME\_MITOTIC\_G2\_G2\_M\_PHASES | -0.04908 | -0.1477 | -1.06444 | 0.291017 | 0.64666 | -5.32521 |
| REACTOME\_GLUCONEOGENESIS | 0.060041 | -0.06273 | 1.063778 | 0.291315 | 0.647094 | -5.32585 |
| BLUM\_RESPONSE\_TO\_SALIRASIB\_DN | -0.06197 | -0.08436 | -1.06349 | 0.291444 | 0.647156 | -5.32613 |
| PLASARI\_TGFB1\_TARGETS\_10HR\_DN | -0.0569 | -0.04617 | -1.06246 | 0.291906 | 0.647956 | -5.32713 |
| BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_DN | 0.047507 | -0.23567 | 1.062119 | 0.292061 | 0.647986 | -5.32746 |
| REACTOME\_TICAM1\_TRAF6\_DEPENDENT\_INDUCTION\_OF\_TAK1\_COMPLEX | 0.070999 | 0.009948 | 1.061842 | 0.292186 | 0.647986 | -5.32773 |
| LEI\_HOXC8\_TARGETS\_DN | 0.058807 | -0.11394 | 1.061756 | 0.292225 | 0.647986 | -5.32782 |
| WP\_SPLICING\_FACTOR\_NOVA\_REGULATED\_SYNAPTIC\_PROTEINS | 0.041167 | -0.05557 | 1.06136 | 0.292403 | 0.648155 | -5.3282 |
| XU\_GH1\_AUTOCRINE\_TARGETS\_DN | -0.05009 | -0.07544 | -1.06104 | 0.292547 | 0.648238 | -5.32851 |
| REACTOME\_SIGNALING\_BY\_CTNNB1\_PHOSPHO\_SITE\_MUTANTS | -0.07543 | 0.007214 | -1.06083 | 0.292644 | 0.648238 | -5.32872 |
| WP\_15Q133\_COPY\_NUMBER\_VARIATION\_SYNDROME | 0.038889 | -0.30565 | 1.060142 | 0.292952 | 0.648499 | -5.32938 |
| KEGG\_GALACTOSE\_METABOLISM | 0.05298 | -0.10596 | 1.060113 | 0.292966 | 0.648499 | -5.32941 |
| FUKUSHIMA\_TNFSF11\_TARGETS | -0.05119 | -0.29262 | -1.05956 | 0.293215 | 0.648807 | -5.32995 |
| REACTOME\_TLR3\_MEDIATED\_TICAM1\_DEPENDENT\_PROGRAMMED\_CELL\_DEATH | 0.080245 | -0.11684 | 1.059167 | 0.293393 | 0.648807 | -5.33033 |
| REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER | -0.08899 | -0.00351 | -1.05913 | 0.293411 | 0.648807 | -5.33037 |
| REACTOME\_COLLAGEN\_FORMATION | 0.064721 | -0.06483 | 1.0585 | 0.293694 | 0.64918 | -5.33098 |
| XU\_HGF\_TARGETS\_INDUCED\_BY\_AKT1\_6HR | 0.070622 | -0.0488 | 1.058303 | 0.293784 | 0.64918 | -5.33117 |
| NIKOLSKY\_BREAST\_CANCER\_1Q21\_AMPLICON | -0.04418 | -0.14091 | -1.05798 | 0.293931 | 0.649281 | -5.33148 |
| MEISSNER\_BRAIN\_HCP\_WITH\_H3K4ME2 | 0.078284 | -0.04216 | 1.057718 | 0.294048 | 0.649314 | -5.33173 |
| BILANGES\_SERUM\_AND\_RAPAMYCIN\_SENSITIVE\_GENES | -0.0754 | -0.14951 | -1.05679 | 0.294469 | 0.649976 | -5.33263 |
| WP\_16P112\_PROXIMAL\_DELETION\_SYNDROME | -0.04998 | -0.0328 | -1.05661 | 0.294552 | 0.649976 | -5.33281 |
| SMITH\_LIVER\_CANCER | -0.0617 | -0.1312 | -1.05569 | 0.294968 | 0.650132 | -5.3337 |
| BIOCARTA\_ETC\_PATHWAY | -0.11566 | -0.00158 | -1.05566 | 0.294981 | 0.650132 | -5.33373 |
| KYNG\_DNA\_DAMAGE\_BY\_GAMMA\_RADIATION | 0.047559 | -0.0879 | 1.055647 | 0.294987 | 0.650132 | -5.33374 |
| WACKER\_HYPOXIA\_TARGETS\_OF\_VHL | 0.096701 | -0.0187 | 1.055549 | 0.295031 | 0.650132 | -5.33383 |
| HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BII\_LYMPHOCYTE\_DN | 0.035432 | -0.12342 | 1.055117 | 0.295227 | 0.650338 | -5.33425 |
| CHEN\_NEUROBLASTOMA\_COPY\_NUMBER\_GAINS | -0.04326 | -0.08231 | -1.05306 | 0.296161 | 0.651602 | -5.33623 |
| KEGG\_RIBOSOME | -0.07559 | -0.17293 | -1.05247 | 0.296431 | 0.651602 | -5.33681 |
| HOLLMANN\_APOPTOSIS\_VIA\_CD40\_UP | -0.06317 | -0.04358 | -1.0522 | 0.296555 | 0.651602 | -5.33707 |
| MARIADASON\_REGULATED\_BY\_HISTONE\_ACETYLATION\_DN | -0.03807 | -0.10888 | -1.05211 | 0.296593 | 0.651602 | -5.33715 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_6 | 0.087191 | 0.004773 | 1.051949 | 0.296668 | 0.651602 | -5.33731 |
| REACTOME\_METABOLISM\_OF\_NITRIC\_OXIDE\_NOS3\_ACTIVATION\_AND\_REGULATION | -0.07789 | -0.2506 | -1.05188 | 0.296698 | 0.651602 | -5.33737 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_WASPS\_AND\_WAVES | -0.08015 | -0.0379 | -1.05174 | 0.296763 | 0.651602 | -5.33751 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_SALMON\_DN | 0.07397 | -0.01411 | 1.051614 | 0.29682 | 0.651602 | -5.33763 |
| HASINA\_NOL7\_TARGETS\_DN | 0.087539 | -0.01123 | 1.051601 | 0.296826 | 0.651602 | -5.33764 |
| REACTOME\_PEROXISOMAL\_PROTEIN\_IMPORT | -0.04698 | -0.0764 | -1.05149 | 0.296877 | 0.651602 | -5.33775 |
| FOROUTAN\_INTEGRATED\_TGFB\_EMT\_UP | 0.073402 | -0.07814 | 1.05136 | 0.296936 | 0.651602 | -5.33787 |
| REACTOME\_ACTIVATION\_OF\_THE\_TFAP2\_AP\_2\_FAMILY\_OF\_TRANSCRIPTION\_FACTORS | 0.061411 | 0.006124 | 1.051154 | 0.29703 | 0.651602 | -5.33807 |
| REACTOME\_AURKA\_ACTIVATION\_BY\_TPX2 | -0.05162 | -0.14656 | -1.0507 | 0.297237 | 0.651831 | -5.33851 |
| ISHIDA\_E2F\_TARGETS | -0.08285 | -0.04615 | -1.0502 | 0.297463 | 0.652104 | -5.33899 |
| REACTOME\_APC\_C\_CDC20\_MEDIATED\_DEGRADATION\_OF\_CYCLIN\_B | -0.08292 | -0.00433 | -1.04979 | 0.297651 | 0.652177 | -5.33938 |
| PUJANA\_BREAST\_CANCER\_LIT\_INT\_NETWORK | -0.0531 | -0.10102 | -1.04968 | 0.297702 | 0.652177 | -5.33949 |
| STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_UP | -0.05456 | -0.20829 | -1.04913 | 0.297951 | 0.652498 | -5.34001 |
| WP\_EFFECT\_OF\_PROGERIN\_ON\_GENES\_INVOLVED\_IN\_HUTCHINSONGILFORD\_PROGERIA\_SYNDROME | -0.07959 | -0.01179 | -1.04847 | 0.298256 | 0.652941 | -5.34065 |
| KEGG\_ENDOMETRIAL\_CANCER | -0.04714 | -0.05347 | -1.04766 | 0.298627 | 0.653529 | -5.34143 |
| WP\_CELLTYPE\_DEPENDENT\_SELECTIVITY\_OF\_CCK2R\_SIGNALING | -0.06743 | 0.005037 | -1.0462 | 0.299296 | 0.654419 | -5.34283 |
| AMIT\_EGF\_RESPONSE\_20\_MCF10A | 0.072352 | -0.2556 | 1.046177 | 0.299304 | 0.654419 | -5.34285 |
| MATZUK\_MATERNAL\_EFFECT | 0.075705 | -0.09795 | 1.045999 | 0.299385 | 0.654419 | -5.34302 |
| REACTOME\_SIGNALING\_BY\_WNT\_IN\_CANCER | -0.04129 | -0.01751 | -1.04587 | 0.299445 | 0.654419 | -5.34315 |
| WP\_VITAMIN\_B12\_DISORDERS | -0.06325 | -0.01273 | -1.04542 | 0.299651 | 0.654423 | -5.34358 |
| MARSHALL\_VIRAL\_INFECTION\_RESPONSE\_UP | 0.062498 | -0.0946 | 1.045264 | 0.299723 | 0.654423 | -5.34373 |
| KEGG\_LEISHMANIA\_INFECTION | 0.02534 | -0.52856 | 1.04497 | 0.299857 | 0.654423 | -5.34401 |
| BILD\_CTNNB1\_ONCOGENIC\_SIGNATURE | -0.05772 | -0.04642 | -1.04497 | 0.299858 | 0.654423 | -5.34401 |
| REACTOME\_FLT3\_SIGNALING\_BY\_CBL\_MUTANTS | 0.111505 | 0.010004 | 1.044573 | 0.300039 | 0.654594 | -5.34439 |
| CUI\_TCF21\_TARGETS\_2\_UP | -0.03072 | -0.1068 | -1.04382 | 0.300386 | 0.654919 | -5.34511 |
| KREPPEL\_CD99\_TARGETS\_DN | -0.09207 | -0.00559 | -1.0438 | 0.300394 | 0.654919 | -5.34513 |
| SIG\_PIP3\_SIGNALING\_IN\_CARDIAC\_MYOCTES | -0.04563 | -0.08506 | -1.04308 | 0.300727 | 0.655039 | -5.34582 |
| ZHENG\_GLIOBLASTOMA\_PLASTICITY\_DN | 0.050392 | -0.0756 | 1.043071 | 0.300729 | 0.655039 | -5.34582 |
| LU\_EZH2\_TARGETS\_DN | -0.06646 | -0.09339 | -1.04284 | 0.300836 | 0.655039 | -5.34605 |
| GUTIERREZ\_MULTIPLE\_MYELOMA\_UP | -0.08875 | -0.04981 | -1.04271 | 0.300894 | 0.655039 | -5.34617 |
| WP\_ACE\_INHIBITOR\_PATHWAY | 0.061357 | -0.04229 | 1.042471 | 0.301005 | 0.655039 | -5.3464 |
| BIOCARTA\_GSK3\_PATHWAY | 0.076761 | -0.00731 | 1.04217 | 0.301144 | 0.655039 | -5.34668 |
| REACTOME\_TRANSPORT\_OF\_BILE\_SALTS\_AND\_ORGANIC\_ACIDS\_METAL\_IONS\_AND\_AMINE\_COMPOUNDS | 0.038003 | -0.13553 | 1.042113 | 0.30117 | 0.655039 | -5.34674 |
| MOTAMED\_RESPONSE\_TO\_ANDROGEN\_UP | 0.11928 | -0.02925 | 1.041828 | 0.301301 | 0.655101 | -5.34701 |
| REACTOME\_SPERM\_MOTILITY\_AND\_TAXES | 0.082712 | -0.10645 | 1.041186 | 0.301596 | 0.655355 | -5.34762 |
| REACTOME\_PHASE\_II\_CONJUGATION\_OF\_COMPOUNDS | 0.033103 | -0.02684 | 1.041097 | 0.301637 | 0.655355 | -5.34771 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_5 | -0.06797 | -0.18408 | -1.04077 | 0.301789 | 0.655355 | -5.34802 |
| SEMENZA\_HIF1\_TARGETS | 0.070737 | -0.02663 | 1.04068 | 0.30183 | 0.655355 | -5.34811 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_6 | -0.0826 | -0.00854 | -1.04031 | 0.301999 | 0.655412 | -5.34846 |
| KAMMINGA\_SENESCENCE | -0.04556 | -0.02571 | -1.0396 | 0.302328 | 0.655412 | -5.34914 |
| WP\_LEUKOCYTEINTRINSIC\_HIPPO\_PATHWAY\_FUNCTIONS | -0.06105 | -0.02567 | -1.03935 | 0.302441 | 0.655412 | -5.34937 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CELL\_DEATH\_GENES | 0.049653 | -0.04566 | 1.039351 | 0.302443 | 0.655412 | -5.34937 |
| REACTOME\_STAT5\_ACTIVATION\_DOWNSTREAM\_OF\_FLT3\_ITD\_MUTANTS | 0.088901 | 0.017746 | 1.039337 | 0.302449 | 0.655412 | -5.34939 |
| REACTOME\_TAK1\_ACTIVATES\_NFKB\_BY\_PHOSPHORYLATION\_AND\_ACTIVATION\_OF\_IKKS\_COMPLEX | 0.054979 | -0.15638 | 1.039266 | 0.302481 | 0.655412 | -5.34945 |
| ZHU\_SKIL\_TARGETS\_DN | -0.06268 | 0.006009 | -1.03906 | 0.302577 | 0.655412 | -5.34965 |
| WANG\_RESPONSE\_TO\_BEXAROTENE\_UP | -0.04207 | -0.03806 | -1.0381 | 0.30302 | 0.655898 | -5.35056 |
| REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION | -0.07576 | -0.15905 | -1.03797 | 0.303079 | 0.655898 | -5.35068 |
| ZHAN\_LATE\_DIFFERENTIATION\_GENES\_UP | -0.0879 | -0.00413 | -1.03783 | 0.303144 | 0.655898 | -5.35082 |
| KEGG\_GRAFT\_VERSUS\_HOST\_DISEASE | 0.015587 | -0.86474 | 1.037519 | 0.303288 | 0.655898 | -5.35112 |
| REACTOME\_N\_GLYCAN\_TRIMMING\_IN\_THE\_ER\_AND\_CALNEXIN\_CALRETICULIN\_CYCLE | -0.07208 | -0.16977 | -1.03746 | 0.303317 | 0.655898 | -5.35117 |
| MILICIC\_FAMILIAL\_ADENOMATOUS\_POLYPOSIS\_UP | 0.065739 | -0.07404 | 1.037018 | 0.30352 | 0.656115 | -5.35159 |
| BUCKANOVICH\_T\_LYMPHOCYTE\_HOMING\_ON\_TUMOR\_UP | -0.07793 | 0.000312 | -1.03675 | 0.303644 | 0.656159 | -5.35185 |
| MARTENS\_BOUND\_BY\_PML\_RARA\_FUSION | 0.048126 | -0.05895 | 1.036443 | 0.303786 | 0.65623 | -5.35214 |
| WP\_WHITE\_FAT\_CELL\_DIFFERENTIATION | 0.064829 | -0.00226 | 1.036234 | 0.303883 | 0.65623 | -5.35234 |
| REACTOME\_PHASE\_2\_PLATEAU\_PHASE | 0.094294 | -0.01957 | 1.035988 | 0.303997 | 0.656254 | -5.35257 |
| LEE\_RECENT\_THYMIC\_EMIGRANT | -0.05629 | -0.10229 | -1.03559 | 0.304183 | 0.656432 | -5.35295 |
| REACTOME\_PRC2\_METHYLATES\_HISTONES\_AND\_DNA | -0.07613 | -0.08127 | -1.03504 | 0.304436 | 0.656757 | -5.35347 |
| REACTOME\_SIGNALING\_BY\_ERBB2\_IN\_CANCER | -0.0494 | -0.04186 | -1.03465 | 0.304615 | 0.656802 | -5.35383 |
| KANG\_DOXORUBICIN\_RESISTANCE\_UP | -0.08388 | -0.07482 | -1.0345 | 0.304685 | 0.656802 | -5.35398 |
| REACTOME\_TRAFFICKING\_OF\_MYRISTOYLATED\_PROTEINS\_TO\_THE\_CILIUM | -0.10916 | -0.00303 | -1.0342 | 0.304826 | 0.656802 | -5.35427 |
| PID\_AJDISS\_2PATHWAY | 0.044948 | -0.04376 | 1.034104 | 0.30487 | 0.656802 | -5.35436 |
| WP\_NRP1TRIGGERED\_SIGNALING\_PATHWAYS\_IN\_PANCREATIC\_CANCER | 0.055925 | -0.06403 | 1.032659 | 0.305541 | 0.658024 | -5.35572 |
| KEGG\_PROTEIN\_EXPORT | -0.11549 | -0.00224 | -1.03207 | 0.305816 | 0.658394 | -5.35628 |
| HUANG\_DASATINIB\_RESISTANCE\_DN | -0.0391 | -0.06099 | -1.03183 | 0.305928 | 0.658413 | -5.35651 |
| WP\_NSP1\_FROM\_SARSCOV2\_INHIBITS\_TRANSLATION\_INITIATION\_IN\_THE\_HOST\_CELL | -0.10733 | 0.001064 | -1.03156 | 0.30605 | 0.658453 | -5.35676 |
| MEISSNER\_BRAIN\_HCP\_WITH\_H3K27ME3 | 0.066608 | -0.04891 | 1.030971 | 0.306326 | 0.658823 | -5.35732 |
| REACTOME\_SLC\_TRANSPORTER\_DISORDERS | -0.03061 | -0.0234 | -1.02933 | 0.307091 | 0.66004 | -5.35887 |
| REACTOME\_GLUCURONIDATION | 0.079162 | -0.04586 | 1.029227 | 0.307138 | 0.66004 | -5.35897 |
| KAN\_RESPONSE\_TO\_ARSENIC\_TRIOXIDE | 0.052078 | -0.11569 | 1.029088 | 0.307203 | 0.66004 | -5.3591 |
| CAIRO\_HEPATOBLASTOMA\_POOR\_SURVIVAL | -0.05941 | 0.010258 | -1.02841 | 0.307519 | 0.660496 | -5.35974 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_D\_DN | 0.078074 | -0.01278 | 1.028116 | 0.307657 | 0.660506 | -5.36002 |
| REACTOME\_SIGNALING\_BY\_FGFR3 | -0.04872 | -0.01711 | -1.02796 | 0.307731 | 0.660506 | -5.36016 |
| REACTOME\_MITOPHAGY | -0.08204 | -0.2004 | -1.0275 | 0.307944 | 0.660723 | -5.36059 |
| MORI\_PLASMA\_CELL\_DN | 0.070224 | -0.00095 | 1.026778 | 0.308282 | 0.660723 | -5.36128 |
| REACTOME\_NUCLEAR\_EVENTS\_STIMULATED\_BY\_ALK\_SIGNALING\_IN\_CANCER | 0.087501 | -0.00865 | 1.026729 | 0.308304 | 0.660723 | -5.36132 |
| HU\_ANGIOGENESIS\_UP | 0.075633 | -0.00678 | 1.026654 | 0.30834 | 0.660723 | -5.36139 |
| SHIRAISHI\_PLZF\_TARGETS\_UP | 0.069074 | -0.07143 | 1.026414 | 0.308452 | 0.660723 | -5.36162 |
| OZANNE\_AP1\_TARGETS\_UP | 0.073792 | -0.05248 | 1.026407 | 0.308455 | 0.660723 | -5.36162 |
| FOROUTAN\_TGFB\_EMT\_UP | 0.066187 | -0.05904 | 1.026019 | 0.308637 | 0.660835 | -5.36199 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_3\_UP | -0.05484 | -0.10537 | -1.02585 | 0.308715 | 0.660835 | -5.36215 |
| REACTOME\_POST\_TRANSLATIONAL\_PROTEIN\_MODIFICATION | -0.03927 | -0.08796 | -1.02543 | 0.308913 | 0.661015 | -5.36255 |
| REACTOME\_CELL\_DEATH\_SIGNALLING\_VIA\_NRAGE\_NRIF\_AND\_NADE | 0.035311 | -0.0895 | 1.025228 | 0.309007 | 0.661015 | -5.36273 |
| ZHAN\_VARIABLE\_EARLY\_DIFFERENTIATION\_GENES\_DN | -0.08933 | -0.04057 | -1.02471 | 0.309252 | 0.661316 | -5.36322 |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_2HR | 0.082266 | -0.13275 | 1.024193 | 0.309492 | 0.661607 | -5.3637 |
| MCCOLLUM\_GELDANAMYCIN\_RESISTANCE\_DN | -0.06762 | 0.01278 | -1.02366 | 0.30974 | 0.661683 | -5.3642 |
| REACTOME\_ORGANIC\_CATION\_TRANSPORT | -0.07407 | 0.002028 | -1.02351 | 0.309811 | 0.661683 | -5.36434 |
| PID\_IL6\_7\_PATHWAY | 0.063074 | -0.00307 | 1.023452 | 0.309839 | 0.661683 | -5.3644 |
| FERRANDO\_LYL1\_NEIGHBORS | 0.076624 | -0.06598 | 1.022757 | 0.310165 | 0.662157 | -5.36505 |
| RAFFEL\_VEGFA\_TARGETS\_UP | -0.06673 | -0.00893 | -1.02243 | 0.310317 | 0.662259 | -5.36536 |
| REACTOME\_CROSS\_PRESENTATION\_OF\_SOLUBLE\_EXOGENOUS\_ANTIGENS\_ENDOSOMES | -0.06374 | -0.26427 | -1.02175 | 0.31064 | 0.662546 | -5.366 |
| BIOCARTA\_CREB\_PATHWAY | -0.0589 | -0.11308 | -1.0213 | 0.31085 | 0.662546 | -5.36642 |
| WAKABAYASHI\_ADIPOGENESIS\_PPARG\_RXRA\_BOUND\_WITH\_H4K20ME1\_MARK | -0.05786 | -0.06496 | -1.02129 | 0.310855 | 0.662546 | -5.36643 |
| CERVERA\_SDHB\_TARGETS\_1\_DN | 0.034832 | -0.18795 | 1.021261 | 0.310868 | 0.662546 | -5.36645 |
| WP\_MOLYBDENUM\_COFACTOR\_MOCO\_BIOSYNTHESIS | -0.097 | -0.00307 | -1.02065 | 0.311154 | 0.662934 | -5.36702 |
| CAFFAREL\_RESPONSE\_TO\_THC\_24HR\_3\_DN | -0.0701 | -0.0018 | -1.02024 | 0.311347 | 0.663046 | -5.36741 |
| COLDREN\_GEFITINIB\_RESISTANCE\_UP | -0.0677 | -0.02942 | -1.0201 | 0.311415 | 0.663046 | -5.36754 |
| REACTOME\_SYNTHESIS\_OF\_LIPOXINS\_LX | -0.06348 | -0.24301 | -1.01974 | 0.311584 | 0.663183 | -5.36788 |
| MORI\_PLASMA\_CELL\_UP | -0.08281 | -0.03559 | -1.01898 | 0.31194 | 0.663719 | -5.36858 |
| WANG\_NFKB\_TARGETS | 0.069407 | 0.02023 | 1.01867 | 0.312087 | 0.663812 | -5.36888 |
| BROWNE\_HCMV\_INFECTION\_16HR\_UP | -0.04797 | -0.07031 | -1.01727 | 0.312746 | 0.664451 | -5.37018 |
| PID\_RANBP2\_PATHWAY | -0.08849 | 0.016611 | -1.01694 | 0.312905 | 0.664451 | -5.37049 |
| REACTOME\_FACTORS\_INVOLVED\_IN\_MEGAKARYOCYTE\_DEVELOPMENT\_AND\_PLATELET\_PRODUCTION | 0.027837 | -0.04534 | 1.0164 | 0.313159 | 0.664451 | -5.37099 |
| KEGG\_PRIMARY\_IMMUNODEFICIENCY | 0.052368 | -0.31075 | 1.015931 | 0.31338 | 0.664451 | -5.37143 |
| KEGG\_ADHERENS\_JUNCTION | -0.05194 | -0.1087 | -1.01559 | 0.313542 | 0.664451 | -5.37175 |
| BLANCO\_MELO\_INFLUENZA\_A\_INFECTION\_A594\_CELLS\_DN | 0.03128 | -0.20283 | 1.015489 | 0.313589 | 0.664451 | -5.37184 |
| SASAKI\_TARGETS\_OF\_TP73\_AND\_TP63 | 0.079497 | -0.10651 | 1.01539 | 0.313636 | 0.664451 | -5.37193 |
| REACTOME\_CLASS\_C\_3\_METABOTROPIC\_GLUTAMATE\_PHEROMONE\_RECEPTORS | 0.040094 | -0.41606 | 1.015357 | 0.313652 | 0.664451 | -5.37197 |
| PID\_HDAC\_CLASSI\_PATHWAY | -0.05245 | -0.14478 | -1.01532 | 0.313671 | 0.664451 | -5.372 |
| REACTOME\_SIGNALING\_BY\_SCF\_KIT | 0.055469 | -0.02686 | 1.014995 | 0.313823 | 0.664451 | -5.3723 |
| REACTOME\_COPI\_INDEPENDENT\_GOLGI\_TO\_ER\_RETROGRADE\_TRAFFIC | -0.06438 | 0.000689 | -1.01495 | 0.313842 | 0.664451 | -5.37234 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_10 | -0.0781 | -0.06276 | -1.01475 | 0.313937 | 0.664451 | -5.37253 |
| BASSO\_B\_LYMPHOCYTE\_NETWORK | -0.07534 | -0.08057 | -1.01451 | 0.314054 | 0.664451 | -5.37276 |
| REACTOME\_SIGNALLING\_TO\_P38\_VIA\_RIT\_AND\_RIN | 0.081815 | -0.00954 | 1.013719 | 0.314427 | 0.664451 | -5.37349 |
| KEGG\_TASTE\_TRANSDUCTION | 0.031124 | -0.42202 | 1.013708 | 0.314432 | 0.664451 | -5.3735 |
| SCHUETZ\_BREAST\_CANCER\_DUCTAL\_INVASIVE\_DN | 0.029769 | -0.0483 | 1.013635 | 0.314467 | 0.664451 | -5.37357 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_DN | 0.045127 | -0.04268 | 1.013498 | 0.314531 | 0.664451 | -5.37369 |
| REACTOME\_THE\_NLRP3\_INFLAMMASOME | 0.082527 | 0.005227 | 1.013236 | 0.314656 | 0.664451 | -5.37394 |
| ROVERSI\_GLIOMA\_LOH\_REGIONS | 0.04599 | 0.004659 | 1.013164 | 0.31469 | 0.664451 | -5.374 |
| WU\_HBX\_TARGETS\_1\_UP | 0.086336 | -0.06683 | 1.012929 | 0.314801 | 0.664451 | -5.37422 |
| BROWNE\_HCMV\_INFECTION\_48HR\_UP | -0.03652 | -0.13205 | -1.01281 | 0.314857 | 0.664451 | -5.37433 |
| KYNG\_NORMAL\_AGING\_DN | -0.07291 | -0.07213 | -1.01238 | 0.315063 | 0.664451 | -5.37474 |
| WP\_MEVALONATE\_ARM\_OF\_CHOLESTEROL\_BIOSYNTHESIS\_PATHWAY | -0.08763 | -0.07268 | -1.01184 | 0.315319 | 0.664451 | -5.37524 |
| WP\_VALPROIC\_ACID\_PATHWAY | 0.056949 | -0.06959 | 1.011789 | 0.315342 | 0.664451 | -5.37528 |
| RODRIGUES\_THYROID\_CARCINOMA\_ANAPLASTIC\_UP | -0.05821 | -0.06149 | -1.01177 | 0.315353 | 0.664451 | -5.3753 |
| ELVIDGE\_HYPOXIA\_DN | -0.06456 | -0.04387 | -1.01171 | 0.315379 | 0.664451 | -5.37535 |
| MILI\_PSEUDOPODIA | -0.06291 | -0.10397 | -1.0116 | 0.315432 | 0.664451 | -5.37546 |
| CROONQUIST\_IL6\_DEPRIVATION\_DN | -0.06608 | -0.09477 | -1.01148 | 0.31549 | 0.664451 | -5.37557 |
| REACTOME\_FLT3\_SIGNALING\_THROUGH\_SRC\_FAMILY\_KINASES | 0.112199 | 0.001676 | 1.011405 | 0.315524 | 0.664451 | -5.37564 |
| WP\_HEPATOCYTE\_GROWTH\_FACTOR\_RECEPTOR\_SIGNALING | -0.07078 | -0.0837 | -1.01127 | 0.315589 | 0.664451 | -5.37576 |
| WP\_ENDODERM\_DIFFERENTIATION | -0.0304 | -0.08276 | -1.01113 | 0.315657 | 0.664451 | -5.3759 |
| KIM\_ALL\_DISORDERS\_CALB1\_CORR\_UP | -0.0659 | -0.06975 | -1.01046 | 0.315972 | 0.664451 | -5.37651 |
| CORRE\_MULTIPLE\_MYELOMA\_UP | 0.042664 | -0.01852 | 1.010461 | 0.315973 | 0.664451 | -5.37651 |
| REACTOME\_METALLOTHIONEINS\_BIND\_METALS | 0.086152 | -0.00127 | 1.010336 | 0.316032 | 0.664451 | -5.37663 |
| REACTOME\_METHYLATION | -0.0787 | 0.007589 | -1.01006 | 0.316162 | 0.664451 | -5.37688 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_DN | 0.0588 | -0.10634 | 1.009812 | 0.316281 | 0.664451 | -5.37711 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_DN | -0.05228 | -0.08365 | -1.00944 | 0.316459 | 0.664451 | -5.37746 |
| WP\_P38\_MAPK\_SIGNALING\_PATHWAY | -0.06284 | -0.12778 | -1.00934 | 0.316504 | 0.664451 | -5.37755 |
| REACTOME\_SIGNALING\_BY\_RECEPTOR\_TYROSINE\_KINASES | 0.037813 | -0.04117 | 1.008778 | 0.316773 | 0.664451 | -5.37807 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G3\_DN | -0.04379 | -0.07036 | -1.00875 | 0.316785 | 0.664451 | -5.37809 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_E\_DN | 0.05654 | -0.19401 | 1.008478 | 0.316916 | 0.664451 | -5.37835 |
| NIKOLSKY\_BREAST\_CANCER\_12Q24\_AMPLICON | 0.059362 | -0.21926 | 1.008322 | 0.31699 | 0.664451 | -5.37849 |
| KAAB\_FAILED\_HEART\_ATRIUM\_DN | -0.07699 | -0.07765 | -1.00808 | 0.317106 | 0.664451 | -5.37872 |
| WP\_HYPOTHETICAL\_CRANIOFACIAL\_DEVELOPMENT\_PATHWAY | -0.06725 | -0.00493 | -1.00798 | 0.317153 | 0.664451 | -5.37881 |
| BIOCARTA\_PYK2\_PATHWAY | -0.08034 | -0.05958 | -1.00748 | 0.317392 | 0.664451 | -5.37927 |
| THUM\_MIR21\_TARGETS\_HEART\_DISEASE\_UP | 0.096326 | -0.02207 | 1.007307 | 0.317474 | 0.664451 | -5.37943 |
| NAKAMURA\_METASTASIS | 0.052378 | -0.06961 | 1.007291 | 0.317482 | 0.664451 | -5.37945 |
| REACTOME\_ION\_TRANSPORT\_BY\_P\_TYPE\_ATPASES | -0.04183 | -0.02035 | -1.00702 | 0.317612 | 0.664451 | -5.3797 |
| KEGG\_NEUROTROPHIN\_SIGNALING\_PATHWAY | -0.05059 | -0.03312 | -1.00696 | 0.317642 | 0.664451 | -5.37976 |
| BROWNE\_HCMV\_INFECTION\_8HR\_UP | 0.044347 | -0.10087 | 1.006826 | 0.317703 | 0.664451 | -5.37987 |
| REACTOME\_FGFR3\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.072711 | 0.020846 | 1.006702 | 0.317763 | 0.664451 | -5.37999 |
| REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE | -0.08139 | -0.12025 | -1.00659 | 0.317817 | 0.664451 | -5.38009 |
| PID\_ARF\_3PATHWAY | 0.081382 | 0.005517 | 1.006158 | 0.318022 | 0.664459 | -5.38049 |
| REACTOME\_SUMOYLATION\_OF\_CHROMATIN\_ORGANIZATION\_PROTEINS | -0.06378 | -0.09854 | -1.00609 | 0.318054 | 0.664459 | -5.38055 |
| REACTOME\_CYTOSOLIC\_IRON\_SULFUR\_CLUSTER\_ASSEMBLY | -0.06853 | -0.00652 | -1.00592 | 0.318134 | 0.664459 | -5.38071 |
| REACTOME\_DEGRADATION\_OF\_DVL | -0.06376 | -0.23887 | -1.00509 | 0.318533 | 0.665061 | -5.38148 |
| REACTOME\_SIGNALING\_BY\_CSF3\_G\_CSF | 0.07797 | 0.010894 | 1.004882 | 0.318631 | 0.665061 | -5.38167 |
| KEGG\_INOSITOL\_PHOSPHATE\_METABOLISM | -0.04674 | -0.06033 | -1.00434 | 0.318892 | 0.665386 | -5.38217 |
| PID\_IL27\_PATHWAY | 0.049003 | -0.23249 | 1.003388 | 0.319346 | 0.66562 | -5.38304 |
| MOREIRA\_RESPONSE\_TO\_TSA\_UP | 0.060323 | -0.23129 | 1.003166 | 0.319453 | 0.66562 | -5.38325 |
| REACTOME\_MELANIN\_BIOSYNTHESIS | 0.119225 | -0.00608 | 1.003127 | 0.319471 | 0.66562 | -5.38328 |
| PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_DN | -0.07253 | -0.04224 | -1.00302 | 0.319523 | 0.66562 | -5.38338 |
| CHUANG\_OXIDATIVE\_STRESS\_RESPONSE\_UP | 0.042637 | -0.20162 | 1.002757 | 0.319648 | 0.66562 | -5.38362 |
| CLASPER\_LYMPHATIC\_VESSELS\_DURING\_METASTASIS\_UP | 0.075627 | -0.00601 | 1.002394 | 0.319822 | 0.66562 | -5.38396 |
| DAZARD\_RESPONSE\_TO\_UV\_SCC\_DN | -0.06384 | -0.05662 | -1.00196 | 0.320029 | 0.66562 | -5.38436 |
| SETLUR\_PROSTATE\_CANCER\_TMPRSS2\_ERG\_FUSION\_DN | 0.051668 | -0.0693 | 1.001828 | 0.320094 | 0.66562 | -5.38448 |
| GAVIN\_IL2\_RESPONSIVE\_FOXP3\_TARGETS\_UP | 0.061606 | -0.0575 | 1.001763 | 0.320125 | 0.66562 | -5.38454 |
| VISALA\_RESPONSE\_TO\_HEAT\_SHOCK\_AND\_AGING\_UP | -0.08483 | -0.06779 | -1.00172 | 0.320144 | 0.66562 | -5.38458 |
| LEE\_LIVER\_CANCER\_DENA\_UP | 0.062278 | -0.02336 | 1.001701 | 0.320155 | 0.66562 | -5.3846 |
| PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_DN | 0.036279 | -0.19284 | 1.001162 | 0.320413 | 0.665705 | -5.38509 |
| PID\_ERBB1\_INTERNALIZATION\_PATHWAY | -0.06709 | -0.02234 | -1.00067 | 0.320648 | 0.665705 | -5.38554 |
| FINETTI\_BREAST\_CANCERS\_KINOME\_GRAY | -0.08035 | -0.0209 | -1.00065 | 0.320657 | 0.665705 | -5.38556 |
| JAZAG\_TGFB1\_SIGNALING\_DN | -0.03977 | -0.12679 | -0.99971 | 0.321111 | 0.665705 | -5.38643 |
| REACTOME\_REGULATION\_OF\_TLR\_BY\_ENDOGENOUS\_LIGAND | 0.073243 | -0.04723 | 0.999496 | 0.321213 | 0.665705 | -5.38662 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_NOTCH4\_SIGNALING | -0.06449 | -0.27229 | -0.99929 | 0.321313 | 0.665705 | -5.38681 |
| REACTOME\_SUMO\_IS\_PROTEOLYTICALLY\_PROCESSED | 0.105011 | -0.00763 | 0.999223 | 0.321344 | 0.665705 | -5.38687 |
| HSIAO\_LIVER\_SPECIFIC\_GENES | 0.028129 | -0.1258 | 0.999218 | 0.321346 | 0.665705 | -5.38687 |
| BALDWIN\_PRKCI\_TARGETS\_UP | -0.06693 | -0.03367 | -0.99891 | 0.321495 | 0.665705 | -5.38716 |
| ONDER\_CDH1\_SIGNALING\_VIA\_CTNNB1 | 0.068594 | -0.06685 | 0.998801 | 0.321547 | 0.665705 | -5.38726 |
| CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_5\_UP | 0.094877 | -0.0045 | 0.998766 | 0.321564 | 0.665705 | -5.38729 |
| ZHONG\_RESPONSE\_TO\_AZACITIDINE\_AND\_TSA\_UP | 0.029393 | -0.12989 | 0.998479 | 0.321702 | 0.665705 | -5.38755 |
| KORKOLA\_CHORIOCARCINOMA\_DN | 0.098457 | 0.033582 | 0.998363 | 0.321758 | 0.665705 | -5.38766 |
| HILLION\_HMGA1B\_TARGETS | 0.051504 | -0.02442 | 0.998176 | 0.321848 | 0.665705 | -5.38783 |
| REACTOME\_CLEC7A\_DECTIN\_1\_SIGNALING | -0.06225 | -0.15203 | -0.99814 | 0.321865 | 0.665705 | -5.38786 |
| REACTOME\_POU5F1\_OCT4\_SOX2\_NANOG\_REPRESS\_GENES\_RELATED\_TO\_DIFFERENTIATION | 0.045758 | -0.3299 | 0.998131 | 0.321869 | 0.665705 | -5.38787 |
| GAJATE\_RESPONSE\_TO\_TRABECTEDIN\_UP | 0.048944 | -0.16168 | 0.997883 | 0.321988 | 0.665736 | -5.3881 |
| NIKOLSKY\_BREAST\_CANCER\_10Q22\_AMPLICON | -0.06829 | -0.09184 | -0.997 | 0.322412 | 0.666291 | -5.3889 |
| REACTOME\_THYROXINE\_BIOSYNTHESIS | 0.102047 | 0.022226 | 0.996708 | 0.322554 | 0.666291 | -5.38917 |
| IBRAHIM\_NRF3\_UP | 0.124169 | 0.00938 | 0.996673 | 0.322571 | 0.666291 | -5.3892 |
| KEGG\_LONG\_TERM\_DEPRESSION | 0.026668 | -0.0599 | 0.994994 | 0.323381 | 0.667169 | -5.39074 |
| SCIBETTA\_KDM5B\_TARGETS\_DN | -0.05861 | -0.1474 | -0.99468 | 0.323533 | 0.667169 | -5.39103 |
| TORCHIA\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_DN | -0.03936 | -0.12206 | -0.99458 | 0.32358 | 0.667169 | -5.39112 |
| BIOCARTA\_MET\_PATHWAY | -0.07297 | -0.08237 | -0.99454 | 0.323598 | 0.667169 | -5.39115 |
| REACTOME\_EXTENSION\_OF\_TELOMERES | -0.06484 | -0.03907 | -0.99439 | 0.323674 | 0.667169 | -5.39129 |
| PID\_PTP1B\_PATHWAY | 0.049201 | -0.07617 | 0.994333 | 0.3237 | 0.667169 | -5.39134 |
| WENG\_POR\_TARGETS\_GLOBAL\_DN | -0.0529 | -0.00837 | -0.99427 | 0.32373 | 0.667169 | -5.3914 |
| REACTOME\_HSF1\_ACTIVATION | -0.05361 | -0.28707 | -0.99396 | 0.323881 | 0.667264 | -5.39168 |
| REACTOME\_IRE1ALPHA\_ACTIVATES\_CHAPERONES | -0.07395 | -0.02044 | -0.99333 | 0.324183 | 0.667562 | -5.39225 |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_3 | -0.04545 | -0.06669 | -0.9932 | 0.324246 | 0.667562 | -5.39237 |
| SUZUKI\_AMPLIFIED\_IN\_ORAL\_CANCER | 0.060333 | -0.09729 | 0.992963 | 0.324363 | 0.667562 | -5.39259 |
| KEGG\_ALDOSTERONE\_REGULATED\_SODIUM\_REABSORPTION | -0.0466 | 0.002637 | -0.99279 | 0.324445 | 0.667562 | -5.39275 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_12HR\_DN | 0.041722 | -0.04193 | 0.992412 | 0.324629 | 0.667725 | -5.39309 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P4 | 0.039189 | -0.06725 | 0.992097 | 0.324781 | 0.667742 | -5.39338 |
| REACTOME\_SYNTHESIS\_OF\_BILE\_ACIDS\_AND\_BILE\_SALTS\_VIA\_7ALPHA\_HYDROXYCHOLESTEROL | 0.052527 | -0.03543 | 0.991961 | 0.324847 | 0.667742 | -5.3935 |
| WP\_FAS\_LIGAND\_PATHWAY\_AND\_STRESS\_INDUCTION\_OF\_HEAT\_SHOCK\_PROTEINS | -0.05688 | -0.20169 | -0.99156 | 0.325043 | 0.667927 | -5.39387 |
| LA\_MEN1\_TARGETS | -0.06067 | -0.066 | -0.99105 | 0.325287 | 0.668214 | -5.39433 |
| REACTOME\_INTERLEUKIN\_21\_SIGNALING | 0.080467 | -0.01106 | 0.990565 | 0.325524 | 0.668276 | -5.39477 |
| REACTOME\_REGULATION\_OF\_RAS\_BY\_GAPS | -0.05572 | -0.23585 | -0.99053 | 0.32554 | 0.668276 | -5.3948 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G1\_UP | -0.04415 | -0.08841 | -0.99034 | 0.325632 | 0.668276 | -5.39498 |
| JISON\_SICKLE\_CELL\_DISEASE\_DN | -0.06805 | -0.09482 | -0.98928 | 0.326146 | 0.669114 | -5.39594 |
| PID\_CERAMIDE\_PATHWAY | -0.05675 | -0.12362 | -0.98866 | 0.326447 | 0.669328 | -5.3965 |
| REACTOME\_DERMATAN\_SULFATE\_BIOSYNTHESIS | 0.065676 | -0.08677 | 0.988445 | 0.326553 | 0.669328 | -5.3967 |
| STARK\_HYPPOCAMPUS\_22Q11\_DELETION\_UP | 0.041579 | -0.09338 | 0.988418 | 0.326565 | 0.669328 | -5.39672 |
| BIOCARTA\_TPO\_PATHWAY | -0.07808 | -0.04018 | -0.98674 | 0.32738 | 0.670774 | -5.39824 |
| GALI\_TP53\_TARGETS\_APOPTOTIC\_UP | 0.090557 | -0.02124 | 0.986534 | 0.327482 | 0.670774 | -5.39843 |
| LUI\_THYROID\_CANCER\_CLUSTER\_1 | 0.054025 | 0.012516 | 0.985637 | 0.327918 | 0.671452 | -5.39924 |
| RUAN\_RESPONSE\_TO\_TNF\_DN | 0.047973 | -0.07391 | 0.98526 | 0.328102 | 0.671613 | -5.39958 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_DN | 0.060457 | -0.01749 | 0.984816 | 0.328319 | 0.671839 | -5.39998 |
| WP\_QUERCETIN\_AND\_NFKB\_AP1\_INDUCED\_APOPTOSIS | 0.059175 | -0.07961 | 0.983841 | 0.328795 | 0.67202 | -5.40087 |
| REACTOME\_ERK\_MAPK\_TARGETS | 0.051706 | -0.03798 | 0.983719 | 0.328854 | 0.67202 | -5.40097 |
| LIU\_VAV3\_PROSTATE\_CARCINOGENESIS\_DN | 0.042072 | -0.30384 | 0.983674 | 0.328876 | 0.67202 | -5.40102 |
| KEGG\_INTESTINAL\_IMMUNE\_NETWORK\_FOR\_IGA\_PRODUCTION | 0.02086 | -0.60165 | 0.983653 | 0.328886 | 0.67202 | -5.40103 |
| REACTOME\_GOLGI\_TO\_ER\_RETROGRADE\_TRANSPORT | -0.04875 | -0.04956 | -0.98355 | 0.328935 | 0.67202 | -5.40113 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_C\_UP | -0.0411 | -0.09956 | -0.98334 | 0.329041 | 0.67202 | -5.40132 |
| REACTOME\_DNA\_METHYLATION | 0.0848 | -0.01097 | 0.982976 | 0.329217 | 0.672086 | -5.40165 |
| KRASNOSELSKAYA\_ILF3\_TARGETS\_UP | 0.047062 | -0.36874 | 0.982523 | 0.329438 | 0.672086 | -5.40205 |
| REACTOME\_ERBB2\_REGULATES\_CELL\_MOTILITY | 0.061489 | 0.001611 | 0.982477 | 0.329461 | 0.672086 | -5.4021 |
| PETRETTO\_LEFT\_VENTRICLE\_MASS\_QTL\_CIS\_DN | -0.09218 | -0.01068 | -0.98229 | 0.32955 | 0.672086 | -5.40226 |
| BIOCARTA\_DEATH\_PATHWAY | -0.0653 | -0.02506 | -0.98164 | 0.329868 | 0.672086 | -5.40285 |
| NADELLA\_PRKAR1A\_TARGETS\_UP | 0.060514 | -0.1982 | 0.981588 | 0.329895 | 0.672086 | -5.4029 |
| HOWLIN\_PUBERTAL\_MAMMARY\_GLAND | 0.03693 | -0.15308 | 0.981334 | 0.330019 | 0.672086 | -5.40313 |
| BIOCARTA\_CB1R\_PATHWAY | 0.06511 | -0.1006 | 0.981225 | 0.330073 | 0.672086 | -5.40322 |
| GHO\_ATF5\_TARGETS\_UP | -0.0691 | -0.00148 | -0.98121 | 0.33008 | 0.672086 | -5.40324 |
| RODRIGUES\_DCC\_TARGETS\_UP | 0.078591 | -0.00769 | 0.980989 | 0.330188 | 0.672086 | -5.40344 |
| WP\_FOCAL\_ADHESION\_PI3KAKTMTORSIGNALING\_PATHWAY | 0.026729 | -0.07443 | 0.980894 | 0.330235 | 0.672086 | -5.40352 |
| FINETTI\_BREAST\_CANCER\_KINOME\_GREEN | 0.096741 | -0.05786 | 0.980265 | 0.330543 | 0.672265 | -5.40409 |
| REACTOME\_ORGANIC\_ANION\_TRANSPORT | 0.115188 | 0.046605 | 0.980254 | 0.330548 | 0.672265 | -5.4041 |
| DANG\_BOUND\_BY\_MYC | -0.04976 | -0.14635 | -0.97985 | 0.330745 | 0.672265 | -5.40446 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_1\_UP | -0.03186 | -0.09463 | -0.97962 | 0.330857 | 0.672265 | -5.40467 |
| SIG\_INSULIN\_RECEPTOR\_PATHWAY\_IN\_CARDIAC\_MYOCYTES | -0.04397 | -0.1831 | -0.97906 | 0.331135 | 0.672265 | -5.40517 |
| HELLEBREKERS\_SILENCED\_DURING\_TUMOR\_ANGIOGENESIS | 0.045921 | -0.15195 | 0.979051 | 0.331138 | 0.672265 | -5.40518 |
| REACTOME\_BETA\_CATENIN\_INDEPENDENT\_WNT\_SIGNALING | -0.04802 | -0.12833 | -0.97885 | 0.331238 | 0.672265 | -5.40536 |
| KEGG\_ASCORBATE\_AND\_ALDARATE\_METABOLISM | 0.059023 | -0.08795 | 0.97881 | 0.331256 | 0.672265 | -5.4054 |
| BOYLAN\_MULTIPLE\_MYELOMA\_PCA1\_UP | 0.032606 | -0.22313 | 0.978603 | 0.331357 | 0.672265 | -5.40558 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_CDC25\_DN | 0.057798 | -0.15073 | 0.978366 | 0.331474 | 0.672265 | -5.4058 |
| OSMAN\_BLADDER\_CANCER\_UP | -0.06612 | -0.09349 | -0.97834 | 0.331485 | 0.672265 | -5.40582 |
| BENPORATH\_SOX2\_TARGETS | -0.04689 | -0.12611 | -0.97696 | 0.332166 | 0.673315 | -5.40706 |
| WP\_NAD\_METABOLISM\_IN\_ONCOGENEINDUCED\_SENESCENCE\_AND\_MITOCHONDRIAL\_DYSFUNCTIONASSOCIATED\_SENESCENCE | 0.058612 | -0.08404 | 0.976859 | 0.332214 | 0.673315 | -5.40715 |
| PEREZ\_TP53\_TARGETS | 0.018751 | -0.07794 | 0.976505 | 0.332388 | 0.673453 | -5.40747 |
| WP\_CHOLESTEROL\_BIOSYNTHESIS\_WITH\_SKELETAL\_DYSPLASIAS | -0.10831 | 0.01101 | -0.97598 | 0.332646 | 0.673605 | -5.40794 |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_UP | -0.0532 | -0.03904 | -0.97592 | 0.332675 | 0.673605 | -5.40799 |
| REACTOME\_FATTY\_ACID\_METABOLISM | -0.03352 | -0.09351 | -0.9741 | 0.333573 | 0.674722 | -5.40962 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_CIT | -0.0808 | -0.04313 | -0.97374 | 0.333747 | 0.674722 | -5.40994 |
| REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT | -0.04601 | -0.15933 | -0.97368 | 0.333779 | 0.674722 | -5.41 |
| REACTOME\_PHYSIOLOGICAL\_FACTORS | 0.070531 | -0.05765 | 0.973594 | 0.333821 | 0.674722 | -5.41007 |
| KAUFFMANN\_MELANOMA\_RELAPSE\_DN | -0.09499 | 0.006743 | -0.97349 | 0.333872 | 0.674722 | -5.41016 |
| REACTOME\_ROLE\_OF\_ABL\_IN\_ROBO\_SLIT\_SIGNALING | -0.08991 | -0.00785 | -0.97329 | 0.333973 | 0.674722 | -5.41035 |
| LIU\_COMMON\_CANCER\_GENES | -0.03813 | -0.11394 | -0.97299 | 0.334119 | 0.674722 | -5.41061 |
| WP\_THIAMINE\_METABOLIC\_PATHWAYS | 0.086145 | -0.01336 | 0.972942 | 0.334142 | 0.674722 | -5.41065 |
| KEGG\_APOPTOSIS | -0.0483 | -0.10499 | -0.97286 | 0.33418 | 0.674722 | -5.41072 |
| PID\_INSULIN\_GLUCOSE\_PATHWAY | 0.048373 | -0.06901 | 0.97251 | 0.334355 | 0.674861 | -5.41104 |
| SAFFORD\_T\_LYMPHOCYTE\_ANERGY | 0.032021 | -0.1932 | 0.972112 | 0.334552 | 0.674979 | -5.41139 |
| WP\_CORTICOTROPINRELEASING\_HORMONE\_SIGNALING\_PATHWAY | 0.032385 | -0.09324 | 0.971962 | 0.334626 | 0.674979 | -5.41153 |
| IWANAGA\_CARCINOGENESIS\_BY\_KRAS\_UP | -0.02702 | -0.07763 | -0.97164 | 0.334787 | 0.675079 | -5.41182 |
| BOYLAN\_MULTIPLE\_MYELOMA\_D\_UP | -0.04504 | -0.05805 | -0.97143 | 0.334887 | 0.675079 | -5.412 |
| REACTOME\_N\_GLYCAN\_TRIMMING\_AND\_ELONGATION\_IN\_THE\_CIS\_GOLGI | -0.09921 | -0.00981 | -0.97104 | 0.33508 | 0.675253 | -5.41235 |
| PIEPOLI\_LGI1\_TARGETS\_UP | 0.056687 | 0.00961 | 0.970657 | 0.335271 | 0.675321 | -5.41269 |
| ASTON\_MAJOR\_DEPRESSIVE\_DISORDER\_UP | -0.04291 | -0.04924 | -0.97035 | 0.335424 | 0.675321 | -5.41297 |
| WP\_GPR40\_PATHWAY | -0.05468 | 0.001591 | -0.97024 | 0.335475 | 0.675321 | -5.41306 |
| RUAN\_RESPONSE\_TO\_TROGLITAZONE\_DN | 0.052812 | -0.24496 | 0.970111 | 0.33554 | 0.675321 | -5.41318 |
| CONRAD\_STEM\_CELL | 0.041808 | -0.17741 | 0.969901 | 0.335645 | 0.675321 | -5.41337 |
| GERHOLD\_RESPONSE\_TO\_TZD\_UP | 0.071552 | -0.0013 | 0.969205 | 0.335989 | 0.675801 | -5.41399 |
| BURTON\_ADIPOGENESIS\_8 | 0.059223 | -0.14138 | 0.968557 | 0.33631 | 0.676232 | -5.41456 |
| HU\_ANGIOGENESIS\_DN | -0.08194 | -0.06086 | -0.96743 | 0.336871 | 0.677133 | -5.41557 |
| REACTOME\_CONSTITUTIVE\_SIGNALING\_BY\_LIGAND\_RESPONSIVE\_EGFR\_CANCER\_VARIANTS | -0.06662 | -0.03917 | -0.96722 | 0.336971 | 0.677133 | -5.41575 |
| YORDY\_RECIPROCAL\_REGULATION\_BY\_ETS1\_AND\_SP100\_UP | 0.05955 | -0.0037 | 0.966825 | 0.337169 | 0.677317 | -5.4161 |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_35D\_DN | -0.03122 | -0.13917 | -0.96637 | 0.337393 | 0.677555 | -5.4165 |
| REACTOME\_DISEASES\_ASSOCIATED\_WITH\_N\_GLYCOSYLATION\_OF\_PROTEINS | -0.08266 | 0.00143 | -0.96603 | 0.337564 | 0.677626 | -5.41681 |
| WEST\_ADRENOCORTICAL\_CARCINOMA\_VS\_ADENOMA\_DN | 0.029233 | -0.53584 | 0.965793 | 0.337681 | 0.677626 | -5.41702 |
| FRIDMAN\_SENESCENCE\_UP | 0.053657 | -0.13157 | 0.965608 | 0.337773 | 0.677626 | -5.41718 |
| REACTOME\_ARACHIDONIC\_ACID\_METABOLISM | 0.031814 | -0.03013 | 0.965434 | 0.337859 | 0.677626 | -5.41734 |
| BORCZUK\_MALIGNANT\_MESOTHELIOMA\_DN | 0.027012 | -0.53304 | 0.964775 | 0.338187 | 0.677626 | -5.41792 |
| SIG\_CHEMOTAXIS | -0.04294 | -0.06914 | -0.96477 | 0.338188 | 0.677626 | -5.41792 |
| BROWNE\_INTERFERON\_RESPONSIVE\_GENES | 0.043053 | -0.31376 | 0.964614 | 0.338267 | 0.677626 | -5.41806 |
| REACTOME\_DISEASES\_ASSOCIATED\_WITH\_GLYCOSYLATION\_PRECURSOR\_BIOSYNTHESIS | -0.06659 | -0.24669 | -0.96459 | 0.33828 | 0.677626 | -5.41809 |
| REACTOME\_HEDGEHOG\_OFF\_STATE | -0.04609 | -0.15643 | -0.96396 | 0.338594 | 0.678041 | -5.41864 |
| DUTERTRE\_ESTRADIOL\_RESPONSE\_6HR\_DN | -0.05286 | -0.00893 | -0.96353 | 0.338805 | 0.678048 | -5.41902 |
| FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_DN | -0.03741 | -0.2139 | -0.96352 | 0.338811 | 0.678048 | -5.41903 |
| GUENTHER\_GROWTH\_SPHERICAL\_VS\_ADHERENT\_UP | 0.059299 | -0.08058 | 0.963251 | 0.338945 | 0.678104 | -5.41927 |
| PID\_ALK1\_PATHWAY | -0.06143 | -0.19296 | -0.96271 | 0.339213 | 0.678307 | -5.41974 |
| FRASOR\_RESPONSE\_TO\_ESTRADIOL\_UP | 0.051685 | -0.07636 | 0.962619 | 0.33926 | 0.678307 | -5.41983 |
| REACTOME\_NEF\_AND\_SIGNAL\_TRANSDUCTION | 0.090757 | -0.01478 | 0.962043 | 0.339547 | 0.678668 | -5.42034 |
| BIOCARTA\_CASPASE\_PATHWAY | -0.06963 | -0.00412 | -0.96139 | 0.339872 | 0.678747 | -5.42091 |
| WONG\_ENDMETRIUM\_CANCER\_DN | -0.05452 | -0.07292 | -0.96129 | 0.339924 | 0.678747 | -5.42101 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_MODERATELY\_VS\_POORLY\_UP | -0.05425 | -0.05591 | -0.9609 | 0.34012 | 0.678747 | -5.42135 |
| REACTOME\_COOPERATION\_OF\_PREFOLDIN\_AND\_TRIC\_CCT\_IN\_ACTIN\_AND\_TUBULIN\_FOLDING | -0.0595 | -0.09689 | -0.96072 | 0.340209 | 0.678747 | -5.42151 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_OF\_PLURIPOTENT\_STEM\_CELLS | 0.039045 | -0.16245 | 0.960647 | 0.340243 | 0.678747 | -5.42157 |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_24HR | -0.06368 | -0.09912 | -0.96057 | 0.34028 | 0.678747 | -5.42163 |
| KEGG\_CHRONIC\_MYELOID\_LEUKEMIA | -0.05977 | -0.03463 | -0.96047 | 0.340333 | 0.678747 | -5.42173 |
| WP\_NONHOMOLOGOUS\_END\_JOINING | -0.07019 | 0.011897 | -0.95985 | 0.340643 | 0.679116 | -5.42227 |
| REACTOME\_UNBLOCKING\_OF\_NMDA\_RECEPTORS\_GLUTAMATE\_BINDING\_AND\_ACTIVATION | -0.06835 | 0.001966 | -0.95967 | 0.340732 | 0.679116 | -5.42243 |
| BIOCARTA\_MCM\_PATHWAY | -0.06587 | -0.00775 | -0.95943 | 0.34085 | 0.679139 | -5.42264 |
| BIOCARTA\_PTC1\_PATHWAY | -0.06663 | -0.10297 | -0.95836 | 0.341389 | 0.679999 | -5.42359 |
| XU\_CREBBP\_TARGETS\_DN | 0.044568 | -0.16034 | 0.958007 | 0.341563 | 0.680134 | -5.4239 |
| PID\_AVB3\_INTEGRIN\_PATHWAY | 0.053911 | -0.09463 | 0.956847 | 0.342144 | 0.68073 | -5.42492 |
| REACTOME\_DEVELOPMENTAL\_BIOLOGY | 0.01768 | -0.09443 | 0.956772 | 0.342182 | 0.68073 | -5.42498 |
| ZHENG\_GLIOBLASTOMA\_PLASTICITY\_UP | -0.03145 | -0.05766 | -0.95665 | 0.342244 | 0.68073 | -5.42509 |
| BONCI\_TARGETS\_OF\_MIR15A\_AND\_MIR16\_1 | -0.04646 | -0.01776 | -0.95656 | 0.34229 | 0.68073 | -5.42517 |
| MAYBURD\_RESPONSE\_TO\_L663536\_UP | -0.03966 | -0.00437 | -0.95621 | 0.342465 | 0.680751 | -5.42548 |
| REACTOME\_APOPTOSIS | -0.05044 | -0.12548 | -0.95611 | 0.342515 | 0.680751 | -5.42557 |
| REACTOME\_DEFECTIVE\_GALNT3\_CAUSES\_HFTC | 0.074247 | -0.11485 | 0.955231 | 0.342954 | 0.681412 | -5.42634 |
| RANKIN\_ANGIOGENIC\_TARGETS\_OF\_VHL\_HIF2A\_DN | 0.083673 | -0.0254 | 0.954632 | 0.343255 | 0.681795 | -5.42686 |
| BIOCARTA\_RELA\_PATHWAY | -0.06807 | -0.28526 | -0.95391 | 0.343618 | 0.682175 | -5.42749 |
| GHANDHI\_BYSTANDER\_IRRADIATION\_DN | 0.054041 | -0.21005 | 0.953825 | 0.34366 | 0.682175 | -5.42757 |
| REACTOME\_INTRINSIC\_PATHWAY\_OF\_FIBRIN\_CLOT\_FORMATION | 0.042084 | -0.00181 | 0.953091 | 0.344029 | 0.682364 | -5.42821 |
| MASRI\_RESISTANCE\_TO\_TAMOXIFEN\_AND\_AROMATASE\_INHIBITORS\_UP | 0.057965 | -0.00628 | 0.952878 | 0.344136 | 0.682364 | -5.4284 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_VENTX | -0.05053 | -0.11368 | -0.95282 | 0.344165 | 0.682364 | -5.42845 |
| LEONARD\_HYPOXIA | 0.075646 | -0.02584 | 0.952603 | 0.344275 | 0.682364 | -5.42864 |
| MARIADASON\_RESPONSE\_TO\_BUTYRATE\_CURCUMIN\_SULINDAC\_TSA\_2 | 0.060779 | -0.45506 | 0.952291 | 0.344431 | 0.682364 | -5.42891 |
| WP\_GLYCOLYSIS\_IN\_SENESCENCE | 0.07825 | -0.07647 | 0.952193 | 0.344481 | 0.682364 | -5.429 |
| SU\_PANCREAS | 0.053205 | -0.01586 | 0.951835 | 0.344661 | 0.682364 | -5.42931 |
| FOSTER\_TOLERANT\_MACROPHAGE\_DN | 0.046984 | -0.08385 | 0.951622 | 0.344768 | 0.682364 | -5.4295 |
| MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_DN | -0.04484 | -0.08186 | -0.95147 | 0.344844 | 0.682364 | -5.42963 |
| MOOTHA\_TCA | -0.10089 | 0.016062 | -0.95144 | 0.344859 | 0.682364 | -5.42965 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_LATE\_2 | -0.06509 | -0.04004 | -0.95129 | 0.344935 | 0.682364 | -5.42979 |
| REACTOME\_RAB\_REGULATION\_OF\_TRAFFICKING | -0.05426 | -0.0356 | -0.95081 | 0.345176 | 0.682382 | -5.4302 |
| WP\_EGFEGFR\_SIGNALING\_PATHWAY | -0.05135 | -0.05226 | -0.95067 | 0.345247 | 0.682382 | -5.43033 |
| AMIT\_EGF\_RESPONSE\_20\_HELA | 0.081853 | -0.07495 | 0.950635 | 0.345266 | 0.682382 | -5.43036 |
| POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_UP | 0.041606 | -0.11394 | 0.950258 | 0.345456 | 0.682546 | -5.43069 |
| FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_UP | -0.06829 | -0.13497 | -0.95001 | 0.345579 | 0.682577 | -5.4309 |
| WP\_CYTOSOLIC\_DNASENSING\_PATHWAY | -0.03988 | -0.08013 | -0.94856 | 0.346315 | 0.683131 | -5.43217 |
| HOLLERN\_PAPILLARY\_BREAST\_TUMOR | -0.05005 | 0.017645 | -0.94853 | 0.346327 | 0.683131 | -5.4322 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_6\_UP | -0.02611 | -0.15686 | -0.94843 | 0.346379 | 0.683131 | -5.43228 |
| BERNARD\_PPAPDC1B\_TARGETS\_UP | -0.07858 | -0.03703 | -0.94841 | 0.34639 | 0.683131 | -5.4323 |
| REACTOME\_FLT3\_SIGNALING | 0.052916 | -0.03429 | 0.948217 | 0.346486 | 0.683131 | -5.43247 |
| REACTOME\_METABOLISM\_OF\_WATER\_SOLUBLE\_VITAMINS\_AND\_COFACTORS | -0.03885 | -0.06555 | -0.94799 | 0.346602 | 0.683131 | -5.43267 |
| REACTOME\_SIGNALING\_BY\_TGF\_BETA\_RECEPTOR\_COMPLEX\_IN\_CANCER | 0.079576 | -0.01816 | 0.947969 | 0.346611 | 0.683131 | -5.43268 |
| DAIRKEE\_CANCER\_PRONE\_RESPONSE\_E2 | -0.04704 | -0.04226 | -0.94683 | 0.347186 | 0.683775 | -5.43367 |
| ACEVEDO\_LIVER\_CANCER\_WITH\_H3K27ME3\_UP | 0.026832 | -0.10409 | 0.946829 | 0.347187 | 0.683775 | -5.43368 |
| WESTON\_VEGFA\_TARGETS\_6HR | 0.057628 | -0.02312 | 0.946686 | 0.34726 | 0.683775 | -5.4338 |
| SCHWAB\_TARGETS\_OF\_BMYB\_POLYMORPHIC\_VARIANTS\_UP | -0.06396 | 0.009705 | -0.94573 | 0.347743 | 0.684515 | -5.43463 |
| SCHAEFFER\_SOX9\_TARGETS\_IN\_PROSTATE\_DEVELOPMENT\_DN | -0.05766 | -0.03449 | -0.94535 | 0.347935 | 0.684682 | -5.43496 |
| NUTT\_GBM\_VS\_AO\_GLIOMA\_UP | 0.051609 | -0.21672 | 0.945111 | 0.348057 | 0.684709 | -5.43517 |
| SABATES\_COLORECTAL\_ADENOMA\_SIZE\_UP | 0.05251 | -0.19758 | 0.944592 | 0.34832 | 0.68481 | -5.43562 |
| ZHAN\_MULTIPLE\_MYELOMA\_UP | -0.054 | -0.12808 | -0.94458 | 0.348324 | 0.68481 | -5.43563 |
| GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_DIVIDING\_DN | 0.034823 | -0.57031 | 0.9442 | 0.348518 | 0.684811 | -5.43596 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_12 | -0.07181 | -0.04583 | -0.94416 | 0.348539 | 0.684811 | -5.436 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_6HR\_UP | -0.04247 | 0.000119 | -0.94372 | 0.348761 | 0.685035 | -5.43637 |
| REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS | -0.06959 | -0.00168 | -0.94334 | 0.348953 | 0.685201 | -5.4367 |
| NIKOLSKY\_BREAST\_CANCER\_7P15\_AMPLICON | -0.07607 | 0.007995 | -0.94285 | 0.349202 | 0.685478 | -5.43713 |
| WP\_HEPATITIS\_C\_AND\_HEPATOCELLULAR\_CARCINOMA | 0.05607 | -0.05749 | 0.942463 | 0.3494 | 0.685656 | -5.43747 |
| HE\_PTEN\_TARGETS\_DN | 0.085381 | 0.003802 | 0.941829 | 0.349722 | 0.685956 | -5.43802 |
| SEIDEN\_ONCOGENESIS\_BY\_MET | -0.08431 | -0.06357 | -0.94125 | 0.350017 | 0.685956 | -5.43852 |
| BIOCARTA\_FAS\_PATHWAY | -0.06665 | -0.1183 | -0.94112 | 0.350084 | 0.685956 | -5.43863 |
| REACTOME\_PCP\_CE\_PATHWAY | -0.05422 | -0.17386 | -0.94087 | 0.350208 | 0.685956 | -5.43884 |
| CORONEL\_RFX7\_DIRECT\_TARGETS\_UP | -0.06368 | -0.08592 | -0.94045 | 0.350425 | 0.685956 | -5.43921 |
| BIOCARTA\_HSWI\_SNF\_PATHWAY | -0.0806 | -0.05554 | -0.9404 | 0.35045 | 0.685956 | -5.43925 |
| FURUKAWA\_DUSP6\_TARGETS\_PCI35\_DN | -0.05052 | -0.07342 | -0.94003 | 0.350636 | 0.685956 | -5.43957 |
| TURJANSKI\_MAPK8\_AND\_MAPK9\_TARGETS | -0.06788 | -0.08783 | -0.93975 | 0.35078 | 0.685956 | -5.43981 |
| MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_UP | -0.04812 | -0.09457 | -0.93923 | 0.351047 | 0.685956 | -5.44027 |
| REACTOME\_NEF\_MEDIATED\_CD4\_DOWN\_REGULATION | 0.089872 | -0.00859 | 0.939195 | 0.351063 | 0.685956 | -5.44029 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_GRANULOCYTE\_DN | 0.065471 | -0.0526 | 0.938569 | 0.351382 | 0.685956 | -5.44083 |
| REACTOME\_TRISTETRAPROLIN\_TTP\_ZFP36\_BINDS\_AND\_DESTABILIZES\_MRNA | -0.09241 | -0.0191 | -0.9385 | 0.351418 | 0.685956 | -5.44089 |
| REACTOME\_DISEASES\_OF\_IMMUNE\_SYSTEM | 0.069547 | -0.00058 | 0.938458 | 0.351438 | 0.685956 | -5.44093 |
| WP\_SUPRESSION\_OF\_HMGB1\_MEDIATED\_INFLAMMATION\_BY\_THBD | 0.065885 | -0.34944 | 0.938397 | 0.351469 | 0.685956 | -5.44098 |
| WP\_LEPTIN\_SIGNALING\_PATHWAY | -0.06549 | -0.06034 | -0.93796 | 0.35169 | 0.685956 | -5.44135 |
| WP\_ARYLAMINE\_METABOLISM | 0.096228 | 0.024074 | 0.937635 | 0.351858 | 0.685956 | -5.44164 |
| REACTOME\_IRAK1\_RECRUITS\_IKK\_COMPLEX | 0.082494 | 0.011424 | 0.937509 | 0.351922 | 0.685956 | -5.44175 |
| VANTVEER\_BREAST\_CANCER\_ESR1\_DN | 0.046557 | -0.0861 | 0.937506 | 0.351924 | 0.685956 | -5.44175 |
| REACTOME\_FGFR1C\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.070832 | 0.026854 | 0.937369 | 0.351994 | 0.685956 | -5.44187 |
| PROVENZANI\_METASTASIS\_UP | -0.05554 | -0.08473 | -0.93719 | 0.352085 | 0.685956 | -5.44202 |
| REACTOME\_INWARDLY\_RECTIFYING\_K\_CHANNELS | 0.038724 | -0.13895 | 0.937169 | 0.352096 | 0.685956 | -5.44204 |
| KEGG\_ETHER\_LIPID\_METABOLISM | 0.034444 | -0.0688 | 0.936945 | 0.35221 | 0.685956 | -5.44223 |
| WP\_AUTOSOMAL\_RECESSIVE\_OSTEOPETROSIS\_PATHWAYS | 0.072563 | -0.00886 | 0.936531 | 0.352422 | 0.685956 | -5.44259 |
| MASRI\_RESISTANCE\_TO\_TAMOXIFEN\_AND\_AROMATASE\_INHIBITORS\_DN | 0.076203 | -0.00188 | 0.936243 | 0.352569 | 0.685956 | -5.44284 |
| SU\_LIVER | 0.050091 | -0.07124 | 0.936169 | 0.352607 | 0.685956 | -5.4429 |
| WENG\_POR\_TARGETS\_LIVER\_UP | 0.056153 | -0.02709 | 0.936165 | 0.352609 | 0.685956 | -5.4429 |
| OUELLET\_CULTURED\_OVARIAN\_CANCER\_INVASIVE\_VS\_LMP\_UP | -0.06319 | -0.05776 | -0.93613 | 0.352624 | 0.685956 | -5.44293 |
| TARTE\_PLASMA\_CELL\_VS\_B\_LYMPHOCYTE\_DN | 0.050278 | -0.29105 | 0.936046 | 0.35267 | 0.685956 | -5.44301 |
| HELLER\_SILENCED\_BY\_METHYLATION\_DN | 0.041791 | -0.08669 | 0.935966 | 0.35271 | 0.685956 | -5.44307 |
| REACTOME\_TRANSPORT\_OF\_VITAMINS\_NUCLEOSIDES\_AND\_RELATED\_MOLECULES | 0.035374 | -0.00652 | 0.935473 | 0.352962 | 0.685956 | -5.4435 |
| WP\_RALA\_DOWNSTREAM\_REGULATED\_GENES | -0.08067 | -0.08783 | -0.9354 | 0.353001 | 0.685956 | -5.44356 |
| SHEPARD\_BMYB\_MORPHOLINO\_UP | 0.033715 | -0.09152 | 0.935297 | 0.353052 | 0.685956 | -5.44365 |
| COLLER\_MYC\_TARGETS\_DN | 0.107559 | -0.01472 | 0.935184 | 0.35311 | 0.685956 | -5.44375 |
| NIKOLSKY\_BREAST\_CANCER\_22Q13\_AMPLICON | 0.061149 | -0.01449 | 0.934342 | 0.353541 | 0.686281 | -5.44447 |
| BAKKER\_FOXO3\_TARGETS\_DN | -0.03355 | -0.14506 | -0.93368 | 0.353882 | 0.686281 | -5.44504 |
| REACTOME\_SENSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAKS | -0.08037 | 0.005985 | -0.93344 | 0.354003 | 0.686281 | -5.44525 |
| ZHENG\_RESPONSE\_TO\_ARSENITE\_UP | 0.086447 | -0.0064 | 0.933312 | 0.354068 | 0.686281 | -5.44536 |
| REACTOME\_INTEGRIN\_SIGNALING | -0.05572 | 0.001729 | -0.93325 | 0.354098 | 0.686281 | -5.44541 |
| BIOCARTA\_EIF4\_PATHWAY | -0.07305 | -0.04571 | -0.93323 | 0.35411 | 0.686281 | -5.44543 |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION | -0.05889 | -0.13493 | -0.93319 | 0.35413 | 0.686281 | -5.44546 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_WNT\_SIGNALING | -0.08327 | -0.0165 | -0.93205 | 0.354714 | 0.686281 | -5.44643 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_UV\_IN\_OLD | 0.042397 | -0.2618 | 0.931939 | 0.354772 | 0.686281 | -5.44653 |
| REACTOME\_INTEGRATION\_OF\_ENERGY\_METABOLISM | 0.028165 | -0.11938 | 0.931836 | 0.354825 | 0.686281 | -5.44662 |
| REACTOME\_CD28\_DEPENDENT\_VAV1\_PATHWAY | 0.084495 | -0.01241 | 0.931821 | 0.354832 | 0.686281 | -5.44663 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_10HR\_UP | -0.05259 | -0.03557 | -0.9318 | 0.354844 | 0.686281 | -5.44665 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_LUNG\_UP | 0.048473 | -0.18459 | 0.931748 | 0.35487 | 0.686281 | -5.4467 |
| ZHANG\_GATA6\_TARGETS\_DN | 0.032154 | -0.03255 | 0.931739 | 0.354875 | 0.686281 | -5.4467 |
| REACTOME\_PHASE\_4\_RESTING\_MEMBRANE\_POTENTIAL | 0.056299 | 0.016092 | 0.9317 | 0.354895 | 0.686281 | -5.44674 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_UP | -0.05189 | -0.09344 | -0.93121 | 0.355144 | 0.686554 | -5.44715 |
| SCHUHMACHER\_MYC\_TARGETS\_DN | 0.081692 | 0.009882 | 0.930206 | 0.355662 | 0.687346 | -5.44802 |
| LEE\_LIVER\_CANCER\_MYC\_UP | 0.051688 | -0.03548 | 0.92912 | 0.35622 | 0.687954 | -5.44894 |
| VALK\_AML\_CLUSTER\_12 | -0.04949 | -0.00461 | -0.92908 | 0.356243 | 0.687954 | -5.44898 |
| SWEET\_KRAS\_ONCOGENIC\_SIGNATURE | 0.054703 | -0.05543 | 0.928816 | 0.356377 | 0.687954 | -5.4492 |
| REACTOME\_DCC\_MEDIATED\_ATTRACTIVE\_SIGNALING | -0.0779 | 0.010367 | -0.92865 | 0.35646 | 0.687954 | -5.44934 |
| REACTOME\_NUCLEOTIDE\_BINDING\_DOMAIN\_LEUCINE\_RICH\_REPEAT\_CONTAINING\_RECEPTOR\_NLR\_SIGNALING\_PATHWAYS | 0.060235 | 0.000291 | 0.928544 | 0.356517 | 0.687954 | -5.44944 |
| WHITFIELD\_CELL\_CYCLE\_G2\_M | -0.04115 | -0.12274 | -0.92727 | 0.357171 | 0.688505 | -5.45052 |
| VALK\_AML\_CLUSTER\_11 | 0.062499 | 0.005088 | 0.927232 | 0.357192 | 0.688505 | -5.45056 |
| CHESLER\_BRAIN\_QTL\_TRANS | 0.09651 | -0.00731 | 0.927188 | 0.357214 | 0.688505 | -5.45059 |
| BRUINS\_UVC\_RESPONSE\_VIA\_TP53\_GROUP\_B | 0.026583 | -0.12263 | 0.927076 | 0.357272 | 0.688505 | -5.45069 |
| REACTOME\_INTERLEUKIN\_23\_SIGNALING | 0.063899 | -0.00222 | 0.926939 | 0.357343 | 0.688505 | -5.45081 |
| KOINUMA\_COLON\_CANCER\_MSI\_UP | 0.044668 | -0.35992 | 0.925266 | 0.358206 | 0.689958 | -5.45223 |
| TSENG\_ADIPOGENIC\_POTENTIAL\_UP | -0.05176 | -0.03657 | -0.92501 | 0.358338 | 0.690004 | -5.45245 |
| REACTOME\_FRUCTOSE\_METABOLISM | -0.07312 | -0.0021 | -0.92455 | 0.358577 | 0.690175 | -5.45284 |
| REACTOME\_MASTL\_FACILITATES\_MITOTIC\_PROGRESSION | -0.08975 | 0.002483 | -0.92435 | 0.358677 | 0.690175 | -5.453 |
| REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_RESPONSE | 0.040083 | -0.15675 | 0.924208 | 0.358752 | 0.690175 | -5.45313 |
| MILI\_PSEUDOPODIA\_CHEMOTAXIS\_UP | -0.05943 | -0.06819 | -0.92365 | 0.359042 | 0.690523 | -5.45361 |
| AMIT\_EGF\_RESPONSE\_40\_HELA | 0.072191 | -0.11756 | 0.923354 | 0.359194 | 0.690551 | -5.45385 |
| WORSCHECH\_TUMOR\_REJECTION\_DN | 0.068903 | -0.10281 | 0.92314 | 0.359304 | 0.690551 | -5.45404 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P2 | 0.032115 | -0.04426 | 0.9228 | 0.35948 | 0.690551 | -5.45432 |
| REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY | -0.06665 | -0.13313 | -0.92253 | 0.359619 | 0.690551 | -5.45455 |
| REACTOME\_SIGNALING\_BY\_MODERATE\_KINASE\_ACTIVITY\_BRAF\_MUTANTS | -0.05536 | -0.01667 | -0.92236 | 0.359705 | 0.690551 | -5.45469 |
| BACOLOD\_RESISTANCE\_TO\_ALKYLATING\_AGENTS\_DN | -0.05091 | -0.14186 | -0.92236 | 0.359707 | 0.690551 | -5.4547 |
| WP\_EICOSANOID\_SYNTHESIS | 0.035647 | -0.08253 | 0.92208 | 0.359852 | 0.690564 | -5.45494 |
| TUOMISTO\_TUMOR\_SUPPRESSION\_BY\_COL13A1\_DN | 0.086345 | 0.01235 | 0.921928 | 0.359931 | 0.690564 | -5.45506 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C6 | -0.08212 | -0.0168 | -0.92053 | 0.360657 | 0.69145 | -5.45625 |
| BIOCARTA\_FREE\_PATHWAY | 0.051555 | -0.37981 | 0.920483 | 0.36068 | 0.69145 | -5.45629 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C1 | -0.0629 | -0.00848 | -0.92041 | 0.360718 | 0.69145 | -5.45635 |
| TANG\_SENESCENCE\_TP53\_TARGETS\_UP | 0.048236 | 0.005874 | 0.919903 | 0.360981 | 0.691576 | -5.45678 |
| CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_UP | 0.067165 | -0.04181 | 0.919862 | 0.361002 | 0.691576 | -5.45681 |
| REACTOME\_FGFR2\_MUTANT\_RECEPTOR\_ACTIVATION | -0.04048 | 0.002031 | -0.91797 | 0.361983 | 0.693246 | -5.45841 |
| REACTOME\_METABOLIC\_DISORDERS\_OF\_BIOLOGICAL\_OXIDATION\_ENZYMES | 0.040005 | -0.14268 | 0.917302 | 0.362332 | 0.693706 | -5.45898 |
| KEGG\_TOLL\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 0.037346 | -0.11505 | 0.916985 | 0.362496 | 0.693812 | -5.45924 |
| POS\_RESPONSE\_TO\_HISTAMINE\_UP | -0.06255 | -0.0191 | -0.91644 | 0.362781 | 0.694065 | -5.45971 |
| PID\_FGF\_PATHWAY | 0.031668 | -0.04155 | 0.916312 | 0.362847 | 0.694065 | -5.45981 |
| BIOCARTA\_PDGF\_PATHWAY | -0.07823 | -0.02511 | -0.91605 | 0.362983 | 0.694118 | -5.46003 |
| BURTON\_ADIPOGENESIS\_5 | -0.0715 | -0.0052 | -0.9153 | 0.363372 | 0.694608 | -5.46066 |
| DAVICIONI\_RHABDOMYOSARCOMA\_PAX\_FOXO1\_FUSION\_UP | 0.045425 | -0.0561 | 0.914824 | 0.363621 | 0.694608 | -5.46106 |
| REACTOME\_HEPARAN\_SULFATE\_HEPARIN\_HS\_GAG\_METABOLISM | 0.041927 | -0.01885 | 0.914525 | 0.363778 | 0.694608 | -5.46132 |
| REACTOME\_POLB\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR | -0.1125 | 0.000395 | -0.91437 | 0.36386 | 0.694608 | -5.46145 |
| REACTOME\_RHO\_GTPASE\_EFFECTORS | -0.04289 | -0.03187 | -0.91435 | 0.363869 | 0.694608 | -5.46146 |
| NAKAYAMA\_FRA2\_TARGETS | 0.052393 | -0.12294 | 0.914301 | 0.363894 | 0.694608 | -5.4615 |
| REACTOME\_ADRENALINE\_NORADRENALINE\_INHIBITS\_INSULIN\_SECRETION | 0.034623 | -0.07446 | 0.913693 | 0.364211 | 0.695005 | -5.46202 |
| BASAKI\_YBX1\_TARGETS\_DN | -0.04736 | -0.08196 | -0.91288 | 0.364634 | 0.695603 | -5.4627 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_UP | -0.04229 | -0.09831 | -0.91246 | 0.364857 | 0.695623 | -5.46305 |
| WP\_7Q1123\_COPY\_NUMBER\_VARIATION\_SYNDROME | -0.04696 | -0.06602 | -0.91224 | 0.364968 | 0.695623 | -5.46323 |
| KIM\_WT1\_TARGETS\_8HR\_UP | 0.050011 | -0.08825 | 0.912002 | 0.365094 | 0.695623 | -5.46344 |
| WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS | -0.06392 | -0.17639 | -0.91178 | 0.365212 | 0.695623 | -5.46362 |
| PID\_P38\_MKK3\_6PATHWAY | -0.04195 | -0.00349 | -0.91127 | 0.365476 | 0.695623 | -5.46405 |
| PID\_A6B1\_A6B4\_INTEGRIN\_PATHWAY | 0.048776 | -0.12978 | 0.91124 | 0.365492 | 0.695623 | -5.46407 |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S1 | 0.047472 | -0.21872 | 0.911141 | 0.365544 | 0.695623 | -5.46416 |
| PID\_MET\_PATHWAY | -0.05527 | -0.03097 | -0.91075 | 0.36575 | 0.695623 | -5.46449 |
| BIOCARTA\_MRP\_PATHWAY | -0.0774 | -0.15038 | -0.91061 | 0.365819 | 0.695623 | -5.4646 |
| WP\_PEROXIREDOXIN\_2\_INDUCED\_OVARIAN\_FAILURE | 0.061438 | -0.11965 | 0.91057 | 0.365843 | 0.695623 | -5.46464 |
| REACTOME\_MITOCHONDRIAL\_CALCIUM\_ION\_TRANSPORT | -0.07183 | -0.09587 | -0.91056 | 0.365847 | 0.695623 | -5.46464 |
| KIM\_BIPOLAR\_DISORDER\_OLIGODENDROCYTE\_DENSITY\_CORR\_UP | -0.05854 | -0.11742 | -0.90998 | 0.366151 | 0.695993 | -5.46513 |
| REACTOME\_DSCAM\_INTERACTIONS | 0.052796 | 0.006695 | 0.909075 | 0.366625 | 0.696518 | -5.46589 |
| REACTOME\_SPHINGOLIPID\_DE\_NOVO\_BIOSYNTHESIS | 0.036077 | -0.02303 | 0.909036 | 0.366646 | 0.696518 | -5.46592 |
| REACTOME\_BILE\_ACID\_AND\_BILE\_SALT\_METABOLISM | 0.036746 | -0.02032 | 0.90873 | 0.366806 | 0.696614 | -5.46618 |
| REACTOME\_CARNITINE\_METABOLISM | -0.06146 | -0.0614 | -0.9081 | 0.367135 | 0.696992 | -5.4667 |
| KUMAR\_AUTOPHAGY\_NETWORK | -0.02491 | -0.15498 | -0.90793 | 0.367224 | 0.696992 | -5.46684 |
| REACTOME\_SUMOYLATION\_OF\_DNA\_REPLICATION\_PROTEINS | -0.06892 | -0.004 | -0.90751 | 0.367445 | 0.697203 | -5.46719 |
| GRADE\_COLON\_AND\_RECTAL\_CANCER\_UP | -0.05137 | -0.16534 | -0.90697 | 0.367727 | 0.697531 | -5.46764 |
| WP\_PI3KAKTMTOR\_SIGNALING\_PATHWAY\_AND\_THERAPEUTIC\_OPPORTUNITIES | -0.0552 | -0.06949 | -0.90564 | 0.36843 | 0.698573 | -5.46876 |
| ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_UP | -0.04371 | -0.03542 | -0.90551 | 0.368496 | 0.698573 | -5.46886 |
| OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_DN | 0.034825 | -0.13408 | 0.905248 | 0.368634 | 0.698626 | -5.46908 |
| GERHOLD\_ADIPOGENESIS\_DN | 0.050339 | -0.17945 | 0.904647 | 0.36895 | 0.698908 | -5.46958 |
| KIM\_ALL\_DISORDERS\_OLIGODENDROCYTE\_NUMBER\_CORR\_DN | 0.048995 | -0.01354 | 0.90445 | 0.369054 | 0.698908 | -5.46975 |
| BASSO\_HAIRY\_CELL\_LEUKEMIA\_UP | 0.048065 | -0.12146 | 0.904056 | 0.369261 | 0.698908 | -5.47007 |
| REACTOME\_REGULATION\_OF\_RUNX3\_EXPRESSION\_AND\_ACTIVITY | -0.05468 | -0.25489 | -0.90398 | 0.369299 | 0.698908 | -5.47013 |
| REACTOME\_FIBRONECTIN\_MATRIX\_FORMATION | 0.077376 | -0.00962 | 0.903922 | 0.369332 | 0.698908 | -5.47018 |
| REACTOME\_NCAM\_SIGNALING\_FOR\_NEURITE\_OUT\_GROWTH | 0.034042 | -0.02465 | 0.903128 | 0.369749 | 0.699247 | -5.47084 |
| WP\_ROBO4\_AND\_VEGF\_SIGNALING\_PATHWAYS\_CROSSTALK | 0.083937 | -0.00319 | 0.902974 | 0.369831 | 0.699247 | -5.47097 |
| LAIHO\_COLORECTAL\_CANCER\_SERRATED\_DN | -0.03881 | -0.18265 | -0.90296 | 0.36984 | 0.699247 | -5.47099 |
| WP\_MESODERMAL\_COMMITMENT\_PATHWAY | -0.0275 | -0.06765 | -0.90209 | 0.370297 | 0.699901 | -5.47171 |
| ZWANG\_EGF\_INTERVAL\_UP | 0.02774 | -0.48047 | 0.901581 | 0.370565 | 0.700052 | -5.47213 |
| BIOCARTA\_SAM68\_PATHWAY | -0.09974 | -0.12441 | -0.90152 | 0.370596 | 0.700052 | -5.47218 |
| MORI\_IMMATURE\_B\_LYMPHOCYTE\_DN | -0.05343 | -0.14905 | -0.90128 | 0.370723 | 0.700083 | -5.47238 |
| HORTON\_SREBF\_TARGETS | -0.06837 | -0.10472 | -0.89953 | 0.371648 | 0.701359 | -5.47383 |
| PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_UP | -0.03874 | -0.06252 | -0.89928 | 0.371782 | 0.701359 | -5.47404 |
| REACTOME\_BLOOD\_GROUP\_SYSTEMS\_BIOSYNTHESIS | 0.051043 | -0.15627 | 0.899178 | 0.371834 | 0.701359 | -5.47412 |
| REACTOME\_IKK\_COMPLEX\_RECRUITMENT\_MEDIATED\_BY\_RIP1 | 0.072377 | -0.03734 | 0.899168 | 0.371839 | 0.701359 | -5.47413 |
| WP\_WNT\_SIGNALING | -0.02814 | -0.10581 | -0.89888 | 0.371991 | 0.701437 | -5.47437 |
| LEE\_NAIVE\_T\_LYMPHOCYTE | 0.052315 | -0.00161 | 0.898641 | 0.372118 | 0.701469 | -5.47456 |
| SCHRAETS\_MLL\_TARGETS\_UP | 0.054811 | -0.08351 | 0.898194 | 0.372354 | 0.701706 | -5.47493 |
| WP\_PURINE\_METABOLISM | 0.082948 | 0.008486 | 0.897935 | 0.372491 | 0.701757 | -5.47515 |
| REACTOME\_RETROGRADE\_NEUROTROPHIN\_SIGNALLING | 0.06522 | -0.00764 | 0.897561 | 0.372689 | 0.701805 | -5.47546 |
| SCHUHMACHER\_MYC\_TARGETS\_UP | -0.06906 | -0.03284 | -0.89744 | 0.372756 | 0.701805 | -5.47556 |
| LE\_SKI\_TARGETS\_DN | 0.078718 | -0.02468 | 0.89724 | 0.372859 | 0.701805 | -5.47572 |
| BIOCARTA\_CDK5\_PATHWAY | 0.065648 | -0.05777 | 0.897054 | 0.372958 | 0.701805 | -5.47588 |
| KAAB\_FAILED\_HEART\_VENTRICLE\_DN | 0.069742 | -0.04352 | 0.896539 | 0.373231 | 0.702111 | -5.4763 |
| REACTOME\_ATF6\_ATF6\_ALPHA\_ACTIVATES\_CHAPERONE\_GENES | -0.09097 | -0.00476 | -0.89619 | 0.373415 | 0.702197 | -5.47659 |
| KIM\_ALL\_DISORDERS\_OLIGODENDROCYTE\_NUMBER\_CORR\_UP | -0.0508 | -0.12589 | -0.89595 | 0.373544 | 0.702197 | -5.47679 |
| CHANGOLKAR\_H2AFY\_TARGETS\_DN | -0.05241 | -0.02939 | -0.89572 | 0.373663 | 0.702197 | -5.47697 |
| DEMAGALHAES\_AGING\_DN | -0.07949 | 0.002161 | -0.89545 | 0.37381 | 0.702197 | -5.4772 |
| REACTOME\_ASPARAGINE\_N\_LINKED\_GLYCOSYLATION | -0.04771 | -0.06757 | -0.89516 | 0.373963 | 0.702197 | -5.47744 |
| SCHWAB\_TARGETS\_OF\_BMYB\_POLYMORPHIC\_VARIANTS\_DN | -0.05569 | -0.01715 | -0.89501 | 0.374043 | 0.702197 | -5.47756 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_10D\_UP | 0.031249 | -0.12731 | 0.894494 | 0.374315 | 0.702197 | -5.47799 |
| REACTOME\_FC\_EPSILON\_RECEPTOR\_FCERI\_SIGNALING | -0.05684 | -0.12352 | -0.89448 | 0.374323 | 0.702197 | -5.478 |
| OSWALD\_HEMATOPOIETIC\_STEM\_CELL\_IN\_COLLAGEN\_GEL\_DN | -0.04171 | -0.13669 | -0.89426 | 0.374441 | 0.702197 | -5.47818 |
| BIOCARTA\_CTLA4\_PATHWAY | 0.042157 | -0.40788 | 0.894113 | 0.374517 | 0.702197 | -5.4783 |
| REACTOME\_GENERATION\_OF\_SECOND\_MESSENGER\_MOLECULES | 0.033377 | -0.48169 | 0.893911 | 0.374625 | 0.702197 | -5.47847 |
| IVANOVA\_HEMATOPOIESIS\_LATE\_PROGENITOR | -0.05099 | -0.07271 | -0.89362 | 0.37478 | 0.702197 | -5.47871 |
| NAKAMURA\_METASTASIS\_MODEL\_UP | 0.048704 | -0.04989 | 0.893545 | 0.374819 | 0.702197 | -5.47877 |
| REACTOME\_P130CAS\_LINKAGE\_TO\_MAPK\_SIGNALING\_FOR\_INTEGRINS | -0.06235 | 0.000437 | -0.89338 | 0.374906 | 0.702197 | -5.4789 |
| DUTERTRE\_ESTRADIOL\_RESPONSE\_24HR\_UP | -0.04092 | -0.07465 | -0.89331 | 0.374943 | 0.702197 | -5.47896 |
| WU\_SILENCED\_BY\_METHYLATION\_IN\_BLADDER\_CANCER | 0.047271 | -0.14465 | 0.893126 | 0.375042 | 0.702197 | -5.47911 |
| REACTOME\_REGULATION\_OF\_PYRUVATE\_DEHYDROGENASE\_PDH\_COMPLEX | -0.06935 | 0.000428 | -0.89243 | 0.375414 | 0.702686 | -5.47969 |
| KEGG\_SMALL\_CELL\_LUNG\_CANCER | -0.04372 | -0.08245 | -0.89202 | 0.375631 | 0.702745 | -5.48002 |
| WP\_MONOAMINE\_GPCRS | 0.064625 | -0.00552 | 0.891952 | 0.375666 | 0.702745 | -5.48008 |
| WP\_LEPTININSULIN\_SIGNALING\_OVERLAP | -0.05665 | -0.00157 | -0.89144 | 0.375941 | 0.70293 | -5.4805 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_HEMGN | 0.045677 | -0.04499 | 0.891351 | 0.375986 | 0.70293 | -5.48057 |
| VANASSE\_BCL2\_TARGETS\_DN | 0.037635 | -0.14536 | 0.890915 | 0.376218 | 0.703158 | -5.48093 |
| REACTOME\_ABACAVIR\_TRANSMEMBRANE\_TRANSPORT | -0.08595 | -0.0066 | -0.89031 | 0.376539 | 0.703448 | -5.48142 |
| GRABARCZYK\_BCL11B\_TARGETS\_DN | -0.03862 | -0.06107 | -0.89021 | 0.376594 | 0.703448 | -5.48151 |
| TIEN\_INTESTINE\_PROBIOTICS\_6HR\_DN | -0.05228 | -0.1005 | -0.88944 | 0.377006 | 0.70401 | -5.48214 |
| VANDESLUIS\_NORMAL\_EMBRYOS\_UP | 0.094839 | -0.01028 | 0.888687 | 0.377406 | 0.704199 | -5.48275 |
| KEGG\_LINOLEIC\_ACID\_METABOLISM | 0.069024 | -0.01205 | 0.888661 | 0.37742 | 0.704199 | -5.48277 |
| REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX | -0.06301 | -0.01467 | -0.88862 | 0.377439 | 0.704199 | -5.4828 |
| MARSON\_FOXP3\_TARGETS\_STIMULATED\_DN | -0.05167 | -0.39589 | -0.88841 | 0.377553 | 0.704205 | -5.48298 |
| PETRETTO\_BLOOD\_PRESSURE\_UP | 0.071155 | 0.014164 | 0.887744 | 0.377909 | 0.704411 | -5.48352 |
| NUTT\_GBM\_VS\_AO\_GLIOMA\_DN | -0.05211 | -0.059 | -0.88772 | 0.377923 | 0.704411 | -5.48354 |
| REACTOME\_ACTIVATION\_OF\_NOXA\_AND\_TRANSLOCATION\_TO\_MITOCHONDRIA | 0.084265 | 0.001909 | 0.887582 | 0.377996 | 0.704411 | -5.48365 |
| PELLICCIOTTA\_HDAC\_IN\_ANTIGEN\_PRESENTATION\_DN | -0.03767 | -0.50875 | -0.88708 | 0.378265 | 0.7047 | -5.48407 |
| WP\_TCELL\_RECEPTOR\_TCR\_SIGNALING\_PATHWAY | 0.061039 | -0.02829 | 0.886878 | 0.378372 | 0.7047 | -5.48423 |
| WESTON\_VEGFA\_TARGETS\_3HR | 0.045465 | -0.03312 | 0.886608 | 0.378516 | 0.70476 | -5.48445 |
| MATZUK\_CENTRAL\_FOR\_FEMALE\_FERTILITY | 0.038505 | -0.09547 | 0.886403 | 0.378626 | 0.70476 | -5.48462 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_A | -0.02949 | -0.10287 | -0.88531 | 0.379211 | 0.705376 | -5.48551 |
| REACTOME\_SUMO\_IS\_CONJUGATED\_TO\_E1\_UBA2\_SAE1 | 0.09794 | -0.00638 | 0.885134 | 0.379305 | 0.705376 | -5.48565 |
| WP\_EXERCISEINDUCED\_CIRCADIAN\_REGULATION | -0.0593 | -0.11413 | -0.88498 | 0.379386 | 0.705376 | -5.48578 |
| PID\_ERBB1\_DOWNSTREAM\_PATHWAY | -0.05692 | -0.03209 | -0.88455 | 0.379615 | 0.705376 | -5.48612 |
| REACTOME\_RUNX1\_REGULATES\_GENES\_INVOLVED\_IN\_MEGAKARYOCYTE\_DIFFERENTIATION\_AND\_PLATELET\_FUNCTION | -0.05155 | -0.03495 | -0.88448 | 0.379654 | 0.705376 | -5.48618 |
| REACTOME\_CHK1\_CHK2\_CDS1\_MEDIATED\_INACTIVATION\_OF\_CYCLIN\_B\_CDK1\_COMPLEX | 0.069602 | -0.08129 | 0.884431 | 0.379681 | 0.705376 | -5.48622 |
| REACTOME\_SEROTONIN\_AND\_MELATONIN\_BIOSYNTHESIS | -0.09936 | -0.01383 | -0.88425 | 0.379777 | 0.705376 | -5.48637 |
| WP\_NOCGMPPKG\_MEDIATED\_NEUROPROTECTION | -0.03847 | -0.14077 | -0.88413 | 0.379843 | 0.705376 | -5.48647 |
| PID\_FCER1\_PATHWAY | 0.06551 | -0.0153 | 0.88384 | 0.379998 | 0.705457 | -5.48671 |
| BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_DN | -0.05573 | -0.05566 | -0.88285 | 0.380529 | 0.705756 | -5.48751 |
| BIOCARTA\_AMAN\_PATHWAY | 0.049587 | 0.000686 | 0.88266 | 0.380631 | 0.705756 | -5.48767 |
| HOFMANN\_CELL\_LYMPHOMA\_UP | -0.04636 | -0.14682 | -0.8824 | 0.380768 | 0.705756 | -5.48787 |
| WP\_KYNURENINE\_PATHWAY\_AND\_LINKS\_TO\_CELL\_SENESCENCE | 0.034954 | -0.25075 | 0.881991 | 0.38099 | 0.705756 | -5.48821 |
| REACTOME\_AGGREPHAGY | -0.05071 | -0.02806 | -0.88179 | 0.381097 | 0.705756 | -5.48837 |
| REACTOME\_UNFOLDED\_PROTEIN\_RESPONSE\_UPR | -0.06386 | -0.02559 | -0.88165 | 0.381174 | 0.705756 | -5.48849 |
| WP\_GASTRIC\_CANCER\_NETWORK\_1 | -0.05559 | -0.12493 | -0.88157 | 0.381215 | 0.705756 | -5.48855 |
| WP\_GANGLIO\_SPHINGOLIPID\_METABOLISM | 0.044214 | -0.23254 | 0.88127 | 0.381377 | 0.705756 | -5.48879 |
| AMIT\_EGF\_RESPONSE\_240\_HELA | 0.059595 | 0.006445 | 0.881075 | 0.381481 | 0.705756 | -5.48895 |
| WESTON\_VEGFA\_TARGETS | 0.044378 | -0.08842 | 0.881011 | 0.381516 | 0.705756 | -5.489 |
| REACTOME\_TELOMERE\_C\_STRAND\_SYNTHESIS\_INITIATION | -0.06316 | -0.07132 | -0.88097 | 0.381538 | 0.705756 | -5.48904 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P7 | 0.039726 | -0.03937 | 0.880871 | 0.381591 | 0.705756 | -5.48912 |
| WP\_THYMIC\_STROMAL\_LYMPHOPOIETIN\_TSLP\_SIGNALING\_PATHWAY | 0.063008 | 0.006663 | 0.880614 | 0.381729 | 0.705756 | -5.48933 |
| STARK\_PREFRONTAL\_CORTEX\_22Q11\_DELETION\_UP | -0.03327 | -0.06995 | -0.88061 | 0.38173 | 0.705756 | -5.48933 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G24 | 0.050342 | -0.09146 | 0.88044 | 0.381822 | 0.705756 | -5.48947 |
| LEE\_AGING\_NEOCORTEX\_DN | 0.023379 | -0.25192 | 0.879425 | 0.382369 | 0.706561 | -5.49029 |
| EHLERS\_ANEUPLOIDY\_DN | 0.056807 | -0.07906 | 0.8792 | 0.38249 | 0.706579 | -5.49047 |
| REACTOME\_ABACAVIR\_TRANSPORT\_AND\_METABOLISM | -0.05818 | -0.00949 | -0.87883 | 0.382691 | 0.706745 | -5.49077 |
| KEGG\_CELL\_ADHESION\_MOLECULES\_CAMS | 0.018134 | -0.47014 | 0.877967 | 0.383153 | 0.707394 | -5.49147 |
| REN\_ALVEOLAR\_RHABDOMYOSARCOMA\_UP | -0.03265 | -0.07053 | -0.87734 | 0.383491 | 0.707813 | -5.49198 |
| WP\_TOLLLIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 0.035164 | -0.12058 | 0.87691 | 0.383723 | 0.707976 | -5.49232 |
| WEBER\_METHYLATED\_LCP\_IN\_FIBROBLAST\_DN | 0.087507 | 0.00995 | 0.876764 | 0.383802 | 0.707976 | -5.49244 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_QTL\_CIS | -0.04572 | -0.21607 | -0.8756 | 0.384432 | 0.708933 | -5.49338 |
| REACTOME\_MATURATION\_OF\_SARS\_COV\_2\_NUCLEOPROTEIN | -0.06511 | -0.01415 | -0.87503 | 0.384736 | 0.709288 | -5.49384 |
| REACTOME\_RUNX1\_AND\_FOXP3\_CONTROL\_THE\_DEVELOPMENT\_OF\_REGULATORY\_T\_LYMPHOCYTES\_TREGS | 0.053691 | 0.02008 | 0.874791 | 0.384867 | 0.709323 | -5.49403 |
| IWANAGA\_E2F1\_TARGETS\_NOT\_INDUCED\_BY\_SERUM | -0.06837 | -0.12369 | -0.87433 | 0.385118 | 0.709581 | -5.49441 |
| BIOCARTA\_BIOPEPTIDES\_PATHWAY | -0.06057 | -0.05455 | -0.87405 | 0.385266 | 0.709647 | -5.49463 |
| BIOCARTA\_BAD\_PATHWAY | -0.04328 | -0.07471 | -0.8734 | 0.385616 | 0.710087 | -5.49515 |
| TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_DN | 0.036381 | -0.04171 | 0.872964 | 0.385855 | 0.71013 | -5.4955 |
| MOHANKUMAR\_HOXA1\_TARGETS\_UP | -0.04494 | -0.13859 | -0.87262 | 0.386039 | 0.71013 | -5.49578 |
| LEIN\_NEURON\_MARKERS | -0.029 | -0.12444 | -0.8725 | 0.386105 | 0.71013 | -5.49587 |
| KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6 | -0.05241 | -0.05063 | -0.87223 | 0.386252 | 0.71013 | -5.49609 |
| REACTOME\_SEROTONIN\_NEUROTRANSMITTER\_RELEASE\_CYCLE | 0.054311 | 0.0053 | 0.872157 | 0.386292 | 0.71013 | -5.49615 |
| REACTOME\_DEFECTIVE\_CHST14\_CAUSES\_EDS\_MUSCULOCONTRACTURAL\_TYPE | 0.068467 | -0.00717 | 0.872125 | 0.386309 | 0.71013 | -5.49618 |
| LIU\_PROSTATE\_CANCER\_DN | -0.04491 | -0.06608 | -0.87181 | 0.386481 | 0.710241 | -5.49643 |
| WP\_MIRNA\_REGULATION\_OF\_P53\_PATHWAY\_IN\_PROSTATE\_CANCER | 0.045121 | -0.04538 | 0.871169 | 0.386827 | 0.710671 | -5.49694 |
| WP\_AMYOTROPHIC\_LATERAL\_SCLEROSIS\_ALS | -0.04904 | -0.22668 | -0.87044 | 0.387224 | 0.711196 | -5.49753 |
| REACTOME\_CARGO\_RECOGNITION\_FOR\_CLATHRIN\_MEDIATED\_ENDOCYTOSIS | 0.041911 | -0.01886 | 0.869394 | 0.387789 | 0.712029 | -5.49837 |
| YAGI\_AML\_WITH\_INV\_16\_TRANSLOCATION | -0.03175 | -0.12016 | -0.86876 | 0.388132 | 0.712452 | -5.49887 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_B\_UP | 0.040732 | 0.000261 | 0.868072 | 0.388507 | 0.712827 | -5.49942 |
| KANG\_FLUOROURACIL\_RESISTANCE\_DN | 0.050119 | -0.12015 | 0.867961 | 0.388567 | 0.712827 | -5.49951 |
| REACTOME\_EGFR\_DOWNREGULATION | 0.047526 | -0.03803 | 0.867535 | 0.388799 | 0.712827 | -5.49985 |
| ELVIDGE\_HIF1A\_TARGETS\_DN | 0.049896 | -0.061 | 0.867452 | 0.388844 | 0.712827 | -5.49992 |
| SCHLOSSER\_MYC\_AND\_SERUM\_RESPONSE\_SYNERGY | -0.05764 | -0.05731 | -0.86736 | 0.388896 | 0.712827 | -5.5 |
| RIGGINS\_TAMOXIFEN\_RESISTANCE\_UP | 0.028356 | -0.09331 | 0.867056 | 0.389059 | 0.712921 | -5.50024 |
| DELPUECH\_FOXO3\_TARGETS\_DN | -0.04968 | -0.03983 | -0.86661 | 0.389304 | 0.713163 | -5.50059 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_FLI1 | -0.04305 | -0.43755 | -0.86624 | 0.389506 | 0.713182 | -5.50089 |
| BENPORATH\_OCT4\_TARGETS | -0.03332 | -0.16257 | -0.86618 | 0.389538 | 0.713182 | -5.50094 |
| REACTOME\_REGULATION\_OF\_GENE\_EXPRESSION\_IN\_EARLY\_PANCREATIC\_PRECURSOR\_CELLS | 0.083183 | -0.11021 | 0.865835 | 0.389724 | 0.713317 | -5.50121 |
| REACTOME\_RHOF\_GTPASE\_CYCLE | -0.0497 | -0.00146 | -0.86531 | 0.390009 | 0.713355 | -5.50163 |
| BROWNE\_HCMV\_INFECTION\_18HR\_DN | 0.03296 | -0.09852 | 0.865309 | 0.390011 | 0.713355 | -5.50163 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR2\_SIGNALING | 0.034727 | -0.00523 | 0.864995 | 0.390182 | 0.713355 | -5.50188 |
| WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP | -0.04152 | -0.03544 | -0.86481 | 0.39028 | 0.713355 | -5.50202 |
| MARSON\_BOUND\_BY\_FOXP3\_UNSTIMULATED | -0.04479 | -0.0623 | -0.86454 | 0.390427 | 0.713355 | -5.50224 |
| FIRESTEIN\_CTNNB1\_PATHWAY\_AND\_PROLIFERATION | -0.06839 | -0.10139 | -0.86447 | 0.390466 | 0.713355 | -5.5023 |
| BERTUCCI\_INVASIVE\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_DN | 0.047588 | -0.13112 | 0.864181 | 0.390625 | 0.713355 | -5.50253 |
| WP\_METASTATIC\_BRAIN\_TUMOR | -0.08552 | -0.03355 | -0.86415 | 0.390642 | 0.713355 | -5.50255 |
| WP\_MIR5093P\_ALTERATION\_OF\_YAP1ECM\_AXIS | -0.07934 | -0.06728 | -0.86373 | 0.390873 | 0.713573 | -5.50289 |
| REACTOME\_METABOLISM\_OF\_LIPIDS | -0.02533 | -0.10978 | -0.86232 | 0.391641 | 0.714579 | -5.50401 |
| GENTILE\_UV\_LOW\_DOSE\_DN | -0.05911 | -0.03431 | -0.86226 | 0.391671 | 0.714579 | -5.50405 |
| WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS | -0.05912 | -0.04717 | -0.86172 | 0.391967 | 0.714579 | -5.50448 |
| KYNG\_DNA\_DAMAGE\_BY\_GAMMA\_AND\_UV\_RADIATION | -0.04827 | -0.05684 | -0.86151 | 0.392082 | 0.714579 | -5.50465 |
| MATTIOLI\_MGUS\_VS\_PCL | -0.04736 | -0.24631 | -0.86144 | 0.392124 | 0.714579 | -5.50471 |
| WP\_TRANSCRIPTION\_FACTOR\_REGULATION\_IN\_ADIPOGENESIS | -0.04987 | -0.26688 | -0.86124 | 0.392232 | 0.714579 | -5.50487 |
| REACTOME\_RETINOID\_CYCLE\_DISEASE\_EVENTS | 0.048479 | -0.10838 | 0.861144 | 0.392283 | 0.714579 | -5.50494 |
| REACTOME\_2\_LTR\_CIRCLE\_FORMATION | -0.06846 | 0.024403 | -0.86072 | 0.392516 | 0.714579 | -5.50528 |
| HESS\_TARGETS\_OF\_HOXA9\_AND\_MEIS1\_UP | -0.05297 | -0.06932 | -0.8607 | 0.392524 | 0.714579 | -5.50529 |
| ENK\_UV\_RESPONSE\_KERATINOCYTE\_UP | 0.032588 | -0.2263 | 0.859619 | 0.393118 | 0.714579 | -5.50615 |
| WP\_EFFECTS\_OF\_NITRIC\_OXIDE | 0.078299 | -0.00419 | 0.859557 | 0.393152 | 0.714579 | -5.5062 |
| APRELIKOVA\_BRCA1\_TARGETS | 0.056011 | -0.07832 | 0.859425 | 0.393224 | 0.714579 | -5.5063 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM4 | -0.02216 | -0.13117 | -0.85932 | 0.39328 | 0.714579 | -5.50639 |
| BIOCARTA\_P53HYPOXIA\_PATHWAY | 0.048552 | -0.19074 | 0.858957 | 0.39348 | 0.714579 | -5.50667 |
| KIM\_TIAL1\_TARGETS | -0.05841 | -0.06949 | -0.85895 | 0.393486 | 0.714579 | -5.50668 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_INTERFERON\_UP | -0.0564 | -0.09949 | -0.85885 | 0.393541 | 0.714579 | -5.50676 |
| KEGG\_PYRUVATE\_METABOLISM | -0.05024 | -0.09451 | -0.8588 | 0.393564 | 0.714579 | -5.50679 |
| REACTOME\_DISPLACEMENT\_OF\_DNA\_GLYCOSYLASE\_BY\_APEX1 | -0.06932 | 0.000966 | -0.85871 | 0.393616 | 0.714579 | -5.50687 |
| REACTOME\_TERMINAL\_PATHWAY\_OF\_COMPLEMENT | -0.06259 | 0.007545 | -0.85867 | 0.393639 | 0.714579 | -5.5069 |
| HAHTOLA\_SEZARY\_SYNDROM\_DN | 0.016548 | -0.78515 | 0.858592 | 0.39368 | 0.714579 | -5.50696 |
| REACTOME\_COMPETING\_ENDOGENOUS\_RNAS\_CERNAS\_REGULATE\_PTEN\_TRANSLATION | -0.05725 | -0.09689 | -0.85822 | 0.393885 | 0.714579 | -5.50726 |
| KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_UP | -0.04959 | -0.07888 | -0.8582 | 0.393894 | 0.714579 | -5.50727 |
| WP\_MET\_IN\_TYPE\_1\_PAPILLARY\_RENAL\_CELL\_CARCINOMA | -0.04749 | -0.03061 | -0.8573 | 0.394391 | 0.715137 | -5.50799 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_27 | 0.056841 | 0.003703 | 0.857229 | 0.394427 | 0.715137 | -5.50804 |
| RAHMAN\_TP53\_TARGETS\_PHOSPHORYLATED | -0.08092 | -0.05446 | -0.85678 | 0.394676 | 0.715385 | -5.5084 |
| KEGG\_COLORECTAL\_CANCER | -0.04292 | -0.01743 | -0.85632 | 0.394926 | 0.715634 | -5.50876 |
| NIKOLSKY\_BREAST\_CANCER\_20Q12\_Q13\_AMPLICON | 0.023717 | -0.04809 | 0.856112 | 0.39504 | 0.715637 | -5.50892 |
| WP\_22Q112\_COPY\_NUMBER\_VARIATION\_SYNDROME | -0.02109 | -0.02863 | -0.85585 | 0.395186 | 0.715697 | -5.50913 |
| ZHU\_SKIL\_TARGETS\_UP | 0.059225 | -0.05913 | 0.854745 | 0.395791 | 0.716382 | -5.51 |
| WP\_SECRETION\_OF\_HYDROCHLORIC\_ACID\_IN\_PARIETAL\_CELLS | 0.086435 | -0.15132 | 0.854357 | 0.396004 | 0.716382 | -5.5103 |
| MADAN\_DPPA4\_TARGETS | 0.030557 | -0.08017 | 0.853891 | 0.396261 | 0.716382 | -5.51067 |
| KIM\_LIVER\_CANCER\_POOR\_SURVIVAL\_UP | 0.085977 | 0.003342 | 0.853794 | 0.396314 | 0.716382 | -5.51075 |
| WAKABAYASHI\_ADIPOGENESIS\_PPARG\_RXRA\_BOUND\_8D | -0.03621 | -0.08489 | -0.85361 | 0.396415 | 0.716382 | -5.51089 |
| REACTOME\_EXTRA\_NUCLEAR\_ESTROGEN\_SIGNALING | -0.03922 | -0.03537 | -0.85356 | 0.396443 | 0.716382 | -5.51093 |
| VALK\_AML\_CLUSTER\_1 | 0.046243 | -0.03376 | 0.853388 | 0.396538 | 0.716382 | -5.51107 |
| KEGG\_GLYCEROPHOSPHOLIPID\_METABOLISM | 0.027199 | -0.20273 | 0.853369 | 0.396548 | 0.716382 | -5.51108 |
| REACTOME\_HORMONE\_LIGAND\_BINDING\_RECEPTORS | 0.090556 | 0.00386 | 0.853233 | 0.396623 | 0.716382 | -5.51119 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_6HR\_DN | -0.04667 | -0.06473 | -0.85311 | 0.396689 | 0.716382 | -5.51128 |
| JOHNSTONE\_PARVB\_TARGETS\_3\_UP | 0.041878 | -0.16561 | 0.852703 | 0.396915 | 0.716459 | -5.51161 |
| SPIRA\_SMOKERS\_LUNG\_CANCER\_UP | 0.054824 | -0.0836 | 0.852626 | 0.396957 | 0.716459 | -5.51167 |
| PID\_SMAD2\_3PATHWAY | -0.08196 | -0.01197 | -0.85199 | 0.397309 | 0.716545 | -5.51217 |
| DOUGLAS\_BMI1\_TARGETS\_DN | -0.0504 | -0.07991 | -0.85173 | 0.397449 | 0.716545 | -5.51237 |
| MCCABE\_HOXC6\_TARGETS\_DN | 0.05685 | -0.00754 | 0.851576 | 0.397535 | 0.716545 | -5.51249 |
| ANASTASSIOU\_MULTICANCER\_INVASIVENESS\_SIGNATURE | 0.079606 | -0.06371 | 0.851542 | 0.397554 | 0.716545 | -5.51252 |
| WP\_TGFBETA\_RECEPTOR\_SIGNALING\_IN\_SKELETAL\_DYSPLASIAS | 0.043492 | -0.12324 | 0.851518 | 0.397567 | 0.716545 | -5.51254 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_AND\_BRAIN\_QTL\_TRANS | -0.03605 | -0.06603 | -0.85127 | 0.397707 | 0.716593 | -5.51273 |
| REACTOME\_CHREBP\_ACTIVATES\_METABOLIC\_GENE\_EXPRESSION | 0.040494 | -0.48924 | 0.850606 | 0.39807 | 0.716875 | -5.51325 |
| TSENG\_IRS1\_TARGETS\_UP | -0.04611 | -0.07491 | -0.85057 | 0.398089 | 0.716875 | -5.51328 |
| ANDERSEN\_LIVER\_CANCER\_KRT19\_DN | -0.02631 | -0.10156 | -0.84936 | 0.39876 | 0.71744 | -5.51423 |
| REACTOME\_REGULATION\_OF\_IFNG\_SIGNALING | 0.072188 | -0.06822 | 0.849291 | 0.398796 | 0.71744 | -5.51428 |
| GYORFFY\_DOXORUBICIN\_RESISTANCE | 0.043623 | -0.05396 | 0.849171 | 0.398863 | 0.71744 | -5.51438 |
| REACTOME\_SIGNALING\_BY\_KIT\_IN\_DISEASE | -0.06763 | -0.03216 | -0.84884 | 0.399044 | 0.71744 | -5.51463 |
| MAGRANGEAS\_MULTIPLE\_MYELOMA\_IGG\_VS\_IGA\_DN | 0.056158 | -0.03438 | 0.848773 | 0.399082 | 0.71744 | -5.51469 |
| HOQUE\_METHYLATED\_IN\_CANCER | 0.02955 | -0.0391 | 0.848665 | 0.399142 | 0.71744 | -5.51477 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_48HR\_UP | 0.022248 | -0.10642 | 0.848576 | 0.399191 | 0.71744 | -5.51484 |
| BURTON\_ADIPOGENESIS\_2 | 0.057014 | -0.02753 | 0.848225 | 0.399385 | 0.717585 | -5.51511 |
| REACTOME\_TNFR1\_INDUCED\_PROAPOPTOTIC\_SIGNALING | -0.05637 | -0.29773 | -0.84747 | 0.399804 | 0.718136 | -5.51571 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_PINK\_DN | 0.050751 | -0.02634 | 0.846759 | 0.400196 | 0.718637 | -5.51626 |
| REACTOME\_MULTIFUNCTIONAL\_ANION\_EXCHANGERS | 0.075185 | 0.027445 | 0.845468 | 0.400911 | 0.719587 | -5.51727 |
| LUND\_SILENCED\_BY\_METHYLATION | -0.06799 | -0.01199 | -0.84539 | 0.400952 | 0.719587 | -5.51732 |
| ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_DN | -0.05082 | -0.07398 | -0.84495 | 0.401198 | 0.719827 | -5.51767 |
| NUYTTEN\_NIPP1\_TARGETS\_DN | -0.04154 | -0.06181 | -0.84272 | 0.402433 | 0.721399 | -5.5194 |
| BONOME\_OVARIAN\_CANCER\_POOR\_SURVIVAL\_DN | -0.05255 | -0.23562 | -0.84268 | 0.402459 | 0.721399 | -5.51944 |
| MOROSETTI\_FACIOSCAPULOHUMERAL\_MUSCULAR\_DISTROPHY\_UP | 0.057724 | -0.2042 | 0.842461 | 0.402579 | 0.721399 | -5.51961 |
| REACTOME\_MECP2\_REGULATES\_TRANSCRIPTION\_OF\_NEURONAL\_LIGANDS | 0.055688 | -0.10717 | 0.842393 | 0.402617 | 0.721399 | -5.51966 |
| REACTOME\_AMINE\_LIGAND\_BINDING\_RECEPTORS | 0.063642 | 0.00194 | 0.842327 | 0.402654 | 0.721399 | -5.51971 |
| REACTOME\_MAP2K\_AND\_MAPK\_ACTIVATION | -0.05565 | -0.01913 | -0.84215 | 0.402755 | 0.721399 | -5.51985 |
| HASLINGER\_B\_CLL\_WITH\_CHROMOSOME\_12\_TRISOMY | -0.07124 | -0.03778 | -0.84189 | 0.402894 | 0.721446 | -5.52005 |
| FRASOR\_TAMOXIFEN\_RESPONSE\_UP | -0.04476 | -0.13699 | -0.8415 | 0.403114 | 0.721581 | -5.52035 |
| REACTOME\_ANCHORING\_FIBRIL\_FORMATION | 0.064908 | 0.000869 | 0.841351 | 0.403196 | 0.721581 | -5.52047 |
| BRACHAT\_RESPONSE\_TO\_METHOTREXATE\_UP | 0.055734 | -0.00734 | 0.838716 | 0.404663 | 0.723893 | -5.52251 |
| PHONG\_TNF\_TARGETS\_DN | 0.084551 | 0.002451 | 0.838039 | 0.40504 | 0.723893 | -5.52303 |
| BROWNE\_HCMV\_INFECTION\_20HR\_DN | -0.04759 | -0.07931 | -0.83798 | 0.405074 | 0.723893 | -5.52308 |
| LIANG\_SILENCED\_BY\_METHYLATION\_DN | -0.07533 | -0.03444 | -0.83791 | 0.405114 | 0.723893 | -5.52313 |
| SENESE\_HDAC2\_TARGETS\_UP | 0.051282 | -0.04985 | 0.837756 | 0.405198 | 0.723893 | -5.52325 |
| PARK\_HSC\_VS\_MULTIPOTENT\_PROGENITORS\_UP | -0.05758 | -0.05496 | -0.83775 | 0.405199 | 0.723893 | -5.52325 |
| DANG\_MYC\_TARGETS\_DN | 0.056108 | -0.09953 | 0.837601 | 0.405284 | 0.723893 | -5.52337 |
| REACTOME\_CA2\_ACTIVATED\_K\_CHANNELS | 0.057586 | 0.019877 | 0.836341 | 0.405988 | 0.724945 | -5.52434 |
| GAZIN\_EPIGENETIC\_SILENCING\_BY\_KRAS | -0.04485 | 0.014271 | -0.83611 | 0.406118 | 0.724975 | -5.52452 |
| ITO\_PTTG1\_TARGETS\_DN | 0.091752 | 0.010895 | 0.835134 | 0.406662 | 0.725513 | -5.52527 |
| LEE\_NEURAL\_CREST\_STEM\_CELL\_UP | 0.03356 | -0.04768 | 0.835087 | 0.406688 | 0.725513 | -5.52531 |
| BIOCARTA\_PAR1\_PATHWAY | -0.0564 | 0.010409 | -0.83496 | 0.406762 | 0.725513 | -5.52541 |
| WANG\_HCP\_PROSTATE\_CANCER | 0.040909 | -0.04165 | 0.834721 | 0.406893 | 0.725543 | -5.52559 |
| IKEDA\_MIR133\_TARGETS\_DN | -0.07699 | -0.02076 | -0.8338 | 0.407405 | 0.725861 | -5.52629 |
| BROCKE\_APOPTOSIS\_REVERSED\_BY\_IL6 | 0.053328 | -0.09915 | 0.833696 | 0.407466 | 0.725861 | -5.52638 |
| GILMORE\_CORE\_NFKB\_PATHWAY | 0.085105 | -0.0522 | 0.833608 | 0.407515 | 0.725861 | -5.52644 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_1 | 0.076256 | 0.004116 | 0.833411 | 0.407626 | 0.725861 | -5.5266 |
| BOSCO\_INTERFERON\_INDUCED\_ANTIVIRAL\_MODULE | 0.053669 | -0.06605 | 0.833384 | 0.407641 | 0.725861 | -5.52662 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_LD\_MTX\_UP | -0.06886 | -0.03376 | -0.833 | 0.407856 | 0.725884 | -5.52691 |
| FUJIWARA\_PARK2\_HEPATOCYTE\_PROLIFERATION\_UP | 0.047686 | -0.24826 | 0.832953 | 0.407882 | 0.725884 | -5.52695 |
| REACTOME\_PROLONGED\_ERK\_ACTIVATION\_EVENTS | -0.07795 | 0.002448 | -0.83257 | 0.408098 | 0.726066 | -5.52724 |
| BIOCARTA\_ALTERNATIVE\_PATHWAY | -0.04722 | -0.40379 | -0.83225 | 0.408275 | 0.726177 | -5.52749 |
| NADERI\_BREAST\_CANCER\_PROGNOSIS\_DN | -0.07543 | 0.015842 | -0.83169 | 0.408588 | 0.72653 | -5.52791 |
| REACTOME\_LONG\_TERM\_POTENTIATION | -0.05677 | 0.002313 | -0.8313 | 0.408808 | 0.726697 | -5.52822 |
| REACTOME\_EPHRIN\_SIGNALING | -0.05086 | -0.01125 | -0.83112 | 0.40891 | 0.726697 | -5.52835 |
| FISCHER\_G2\_M\_CELL\_CYCLE | -0.03869 | -0.1222 | -0.83051 | 0.409252 | 0.727011 | -5.52882 |
| WP\_NODLIKE\_RECEPTOR\_NLR\_SIGNALING\_PATHWAY | -0.08444 | 0.013642 | -0.8304 | 0.409315 | 0.727011 | -5.52891 |
| WP\_RANKLRANK\_SIGNALING\_PATHWAY | 0.050704 | -0.01561 | 0.829567 | 0.40978 | 0.727635 | -5.52954 |
| NGUYEN\_NOTCH1\_TARGETS\_UP | -0.04374 | -0.2075 | -0.82911 | 0.410035 | 0.727756 | -5.52989 |
| WP\_SOMATIC\_SEX\_DETERMINATION | 0.071113 | -0.05114 | 0.829038 | 0.410078 | 0.727756 | -5.52995 |
| MOOTHA\_PGC | -0.04777 | -0.16977 | -0.82836 | 0.410461 | 0.727865 | -5.53047 |
| WP\_NOTCH\_SIGNALING\_PATHWAY | 0.037907 | -0.20031 | 0.828177 | 0.410561 | 0.727865 | -5.5306 |
| WP\_DISRUPTION\_OF\_POSTSYNAPTIC\_SIGNALING\_BY\_CNV | -0.0399 | -0.14255 | -0.82816 | 0.410569 | 0.727865 | -5.53062 |
| REACTOME\_G1\_S\_DNA\_DAMAGE\_CHECKPOINTS | -0.04768 | -0.20825 | -0.82811 | 0.410596 | 0.727865 | -5.53065 |
| GRESHOCK\_CANCER\_COPY\_NUMBER\_UP | -0.03484 | -0.05322 | -0.82785 | 0.410743 | 0.727905 | -5.53085 |
| REACTOME\_FGFR1\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.06723 | 0.028076 | 0.827505 | 0.410939 | 0.727905 | -5.53112 |
| BRUINS\_UVC\_RESPONSE\_VIA\_TP53\_GROUP\_A | 0.014348 | -0.1386 | 0.827297 | 0.411057 | 0.727905 | -5.53128 |
| REACTOME\_NRIF\_SIGNALS\_CELL\_DEATH\_FROM\_THE\_NUCLEUS | 0.054989 | -0.0604 | 0.827262 | 0.411076 | 0.727905 | -5.5313 |
| GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN | -0.05956 | -0.03285 | -0.82677 | 0.41135 | 0.728187 | -5.53167 |
| DEN\_INTERACT\_WITH\_LCA5 | -0.04437 | -0.42478 | -0.82572 | 0.411943 | 0.728292 | -5.53248 |
| SA\_CASPASE\_CASCADE | -0.05095 | 0.008318 | -0.82558 | 0.412023 | 0.728292 | -5.53258 |
| MIKKELSEN\_NPC\_WITH\_LCP\_H3K27ME3 | 0.050819 | -0.08543 | 0.825564 | 0.412032 | 0.728292 | -5.5326 |
| REACTOME\_PROGRAMMED\_CELL\_DEATH | -0.04301 | -0.1364 | -0.82554 | 0.412047 | 0.728292 | -5.53262 |
| WP\_GLYCOLYSIS\_AND\_GLUCONEOGENESIS | 0.046095 | -0.08585 | 0.825366 | 0.412143 | 0.728292 | -5.53275 |
| STEIN\_ESTROGEN\_RESPONSE\_NOT\_VIA\_ESRRA | 0.037877 | -0.09936 | 0.825193 | 0.412241 | 0.728292 | -5.53288 |
| ONO\_AML1\_TARGETS\_UP | 0.054216 | -0.03113 | 0.824964 | 0.41237 | 0.728292 | -5.53305 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_UP | -0.05673 | -0.13652 | -0.82488 | 0.412419 | 0.728292 | -5.53312 |
| WP\_NONALCOHOLIC\_FATTY\_LIVER\_DISEASE | -0.04162 | -0.13433 | -0.82482 | 0.412454 | 0.728292 | -5.53317 |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_1\_UP | 0.047424 | -0.03449 | 0.824638 | 0.412554 | 0.728292 | -5.5333 |
| BERNARD\_PPAPDC1B\_TARGETS\_DN | 0.026903 | -0.07678 | 0.824283 | 0.412754 | 0.728443 | -5.53357 |
| WP\_TGFBETA\_RECEPTOR\_SIGNALING | 0.042194 | -0.1308 | 0.823978 | 0.412926 | 0.728545 | -5.5338 |
| REACTOME\_RESPONSE\_OF\_EIF2AK1\_HRI\_TO\_HEME\_DEFICIENCY | -0.07804 | 0.006528 | -0.82377 | 0.413045 | 0.728553 | -5.53396 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_WORST\_VS\_BEST\_DN | 0.066133 | -0.02855 | 0.823525 | 0.413182 | 0.728593 | -5.53415 |
| BROWNE\_HCMV\_INFECTION\_48HR\_DN | 0.023899 | -0.15126 | 0.822999 | 0.413478 | 0.72883 | -5.53455 |
| WP\_NEUROINFLAMMATION\_AND\_GLUTAMATERGIC\_SIGNALING | 0.023817 | -0.10581 | 0.822863 | 0.413556 | 0.72883 | -5.53465 |
| FERRANDO\_HOX11\_NEIGHBORS | -0.05736 | -0.00702 | -0.82236 | 0.413841 | 0.72883 | -5.53503 |
| REACTOME\_TNFR1\_MEDIATED\_CERAMIDE\_PRODUCTION | -0.05083 | -0.47146 | -0.82228 | 0.413885 | 0.72883 | -5.53509 |
| VALK\_AML\_CLUSTER\_13 | 0.037451 | -0.00815 | 0.8217 | 0.414213 | 0.72883 | -5.53553 |
| BROWNE\_HCMV\_INFECTION\_30MIN\_UP | 0.031979 | -0.16054 | 0.821321 | 0.414427 | 0.72883 | -5.53582 |
| KOYAMA\_SEMA3B\_TARGETS\_DN | -0.02962 | -0.10748 | -0.82127 | 0.414453 | 0.72883 | -5.53585 |
| GUILLAUMOND\_KLF10\_TARGETS\_DN | -0.05298 | -0.00554 | -0.82095 | 0.414634 | 0.72883 | -5.5361 |
| KEGG\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS | 0.015795 | -0.63421 | 0.820894 | 0.414668 | 0.72883 | -5.53614 |
| ZHENG\_FOXP3\_TARGETS\_IN\_T\_LYMPHOCYTE\_UP | -0.04558 | -0.01083 | -0.82086 | 0.414689 | 0.72883 | -5.53617 |
| REACTOME\_APOBEC3G\_MEDIATED\_RESISTANCE\_TO\_HIV\_1\_INFECTION | 0.084403 | -0.00852 | 0.82084 | 0.414699 | 0.72883 | -5.53618 |
| REACTOME\_THROMBIN\_SIGNALLING\_THROUGH\_PROTEINASE\_ACTIVATED\_RECEPTORS\_PARS | 0.033887 | -0.03681 | 0.820627 | 0.414819 | 0.72883 | -5.53634 |
| POMEROY\_MEDULLOBLASTOMA\_DESMOPLASIC\_VS\_CLASSIC\_UP | 0.030837 | -0.04755 | 0.820387 | 0.414955 | 0.72883 | -5.53653 |
| BIDUS\_METASTASIS\_DN | -0.03815 | -0.12683 | -0.82023 | 0.415045 | 0.72883 | -5.53665 |
| CHIN\_BREAST\_CANCER\_COPY\_NUMBER\_UP | 0.048455 | -0.05033 | 0.820166 | 0.41508 | 0.72883 | -5.53669 |
| LY\_AGING\_OLD\_UP | 0.087636 | 0.00433 | 0.819818 | 0.415277 | 0.72883 | -5.53696 |
| KEGG\_LYSOSOME | 0.052334 | -0.12997 | 0.8198 | 0.415287 | 0.72883 | -5.53697 |
| CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_DN | -0.0678 | -0.04011 | -0.81964 | 0.415378 | 0.72883 | -5.53709 |
| REACTOME\_NERVOUS\_SYSTEM\_DEVELOPMENT | -0.03285 | -0.08052 | -0.81896 | 0.415763 | 0.728888 | -5.53761 |
| YAMASHITA\_LIVER\_CANCER\_STEM\_CELL\_DN | 0.025334 | -0.06089 | 0.818951 | 0.415768 | 0.728888 | -5.53761 |
| REACTOME\_SUMOYLATION\_OF\_DNA\_DAMAGE\_RESPONSE\_AND\_REPAIR\_PROTEINS | -0.04298 | -0.16254 | -0.81873 | 0.415891 | 0.728888 | -5.53778 |
| WP\_HISTONE\_MODIFICATIONS | -0.03676 | -0.1328 | -0.81848 | 0.416038 | 0.728888 | -5.53797 |
| REACTOME\_ARACHIDONATE\_PRODUCTION\_FROM\_DAG | 0.090008 | -0.0065 | 0.818323 | 0.416124 | 0.728888 | -5.53809 |
| REACTOME\_METAL\_SEQUESTRATION\_BY\_ANTIMICROBIAL\_PROTEINS | 0.065167 | -0.00889 | 0.818066 | 0.41627 | 0.728888 | -5.53828 |
| MIKKELSEN\_IPS\_ICP\_WITH\_H3K27ME3 | 0.042187 | -0.13383 | 0.817809 | 0.416415 | 0.728888 | -5.53847 |
| KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_DN | -0.04616 | -0.09274 | -0.81755 | 0.416564 | 0.728888 | -5.53867 |
| HEIDENBLAD\_AMPLIFIED\_IN\_SOFT\_TISSUE\_CANCER | -0.05164 | -0.01191 | -0.81738 | 0.416658 | 0.728888 | -5.5388 |
| ZWANG\_EGF\_PERSISTENTLY\_UP | -0.04643 | 0.001505 | -0.81736 | 0.416672 | 0.728888 | -5.53881 |
| LEE\_LIVER\_CANCER\_CIPROFIBRATE\_UP | 0.037316 | -0.03816 | 0.817306 | 0.416701 | 0.728888 | -5.53885 |
| REACTOME\_DEPOLYMERISATION\_OF\_THE\_NUCLEAR\_LAMINA | -0.07118 | -0.07485 | -0.81716 | 0.416785 | 0.728888 | -5.53897 |
| SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_DN | 0.044007 | -0.14725 | 0.816686 | 0.417053 | 0.729155 | -5.53932 |
| TURJANSKI\_MAPK1\_AND\_MAPK2\_TARGETS | 0.063409 | 0.0062 | 0.81622 | 0.417317 | 0.729416 | -5.53967 |
| REACTOME\_MAPK3\_ERK1\_ACTIVATION | -0.08154 | 0.004037 | -0.81573 | 0.417596 | 0.729418 | -5.54004 |
| WP\_FGFR3\_SIGNALING\_IN\_CHONDROCYTE\_PROLIFERATION\_AND\_TERMINAL\_DIFFERENTIATION | 0.040076 | -0.00171 | 0.815643 | 0.417645 | 0.729418 | -5.5401 |
| SCHLOSSER\_SERUM\_RESPONSE\_UP | 0.021751 | -0.29129 | 0.815613 | 0.417662 | 0.729418 | -5.54013 |
| RIGGINS\_TAMOXIFEN\_RESISTANCE\_DN | -0.04821 | -0.0327 | -0.81446 | 0.418319 | 0.730262 | -5.541 |
| DELACROIX\_RAR\_BOUND\_ES | 0.017052 | -0.16084 | 0.814265 | 0.418428 | 0.730262 | -5.54114 |
| KOBAYASHI\_EGFR\_SIGNALING\_24HR\_DN | -0.04533 | -0.08014 | -0.81416 | 0.418489 | 0.730262 | -5.54122 |
| WP\_PHOSPHODIESTERASES\_IN\_NEURONAL\_FUNCTION | 0.034983 | -0.04983 | 0.813945 | 0.41861 | 0.73027 | -5.54138 |
| WEIGEL\_OXIDATIVE\_STRESS\_BY\_HNE\_AND\_H2O2 | 0.053096 | 0.010875 | 0.813604 | 0.418804 | 0.73027 | -5.54164 |
| MIKKELSEN\_IPS\_WITH\_HCP\_H3K27ME3 | 0.050621 | -0.06168 | 0.813525 | 0.418849 | 0.73027 | -5.5417 |
| WP\_MITOCHONDRIAL\_IMMUNE\_RESPONSE\_TO\_SARSCOV2 | 0.038146 | -0.05416 | 0.813197 | 0.419035 | 0.73027 | -5.54194 |
| LEE\_EARLY\_T\_LYMPHOCYTE\_UP | -0.05024 | -0.10483 | -0.81314 | 0.419068 | 0.73027 | -5.54198 |
| KEGG\_FOCAL\_ADHESION | 0.035545 | -0.09024 | 0.812924 | 0.419191 | 0.730285 | -5.54215 |
| GUTIERREZ\_WALDENSTROEMS\_MACROGLOBULINEMIA\_1\_UP | 0.044637 | -0.3734 | 0.81263 | 0.419358 | 0.730318 | -5.54237 |
| SHEDDEN\_LUNG\_CANCER\_POOR\_SURVIVAL\_A6 | -0.0408 | -0.04702 | -0.81249 | 0.419439 | 0.730318 | -5.54247 |
| REACTOME\_FGFR2\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.067553 | 0.013783 | 0.812103 | 0.419658 | 0.730454 | -5.54276 |
| LIU\_BREAST\_CANCER | 0.036016 | -0.2428 | 0.811769 | 0.419849 | 0.730454 | -5.54301 |
| WOO\_LIVER\_CANCER\_RECURRENCE\_DN | 0.031364 | -0.01598 | 0.811746 | 0.419862 | 0.730454 | -5.54303 |
| REACTOME\_SYNTHESIS\_OF\_15\_EICOSATETRAENOIC\_ACID\_DERIVATIVES | 0.066405 | 0.010202 | 0.811147 | 0.420203 | 0.730764 | -5.54348 |
| REACTOME\_REGULATION\_OF\_GENE\_EXPRESSION\_IN\_BETA\_CELLS | 0.063237 | -0.05435 | 0.81103 | 0.42027 | 0.730764 | -5.54357 |
| TSUDA\_ALVEOLAR\_SOFT\_PART\_SARCOMA | 0.065605 | -0.10387 | 0.810586 | 0.420523 | 0.731005 | -5.5439 |
| SU\_THYMUS | 0.074229 | -0.01118 | 0.81018 | 0.420755 | 0.731207 | -5.5442 |
| MA\_MYELOID\_DIFFERENTIATION\_UP | 0.045831 | -0.15853 | 0.809861 | 0.420937 | 0.731325 | -5.54444 |
| REACTOME\_ERBB2\_ACTIVATES\_PTK6\_SIGNALING | 0.075006 | 0.02097 | 0.809617 | 0.421076 | 0.731367 | -5.54462 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_DN\_BLOCKED\_BY\_FZD8CRD | 0.031795 | -0.07182 | 0.808638 | 0.421635 | 0.731402 | -5.54535 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_5 | 0.079952 | -0.00889 | 0.808568 | 0.421675 | 0.731402 | -5.5454 |
| WP\_ESTROGEN\_RECEPTOR\_PATHWAY | -0.05416 | -0.01215 | -0.80853 | 0.421698 | 0.731402 | -5.54543 |
| ZHAN\_LATE\_DIFFERENTIATION\_GENES\_DN | 0.063616 | -0.00634 | 0.808423 | 0.421758 | 0.731402 | -5.54551 |
| REACTOME\_GAMMA\_CARBOXYLATION\_TRANSPORT\_AND\_AMINO\_TERMINAL\_CLEAVAGE\_OF\_PROTEINS | 0.056448 | 0.020458 | 0.808423 | 0.421758 | 0.731402 | -5.54551 |
| WANG\_RECURRENT\_LIVER\_CANCER\_DN | -0.07108 | 0.00777 | -0.80837 | 0.421786 | 0.731402 | -5.54555 |
| BIOCARTA\_AMI\_PATHWAY | 0.052117 | 0.008597 | 0.807926 | 0.422042 | 0.731462 | -5.54588 |
| REACTOME\_BETA\_CATENIN\_PHOSPHORYLATION\_CASCADE | -0.05312 | -0.00053 | -0.80791 | 0.42205 | 0.731462 | -5.54589 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_DN | -0.0444 | -0.05306 | -0.80704 | 0.422549 | 0.732016 | -5.54654 |
| WP\_CONSTITUTIVE\_ANDROSTANE\_RECEPTOR\_PATHWAY | -0.03719 | -0.02436 | -0.80664 | 0.422777 | 0.732016 | -5.54684 |
| VALK\_AML\_CLUSTER\_6 | -0.03525 | -0.35597 | -0.80659 | 0.422809 | 0.732016 | -5.54688 |
| DARWICHE\_PAPILLOMA\_PROGRESSION\_RISK | 0.022035 | -0.19835 | 0.806548 | 0.42283 | 0.732016 | -5.54691 |
| LEE\_LIVER\_CANCER\_SURVIVAL\_UP | 0.019716 | -0.13472 | 0.806037 | 0.423122 | 0.732323 | -5.54729 |
| BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_UP | 0.045212 | -0.07394 | 0.805507 | 0.423426 | 0.732649 | -5.54768 |
| NOUSHMEHR\_GBM\_SOMATIC\_MUTATED | 0.048847 | -0.00669 | 0.805061 | 0.423682 | 0.732835 | -5.54802 |
| REACTOME\_EARLY\_PHASE\_OF\_HIV\_LIFE\_CYCLE | 0.064569 | 0.000577 | 0.804917 | 0.423764 | 0.732835 | -5.54812 |
| JINESH\_BLEBBISHIELD\_TRANSFORMED\_STEM\_CELL\_SPHERES\_UP | 0.039415 | -0.1171 | 0.804093 | 0.424237 | 0.733092 | -5.54873 |
| YANG\_BREAST\_CANCER\_ESR1\_BULK\_UP | -0.05621 | -0.00859 | -0.80403 | 0.42427 | 0.733092 | -5.54878 |
| REACTOME\_POST\_CHAPERONIN\_TUBULIN\_FOLDING\_PATHWAY | 0.041813 | -0.08942 | 0.803743 | 0.424437 | 0.733092 | -5.54899 |
| WHITFIELD\_CELL\_CYCLE\_G2 | -0.03304 | -0.15299 | -0.80326 | 0.424713 | 0.733092 | -5.54935 |
| SIG\_BCR\_SIGNALING\_PATHWAY | -0.04613 | -0.17697 | -0.80307 | 0.424822 | 0.733092 | -5.54949 |
| WP\_ALPHA\_6\_BETA\_4\_SIGNALING\_PATHWAY | -0.05453 | -0.0287 | -0.80284 | 0.424953 | 0.733092 | -5.54966 |
| REACTOME\_SIGNALING\_BY\_FGFR1 | -0.03669 | -0.01784 | -0.80244 | 0.425185 | 0.733092 | -5.54996 |
| RUTELLA\_RESPONSE\_TO\_HGF\_UP | 0.051155 | -0.07219 | 0.80223 | 0.425305 | 0.733092 | -5.55011 |
| WELCH\_GATA1\_TARGETS | 0.038551 | -0.04504 | 0.80221 | 0.425317 | 0.733092 | -5.55013 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_XPCS\_DN | -0.04617 | -0.05814 | -0.80219 | 0.425326 | 0.733092 | -5.55014 |
| PECE\_MAMMARY\_STEM\_CELL\_DN | -0.05504 | -0.10477 | -0.80216 | 0.425346 | 0.733092 | -5.55017 |
| DELASERNA\_MYOD\_TARGETS\_DN | 0.049308 | -0.05566 | 0.802077 | 0.425393 | 0.733092 | -5.55023 |
| KEGG\_ALLOGRAFT\_REJECTION | 0.013262 | -0.76302 | 0.802048 | 0.42541 | 0.733092 | -5.55025 |
| LU\_IL4\_SIGNALING | 0.048148 | -0.07116 | 0.801736 | 0.425589 | 0.733202 | -5.55048 |
| PID\_SHP2\_PATHWAY | -0.04027 | -0.0325 | -0.80145 | 0.425756 | 0.733291 | -5.55069 |
| WP\_RETT\_SYNDROME\_CAUSING\_GENES | -0.03298 | -0.04723 | -0.80121 | 0.425892 | 0.733327 | -5.55087 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_2A\_UP | 0.047983 | 0.005257 | 0.800924 | 0.426056 | 0.733382 | -5.55108 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR1\_SIGNALING | 0.035605 | -0.00321 | 0.800752 | 0.426155 | 0.733382 | -5.55121 |
| BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_UP | -0.05439 | -0.02798 | -0.79976 | 0.426725 | 0.733898 | -5.55194 |
| KLEIN\_PRIMARY\_EFFUSION\_LYMPHOMA\_UP | 0.03664 | -0.06646 | 0.799388 | 0.42694 | 0.733898 | -5.55221 |
| STONER\_ESOPHAGEAL\_CARCINOGENESIS\_DN | -0.06941 | -0.00042 | -0.79936 | 0.426956 | 0.733898 | -5.55224 |
| GOLDRATH\_IMMUNE\_MEMORY | -0.04786 | -0.01505 | -0.79935 | 0.426959 | 0.733898 | -5.55224 |
| REACTOME\_SIGNALING\_BY\_PDGFR\_IN\_DISEASE | -0.06279 | -0.04371 | -0.79906 | 0.427127 | 0.733898 | -5.55245 |
| WP\_EGFR\_TYROSINE\_KINASE\_INHIBITOR\_RESISTANCE | -0.03913 | -0.02911 | -0.79898 | 0.427176 | 0.733898 | -5.55252 |
| CUI\_TCF21\_TARGETS\_UP | -0.04679 | -0.08192 | -0.79883 | 0.427261 | 0.733898 | -5.55263 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_3 | 0.039352 | -0.02787 | 0.798561 | 0.427415 | 0.733938 | -5.55282 |
| MATZUK\_MALE\_REPRODUCTION\_SERTOLI | -0.03958 | -0.01017 | -0.79839 | 0.427516 | 0.733938 | -5.55295 |
| REACTOME\_MEIOTIC\_SYNAPSIS | -0.03077 | -0.05789 | -0.79776 | 0.427876 | 0.734359 | -5.55341 |
| BIOCARTA\_STAT3\_PATHWAY | -0.08286 | -0.01661 | -0.7974 | 0.428085 | 0.734519 | -5.55368 |
| WP\_ALTERED\_GLYCOSYLATION\_OF\_MUC1\_IN\_TUMOR\_MICROENVIRONMENT | -0.05733 | -0.38049 | -0.79618 | 0.428789 | 0.73553 | -5.55458 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G1 | -0.04987 | -0.03918 | -0.79572 | 0.429054 | 0.735633 | -5.55491 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM1 | 0.029205 | -0.0753 | 0.795674 | 0.42908 | 0.735633 | -5.55495 |
| TSAI\_DNAJB4\_TARGETS\_DN | -0.07501 | -0.00476 | -0.79502 | 0.42946 | 0.736085 | -5.55543 |
| REACTOME\_ARMS\_MEDIATED\_ACTIVATION | -0.07836 | -0.00189 | -0.79479 | 0.429593 | 0.736115 | -5.5556 |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR | -0.05294 | -0.17377 | -0.79389 | 0.43011 | 0.736404 | -5.55625 |
| WP\_NICOTINE\_EFFECT\_ON\_DOPAMINERGIC\_NEURONS | 0.040975 | -0.08063 | 0.793796 | 0.430165 | 0.736404 | -5.55633 |
| DOANE\_RESPONSE\_TO\_ANDROGEN\_DN | -0.02511 | -0.10967 | -0.79378 | 0.430172 | 0.736404 | -5.55633 |
| REACTOME\_BUTYRATE\_RESPONSE\_FACTOR\_1\_BRF1\_BINDS\_AND\_DESTABILIZES\_MRNA | -0.08004 | -0.01471 | -0.7936 | 0.430279 | 0.736404 | -5.55647 |
| XU\_RESPONSE\_TO\_TRETINOIN\_DN | -0.08049 | -0.01961 | -0.79344 | 0.430368 | 0.736404 | -5.55658 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREEN\_UP | 0.048031 | 0.008474 | 0.793292 | 0.430456 | 0.736404 | -5.55669 |
| REACTOME\_MEMBRANE\_TRAFFICKING | -0.04064 | -0.04383 | -0.79301 | 0.430621 | 0.736488 | -5.5569 |
| REACTOME\_AFLATOXIN\_ACTIVATION\_AND\_DETOXIFICATION | -0.0397 | -0.00535 | -0.7927 | 0.430797 | 0.73659 | -5.55712 |
| NIKOLSKY\_BREAST\_CANCER\_20Q11\_AMPLICON | 0.036514 | -0.00091 | 0.792039 | 0.431182 | 0.737051 | -5.55761 |
| PASQUALUCCI\_LYMPHOMA\_BY\_GC\_STAGE\_DN | -0.0468 | -0.08549 | -0.79029 | 0.432196 | 0.738355 | -5.55889 |
| LIEN\_BREAST\_CARCINOMA\_METAPLASTIC\_VS\_DUCTAL\_DN | 0.035241 | -0.04786 | 0.789949 | 0.432393 | 0.738355 | -5.55914 |
| PUJANA\_ATM\_PCC\_NETWORK | -0.03749 | -0.16935 | -0.78987 | 0.432438 | 0.738355 | -5.55919 |
| YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_DN | -0.04049 | -0.18003 | -0.7898 | 0.43248 | 0.738355 | -5.55925 |
| WP\_TOLLLIKE\_RECEPTOR\_SIGNALING\_RELATED\_TO\_MYD88 | 0.062593 | -0.02931 | 0.789583 | 0.432605 | 0.738355 | -5.5594 |
| EHRLICH\_ICF\_SYNDROM\_DN | 0.055052 | -0.15393 | 0.789477 | 0.432667 | 0.738355 | -5.55948 |
| WOTTON\_RUNX\_TARGETS\_UP | 0.040126 | -0.1189 | 0.789322 | 0.432757 | 0.738355 | -5.55959 |
| HEDVAT\_ELF4\_TARGETS\_UP | 0.072787 | 0.001129 | 0.788907 | 0.432997 | 0.738567 | -5.5599 |
| REACTOME\_PYRUVATE\_METABOLISM\_AND\_CITRIC\_ACID\_TCA\_CYCLE | -0.0551 | -0.03569 | -0.78865 | 0.433145 | 0.738622 | -5.56008 |
| BASAKI\_YBX1\_TARGETS\_UP | -0.03589 | -0.06429 | -0.78754 | 0.433789 | 0.739522 | -5.56089 |
| BROWNE\_HCMV\_INFECTION\_20HR\_UP | -0.02402 | -0.14096 | -0.78696 | 0.434129 | 0.739811 | -5.56131 |
| KOYAMA\_SEMA3B\_TARGETS\_UP | -0.02621 | -0.08049 | -0.78671 | 0.434273 | 0.739811 | -5.56149 |
| VIETOR\_IFRD1\_TARGETS | -0.04648 | -0.0046 | -0.78661 | 0.434333 | 0.739811 | -5.56157 |
| KEGG\_STEROID\_HORMONE\_BIOSYNTHESIS | 0.036849 | -0.19957 | 0.786265 | 0.434532 | 0.739811 | -5.56182 |
| WP\_TCELL\_ANTIGEN\_RECEPTOR\_TCR\_PATHWAY\_DURING\_STAPHYLOCOCCUS\_AUREUS\_INFECTION | 0.045924 | -0.13556 | 0.786102 | 0.434627 | 0.739811 | -5.56193 |
| MARSON\_FOXP3\_TARGETS\_UP | 0.045328 | -0.12131 | 0.785968 | 0.434705 | 0.739811 | -5.56203 |
| REACTOME\_NEURONAL\_SYSTEM | 0.032865 | -0.05247 | 0.785671 | 0.434878 | 0.739811 | -5.56225 |
| PETRETTO\_BLOOD\_PRESSURE\_DN | -0.05334 | -0.01054 | -0.78551 | 0.434969 | 0.739811 | -5.56236 |
| GOUYER\_TATI\_TARGETS\_DN | 0.054439 | -0.04413 | 0.785452 | 0.435005 | 0.739811 | -5.56241 |
| CHIN\_BREAST\_CANCER\_COPY\_NUMBER\_DN | -0.03285 | -0.27236 | -0.78474 | 0.435417 | 0.739993 | -5.56292 |
| WP\_NICOTINE\_METABOLISM\_IN\_LIVER\_CELLS | 0.058121 | -0.09828 | 0.784666 | 0.435463 | 0.739993 | -5.56298 |
| POMEROY\_MEDULLOBLASTOMA\_DESMOPLASIC\_VS\_CLASSIC\_DN | -0.0363 | -0.19575 | -0.78456 | 0.435523 | 0.739993 | -5.56305 |
| BIOCARTA\_NGF\_PATHWAY | -0.05801 | -0.04001 | -0.78423 | 0.435715 | 0.739993 | -5.56329 |
| REACTOME\_PURINE\_SALVAGE | 0.047117 | -0.08211 | 0.784211 | 0.435728 | 0.739993 | -5.56331 |
| WATANABE\_COLON\_CANCER\_MSI\_VS\_MSS\_DN | 0.029076 | -0.15542 | 0.784071 | 0.43581 | 0.739993 | -5.56341 |
| MEISSNER\_NPC\_ICP\_WITH\_H3K4ME3 | -0.02744 | -0.4571 | -0.78344 | 0.436175 | 0.740415 | -5.56386 |
| SESTO\_RESPONSE\_TO\_UV\_C8 | -0.05497 | -0.07702 | -0.78196 | 0.437042 | 0.741573 | -5.56493 |
| NAKAMURA\_TUMOR\_ZONE\_PERIPHERAL\_VS\_CENTRAL\_UP | -0.04138 | -0.06451 | -0.78171 | 0.437186 | 0.741573 | -5.56511 |
| GYORFFY\_MITOXANTRONE\_RESISTANCE | 0.032312 | -0.20178 | 0.781644 | 0.437225 | 0.741573 | -5.56516 |
| BROWNE\_HCMV\_INFECTION\_14HR\_DN | -0.03448 | -0.05974 | -0.78148 | 0.437323 | 0.741573 | -5.56528 |
| BIOCARTA\_IL12\_PATHWAY | 0.062217 | -0.01352 | 0.780592 | 0.437839 | 0.742251 | -5.56592 |
| ELVIDGE\_HYPOXIA\_BY\_DMOG\_DN | -0.04578 | 0.001266 | -0.78027 | 0.438029 | 0.742375 | -5.56615 |
| GUENTHER\_GROWTH\_SPHERICAL\_VS\_ADHERENT\_DN | 0.068529 | -0.01938 | 0.779939 | 0.438221 | 0.742483 | -5.56639 |
| REACTOME\_TNF\_SIGNALING | -0.04803 | -0.12765 | -0.77969 | 0.438366 | 0.742483 | -5.56657 |
| KIM\_GERMINAL\_CENTER\_T\_HELPER\_DN | 0.063455 | -0.14511 | 0.779405 | 0.438533 | 0.742483 | -5.56677 |
| DOANE\_BREAST\_CANCER\_ESR1\_UP | 0.02389 | -0.15297 | 0.77936 | 0.438559 | 0.742483 | -5.56681 |
| DAVICIONI\_PAX\_FOXO1\_SIGNATURE\_IN\_ARMS\_UP | 0.044126 | -0.03256 | 0.778997 | 0.438772 | 0.742645 | -5.56707 |
| PID\_ARF6\_PATHWAY | 0.039813 | -0.03485 | 0.778245 | 0.439211 | 0.743191 | -5.56761 |
| WP\_HEAD\_AND\_NECK\_SQUAMOUS\_CELL\_CARCINOMA | -0.03113 | -0.06161 | -0.77783 | 0.439452 | 0.743401 | -5.5679 |
| REACTOME\_RESPONSE\_TO\_METAL\_IONS | 0.059991 | 0.014437 | 0.777336 | 0.439744 | 0.743678 | -5.56826 |
| ZHU\_CMV\_24\_HR\_DN | 0.053009 | -0.03057 | 0.777155 | 0.43985 | 0.743678 | -5.56839 |
| REACTOME\_ACTIVATED\_NTRK2\_SIGNALS\_THROUGH\_PI3K | -0.06079 | -0.0075 | -0.77622 | 0.440399 | 0.744409 | -5.56906 |
| WP\_INSULIN\_SIGNALING | -0.03784 | -0.07458 | -0.77473 | 0.441273 | 0.745688 | -5.57013 |
| MORI\_MATURE\_B\_LYMPHOCYTE\_UP | 0.033512 | -0.30531 | 0.774458 | 0.441431 | 0.745758 | -5.57032 |
| REACTOME\_NOTCH3\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION | 0.038454 | -0.07594 | 0.773641 | 0.441912 | 0.746371 | -5.57091 |
| BROWNE\_HCMV\_INFECTION\_14HR\_UP | -0.03938 | -0.08323 | -0.77337 | 0.442068 | 0.74638 | -5.5711 |
| REACTOME\_SARS\_COV\_INFECTIONS | -0.04295 | -0.0883 | -0.77323 | 0.442152 | 0.74638 | -5.5712 |
| BRIDEAU\_IMPRINTED\_GENES | -0.02779 | -0.09657 | -0.77293 | 0.442331 | 0.746484 | -5.57142 |
| FORTSCHEGGER\_PHF8\_TARGETS\_DN | -0.03558 | -0.1059 | -0.77264 | 0.442502 | 0.746536 | -5.57162 |
| ZHENG\_RESPONSE\_TO\_ARSENITE\_DN | 0.065207 | -0.06572 | 0.772476 | 0.442596 | 0.746536 | -5.57174 |
| REACTOME\_PTK6\_REGULATES\_RHO\_GTPASES\_RAS\_GTPASE\_AND\_MAP\_KINASES | -0.0535 | -0.06717 | -0.77189 | 0.442938 | 0.746915 | -5.57215 |
| ZHU\_CMV\_8\_HR\_DN | -0.05403 | -0.02869 | -0.77146 | 0.443191 | 0.747144 | -5.57246 |
| ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR | -0.04822 | -0.05628 | -0.77062 | 0.443688 | 0.747615 | -5.57306 |
| DARWICHE\_SQUAMOUS\_CELL\_CARCINOMA\_DN | -0.0203 | -0.07101 | -0.77026 | 0.443902 | 0.747615 | -5.57332 |
| BLUM\_RESPONSE\_TO\_SALIRASIB\_UP | -0.04584 | -0.12829 | -0.77015 | 0.443965 | 0.747615 | -5.5734 |
| JOSEPH\_RESPONSE\_TO\_SODIUM\_BUTYRATE\_UP | 0.060827 | 0.008934 | 0.770048 | 0.444025 | 0.747615 | -5.57347 |
| BAUS\_TFF2\_TARGETS\_UP | 0.019115 | -0.56812 | 0.769992 | 0.444058 | 0.747615 | -5.57351 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_NADPH\_OXIDASES | 0.048148 | -0.01264 | 0.769704 | 0.444228 | 0.747703 | -5.57371 |
| DANG\_REGULATED\_BY\_MYC\_DN | 0.03907 | -0.13256 | 0.768736 | 0.444798 | 0.748465 | -5.5744 |
| WP\_PROTEASOME\_DEGRADATION | -0.03585 | -0.46689 | -0.76852 | 0.444924 | 0.748479 | -5.57455 |
| WP\_ASPIRIN\_AND\_MIRNAS | 0.04971 | -0.09099 | 0.767873 | 0.445307 | 0.748926 | -5.57501 |
| REACTOME\_FRUCTOSE\_CATABOLISM | -0.06524 | 0.006419 | -0.76748 | 0.445538 | 0.748959 | -5.57529 |
| MATZUK\_MEIOTIC\_AND\_DNA\_REPAIR | 0.029689 | -0.17778 | 0.767441 | 0.445562 | 0.748959 | -5.57532 |
| PID\_CD8\_TCR\_DOWNSTREAM\_PATHWAY | -0.0331 | -0.19087 | -0.767 | 0.445822 | 0.749138 | -5.57563 |
| BIOCARTA\_INTEGRIN\_PATHWAY | -0.05367 | -0.07415 | -0.76686 | 0.445904 | 0.749138 | -5.57573 |
| REACTOME\_MITOCHONDRIAL\_FATTY\_ACID\_BETA\_OXIDATION | -0.05007 | -0.01389 | -0.76665 | 0.446028 | 0.749148 | -5.57588 |
| KEGG\_BETA\_ALANINE\_METABOLISM | -0.05745 | -0.0028 | -0.76631 | 0.446232 | 0.749179 | -5.57612 |
| DORSAM\_HOXA9\_TARGETS\_DN | 0.048215 | -0.00709 | 0.766163 | 0.446317 | 0.749179 | -5.57622 |
| SHEN\_SMARCA2\_TARGETS\_DN | 0.025979 | -0.34639 | 0.766023 | 0.4464 | 0.749179 | -5.57632 |
| ENK\_UV\_RESPONSE\_EPIDERMIS\_DN | 0.038427 | -0.09405 | 0.765225 | 0.446871 | 0.749773 | -5.57689 |
| GALIE\_TUMOR\_STEMNESS\_GENES | 0.069085 | -0.01222 | 0.764746 | 0.447155 | 0.750051 | -5.57722 |
| BIOCARTA\_SET\_PATHWAY | -0.07973 | 0.007115 | -0.7637 | 0.447775 | 0.750637 | -5.57796 |
| DEBIASI\_APOPTOSIS\_BY\_REOVIRUS\_INFECTION\_DN | -0.03203 | -0.12542 | -0.76369 | 0.447778 | 0.750637 | -5.57797 |
| ROETH\_TERT\_TARGETS\_UP | 0.072274 | -0.02318 | 0.763557 | 0.447858 | 0.750637 | -5.57806 |
| MIKKELSEN\_MEF\_LCP\_WITH\_H3K27ME3 | 0.042806 | -0.11414 | 0.763264 | 0.448031 | 0.75073 | -5.57827 |
| REACTOME\_COLLAGEN\_BIOSYNTHESIS\_AND\_MODIFYING\_ENZYMES | 0.050252 | -0.07425 | 0.762284 | 0.448612 | 0.751505 | -5.57896 |
| MCCLUNG\_COCAINE\_REWARD\_5D | 0.024968 | -0.07856 | 0.760997 | 0.449375 | 0.752585 | -5.57987 |
| WUNDER\_INFLAMMATORY\_RESPONSE\_AND\_CHOLESTEROL\_UP | 0.016834 | -0.54769 | 0.760559 | 0.449635 | 0.752822 | -5.58017 |
| JI\_RESPONSE\_TO\_FSH\_UP | -0.04544 | -0.1407 | -0.75987 | 0.450044 | 0.753286 | -5.58066 |
| REACTOME\_MINERALOCORTICOID\_BIOSYNTHESIS | 0.059278 | -0.40139 | 0.759401 | 0.450323 | 0.753286 | -5.58099 |
| SCHLESINGER\_METHYLATED\_IN\_COLON\_CANCER | 0.042663 | 0.006182 | 0.75935 | 0.450353 | 0.753286 | -5.58102 |
| PID\_TOLL\_ENDOGENOUS\_PATHWAY | 0.06788 | -0.00349 | 0.759295 | 0.450386 | 0.753286 | -5.58106 |
| ALONSO\_METASTASIS\_NEURAL\_UP | 0.048525 | 0.001263 | 0.759059 | 0.450525 | 0.753322 | -5.58123 |
| FOROUTAN\_PRODRANK\_TGFB\_EMT\_DN | 0.03205 | -0.01454 | 0.758176 | 0.45105 | 0.754001 | -5.58184 |
| PID\_EPHRINB\_REV\_PATHWAY | -0.03761 | -0.03889 | -0.75742 | 0.451503 | 0.754045 | -5.58238 |
| NIKOLSKY\_BREAST\_CANCER\_17Q11\_Q21\_AMPLICON | 0.020601 | -0.19224 | 0.7571 | 0.45169 | 0.754045 | -5.5826 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_G2\_G3\_UP | -0.04013 | -0.08325 | -0.757 | 0.45175 | 0.754045 | -5.58267 |
| STREICHER\_LSM1\_TARGETS\_UP | -0.03699 | -0.00259 | -0.75695 | 0.451781 | 0.754045 | -5.5827 |
| REACTOME\_FGFR2C\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.065708 | 0.029774 | 0.75686 | 0.451833 | 0.754045 | -5.58277 |
| BIOCARTA\_NPC\_PATHWAY | -0.08216 | 0.012326 | -0.75671 | 0.451921 | 0.754045 | -5.58287 |
| MARTORIATI\_MDM4\_TARGETS\_NEUROEPITHELIUM\_DN | 0.019059 | -0.12186 | 0.756559 | 0.452012 | 0.754045 | -5.58298 |
| WP\_RAC1PAK1P38MMP2\_PATHWAY | -0.03434 | -0.01992 | -0.75654 | 0.452024 | 0.754045 | -5.58299 |
| RIGGI\_EWING\_SARCOMA\_PROGENITOR\_UP | 0.026379 | -0.06012 | 0.755446 | 0.452675 | 0.754932 | -5.58375 |
| REACTOME\_MET\_ACTIVATES\_RAP1\_AND\_RAC1 | -0.06385 | 0.001689 | -0.75428 | 0.453367 | 0.755884 | -5.58456 |
| TRAYNOR\_RETT\_SYNDROM\_DN | 0.048292 | -0.14305 | 0.753977 | 0.453551 | 0.755884 | -5.58478 |
| ZWANG\_EGF\_INTERVAL\_DN | 0.023398 | -0.12044 | 0.753891 | 0.453602 | 0.755884 | -5.58484 |
| REACTOME\_NICOTINAMIDE\_SALVAGING | 0.036674 | -0.10091 | 0.753064 | 0.454095 | 0.756508 | -5.58541 |
| REACTOME\_NEF\_MEDIATED\_CD8\_DOWN\_REGULATION | -0.06533 | -0.01132 | -0.75256 | 0.454397 | 0.756695 | -5.58576 |
| REACTOME\_TCR\_SIGNALING | -0.03612 | -0.29907 | -0.75248 | 0.454445 | 0.756695 | -5.58582 |
| PID\_S1P\_S1P1\_PATHWAY | 0.06099 | 0.012333 | 0.751975 | 0.454745 | 0.756818 | -5.58617 |
| OHASHI\_AURKB\_TARGETS | -0.0564 | 0.000903 | -0.75156 | 0.454991 | 0.756818 | -5.58646 |
| VECCHI\_GASTRIC\_CANCER\_ADVANCED\_VS\_EARLY\_UP | 0.046834 | -0.09022 | 0.751468 | 0.455048 | 0.756818 | -5.58652 |
| DAVICIONI\_PAX\_FOXO1\_SIGNATURE\_IN\_ARMS\_DN | 0.041643 | -0.01266 | 0.751466 | 0.455049 | 0.756818 | -5.58652 |
| CHANDRAN\_METASTASIS\_DN | -0.02947 | -0.09097 | -0.7513 | 0.455148 | 0.756818 | -5.58664 |
| BIOCARTA\_IL7\_PATHWAY | -0.06738 | -0.00772 | -0.75116 | 0.455232 | 0.756818 | -5.58674 |
| VERHAAK\_GLIOBLASTOMA\_CLASSICAL | -0.02943 | -0.08485 | -0.75061 | 0.455563 | 0.757104 | -5.58712 |
| REACTOME\_SEALING\_OF\_THE\_NUCLEAR\_ENVELOPE\_NE\_BY\_ESCRT\_III | -0.03647 | -0.03391 | -0.75047 | 0.455642 | 0.757104 | -5.58721 |
| SEMBA\_FHIT\_TARGETS\_DN | -0.05481 | -0.01275 | -0.74989 | 0.45599 | 0.757305 | -5.58761 |
| ELLWOOD\_MYC\_TARGETS\_UP | 0.031695 | -0.37812 | 0.749873 | 0.456002 | 0.757305 | -5.58763 |
| LI\_CYTIDINE\_ANALOGS\_CYCTOTOXICITY | -0.05728 | -0.02471 | -0.74923 | 0.456387 | 0.757747 | -5.58807 |
| NIKOLSKY\_BREAST\_CANCER\_7P22\_AMPLICON | 0.028242 | -0.07774 | 0.748476 | 0.456838 | 0.758169 | -5.5886 |
| WP\_ENDOMETRIAL\_CANCER | -0.03024 | -0.03563 | -0.74841 | 0.456879 | 0.758169 | -5.58864 |
| YORDY\_RECIPROCAL\_REGULATION\_BY\_ETS1\_AND\_SP100\_DN | 0.026776 | -0.18401 | 0.747738 | 0.45728 | 0.758581 | -5.58911 |
| IVANOV\_MUTATED\_IN\_COLON\_CANCER | -0.04533 | -0.31714 | -0.74759 | 0.457366 | 0.758581 | -5.5892 |
| SABATES\_COLORECTAL\_ADENOMA\_DN | 0.026407 | -0.06704 | 0.746966 | 0.457743 | 0.759008 | -5.58964 |
| BIOCARTA\_CHEMICAL\_PATHWAY | -0.06126 | -0.00166 | -0.7462 | 0.458203 | 0.75922 | -5.59017 |
| WP\_ERBB\_SIGNALING\_PATHWAY | -0.03189 | -0.01618 | -0.74603 | 0.458301 | 0.75922 | -5.59028 |
| WP\_SEROTONIN\_TRANSPORTER\_ACTIVITY | 0.059129 | -0.00985 | 0.74599 | 0.458328 | 0.75922 | -5.59031 |
| CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_DN | 0.046555 | -0.14685 | 0.745957 | 0.458348 | 0.75922 | -5.59033 |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_ASSOCIATION\_WITH\_CO\_FACTORS | 0.047396 | -0.05668 | 0.745311 | 0.458735 | 0.759659 | -5.59078 |
| KEGG\_P53\_SIGNALING\_PATHWAY | 0.029854 | -0.02876 | 0.74497 | 0.45894 | 0.759659 | -5.59101 |
| FIRESTEIN\_CTNNB1\_PATHWAY | -0.03652 | -0.05883 | -0.74485 | 0.459011 | 0.759659 | -5.5911 |
| SYED\_ESTRADIOL\_RESPONSE | 0.034992 | -0.37504 | 0.744648 | 0.459134 | 0.759659 | -5.59124 |
| WP\_PATHWAYS\_AFFECTED\_IN\_ADENOID\_CYSTIC\_CARCINOMA | -0.03674 | -0.09637 | -0.74452 | 0.459209 | 0.759659 | -5.59132 |
| REACTOME\_CYCLIN\_A\_B1\_B2\_ASSOCIATED\_EVENTS\_DURING\_G2\_M\_TRANSITION | -0.04787 | -0.04303 | -0.74383 | 0.459627 | 0.760027 | -5.5918 |
| ZHENG\_FOXP3\_TARGETS\_IN\_THYMUS\_UP | -0.05455 | -0.03578 | -0.74349 | 0.459829 | 0.760027 | -5.59203 |
| REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX | -0.06364 | -0.00573 | -0.74336 | 0.459907 | 0.760027 | -5.59212 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_POS\_PATIENT\_LUNG\_TISSUE\_DN | -0.03247 | -0.1366 | -0.74323 | 0.459985 | 0.760027 | -5.59221 |
| ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_UP | -0.03349 | -0.09504 | -0.7431 | 0.460062 | 0.760027 | -5.5923 |
| MIKKELSEN\_PLURIPOTENT\_STATE\_UP | -0.05067 | -0.08296 | -0.74296 | 0.460148 | 0.760027 | -5.5924 |
| REACTOME\_TRANSFERRIN\_ENDOCYTOSIS\_AND\_RECYCLING | 0.040366 | -0.19092 | 0.742457 | 0.46045 | 0.760329 | -5.59274 |
| REACTOME\_ATTENUATION\_PHASE | -0.039 | -0.31313 | -0.74183 | 0.460828 | 0.760622 | -5.59317 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L1\_G1\_UP | -0.06018 | -0.07001 | -0.74176 | 0.460867 | 0.760622 | -5.59322 |
| MASSARWEH\_TAMOXIFEN\_RESISTANCE\_UP | -0.03255 | -0.09567 | -0.7413 | 0.461148 | 0.760657 | -5.59354 |
| REACTOME\_TIGHT\_JUNCTION\_INTERACTIONS | 0.04032 | -0.0477 | 0.74111 | 0.461261 | 0.760657 | -5.59366 |
| REACTOME\_INTERLEUKIN\_12\_FAMILY\_SIGNALING | 0.048181 | -0.07254 | 0.740866 | 0.461408 | 0.760657 | -5.59383 |
| FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP | -0.03835 | -0.10749 | -0.7407 | 0.461511 | 0.760657 | -5.59395 |
| REACTOME\_CREATINE\_METABOLISM | 0.05723 | 0.012706 | 0.740563 | 0.461591 | 0.760657 | -5.59404 |
| REACTOME\_SYNTHESIS\_OF\_EPOXY\_EET\_AND\_DIHYDROXYEICOSATRIENOIC\_ACIDS\_DHET | -0.05893 | 0.005653 | -0.74054 | 0.461605 | 0.760657 | -5.59406 |
| KEGG\_PHOSPHATIDYLINOSITOL\_SIGNALING\_SYSTEM | -0.02783 | -0.06671 | -0.74009 | 0.461877 | 0.760907 | -5.59436 |
| KENNY\_CTNNB1\_TARGETS\_UP | -0.04541 | 0.003759 | -0.73965 | 0.462143 | 0.761148 | -5.59467 |
| REACTOME\_LYSINE\_CATABOLISM | -0.04646 | -0.00313 | -0.73938 | 0.462302 | 0.761213 | -5.59485 |
| BILBAN\_B\_CLL\_LPL\_UP | -0.03295 | -0.06652 | -0.73836 | 0.462921 | 0.761597 | -5.59555 |
| HUANG\_FOXA2\_TARGETS\_DN | 0.047552 | -0.02097 | 0.738354 | 0.462922 | 0.761597 | -5.59555 |
| REACTOME\_EPH\_EPHRIN\_MEDIATED\_REPULSION\_OF\_CELLS | 0.034168 | -0.02565 | 0.738219 | 0.463004 | 0.761597 | -5.59564 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_LATE\_DN | 0.052851 | -0.0231 | 0.738203 | 0.463014 | 0.761597 | -5.59565 |
| BIOCARTA\_TRKA\_PATHWAY | -0.04278 | -0.06146 | -0.73756 | 0.463401 | 0.761844 | -5.59609 |
| HOLLERN\_ADENOMYOEPITHELIAL\_BREAST\_TUMOR | 0.027386 | -0.46414 | 0.737557 | 0.463403 | 0.761844 | -5.59609 |
| MALONEY\_RESPONSE\_TO\_17AAG\_DN | -0.0617 | -0.05884 | -0.73708 | 0.463694 | 0.762125 | -5.59642 |
| NIKOLSKY\_BREAST\_CANCER\_19Q13.1\_AMPLICON | -0.05027 | -0.00083 | -0.73665 | 0.463954 | 0.762355 | -5.59671 |
| HADDAD\_T\_LYMPHOCYTE\_AND\_NK\_PROGENITOR\_UP | -0.04185 | -0.06467 | -0.73601 | 0.46434 | 0.762725 | -5.59715 |
| BRUNEAU\_SEPTATION\_VENTRICULAR | -0.04326 | -0.09846 | -0.73545 | 0.464676 | 0.762725 | -5.59753 |
| IZADPANAH\_STEM\_CELL\_ADIPOSE\_VS\_BONE\_DN | -0.03899 | -0.09697 | -0.73539 | 0.464713 | 0.762725 | -5.59757 |
| PASTURAL\_RIZ1\_TARGETS\_DN | -0.0592 | -0.18124 | -0.73537 | 0.464723 | 0.762725 | -5.59758 |
| REACTOME\_WAX\_AND\_PLASMALOGEN\_BIOSYNTHESIS | -0.06683 | -0.01616 | -0.73528 | 0.464778 | 0.762725 | -5.59764 |
| WHITFIELD\_CELL\_CYCLE\_LITERATURE | -0.05684 | -0.02357 | -0.73475 | 0.465102 | 0.762922 | -5.598 |
| BIOCARTA\_IL1R\_PATHWAY | 0.032663 | -0.19845 | 0.734687 | 0.465138 | 0.762922 | -5.59804 |
| PID\_TRKR\_PATHWAY | -0.03569 | -0.04487 | -0.73374 | 0.465709 | 0.763663 | -5.59869 |
| WP\_DRUG\_INDUCTION\_OF\_BILE\_ACID\_PATHWAY | 0.050956 | -0.09523 | 0.732776 | 0.466295 | 0.764426 | -5.59934 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_8 | -0.05787 | -0.00855 | -0.73198 | 0.466777 | 0.764887 | -5.59988 |
| REACTOME\_MYD88\_INDEPENDENT\_TLR4\_CASCADE | 0.036737 | -0.08965 | 0.731767 | 0.466907 | 0.764887 | -5.60002 |
| KAYO\_CALORIE\_RESTRICTION\_MUSCLE\_DN | -0.02214 | -0.21047 | -0.73172 | 0.466937 | 0.764887 | -5.60006 |
| REACTOME\_FATTY\_ACYL\_COA\_BIOSYNTHESIS | -0.02822 | -0.28527 | -0.73076 | 0.467516 | 0.765639 | -5.6007 |
| CERVERA\_SDHB\_TARGETS\_2 | -0.0225 | -0.22959 | -0.73019 | 0.467865 | 0.766013 | -5.60109 |
| REACTOME\_METABOLISM\_OF\_POLYAMINES | -0.04617 | -0.23391 | -0.7297 | 0.468162 | 0.766228 | -5.60142 |
| BIOCARTA\_PLC\_PATHWAY | -0.06342 | 0.001031 | -0.72957 | 0.468237 | 0.766228 | -5.6015 |
| REACTOME\_INFECTIOUS\_DISEASE | -0.03519 | -0.10973 | -0.72846 | 0.468916 | 0.76677 | -5.60226 |
| WP\_H19\_ACTION\_RBE2F1\_SIGNALING\_AND\_CDKBETACATENIN\_ACTIVITY | -0.05803 | -0.0636 | -0.72833 | 0.468996 | 0.76677 | -5.60235 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_7 | -0.08366 | -0.00511 | -0.72819 | 0.469079 | 0.76677 | -5.60244 |
| MCCOLLUM\_GELDANAMYCIN\_RESISTANCE\_UP | -0.04419 | 0.001417 | -0.72799 | 0.469201 | 0.76677 | -5.60257 |
| REACTOME\_SIGNALING\_BY\_NOTCH4 | -0.04173 | -0.21695 | -0.72766 | 0.469404 | 0.76677 | -5.6028 |
| REACTOME\_PURINE\_RIBONUCLEOSIDE\_MONOPHOSPHATE\_BIOSYNTHESIS | -0.06922 | -0.0996 | -0.7275 | 0.4695 | 0.76677 | -5.6029 |
| REACTOME\_SIGNALING\_BY\_THE\_B\_CELL\_RECEPTOR\_BCR | -0.0492 | -0.14638 | -0.7274 | 0.469561 | 0.76677 | -5.60297 |
| REACTOME\_SYNTHESIS\_OF\_UDP\_N\_ACETYL\_GLUCOSAMINE | 0.074624 | -0.01536 | 0.727342 | 0.469594 | 0.76677 | -5.60301 |
| WP\_ANGIOGENESIS | 0.044154 | -0.00618 | 0.727042 | 0.469777 | 0.76677 | -5.60321 |
| MAHADEVAN\_IMATINIB\_RESISTANCE\_UP | -0.03586 | -0.12782 | -0.72685 | 0.469895 | 0.76677 | -5.60334 |
| RAFFEL\_VEGFA\_TARGETS\_DN | 0.061628 | 0.016363 | 0.726763 | 0.469947 | 0.76677 | -5.6034 |
| REACTOME\_CONSTITUTIVE\_SIGNALING\_BY\_AKT1\_E17K\_IN\_CANCER | -0.03472 | -0.02758 | -0.72665 | 0.470014 | 0.76677 | -5.60347 |
| CHENG\_RESPONSE\_TO\_NICKEL\_ACETATE | -0.0498 | -0.14964 | -0.72589 | 0.470476 | 0.767239 | -5.60398 |
| GOBERT\_OLIGODENDROCYTE\_DIFFERENTIATION\_DN | -0.02574 | -0.0957 | -0.72578 | 0.470542 | 0.767239 | -5.60405 |
| REACTOME\_SEROTONIN\_RECEPTORS | -0.05532 | 0.03411 | -0.72459 | 0.471272 | 0.767689 | -5.60486 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_4 | -0.04239 | -0.11323 | -0.72405 | 0.471597 | 0.767689 | -5.60521 |
| LIU\_SOX4\_TARGETS\_UP | -0.03793 | -0.09983 | -0.72379 | 0.471756 | 0.767689 | -5.60539 |
| WENG\_POR\_TARGETS\_LIVER\_DN | 0.037834 | -0.03005 | 0.723623 | 0.47186 | 0.767689 | -5.6055 |
| ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_DN | -0.04473 | -0.06171 | -0.7234 | 0.471997 | 0.767689 | -5.60565 |
| RODRIGUES\_DCC\_TARGETS\_DN | -0.03785 | -0.14762 | -0.72326 | 0.472079 | 0.767689 | -5.60574 |
| PID\_MYC\_PATHWAY | -0.04564 | -0.06723 | -0.72308 | 0.472193 | 0.767689 | -5.60587 |
| WP\_MALIGNANT\_PLEURAL\_MESOTHELIOMA | 0.019164 | -0.07965 | 0.723074 | 0.472195 | 0.767689 | -5.60587 |
| HO\_LIVER\_CANCER\_VASCULAR\_INVASION | 0.043046 | -0.00051 | 0.723015 | 0.472231 | 0.767689 | -5.60591 |
| KEGG\_NON\_SMALL\_CELL\_LUNG\_CANCER | -0.03692 | -0.12664 | -0.72299 | 0.472243 | 0.767689 | -5.60592 |
| PEART\_HDAC\_PROLIFERATION\_CLUSTER\_UP | -0.04332 | -0.0598 | -0.72273 | 0.472408 | 0.767689 | -5.6061 |
| BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP | -0.03371 | -0.13455 | -0.72255 | 0.472514 | 0.767689 | -5.60622 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX3 | -0.03762 | -0.19701 | -0.72249 | 0.472554 | 0.767689 | -5.60626 |
| WP\_HOSTPATHOGEN\_INTERACTION\_OF\_HUMAN\_CORONAVIRUSES\_AUTOPHAGY | -0.0591 | -0.0566 | -0.7222 | 0.472726 | 0.767689 | -5.60645 |
| REACTOME\_TRAFFICKING\_OF\_GLUR2\_CONTAINING\_AMPA\_RECEPTORS | -0.0364 | -0.11489 | -0.72215 | 0.472756 | 0.767689 | -5.60648 |
| STONER\_ESOPHAGEAL\_CARCINOGENESIS\_UP | -0.04388 | -0.06328 | -0.72207 | 0.472811 | 0.767689 | -5.60654 |
| BIOCARTA\_VIP\_PATHWAY | -0.04858 | -0.03698 | -0.72197 | 0.472869 | 0.767689 | -5.60661 |
| KEGG\_TYPE\_I\_DIABETES\_MELLITUS | 0.012166 | -0.74578 | 0.721528 | 0.473139 | 0.767903 | -5.6069 |
| REACTOME\_PURINE\_CATABOLISM | -0.04803 | -0.01492 | -0.72136 | 0.473242 | 0.767903 | -5.60701 |
| REACTOME\_RND3\_GTPASE\_CYCLE | 0.035727 | -0.0236 | 0.720865 | 0.473543 | 0.768056 | -5.60734 |
| REACTOME\_NONCANONICAL\_ACTIVATION\_OF\_NOTCH3 | 0.069581 | -0.00141 | 0.720809 | 0.473578 | 0.768056 | -5.60738 |
| REACTOME\_HSF1\_DEPENDENT\_TRANSACTIVATION | -0.03652 | -0.25564 | -0.71918 | 0.474573 | 0.769474 | -5.60846 |
| DEURIG\_T\_CELL\_PROLYMPHOCYTIC\_LEUKEMIA\_DN | -0.04757 | -0.08414 | -0.71811 | 0.475232 | 0.770168 | -5.60918 |
| CHUANG\_OXIDATIVE\_STRESS\_RESPONSE\_DN | -0.06212 | -0.00181 | -0.71808 | 0.475245 | 0.770168 | -5.60919 |
| COLLER\_MYC\_TARGETS\_UP | 0.053009 | -0.13497 | 0.717881 | 0.475369 | 0.770168 | -5.60933 |
| WANG\_IMMORTALIZED\_BY\_HOXA9\_AND\_MEIS1\_DN | 0.050007 | -0.00661 | 0.717504 | 0.475601 | 0.770168 | -5.60958 |
| PID\_HES\_HEY\_PATHWAY | 0.038412 | -0.04424 | 0.71744 | 0.47564 | 0.770168 | -5.60962 |
| LEE\_TARGETS\_OF\_PTCH1\_AND\_SUFU\_UP | 0.038602 | -0.10822 | 0.717297 | 0.475727 | 0.770168 | -5.60972 |
| WP\_HEREDITARY\_LEIOMYOMATOSIS\_AND\_RENAL\_CELL\_CARCINOMA\_PATHWAY | -0.05231 | -0.10274 | -0.71539 | 0.476899 | 0.771869 | -5.61098 |
| GENTILE\_UV\_HIGH\_DOSE\_DN | -0.04417 | -0.05522 | -0.71508 | 0.477089 | 0.771923 | -5.61119 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_CTNNB1\_UP | -0.025 | -0.03739 | -0.71494 | 0.477175 | 0.771923 | -5.61128 |
| FRIDMAN\_SENESCENCE\_DN | 0.067339 | -0.00118 | 0.714242 | 0.477602 | 0.772416 | -5.61174 |
| BIOCARTA\_HDAC\_PATHWAY | -0.03288 | -0.03968 | -0.7129 | 0.478426 | 0.773552 | -5.61262 |
| KEGG\_ERBB\_SIGNALING\_PATHWAY | -0.03048 | -0.01814 | -0.7127 | 0.478548 | 0.773553 | -5.61275 |
| TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_UP | -0.04601 | -0.04179 | -0.71234 | 0.478772 | 0.773614 | -5.61299 |
| BARIS\_THYROID\_CANCER\_DN | -0.04076 | -0.13845 | -0.71225 | 0.478829 | 0.773614 | -5.61305 |
| DOUGLAS\_BMI1\_TARGETS\_UP | -0.02848 | -0.06578 | -0.71177 | 0.479122 | 0.7737 | -5.61337 |
| REACTOME\_PERK\_REGULATES\_GENE\_EXPRESSION | -0.06145 | -0.03295 | -0.71176 | 0.479125 | 0.7737 | -5.61337 |
| WP\_SIGNAL\_TRANSDUCTION\_THROUGH\_IL1R | 0.031379 | -0.19227 | 0.711461 | 0.479311 | 0.773804 | -5.61357 |
| WP\_HYPERTROPHY\_MODEL | 0.044198 | -0.05132 | 0.71029 | 0.480032 | 0.774707 | -5.61434 |
| REACTOME\_CATION\_COUPLED\_CHLORIDE\_COTRANSPORTERS | 0.048417 | 0.0224 | 0.709887 | 0.48028 | 0.774707 | -5.61461 |
| REACTOME\_OAS\_ANTIVIRAL\_RESPONSE | 0.068572 | -0.01048 | 0.709817 | 0.480323 | 0.774707 | -5.61465 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_DN | 0.045242 | -0.21555 | 0.709762 | 0.480357 | 0.774707 | -5.61469 |
| KEGG\_GLYCOSPHINGOLIPID\_BIOSYNTHESIS\_LACTO\_AND\_NEOLACTO\_SERIES | 0.035007 | -0.09217 | 0.708382 | 0.481208 | 0.775387 | -5.61559 |
| WP\_EMBRYONIC\_STEM\_CELL\_PLURIPOTENCY\_PATHWAYS | -0.02055 | -0.07728 | -0.70834 | 0.481236 | 0.775387 | -5.61562 |
| REACTOME\_MET\_PROMOTES\_CELL\_MOTILITY | 0.04294 | -0.08701 | 0.708298 | 0.481259 | 0.775387 | -5.61565 |
| PARK\_OSTEOBLAST\_DIFFERENTIATION\_BY\_PHENYLAMIL\_DN | 0.063639 | -0.00636 | 0.707993 | 0.481448 | 0.775387 | -5.61585 |
| REACTOME\_PEXOPHAGY | 0.053851 | -0.16227 | 0.707833 | 0.481547 | 0.775387 | -5.61595 |
| REACTOME\_RECYCLING\_OF\_BILE\_ACIDS\_AND\_SALTS | 0.051124 | -0.0374 | 0.707832 | 0.481547 | 0.775387 | -5.61595 |
| BIOCARTA\_PS1\_PATHWAY | 0.043231 | -0.0772 | 0.707266 | 0.481897 | 0.775387 | -5.61632 |
| SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP | -0.0372 | -0.11256 | -0.70724 | 0.481913 | 0.775387 | -5.61634 |
| REACTOME\_DEFECTIVE\_CHST6\_CAUSES\_MCDC1 | 0.065103 | -0.01 | 0.707149 | 0.481969 | 0.775387 | -5.6164 |
| KIM\_GLIS2\_TARGETS\_UP | 0.023736 | -0.42649 | 0.707102 | 0.481997 | 0.775387 | -5.61643 |
| WANG\_CISPLATIN\_RESPONSE\_AND\_XPC\_UP | 0.025225 | -0.1451 | 0.706885 | 0.482132 | 0.775407 | -5.61657 |
| PID\_FAS\_PATHWAY | -0.0443 | -0.00362 | -0.70631 | 0.482485 | 0.775779 | -5.61695 |
| KEGG\_PROSTATE\_CANCER | -0.03503 | -0.0416 | -0.70583 | 0.482784 | 0.776064 | -5.61726 |
| MONTERO\_THYROID\_CANCER\_POOR\_SURVIVAL\_UP | -0.06889 | -0.03286 | -0.70556 | 0.482949 | 0.776134 | -5.61744 |
| REACTOME\_CALCINEURIN\_ACTIVATES\_NFAT | -0.06008 | 0.014451 | -0.70524 | 0.48315 | 0.776261 | -5.61765 |
| FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_UP | -0.04093 | -0.21245 | -0.70446 | 0.483632 | 0.776839 | -5.61816 |
| WP\_MFAP5\_EFFECT\_ON\_PERMEABILITY\_AND\_MOTILITY\_OF\_ENDOTHELIAL\_CELLS\_VIA\_CYTOSKELETON\_REARRANGEMENT | -0.06043 | -0.07 | -0.70309 | 0.484476 | 0.7778 | -5.61905 |
| WP\_INFLUENCE\_OF\_LAMINOPATHIES\_ON\_WNT\_SIGNALING | 0.039372 | -0.05466 | 0.702922 | 0.484582 | 0.7778 | -5.61916 |
| KYNG\_WERNER\_SYNDROM\_AND\_NORMAL\_AGING\_DN | -0.0312 | -0.09507 | -0.70256 | 0.484808 | 0.7778 | -5.61939 |
| WANG\_RESPONSE\_TO\_ANDROGEN\_UP | -0.05295 | -0.00767 | -0.70229 | 0.484971 | 0.7778 | -5.61956 |
| TAKADA\_GASTRIC\_CANCER\_COPY\_NUMBER\_DN | -0.03003 | -0.00017 | -0.70214 | 0.485067 | 0.7778 | -5.61966 |
| DEBIASI\_APOPTOSIS\_BY\_REOVIRUS\_INFECTION\_UP | -0.03849 | -0.11371 | -0.70201 | 0.485145 | 0.7778 | -5.61975 |
| TESAR\_ALK\_TARGETS\_HUMAN\_ES\_4D\_DN | -0.06085 | 0.014283 | -0.7019 | 0.485213 | 0.7778 | -5.61982 |
| KEGG\_NATURAL\_KILLER\_CELL\_MEDIATED\_CYTOTOXICITY | 0.011966 | -0.68823 | 0.701759 | 0.485302 | 0.7778 | -5.61991 |
| REACTOME\_SIGNALING\_BY\_ALK | 0.041087 | -0.00301 | 0.701703 | 0.485337 | 0.7778 | -5.61995 |
| LE\_NEURONAL\_DIFFERENTIATION\_DN | -0.04394 | -0.06615 | -0.70108 | 0.485721 | 0.7778 | -5.62035 |
| CALVET\_IRINOTECAN\_SENSITIVE\_VS\_REVERTED\_DN | -0.06068 | 0.001701 | -0.70081 | 0.485887 | 0.7778 | -5.62052 |
| FULCHER\_INFLAMMATORY\_RESPONSE\_LECTIN\_VS\_LPS\_DN | 0.036458 | -0.14507 | 0.700722 | 0.485945 | 0.7778 | -5.62058 |
| KASLER\_HDAC7\_TARGETS\_1\_DN | 0.058777 | 0.014453 | 0.700522 | 0.486069 | 0.7778 | -5.62071 |
| NGO\_MALIGNANT\_GLIOMA\_1P\_LOH | -0.0718 | 0.011788 | -0.70052 | 0.486072 | 0.7778 | -5.62072 |
| KEGG\_ABC\_TRANSPORTERS | -0.0247 | -0.27889 | -0.70025 | 0.48624 | 0.7778 | -5.62089 |
| WP\_ANGIOPOIETINLIKE\_PROTEIN\_8\_REGULATORY\_PATHWAY | -0.02745 | -0.0862 | -0.70014 | 0.486307 | 0.7778 | -5.62096 |
| LINDVALL\_IMMORTALIZED\_BY\_TERT\_UP | 0.045128 | -0.09307 | 0.69986 | 0.48648 | 0.7778 | -5.62114 |
| VICENT\_METASTASIS\_UP | -0.04286 | 0.007309 | -0.69973 | 0.486562 | 0.7778 | -5.62123 |
| LIU\_CDX2\_TARGETS\_DN | 0.062193 | 0.026569 | 0.699539 | 0.486679 | 0.7778 | -5.62135 |
| REACTOME\_NITRIC\_OXIDE\_STIMULATES\_GUANYLATE\_CYCLASE | -0.04819 | 0.012948 | -0.6994 | 0.486764 | 0.7778 | -5.62144 |
| REACTOME\_PHOSPHOLIPID\_METABOLISM | -0.02227 | -0.15734 | -0.69906 | 0.486978 | 0.7778 | -5.62166 |
| DORN\_ADENOVIRUS\_INFECTION\_48HR\_UP | 0.043424 | 0.010958 | 0.698972 | 0.487031 | 0.7778 | -5.62172 |
| SIMBULAN\_PARP1\_TARGETS\_UP | 0.055679 | -0.0442 | 0.698736 | 0.487177 | 0.7778 | -5.62187 |
| REACTOME\_SIGNALING\_BY\_MEMBRANE\_TETHERED\_FUSIONS\_OF\_PDGFRA\_OR\_PDGFRB | 0.060592 | -0.01495 | 0.69869 | 0.487206 | 0.7778 | -5.6219 |
| MCCLUNG\_DELTA\_FOSB\_TARGETS\_8WK | 0.030957 | -0.12642 | 0.698401 | 0.487385 | 0.7778 | -5.62209 |
| WP\_SREBF\_AND\_MIR33\_IN\_CHOLESTEROL\_AND\_LIPID\_HOMEOSTASIS | 0.052713 | 0.006575 | 0.698198 | 0.487512 | 0.7778 | -5.62222 |
| REACTOME\_INLA\_MEDIATED\_ENTRY\_OF\_LISTERIA\_MONOCYTOGENES\_INTO\_HOST\_CELLS | 0.056005 | -0.00191 | 0.698167 | 0.487531 | 0.7778 | -5.62224 |
| LEI\_MYB\_TARGETS | 0.032252 | -0.16989 | 0.696419 | 0.488617 | 0.779338 | -5.62336 |
| KARLSSON\_TGFB1\_TARGETS\_UP | -0.05768 | -0.0081 | -0.69595 | 0.488907 | 0.779416 | -5.62366 |
| HOSHIDA\_LIVER\_CANCER\_SURVIVAL\_UP | 0.028785 | -0.21987 | 0.695947 | 0.488911 | 0.779416 | -5.62367 |
| REACTOME\_LECTIN\_PATHWAY\_OF\_COMPLEMENT\_ACTIVATION | 0.06101 | 0.014929 | 0.695546 | 0.489161 | 0.779447 | -5.62393 |
| REACTOME\_SIGNALING\_BY\_EGFR | -0.03614 | -0.04239 | -0.69549 | 0.489195 | 0.779447 | -5.62396 |
| REACTOME\_SIGNAL\_TRANSDUCTION\_BY\_L1 | -0.04633 | -0.20705 | -0.69516 | 0.489403 | 0.779447 | -5.62418 |
| KEGG\_CARDIAC\_MUSCLE\_CONTRACTION | -0.02759 | -0.03507 | -0.69513 | 0.48942 | 0.779447 | -5.6242 |
| WP\_TRYPTOPHAN\_METABOLISM | -0.02896 | -0.01943 | -0.69431 | 0.48993 | 0.780064 | -5.62472 |
| WP\_DEGRADATION\_PATHWAY\_OF\_SPHINGOLIPIDS\_INCLUDING\_DISEASES | 0.036608 | -0.42029 | 0.693896 | 0.490188 | 0.780279 | -5.62499 |
| WANG\_SMARCE1\_TARGETS\_DN | -0.03429 | -0.14202 | -0.6931 | 0.490687 | 0.780732 | -5.6255 |
| REACTOME\_REGULATION\_OF\_RUNX2\_EXPRESSION\_AND\_ACTIVITY | -0.04152 | -0.20195 | -0.69305 | 0.490717 | 0.780732 | -5.62553 |
| REACTOME\_SIGNALING\_BY\_NOTCH3 | 0.030945 | -0.0652 | 0.692061 | 0.491332 | 0.781514 | -5.62616 |
| REACTOME\_SIGNALING\_BY\_NOTCH | -0.03319 | -0.12964 | -0.69165 | 0.491591 | 0.781731 | -5.62643 |
| REACTOME\_UNWINDING\_OF\_DNA | -0.06053 | -0.00649 | -0.69102 | 0.491979 | 0.781971 | -5.62683 |
| REACTOME\_BETA\_OXIDATION\_OF\_HEXANOYL\_COA\_TO\_BUTANOYL\_COA | -0.08347 | -0.01841 | -0.69069 | 0.492189 | 0.781971 | -5.62704 |
| WP\_MODULATORS\_OF\_TCR\_SIGNALING\_AND\_T\_CELL\_ACTIVATION | 0.055043 | -0.04909 | 0.690615 | 0.492234 | 0.781971 | -5.62709 |
| MARSON\_BOUND\_BY\_FOXP3\_STIMULATED | -0.03587 | -0.09228 | -0.69049 | 0.492313 | 0.781971 | -5.62717 |
| BIOCARTA\_CXCR4\_PATHWAY | -0.05668 | -0.0877 | -0.69034 | 0.492408 | 0.781971 | -5.62727 |
| REACTOME\_NEPHRIN\_FAMILY\_INTERACTIONS | -0.04124 | -0.05093 | -0.69022 | 0.492479 | 0.781971 | -5.62734 |
| KEGG\_SULFUR\_METABOLISM | 0.04879 | -0.00163 | 0.689825 | 0.492728 | 0.78217 | -5.62759 |
| REACTOME\_INTERLEUKIN\_15\_SIGNALING | 0.051033 | -0.00326 | 0.689173 | 0.493136 | 0.7823 | -5.62801 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM2 | 0.026645 | -0.08669 | 0.68915 | 0.49315 | 0.7823 | -5.62802 |
| REACTOME\_SMOOTH\_MUSCLE\_CONTRACTION | -0.05251 | -0.01958 | -0.68901 | 0.493235 | 0.7823 | -5.62811 |
| DORN\_ADENOVIRUS\_INFECTION\_48HR\_DN | 0.045897 | -0.14616 | 0.688907 | 0.493301 | 0.7823 | -5.62818 |
| REACTOME\_ANTIVIRAL\_MECHANISM\_BY\_IFN\_STIMULATED\_GENES | -0.05535 | -0.009 | -0.68848 | 0.493567 | 0.782449 | -5.62845 |
| GUILLAUMOND\_KLF10\_TARGETS\_UP | -0.02922 | -0.05807 | -0.68819 | 0.493752 | 0.782449 | -5.62864 |
| WANG\_TARGETS\_OF\_MLL\_CBP\_FUSION\_DN | -0.06745 | 0.007327 | -0.68817 | 0.493764 | 0.782449 | -5.62865 |
| LIM\_MAMMARY\_LUMINAL\_MATURE\_UP | 0.017043 | -0.09087 | 0.687836 | 0.493972 | 0.782583 | -5.62886 |
| MARTINEZ\_RESPONSE\_TO\_TRABECTEDIN | -0.05663 | -0.02394 | -0.68695 | 0.494527 | 0.783189 | -5.62942 |
| REACTOME\_REGULATION\_OF\_GENE\_EXPRESSION\_BY\_HYPOXIA\_INDUCIBLE\_FACTOR | 0.049899 | -0.01422 | 0.686676 | 0.494698 | 0.783189 | -5.6296 |
| REACTOME\_IRAK4\_DEFICIENCY\_TLR2\_4 | 0.056621 | 0.00081 | 0.6866 | 0.494746 | 0.783189 | -5.62965 |
| MURAKAMI\_UV\_RESPONSE\_24HR | -0.0296 | -0.26129 | -0.68644 | 0.494847 | 0.783189 | -5.62975 |
| HOOI\_ST7\_TARGETS\_DN | 0.025854 | -0.03326 | 0.685643 | 0.495345 | 0.783617 | -5.63025 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_MACROPHAGE | 0.040419 | -0.1415 | 0.685614 | 0.495363 | 0.783617 | -5.63027 |
| WANG\_TUMOR\_INVASIVENESS\_UP | -0.04306 | -0.09272 | -0.68398 | 0.496385 | 0.784571 | -5.6313 |
| KIM\_HYPOXIA | 0.052205 | -0.06052 | 0.68388 | 0.49645 | 0.784571 | -5.63137 |
| DACOSTA\_ERCC3\_ALLELE\_XPCS\_VS\_TTD\_DN | 0.043738 | -0.04377 | 0.683878 | 0.496451 | 0.784571 | -5.63137 |
| WP\_SARSCOV2\_AND\_ACE2\_RECEPTOR\_MOLECULAR\_MECHANISMS | 0.061197 | 0.022095 | 0.683815 | 0.496491 | 0.784571 | -5.63141 |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_DN | 0.06126 | -0.01934 | 0.682873 | 0.497082 | 0.784571 | -5.63201 |
| REACTOME\_SIGNALLING\_TO\_RAS | 0.036179 | -0.04399 | 0.68276 | 0.497153 | 0.784571 | -5.63208 |
| REACTOME\_NON\_INTEGRIN\_MEMBRANE\_ECM\_INTERACTIONS | 0.036394 | -0.12455 | 0.682726 | 0.497175 | 0.784571 | -5.6321 |
| REACTOME\_SUMO\_IS\_TRANSFERRED\_FROM\_E1\_TO\_E2\_UBE2I\_UBC9 | -0.06366 | -0.01171 | -0.68261 | 0.497246 | 0.784571 | -5.63217 |
| SHARMA\_PILOCYTIC\_ASTROCYTOMA\_LOCATION\_UP | -0.0329 | -0.20612 | -0.68258 | 0.497263 | 0.784571 | -5.63219 |
| SHAFFER\_IRF4\_TARGETS\_IN\_PLASMA\_CELL\_VS\_MATURE\_B\_LYMPHOCYTE | 0.048201 | -0.03998 | 0.681786 | 0.497765 | 0.784571 | -5.63269 |
| REACTOME\_MET\_ACTIVATES\_RAS\_SIGNALING | -0.04937 | -0.08552 | -0.68148 | 0.497958 | 0.784571 | -5.63289 |
| BIOCARTA\_GATA3\_PATHWAY | 0.051659 | -0.04521 | 0.681293 | 0.498075 | 0.784571 | -5.633 |
| REACTOME\_RHOD\_GTPASE\_CYCLE | -0.04124 | -0.01893 | -0.68127 | 0.498086 | 0.784571 | -5.63302 |
| REACTOME\_POTENTIAL\_THERAPEUTICS\_FOR\_SARS | -0.03607 | -0.10292 | -0.68113 | 0.498178 | 0.784571 | -5.63311 |
| BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_UP | -0.02666 | -0.10698 | -0.68065 | 0.498481 | 0.784571 | -5.63341 |
| CHEN\_LVAD\_SUPPORT\_OF\_FAILING\_HEART\_UP | 0.051551 | 0.002617 | 0.680223 | 0.498748 | 0.784571 | -5.63368 |
| KYNG\_WERNER\_SYNDROM\_DN | -0.05237 | -0.06678 | -0.68006 | 0.498852 | 0.784571 | -5.63378 |
| MIKKELSEN\_IPS\_HCP\_WITH\_H3\_UNMETHYLATED | 0.043941 | -0.03726 | 0.679812 | 0.499006 | 0.784571 | -5.63394 |
| BIOCARTA\_EDG1\_PATHWAY | 0.047237 | -0.00897 | 0.679629 | 0.499121 | 0.784571 | -5.63405 |
| ULE\_SPLICING\_VIA\_NOVA2 | -0.0284 | -0.0296 | -0.67931 | 0.499319 | 0.784571 | -5.63425 |
| KEGG\_CELL\_CYCLE | -0.03961 | -0.04089 | -0.6793 | 0.49933 | 0.784571 | -5.63426 |
| GRANDVAUX\_IRF3\_TARGETS\_UP | 0.060526 | -0.00804 | 0.679026 | 0.499501 | 0.784571 | -5.63443 |
| BIOCARTA\_TNFR2\_PATHWAY | 0.061062 | -0.04933 | 0.678856 | 0.499608 | 0.784571 | -5.63454 |
| REACTOME\_L1CAM\_INTERACTIONS | 0.025485 | -0.05956 | 0.678612 | 0.499762 | 0.784571 | -5.63469 |
| RIZKI\_TUMOR\_INVASIVENESS\_3D\_UP | -0.02159 | -0.11515 | -0.67856 | 0.499792 | 0.784571 | -5.63472 |
| REACTOME\_INITIATION\_OF\_NUCLEAR\_ENVELOPE\_NE\_REFORMATION | -0.06012 | -0.05571 | -0.67856 | 0.499795 | 0.784571 | -5.63473 |
| MARIADASON\_RESPONSE\_TO\_CURCUMIN\_SULINDAC\_5 | -0.04651 | 0.006515 | -0.67854 | 0.499806 | 0.784571 | -5.63474 |
| WP\_ZINC\_HOMEOSTASIS | 0.027841 | -0.16932 | 0.67846 | 0.499857 | 0.784571 | -5.63479 |
| CARD\_MIR302A\_TARGETS | -0.03856 | -0.04409 | -0.67841 | 0.499887 | 0.784571 | -5.63482 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR3\_SIGNALING | 0.03281 | 0.00012 | 0.678152 | 0.500051 | 0.784571 | -5.63498 |
| REACTOME\_RECYCLING\_PATHWAY\_OF\_L1 | 0.035787 | -0.02296 | 0.677842 | 0.500246 | 0.784571 | -5.63517 |
| KOBAYASHI\_EGFR\_SIGNALING\_24HR\_UP | 0.03493 | -0.1028 | 0.677837 | 0.50025 | 0.784571 | -5.63518 |
| LIU\_CMYB\_TARGETS\_DN | -0.0766 | -0.00995 | -0.67772 | 0.500321 | 0.784571 | -5.63525 |
| REACTOME\_SYNTHESIS\_OF\_PIPS\_AT\_THE\_EARLY\_ENDOSOME\_MEMBRANE | -0.04559 | -0.05541 | -0.67771 | 0.500331 | 0.784571 | -5.63526 |
| BLALOCK\_ALZHEIMERS\_DISEASE\_UP | -0.02637 | -0.11949 | -0.67734 | 0.500561 | 0.784571 | -5.63549 |
| KOMMAGANI\_TP63\_GAMMA\_TARGETS | 0.055595 | 0.002242 | 0.677266 | 0.500609 | 0.784571 | -5.63554 |
| TARTE\_PLASMA\_CELL\_VS\_PLASMABLAST\_DN | -0.04734 | -0.09921 | -0.67726 | 0.500616 | 0.784571 | -5.63554 |
| BIOCARTA\_NFAT\_PATHWAY | -0.02971 | -0.07358 | -0.67717 | 0.500669 | 0.784571 | -5.6356 |
| ASTON\_MAJOR\_DEPRESSIVE\_DISORDER\_DN | 0.018861 | -0.17149 | 0.676883 | 0.500851 | 0.784571 | -5.63578 |
| VISALA\_RESPONSE\_TO\_HEAT\_SHOCK\_AND\_AGING\_DN | -0.06345 | 0.012308 | -0.67662 | 0.50102 | 0.784571 | -5.63594 |
| PEDRIOLI\_MIR31\_TARGETS\_UP | 0.021526 | -0.04789 | 0.676613 | 0.501021 | 0.784571 | -5.63595 |
| PID\_IL2\_1PATHWAY | -0.04252 | -0.01089 | -0.67564 | 0.501638 | 0.785344 | -5.63656 |
| PID\_HEDGEHOG\_2PATHWAY | -0.03802 | -0.04016 | -0.67535 | 0.501816 | 0.785345 | -5.63673 |
| JAZAERI\_BREAST\_CANCER\_BRCA1\_VS\_BRCA2\_UP | -0.04622 | -0.06428 | -0.67512 | 0.501965 | 0.785345 | -5.63688 |
| DORN\_ADENOVIRUS\_INFECTION\_12HR\_DN | 0.04825 | -0.17332 | 0.674817 | 0.502154 | 0.785345 | -5.63707 |
| MULLIGHAN\_MLL\_SIGNATURE\_2\_DN | -0.02258 | -0.19557 | -0.67474 | 0.502201 | 0.785345 | -5.63711 |
| BIOCARTA\_BARR\_MAPK\_PATHWAY | 0.034996 | 0.002621 | 0.674657 | 0.502256 | 0.785345 | -5.63717 |
| ZHENG\_BOUND\_BY\_FOXP3 | -0.03733 | -0.05643 | -0.67348 | 0.503 | 0.786315 | -5.6379 |
| LEIN\_LOCALIZED\_TO\_DISTAL\_AND\_PROXIMAL\_DENDRITES | 0.043497 | ####### | 0.672616 | 0.503545 | 0.786974 | -5.63844 |
| SATOH\_COLORECTAL\_CANCER\_MYC\_UP | -0.04943 | -0.03492 | -0.6716 | 0.504185 | 0.787644 | -5.63907 |
| IBRAHIM\_NRF2\_UP | -0.04984 | -0.02141 | -0.67155 | 0.504221 | 0.787644 | -5.63911 |
| ONGUSAHA\_BRCA1\_TARGETS\_DN | 0.046373 | 0.002008 | 0.670862 | 0.504655 | 0.787951 | -5.63953 |
| CHUNG\_BLISTER\_CYTOTOXICITY\_DN | -0.04829 | -0.00727 | -0.67085 | 0.504665 | 0.787951 | -5.63954 |
| WP\_PRION\_DISEASE\_PATHWAY | -0.05432 | -0.03482 | -0.66989 | 0.505272 | 0.788569 | -5.64014 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_4\_DN | -0.03852 | -0.06874 | -0.66979 | 0.505333 | 0.788569 | -5.6402 |
| REACTOME\_PTK6\_REGULATES\_CELL\_CYCLE | 0.055342 | -0.01796 | 0.669491 | 0.505523 | 0.788569 | -5.64038 |
| DUTTA\_APOPTOSIS\_VIA\_NFKB | 0.031339 | -0.26245 | 0.669438 | 0.505556 | 0.788569 | -5.64041 |
| REACTOME\_MOLECULES\_ASSOCIATED\_WITH\_ELASTIC\_FIBRES | -0.04317 | 0.010254 | -0.669 | 0.505834 | 0.788664 | -5.64069 |
| REACTOME\_DEFECTIVE\_LFNG\_CAUSES\_SCDO3 | -0.04889 | -0.34067 | -0.66895 | 0.505865 | 0.788664 | -5.64072 |
| GRANDVAUX\_IFN\_RESPONSE\_NOT\_VIA\_IRF3 | 0.05654 | -0.12424 | 0.668363 | 0.506237 | 0.789051 | -5.64108 |
| KIM\_LRRC3B\_TARGETS | 0.01413 | -0.65855 | 0.667871 | 0.50655 | 0.789334 | -5.64138 |
| MARIADASON\_RESPONSE\_TO\_CURCUMIN\_SULINDAC\_7 | 0.051469 | 0.007216 | 0.667686 | 0.506667 | 0.789334 | -5.6415 |
| REACTOME\_PI3K\_AKT\_SIGNALING\_IN\_CANCER | 0.019254 | -0.00712 | 0.66715 | 0.507007 | 0.789671 | -5.64183 |
| REACTOME\_KINESINS | 0.027366 | -0.05133 | 0.666586 | 0.507365 | 0.790035 | -5.64218 |
| REACTOME\_B\_WICH\_COMPLEX\_POSITIVELY\_REGULATES\_RRNA\_EXPRESSION | -0.04849 | 0.001203 | -0.6657 | 0.507929 | 0.790719 | -5.64273 |
| WP\_DEVELOPMENT\_OF\_URETERIC\_COLLECTION\_SYSTEM | 0.034982 | -0.06051 | 0.665001 | 0.508372 | 0.791201 | -5.64316 |
| REACTOME\_UPTAKE\_AND\_FUNCTION\_OF\_DIPHTHERIA\_TOXIN | 0.08193 | 0.0064 | 0.66461 | 0.50862 | 0.791201 | -5.6434 |
| NIKOLSKY\_OVERCONNECTED\_IN\_BREAST\_CANCER | -0.03819 | -0.00466 | -0.66406 | 0.508972 | 0.791201 | -5.64374 |
| PID\_PDGFRB\_PATHWAY | -0.0444 | -0.04807 | -0.66405 | 0.508979 | 0.791201 | -5.64374 |
| PLASARI\_NFIC\_TARGETS\_BASAL\_DN | 0.050965 | -0.05754 | 0.663888 | 0.509079 | 0.791201 | -5.64384 |
| WP\_WNTBETACATENIN\_SIGNALING\_PATHWAY\_IN\_LEUKEMIA | 0.035973 | -0.03123 | 0.663886 | 0.509081 | 0.791201 | -5.64384 |
| SHIPP\_DLBCL\_CURED\_VS\_FATAL\_DN | -0.0454 | -0.00554 | -0.66371 | 0.509193 | 0.791201 | -5.64395 |
| XU\_RESPONSE\_TO\_TRETINOIN\_AND\_NSC682994\_DN | -0.05866 | -0.00134 | -0.66365 | 0.509233 | 0.791201 | -5.64399 |
| PIONTEK\_PKD1\_TARGETS\_DN | 0.029878 | -0.34873 | 0.663444 | 0.509362 | 0.791208 | -5.64411 |
| HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_DN | 0.037186 | -0.06059 | 0.662642 | 0.509872 | 0.791807 | -5.6446 |
| CHOI\_ATL\_CHRONIC\_VS\_ACUTE\_DN | -0.06863 | -0.01871 | -0.66206 | 0.510245 | 0.792108 | -5.64496 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_AND\_HIF1A\_UP | 0.036439 | -0.12714 | 0.661948 | 0.510315 | 0.792108 | -5.64503 |
| BIOCARTA\_BARRESTIN\_PATHWAY | 0.045228 | 0.004773 | 0.661558 | 0.510563 | 0.79218 | -5.64527 |
| LOPEZ\_TRANSLATION\_VIA\_FN1\_SIGNALING | -0.05229 | 0.006177 | -0.66135 | 0.510695 | 0.79218 | -5.6454 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_MYELOID\_UP | 0.052959 | -0.02958 | 0.661288 | 0.510735 | 0.79218 | -5.64543 |
| ZHANG\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION | 0.033667 | -0.1723 | 0.66101 | 0.510911 | 0.792214 | -5.6456 |
| BIOCARTA\_CELL2CELL\_PATHWAY | -0.03856 | -0.07142 | -0.66086 | 0.511005 | 0.792214 | -5.64569 |
| BIOCARTA\_EICOSANOID\_PATHWAY | 0.034561 | -0.05057 | 0.660466 | 0.511258 | 0.792413 | -5.64594 |
| REACTOME\_CALNEXIN\_CALRETICULIN\_CYCLE | -0.0406 | -0.2102 | -0.65989 | 0.511627 | 0.79263 | -5.64629 |
| ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_UP | -0.04326 | -0.11865 | -0.65974 | 0.511722 | 0.79263 | -5.64638 |
| REACTOME\_HS\_GAG\_DEGRADATION | 0.039281 | 0.010807 | 0.659493 | 0.511879 | 0.79263 | -5.64653 |
| HOEBEKE\_LYMPHOID\_STEM\_CELL\_DN | -0.04436 | -0.07335 | -0.65947 | 0.511896 | 0.79263 | -5.64655 |
| GAVIN\_IL2\_RESPONSIVE\_FOXP3\_TARGETS\_DN | -0.05842 | 0.007581 | -0.65912 | 0.512116 | 0.792778 | -5.64676 |
| WP\_NAD\_METABOLISM\_SIRTUINS\_AND\_AGING | 0.052471 | 0.002075 | 0.658381 | 0.512589 | 0.793168 | -5.64721 |
| MORI\_PRE\_BI\_LYMPHOCYTE\_UP | -0.03416 | -0.13635 | -0.65833 | 0.512618 | 0.793168 | -5.64724 |
| WP\_AMINO\_ACID\_METABOLISM\_PATHWAY\_EXCERPT\_HISTIDINE\_CATABOLISM\_EXTENSION | -0.04577 | -0.14376 | -0.65756 | 0.513112 | 0.793572 | -5.64771 |
| WP\_IL6\_SIGNALING\_PATHWAY | -0.05139 | 0.005473 | -0.65754 | 0.513128 | 0.793572 | -5.64773 |
| KANNAN\_TP53\_TARGETS\_DN | 0.030405 | -0.118 | 0.657075 | 0.513423 | 0.79366 | -5.64801 |
| BURTON\_ADIPOGENESIS\_9 | 0.037012 | -0.17041 | 0.657056 | 0.513435 | 0.79366 | -5.64802 |
| REACTOME\_NCAM1\_INTERACTIONS | 0.034349 | -0.01324 | 0.656694 | 0.513666 | 0.793825 | -5.64824 |
| WP\_APOPTOSISRELATED\_NETWORK\_DUE\_TO\_ALTERED\_NOTCH3\_IN\_OVARIAN\_CANCER | 0.033521 | -0.19528 | 0.656053 | 0.514076 | 0.793914 | -5.64863 |
| WP\_KININKALLIKREIN\_PATHWAY | 0.057329 | 0.019977 | 0.655956 | 0.514138 | 0.793914 | -5.64869 |
| MATZUK\_CUMULUS\_EXPANSION | 0.053507 | 0.00213 | 0.655681 | 0.514313 | 0.793914 | -5.64885 |
| REACTOME\_VITAMIN\_B1\_THIAMIN\_METABOLISM | 0.054646 | 0.000521 | 0.655534 | 0.514407 | 0.793914 | -5.64894 |
| MARTORIATI\_MDM4\_TARGETS\_FETAL\_LIVER\_DN | -0.03306 | -0.09215 | -0.65544 | 0.514469 | 0.793914 | -5.649 |
| IRITANI\_MAD1\_TARGETS\_DN | -0.04356 | -0.18502 | -0.65539 | 0.514497 | 0.793914 | -5.64903 |
| BIOCARTA\_IL2\_PATHWAY | -0.04593 | -0.04056 | -0.65521 | 0.514616 | 0.793914 | -5.64914 |
| YAO\_HOXA10\_TARGETS\_VIA\_PROGESTERONE\_DN | 0.044816 | -0.01834 | 0.655043 | 0.514722 | 0.793914 | -5.64924 |
| REACTOME\_SIGNALING\_BY\_BRAF\_AND\_RAF1\_FUSIONS | -0.0365 | -0.02696 | -0.65451 | 0.51506 | 0.794243 | -5.64956 |
| REACTOME\_MECP2\_REGULATES\_TRANSCRIPTION\_FACTORS | -0.05859 | 0.020184 | -0.65395 | 0.515424 | 0.794474 | -5.64991 |
| KOBAYASHI\_EGFR\_SIGNALING\_6HR\_UP | -0.07154 | -0.0249 | -0.65389 | 0.515459 | 0.794474 | -5.64994 |
| REACTOME\_PRESYNAPTIC\_FUNCTION\_OF\_KAINATE\_RECEPTORS | 0.031374 | -0.05111 | 0.653315 | 0.515828 | 0.794707 | -5.65029 |
| RUIZ\_TNC\_TARGETS\_DN | -0.0341 | -0.04691 | -0.65326 | 0.51586 | 0.794707 | -5.65032 |
| REACTOME\_CDC42\_GTPASE\_CYCLE | 0.024637 | -0.06828 | 0.651711 | 0.516856 | 0.795882 | -5.65126 |
| DORN\_ADENOVIRUS\_INFECTION\_32HR\_UP | 0.047508 | 0.005421 | 0.651507 | 0.516987 | 0.795882 | -5.65138 |
| ASTIER\_INTEGRIN\_SIGNALING | 0.03238 | -0.06351 | 0.651462 | 0.517015 | 0.795882 | -5.65141 |
| WP\_MELANOMA | -0.03339 | -0.11692 | -0.65126 | 0.517143 | 0.795882 | -5.65153 |
| WIERENGA\_PML\_INTERACTOME | -0.04106 | -0.16981 | -0.6511 | 0.517249 | 0.795882 | -5.65163 |
| GRADE\_COLON\_AND\_RECTAL\_CANCER\_DN | -0.02468 | -0.08869 | -0.65081 | 0.517435 | 0.795925 | -5.6518 |
| REACTOME\_RHOU\_GTPASE\_CYCLE | -0.03809 | -0.02002 | -0.65067 | 0.517526 | 0.795925 | -5.65189 |
| REACTOME\_VLDL\_ASSEMBLY | 0.060634 | -0.00392 | 0.650111 | 0.517882 | 0.796195 | -5.65222 |
| ROESSLER\_LIVER\_CANCER\_METASTASIS\_UP | -0.02078 | -0.15406 | -0.65 | 0.517952 | 0.796195 | -5.65229 |
| BREDEMEYER\_RAG\_SIGNALING\_VIA\_ATM\_NOT\_VIA\_NFKB\_UP | -0.0273 | -0.17913 | -0.64938 | 0.51835 | 0.796344 | -5.65266 |
| REACTOME\_HOST\_INTERACTIONS\_OF\_HIV\_FACTORS | -0.04414 | -0.13356 | -0.64934 | 0.518377 | 0.796344 | -5.65268 |
| REACTOME\_TRIGLYCERIDE\_METABOLISM | -0.02667 | -0.05052 | -0.64927 | 0.518425 | 0.796344 | -5.65273 |
| STAMBOLSKY\_BOUND\_BY\_MUTATED\_TP53 | 0.040385 | -0.04225 | 0.648639 | 0.518828 | 0.796597 | -5.65311 |
| VALK\_AML\_CLUSTER\_15 | -0.0487 | -0.04737 | -0.64862 | 0.518839 | 0.796597 | -5.65312 |
| MULLIGAN\_NTF3\_SIGNALING\_VIA\_INSR\_AND\_IGF1R\_UP | 0.062813 | 0.002598 | 0.648076 | 0.519189 | 0.796942 | -5.65344 |
| SAMOLS\_TARGETS\_OF\_KHSV\_MIRNAS\_UP | -0.05322 | -0.01138 | -0.64747 | 0.519575 | 0.797342 | -5.6538 |
| AFFAR\_YY1\_TARGETS\_UP | 0.019638 | -0.07256 | 0.646819 | 0.519997 | 0.79738 | -5.6542 |
| REACTOME\_FREE\_FATTY\_ACIDS\_REGULATE\_INSULIN\_SECRETION | 0.040915 | -0.00089 | 0.646557 | 0.520166 | 0.79738 | -5.65435 |
| WHITESIDE\_CISPLATIN\_RESISTANCE\_DN | -0.03835 | -0.36415 | -0.64649 | 0.520209 | 0.79738 | -5.65439 |
| REACTOME\_NOTCH1\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION | -0.03819 | -0.04322 | -0.64622 | 0.52038 | 0.79738 | -5.65455 |
| WP\_SMALL\_LIGAND\_GPCRS | -0.03018 | -0.00223 | -0.64617 | 0.520414 | 0.79738 | -5.65459 |
| CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_DN | 0.042325 | -0.26406 | 0.64606 | 0.520486 | 0.79738 | -5.65465 |
| AKL\_HTLV1\_INFECTION\_DN | -0.04483 | -0.00926 | -0.64589 | 0.520595 | 0.79738 | -5.65475 |
| BIOCARTA\_PRC2\_PATHWAY | -0.04854 | -0.25605 | -0.64588 | 0.520603 | 0.79738 | -5.65476 |
| OUELLET\_OVARIAN\_CANCER\_INVASIVE\_VS\_LMP\_UP | -0.0544 | -0.08489 | -0.64545 | 0.52088 | 0.797612 | -5.65502 |
| CHENG\_TAF7L\_TARGETS | 0.068772 | -0.01545 | 0.644999 | 0.521168 | 0.797862 | -5.65529 |
| REACTOME\_E2F\_ENABLED\_INHIBITION\_OF\_PRE\_REPLICATION\_COMPLEX\_FORMATION | -0.05009 | 0.00601 | -0.64457 | 0.521447 | 0.798097 | -5.65554 |
| PID\_PI3K\_PLC\_TRK\_PATHWAY | -0.03113 | -0.05593 | -0.64266 | 0.522678 | 0.799789 | -5.65668 |
| VANHARANTA\_UTERINE\_FIBROID\_DN | 0.040532 | -0.11798 | 0.64241 | 0.522837 | 0.79984 | -5.65683 |
| KEGG\_CIRCADIAN\_RHYTHM\_MAMMAL | 0.05087 | -0.00211 | 0.641679 | 0.523309 | 0.800369 | -5.65726 |
| LUI\_THYROID\_CANCER\_PAX8\_PPARG\_DN | 0.046063 | -0.11188 | 0.641395 | 0.523492 | 0.800457 | -5.65743 |
| ONDER\_CDH1\_TARGETS\_3\_UP | -0.05584 | -0.0043 | -0.6411 | 0.52368 | 0.800541 | -5.6576 |
| REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1 | -0.03901 | -0.02921 | -0.64089 | 0.523821 | 0.800541 | -5.65773 |
| REACTOME\_MEIOSIS | -0.02219 | -0.1128 | -0.64073 | 0.523924 | 0.800541 | -5.65783 |
| DURCHDEWALD\_SKIN\_CARCINOGENESIS\_DN | 0.03058 | -0.03273 | 0.639783 | 0.524533 | 0.801279 | -5.65839 |
| REACTOME\_GLUTAMATE\_AND\_GLUTAMINE\_METABOLISM | -0.03706 | -0.0919 | -0.63953 | 0.524698 | 0.801338 | -5.65854 |
| REACTOME\_SIGNAL\_AMPLIFICATION | 0.026813 | -0.03341 | 0.638686 | 0.525242 | 0.801684 | -5.65904 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C1 | -0.04774 | -0.0491 | -0.63855 | 0.525328 | 0.801684 | -5.65912 |
| BERTUCCI\_INVASIVE\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_UP | -0.03954 | 0.00126 | -0.63842 | 0.525411 | 0.801684 | -5.65919 |
| MCLACHLAN\_DENTAL\_CARIES\_DN | -0.03013 | -0.02941 | -0.63836 | 0.525451 | 0.801684 | -5.65923 |
| LOPEZ\_MBD\_TARGETS | -0.02986 | -0.12367 | -0.63808 | 0.525636 | 0.801684 | -5.6594 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_CLUSTER\_DN | 0.042654 | -0.01073 | 0.638009 | 0.52568 | 0.801684 | -5.65944 |
| GILDEA\_METASTASIS | 0.051699 | -0.0348 | 0.637613 | 0.525937 | 0.801883 | -5.65967 |
| REACTOME\_DIGESTION | 0.041748 | 0.012084 | 0.637179 | 0.526217 | 0.802094 | -5.65993 |
| REACTOME\_METABOLISM\_OF\_FOLATE\_AND\_PTERINES | 0.03757 | -0.07261 | 0.63701 | 0.526327 | 0.802094 | -5.66003 |
| PID\_NETRIN\_PATHWAY | -0.04268 | -0.03481 | -0.63571 | 0.527172 | 0.803189 | -5.6608 |
| HU\_GENOTOXIC\_DAMAGE\_4HR | 0.035537 | -0.25294 | 0.635226 | 0.527482 | 0.803469 | -5.66108 |
| HUMMERICH\_SKIN\_CANCER\_PROGRESSION\_DN | 0.024464 | -0.1787 | 0.634545 | 0.527923 | 0.803936 | -5.66148 |
| FARMER\_BREAST\_CANCER\_APOCRINE\_VS\_LUMINAL | -0.028 | -0.0833 | -0.63424 | 0.528119 | 0.803936 | -5.66166 |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_HYPOXIA | -0.03979 | -0.19602 | -0.63413 | 0.52819 | 0.803936 | -5.66172 |
| SESTO\_RESPONSE\_TO\_UV\_C5 | -0.05205 | -0.00041 | -0.63397 | 0.528293 | 0.803936 | -5.66182 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_4 | 0.067395 | -0.06163 | 0.633766 | 0.528429 | 0.803949 | -5.66194 |
| REACTOME\_RUNX2\_REGULATES\_BONE\_DEVELOPMENT | -0.04204 | -0.0063 | -0.63322 | 0.52878 | 0.804276 | -5.66226 |
| BIOCARTA\_EIF\_PATHWAY | -0.05551 | -0.04984 | -0.63305 | 0.528896 | 0.804276 | -5.66236 |
| CASTELLANO\_HRAS\_AND\_NRAS\_TARGETS\_UP | -0.06898 | -0.03612 | -0.63247 | 0.529273 | 0.804339 | -5.6627 |
| REACTOME\_GRB2\_EVENTS\_IN\_ERBB2\_SIGNALING | 0.03979 | -0.05735 | 0.632306 | 0.529376 | 0.804339 | -5.66279 |
| MAGRANGEAS\_MULTIPLE\_MYELOMA\_IGLL\_VS\_IGLK\_UP | -0.02397 | -0.17723 | -0.63226 | 0.529409 | 0.804339 | -5.66282 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_OF\_GRANULOPOIESIS | 0.039704 | 0.005977 | 0.632096 | 0.529512 | 0.804339 | -5.66292 |
| BIOCARTA\_WNT\_PATHWAY | 0.032757 | -0.00835 | 0.632008 | 0.52957 | 0.804339 | -5.66297 |
| REACTOME\_SIGNALING\_BY\_NOTCH1\_PEST\_DOMAIN\_MUTANTS\_IN\_CANCER | -0.03387 | -0.05422 | -0.6318 | 0.529704 | 0.804351 | -5.66309 |
| REACTOME\_PI3K\_EVENTS\_IN\_ERBB2\_SIGNALING | 0.04307 | 0.010224 | 0.631466 | 0.529921 | 0.804489 | -5.66329 |
| IGLESIAS\_E2F\_TARGETS\_UP | 0.035805 | -0.14871 | 0.631028 | 0.530206 | 0.80473 | -5.66354 |
| MARTORIATI\_MDM4\_TARGETS\_NEUROEPITHELIUM\_UP | 0.028243 | -0.11843 | 0.630817 | 0.530343 | 0.804746 | -5.66367 |
| WP\_NETRINUNC5B\_SIGNALING\_PATHWAY | 0.032428 | -0.1313 | 0.630186 | 0.530754 | 0.805176 | -5.66403 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_4NQO\_IN\_OLD | 0.03029 | -0.36369 | 0.629332 | 0.531309 | 0.805771 | -5.66453 |
| JIANG\_VHL\_TARGETS | -0.03597 | -0.05304 | -0.62919 | 0.531399 | 0.805771 | -5.66461 |
| GENTILE\_UV\_LOW\_DOSE\_UP | 0.022073 | -0.44974 | 0.628659 | 0.531746 | 0.806106 | -5.66492 |
| IBRAHIM\_NRF1\_UP | -0.04361 | -0.0604 | -0.62805 | 0.532144 | 0.806517 | -5.66528 |
| SNIJDERS\_AMPLIFIED\_IN\_HEAD\_AND\_NECK\_TUMORS | 0.040921 | -0.07979 | 0.627513 | 0.532493 | 0.806853 | -5.66559 |
| REACTOME\_GENE\_AND\_PROTEIN\_EXPRESSION\_BY\_JAK\_STAT\_SIGNALING\_AFTER\_INTERLEUKIN\_12\_STIMULATION | 0.048786 | -0.05112 | 0.627035 | 0.532804 | 0.807133 | -5.66587 |
| AUNG\_GASTRIC\_CANCER | 0.016913 | -0.12885 | 0.625972 | 0.533497 | 0.807859 | -5.66649 |
| REACTOME\_CELLULAR\_HEXOSE\_TRANSPORT | 0.031266 | -0.11669 | 0.62591 | 0.533538 | 0.807859 | -5.66652 |
| REACTOME\_SIGNALLING\_TO\_ERKS | -0.0382 | -0.02775 | -0.62515 | 0.534034 | 0.808344 | -5.66696 |
| REACTOME\_SIGNALING\_BY\_RETINOIC\_ACID | 0.025292 | -0.25331 | 0.624981 | 0.534143 | 0.808344 | -5.66706 |
| PEDRIOLI\_MIR31\_TARGETS\_DN | 0.018507 | -0.10498 | 0.624835 | 0.534239 | 0.808344 | -5.66714 |
| KAYO\_CALORIE\_RESTRICTION\_MUSCLE\_UP | 0.027974 | -0.15137 | 0.624475 | 0.534473 | 0.808412 | -5.66735 |
| COLINA\_TARGETS\_OF\_4EBP1\_AND\_4EBP2 | -0.03247 | -0.12645 | -0.62417 | 0.534673 | 0.808412 | -5.66753 |
| MCGARVEY\_SILENCED\_BY\_METHYLATION\_IN\_COLON\_CANCER | 0.029703 | -0.02239 | 0.623846 | 0.534883 | 0.808412 | -5.66772 |
| KAMIKUBO\_MYELOID\_MN1\_NETWORK | -0.05244 | 0.004678 | -0.62366 | 0.535002 | 0.808412 | -5.66782 |
| REACTOME\_SIGNALING\_BY\_LEPTIN | -0.06314 | -0.01085 | -0.62361 | 0.535041 | 0.808412 | -5.66786 |
| REACTOME\_FBXW7\_MUTANTS\_AND\_NOTCH1\_IN\_CANCER | -0.06781 | 0.00059 | -0.6236 | 0.535046 | 0.808412 | -5.66786 |
| BAKKER\_FOXO3\_TARGETS\_UP | 0.032828 | -0.00151 | 0.623192 | 0.535311 | 0.80862 | -5.66809 |
| WP\_ENVELOPE\_PROTEINS\_AND\_THEIR\_POTENTIAL\_ROLES\_IN\_EDMD\_PHYSIOPATHOLOGY | -0.03197 | -0.04439 | -0.62219 | 0.535963 | 0.809414 | -5.66867 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX1\_UP | -0.06323 | 0.006655 | -0.6218 | 0.536219 | 0.809592 | -5.6689 |
| MORI\_SMALL\_PRE\_BII\_LYMPHOCYTE\_DN | -0.03439 | -0.15922 | -0.62162 | 0.536335 | 0.809592 | -5.669 |
| SESTO\_RESPONSE\_TO\_UV\_C3 | 0.03087 | -0.44664 | 0.621177 | 0.536628 | 0.809731 | -5.66926 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_MODERATELY\_VS\_POORLY\_DN | -0.05591 | -0.0049 | -0.62109 | 0.536682 | 0.809731 | -5.6693 |
| WP\_IL4\_SIGNALING\_PATHWAY | 0.040339 | -0.01485 | 0.620726 | 0.536923 | 0.809902 | -5.66952 |
| TIAN\_BHLHA15\_TARGETS | -0.04619 | -0.011 | -0.62052 | 0.537055 | 0.80991 | -5.66963 |
| WP\_ETHANOL\_METABOLISM\_PRODUCTION\_OF\_ROS\_BY\_CYP2E1 | -0.05473 | -0.01539 | -0.62022 | 0.537256 | 0.81002 | -5.66981 |
| GUTIERREZ\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_UP | -0.05462 | -0.00891 | -0.61966 | 0.53762 | 0.810312 | -5.67013 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BONE\_UP | 0.022928 | -0.11725 | 0.619531 | 0.537704 | 0.810312 | -5.6702 |
| REACTOME\_TFAP2\_AP\_2\_FAMILY\_REGULATES\_TRANSCRIPTION\_OF\_CELL\_CYCLE\_FACTORS | 0.059119 | 0.019808 | 0.618728 | 0.53823 | 0.810912 | -5.67066 |
| PID\_FOXM1\_PATHWAY | -0.04351 | -0.0165 | -0.61784 | 0.538815 | 0.811602 | -5.67117 |
| SUBTIL\_PROGESTIN\_TARGETS | 0.034906 | -0.08104 | 0.617325 | 0.539149 | 0.811913 | -5.67147 |
| HASLINGER\_B\_CLL\_WITH\_17P13\_DELETION | 0.049685 | -0.037 | 0.616279 | 0.539835 | 0.812753 | -5.67206 |
| REACTOME\_LEUKOTRIENE\_RECEPTORS | 0.038935 | -0.28192 | 0.615825 | 0.540133 | 0.81284 | -5.67232 |
| WP\_NANOMATERIALINDUCED\_INFLAMMASOME\_ACTIVATION | 0.053732 | -0.10573 | 0.615788 | 0.540157 | 0.81284 | -5.67234 |
| THEILGAARD\_NEUTROPHIL\_AT\_SKIN\_WOUND\_DN | -0.03643 | -0.14179 | -0.61543 | 0.540394 | 0.81284 | -5.67255 |
| KEGG\_ADIPOCYTOKINE\_SIGNALING\_PATHWAY | -0.02208 | -0.21152 | -0.61541 | 0.540403 | 0.81284 | -5.67256 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_UP | -0.02965 | -0.18492 | -0.61516 | 0.540568 | 0.812895 | -5.6727 |
| NELSON\_RESPONSE\_TO\_ANDROGEN\_UP | 0.040655 | -0.02338 | 0.614396 | 0.541071 | 0.813322 | -5.67314 |
| BIOCARTA\_MEF2D\_PATHWAY | -0.05028 | -0.04308 | -0.61417 | 0.541222 | 0.813322 | -5.67327 |
| HATADA\_METHYLATED\_IN\_LUNG\_CANCER\_UP | 0.014151 | -0.04789 | 0.614146 | 0.541235 | 0.813322 | -5.67328 |
| KEGG\_AMYOTROPHIC\_LATERAL\_SCLEROSIS\_ALS | -0.02417 | -0.18021 | -0.61388 | 0.541409 | 0.813335 | -5.67343 |
| MARIADASON\_RESPONSE\_TO\_BUTYRATE\_CURCUMIN\_SULINDAC\_TSA\_8 | -0.04326 | 0.010111 | -0.61349 | 0.541666 | 0.813335 | -5.67365 |
| WATANABE\_RECTAL\_CANCER\_RADIOTHERAPY\_RESPONSIVE\_UP | -0.03461 | -0.1185 | -0.61332 | 0.54178 | 0.813335 | -5.67375 |
| WP\_ERK\_PATHWAY\_IN\_HUNTINGTONS\_DISEASE | -0.03565 | -0.06815 | -0.61291 | 0.542044 | 0.813335 | -5.67398 |
| TUOMISTO\_TUMOR\_SUPPRESSION\_BY\_COL13A1\_UP | 0.02132 | -0.47962 | 0.612844 | 0.54209 | 0.813335 | -5.67402 |
| NIKOLSKY\_BREAST\_CANCER\_11Q12\_Q14\_AMPLICON | 0.018752 | -0.04136 | 0.612699 | 0.542186 | 0.813335 | -5.6741 |
| MODY\_HIPPOCAMPUS\_NEONATAL | 0.032581 | -0.22794 | 0.612629 | 0.542232 | 0.813335 | -5.67414 |
| YU\_BAP1\_TARGETS | -0.03331 | -0.00286 | -0.61258 | 0.542266 | 0.813335 | -5.67417 |
| YUAN\_ZNF143\_PARTNERS | -0.04377 | -0.21641 | -0.61202 | 0.542631 | 0.813394 | -5.67449 |
| SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_UP | -0.0282 | -0.10495 | -0.61198 | 0.542661 | 0.813394 | -5.67451 |
| KEGG\_RNA\_DEGRADATION | -0.03336 | -0.27987 | -0.61157 | 0.542928 | 0.813394 | -5.67474 |
| ONDER\_CDH1\_TARGETS\_1\_UP | 0.024954 | -0.12805 | 0.611531 | 0.542954 | 0.813394 | -5.67477 |
| FAELT\_B\_CLL\_WITH\_VH\_REARRANGEMENTS\_UP | 0.036784 | -0.21676 | 0.611463 | 0.542998 | 0.813394 | -5.6748 |
| REACTOME\_PROTEIN\_FOLDING | -0.0265 | -0.14929 | -0.61135 | 0.543072 | 0.813394 | -5.67487 |
| OLSSON\_E2F3\_TARGETS\_UP | -0.03428 | 0.004457 | -0.6105 | 0.543632 | 0.813627 | -5.67535 |
| PID\_ERBB4\_PATHWAY | -0.02278 | -0.00399 | -0.61023 | 0.543813 | 0.813627 | -5.6755 |
| FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_UP | -0.03792 | -0.17509 | -0.61011 | 0.543891 | 0.813627 | -5.67557 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_QTL\_TRANS | -0.02206 | -0.13807 | -0.6095 | 0.54429 | 0.813627 | -5.67591 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN | 0.023481 | -0.53276 | 0.609496 | 0.544293 | 0.813627 | -5.67592 |
| KEGG\_GLUTATHIONE\_METABOLISM | 0.03186 | -0.06509 | 0.609466 | 0.544313 | 0.813627 | -5.67593 |
| HARRIS\_BRAIN\_CANCER\_PROGENITORS | 0.028388 | -0.04881 | 0.609344 | 0.544393 | 0.813627 | -5.676 |
| KEGG\_PURINE\_METABOLISM | -0.02348 | -0.05403 | -0.60925 | 0.544456 | 0.813627 | -5.67606 |
| MANNE\_COVID19\_NONICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP | 0.027781 | -0.003 | 0.609063 | 0.544578 | 0.813627 | -5.67616 |
| MARTINEZ\_TP53\_TARGETS\_UP | -0.02722 | -0.06879 | -0.60898 | 0.544633 | 0.813627 | -5.67621 |
| WELCSH\_BRCA1\_TARGETS\_UP | -0.04028 | -0.14358 | -0.60887 | 0.544706 | 0.813627 | -5.67627 |
| RAMJAUN\_APOPTOSIS\_BY\_TGFB1\_VIA\_MAPK1\_DN | 0.057792 | -0.00933 | 0.608784 | 0.544762 | 0.813627 | -5.67632 |
| GARY\_CD5\_TARGETS\_UP | 0.026195 | -0.16696 | 0.607772 | 0.545429 | 0.814432 | -5.67689 |
| MARTIN\_INTERACT\_WITH\_HDAC | -0.03871 | -0.03754 | -0.60715 | 0.545836 | 0.814849 | -5.67724 |
| WP\_PREGNANE\_X\_RECEPTOR\_PATHWAY | -0.0254 | -0.03172 | -0.60672 | 0.546123 | 0.814903 | -5.67748 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_AP1\_SURVIVAL\_SIGNALING | 0.027075 | -0.12352 | 0.606712 | 0.546128 | 0.814903 | -5.67749 |
| GROSS\_HYPOXIA\_VIA\_HIF1A\_UP | -0.03351 | -0.15649 | -0.60631 | 0.546395 | 0.814989 | -5.67771 |
| BIOCARTA\_VITCB\_PATHWAY | 0.040539 | -0.01116 | 0.606235 | 0.546443 | 0.814989 | -5.67775 |
| SCHLOSSER\_MYC\_TARGETS\_AND\_SERUM\_RESPONSE\_UP | -0.0466 | -0.09297 | -0.60566 | 0.546823 | 0.815187 | -5.67808 |
| REACTOME\_BIOSYNTHESIS\_OF\_MARESINS | -0.04093 | -0.18009 | -0.60554 | 0.546903 | 0.815187 | -5.67815 |
| BIOCARTA\_EGFR\_SMRTE\_PATHWAY | 0.03606 | 0.00602 | 0.605303 | 0.547058 | 0.815187 | -5.67828 |
| REACTOME\_BUTYROPHILIN\_BTN\_FAMILY\_INTERACTIONS | -0.03882 | -0.00101 | -0.60513 | 0.547174 | 0.815187 | -5.67838 |
| REACTOME\_SIGNALING\_BY\_ERYTHROPOIETIN | -0.04475 | -0.02962 | -0.60503 | 0.547238 | 0.815187 | -5.67843 |
| HESSON\_TUMOR\_SUPPRESSOR\_CLUSTER\_3P21\_3 | -0.04016 | -0.10104 | -0.60487 | 0.547344 | 0.815187 | -5.67852 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T7 | -0.0365 | -0.16302 | -0.60453 | 0.547567 | 0.815296 | -5.67871 |
| HIRSCH\_CELLULAR\_TRANSFORMATION\_SIGNATURE\_DN | -0.03669 | -0.04857 | -0.60402 | 0.547905 | 0.815296 | -5.679 |
| BENPORATH\_NOS\_TARGETS | -0.02374 | -0.17042 | -0.60396 | 0.547948 | 0.815296 | -5.67903 |
| MATTIOLI\_MULTIPLE\_MYELOMA\_SUBGROUPS | -0.02691 | -0.06193 | -0.6037 | 0.548114 | 0.815296 | -5.67917 |
| CASTELLANO\_NRAS\_TARGETS\_UP | 0.024632 | -0.26577 | 0.603534 | 0.548226 | 0.815296 | -5.67927 |
| PID\_NFKAPPAB\_CANONICAL\_PATHWAY | -0.04618 | -0.21065 | -0.60337 | 0.548338 | 0.815296 | -5.67936 |
| PID\_TRAIL\_PATHWAY | -0.04447 | 0.002744 | -0.60332 | 0.548368 | 0.815296 | -5.67939 |
| WP\_THYROID\_STIMULATING\_HORMONE\_TSH\_SIGNALING\_PATHWAY | -0.03601 | -0.04092 | -0.60315 | 0.548481 | 0.815296 | -5.67948 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CASPASE\_ACTIVATORS\_AND\_CASPASES | -0.04667 | -0.00762 | -0.60302 | 0.54857 | 0.815296 | -5.67956 |
| REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_G1\_S\_TRANSITION\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS | -0.04128 | -0.05945 | -0.6021 | 0.549174 | 0.815804 | -5.68007 |
| PID\_TCR\_RAS\_PATHWAY | -0.05816 | -0.05523 | -0.60183 | 0.549351 | 0.815804 | -5.68022 |
| REACTOME\_ZBP1\_DAI\_MEDIATED\_INDUCTION\_OF\_TYPE\_I\_IFNS | 0.041276 | -0.07622 | 0.601773 | 0.549392 | 0.815804 | -5.68025 |
| NIKOLSKY\_BREAST\_CANCER\_19Q13.4\_AMPLICON | -0.00925 | -0.8675 | -0.60151 | 0.549563 | 0.815804 | -5.6804 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD2\_UP | -0.03721 | -0.02806 | -0.60134 | 0.549676 | 0.815804 | -5.68049 |
| PID\_NOTCH\_PATHWAY | -0.02421 | -0.11656 | -0.60134 | 0.549681 | 0.815804 | -5.6805 |
| LE\_SKI\_TARGETS\_UP | 0.042013 | 0.002715 | 0.600294 | 0.55037 | 0.816637 | -5.68108 |
| WP\_NANOPARTICLE\_TRIGGERED\_REGULATED\_NECROSIS | -0.03398 | -0.36749 | -0.59996 | 0.550591 | 0.816773 | -5.68126 |
| REACTOME\_RIP\_MEDIATED\_NFKB\_ACTIVATION\_VIA\_ZBP1 | 0.044941 | -0.08893 | 0.599542 | 0.550869 | 0.81696 | -5.68149 |
| BIOCARTA\_UCALPAIN\_PATHWAY | -0.04346 | -0.01569 | -0.59932 | 0.551016 | 0.81696 | -5.68162 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_DN | 0.024762 | -0.0631 | 0.599119 | 0.551149 | 0.81696 | -5.68173 |
| REACTOME\_ADVANCED\_GLYCOSYLATION\_ENDPRODUCT\_RECEPTOR\_SIGNALING | 0.04094 | -0.27346 | 0.598907 | 0.551289 | 0.81696 | -5.68185 |
| WP\_IL9\_SIGNALING\_PATHWAY | 0.043499 | -0.00717 | 0.598803 | 0.551358 | 0.81696 | -5.6819 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_WITHOUT\_MGMT\_48HR\_DN | 0.02882 | -0.00306 | 0.59843 | 0.551606 | 0.817137 | -5.68211 |
| HOLLERN\_SOLID\_NODULAR\_BREAST\_TUMOR\_UP | -0.04437 | -0.00832 | -0.59819 | 0.551763 | 0.81718 | -5.68224 |
| BIOCARTA\_CARM\_ER\_PATHWAY | -0.04341 | -0.00298 | -0.59684 | 0.552658 | 0.818009 | -5.68299 |
| WP\_LNCRNA\_IN\_CANONICAL\_WNT\_SIGNALING\_AND\_COLORECTAL\_CANCER | -0.01851 | -0.13242 | -0.59683 | 0.552665 | 0.818009 | -5.683 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX3 | -0.06017 | -0.01504 | -0.59643 | 0.552935 | 0.818009 | -5.68322 |
| REACTOME\_PROCESSING\_AND\_ACTIVATION\_OF\_SUMO | -0.05475 | -0.00404 | -0.59633 | 0.552998 | 0.818009 | -5.68327 |
| KEGG\_MAPK\_SIGNALING\_PATHWAY | 0.015194 | -0.13874 | 0.596266 | 0.553042 | 0.818009 | -5.68331 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_15 | -0.0326 | -0.06698 | -0.59619 | 0.553095 | 0.818009 | -5.68335 |
| WP\_GAMMAGLUTAMYL\_CYCLE\_FOR\_THE\_BIOSYNTHESIS\_AND\_DEGRADATION\_OF\_GLUTATHIONE\_INCLUDING\_DISEASES | 0.035843 | -0.02136 | 0.595534 | 0.553527 | 0.818459 | -5.68371 |
| MCDOWELL\_ACUTE\_LUNG\_INJURY\_DN | 0.021961 | -0.20865 | 0.594732 | 0.554061 | 0.818663 | -5.68416 |
| KOINUMA\_COLON\_CANCER\_MSI\_DN | -0.05847 | 0.001313 | -0.59471 | 0.554073 | 0.818663 | -5.68417 |
| DACOSTA\_LOW\_DOSE\_UV\_RESPONSE\_VIA\_ERCC3\_XPCS\_DN | 0.053779 | -0.05372 | 0.594547 | 0.554183 | 0.818663 | -5.68426 |
| KLEIN\_PRIMARY\_EFFUSION\_LYMPHOMA\_DN | 0.032429 | -0.29582 | 0.594458 | 0.554243 | 0.818663 | -5.68431 |
| REACTOME\_MAPK\_TARGETS\_NUCLEAR\_EVENTS\_MEDIATED\_BY\_MAP\_KINASES | 0.032878 | -0.02441 | 0.594267 | 0.55437 | 0.818663 | -5.68441 |
| ROSS\_ACUTE\_MYELOID\_LEUKEMIA\_CBF | -0.02109 | -0.2559 | -0.594 | 0.554547 | 0.818663 | -5.68456 |
| NABA\_BASEMENT\_MEMBRANES | 0.034287 | -0.00153 | 0.593972 | 0.554566 | 0.818663 | -5.68458 |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_UP | 0.053144 | -0.00637 | 0.593512 | 0.554871 | 0.818846 | -5.68483 |
| MOHANKUMAR\_HOXA1\_TARGETS\_DN | 0.018067 | -0.10285 | 0.593297 | 0.555015 | 0.818846 | -5.68495 |
| PEART\_HDAC\_PROLIFERATION\_CLUSTER\_DN | -0.03527 | -0.14503 | -0.59313 | 0.555124 | 0.818846 | -5.68504 |
| RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_UP | 0.031638 | -0.12197 | 0.593012 | 0.555204 | 0.818846 | -5.6851 |
| WU\_HBX\_TARGETS\_2\_DN | 0.036532 | -0.142 | 0.592758 | 0.555373 | 0.818905 | -5.68524 |
| REACTOME\_DEADENYLATION\_OF\_MRNA | -0.03558 | -0.29556 | -0.59195 | 0.555914 | 0.819513 | -5.68569 |
| CHESLER\_BRAIN\_QTL\_CIS | -0.03407 | -0.13013 | -0.59169 | 0.556087 | 0.819578 | -5.68583 |
| REACTOME\_GLUCAGON\_TYPE\_LIGAND\_RECEPTORS | 0.027752 | -0.05179 | 0.59142 | 0.556264 | 0.819604 | -5.68598 |
| SHIPP\_DLBCL\_VS\_FOLLICULAR\_LYMPHOMA\_UP | 0.045601 | -0.05398 | 0.591149 | 0.556444 | 0.819604 | -5.68613 |
| HAHTOLA\_CTCL\_CUTANEOUS | 0.039039 | -0.17474 | 0.591073 | 0.556495 | 0.819604 | -5.68617 |
| GAUTSCHI\_SRC\_SIGNALING | 0.05368 | -0.1105 | 0.590885 | 0.55662 | 0.819604 | -5.68627 |
| DORN\_ADENOVIRUS\_INFECTION\_32HR\_DN | 0.039045 | -0.14204 | 0.590095 | 0.557146 | 0.820099 | -5.6867 |
| BIOCARTA\_RAS\_PATHWAY | -0.05297 | -0.03933 | -0.58999 | 0.557214 | 0.820099 | -5.68676 |
| BIOCARTA\_CERAMIDE\_PATHWAY | -0.04639 | 0.006527 | -0.58915 | 0.557779 | 0.820631 | -5.68722 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_VS\_CD2\_DN | -0.04423 | -0.00246 | -0.58888 | 0.557954 | 0.820631 | -5.68736 |
| PID\_VEGFR1\_2\_PATHWAY | -0.03268 | -0.01549 | -0.58887 | 0.557962 | 0.820631 | -5.68737 |
| HASLINGER\_B\_CLL\_WITH\_MUTATED\_VH\_GENES | -0.04118 | -0.0497 | -0.58844 | 0.558248 | 0.820862 | -5.68761 |
| WP\_TARGET\_OF\_RAPAMYCIN\_TOR\_SIGNALING | -0.03719 | -0.01177 | -0.58815 | 0.558446 | 0.820963 | -5.68777 |
| WP\_TRANSCRIPTIONAL\_ACTIVATION\_BY\_NRF2\_IN\_RESPONSE\_TO\_PHYTOCHEMICALS | 0.044258 | -0.00027 | 0.587579 | 0.558824 | 0.821226 | -5.68808 |
| WP\_PROLACTIN\_SIGNALING\_PATHWAY | 0.037022 | -0.0204 | 0.587218 | 0.559065 | 0.821226 | -5.68827 |
| BIOCARTA\_RAB\_PATHWAY | -0.05495 | -0.01116 | -0.58717 | 0.559095 | 0.821226 | -5.6883 |
| PID\_INSULIN\_PATHWAY | -0.03093 | -0.0278 | -0.5871 | 0.559141 | 0.821226 | -5.68833 |
| WEST\_ADRENOCORTICAL\_TUMOR\_MARKERS\_UP | 0.035267 | -0.04928 | 0.586842 | 0.559316 | 0.821294 | -5.68848 |
| WP\_CONGENITAL\_GENERALIZED\_LIPODYSTROPHY\_CGL | 0.035329 | -0.11229 | 0.586391 | 0.559617 | 0.821364 | -5.68872 |
| PID\_TCR\_JNK\_PATHWAY | -0.05259 | -0.04974 | -0.58638 | 0.559622 | 0.821364 | -5.68873 |
| BIOCARTA\_HER2\_PATHWAY | -0.03856 | -0.04406 | -0.58538 | 0.56029 | 0.821884 | -5.68927 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_FIBROBLAST | 0.032731 | -0.16736 | 0.585318 | 0.560334 | 0.821884 | -5.68931 |
| REACTOME\_SIALIC\_ACID\_METABOLISM | 0.020603 | -0.18224 | 0.585262 | 0.560371 | 0.821884 | -5.68934 |
| TIEN\_INTESTINE\_PROBIOTICS\_2HR\_UP | -0.03875 | -0.05969 | -0.58508 | 0.560493 | 0.821884 | -5.68943 |
| MULLIGAN\_NTF3\_SIGNALING\_VIA\_INSR\_AND\_IGF1R\_DN | -0.04789 | -0.10422 | -0.58487 | 0.560633 | 0.8219 | -5.68955 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX1\_DN | 0.041892 | -0.08962 | 0.584135 | 0.561125 | 0.822432 | -5.68995 |
| MATZUK\_IMPLANTATION\_AND\_UTERINE | -0.02655 | -0.03727 | -0.5835 | 0.561552 | 0.82278 | -5.69029 |
| CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_UP | -0.03999 | -0.19536 | -0.58321 | 0.561741 | 0.82278 | -5.69045 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D7 | -0.03622 | -0.14207 | -0.5832 | 0.56175 | 0.82278 | -5.69045 |
| REACTOME\_RHOH\_GTPASE\_CYCLE | -0.03814 | 0.004043 | -0.58299 | 0.561893 | 0.822799 | -5.69057 |
| KEGG\_GLYCOLYSIS\_GLUCONEOGENESIS | 0.027637 | -0.0815 | 0.58238 | 0.562299 | 0.822965 | -5.6909 |
| VERRECCHIA\_DELAYED\_RESPONSE\_TO\_TGFB1 | 0.031917 | -0.17617 | 0.582304 | 0.56235 | 0.822965 | -5.69094 |
| ITO\_PTTG1\_TARGETS\_UP | 0.049778 | -0.00972 | 0.582137 | 0.562462 | 0.822965 | -5.69103 |
| BIOCARTA\_RAN\_PATHWAY | -0.06109 | 0.036551 | -0.582 | 0.562555 | 0.822965 | -5.6911 |
| KORKOLA\_CHORIOCARCINOMA | 0.046632 | 0.00385 | 0.581604 | 0.562819 | 0.822965 | -5.69132 |
| OHM\_METHYLATED\_IN\_ADULT\_CANCERS | 0.034264 | -0.04282 | 0.581555 | 0.562852 | 0.822965 | -5.69134 |
| WP\_SARSCOV2\_REPLICATION\_ORGANELLE\_FORMATION | 0.059285 | -0.00244 | 0.581467 | 0.562911 | 0.822965 | -5.69139 |
| MORI\_MATURE\_B\_LYMPHOCYTE\_DN | -0.03697 | -0.01922 | -0.58086 | 0.563317 | 0.82315 | -5.69172 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_1 | 0.031091 | -0.12191 | 0.580793 | 0.563362 | 0.82315 | -5.69175 |
| WP\_FLUOROACETIC\_ACID\_TOXICITY | -0.0695 | 0.017661 | -0.5807 | 0.563425 | 0.82315 | -5.6918 |
| PID\_CIRCADIAN\_PATHWAY | 0.035631 | -0.00351 | 0.580081 | 0.563839 | 0.823372 | -5.69214 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_UP | 0.030334 | -0.03288 | 0.579847 | 0.563996 | 0.823372 | -5.69226 |
| REACTOME\_RAC1\_GTPASE\_CYCLE | 0.023133 | -0.0376 | 0.57961 | 0.564155 | 0.823372 | -5.69239 |
| TARTE\_PLASMA\_CELL\_VS\_B\_LYMPHOCYTE\_UP | -0.04074 | -0.15443 | -0.57956 | 0.564187 | 0.823372 | -5.69241 |
| REACTOME\_RESPONSE\_OF\_MTB\_TO\_PHAGOCYTOSIS | 0.038717 | -0.1895 | 0.579404 | 0.564294 | 0.823372 | -5.6925 |
| WANG\_RESPONSE\_TO\_BEXAROTENE\_DN | 0.029304 | -0.04994 | 0.579215 | 0.56442 | 0.823372 | -5.6926 |
| FUJII\_YBX1\_TARGETS\_UP | 0.030106 | -0.16118 | 0.579121 | 0.564483 | 0.823372 | -5.69265 |
| XU\_CREBBP\_TARGETS\_UP | -0.03613 | 0.000303 | -0.57863 | 0.564812 | 0.823663 | -5.69291 |
| RIZKI\_TUMOR\_INVASIVENESS\_2D\_DN | -0.0263 | -0.08952 | -0.57828 | 0.565046 | 0.823815 | -5.6931 |
| ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP | -0.04548 | -0.07403 | -0.57793 | 0.565285 | 0.823974 | -5.69329 |
| REACTOME\_RHOJ\_GTPASE\_CYCLE | -0.03145 | -0.00538 | -0.57748 | 0.565584 | 0.82399 | -5.69353 |
| REACTOME\_NETRIN\_MEDIATED\_REPULSION\_SIGNALS | -0.04339 | 0.005574 | -0.57727 | 0.565726 | 0.82399 | -5.69364 |
| REACTOME\_SUMOYLATION\_OF\_INTRACELLULAR\_RECEPTORS | 0.026116 | -0.00499 | 0.57715 | 0.565806 | 0.82399 | -5.69371 |
| NAKAMURA\_ADIPOGENESIS\_EARLY\_UP | 0.039255 | 0.002734 | 0.577125 | 0.565823 | 0.82399 | -5.69372 |
| WANG\_CLIM2\_TARGETS\_UP | -0.01716 | -0.07151 | -0.57674 | 0.56608 | 0.82399 | -5.69393 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_ACTIVITY\_OF\_TFAP2\_AP\_2\_FAMILY\_TRANSCRIPTION\_FACTORS | 0.04741 | 0.007369 | 0.576595 | 0.566179 | 0.82399 | -5.69401 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_3D\_UP | 0.027196 | -0.06226 | 0.576448 | 0.566277 | 0.82399 | -5.69408 |
| VANTVEER\_BREAST\_CANCER\_BRCA1\_DN | -0.04609 | 0.001675 | -0.57636 | 0.566339 | 0.82399 | -5.69413 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_6 | 0.033517 | -0.04097 | 0.575768 | 0.566734 | 0.82399 | -5.69445 |
| WP\_PARKINUBIQUITIN\_PROTEASOMAL\_SYSTEM\_PATHWAY | -0.02885 | -0.23379 | -0.57569 | 0.56679 | 0.82399 | -5.69449 |
| REACTOME\_INFLAMMASOMES | 0.043379 | -0.00022 | 0.575685 | 0.56679 | 0.82399 | -5.69449 |
| AMUNDSON\_RESPONSE\_TO\_ARSENITE | -0.03096 | -0.12971 | -0.57529 | 0.567058 | 0.82399 | -5.6947 |
| REACTOME\_RHOB\_GTPASE\_CYCLE | -0.02494 | -0.08751 | -0.57523 | 0.567096 | 0.82399 | -5.69473 |
| RIZKI\_TUMOR\_INVASIVENESS\_2D\_UP | -0.0249 | -0.05612 | -0.57497 | 0.567271 | 0.82399 | -5.69487 |
| REACTOME\_RHOBTB2\_GTPASE\_CYCLE | -0.03997 | -0.20324 | -0.57486 | 0.567344 | 0.82399 | -5.69493 |
| PID\_MAPK\_TRK\_PATHWAY | -0.03365 | -0.05723 | -0.57483 | 0.567367 | 0.82399 | -5.69495 |
| BIOCARTA\_CBL\_PATHWAY | 0.046823 | -0.00462 | 0.5744 | 0.567654 | 0.824219 | -5.69518 |
| WP\_3Q29\_COPY\_NUMBER\_VARIATION\_SYNDROME | 0.022787 | 0.000673 | 0.573841 | 0.56803 | 0.824384 | -5.69547 |
| KAPOSI\_LIVER\_CANCER\_MET\_DN | -0.06353 | -0.01369 | -0.57372 | 0.56811 | 0.824384 | -5.69554 |
| TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_UP | 0.040951 | -0.00756 | 0.573653 | 0.568157 | 0.824384 | -5.69557 |
| REACTOME\_COBALAMIN\_CBL\_VITAMIN\_B12\_TRANSPORT\_AND\_METABOLISM | -0.02556 | -0.05893 | -0.57342 | 0.568315 | 0.824425 | -5.6957 |
| TOMLINS\_METASTASIS\_UP | -0.02997 | -0.08196 | -0.57282 | 0.568714 | 0.824817 | -5.69602 |
| MIKKELSEN\_PARTIALLY\_REPROGRAMMED\_TO\_PLURIPOTENCY | 0.041406 | -0.00024 | 0.572594 | 0.568869 | 0.824854 | -5.69614 |
| SARTIPY\_BLUNTED\_BY\_INSULIN\_RESISTANCE\_DN | -0.04282 | -0.06727 | -0.57229 | 0.569076 | 0.824966 | -5.6963 |
| REACTOME\_DEFECTIVE\_EXT2\_CAUSES\_EXOSTOSES\_2 | -0.03997 | 0.022833 | -0.57205 | 0.569239 | 0.825014 | -5.69643 |
| BIOCARTA\_GCR\_PATHWAY | -0.04422 | -0.00153 | -0.57156 | 0.569564 | 0.825298 | -5.69668 |
| DARWICHE\_SQUAMOUS\_CELL\_CARCINOMA\_UP | 0.025739 | -0.03796 | 0.57104 | 0.569916 | 0.82562 | -5.69696 |
| SARTIPY\_NORMAL\_AT\_INSULIN\_RESISTANCE\_DN | -0.03444 | 7.29E-05 | -0.57084 | 0.570049 | 0.825625 | -5.69707 |
| REACTOME\_TRANSCRIPTION\_OF\_E2F\_TARGETS\_UNDER\_NEGATIVE\_CONTROL\_BY\_DREAM\_COMPLEX | -0.0361 | 0.001732 | -0.5699 | 0.570686 | 0.826359 | -5.69757 |
| BIOCARTA\_HIVNEF\_PATHWAY | -0.03073 | -0.17671 | -0.56886 | 0.571388 | 0.827187 | -5.69812 |
| WP\_CELL\_CYCLE | -0.03275 | -0.04099 | -0.56793 | 0.572014 | 0.827876 | -5.6986 |
| PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_UP | 0.037369 | -0.0672 | 0.567766 | 0.572125 | 0.827876 | -5.69869 |
| DESERT\_EXTRACELLULAR\_MATRIX\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | -0.04186 | -0.00299 | -0.56724 | 0.572483 | 0.828207 | -5.69897 |
| WP\_BMP\_SIGNALING\_IN\_EYELID\_DEVELOPMENT | 0.03437 | -0.01372 | 0.56668 | 0.572858 | 0.828561 | -5.69926 |
| ROVERSI\_GLIOMA\_COPY\_NUMBER\_DN | -0.01725 | -0.06273 | -0.56605 | 0.573282 | 0.828908 | -5.69959 |
| ABRAHAM\_ALPC\_VS\_MULTIPLE\_MYELOMA\_UP | 0.043213 | -0.038 | 0.565701 | 0.57352 | 0.828908 | -5.69978 |
| WP\_MECHANOREGULATION\_AND\_PATHOLOGY\_OF\_YAPTAZ\_VIA\_HIPPO\_AND\_NONHIPPO\_MECHANISMS | -0.02591 | -0.0221 | -0.56563 | 0.573567 | 0.828908 | -5.69981 |
| KANG\_AR\_TARGETS\_UP | 0.041003 | -0.00979 | 0.565371 | 0.573742 | 0.828908 | -5.69995 |
| AIYAR\_COBRA1\_TARGETS\_DN | -0.03666 | -0.00868 | -0.56536 | 0.573749 | 0.828908 | -5.69995 |
| CHEMELLO\_SOLEUS\_VS\_EDL\_MYOFIBERS\_DN | 0.056542 | -0.16531 | 0.565003 | 0.573991 | 0.829069 | -5.70014 |
| REACTOME\_IRON\_UPTAKE\_AND\_TRANSPORT | 0.029262 | -0.14212 | 0.564327 | 0.574449 | 0.829189 | -5.7005 |
| NOUZOVA\_METHYLATED\_IN\_APL | 0.020423 | -0.0073 | 0.564305 | 0.574464 | 0.829189 | -5.70051 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_UP | 0.033088 | -0.11231 | 0.564303 | 0.574465 | 0.829189 | -5.70051 |
| THEODOROU\_MAMMARY\_TUMORIGENESIS | -0.02036 | -0.22458 | -0.56371 | 0.574867 | 0.82943 | -5.70082 |
| REACTOME\_SARS\_COV\_2\_INFECTION | -0.03544 | -0.06728 | -0.56332 | 0.575132 | 0.82943 | -5.70102 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_DN | -0.02335 | -0.34317 | -0.56301 | 0.575339 | 0.82943 | -5.70118 |
| SILIGAN\_BOUND\_BY\_EWS\_FLT1\_FUSION | -0.02124 | -0.04604 | -0.56301 | 0.575341 | 0.82943 | -5.70119 |
| REACTOME\_ESTROGEN\_BIOSYNTHESIS | -0.04596 | 0.013464 | -0.56274 | 0.575521 | 0.82943 | -5.70132 |
| LINDGREN\_BLADDER\_CANCER\_HIGH\_RECURRENCE | 0.042245 | -0.00242 | 0.562634 | 0.575595 | 0.82943 | -5.70138 |
| REACTOME\_A\_TETRASACCHARIDE\_LINKER\_SEQUENCE\_IS\_REQUIRED\_FOR\_GAG\_SYNTHESIS | -0.03035 | 0.010944 | -0.5624 | 0.575751 | 0.82943 | -5.7015 |
| BIOCARTA\_MPR\_PATHWAY | -0.0239 | -0.1459 | -0.56237 | 0.575773 | 0.82943 | -5.70152 |
| MCCLUNG\_CREB1\_TARGETS\_DN | -0.02304 | -0.14799 | -0.56232 | 0.575805 | 0.82943 | -5.70154 |
| OHM\_EMBRYONIC\_CARCINOMA\_UP | -0.05585 | -0.0271 | -0.562 | 0.576021 | 0.829554 | -5.70171 |
| FARMER\_BREAST\_CANCER\_BASAL\_VS\_LULMINAL | -0.02428 | -0.05877 | -0.56154 | 0.576333 | 0.829555 | -5.70195 |
| ZHENG\_FOXP3\_TARGETS\_DN | -0.03997 | 0.004965 | -0.56135 | 0.576465 | 0.829555 | -5.70205 |
| KEGG\_FC\_EPSILON\_RI\_SIGNALING\_PATHWAY | 0.020751 | -0.12783 | 0.561299 | 0.576499 | 0.829555 | -5.70208 |
| TERAO\_AOX4\_TARGETS\_HG\_UP | 0.027189 | -0.13465 | 0.561233 | 0.576543 | 0.829555 | -5.70211 |
| WP\_CANCER\_IMMUNOTHERAPY\_BY\_CTLA4\_BLOCKADE | 0.037793 | -0.24933 | 0.560358 | 0.577137 | 0.830029 | -5.70257 |
| WP\_FOCAL\_ADHESION | 0.024968 | -0.07225 | 0.560312 | 0.577168 | 0.830029 | -5.70259 |
| CHICAS\_RB1\_TARGETS\_LOW\_SERUM | -0.02239 | -0.14106 | -0.55998 | 0.577391 | 0.830029 | -5.70276 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_DN | -0.03671 | -0.06553 | -0.55998 | 0.577394 | 0.830029 | -5.70276 |
| REACTOME\_IONOTROPIC\_ACTIVITY\_OF\_KAINATE\_RECEPTORS | -0.04399 | -0.01138 | -0.55964 | 0.577622 | 0.830169 | -5.70294 |
| CASORELLI\_ACUTE\_PROMYELOCYTIC\_LEUKEMIA\_UP | 0.036619 | -0.03374 | 0.55899 | 0.578065 | 0.830617 | -5.70328 |
| BIOCARTA\_FCER1\_PATHWAY | -0.04285 | -0.04361 | -0.55837 | 0.578489 | 0.831039 | -5.7036 |
| YAGI\_AML\_WITH\_11Q23\_REARRANGED | -0.02303 | -0.13262 | -0.55787 | 0.578822 | 0.831178 | -5.70385 |
| WU\_APOPTOSIS\_BY\_CDKN1A\_NOT\_VIA\_TP53 | 0.03053 | -0.3124 | 0.557837 | 0.578847 | 0.831178 | -5.70387 |
| REACTOME\_GABA\_SYNTHESIS\_RELEASE\_REUPTAKE\_AND\_DEGRADATION | 0.028416 | -0.00023 | 0.557359 | 0.579172 | 0.831457 | -5.70412 |
| BROWNE\_HCMV\_INFECTION\_4HR\_UP | 0.021068 | -0.12102 | 0.556971 | 0.579435 | 0.831648 | -5.70432 |
| ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_UP | -0.05027 | 0.01691 | -0.55645 | 0.579788 | 0.831935 | -5.70459 |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_1\_DN | 0.028192 | -0.19247 | 0.556271 | 0.579911 | 0.831935 | -5.70468 |
| PID\_HDAC\_CLASSIII\_PATHWAY | 0.035393 | -0.03635 | 0.556099 | 0.580027 | 0.831935 | -5.70477 |
| WP\_7OXOC\_AND\_7BETAHC\_PATHWAYS | 0.025725 | -0.04328 | 0.555493 | 0.58044 | 0.832339 | -5.70508 |
| RHODES\_CANCER\_META\_SIGNATURE | -0.03721 | -0.19774 | -0.55451 | 0.581107 | 0.832779 | -5.70559 |
| ZHAN\_V1\_LATE\_DIFFERENTIATION\_GENES\_DN | 0.049601 | -0.118 | 0.554365 | 0.581207 | 0.832779 | -5.70567 |
| ABBUD\_LIF\_SIGNALING\_1\_DN | 0.034813 | -0.10242 | 0.554338 | 0.581225 | 0.832779 | -5.70568 |
| LINDVALL\_IMMORTALIZED\_BY\_TERT\_DN | 0.030928 | -0.14088 | 0.554271 | 0.581271 | 0.832779 | -5.70571 |
| KUMAR\_PATHOGEN\_LOAD\_BY\_MACROPHAGES | -0.01063 | -0.16187 | -0.55382 | 0.581579 | 0.833033 | -5.70595 |
| WP\_INTERACTOME\_OF\_POLYCOMB\_REPRESSIVE\_COMPLEX\_2\_PRC2 | -0.04576 | -0.00537 | -0.55294 | 0.582179 | 0.833669 | -5.7064 |
| MATZUK\_SPERMATOCYTE | -0.01717 | -0.18424 | -0.55241 | 0.582538 | 0.833669 | -5.70667 |
| SCIBETTA\_KDM5B\_TARGETS\_UP | 0.045203 | -0.04009 | 0.552345 | 0.582582 | 0.833669 | -5.7067 |
| NADLER\_OBESITY\_DN | 0.029072 | -0.16718 | 0.551795 | 0.582956 | 0.833669 | -5.70698 |
| JISON\_SICKLE\_CELL\_DISEASE\_UP | 0.027459 | -0.21676 | 0.55155 | 0.583123 | 0.833669 | -5.70711 |
| SWEET\_KRAS\_TARGETS\_UP | 0.039624 | -0.0134 | 0.551345 | 0.583263 | 0.833669 | -5.70721 |
| WP\_TYPE\_III\_INTERFERON\_SIGNALING | -0.04406 | -0.09032 | -0.5513 | 0.583292 | 0.833669 | -5.70724 |
| TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_DN | -0.03973 | -0.06447 | -0.55114 | 0.5834 | 0.833669 | -5.70732 |
| REACTOME\_CTLA4\_INHIBITORY\_SIGNALING | -0.03561 | -0.02445 | -0.55099 | 0.583504 | 0.833669 | -5.70739 |
| REACTOME\_BIOSYNTHESIS\_OF\_SPECIALIZED\_PRORESOLVING\_MEDIATORS\_SPMS | -0.02213 | -0.13063 | -0.55091 | 0.583558 | 0.833669 | -5.70744 |
| BACOLOD\_RESISTANCE\_TO\_ALKYLATING\_AGENTS\_UP | 0.03848 | -0.00061 | 0.550811 | 0.583627 | 0.833669 | -5.70749 |
| REACTOME\_DISEASES\_OF\_SIGNAL\_TRANSDUCTION\_BY\_GROWTH\_FACTOR\_RECEPTORS\_AND\_SECOND\_MESSENGERS | -0.02482 | -0.06748 | -0.5508 | 0.583634 | 0.833669 | -5.70749 |
| REACTOME\_C\_TYPE\_LECTIN\_RECEPTORS\_CLRS | -0.02832 | -0.13858 | -0.55067 | 0.583725 | 0.833669 | -5.70756 |
| BRUINS\_UVC\_RESPONSE\_VIA\_TP53\_GROUP\_D | -0.01263 | -0.06217 | -0.5496 | 0.584456 | 0.834525 | -5.70811 |
| WATANABE\_ULCERATIVE\_COLITIS\_WITH\_CANCER\_DN | 0.052312 | -0.00411 | 0.549333 | 0.584635 | 0.834594 | -5.70824 |
| REACTOME\_DEFECTIVE\_FACTOR\_IX\_CAUSES\_HEMOPHILIA\_B | 0.038711 | 0.003651 | 0.548518 | 0.585191 | 0.835199 | -5.70866 |
| REACTOME\_VEGFR2\_MEDIATED\_VASCULAR\_PERMEABILITY | -0.02874 | -0.03801 | -0.54822 | 0.585397 | 0.835306 | -5.70881 |
| ZHANG\_BREAST\_CANCER\_PROGENITORS\_DN | -0.02978 | -0.07183 | -0.54786 | 0.585642 | 0.835324 | -5.70899 |
| BAKER\_HEMATOPOESIS\_STAT1\_TARGETS | -0.04627 | 0.005124 | -0.54781 | 0.585672 | 0.835324 | -5.70901 |
| REACTOME\_SYNTHESIS\_OF\_BILE\_ACIDS\_AND\_BILE\_SALTS | 0.024352 | -0.02966 | 0.547143 | 0.58613 | 0.83579 | -5.70936 |
| KUNINGER\_IGF1\_VS\_PDGFB\_TARGETS\_UP | -0.02635 | -0.0379 | -0.54685 | 0.586331 | 0.83589 | -5.70951 |
| HU\_GENOTOXIN\_ACTION\_DIRECT\_VS\_INDIRECT\_24HR | -0.03275 | -0.18542 | -0.54576 | 0.587076 | 0.836244 | -5.71006 |
| REACTOME\_RHOA\_GTPASE\_CYCLE | 0.02154 | -0.05612 | 0.545707 | 0.587111 | 0.836244 | -5.71008 |
| PID\_IGF1\_PATHWAY | -0.03504 | -0.09236 | -0.54565 | 0.58715 | 0.836244 | -5.71011 |
| PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_DN | 0.033087 | -0.08991 | 0.545578 | 0.587199 | 0.836244 | -5.71015 |
| MORI\_SMALL\_PRE\_BII\_LYMPHOCYTE\_UP | -0.0333 | -0.01589 | -0.54552 | 0.587237 | 0.836244 | -5.71018 |
| MCBRYAN\_PUBERTAL\_BREAST\_3\_4WK\_DN | -0.02462 | -0.0927 | -0.54484 | 0.587705 | 0.836675 | -5.71052 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_6HR\_UP | -0.03138 | -0.04436 | -0.5447 | 0.587802 | 0.836675 | -5.71059 |
| KONDO\_EZH2\_TARGETS | 0.019895 | -0.06959 | 0.543829 | 0.588395 | 0.837332 | -5.71103 |
| REACTOME\_PHASE\_3\_RAPID\_REPOLARISATION | 0.054959 | 0.02287 | 0.543056 | 0.588925 | 0.837898 | -5.71142 |
| FERRARI\_RESPONSE\_TO\_FENRETINIDE\_DN | -0.05675 | 0.009237 | -0.54282 | 0.589086 | 0.83794 | -5.71154 |
| WANG\_TARGETS\_OF\_MLL\_CBP\_FUSION\_UP | -0.03142 | -0.01781 | -0.54221 | 0.589502 | 0.838194 | -5.71185 |
| BIOCARTA\_MTOR\_PATHWAY | -0.04215 | -0.05359 | -0.54198 | 0.589658 | 0.838194 | -5.71196 |
| WP\_SEROTONIN\_RECEPTOR\_2\_AND\_ELKSRFGATA4\_SIGNALING | -0.03751 | -0.09308 | -0.54198 | 0.589659 | 0.838194 | -5.71196 |
| KEGG\_GLYCOSPHINGOLIPID\_BIOSYNTHESIS\_GANGLIO\_SERIES | -0.03046 | -0.20739 | -0.54172 | 0.589842 | 0.838266 | -5.7121 |
| PID\_INTEGRIN\_CS\_PATHWAY | 0.032854 | 0.00386 | 0.541356 | 0.590089 | 0.83843 | -5.71228 |
| REACTOME\_CASPASE\_MEDIATED\_CLEAVAGE\_OF\_CYTOSKELETAL\_PROTEINS | 0.030753 | -0.14297 | 0.541009 | 0.590327 | 0.838549 | -5.71245 |
| KEGG\_CYSTEINE\_AND\_METHIONINE\_METABOLISM | 0.024127 | -0.05957 | 0.540697 | 0.590541 | 0.838549 | -5.71261 |
| SEITZ\_NEOPLASTIC\_TRANSFORMATION\_BY\_8P\_DELETION\_UP | 0.035029 | -0.03769 | 0.540656 | 0.590568 | 0.838549 | -5.71263 |
| SANSOM\_WNT\_PATHWAY\_REQUIRE\_MYC | -0.02115 | -0.03554 | -0.53992 | 0.591075 | 0.839081 | -5.713 |
| SMID\_BREAST\_CANCER\_NORMAL\_LIKE\_UP | 0.024521 | -0.17618 | 0.539257 | 0.591528 | 0.839209 | -5.71333 |
| REACTOME\_GLYCOGEN\_SYNTHESIS | -0.04424 | 0.006999 | -0.53898 | 0.59172 | 0.839209 | -5.71347 |
| INAMURA\_LUNG\_CANCER\_SCC\_SUBTYPES\_UP | -0.04892 | -0.01308 | -0.5388 | 0.591844 | 0.839209 | -5.71356 |
| BIOCARTA\_CCR5\_PATHWAY | -0.03525 | -0.10369 | -0.53866 | 0.591936 | 0.839209 | -5.71363 |
| REACTOME\_NOTCH4\_ACTIVATION\_AND\_TRANSMISSION\_OF\_SIGNAL\_TO\_THE\_NUCLEUS | -0.04016 | -0.18449 | -0.53835 | 0.592151 | 0.839209 | -5.71378 |
| REACTOME\_G\_PROTEIN\_ACTIVATION | 0.022618 | -0.03776 | 0.53827 | 0.592206 | 0.839209 | -5.71382 |
| WP\_ECTODERM\_DIFFERENTIATION | -0.01801 | -0.0254 | -0.53818 | 0.592269 | 0.839209 | -5.71387 |
| KEGG\_LYSINE\_DEGRADATION | -0.03171 | -0.11809 | -0.53811 | 0.592315 | 0.839209 | -5.7139 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_ERYTHROCYTE\_DN | 0.030263 | -0.06184 | 0.538057 | 0.592352 | 0.839209 | -5.71393 |
| BIOCARTA\_EIF2\_PATHWAY | -0.0548 | 0.025253 | -0.53727 | 0.592889 | 0.839782 | -5.71432 |
| REACTOME\_G\_BETA\_GAMMA\_SIGNALLING\_THROUGH\_PI3KGAMMA | -0.02222 | -0.07136 | -0.5364 | 0.593486 | 0.839995 | -5.71475 |
| QI\_HYPOXIA | 0.022743 | -0.11074 | 0.536144 | 0.593665 | 0.839995 | -5.71488 |
| HUANG\_FOXA2\_TARGETS\_UP | 0.020613 | -0.02048 | 0.535921 | 0.593818 | 0.839995 | -5.71499 |
| HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_2NM\_DN | 0.03309 | -0.15077 | 0.535824 | 0.593885 | 0.839995 | -5.71504 |
| ONKEN\_UVEAL\_MELANOMA\_UP | -0.03003 | -0.15748 | -0.53534 | 0.594218 | 0.839995 | -5.71528 |
| REACTOME\_DISEASES\_OF\_CARBOHYDRATE\_METABOLISM | 0.028544 | -0.00327 | 0.535181 | 0.594328 | 0.839995 | -5.71536 |
| REACTOME\_MRNA\_DECAY\_BY\_5\_TO\_3\_EXORIBONUCLEASE | -0.03512 | -0.29638 | -0.53507 | 0.594403 | 0.839995 | -5.71542 |
| SMID\_BREAST\_CANCER\_LUMINAL\_A\_UP | 0.031907 | -0.06095 | 0.535025 | 0.594435 | 0.839995 | -5.71544 |
| WALLACE\_PROSTATE\_CANCER\_DN | -0.05954 | 0.01271 | -0.535 | 0.594452 | 0.839995 | -5.71545 |
| REACTOME\_SIGNALING\_BY\_NTRKS | 0.025246 | -0.0239 | 0.534958 | 0.594481 | 0.839995 | -5.71547 |
| AFFAR\_YY1\_TARGETS\_DN | 0.017722 | -0.08191 | 0.534943 | 0.594491 | 0.839995 | -5.71548 |
| KATSANOU\_ELAVL1\_TARGETS\_DN | -0.0165 | -0.06598 | -0.53434 | 0.594903 | 0.840011 | -5.71578 |
| BIOCARTA\_TCR\_PATHWAY | -0.041 | -0.03143 | -0.53428 | 0.594944 | 0.840011 | -5.71581 |
| MURAKAMI\_UV\_RESPONSE\_6HR\_DN | 0.018063 | -0.25342 | 0.533938 | 0.595182 | 0.840011 | -5.71598 |
| BIOCARTA\_RB\_PATHWAY | 0.039351 | -0.08708 | 0.533805 | 0.595274 | 0.840011 | -5.71605 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_ERYTHROID\_UP | -0.03391 | -0.10086 | -0.53359 | 0.595423 | 0.840011 | -5.71615 |
| REACTOME\_PINK1\_PRKN\_MEDIATED\_MITOPHAGY | -0.05283 | -0.05709 | -0.53329 | 0.595625 | 0.840011 | -5.7163 |
| WP\_ALZHEIMERS\_DISEASE | -0.02026 | -0.13919 | -0.53327 | 0.595644 | 0.840011 | -5.71631 |
| EPPERT\_HSC\_R | -0.02642 | -0.09972 | -0.53327 | 0.595645 | 0.840011 | -5.71631 |
| MAHADEVAN\_IMATINIB\_RESISTANCE\_DN | 0.038867 | -0.06588 | 0.5332 | 0.59569 | 0.840011 | -5.71634 |
| REACTOME\_DEATH\_RECEPTOR\_SIGNALLING | 0.0221 | -0.09008 | 0.532879 | 0.595911 | 0.840045 | -5.7165 |
| REACTOME\_DISINHIBITION\_OF\_SNARE\_FORMATION | -0.052 | -0.01775 | -0.53271 | 0.596027 | 0.840045 | -5.71659 |
| DARWICHE\_PAPILLOMA\_RISK\_HIGH\_UP | 0.019435 | -0.04485 | 0.53259 | 0.59611 | 0.840045 | -5.71665 |
| REACTOME\_ASSEMBLY\_OF\_THE\_HIV\_VIRION | 0.048049 | -0.0349 | 0.532389 | 0.596248 | 0.840054 | -5.71675 |
| PROVENZANI\_METASTASIS\_DN | 0.024849 | -0.1905 | 0.532093 | 0.596452 | 0.840156 | -5.71689 |
| WP\_METHIONINE\_DE\_NOVO\_AND\_SALVAGE\_PATHWAY | -0.03295 | -0.09367 | -0.53118 | 0.597078 | 0.840851 | -5.71734 |
| ZHOU\_PANCREATIC\_BETA\_CELL | -0.04166 | 0.034808 | -0.53092 | 0.597263 | 0.840926 | -5.71747 |
| WP\_SMALL\_CELL\_LUNG\_CANCER | -0.02267 | -0.08562 | -0.53069 | 0.59742 | 0.84096 | -5.71758 |
| LEE\_NEURAL\_CREST\_STEM\_CELL\_DN | 0.018949 | -0.11116 | 0.530437 | 0.597593 | 0.841018 | -5.71771 |
| KEGG\_RIBOFLAVIN\_METABOLISM | 0.033016 | 0.002518 | 0.529839 | 0.598006 | 0.841237 | -5.718 |
| IZADPANAH\_STEM\_CELL\_ADIPOSE\_VS\_BONE\_UP | 0.027636 | -0.17818 | 0.529828 | 0.598013 | 0.841237 | -5.71801 |
| REACTOME\_SHC\_MEDIATED\_CASCADE\_FGFR3 | 0.027942 | -0.04515 | 0.529228 | 0.598427 | 0.841557 | -5.7183 |
| RADMACHER\_AML\_PROGNOSIS | -0.03017 | -0.04293 | -0.52892 | 0.598637 | 0.841557 | -5.71845 |
| MIKKELSEN\_PLURIPOTENT\_STATE\_DN | -0.04496 | -0.1158 | -0.52892 | 0.598637 | 0.841557 | -5.71845 |
| ROSTY\_CERVICAL\_CANCER\_PROLIFERATION\_CLUSTER | -0.03619 | -0.06786 | -0.52829 | 0.599074 | 0.841985 | -5.71876 |
| GUTIERREZ\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_DN | -0.02911 | -0.07542 | -0.52795 | 0.599309 | 0.842129 | -5.71893 |
| WU\_HBX\_TARGETS\_3\_UP | -0.04547 | -0.0163 | -0.52766 | 0.599509 | 0.842225 | -5.71907 |
| BREUHAHN\_GROWTH\_FACTOR\_SIGNALING\_IN\_LIVER\_CANCER | -0.03849 | -0.01653 | -0.5266 | 0.600244 | 0.842976 | -5.71959 |
| REACTOME\_INCRETIN\_SYNTHESIS\_SECRETION\_AND\_INACTIVATION | 0.023302 | -0.03468 | 0.5265 | 0.600309 | 0.842976 | -5.71964 |
| KEGG\_GLYCOSAMINOGLYCAN\_BIOSYNTHESIS\_CHONDROITIN\_SULFATE | -0.03573 | -0.05444 | -0.52629 | 0.600453 | 0.842992 | -5.71974 |
| REACTOME\_SUPPRESSION\_OF\_PHAGOSOMAL\_MATURATION | 0.050588 | 0.00728 | 0.525228 | 0.601189 | 0.843838 | -5.72026 |
| KEGG\_MELANOGENESIS | -0.01633 | -0.05433 | -0.5247 | 0.601554 | 0.844165 | -5.72052 |
| REACTOME\_GAP\_JUNCTION\_DEGRADATION | 0.046336 | 0.009029 | 0.524142 | 0.60194 | 0.84452 | -5.72079 |
| MARTINEZ\_TP53\_TARGETS\_DN | 0.012602 | -0.16335 | 0.523837 | 0.60215 | 0.84463 | -5.72094 |
| REACTOME\_DOPAMINE\_CLEARANCE\_FROM\_THE\_SYNAPTIC\_CLEFT | -0.04697 | -0.19093 | -0.52337 | 0.602472 | 0.844895 | -5.72116 |
| INGRAM\_SHH\_TARGETS\_DN | 0.027627 | -0.08524 | 0.52307 | 0.602681 | 0.845002 | -5.72131 |
| REACTOME\_GLYCOSPHINGOLIPID\_METABOLISM | -0.02371 | -0.15502 | -0.52257 | 0.603031 | 0.845215 | -5.72156 |
| THUM\_MIR21\_TARGETS\_HEART\_DISEASE\_DN | -0.03543 | -0.01289 | -0.52247 | 0.603099 | 0.845215 | -5.7216 |
| LI\_INDUCED\_T\_TO\_NATURAL\_KILLER\_DN | -0.0236 | -0.0678 | -0.52192 | 0.603476 | 0.845294 | -5.72187 |
| JINESH\_BLEBBISHIELD\_VS\_LIVE\_CONTROL\_DN | -0.02564 | -0.19888 | -0.52171 | 0.603624 | 0.845294 | -5.72197 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_OVERALL\_DN | 0.036185 | -0.00178 | 0.521679 | 0.603644 | 0.845294 | -5.72199 |
| REACTOME\_CASPASE\_ACTIVATION\_VIA\_DEPENDENCE\_RECEPTORS\_IN\_THE\_ABSENCE\_OF\_LIGAND | 0.034212 | 0.004897 | 0.521617 | 0.603687 | 0.845294 | -5.72201 |
| FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_DN | -0.02934 | -0.02178 | -0.52057 | 0.60441 | 0.84612 | -5.72252 |
| REACTOME\_DOWNREGULATION\_OF\_SMAD2\_3\_SMAD4\_TRANSCRIPTIONAL\_ACTIVITY | 0.03118 | 0.002775 | 0.519527 | 0.605135 | 0.846641 | -5.72302 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_IQGAPS | 0.027883 | 0.004124 | 0.519501 | 0.605153 | 0.846641 | -5.72304 |
| REACTOME\_E2F\_MEDIATED\_REGULATION\_OF\_DNA\_REPLICATION | -0.0329 | 0.011572 | -0.51946 | 0.605181 | 0.846641 | -5.72306 |
| HOEBEKE\_LYMPHOID\_STEM\_CELL\_UP | -0.03671 | -0.01935 | -0.51926 | 0.605323 | 0.846653 | -5.72316 |
| REACTOME\_GLYCOSAMINOGLYCAN\_METABOLISM | 0.025141 | -0.01787 | 0.518753 | 0.605672 | 0.846955 | -5.7234 |
| PID\_VEGFR1\_PATHWAY | -0.03846 | -0.03083 | -0.51785 | 0.606301 | 0.847339 | -5.72383 |
| KASLER\_HDAC7\_TARGETS\_1\_UP | 0.020959 | -0.08799 | 0.517786 | 0.606343 | 0.847339 | -5.72386 |
| MATZUK\_STEROIDOGENESIS | 0.036936 | -0.09507 | 0.517705 | 0.606399 | 0.847339 | -5.7239 |
| MIKKELSEN\_DEDIFFERENTIATED\_STATE\_DN | 0.046613 | 0.004013 | 0.51759 | 0.606479 | 0.847339 | -5.72396 |
| BROWNE\_HCMV\_INFECTION\_2HR\_DN | 0.022287 | 0.004098 | 0.516937 | 0.606932 | 0.847787 | -5.72427 |
| OSAWA\_TNF\_TARGETS | 0.030057 | -0.35549 | 0.51644 | 0.607277 | 0.847976 | -5.72451 |
| KEGG\_VALINE\_LEUCINE\_AND\_ISOLEUCINE\_BIOSYNTHESIS | -0.03262 | -0.41058 | -0.51636 | 0.607334 | 0.847976 | -5.72455 |
| KEGG\_AXON\_GUIDANCE | 0.017918 | -0.03844 | 0.515855 | 0.607683 | 0.848184 | -5.72479 |
| KRIGE\_RESPONSE\_TO\_TOSEDOSTAT\_6HR\_UP | -0.02614 | -0.12727 | -0.51576 | 0.607749 | 0.848184 | -5.72484 |
| KEGG\_B\_CELL\_RECEPTOR\_SIGNALING\_PATHWAY | 0.031917 | -0.08187 | 0.515354 | 0.608031 | 0.848391 | -5.72503 |
| CHEBOTAEV\_GR\_TARGETS\_UP | 0.025131 | -0.03236 | 0.513789 | 0.609119 | 0.849695 | -5.72578 |
| PID\_ANTHRAX\_PATHWAY | 0.028463 | -0.28919 | 0.513464 | 0.609345 | 0.849695 | -5.72593 |
| REACTOME\_RAB\_GEFS\_EXCHANGE\_GTP\_FOR\_GDP\_ON\_RABS | -0.028 | -0.0466 | -0.51343 | 0.609366 | 0.849695 | -5.72595 |
| REACTOME\_SIGNALING\_BY\_NODAL | 0.024104 | 0.008384 | 0.51309 | 0.609605 | 0.849836 | -5.72611 |
| KEGG\_PATHOGENIC\_ESCHERICHIA\_COLI\_INFECTION | 0.027651 | -0.142 | 0.512712 | 0.609868 | 0.849836 | -5.72629 |
| WP\_PATHOGENIC\_ESCHERICHIA\_COLI\_INFECTION | 0.027651 | -0.142 | 0.512712 | 0.609868 | 0.849836 | -5.72629 |
| REACTOME\_RHOC\_GTPASE\_CYCLE | 0.020231 | -0.08553 | 0.51236 | 0.610113 | 0.849992 | -5.72646 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_UP | 0.019565 | -0.43396 | 0.512064 | 0.610319 | 0.850093 | -5.7266 |
| REACTOME\_OPSINS | 0.051465 | 0.042691 | 0.511463 | 0.610738 | 0.850331 | -5.72688 |
| REACTOME\_REGULATION\_OF\_TNFR1\_SIGNALING | -0.03329 | -0.15522 | -0.51142 | 0.610768 | 0.850331 | -5.7269 |
| PID\_PI3KCI\_AKT\_PATHWAY | -0.02998 | -0.10135 | -0.51118 | 0.610936 | 0.850331 | -5.72702 |
| WP\_SRF\_AND\_MIRS\_IN\_SMOOTH\_MUSCLE\_DIFFERENTIATION\_AND\_PROLIFERATION | 0.040778 | -0.00085 | 0.510947 | 0.611097 | 0.850331 | -5.72713 |
| SANA\_RESPONSE\_TO\_IFNG\_DN | -0.0393 | -0.0096 | -0.51085 | 0.611167 | 0.850331 | -5.72718 |
| REACTOME\_CELLULAR\_SENESCENCE | -0.0215 | -0.09711 | -0.51067 | 0.611292 | 0.850331 | -5.72726 |
| RUTELLA\_RESPONSE\_TO\_HGF\_DN | 0.02648 | -0.19127 | 0.509863 | 0.611852 | 0.85084 | -5.72764 |
| FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_DN | 0.032 | -0.15404 | 0.509355 | 0.612206 | 0.85084 | -5.72788 |
| DASU\_IL6\_SIGNALING\_DN | -0.05132 | 0.003214 | -0.50932 | 0.612233 | 0.85084 | -5.7279 |
| REACTOME\_ALPHA\_LINOLENIC\_OMEGA3\_AND\_LINOLEIC\_OMEGA6\_ACID\_METABOLISM | -0.03793 | -0.00995 | -0.50927 | 0.612267 | 0.85084 | -5.72792 |
| WINTER\_HYPOXIA\_DN | -0.03498 | -0.17267 | -0.50904 | 0.612427 | 0.85084 | -5.72803 |
| BOWIE\_RESPONSE\_TO\_TAMOXIFEN | 0.040169 | -0.17809 | 0.508669 | 0.612684 | 0.85084 | -5.72821 |
| REACTOME\_ACTIVATION\_OF\_IRF3\_IRF7\_MEDIATED\_BY\_TBK1\_IKK\_EPSILON | 0.044293 | -0.05285 | 0.508626 | 0.612714 | 0.85084 | -5.72823 |
| REACTOME\_INTERLEUKIN\_12\_SIGNALING | 0.037216 | -0.04653 | 0.508418 | 0.612859 | 0.85084 | -5.72833 |
| REACTOME\_MAPK\_FAMILY\_SIGNALING\_CASCADES | -0.01627 | -0.09406 | -0.50841 | 0.612862 | 0.85084 | -5.72833 |
| PID\_RAC1\_PATHWAY | 0.02908 | -0.02282 | 0.508038 | 0.613124 | 0.850933 | -5.72851 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM6 | 0.018324 | -0.04018 | 0.507788 | 0.613299 | 0.850933 | -5.72862 |
| REACTOME\_VESICLE\_MEDIATED\_TRANSPORT | -0.02539 | -0.04437 | -0.50774 | 0.61333 | 0.850933 | -5.72864 |
| WP\_OVERVIEW\_OF\_INTERFERONSMEDIATED\_SIGNALING\_PATHWAY | -0.02192 | -0.05156 | -0.50716 | 0.613739 | 0.851141 | -5.72892 |
| REACTOME\_SUPPRESSION\_OF\_APOPTOSIS | 0.0324 | -0.35174 | 0.506837 | 0.613962 | 0.851141 | -5.72907 |
| MILI\_PSEUDOPODIA\_CHEMOTAXIS\_DN | 0.022659 | -0.19253 | 0.506781 | 0.614001 | 0.851141 | -5.7291 |
| REACTOME\_BICARBONATE\_TRANSPORTERS | 0.035314 | 0.011067 | 0.506762 | 0.614014 | 0.851141 | -5.72911 |
| REACTOME\_COSTIMULATION\_BY\_THE\_CD28\_FAMILY | 0.020346 | -0.32183 | 0.505995 | 0.614549 | 0.851208 | -5.72947 |
| BIOCARTA\_ATRBRCA\_PATHWAY | -0.03257 | -0.06227 | -0.50578 | 0.614698 | 0.851208 | -5.72957 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_CLUSTER\_UP | -0.02356 | -0.12489 | -0.50574 | 0.614729 | 0.851208 | -5.72959 |
| RUAN\_RESPONSE\_TO\_TNF\_TROGLITAZONE\_UP | 0.017915 | -0.57842 | 0.505691 | 0.614762 | 0.851208 | -5.72961 |
| ALONSO\_METASTASIS\_EMT\_DN | 0.045441 | 0.012528 | 0.50542 | 0.614952 | 0.851208 | -5.72974 |
| WP\_OSTEOPONTIN\_SIGNALING | 0.04782 | -0.06316 | 0.505323 | 0.615019 | 0.851208 | -5.72978 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINED\_IN\_GRANULOCYTE\_DN | 0.048872 | -0.00139 | 0.505295 | 0.615038 | 0.851208 | -5.7298 |
| WP\_DEREGULATION\_OF\_RAB\_AND\_RAB\_EFFECTOR\_GENES\_IN\_BLADDER\_CANCER | -0.02838 | -0.09407 | -0.50483 | 0.615367 | 0.851208 | -5.73002 |
| WU\_ALZHEIMER\_DISEASE\_DN | -0.02907 | -0.09678 | -0.50465 | 0.615492 | 0.851208 | -5.7301 |
| HOLLEMAN\_VINCRISTINE\_RESISTANCE\_B\_ALL\_DN | 0.042444 | 0.003211 | 0.504635 | 0.6155 | 0.851208 | -5.73011 |
| REACTOME\_SIGNALING\_BY\_CYTOSOLIC\_FGFR1\_FUSION\_MUTANTS | -0.03808 | -0.00809 | -0.50459 | 0.615534 | 0.851208 | -5.73013 |
| SALVADOR\_MARTIN\_PEDIATRIC\_TBD\_ANTI\_TNF\_THERAPY\_NONRESPONDER\_PRE\_TREATMENT\_UP | 0.017448 | -0.45003 | 0.503391 | 0.616369 | 0.852177 | -5.73069 |
| LIM\_MAMMARY\_LUMINAL\_MATURE\_DN | -0.03458 | -0.00918 | -0.50291 | 0.616705 | 0.852453 | -5.73091 |
| REACTOME\_ATF4\_ACTIVATES\_GENES\_IN\_RESPONSE\_TO\_ENDOPLASMIC\_RETICULUM\_STRESS | -0.04133 | -0.03905 | -0.50257 | 0.616946 | 0.852453 | -5.73107 |
| REACTOME\_DAP12\_SIGNALING | 0.027547 | -0.18561 | 0.502409 | 0.617056 | 0.852453 | -5.73115 |
| KORKOLA\_EMBRYONIC\_CARCINOMA\_VS\_SEMINOMA\_DN | 0.021986 | -0.06717 | 0.50234 | 0.617104 | 0.852453 | -5.73118 |
| REACTOME\_HS\_GAG\_BIOSYNTHESIS | 0.023283 | -0.01734 | 0.501682 | 0.617564 | 0.852903 | -5.73148 |
| PID\_NFAT\_3PATHWAY | -0.0345 | -0.05129 | -0.50105 | 0.618006 | 0.853328 | -5.73178 |
| JEON\_SMAD6\_TARGETS\_DN | 0.030632 | 0.011612 | 0.500815 | 0.618171 | 0.853371 | -5.73189 |
| HELLER\_HDAC\_TARGETS\_DN | 0.026042 | -0.07609 | 0.500111 | 0.618664 | 0.853712 | -5.73222 |
| REACTOME\_TNFR2\_NON\_CANONICAL\_NF\_KB\_PATHWAY | -0.0225 | -0.25016 | -0.50008 | 0.618686 | 0.853712 | -5.73223 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_UP | 0.028465 | -0.08725 | 0.499745 | 0.61892 | 0.85385 | -5.73239 |
| BIOCARTA\_ACE2\_PATHWAY | 0.033885 | -0.06625 | 0.499191 | 0.619308 | 0.854173 | -5.73264 |
| WEINMANN\_ADAPTATION\_TO\_HYPOXIA\_UP | 0.026266 | -0.18827 | 0.499023 | 0.619426 | 0.854173 | -5.73272 |
| PID\_ALK2\_PATHWAY | 0.038122 | -0.01122 | 0.498692 | 0.619658 | 0.854173 | -5.73287 |
| REACTOME\_ACTIVATION\_OF\_THE\_PHOTOTRANSDUCTION\_CASCADE | 0.034811 | -0.07507 | 0.498644 | 0.619691 | 0.854173 | -5.7329 |
| PEPPER\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_DN | -0.03262 | -0.02211 | -0.4979 | 0.620211 | 0.854704 | -5.73324 |
| PID\_AVB3\_OPN\_PATHWAY | 0.037859 | -0.05741 | 0.497507 | 0.620488 | 0.854879 | -5.73342 |
| REACTOME\_KSRP\_KHSRP\_BINDS\_AND\_DESTABILIZES\_MRNA | -0.04105 | -0.06038 | -0.49734 | 0.620606 | 0.854879 | -5.7335 |
| REACTOME\_NEUROTRANSMITTER\_RECEPTORS\_AND\_POSTSYNAPTIC\_SIGNAL\_TRANSMISSION | 0.018732 | -0.06662 | 0.496671 | 0.621075 | 0.855339 | -5.73381 |
| WAKABAYASHI\_ADIPOGENESIS\_PPARG\_RXRA\_BOUND\_36HR | -0.02278 | -0.07726 | -0.49642 | 0.621251 | 0.855396 | -5.73392 |
| SESTO\_RESPONSE\_TO\_UV\_C1 | 0.032642 | -0.10231 | 0.496111 | 0.621468 | 0.85551 | -5.73407 |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_5 | -0.02523 | -0.05726 | -0.49552 | 0.621884 | 0.855734 | -5.73434 |
| REACTOME\_GOLGI\_ASSOCIATED\_VESICLE\_BIOGENESIS | -0.03838 | -0.01228 | -0.4955 | 0.6219 | 0.855734 | -5.73435 |
| SANA\_RESPONSE\_TO\_IFNG\_UP | 0.016543 | -0.4446 | 0.495072 | 0.622197 | 0.855958 | -5.73454 |
| PID\_FAK\_PATHWAY | -0.03469 | -0.02198 | -0.49476 | 0.622417 | 0.856076 | -5.73469 |
| BIOCARTA\_PROTEASOME\_PATHWAY | -0.05487 | -0.11765 | -0.49426 | 0.622766 | 0.856084 | -5.73492 |
| PID\_P53\_REGULATION\_PATHWAY | -0.0284 | -0.08582 | -0.49405 | 0.622914 | 0.856084 | -5.73501 |
| BIOCARTA\_GLEEVEC\_PATHWAY | -0.03963 | -0.02678 | -0.49402 | 0.622938 | 0.856084 | -5.73503 |
| REACTOME\_ACTIVATION\_OF\_AMPK\_DOWNSTREAM\_OF\_NMDARS | 0.022405 | -0.06605 | 0.493984 | 0.622961 | 0.856084 | -5.73504 |
| WP\_NCRNAS\_INVOLVED\_IN\_STAT3\_SIGNALING\_IN\_HEPATOCELLULAR\_CARCINOMA | -0.03942 | -0.00556 | -0.49331 | 0.623435 | 0.85655 | -5.73535 |
| DING\_LUNG\_CANCER\_BY\_MUTATION\_RATE | 0.019876 | -0.2626 | 0.492903 | 0.62372 | 0.856757 | -5.73554 |
| PHESSE\_TARGETS\_OF\_APC\_AND\_MBD2\_DN | 0.031497 | -0.0021 | 0.492701 | 0.623863 | 0.856768 | -5.73563 |
| KORKOLA\_YOLK\_SAC\_TUMOR | 0.019637 | -0.01673 | 0.491933 | 0.624403 | 0.856857 | -5.73598 |
| SCHUETZ\_BREAST\_CANCER\_DUCTAL\_INVASIVE\_UP | 0.029841 | -0.18449 | 0.491855 | 0.624458 | 0.856857 | -5.73602 |
| MONTERO\_THYROID\_CANCER\_POOR\_SURVIVAL\_DN | -0.04198 | -0.09034 | -0.49171 | 0.624557 | 0.856857 | -5.73608 |
| BIOCARTA\_CDC25\_PATHWAY | 0.036422 | -0.1052 | 0.491625 | 0.624619 | 0.856857 | -5.73612 |
| LY\_AGING\_MIDDLE\_DN | -0.04211 | -0.03358 | -0.49153 | 0.624684 | 0.856857 | -5.73617 |
| WP\_BONE\_MORPHOGENIC\_PROTEIN\_BMP\_SIGNALING\_AND\_REGULATION | 0.035607 | -0.09039 | 0.491459 | 0.624736 | 0.856857 | -5.7362 |
| JOHNSTONE\_PARVB\_TARGETS\_1\_UP | 0.042162 | 0.030918 | 0.491001 | 0.625058 | 0.856857 | -5.73641 |
| REACTOME\_CASPASE\_ACTIVATION\_VIA\_EXTRINSIC\_APOPTOTIC\_SIGNALLING\_PATHWAY | 0.029583 | -0.00649 | 0.490902 | 0.625128 | 0.856857 | -5.73645 |
| WP\_ATM\_SIGNALING\_PATHWAY | 0.023257 | -0.17224 | 0.490704 | 0.625267 | 0.856857 | -5.73654 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM3 | 0.016804 | -0.17308 | 0.490515 | 0.6254 | 0.856857 | -5.73663 |
| WP\_CYTOSINE\_METHYLATION | 0.032389 | -0.00043 | 0.490502 | 0.625409 | 0.856857 | -5.73664 |
| SHI\_SPARC\_TARGETS\_UP | -0.02257 | -0.09875 | -0.48994 | 0.625803 | 0.857212 | -5.73689 |
| ROSS\_AML\_OF\_FAB\_M7\_TYPE | -0.02512 | -0.06494 | -0.48956 | 0.626072 | 0.857396 | -5.73706 |
| REACTOME\_PLATELET\_AGGREGATION\_PLUG\_FORMATION | 0.024165 | -0.0092 | 0.489212 | 0.626317 | 0.857548 | -5.73722 |
| REACTOME\_SIGNALING\_BY\_MET | 0.025452 | -0.0556 | 0.488922 | 0.626521 | 0.857576 | -5.73735 |
| MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_UP | 0.026243 | -0.13899 | 0.488145 | 0.627068 | 0.857576 | -5.73771 |
| REACTOME\_SIGNALING\_BY\_BMP | 0.024538 | -0.0393 | 0.487886 | 0.627251 | 0.857576 | -5.73782 |
| BIOCARTA\_IFNA\_PATHWAY | -0.04139 | -0.09635 | -0.48776 | 0.627341 | 0.857576 | -5.73788 |
| REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION | -0.02915 | -0.00042 | -0.48728 | 0.62768 | 0.857576 | -5.7381 |
| CHANDRAN\_METASTASIS\_TOP50\_DN | -0.03304 | -0.00785 | -0.48724 | 0.627703 | 0.857576 | -5.73811 |
| KEGG\_MELANOMA | -0.01615 | -0.06942 | -0.48722 | 0.627723 | 0.857576 | -5.73813 |
| WP\_TNFALPHA\_SIGNALING\_PATHWAY | -0.02666 | -0.10114 | -0.48699 | 0.62788 | 0.857576 | -5.73823 |
| SILIGAN\_TARGETS\_OF\_EWS\_FLI1\_FUSION\_UP | -0.0299 | -0.12593 | -0.48674 | 0.628058 | 0.857576 | -5.73834 |
| PETRETTO\_CARDIAC\_HYPERTROPHY | 0.04 | -0.05586 | 0.486539 | 0.628201 | 0.857576 | -5.73843 |
| WP\_HAIR\_FOLLICLE\_DEVELOPMENT\_ORGANOGENESIS\_PART\_2\_OF\_3 | 0.021972 | -0.03275 | 0.486513 | 0.628219 | 0.857576 | -5.73845 |
| KEGG\_GNRH\_SIGNALING\_PATHWAY | 0.012739 | -0.04847 | 0.486446 | 0.628266 | 0.857576 | -5.73848 |
| WP\_ALZHEIMERS\_DISEASE\_AND\_MIRNA\_EFFECTS | -0.01856 | -0.13863 | -0.48634 | 0.628338 | 0.857576 | -5.73852 |
| SANA\_TNF\_SIGNALING\_DN | 0.028168 | -0.09327 | 0.486193 | 0.628444 | 0.857576 | -5.73859 |
| NOUSHMEHR\_GBM\_GERMLINE\_MUTATED | 0.034212 | 0.002978 | 0.486179 | 0.628454 | 0.857576 | -5.7386 |
| IBRAHIM\_NRF2\_DOWN | 0.02144 | -0.06815 | 0.486123 | 0.628494 | 0.857576 | -5.73862 |
| LI\_WILMS\_TUMOR\_ANAPLASTIC\_DN | -0.05084 | -0.00741 | -0.48551 | 0.628927 | 0.857983 | -5.7389 |
| TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP | -0.02908 | -0.20474 | -0.48498 | 0.6293 | 0.857994 | -5.73914 |
| IKEDA\_MIR30\_TARGETS\_UP | -0.03452 | -0.04777 | -0.48494 | 0.629327 | 0.857994 | -5.73915 |
| SHIPP\_DLBCL\_VS\_FOLLICULAR\_LYMPHOMA\_DN | 0.021423 | -0.23787 | 0.484924 | 0.629339 | 0.857994 | -5.73916 |
| SIMBULAN\_UV\_RESPONSE\_IMMORTALIZED\_DN | 0.035852 | 0.004095 | 0.484293 | 0.629785 | 0.858021 | -5.73945 |
| REACTOME\_RHOBTB\_GTPASE\_CYCLE | -0.03184 | -0.14831 | -0.48423 | 0.629828 | 0.858021 | -5.73947 |
| BIOCARTA\_TSP1\_PATHWAY | 0.044325 | 0.003534 | 0.483981 | 0.630005 | 0.858021 | -5.73959 |
| CASTELLANO\_HRAS\_TARGETS\_UP | -0.04693 | -0.05258 | -0.48397 | 0.630011 | 0.858021 | -5.73959 |
| WOTTON\_RUNX\_TARGETS\_DN | 0.029469 | -0.10697 | 0.483709 | 0.630197 | 0.858021 | -5.73971 |
| WP\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_IN\_COLORECTAL\_CANCER | -0.01334 | -0.10106 | -0.48341 | 0.63041 | 0.858021 | -5.73984 |
| REACTOME\_MITOCHONDRIAL\_FATTY\_ACID\_BETA\_OXIDATION\_OF\_UNSATURATED\_FATTY\_ACIDS | -0.05774 | -0.01181 | -0.48339 | 0.630424 | 0.858021 | -5.73985 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_LUNG\_DN | -0.0256 | -0.09392 | -0.48337 | 0.630438 | 0.858021 | -5.73986 |
| WP\_PTF1A\_RELATED\_REGULATORY\_PATHWAY | -0.03218 | 0.014927 | -0.4831 | 0.630624 | 0.858078 | -5.73998 |
| WP\_TGFBETA\_SIGNALING\_PATHWAY | -0.02654 | -0.04413 | -0.48274 | 0.630883 | 0.858078 | -5.74014 |
| GREENBAUM\_E2A\_TARGETS\_UP | -0.03886 | -0.01442 | -0.48265 | 0.630944 | 0.858078 | -5.74018 |
| SUNG\_METASTASIS\_STROMA\_UP | 0.03407 | -0.04749 | 0.482487 | 0.63106 | 0.858078 | -5.74026 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_B | 0.020014 | -0.215 | 0.482241 | 0.631234 | 0.858078 | -5.74037 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_THE\_PI3K\_AKT\_NETWORK | -0.01332 | -0.05457 | -0.48181 | 0.631535 | 0.858078 | -5.74056 |
| BLANCO\_MELO\_SARS\_COV\_1\_INFECTION\_MCR5\_CELLS\_UP | -0.03694 | -0.01059 | -0.4818 | 0.631545 | 0.858078 | -5.74056 |
| IVANOVSKA\_MIR106B\_TARGETS | -0.03209 | -0.05375 | -0.48178 | 0.631559 | 0.858078 | -5.74057 |
| WP\_TCELL\_ACTIVATION\_SARSCOV2 | 0.021934 | -0.23136 | 0.481073 | 0.632059 | 0.858575 | -5.74089 |
| KYNG\_DNA\_DAMAGE\_BY\_4NQO\_OR\_GAMMA\_RADIATION | -0.01829 | -0.33926 | -0.48058 | 0.632409 | 0.858756 | -5.74111 |
| CLASPER\_LYMPHATIC\_VESSELS\_DURING\_METASTASIS\_DN | 0.042539 | -0.03848 | 0.480502 | 0.632463 | 0.858756 | -5.74114 |
| KAYO\_AGING\_MUSCLE\_UP | 0.009493 | -0.20343 | 0.480007 | 0.632813 | 0.859049 | -5.74137 |
| REACTOME\_SIGNALING\_BY\_NOTCH1 | -0.0242 | -0.04263 | -0.47966 | 0.633062 | 0.859063 | -5.74152 |
| DER\_IFN\_ALPHA\_RESPONSE\_UP | 0.017983 | -0.40774 | 0.479611 | 0.633093 | 0.859063 | -5.74154 |
| ELLWOOD\_MYC\_TARGETS\_DN | -0.03594 | -0.01552 | -0.47928 | 0.633328 | 0.859096 | -5.74169 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D4 | -0.03429 | -0.00322 | -0.47907 | 0.633478 | 0.859096 | -5.74178 |
| REACTOME\_METABOLISM\_OF\_AMINE\_DERIVED\_HORMONES | 0.045514 | 0.028781 | 0.478752 | 0.633701 | 0.859096 | -5.74192 |
| WHITFIELD\_CELL\_CYCLE\_M\_G1 | -0.02635 | -0.11565 | -0.4787 | 0.633738 | 0.859096 | -5.74195 |
| WP\_INTERACTIONS\_BETWEEN\_LOXL4\_AND\_OXIDATIVE\_STRESS\_PATHWAY | 0.026441 | -0.23353 | 0.47858 | 0.633822 | 0.859096 | -5.742 |
| KEGG\_PRION\_DISEASES | 0.02384 | -0.15885 | 0.478432 | 0.633927 | 0.859096 | -5.74207 |
| KEGG\_ALPHA\_LINOLENIC\_ACID\_METABOLISM | 0.029472 | -0.04242 | 0.47807 | 0.634183 | 0.85926 | -5.74223 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_7 | -0.03084 | -0.12045 | -0.47769 | 0.634453 | 0.859332 | -5.7424 |
| WP\_NIPBL\_ROLE\_IN\_DNA\_DAMAGE\_CORNELIA\_DE\_LANGE\_SYNDROME | 0.028148 | -0.50226 | 0.477613 | 0.634507 | 0.859332 | -5.74243 |
| WP\_NAD\_BIOSYNTHETIC\_PATHWAYS | -0.02182 | -0.15627 | -0.47734 | 0.6347 | 0.859411 | -5.74255 |
| MARZEC\_IL2\_SIGNALING\_DN | 0.026542 | -0.06421 | 0.477071 | 0.634891 | 0.859439 | -5.74267 |
| BIOCARTA\_RARRXR\_PATHWAY | -0.04126 | -0.00315 | -0.47683 | 0.635061 | 0.859439 | -5.74278 |
| REACTOME\_SYNTHESIS\_OF\_5\_EICOSATETRAENOIC\_ACIDS | -0.0287 | -0.18881 | -0.47662 | 0.635211 | 0.859439 | -5.74287 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_6 | -0.02375 | -0.22702 | -0.47655 | 0.635261 | 0.859439 | -5.7429 |
| OUYANG\_PROSTATE\_CANCER\_PROGRESSION\_DN | 0.029208 | -0.00799 | 0.476126 | 0.63556 | 0.859661 | -5.74309 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G6\_DN | 0.025733 | -0.25166 | 0.475711 | 0.635854 | 0.859876 | -5.74327 |
| WP\_INITIATION\_OF\_TRANSCRIPTION\_AND\_TRANSLATION\_ELONGATION\_AT\_THE\_HIV1\_LTR | -0.02826 | -0.15547 | -0.47472 | 0.636559 | 0.860395 | -5.74371 |
| REACTOME\_SIGNALING\_BY\_HIPPO | -0.02602 | -0.09248 | -0.47471 | 0.636563 | 0.860395 | -5.74371 |
| REACTOME\_REGULATION\_OF\_CYTOSKELETAL\_REMODELING\_AND\_CELL\_SPREADING\_BY\_IPP\_COMPLEX\_COMPONENTS | 0.040444 | -0.01424 | 0.474574 | 0.636661 | 0.860395 | -5.74377 |
| CARDOSO\_RESPONSE\_TO\_GAMMA\_RADIATION\_AND\_3AB | 0.02383 | -0.11582 | 0.474313 | 0.636846 | 0.860395 | -5.74389 |
| REACTOME\_AMINO\_ACIDS\_REGULATE\_MTORC1 | -0.02709 | -0.13273 | -0.47421 | 0.636918 | 0.860395 | -5.74393 |
| ZHANG\_ANTIVIRAL\_RESPONSE\_TO\_RIBAVIRIN\_UP | -0.02471 | -0.2076 | -0.47403 | 0.63705 | 0.860395 | -5.74402 |
| SERVITJA\_LIVER\_HNF1A\_TARGETS\_UP | 0.016861 | -0.04638 | 0.473472 | 0.637443 | 0.860744 | -5.74426 |
| WP\_COMMON\_PATHWAYS\_UNDERLYING\_DRUG\_ADDICTION | -0.01712 | -0.04193 | -0.47264 | 0.638034 | 0.86136 | -5.74463 |
| WP\_ANDROGEN\_RECEPTOR\_SIGNALING\_PATHWAY | -0.02557 | -0.06001 | -0.47204 | 0.638458 | 0.861749 | -5.74489 |
| KIM\_MYCL1\_AMPLIFICATION\_TARGETS\_DN | -0.03305 | 0.003745 | -0.47181 | 0.638625 | 0.861791 | -5.74499 |
| PID\_LYSOPHOSPHOLIPID\_PATHWAY | 0.021864 | -0.06755 | 0.471252 | 0.639018 | 0.861889 | -5.74523 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G2 | -0.03023 | -0.10158 | -0.47108 | 0.639139 | 0.861889 | -5.74531 |
| PARK\_OSTEOBLAST\_DIFFERENTIATION\_BY\_PHENYLAMIL\_UP | 0.033031 | 0.000966 | 0.470832 | 0.639317 | 0.861889 | -5.74542 |
| REACTOME\_FORMATION\_OF\_SENESCENCE\_ASSOCIATED\_HETEROCHROMATIN\_FOCI\_SAHF | 0.030137 | -0.00287 | 0.470787 | 0.639349 | 0.861889 | -5.74544 |
| GHANDHI\_DIRECT\_IRRADIATION\_DN | 0.016803 | -0.21679 | 0.47075 | 0.639375 | 0.861889 | -5.74545 |
| PID\_PDGFRA\_PATHWAY | -0.03476 | -0.00121 | -0.47016 | 0.639791 | 0.862042 | -5.74571 |
| COLLIS\_PRKDC\_REGULATORS | 0.023871 | -0.37509 | 0.470059 | 0.639866 | 0.862042 | -5.74576 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_RISK\_UP | 0.024435 | -0.24773 | 0.470019 | 0.639894 | 0.862042 | -5.74577 |
| RAY\_TARGETS\_OF\_P210\_BCR\_ABL\_FUSION\_DN | 0.026479 | -0.27521 | 0.469595 | 0.640195 | 0.862265 | -5.74596 |
| REACTOME\_IRS\_ACTIVATION | -0.04118 | -0.00982 | -0.46928 | 0.64042 | 0.862307 | -5.7461 |
| BIOCARTA\_IL6\_PATHWAY | -0.03962 | -0.02803 | -0.46917 | 0.640497 | 0.862307 | -5.74614 |
| PID\_MTOR\_4PATHWAY | -0.03153 | -0.07057 | -0.46855 | 0.64094 | 0.86233 | -5.74641 |
| MIKKELSEN\_IPS\_LCP\_WITH\_H3K27ME3 | 0.036124 | 0.018698 | 0.468423 | 0.641029 | 0.86233 | -5.74647 |
| RORIE\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_DN | -0.02583 | -0.07161 | -0.46831 | 0.641111 | 0.86233 | -5.74652 |
| KRISHNAN\_FURIN\_TARGETS\_UP | 0.031541 | -0.32001 | 0.468254 | 0.641149 | 0.86233 | -5.74654 |
| BAELDE\_DIABETIC\_NEPHROPATHY\_DN | -0.03001 | -0.08305 | -0.46819 | 0.641192 | 0.86233 | -5.74657 |
| WP\_PRADERWILLI\_AND\_ANGELMAN\_SYNDROME | -0.01385 | -0.14294 | -0.46744 | 0.641729 | 0.862622 | -5.7469 |
| REACTOME\_STRIATED\_MUSCLE\_CONTRACTION | 0.029723 | -0.04039 | 0.467382 | 0.641769 | 0.862622 | -5.74692 |
| DAZARD\_RESPONSE\_TO\_UV\_SCC\_UP | -0.02913 | -0.16885 | -0.46732 | 0.641816 | 0.862622 | -5.74695 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX6\_DN | -0.04361 | -0.00308 | -0.46656 | 0.642354 | 0.863163 | -5.74728 |
| REACTOME\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER\_REGULATES\_TRANSCRIPTION | 0.035439 | 0.007112 | 0.466006 | 0.642749 | 0.863434 | -5.74752 |
| REACTOME\_BETA\_OXIDATION\_OF\_LAUROYL\_COA\_TO\_DECANOYL\_COA\_COA | -0.06041 | -0.02443 | -0.4659 | 0.642827 | 0.863434 | -5.74757 |
| REACTOME\_ANTIGEN\_ACTIVATES\_B\_CELL\_RECEPTOR\_BCR\_LEADING\_TO\_GENERATION\_OF\_SECOND\_MESSENGERS | 0.043807 | -0.01038 | 0.465264 | 0.643277 | 0.863627 | -5.74784 |
| POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN | 0.024764 | -0.16455 | 0.464971 | 0.643486 | 0.863627 | -5.74797 |
| UDAYAKUMAR\_MED1\_TARGETS\_DN | 0.025017 | -0.09064 | 0.464963 | 0.643492 | 0.863627 | -5.74797 |
| LIN\_APC\_TARGETS | -0.02566 | -0.07186 | -0.46493 | 0.643513 | 0.863627 | -5.74798 |
| REACTOME\_THE\_ACTIVATION\_OF\_ARYLSULFATASES | -0.03285 | 0.001187 | -0.46413 | 0.644088 | 0.864042 | -5.74833 |
| WP\_MAJOR\_RECEPTORS\_TARGETED\_BY\_EPINEPHRINE\_AND\_NOREPINEPHRINE | 0.02497 | -0.07931 | 0.464117 | 0.644094 | 0.864042 | -5.74833 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_16 | -0.02971 | 0.002363 | -0.4639 | 0.644251 | 0.86407 | -5.74843 |
| GENTILE\_RESPONSE\_CLUSTER\_D3 | -0.03039 | -0.06392 | -0.46354 | 0.644507 | 0.864231 | -5.74858 |
| KIM\_WT1\_TARGETS\_12HR\_DN | -0.02533 | -0.04914 | -0.46295 | 0.644929 | 0.86458 | -5.74884 |
| CHANG\_POU5F1\_TARGETS\_UP | 0.030688 | -0.05341 | 0.462703 | 0.645102 | 0.86458 | -5.74894 |
| WP\_CHOLESTEROL\_BIOSYNTHESIS\_PATHWAY | -0.04249 | -0.09927 | -0.4622 | 0.645465 | 0.86458 | -5.74916 |
| CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_BASAL\_DN | 0.025371 | -0.10574 | 0.46219 | 0.645468 | 0.86458 | -5.74916 |
| HAHTOLA\_CTCL\_PATHOGENESIS | 0.015434 | -0.72547 | 0.462174 | 0.64548 | 0.86458 | -5.74917 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_MET\_ACTIVITY | 0.035328 | 0.002465 | 0.462031 | 0.645582 | 0.86458 | -5.74923 |
| BRACHAT\_RESPONSE\_TO\_METHOTREXATE\_DN | -0.03717 | -0.03377 | -0.46183 | 0.645722 | 0.864585 | -5.74932 |
| KEGG\_TAURINE\_AND\_HYPOTAURINE\_METABOLISM | 0.033326 | -0.09825 | 0.46135 | 0.646068 | 0.864728 | -5.74952 |
| YAGUE\_PRETUMOR\_DRUG\_RESISTANCE\_UP | -0.03668 | -0.01873 | -0.46122 | 0.646161 | 0.864728 | -5.74958 |
| LU\_TUMOR\_ENDOTHELIAL\_MARKERS\_DN | -0.03928 | 0.02985 | -0.46097 | 0.646337 | 0.864728 | -5.74969 |
| WP\_MECP2\_AND\_ASSOCIATED\_RETT\_SYNDROME | 0.013135 | -0.13348 | 0.460663 | 0.646558 | 0.864728 | -5.74982 |
| HIRSCH\_CELLULAR\_TRANSFORMATION\_SIGNATURE\_UP | 0.02649 | -0.08876 | 0.46057 | 0.646624 | 0.864728 | -5.74986 |
| WINTER\_HYPOXIA\_UP | 0.027405 | -0.11183 | 0.460543 | 0.646644 | 0.864728 | -5.74987 |
| ZHENG\_FOXP3\_TARGETS\_IN\_T\_LYMPHOCYTE\_DN | -0.03205 | -0.03388 | -0.46022 | 0.646876 | 0.864857 | -5.75001 |
| NAGASHIMA\_NRG1\_SIGNALING\_DN | -0.01901 | -0.02897 | -0.45969 | 0.647249 | 0.865174 | -5.75023 |
| REACTOME\_TRANS\_GOLGI\_NETWORK\_VESICLE\_BUDDING | -0.03406 | -0.01072 | -0.45928 | 0.647547 | 0.865391 | -5.75041 |
| ONDER\_CDH1\_TARGETS\_2\_UP | -0.02934 | -0.0798 | -0.45895 | 0.647783 | 0.865524 | -5.75055 |
| ZHANG\_ADIPOGENESIS\_BY\_BMP7 | -0.03036 | -0.06505 | -0.45838 | 0.64819 | 0.865886 | -5.75079 |
| WILSON\_PROTEASES\_AT\_TUMOR\_BONE\_INTERFACE\_UP | -0.02928 | -0.10187 | -0.4578 | 0.6486 | 0.865961 | -5.75104 |
| REACTOME\_LAMININ\_INTERACTIONS | -0.03484 | -0.0042 | -0.45762 | 0.648729 | 0.865961 | -5.75112 |
| PID\_GLYPICAN\_1PATHWAY | -0.02269 | -0.03132 | -0.45759 | 0.64875 | 0.865961 | -5.75113 |
| LEE\_METASTASIS\_AND\_ALTERNATIVE\_SPLICING\_DN | 0.016948 | -0.09081 | 0.457538 | 0.64879 | 0.865961 | -5.75115 |
| BEIER\_GLIOMA\_STEM\_CELL\_DN | 0.01416 | -0.42475 | 0.457271 | 0.648981 | 0.866034 | -5.75127 |
| NAM\_FXYD5\_TARGETS\_DN | -0.03351 | -0.13199 | -0.45701 | 0.649171 | 0.866054 | -5.75138 |
| WP\_DUAL\_HIJACK\_MODEL\_OF\_VIF\_IN\_HIV\_INFECTION | -0.05572 | -0.05372 | -0.45687 | 0.649268 | 0.866054 | -5.75144 |
| SESTO\_RESPONSE\_TO\_UV\_C2 | -0.03588 | -0.03877 | -0.45626 | 0.649706 | 0.866456 | -5.7517 |
| DUTERTRE\_ESTRADIOL\_RESPONSE\_6HR\_UP | 0.014983 | -0.05376 | 0.45602 | 0.649876 | 0.866501 | -5.7518 |
| REACTOME\_TRANSMISSION\_ACROSS\_CHEMICAL\_SYNAPSES | 0.016715 | -0.05416 | 0.455804 | 0.65003 | 0.866503 | -5.75189 |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_2\_DN | 0.030086 | -0.00404 | 0.455637 | 0.65015 | 0.866503 | -5.75196 |
| WOOD\_EBV\_EBNA1\_TARGETS\_UP | 0.022038 | -0.09303 | 0.455036 | 0.65058 | 0.86653 | -5.75221 |
| WANG\_TUMOR\_INVASIVENESS\_DN | -0.03041 | -0.05609 | -0.45499 | 0.65061 | 0.86653 | -5.75223 |
| REACTOME\_TOLL\_LIKE\_RECEPTOR\_9\_TLR9\_CASCADE | 0.022633 | -0.08262 | 0.454952 | 0.65064 | 0.86653 | -5.75225 |
| REACTOME\_JNK\_C\_JUN\_KINASES\_PHOSPHORYLATION\_AND\_ACTIVATION\_MEDIATED\_BY\_ACTIVATED\_HUMAN\_TAK1 | 0.032359 | 0.011664 | 0.454293 | 0.651112 | 0.86653 | -5.75253 |
| KAAB\_HEART\_ATRIUM\_VS\_VENTRICLE\_UP | 0.019332 | -0.10692 | 0.45429 | 0.651114 | 0.86653 | -5.75253 |
| REACTOME\_LATE\_ENDOSOMAL\_MICROAUTOPHAGY | -0.03347 | -0.0436 | -0.45425 | 0.651139 | 0.86653 | -5.75254 |
| XU\_HGF\_TARGETS\_INDUCED\_BY\_AKT1\_48HR\_DN | -0.02342 | -0.05236 | -0.45405 | 0.651289 | 0.86653 | -5.75263 |
| JINESH\_BLEBBISHIELD\_TO\_IMMUNE\_CELL\_FUSION\_PBSHMS\_DN | 0.019253 | -0.14096 | 0.453888 | 0.651401 | 0.86653 | -5.7527 |
| FUJIWARA\_PARK2\_IN\_LIVER\_CANCER\_DN | -0.04159 | -0.00686 | -0.45341 | 0.651746 | 0.86653 | -5.7529 |
| YANG\_BREAST\_CANCER\_ESR1\_LASER\_DN | -0.03119 | -0.00814 | -0.45336 | 0.651778 | 0.86653 | -5.75292 |
| BIOCARTA\_CCR3\_PATHWAY | 0.022725 | -0.04998 | 0.453297 | 0.651825 | 0.86653 | -5.75295 |
| REACTOME\_P38MAPK\_EVENTS | 0.026887 | -0.06217 | 0.453155 | 0.651926 | 0.86653 | -5.75301 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_LOW\_RISK\_UP | 0.019753 | -0.0854 | 0.453136 | 0.65194 | 0.86653 | -5.75301 |
| IKEDA\_MIR1\_TARGETS\_UP | -0.03344 | -0.06726 | -0.45285 | 0.652149 | 0.866585 | -5.75314 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX5\_DN | 0.037694 | -0.01765 | 0.451909 | 0.65282 | 0.866585 | -5.75353 |
| PID\_INTEGRIN4\_PATHWAY | 0.037476 | -0.00708 | 0.451807 | 0.652892 | 0.866585 | -5.75357 |
| PID\_NFKAPPAB\_ATYPICAL\_PATHWAY | -0.03276 | -0.24779 | -0.45176 | 0.652927 | 0.866585 | -5.75359 |
| REACTOME\_CREB3\_FACTORS\_ACTIVATE\_GENES | -0.02995 | -0.01598 | -0.45158 | 0.653054 | 0.866585 | -5.75367 |
| ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_DN | -0.01467 | -0.18938 | -0.45135 | 0.653221 | 0.866585 | -5.75377 |
| DARWICHE\_PAPILLOMA\_RISK\_HIGH\_DN | -0.01451 | -0.06538 | -0.45122 | 0.65331 | 0.866585 | -5.75382 |
| ZHANG\_ANTIVIRAL\_RESPONSE\_TO\_RIBAVIRIN\_DN | 0.022753 | -0.08513 | 0.451191 | 0.653334 | 0.866585 | -5.75383 |
| GRAESSMANN\_APOPTOSIS\_BY\_SERUM\_DEPRIVATION\_DN | 0.01763 | -0.03227 | 0.451146 | 0.653366 | 0.866585 | -5.75385 |
| SABATES\_COLORECTAL\_ADENOMA\_SIZE\_DN | -0.02642 | -0.06653 | -0.4511 | 0.653398 | 0.866585 | -5.75387 |
| HOFFMANN\_SMALL\_PRE\_BII\_TO\_IMMATURE\_B\_LYMPHOCYTE\_DN | 0.018468 | -0.16527 | 0.450989 | 0.653479 | 0.866585 | -5.75392 |
| BOYLAN\_MULTIPLE\_MYELOMA\_PCA1\_DN | 0.039693 | 0.001616 | 0.450749 | 0.653651 | 0.866633 | -5.75402 |
| BIOCARTA\_BCR\_PATHWAY | -0.03421 | -0.03677 | -0.45032 | 0.653961 | 0.866705 | -5.7542 |
| CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_DN | -0.01679 | -0.11376 | -0.45015 | 0.654079 | 0.866705 | -5.75427 |
| REACTOME\_INTERACTION\_WITH\_CUMULUS\_CELLS\_AND\_THE\_ZONA\_PELLUCIDA | 0.032799 | -0.13948 | 0.449818 | 0.654319 | 0.866705 | -5.75441 |
| GOTZMANN\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_UP | 0.021217 | -0.08658 | 0.449575 | 0.654493 | 0.866705 | -5.75451 |
| NAKAMURA\_CANCER\_MICROENVIRONMENT\_DN | -0.0313 | -0.02178 | -0.44957 | 0.654495 | 0.866705 | -5.75451 |
| MCCABE\_BOUND\_BY\_HOXC6 | 0.008451 | -0.13428 | 0.449533 | 0.654523 | 0.866705 | -5.75453 |
| KIM\_WT1\_TARGETS\_12HR\_UP | 0.02383 | -0.09894 | 0.449034 | 0.654882 | 0.866922 | -5.75473 |
| PILON\_KLF1\_TARGETS\_UP | -0.01602 | -0.11724 | -0.44893 | 0.65496 | 0.866922 | -5.75478 |
| KEGG\_FC\_GAMMA\_R\_MEDIATED\_PHAGOCYTOSIS | 0.024261 | -0.05524 | 0.448486 | 0.655274 | 0.867159 | -5.75496 |
| SCHRAETS\_MLL\_TARGETS\_DN | 0.021919 | -0.1245 | 0.448164 | 0.655505 | 0.867284 | -5.7551 |
| VECCHI\_GASTRIC\_CANCER\_EARLY\_UP | -0.01711 | -0.0858 | -0.44753 | 0.655961 | 0.867707 | -5.75536 |
| CAFFAREL\_RESPONSE\_TO\_THC\_24HR\_5\_UP | 0.032876 | -0.19713 | 0.447209 | 0.656192 | 0.867831 | -5.75549 |
| CHANDRAN\_METASTASIS\_TOP50\_UP | 0.03235 | -0.05236 | 0.446568 | 0.656652 | 0.868185 | -5.75576 |
| BROWNE\_HCMV\_INFECTION\_24HR\_DN | -0.02497 | -0.07146 | -0.44646 | 0.656732 | 0.868185 | -5.75581 |
| FERNANDEZ\_BOUND\_BY\_MYC | 0.016699 | -0.07579 | 0.446064 | 0.657014 | 0.868378 | -5.75597 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_5 | -0.04006 | 0.002799 | -0.44536 | 0.657519 | 0.868864 | -5.75626 |
| ALONSO\_METASTASIS\_DN | 0.018324 | -0.02574 | 0.444644 | 0.658035 | 0.869196 | -5.75656 |
| MIKHAYLOVA\_OXIDATIVE\_STRESS\_RESPONSE\_VIA\_VHL\_UP | 0.019497 | -0.56086 | 0.444632 | 0.658043 | 0.869196 | -5.75656 |
| COLLIS\_PRKDC\_SUBSTRATES | -0.03468 | -0.1139 | -0.44386 | 0.658602 | 0.869753 | -5.75688 |
| REACTOME\_SIGNALING\_BY\_ERBB4 | 0.016968 | -0.03808 | 0.44355 | 0.658822 | 0.86984 | -5.75701 |
| REACTOME\_IKBA\_VARIANT\_LEADS\_TO\_EDA\_ID | 0.048557 | 0.014205 | 0.443384 | 0.658941 | 0.86984 | -5.75708 |
| REACTOME\_ASSEMBLY\_AND\_CELL\_SURFACE\_PRESENTATION\_OF\_NMDA\_RECEPTORS | 0.023315 | -0.00646 | 0.442869 | 0.659312 | 0.870054 | -5.75729 |
| BIOCARTA\_MAPK\_PATHWAY | -0.02411 | -0.10091 | -0.44278 | 0.659376 | 0.870054 | -5.75733 |
| PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_UP | -0.02199 | -0.17129 | -0.4423 | 0.65972 | 0.87029 | -5.75752 |
| KEGG\_GAP\_JUNCTION | 0.015156 | -0.12445 | 0.441946 | 0.659976 | 0.87029 | -5.75767 |
| MCBRYAN\_PUBERTAL\_BREAST\_5\_6WK\_UP | 0.018899 | -0.08069 | 0.441776 | 0.660099 | 0.87029 | -5.75774 |
| LY\_AGING\_OLD\_DN | -0.034 | -0.02556 | -0.44177 | 0.660102 | 0.87029 | -5.75774 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D2 | -0.03216 | -0.03591 | -0.44156 | 0.660252 | 0.870308 | -5.75783 |
| BIOCARTA\_G1\_PATHWAY | 0.026246 | -0.00998 | 0.440681 | 0.660887 | 0.870738 | -5.75819 |
| LIU\_PROSTATE\_CANCER\_UP | 0.014945 | -0.06958 | 0.440677 | 0.66089 | 0.870738 | -5.75819 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_PAKS | -0.03343 | -0.08686 | -0.44051 | 0.661011 | 0.870738 | -5.75826 |
| MODY\_HIPPOCAMPUS\_PRENATAL | -0.03034 | -0.15486 | -0.44035 | 0.661126 | 0.870738 | -5.75832 |
| KEGG\_NON\_HOMOLOGOUS\_END\_JOINING | -0.02739 | 0.015227 | -0.43999 | 0.661389 | 0.870904 | -5.75847 |
| PID\_ANGIOPOIETIN\_RECEPTOR\_PATHWAY | -0.02731 | -0.11875 | -0.43899 | 0.662104 | 0.871493 | -5.75888 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_2 | 0.021473 | 0.001584 | 0.43886 | 0.662199 | 0.871493 | -5.75893 |
| KEGG\_T\_CELL\_RECEPTOR\_SIGNALING\_PATHWAY | 0.021768 | -0.11297 | 0.438779 | 0.662258 | 0.871493 | -5.75896 |
| REACTOME\_G2\_M\_DNA\_REPLICATION\_CHECKPOINT | -0.04324 | -0.02506 | -0.43859 | 0.662392 | 0.871493 | -5.75904 |
| AMIT\_EGF\_RESPONSE\_40\_MCF10A | -0.04119 | 0.003572 | -0.43841 | 0.662521 | 0.871493 | -5.75911 |
| WP\_FARNESOID\_X\_RECEPTOR\_PATHWAY | 0.023286 | -0.10074 | 0.438104 | 0.662745 | 0.871607 | -5.75924 |
| SASAI\_RESISTANCE\_TO\_NEOPLASTIC\_TRANSFROMATION | 0.028693 | -0.14375 | 0.437445 | 0.66322 | 0.871913 | -5.75951 |
| REACTOME\_RHOV\_GTPASE\_CYCLE | 0.022444 | -0.02341 | 0.437402 | 0.663251 | 0.871913 | -5.75953 |
| KEGG\_RENAL\_CELL\_CARCINOMA | -0.02627 | -0.0262 | -0.43685 | 0.663647 | 0.87211 | -5.75975 |
| PARK\_HSC\_VS\_MULTIPOTENT\_PROGENITORS\_DN | -0.03469 | 0.004405 | -0.43668 | 0.663771 | 0.87211 | -5.75982 |
| KIM\_ALL\_DISORDERS\_DURATION\_CORR\_DN | -0.02489 | -0.13109 | -0.43662 | 0.663812 | 0.87211 | -5.75984 |
| WANG\_PROSTATE\_CANCER\_ANDROGEN\_INDEPENDENT | -0.02104 | -0.10409 | -0.43603 | 0.664238 | 0.872489 | -5.76008 |
| WP\_PRIMARY\_FOCAL\_SEGMENTAL\_GLOMERULOSCLEROSIS\_FSGS | -0.02003 | -0.0417 | -0.435 | 0.664984 | 0.873233 | -5.7605 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_GAMMA\_IN\_WS | -0.02258 | -0.20517 | -0.4348 | 0.665126 | 0.873233 | -5.76058 |
| WP\_NEUROINFLAMMATION | -0.03222 | 0.002408 | -0.43459 | 0.665279 | 0.873233 | -5.76066 |
| ELVIDGE\_HIF2A\_TARGETS\_UP | 0.042313 | -0.00395 | 0.434446 | 0.665385 | 0.873233 | -5.76072 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_UP | 0.029699 | -0.0287 | 0.434129 | 0.665614 | 0.873233 | -5.76085 |
| REACTOME\_THE\_ROLE\_OF\_GTSE1\_IN\_G2\_M\_PROGRESSION\_AFTER\_G2\_CHECKPOINT | -0.02312 | -0.21327 | -0.43404 | 0.66568 | 0.873233 | -5.76089 |
| LE\_EGR2\_TARGETS\_UP | -0.02318 | -0.12015 | -0.43392 | 0.665765 | 0.873233 | -5.76094 |
| WP\_KETOGENESIS\_AND\_KETOLYSIS | -0.0321 | -0.19331 | -0.43364 | 0.665967 | 0.873318 | -5.76105 |
| WP\_REGUCALCIN\_IN\_PROXIMAL\_TUBULE\_EPITHELIAL\_KIDNEY\_CELLS | 0.020638 | -0.0273 | 0.432629 | 0.666698 | 0.874036 | -5.76146 |
| BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NS1\_INFECTION\_DN | -0.02384 | -0.08537 | -0.4324 | 0.666862 | 0.874036 | -5.76155 |
| IBRAHIM\_NRF3\_DOWN | -0.03374 | -0.00038 | -0.43231 | 0.666927 | 0.874036 | -5.76158 |
| REACTOME\_NUCLEOTIDE\_LIKE\_PURINERGIC\_RECEPTORS | 0.026653 | 0.01065 | 0.432072 | 0.667101 | 0.874084 | -5.76168 |
| BIOCARTA\_ARENRF2\_PATHWAY | -0.02346 | -0.05293 | -0.43163 | 0.667417 | 0.874319 | -5.76185 |
| WP\_ALLOGRAFT\_REJECTION | 0.008758 | -0.59902 | 0.430905 | 0.667945 | 0.87477 | -5.76215 |
| WP\_TCA\_CYCLE\_NUTRIENT\_USE\_AND\_INVASIVENESS\_OF\_OVARIAN\_CANCER | 0.043824 | -0.03024 | 0.430778 | 0.668037 | 0.87477 | -5.7622 |
| CHICAS\_RB1\_TARGETS\_SENESCENT | -0.02108 | -0.07124 | -0.4304 | 0.668314 | 0.874953 | -5.76235 |
| WP\_UNFOLDED\_PROTEIN\_RESPONSE | 0.034959 | 0.005495 | 0.429795 | 0.668748 | 0.875341 | -5.76259 |
| REACTOME\_E3\_UBIQUITIN\_LIGASES\_UBIQUITINATE\_TARGET\_PROTEINS | -0.02718 | -0.03819 | -0.42921 | 0.669169 | 0.8755 | -5.76282 |
| SMITH\_TERT\_TARGETS\_DN | 0.021618 | -0.14008 | 0.429126 | 0.669232 | 0.8755 | -5.76286 |
| WP\_AMPLIFICATION\_AND\_EXPANSION\_OF\_ONCOGENIC\_PATHWAYS\_AS\_METASTATIC\_TRAITS | -0.03022 | 0.004246 | -0.4289 | 0.669392 | 0.8755 | -5.76295 |
| ZHANG\_PROLIFERATING\_VS\_QUIESCENT | 0.033998 | -0.01348 | 0.428868 | 0.669419 | 0.8755 | -5.76296 |
| KORKOLA\_TERATOMA\_UP | 0.039249 | 0.016292 | 0.428069 | 0.669997 | 0.875616 | -5.76328 |
| MOROSETTI\_FACIOSCAPULOHUMERAL\_MUSCULAR\_DISTROPHY\_DN | -0.02857 | -0.00836 | -0.42786 | 0.670149 | 0.875616 | -5.76336 |
| MCBRYAN\_PUBERTAL\_BREAST\_4\_5WK\_DN | -0.02062 | -0.06459 | -0.42756 | 0.670368 | 0.875616 | -5.76348 |
| PID\_P38\_GAMMA\_DELTA\_PATHWAY | -0.02166 | -0.22884 | -0.42754 | 0.670381 | 0.875616 | -5.76349 |
| SHAFFER\_IRF4\_MULTIPLE\_MYELOMA\_PROGRAM | 0.033459 | -0.09762 | 0.427418 | 0.670469 | 0.875616 | -5.76354 |
| SASSON\_FSH\_RESPONSE | -0.03439 | -0.00015 | -0.42729 | 0.67056 | 0.875616 | -5.76359 |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_DN | -0.0173 | -0.06454 | -0.42723 | 0.670607 | 0.875616 | -5.76361 |
| REACTOME\_PI\_3K\_CASCADE\_FGFR4 | -0.02586 | 0.009935 | -0.42723 | 0.670608 | 0.875616 | -5.76361 |
| SCHMIDT\_POR\_TARGETS\_IN\_LIMB\_BUD\_UP | -0.03232 | -0.06867 | -0.427 | 0.670771 | 0.875648 | -5.7637 |
| KEGG\_TIGHT\_JUNCTION | -0.01125 | -0.14164 | -0.4261 | 0.671421 | 0.876226 | -5.76406 |
| REACTOME\_CLEC7A\_INFLAMMASOME\_PATHWAY | 0.039649 | 0.011398 | 0.425686 | 0.671725 | 0.876226 | -5.76423 |
| PURBEY\_TARGETS\_OF\_CTBP1\_NOT\_SATB1\_DN | -0.01064 | -0.10602 | -0.4253 | 0.672002 | 0.876226 | -5.76438 |
| PASQUALUCCI\_LYMPHOMA\_BY\_GC\_STAGE\_UP | -0.02295 | -0.0481 | -0.42522 | 0.672061 | 0.876226 | -5.76441 |
| PID\_LYMPH\_ANGIOGENESIS\_PATHWAY | -0.02906 | -0.04252 | -0.42516 | 0.672105 | 0.876226 | -5.76443 |
| REACTOME\_NUCLEOTIDE\_SALVAGE | 0.024114 | -0.05001 | 0.425065 | 0.672175 | 0.876226 | -5.76447 |
| REACTOME\_INTERLEUKIN\_35\_SIGNALLING | 0.034739 | -0.15503 | 0.424997 | 0.672225 | 0.876226 | -5.7645 |
| SHARMA\_PILOCYTIC\_ASTROCYTOMA\_LOCATION\_DN | -0.03363 | 0.016848 | -0.42487 | 0.672315 | 0.876226 | -5.76455 |
| HONMA\_DOCETAXEL\_RESISTANCE | -0.03041 | -0.21536 | -0.42445 | 0.672624 | 0.87645 | -5.76472 |
| YEGNASUBRAMANIAN\_PROSTATE\_CANCER | -0.01468 | -0.09683 | -0.42414 | 0.672843 | 0.876555 | -5.76483 |
| REACTOME\_SIGNALING\_BY\_RHO\_GTPASES\_MIRO\_GTPASES\_AND\_RHOBTB3 | -0.01824 | -0.0527 | -0.423 | 0.673674 | 0.877301 | -5.76529 |
| YANAGIHARA\_ESX1\_TARGETS | -0.03031 | -0.03629 | -0.42285 | 0.673781 | 0.877301 | -5.76534 |
| WP\_HYPOTHESIZED\_PATHWAYS\_IN\_PATHOGENESIS\_OF\_CARDIOVASCULAR\_DISEASE | -0.02826 | 0.007037 | -0.42275 | 0.673854 | 0.877301 | -5.76538 |
| HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_DN | 0.045877 | 0.022172 | 0.422595 | 0.673967 | 0.877301 | -5.76544 |
| PID\_LIS1\_PATHWAY | 0.028113 | -0.04083 | 0.422334 | 0.674157 | 0.877369 | -5.76555 |
| MAEKAWA\_ATF2\_TARGETS | -0.0187 | -0.02982 | -0.42212 | 0.674309 | 0.877387 | -5.76563 |
| JIANG\_HYPOXIA\_NORMAL | 0.024199 | -0.09064 | 0.421708 | 0.674612 | 0.877455 | -5.76579 |
| DING\_LUNG\_CANCER\_MUTATED\_FREQUENTLY | 0.02589 | -0.29624 | 0.421674 | 0.674636 | 0.877455 | -5.76581 |
| REACTOME\_RAC2\_GTPASE\_CYCLE | 0.019689 | -0.04492 | 0.420596 | 0.675419 | 0.877946 | -5.76623 |
| CHIBA\_RESPONSE\_TO\_TSA | 0.029221 | -0.06643 | 0.420516 | 0.675478 | 0.877946 | -5.76626 |
| PID\_PRL\_SIGNALING\_EVENTS\_PATHWAY | -0.0296 | -0.11727 | -0.42044 | 0.675532 | 0.877946 | -5.76629 |
| WP\_NONGENOMIC\_ACTIONS\_OF\_125\_DIHYDROXYVITAMIN\_D3 | 0.018407 | -0.17361 | 0.420245 | 0.675675 | 0.877946 | -5.76637 |
| BILANGES\_RAPAMYCIN\_SENSITIVE\_GENES | -0.02578 | -0.14623 | -0.4202 | 0.675704 | 0.877946 | -5.76638 |
| KORKOLA\_TERATOMA | 0.019032 | -0.00568 | 0.41957 | 0.676165 | 0.878256 | -5.76663 |
| REACTOME\_FICOLINS\_BIND\_TO\_REPETITIVE\_CARBOHYDRATE\_STRUCTURES\_ON\_THE\_TARGET\_CELL\_SURFACE | 0.043094 | 0.01757 | 0.419497 | 0.676218 | 0.878256 | -5.76666 |
| GOERING\_BLOOD\_HDL\_CHOLESTEROL\_QTL\_TRANS | 0.022973 | -0.08952 | 0.418651 | 0.676834 | 0.878291 | -5.76699 |
| APPIERTO\_RESPONSE\_TO\_FENRETINIDE\_DN | -0.02505 | -0.14963 | -0.41847 | 0.676966 | 0.878291 | -5.76706 |
| BIOCARTA\_BARRESTIN\_SRC\_PATHWAY | 0.021346 | -0.05245 | 0.418407 | 0.677011 | 0.878291 | -5.76708 |
| REACTOME\_DEFECTIVE\_ST3GAL3\_CAUSES\_MCT12\_AND\_EIEE15 | 0.038175 | -0.00363 | 0.418292 | 0.677095 | 0.878291 | -5.76713 |
| BENPORATH\_MYC\_TARGETS\_WITH\_EBOX | 0.017246 | -0.09061 | 0.418287 | 0.677098 | 0.878291 | -5.76713 |
| GROSS\_HYPOXIA\_VIA\_HIF1A\_DN | 0.022993 | -0.03455 | 0.417351 | 0.67778 | 0.878291 | -5.76749 |
| WP\_BRAINDERIVED\_NEUROTROPHIC\_FACTOR\_BDNF\_SIGNALING\_PATHWAY | 0.015347 | -0.07817 | 0.417339 | 0.677788 | 0.878291 | -5.7675 |
| KEGG\_VIRAL\_MYOCARDITIS | 0.00849 | -0.612 | 0.417148 | 0.677927 | 0.878291 | -5.76757 |
| FOROUTAN\_TGFB\_EMT\_DN | 0.014974 | -0.09033 | 0.41714 | 0.677933 | 0.878291 | -5.76757 |
| PID\_P73PATHWAY | 0.014092 | -0.03814 | 0.417125 | 0.677943 | 0.878291 | -5.76758 |
| BROWNE\_HCMV\_INFECTION\_16HR\_DN | -0.02301 | -0.0228 | -0.41709 | 0.677969 | 0.878291 | -5.76759 |
| REACTOME\_SIGNALING\_BY\_PDGF | 0.024933 | -0.02385 | 0.416927 | 0.678087 | 0.878291 | -5.76766 |
| FULCHER\_INFLAMMATORY\_RESPONSE\_LECTIN\_VS\_LPS\_UP | 0.023111 | -0.09595 | 0.416901 | 0.678107 | 0.878291 | -5.76767 |
| MATZUK\_LUTEAL\_GENES | 0.035654 | -0.0067 | 0.416535 | 0.678373 | 0.878291 | -5.76781 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_HSC\_UP | 0.020577 | -0.0995 | 0.416481 | 0.678412 | 0.878291 | -5.76783 |
| BENPORATH\_ES\_CORE\_NINE\_CORRELATED | 0.01851 | -0.12379 | 0.416169 | 0.67864 | 0.878291 | -5.76795 |
| YANG\_BREAST\_CANCER\_ESR1\_DN | -0.02186 | -0.03998 | -0.41577 | 0.678933 | 0.878291 | -5.76811 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_12HR | -0.0181 | -0.0314 | -0.41538 | 0.679212 | 0.878291 | -5.76825 |
| WANG\_ESOPHAGUS\_CANCER\_VS\_NORMAL\_DN | -0.02185 | -0.12568 | -0.41525 | 0.679311 | 0.878291 | -5.76831 |
| WP\_HEPATITIS\_B\_INFECTION | -0.01736 | -0.08247 | -0.41504 | 0.679465 | 0.878291 | -5.76839 |
| GROSS\_HIF1A\_TARGETS\_DN | 0.03427 | -0.00762 | 0.414986 | 0.679501 | 0.878291 | -5.76841 |
| WIEDERSCHAIN\_TARGETS\_OF\_BMI1\_AND\_PCGF2 | -0.02131 | -0.16793 | -0.41491 | 0.679556 | 0.878291 | -5.76844 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_1HR\_UP | 0.026488 | -0.00774 | 0.414709 | 0.679702 | 0.878291 | -5.76851 |
| PID\_WNT\_NONCANONICAL\_PATHWAY | -0.02829 | -0.01586 | -0.41469 | 0.679716 | 0.878291 | -5.76852 |
| REACTOME\_DOPAMINE\_NEUROTRANSMITTER\_RELEASE\_CYCLE | 0.022988 | 0.00983 | 0.41465 | 0.679746 | 0.878291 | -5.76854 |
| REACTOME\_GAB1\_SIGNALOSOME | 0.020411 | 0.013578 | 0.414529 | 0.679834 | 0.878291 | -5.76858 |
| PID\_IL1\_PATHWAY | -0.02283 | -0.01883 | -0.4137 | 0.680439 | 0.87839 | -5.7689 |
| WP\_EBSTEINBARR\_VIRUS\_LMP1\_SIGNALING | 0.024364 | -0.25574 | 0.413358 | 0.680687 | 0.87839 | -5.76903 |
| YAUCH\_HEDGEHOG\_SIGNALING\_PARACRINE\_UP | -0.01318 | -0.06594 | -0.41311 | 0.680866 | 0.87839 | -5.76913 |
| REACTOME\_GASTRIN\_CREB\_SIGNALLING\_PATHWAY\_VIA\_PKC\_AND\_MAPK | 0.020529 | -0.09025 | 0.412839 | 0.681065 | 0.87839 | -5.76923 |
| MULLIGHAN\_MLL\_SIGNATURE\_1\_UP | -0.02365 | -0.11105 | -0.41281 | 0.681089 | 0.87839 | -5.76925 |
| CROSBY\_E2F4\_TARGETS | -0.04214 | -0.02597 | -0.41261 | 0.681234 | 0.87839 | -5.76932 |
| STAMBOLSKY\_RESPONSE\_TO\_VITAMIN\_D3\_UP | -0.01352 | -0.06049 | -0.41258 | 0.681253 | 0.87839 | -5.76933 |
| ANDERSEN\_LIVER\_CANCER\_KRT19\_UP | -0.02262 | -0.29764 | -0.41254 | 0.681285 | 0.87839 | -5.76935 |
| WP\_SARS\_CORONAVIRUS\_AND\_INNATE\_IMMUNITY | 0.015934 | -0.02925 | 0.412361 | 0.681414 | 0.87839 | -5.76942 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_2\_DN | 0.028669 | -0.11795 | 0.412329 | 0.681437 | 0.87839 | -5.76943 |
| CHENG\_IMPRINTED\_BY\_ESTRADIOL | -0.01148 | -0.02825 | -0.41216 | 0.681563 | 0.87839 | -5.76949 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_1\_UP | -0.02502 | -0.07889 | -0.41215 | 0.681567 | 0.87839 | -5.7695 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_6 | 0.025842 | -0.11441 | 0.411931 | 0.681728 | 0.87842 | -5.76958 |
| REACTOME\_MITOCHONDRIAL\_FATTY\_ACID\_BETA\_OXIDATION\_OF\_SATURATED\_FATTY\_ACIDS | -0.02927 | -0.00885 | -0.41135 | 0.682152 | 0.878743 | -5.7698 |
| HOEGERKORP\_CD44\_TARGETS\_TEMPORAL\_DN | 0.019182 | -0.07393 | 0.411209 | 0.682254 | 0.878743 | -5.76986 |
| REACTOME\_SIGNAL\_ATTENUATION | -0.03095 | 0.007939 | -0.41039 | 0.682851 | 0.879152 | -5.77017 |
| REACTOME\_GLYCOGEN\_STORAGE\_DISEASES | 0.029334 | 0.005571 | 0.410327 | 0.682898 | 0.879152 | -5.77019 |
| SMID\_BREAST\_CANCER\_LUMINAL\_B\_UP | 0.013625 | -0.0838 | 0.410169 | 0.683013 | 0.879152 | -5.77025 |
| KEGG\_EPITHELIAL\_CELL\_SIGNALING\_IN\_HELICOBACTER\_PYLORI\_INFECTION | 0.021634 | -0.13272 | 0.410016 | 0.683125 | 0.879152 | -5.77031 |
| MEISSNER\_ES\_ICP\_WITH\_H3K4ME3 | -0.01334 | -0.35364 | -0.40885 | 0.683976 | 0.879823 | -5.77076 |
| REACTOME\_NR1H2\_NR1H3\_REGULATE\_GENE\_EXPRESSION\_TO\_LIMIT\_CHOLESTEROL\_UPTAKE | 0.027056 | -0.45316 | 0.408278 | 0.684394 | 0.879823 | -5.77097 |
| PID\_CASPASE\_PATHWAY | -0.01939 | -0.11783 | -0.4082 | 0.684454 | 0.879823 | -5.77101 |
| REACTOME\_SIGNALING\_BY\_FLT3\_ITD\_AND\_TKD\_MUTANTS | -0.0296 | -0.04027 | -0.40816 | 0.68448 | 0.879823 | -5.77102 |
| WP\_GENES\_CONTROLLING\_NEPHROGENESIS | 0.018333 | -0.04617 | 0.408114 | 0.684514 | 0.879823 | -5.77104 |
| KUROKAWA\_LIVER\_CANCER\_EARLY\_RECURRENCE\_UP | -0.01701 | -0.51151 | -0.40772 | 0.6848 | 0.879823 | -5.77119 |
| WP\_BILE\_ACIDS\_SYNTHESIS\_AND\_ENTEROHEPATIC\_CIRCULATION | 0.021648 | -0.07804 | 0.407297 | 0.685111 | 0.879823 | -5.77135 |
| CHIBA\_RESPONSE\_TO\_TSA\_DN | 0.02325 | -0.08537 | 0.40717 | 0.685203 | 0.879823 | -5.77139 |
| REACTOME\_NUCLEAR\_SIGNALING\_BY\_ERBB4 | 0.01522 | -0.04007 | 0.407057 | 0.685286 | 0.879823 | -5.77144 |
| WANG\_METASTASIS\_OF\_BREAST\_CANCER\_ESR1\_DN | 0.013748 | -0.33196 | 0.406903 | 0.685398 | 0.879823 | -5.7715 |
| REACTOME\_MET\_RECEPTOR\_RECYCLING | 0.030239 | 0.003924 | 0.406693 | 0.685552 | 0.879823 | -5.77157 |
| REACTOME\_LYSOSOME\_VESICLE\_BIOGENESIS | 0.030069 | -0.01381 | 0.406569 | 0.685643 | 0.879823 | -5.77162 |
| REACTOME\_LRR\_FLII\_INTERACTING\_PROTEIN\_1\_LRRFIP1\_ACTIVATES\_TYPE\_I\_IFN\_PRODUCTION | 0.051876 | -0.01463 | 0.406451 | 0.685729 | 0.879823 | -5.77167 |
| MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_UP | 0.036061 | 0.016451 | 0.406262 | 0.685867 | 0.879823 | -5.77174 |
| WP\_ESTROGEN\_METABOLISM | 0.027266 | 0.002303 | 0.406055 | 0.686019 | 0.879823 | -5.77182 |
| REACTOME\_RHOBTB1\_GTPASE\_CYCLE | -0.0347 | -0.00492 | -0.40605 | 0.686022 | 0.879823 | -5.77182 |
| YAGUE\_PRETUMOR\_DRUG\_RESISTANCE\_DN | 0.036734 | 0.002014 | 0.405801 | 0.686204 | 0.879823 | -5.77191 |
| REACTOME\_INTERLEUKIN\_20\_FAMILY\_SIGNALING | -0.02222 | 0.013056 | -0.40521 | 0.686637 | 0.879823 | -5.77214 |
| REACTOME\_METABOLISM\_OF\_VITAMINS\_AND\_COFACTORS | -0.01387 | -0.07113 | -0.40505 | 0.686752 | 0.879823 | -5.77219 |
| MASSARWEH\_RESPONSE\_TO\_ESTRADIOL | -0.01836 | -0.03633 | -0.40492 | 0.686846 | 0.879823 | -5.77224 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_E\_UP | 0.018855 | -0.06181 | 0.404918 | 0.68685 | 0.879823 | -5.77224 |
| WP\_ATM\_SIGNALING\_IN\_DEVELOPMENT\_AND\_DISEASE | -0.01932 | -0.16466 | -0.40477 | 0.686958 | 0.879823 | -5.7723 |
| WP\_APOPTOSIS | 0.018142 | -0.14686 | 0.404677 | 0.687026 | 0.879823 | -5.77234 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX2 | -0.02131 | -0.14876 | -0.40463 | 0.687058 | 0.879823 | -5.77235 |
| PARENT\_MTOR\_SIGNALING\_UP | -0.01447 | -0.1483 | -0.40438 | 0.687244 | 0.879823 | -5.77245 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_3\_DN | -0.02184 | -0.07595 | -0.40423 | 0.68735 | 0.879823 | -5.7725 |
| BIOCARTA\_SODD\_PATHWAY | -0.02544 | -0.37735 | -0.40414 | 0.687418 | 0.879823 | -5.77254 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX4\_DN | -0.0314 | -0.0596 | -0.40386 | 0.687624 | 0.879823 | -5.77264 |
| BILD\_SRC\_ONCOGENIC\_SIGNATURE | -0.02152 | -0.04325 | -0.40343 | 0.687939 | 0.879823 | -5.7728 |
| PETROVA\_PROX1\_TARGETS\_DN | 0.030096 | -0.00122 | 0.403406 | 0.687956 | 0.879823 | -5.77281 |
| SCHLOSSER\_SERUM\_RESPONSE\_AUGMENTED\_BY\_MYC | -0.01938 | -0.08887 | -0.40327 | 0.688058 | 0.879823 | -5.77287 |
| REACTOME\_FRS\_MEDIATED\_FGFR4\_SIGNALING | -0.0198 | -0.03844 | -0.40325 | 0.68807 | 0.879823 | -5.77287 |
| BAE\_BRCA1\_TARGETS\_UP | 0.028076 | -0.03322 | 0.40209 | 0.68892 | 0.880604 | -5.77331 |
| MCCLUNG\_DELTA\_FOSB\_TARGETS\_2WK | -0.01495 | -0.17158 | -0.40204 | 0.688957 | 0.880604 | -5.77333 |
| WEINMANN\_ADAPTATION\_TO\_HYPOXIA\_DN | 0.019263 | -0.2495 | 0.401752 | 0.689167 | 0.880695 | -5.77343 |
| CLIMENT\_BREAST\_CANCER\_COPY\_NUMBER\_UP | 0.017949 | -0.19683 | 0.401332 | 0.689475 | 0.880911 | -5.77359 |
| REACTOME\_SIGNALING\_BY\_LRP5\_MUTANTS | -0.03589 | 0.042872 | -0.40092 | 0.689775 | 0.881117 | -5.77374 |
| IKEDA\_MIR133\_TARGETS\_UP | -0.03165 | -0.07236 | -0.40071 | 0.689929 | 0.881138 | -5.77382 |
| WEBER\_METHYLATED\_IN\_COLON\_CANCER | 0.030897 | 0.021401 | 0.400326 | 0.690212 | 0.881323 | -5.77396 |
| WP\_MBDNF\_AND\_PROBDNF\_REGULATION\_OF\_GABA\_NEUROTRANSMISSION | -0.01503 | -0.07891 | -0.39991 | 0.690515 | 0.881533 | -5.77412 |
| WP\_MIR517\_RELATIONSHIP\_WITH\_ARCN1\_AND\_USP1 | -0.04308 | 0.028444 | -0.39932 | 0.690952 | 0.88188 | -5.77434 |
| LU\_AGING\_BRAIN\_UP | -0.02435 | -0.04821 | -0.3986 | 0.691476 | 0.88188 | -5.7746 |
| DORN\_ADENOVIRUS\_INFECTION\_12HR\_UP | 0.023825 | 0.008257 | 0.398574 | 0.691496 | 0.88188 | -5.77461 |
| REACTOME\_RAC3\_GTPASE\_CYCLE | 0.014647 | -0.03928 | 0.398472 | 0.691571 | 0.88188 | -5.77465 |
| REACTOME\_DOWNREGULATION\_OF\_ERBB4\_SIGNALING | -0.03896 | -0.01047 | -0.39832 | 0.691683 | 0.88188 | -5.77471 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C3 | -0.02371 | -0.15236 | -0.39827 | 0.691722 | 0.88188 | -5.77473 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX2\_DN | -0.03533 | -0.15231 | -0.39822 | 0.691757 | 0.88188 | -5.77475 |
| LU\_TUMOR\_VASCULATURE\_DN | -0.02218 | -0.06609 | -0.39768 | 0.692155 | 0.88205 | -5.77495 |
| LEE\_DIFFERENTIATING\_T\_LYMPHOCYTE | 0.026053 | -0.17362 | 0.397458 | 0.692315 | 0.88205 | -5.77503 |
| WP\_KISSPEPTINKISSPEPTIN\_RECEPTOR\_SYSTEM\_IN\_THE\_OVARY | -0.01945 | -0.04514 | -0.39731 | 0.692426 | 0.88205 | -5.77508 |
| OHASHI\_AURKA\_TARGETS | -0.0416 | -0.05028 | -0.39728 | 0.692445 | 0.88205 | -5.77509 |
| LANDIS\_ERBB2\_BREAST\_TUMORS\_65\_UP | -0.03639 | 0.007479 | -0.39709 | 0.692587 | 0.882054 | -5.77516 |
| KEGG\_GLYCINE\_SERINE\_AND\_THREONINE\_METABOLISM | -0.01901 | -0.02099 | -0.39683 | 0.692773 | 0.882114 | -5.77526 |
| KONDO\_COLON\_CANCER\_HCP\_WITH\_H3K27ME3 | 0.042996 | -0.22927 | 0.396143 | 0.69328 | 0.882481 | -5.77551 |
| KONDO\_PROSTATE\_CANCER\_HCP\_WITH\_H3K27ME3 | -0.01174 | -0.0666 | -0.39604 | 0.693355 | 0.882481 | -5.77555 |
| REACTOME\_INHIBITION\_OF\_REPLICATION\_INITIATION\_OF\_DAMAGED\_DNA\_BY\_RB1\_E2F1 | -0.02811 | 0.011318 | -0.39586 | 0.693488 | 0.882481 | -5.77562 |
| REACTOME\_METALLOPROTEASE\_DUBS | -0.03605 | 0.001186 | -0.39569 | 0.693616 | 0.882481 | -5.77568 |
| RANKIN\_ANGIOGENIC\_TARGETS\_OF\_VHL\_HIF2A\_UP | 0.031763 | -0.01523 | 0.39453 | 0.694465 | 0.883385 | -5.77611 |
| REACTOME\_YAP1\_AND\_WWTR1\_TAZ\_STIMULATED\_GENE\_EXPRESSION | 0.026854 | -0.04823 | 0.393827 | 0.694981 | 0.883864 | -5.77636 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_FGF3 | -0.02473 | -0.38076 | -0.39322 | 0.69543 | 0.884259 | -5.77659 |
| BIOCARTA\_TEL\_PATHWAY | 0.0237 | -0.05961 | 0.392866 | 0.695687 | 0.88441 | -5.77672 |
| WP\_IRINOTECAN\_PATHWAY | 0.026437 | -0.0785 | 0.392329 | 0.696082 | 0.884533 | -5.77691 |
| LAU\_APOPTOSIS\_CDKN2A\_UP | -0.0247 | -0.00213 | -0.39209 | 0.696256 | 0.884533 | -5.777 |
| BIOCARTA\_EXTRINSIC\_PATHWAY | 0.02375 | 0.002411 | 0.391916 | 0.696386 | 0.884533 | -5.77706 |
| KEGG\_PANCREATIC\_CANCER | -0.02353 | -0.03357 | -0.39189 | 0.696402 | 0.884533 | -5.77707 |
| BHAT\_ESR1\_TARGETS\_VIA\_AKT1\_DN | -0.02229 | -0.04042 | -0.39161 | 0.696614 | 0.884533 | -5.77718 |
| BIOCARTA\_CARDIACEGF\_PATHWAY | -0.02324 | -0.09848 | -0.3916 | 0.696618 | 0.884533 | -5.77718 |
| SUZUKI\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_1B | 0.018395 | -0.05499 | 0.391294 | 0.696843 | 0.88454 | -5.77729 |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_0HR | -0.02744 | -0.12879 | -0.39121 | 0.696902 | 0.88454 | -5.77732 |
| LANDIS\_ERBB2\_BREAST\_PRENEOPLASTIC\_DN | -0.02828 | -0.0968 | -0.39052 | 0.697415 | 0.885015 | -5.77757 |
| PID\_ALPHA\_SYNUCLEIN\_PATHWAY | 0.024865 | -0.05592 | 0.390113 | 0.697712 | 0.885121 | -5.77772 |
| REACTOME\_FOXO\_MEDIATED\_TRANSCRIPTION | -0.01892 | -0.01567 | -0.38985 | 0.697904 | 0.885121 | -5.77781 |
| ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN | 0.021018 | -0.28847 | 0.389836 | 0.697916 | 0.885121 | -5.77782 |
| KYNG\_DNA\_DAMAGE\_DN | -0.01985 | -0.12082 | -0.38937 | 0.698257 | 0.885377 | -5.77799 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_LIGHTYELLOW\_UP | 0.042244 | -0.00202 | 0.388919 | 0.698591 | 0.885624 | -5.77815 |
| REACTOME\_ZINC\_TRANSPORTERS | 0.017837 | -0.21157 | 0.387686 | 0.699499 | 0.886478 | -5.7786 |
| BIOCARTA\_NFKB\_PATHWAY | -0.02468 | -0.24884 | -0.38763 | 0.699543 | 0.886478 | -5.77862 |
| NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_DN | 0.022441 | -0.18559 | 0.387005 | 0.7 | 0.886551 | -5.77884 |
| CHEN\_HOXA5\_TARGETS\_6HR\_DN | -0.01961 | -0.57173 | -0.38668 | 0.700243 | 0.886551 | -5.77896 |
| WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL | -0.01969 | -0.10038 | -0.38665 | 0.700261 | 0.886551 | -5.77897 |
| REACTOME\_CARBOXYTERMINAL\_POST\_TRANSLATIONAL\_MODIFICATIONS\_OF\_TUBULIN | 0.016707 | -0.02639 | 0.386469 | 0.700395 | 0.886551 | -5.77903 |
| DEURIG\_T\_CELL\_PROLYMPHOCYTIC\_LEUKEMIA\_UP | 0.010215 | -0.18121 | 0.386427 | 0.700426 | 0.886551 | -5.77905 |
| WONG\_ADULT\_TISSUE\_STEM\_MODULE | 0.015427 | -0.15767 | 0.386165 | 0.700619 | 0.886551 | -5.77914 |
| MELLMAN\_TUT1\_TARGETS\_DN | -0.02264 | -0.08757 | -0.38604 | 0.700711 | 0.886551 | -5.77919 |
| KEGG\_ARGININE\_AND\_PROLINE\_METABOLISM | -0.01922 | -0.03179 | -0.38603 | 0.700715 | 0.886551 | -5.77919 |
| REACTOME\_APOPTOTIC\_CLEAVAGE\_OF\_CELL\_ADHESION\_PROTEINS | 0.022802 | -0.08286 | 0.385415 | 0.701172 | 0.886953 | -5.77941 |
| WANG\_RESPONSE\_TO\_GSK3\_INHIBITOR\_SB216763\_DN | -0.01674 | -0.09732 | -0.38455 | 0.701807 | 0.887433 | -5.77972 |
| DAVICIONI\_TARGETS\_OF\_PAX\_FOXO1\_FUSIONS\_UP | 0.021697 | -0.03666 | 0.384414 | 0.70191 | 0.887433 | -5.77977 |
| REACTOME\_INLB\_MEDIATED\_ENTRY\_OF\_LISTERIA\_MONOCYTOGENES\_INTO\_HOST\_CELL | 0.030038 | 0.000625 | 0.383699 | 0.702438 | 0.887433 | -5.78003 |
| TAVOR\_CEBPA\_TARGETS\_DN | 0.024705 | -0.04129 | 0.383502 | 0.702583 | 0.887433 | -5.7801 |
| CROMER\_METASTASIS\_UP | -0.0156 | -0.31119 | -0.38345 | 0.702621 | 0.887433 | -5.78012 |
| KIM\_GLIS2\_TARGETS\_DN | -0.02885 | -0.14919 | -0.38334 | 0.7027 | 0.887433 | -5.78015 |
| HOLLEMAN\_VINCRISTINE\_RESISTANCE\_ALL\_DN | -0.03434 | -0.00372 | -0.3829 | 0.70303 | 0.887433 | -5.78031 |
| BIOCARTA\_GH\_PATHWAY | -0.02316 | -0.09726 | -0.38232 | 0.703453 | 0.887433 | -5.78052 |
| REACTOME\_TRANSPORT\_AND\_SYNTHESIS\_OF\_PAPS | -0.03905 | -0.02238 | -0.38197 | 0.703713 | 0.887433 | -5.78064 |
| LI\_CYTIDINE\_ANALOG\_PATHWAY | 0.024545 | -0.01293 | 0.381943 | 0.703734 | 0.887433 | -5.78065 |
| UROSEVIC\_RESPONSE\_TO\_IMIQUIMOD | 0.021468 | -0.30497 | 0.381826 | 0.70382 | 0.887433 | -5.78069 |
| NIKOLSKY\_BREAST\_CANCER\_5P15\_AMPLICON | -0.01375 | -0.21521 | -0.38181 | 0.703832 | 0.887433 | -5.7807 |
| SU\_KIDNEY | 0.0288 | -0.03487 | 0.381773 | 0.703859 | 0.887433 | -5.78071 |
| WP\_NUCLEOTIDE\_METABOLISM | -0.03567 | 0.003713 | -0.38174 | 0.703885 | 0.887433 | -5.78072 |
| TURASHVILI\_BREAST\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_UP | -0.02416 | -0.00429 | -0.38165 | 0.703949 | 0.887433 | -5.78076 |
| KEGG\_TRYPTOPHAN\_METABOLISM | -0.01899 | -0.02569 | -0.3815 | 0.704063 | 0.887433 | -5.78081 |
| REACTOME\_INTERLEUKIN\_1\_SIGNALING | -0.02069 | -0.19779 | -0.38126 | 0.704237 | 0.887433 | -5.78089 |
| YAMAZAKI\_TCEB3\_TARGETS\_DN | -0.01682 | -0.07943 | -0.38111 | 0.704351 | 0.887433 | -5.78095 |
| WP\_PENTOSE\_PHOSPHATE\_METABOLISM | 0.041421 | -0.00846 | 0.380961 | 0.704459 | 0.887433 | -5.781 |
| PID\_MYC\_REPRESS\_PATHWAY | 0.023219 | -0.05201 | 0.380917 | 0.704491 | 0.887433 | -5.78102 |
| BIOCARTA\_CELLCYCLE\_PATHWAY | 0.024736 | -0.04159 | 0.38078 | 0.704592 | 0.887433 | -5.78106 |
| CAFFAREL\_RESPONSE\_TO\_THC\_DN | -0.02479 | -0.19257 | -0.38074 | 0.70462 | 0.887433 | -5.78108 |
| WP\_GALANIN\_RECEPTOR\_PATHWAY | 0.018631 | -0.08716 | 0.380264 | 0.704973 | 0.887703 | -5.78125 |
| LIM\_MAMMARY\_LUMINAL\_PROGENITOR\_DN | -0.02794 | -0.08433 | -0.37943 | 0.705591 | 0.888183 | -5.78154 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_GRADES\_1\_2\_UP | -0.01938 | -0.05144 | -0.37937 | 0.705633 | 0.888183 | -5.78156 |
| PID\_FOXO\_PATHWAY | -0.03011 | -0.01953 | -0.37877 | 0.706077 | 0.888525 | -5.78177 |
| SCHEIDEREIT\_IKK\_INTERACTING\_PROTEINS | 0.013307 | -0.26782 | 0.378613 | 0.706193 | 0.888525 | -5.78183 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_23 | 0.026804 | 0.003266 | 0.378436 | 0.706324 | 0.888525 | -5.78189 |
| WHITE\_NEUROBLASTOMA\_WITH\_1P36.3\_DELETION | 0.020398 | 0.017519 | 0.3782 | 0.706498 | 0.888568 | -5.78198 |
| BIOCARTA\_RNAPOL3\_PATHWAY | -0.03037 | -0.02211 | -0.37655 | 0.707722 | 0.889932 | -5.78256 |
| MCCLUNG\_CREB1\_TARGETS\_UP | -0.01639 | -0.08332 | -0.37634 | 0.707874 | 0.889947 | -5.78263 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_3\_DN | -0.01699 | -0.04802 | -0.37613 | 0.708033 | 0.88997 | -5.7827 |
| DING\_LUNG\_CANCER\_MUTATED\_SIGNIFICANTLY | -0.01802 | -0.04154 | -0.37545 | 0.708533 | 0.890424 | -5.78294 |
| REACTOME\_SYNDECAN\_INTERACTIONS | 0.028511 | -0.03069 | 0.375057 | 0.708823 | 0.890565 | -5.78308 |
| WP\_SERINE\_METABOLISM | -0.03163 | -0.11725 | -0.37492 | 0.708925 | 0.890565 | -5.78312 |
| WP\_NOVEL\_INTRACELLULAR\_COMPONENTS\_OF\_RIGILIKE\_RECEPTOR\_RLR\_PATHWAY | -0.01778 | -0.12413 | -0.37435 | 0.709343 | 0.890914 | -5.78332 |
| REACTOME\_G0\_AND\_EARLY\_G1 | -0.02031 | 0.002466 | -0.37381 | 0.709745 | 0.891067 | -5.78351 |
| REACTOME\_SYNTHESIS\_SECRETION\_AND\_INACTIVATION\_OF\_GLUCOSE\_DEPENDENT\_INSULINOTROPIC\_POLYPEPTIDE\_GIP | 0.022716 | -0.0576 | 0.37378 | 0.709769 | 0.891067 | -5.78352 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_22 | 0.028273 | 0.010306 | 0.373623 | 0.709885 | 0.891067 | -5.78358 |
| WEIGEL\_OXIDATIVE\_STRESS\_RESPONSE | -0.01894 | -0.13233 | -0.37228 | 0.710881 | 0.891775 | -5.78404 |
| REACTOME\_SODIUM\_CALCIUM\_EXCHANGERS | 0.021983 | -0.0059 | 0.372131 | 0.71099 | 0.891775 | -5.78409 |
| MELLMAN\_TUT1\_TARGETS\_UP | -0.0251 | -0.0564 | -0.37211 | 0.711003 | 0.891775 | -5.7841 |
| RAMPON\_ENRICHED\_LEARNING\_ENVIRONMENT\_LATE\_UP | -0.02589 | -0.1251 | -0.37199 | 0.711094 | 0.891775 | -5.78414 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR4\_SIGNALING | 0.015457 | -0.00266 | 0.37177 | 0.711258 | 0.891775 | -5.78422 |
| KASLER\_HDAC7\_TARGETS\_2\_DN | 0.020614 | -0.06693 | 0.371652 | 0.711345 | 0.891775 | -5.78426 |
| REACTOME\_DISASSEMBLY\_OF\_THE\_DESTRUCTION\_COMPLEX\_AND\_RECRUITMENT\_OF\_AXIN\_TO\_THE\_MEMBRANE | -0.01659 | -0.03411 | -0.37141 | 0.711523 | 0.891775 | -5.78434 |
| ZHU\_CMV\_ALL\_UP | 0.018271 | -0.1974 | 0.371348 | 0.71157 | 0.891775 | -5.78436 |
| REACTOME\_REGULATED\_PROTEOLYSIS\_OF\_P75NTR | -0.03022 | 0.022522 | -0.37116 | 0.711712 | 0.891776 | -5.78443 |
| LEE\_AGING\_MUSCLE\_UP | 0.023483 | -0.05205 | 0.370329 | 0.712326 | 0.892174 | -5.78472 |
| REACTOME\_PENTOSE\_PHOSPHATE\_PATHWAY | -0.03732 | -0.00674 | -0.37019 | 0.712432 | 0.892174 | -5.78476 |
| DASU\_IL6\_SIGNALING\_SCAR\_DN | 0.028284 | -0.07042 | 0.370163 | 0.712449 | 0.892174 | -5.78477 |
| REACTOME\_HIGHLY\_CALCIUM\_PERMEABLE\_POSTSYNAPTIC\_NICOTINIC\_ACETYLCHOLINE\_RECEPTORS | 0.035766 | 0.030861 | 0.369872 | 0.712665 | 0.892243 | -5.78487 |
| ZHU\_CMV\_ALL\_DN | 0.024539 | -0.03238 | 0.36971 | 0.712785 | 0.892243 | -5.78493 |
| WP\_METABOLISM\_OF\_ALPHALINOLENIC\_ACID | 0.033005 | -0.11504 | 0.368409 | 0.71375 | 0.893275 | -5.78538 |
| REACTOME\_PI5P\_REGULATES\_TP53\_ACETYLATION | -0.03002 | -0.10053 | -0.36794 | 0.714096 | 0.893532 | -5.78553 |
| REACTOME\_NEGATIVE\_FEEDBACK\_REGULATION\_OF\_MAPK\_PATHWAY | -0.047 | -0.0066 | -0.36761 | 0.71434 | 0.893556 | -5.78565 |
| REACTOME\_CD28\_CO\_STIMULATION | 0.022785 | -0.02922 | 0.367539 | 0.714395 | 0.893556 | -5.78567 |
| REACTOME\_IRF3\_MEDIATED\_ACTIVATION\_OF\_TYPE\_1\_IFN | 0.03373 | -0.01991 | 0.366628 | 0.715072 | 0.894095 | -5.78598 |
| IWANAGA\_CARCINOGENESIS\_BY\_KRAS\_PTEN\_UP | -0.00968 | -0.07029 | -0.36658 | 0.715111 | 0.894095 | -5.786 |
| REACTOME\_RUNX2\_REGULATES\_OSTEOBLAST\_DIFFERENTIATION | -0.02496 | -0.00388 | -0.36619 | 0.715398 | 0.894095 | -5.78613 |
| WP\_MTHFR\_DEFICIENCY | 0.014084 | -0.18044 | 0.366143 | 0.715432 | 0.894095 | -5.78615 |
| RAMPON\_ENRICHED\_LEARNING\_ENVIRONMENT\_EARLY\_DN | -0.02997 | 0.007556 | -0.3659 | 0.715611 | 0.894095 | -5.78623 |
| KEGG\_ANTIGEN\_PROCESSING\_AND\_PRESENTATION | 0.005446 | -0.84293 | 0.365693 | 0.715766 | 0.894095 | -5.7863 |
| REACTOME\_RECOGNITION\_AND\_ASSOCIATION\_OF\_DNA\_GLYCOSYLASE\_WITH\_SITE\_CONTAINING\_AN\_AFFECTED\_PURINE | -0.02486 | -0.08622 | -0.36563 | 0.71581 | 0.894095 | -5.78632 |
| FONTAINE\_FOLLICULAR\_THYROID\_ADENOMA\_UP | -0.0121 | -0.1336 | -0.36459 | 0.716586 | 0.894889 | -5.78668 |
| REACTOME\_WNT5A\_DEPENDENT\_INTERNALIZATION\_OF\_FZD2\_FZD5\_AND\_ROR2 | 0.032303 | -0.01695 | 0.36395 | 0.717061 | 0.895159 | -5.78689 |
| CROONQUIST\_STROMAL\_STIMULATION\_DN | 0.028275 | -0.00437 | 0.363722 | 0.717231 | 0.895159 | -5.78697 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_4 | 0.014578 | -0.21314 | 0.363429 | 0.717448 | 0.895159 | -5.78707 |
| ENK\_UV\_RESPONSE\_EPIDERMIS\_UP | 0.015851 | -0.11726 | 0.363045 | 0.717734 | 0.895159 | -5.7872 |
| WP\_CANONICAL\_NFKB\_PATHWAY | 0.042469 | -0.00809 | 0.362267 | 0.718313 | 0.895159 | -5.78746 |
| REACTOME\_RHOQ\_GTPASE\_CYCLE | -0.01918 | -0.01591 | -0.36209 | 0.718446 | 0.895159 | -5.78752 |
| MCBRYAN\_PUBERTAL\_BREAST\_6\_7WK\_UP | 0.013813 | -0.08763 | 0.362017 | 0.718498 | 0.895159 | -5.78755 |
| MARKEY\_RB1\_CHRONIC\_LOF\_UP | -0.01682 | -0.07413 | -0.3618 | 0.718656 | 0.895159 | -5.78762 |
| REACTOME\_KERATAN\_SULFATE\_KERATIN\_METABOLISM | -0.02245 | 0.001763 | -0.3616 | 0.718807 | 0.895159 | -5.78769 |
| LAIHO\_COLORECTAL\_CANCER\_SERRATED\_UP | -0.02878 | -0.11358 | -0.36156 | 0.71884 | 0.895159 | -5.7877 |
| BIOCARTA\_EPHA4\_PATHWAY | -0.03374 | -0.00562 | -0.36144 | 0.718925 | 0.895159 | -5.78774 |
| SENESE\_HDAC1\_TARGETS\_UP | 0.018876 | -0.0573 | 0.36144 | 0.718927 | 0.895159 | -5.78774 |
| REACTOME\_SUMOYLATION\_OF\_TRANSCRIPTION\_COFACTORS | 0.018161 | -0.18256 | 0.361431 | 0.718935 | 0.895159 | -5.78774 |
| DITTMER\_PTHLH\_TARGETS\_DN | -0.02914 | -0.01097 | -0.36136 | 0.718986 | 0.895159 | -5.78777 |
| KENNY\_CTNNB1\_TARGETS\_DN | -0.02532 | -0.02361 | -0.3611 | 0.719184 | 0.895159 | -5.78786 |
| WIKMAN\_ASBESTOS\_LUNG\_CANCER\_DN | 0.023817 | -0.0772 | 0.361035 | 0.719229 | 0.895159 | -5.78788 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_6HR | 0.016747 | -0.04586 | 0.360934 | 0.719304 | 0.895159 | -5.78791 |
| CHANG\_IMMORTALIZED\_BY\_HPV31\_UP | -0.01765 | -0.03819 | -0.36067 | 0.719502 | 0.895159 | -5.788 |
| PID\_BETA\_CATENIN\_DEG\_PATHWAY | 0.020457 | -0.0654 | 0.360507 | 0.719622 | 0.895159 | -5.78805 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G3 | -0.01956 | -0.32078 | -0.36001 | 0.719995 | 0.895159 | -5.78822 |
| REACTOME\_SYNTHESIS\_OF\_PA | 0.012155 | -0.16058 | 0.359913 | 0.720064 | 0.895159 | -5.78825 |
| ACEVEDO\_LIVER\_CANCER\_WITH\_H3K27ME3\_DN | -0.0125 | -0.05534 | -0.35986 | 0.720102 | 0.895159 | -5.78827 |
| PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_DN | -0.02681 | -0.40269 | -0.35978 | 0.720163 | 0.895159 | -5.7883 |
| REACTOME\_SIGNALING\_BY\_NOTCH1\_HD\_DOMAIN\_MUTANTS\_IN\_CANCER | -0.02575 | -0.06068 | -0.35962 | 0.720284 | 0.895159 | -5.78835 |
| WP\_PROSTAGLANDIN\_SYNTHESIS\_AND\_REGULATION | 0.020124 | -0.02952 | 0.359571 | 0.720319 | 0.895159 | -5.78837 |
| WP\_METHYLATION\_PATHWAYS | -0.02727 | 0.007771 | -0.35872 | 0.72095 | 0.895645 | -5.78865 |
| REACTOME\_G\_ALPHA\_12\_13\_SIGNALLING\_EVENTS | 0.009766 | -0.05613 | 0.358597 | 0.721043 | 0.895645 | -5.78869 |
| WP\_INTERLEUKIN11\_SIGNALING\_PATHWAY | 0.025426 | -0.04223 | 0.358478 | 0.721132 | 0.895645 | -5.78873 |
| CHANDRAN\_METASTASIS\_UP | -0.01533 | -0.10524 | -0.3577 | 0.721715 | 0.89606 | -5.78899 |
| LIN\_MELANOMA\_COPY\_NUMBER\_UP | -0.01912 | -0.00945 | -0.35765 | 0.721747 | 0.89606 | -5.78901 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T4 | 0.02096 | -0.05929 | 0.356991 | 0.72224 | 0.896496 | -5.78923 |
| HOFFMAN\_CLOCK\_TARGETS\_UP | 0.019759 | -0.22069 | 0.35667 | 0.722479 | 0.896582 | -5.78933 |
| HILLION\_HMGA1\_TARGETS | 0.016929 | -0.06924 | 0.35652 | 0.722591 | 0.896582 | -5.78938 |
| WP\_KIT\_RECEPTOR\_SIGNALING\_PATHWAY | 0.019574 | -0.08131 | 0.356231 | 0.722806 | 0.896674 | -5.78948 |
| REACTOME\_FOXO\_MEDIATED\_TRANSCRIPTION\_OF\_CELL\_CYCLE\_GENES | -0.02544 | -0.00242 | -0.35525 | 0.723538 | 0.897302 | -5.78981 |
| MATTIOLI\_MULTIPLE\_MYELOMA\_WITH\_14Q32\_TRANSLOCATIONS | -0.02525 | -0.00477 | -0.35517 | 0.723594 | 0.897302 | -5.78983 |
| LI\_WILMS\_TUMOR | -0.01831 | -0.0282 | -0.35433 | 0.724222 | 0.897587 | -5.79011 |
| REACTOME\_NOTCH2\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION | -0.02183 | -0.12588 | -0.35432 | 0.724233 | 0.897587 | -5.79011 |
| ZHOU\_TNF\_SIGNALING\_30MIN | 0.020897 | -0.13313 | 0.354049 | 0.724433 | 0.897587 | -5.7902 |
| CHEOK\_RESPONSE\_TO\_HD\_MTX\_DN | -0.02717 | -0.04526 | -0.35351 | 0.724836 | 0.897587 | -5.79038 |
| LAU\_APOPTOSIS\_CDKN2A\_DN | 0.030711 | 0.00894 | 0.353344 | 0.724959 | 0.897587 | -5.79043 |
| LEE\_CALORIE\_RESTRICTION\_NEOCORTEX\_UP | -0.01135 | -0.19098 | -0.35332 | 0.724979 | 0.897587 | -5.79044 |
| REACTOME\_TFAP2A\_ACTS\_AS\_A\_TRANSCRIPTIONAL\_REPRESSOR\_DURING\_RETINOIC\_ACID\_INDUCED\_CELL\_DIFFERENTIATION | 0.032328 | -0.00048 | 0.353261 | 0.725021 | 0.897587 | -5.79046 |
| HOSHIDA\_LIVER\_CANCER\_LATE\_RECURRENCE\_DN | 0.01169 | -0.02868 | 0.353244 | 0.725034 | 0.897587 | -5.79047 |
| NUNODA\_RESPONSE\_TO\_DASATINIB\_IMATINIB\_DN | 0.020733 | -0.34034 | 0.353096 | 0.725144 | 0.897587 | -5.79052 |
| KEGG\_PHENYLALANINE\_METABOLISM | 0.017499 | -0.05388 | 0.352878 | 0.725307 | 0.897587 | -5.79059 |
| LUI\_THYROID\_CANCER\_CLUSTER\_5 | 0.01241 | -0.46265 | 0.352786 | 0.725376 | 0.897587 | -5.79062 |
| REACTOME\_GLYCOLYSIS | -0.01958 | -0.0198 | -0.35231 | 0.725731 | 0.897742 | -5.79077 |
| MARTINEZ\_RB1\_TARGETS\_UP | -0.01174 | -0.12473 | -0.35224 | 0.725783 | 0.897742 | -5.7908 |
| JACKSON\_DNMT1\_TARGETS\_DN | 0.019996 | -0.00336 | 0.351985 | 0.725973 | 0.897803 | -5.79088 |
| WP\_MICROTUBULE\_CYTOSKELETON\_REGULATION | -0.01352 | -0.07662 | -0.35175 | 0.726152 | 0.897849 | -5.79096 |
| SCIAN\_CELL\_CYCLE\_TARGETS\_OF\_TP53\_AND\_TP73\_DN | -0.02898 | -0.02693 | -0.35141 | 0.726405 | 0.897988 | -5.79107 |
| MARCINIAK\_ER\_STRESS\_RESPONSE\_VIA\_CHOP | 0.018287 | 0.002754 | 0.351205 | 0.726556 | 0.898 | -5.79113 |
| WP\_INTEGRATED\_CANCER\_PATHWAY | -0.01702 | -0.05059 | -0.35099 | 0.726716 | 0.898024 | -5.79121 |
| WP\_BMP2WNT4FOXO1\_PATHWAY\_IN\_PRIMARY\_ENDOMETRIAL\_STROMAL\_CELL\_DIFFERENTIATION | -0.01956 | 0.01128 | -0.35077 | 0.726879 | 0.898051 | -5.79128 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_21 | 0.032195 | -0.00916 | 0.350432 | 0.727133 | 0.89819 | -5.79139 |
| WP\_WNT\_SIGNALING\_PATHWAY\_AND\_PLURIPOTENCY | -0.01117 | -0.12067 | -0.34992 | 0.727517 | 0.898489 | -5.79155 |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D1 | -0.02602 | -0.0959 | -0.34902 | 0.728187 | 0.899049 | -5.79185 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_EMBRYONIC\_DEVELOPMENT\_STAGE\_1\_OF\_4 | 0.017642 | -0.30167 | 0.348933 | 0.728253 | 0.899049 | -5.79187 |
| YAUCH\_HEDGEHOG\_SIGNALING\_PARACRINE\_DN | 0.014543 | -0.08341 | 0.348505 | 0.728573 | 0.89927 | -5.79201 |
| RAMASWAMY\_METASTASIS\_DN | -0.01211 | -0.32705 | -0.34831 | 0.728716 | 0.899273 | -5.79208 |
| REACTOME\_ELASTIC\_FIBRE\_FORMATION | -0.02226 | 0.008796 | -0.34789 | 0.729036 | 0.899449 | -5.79221 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_11 | -0.0257 | -0.05207 | -0.34768 | 0.729186 | 0.899449 | -5.79228 |
| GOBERT\_CORE\_OLIGODENDROCYTE\_DIFFERENTIATION | 0.013652 | -0.04453 | 0.347372 | 0.729419 | 0.899449 | -5.79238 |
| MANNE\_COVID19\_ICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_DN | 0.009744 | 0.004867 | 0.347071 | 0.729645 | 0.899449 | -5.79248 |
| YOKOE\_CANCER\_TESTIS\_ANTIGENS | -0.0116 | -0.16011 | -0.34696 | 0.729727 | 0.899449 | -5.79251 |
| REACTOME\_SYNTHESIS\_OF\_PIPS\_AT\_THE\_GOLGI\_MEMBRANE | -0.02422 | -0.00382 | -0.34674 | 0.72989 | 0.899449 | -5.79258 |
| REACTOME\_N\_GLYCAN\_ANTENNAE\_ELONGATION\_IN\_THE\_MEDIAL\_TRANS\_GOLGI | 0.013006 | -0.09936 | 0.346322 | 0.730205 | 0.899449 | -5.79272 |
| CHANG\_POU5F1\_TARGETS\_DN | 0.018954 | -0.00253 | 0.345521 | 0.730804 | 0.899449 | -5.79298 |
| WP\_VITAMIN\_D\_IN\_INFLAMMATORY\_DISEASES | -0.02023 | -0.22771 | -0.34544 | 0.730868 | 0.899449 | -5.793 |
| TING\_SILENCED\_BY\_DICER | 0.019804 | -0.07511 | 0.345394 | 0.730899 | 0.899449 | -5.79302 |
| IGARASHI\_ATF4\_TARGETS\_DN | -0.01914 | -0.1296 | -0.34522 | 0.731032 | 0.899449 | -5.79308 |
| REACTOME\_ORGANIC\_ANION\_TRANSPORTERS | 0.027821 | -0.0806 | 0.345163 | 0.731072 | 0.899449 | -5.79309 |
| CLAUS\_PGR\_POSITIVE\_MENINGIOMA\_UP | -0.03399 | -0.03188 | -0.34502 | 0.731178 | 0.899449 | -5.79314 |
| REACTOME\_ROLE\_OF\_LAT2\_NTAL\_LAB\_ON\_CALCIUM\_MOBILIZATION | 0.029748 | 0.007073 | 0.344905 | 0.731265 | 0.899449 | -5.79318 |
| SENESE\_HDAC1\_TARGETS\_DN | -0.01574 | -0.0704 | -0.34482 | 0.731327 | 0.899449 | -5.7932 |
| VALK\_AML\_CLUSTER\_9 | 0.021627 | -0.08945 | 0.344513 | 0.731558 | 0.899449 | -5.7933 |
| PID\_KIT\_PATHWAY | 0.021289 | -0.05396 | 0.344485 | 0.731579 | 0.899449 | -5.79331 |
| MIKKELSEN\_DEDIFFERENTIATED\_STATE\_UP | -0.02245 | -0.01262 | -0.34435 | 0.731677 | 0.899449 | -5.79335 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_4NQO\_IN\_WS | -0.01706 | -0.17742 | -0.34435 | 0.731679 | 0.899449 | -5.79335 |
| YAGI\_AML\_FAB\_MARKERS | -0.01694 | -0.07295 | -0.34432 | 0.731702 | 0.899449 | -5.79336 |
| BIOCARTA\_COMP\_PATHWAY | -0.01008 | -0.53963 | -0.34415 | 0.731827 | 0.899449 | -5.79342 |
| WP\_ID\_SIGNALING\_PATHWAY | 0.01698 | -0.04372 | 0.342603 | 0.732988 | 0.900417 | -5.79391 |
| GROSS\_ELK3\_TARGETS\_DN | 0.023844 | -0.00513 | 0.342574 | 0.73301 | 0.900417 | -5.79392 |
| PID\_ECADHERIN\_STABILIZATION\_PATHWAY | 0.018618 | -0.02458 | 0.342535 | 0.733039 | 0.900417 | -5.79393 |
| BIOCARTA\_FMLP\_PATHWAY | 0.022066 | -0.05143 | 0.342187 | 0.7333 | 0.900436 | -5.79404 |
| KEGG\_THYROID\_CANCER | 0.016555 | -0.15927 | 0.342089 | 0.733373 | 0.900436 | -5.79408 |
| KEGG\_MTOR\_SIGNALING\_PATHWAY | -0.01726 | -0.03798 | -0.34195 | 0.733479 | 0.900436 | -5.79412 |
| LOPEZ\_MESOTELIOMA\_SURVIVAL\_TIME\_UP | -0.02426 | -0.0016 | -0.34136 | 0.733916 | 0.900628 | -5.79431 |
| REACTOME\_PI3K\_EVENTS\_IN\_ERBB4\_SIGNALING | 0.026021 | 0.0104 | 0.341174 | 0.734058 | 0.900628 | -5.79437 |
| KHETCHOUMIAN\_TRIM24\_TARGETS\_DN | 0.029536 | 0.018963 | 0.340989 | 0.734197 | 0.900628 | -5.79443 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_1\_DN | 0.012038 | -0.27431 | 0.340983 | 0.734202 | 0.900628 | -5.79443 |
| REACTOME\_NUCLEOTIDE\_CATABOLISM | 0.01346 | -0.00553 | 0.340666 | 0.73444 | 0.900747 | -5.79453 |
| NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA2\_DN | 0.024489 | -0.04579 | 0.340375 | 0.734658 | 0.900781 | -5.79462 |
| NAKAMURA\_ADIPOGENESIS\_EARLY\_DN | 0.031371 | -0.03417 | 0.340063 | 0.734891 | 0.900781 | -5.79472 |
| WP\_EICOSANOID\_METABOLISM\_VIA\_LIPOOXYGENASES\_LOX | -0.01435 | -0.1124 | -0.34006 | 0.734892 | 0.900781 | -5.79472 |
| WP\_HEMATOPOIETIC\_STEM\_CELL\_GENE\_REGULATION\_BY\_GABP\_ALPHABETA\_COMPLEX | -0.02709 | -0.06216 | -0.33957 | 0.735261 | 0.90106 | -5.79487 |
| PID\_IL2\_STAT5\_PATHWAY | -0.01716 | -0.18699 | -0.33891 | 0.735757 | 0.901432 | -5.79508 |
| MITSIADES\_RESPONSE\_TO\_APLIDIN\_UP | 0.01721 | -0.10917 | 0.338787 | 0.735848 | 0.901432 | -5.79512 |
| GREENBAUM\_E2A\_TARGETS\_DN | 0.022412 | -0.09566 | 0.338375 | 0.736157 | 0.901637 | -5.79525 |
| TAKADA\_GASTRIC\_CANCER\_COPY\_NUMBER\_UP | -0.02442 | 0.012802 | -0.33803 | 0.736419 | 0.901685 | -5.79536 |
| CHEN\_HOXA5\_TARGETS\_9HR\_UP | -0.02158 | -0.03878 | -0.33767 | 0.736685 | 0.901685 | -5.79547 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_RISK\_DN | -0.01642 | -0.08749 | -0.33765 | 0.736701 | 0.901685 | -5.79548 |
| WP\_APOPTOSIS\_MODULATION\_AND\_SIGNALING | 0.015332 | -0.12355 | 0.337567 | 0.736763 | 0.901685 | -5.79551 |
| CHIARETTI\_ACUTE\_LYMPHOBLASTIC\_LEUKEMIA\_ZAP70 | -0.01475 | -0.11671 | -0.33719 | 0.737044 | 0.901704 | -5.79562 |
| REACTOME\_MYOCLONIC\_EPILEPSY\_OF\_LAFORA | -0.03071 | 0.01778 | -0.33717 | 0.737062 | 0.901704 | -5.79563 |
| WANG\_RESPONSE\_TO\_FORSKOLIN\_UP | -0.0246 | -0.0008 | -0.33609 | 0.737873 | 0.902522 | -5.79597 |
| REACTOME\_SENSORY\_PERCEPTION\_OF\_SALTY\_TASTE | -0.03382 | 0.024989 | -0.33583 | 0.738066 | 0.902585 | -5.79605 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_16 | 0.02261 | -0.02776 | 0.334935 | 0.738738 | 0.902868 | -5.79633 |
| HOFFMANN\_IMMATURE\_TO\_MATURE\_B\_LYMPHOCYTE\_DN | -0.01669 | -0.04597 | -0.33478 | 0.738852 | 0.902868 | -5.79638 |
| REACTOME\_PI\_3K\_CASCADE\_FGFR3 | 0.018119 | 0.012696 | 0.334783 | 0.738852 | 0.902868 | -5.79638 |
| MULLIGHAN\_NPM1\_MUTATED\_SIGNATURE\_2\_DN | -0.01485 | -0.09839 | -0.33467 | 0.738941 | 0.902868 | -5.79641 |
| DANG\_MYC\_TARGETS\_UP | -0.02341 | -0.04833 | -0.33458 | 0.739007 | 0.902868 | -5.79644 |
| KRIEG\_HYPOXIA\_NOT\_VIA\_KDM3A | 0.01519 | -0.08902 | 0.333823 | 0.739574 | 0.903387 | -5.79668 |
| HOFMANN\_CELL\_LYMPHOMA\_DN | 0.013304 | -0.51968 | 0.333235 | 0.740015 | 0.903753 | -5.79686 |
| REACTOME\_JOSEPHIN\_DOMAIN\_DUBS | 0.027174 | -0.00217 | 0.333025 | 0.740173 | 0.903772 | -5.79692 |
| REACTOME\_ASSOCIATION\_OF\_TRIC\_CCT\_WITH\_TARGET\_PROTEINS\_DURING\_BIOSYNTHESIS | -0.02035 | -0.0995 | -0.33238 | 0.740662 | 0.904196 | -5.79712 |
| YAO\_HOXA10\_TARGETS\_VIA\_PROGESTERONE\_UP | 0.01424 | -0.11313 | 0.332046 | 0.740909 | 0.904324 | -5.79723 |
| REACTOME\_SIGNALING\_BY\_NOTCH2 | -0.01563 | -0.07994 | -0.33172 | 0.741155 | 0.90445 | -5.79733 |
| ZAMORA\_NOS2\_TARGETS\_UP | -0.02143 | -0.11672 | -0.33145 | 0.74136 | 0.904528 | -5.79741 |
| NIKOLSKY\_BREAST\_CANCER\_12Q13\_Q21\_AMPLICON | -0.01564 | 0.004711 | -0.3309 | 0.74177 | 0.904612 | -5.79758 |
| CUI\_TCF21\_TARGETS\_DN | 0.013417 | -0.23755 | 0.33088 | 0.741786 | 0.904612 | -5.79759 |
| REACTOME\_METABOLISM\_OF\_CARBOHYDRATES | 0.014193 | -0.036 | 0.330541 | 0.74204 | 0.904612 | -5.79769 |
| KIM\_MYCN\_AMPLIFICATION\_TARGETS\_UP | 0.011195 | -0.0641 | 0.330537 | 0.742043 | 0.904612 | -5.79769 |
| BIOCARTA\_ARF\_PATHWAY | 0.019174 | -0.00901 | 0.330408 | 0.74214 | 0.904612 | -5.79773 |
| MEDINA\_SMARCA4\_TARGETS | -0.0196 | -0.0335 | -0.33011 | 0.742365 | 0.904713 | -5.79782 |
| REACTOME\_METABOLISM\_OF\_PORPHYRINS | -0.01475 | -0.03657 | -0.32949 | 0.742828 | 0.904735 | -5.79801 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_REVERSIBLY\_DN | 0.028028 | -0.03742 | 0.329478 | 0.74284 | 0.904735 | -5.79802 |
| REACTOME\_TRANSLOCATION\_OF\_SLC2A4\_GLUT4\_TO\_THE\_PLASMA\_MEMBRANE | -0.01866 | -0.02979 | -0.32939 | 0.742908 | 0.904735 | -5.79804 |
| GRAESSMANN\_RESPONSE\_TO\_MC\_AND\_SERUM\_DEPRIVATION\_UP | 0.012937 | -0.14077 | 0.329255 | 0.743008 | 0.904735 | -5.79809 |
| REACTOME\_CYTOSOLIC\_SENSORS\_OF\_PATHOGEN\_ASSOCIATED\_DNA | -0.02229 | -0.04525 | -0.32908 | 0.743136 | 0.904735 | -5.79814 |
| REACTOME\_SODIUM\_COUPLED\_PHOSPHATE\_COTRANSPORTERS | -0.02677 | -0.00491 | -0.32895 | 0.743236 | 0.904735 | -5.79818 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_MAGENTA\_UP | -0.02814 | -0.03071 | -0.32794 | 0.743994 | 0.905422 | -5.79849 |
| BURTON\_ADIPOGENESIS\_6 | -0.01874 | -0.1025 | -0.32766 | 0.744206 | 0.905422 | -5.79857 |
| CAIRO\_HEPATOBLASTOMA\_CLASSES\_DN | -0.0148 | -0.05417 | -0.32763 | 0.744227 | 0.905422 | -5.79858 |
| PID\_HIF2PATHWAY | 0.01859 | -0.1609 | 0.327328 | 0.744458 | 0.905452 | -5.79867 |
| WP\_ARYL\_HYDROCARBON\_RECEPTOR\_PATHWAY\_WP2586 | 0.01706 | -0.14001 | 0.327001 | 0.744704 | 0.905452 | -5.79877 |
| PID\_PS1\_PATHWAY | 0.015243 | -0.04852 | 0.326964 | 0.744732 | 0.905452 | -5.79878 |
| WP\_BIOMARKERS\_FOR\_PYRIMIDINE\_METABOLISM\_DISORDERS | -0.02116 | -0.00603 | -0.32676 | 0.744883 | 0.905452 | -5.79885 |
| REACTOME\_ENDOGENOUS\_STEROLS | 0.015275 | -0.16927 | 0.326548 | 0.745046 | 0.905452 | -5.79891 |
| HASLINGER\_B\_CLL\_WITH\_11Q23\_DELETION | -0.02343 | -0.04294 | -0.32635 | 0.745193 | 0.905452 | -5.79897 |
| WP\_PHYSICOCHEMICAL\_FEATURES\_AND\_TOXICITYASSOCIATED\_PATHWAYS | 0.017527 | -0.00819 | 0.326279 | 0.745248 | 0.905452 | -5.79899 |
| KEGG\_PENTOSE\_PHOSPHATE\_PATHWAY | -0.02269 | -0.03164 | -0.32574 | 0.745656 | 0.905774 | -5.79916 |
| REACTOME\_EPHB\_MEDIATED\_FORWARD\_SIGNALING | -0.02052 | -0.03983 | -0.32531 | 0.745977 | 0.905992 | -5.79929 |
| LUCAS\_HNF4A\_TARGETS\_DN | 0.028262 | -0.01114 | 0.324939 | 0.746258 | 0.90616 | -5.7994 |
| BIOCARTA\_IRES\_PATHWAY | -0.0328 | 0.008893 | -0.32452 | 0.746573 | 0.906369 | -5.79953 |
| GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_DIVIDING\_UP | 0.0206 | -0.00827 | 0.324128 | 0.746868 | 0.906499 | -5.79964 |
| TORCHIA\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION\_UP | 0.008513 | -0.11041 | 0.323859 | 0.747071 | 0.906499 | -5.79973 |
| REACTOME\_CD28\_DEPENDENT\_PI3K\_AKT\_SIGNALING | -0.01932 | -0.03644 | -0.32381 | 0.747107 | 0.906499 | -5.79974 |
| REACTOME\_GALACTOSE\_CATABOLISM | -0.03303 | 0.000777 | -0.32361 | 0.747259 | 0.906511 | -5.7998 |
| LIU\_NASOPHARYNGEAL\_CARCINOMA | 0.014714 | -0.23571 | 0.323038 | 0.74769 | 0.906744 | -5.79997 |
| REACTOME\_GLUTATHIONE\_SYNTHESIS\_AND\_RECYCLING | 0.018241 | -0.00891 | 0.322882 | 0.747808 | 0.906744 | -5.80002 |
| VANTVEER\_BREAST\_CANCER\_BRCA1\_UP | -0.02419 | -0.03202 | -0.32279 | 0.747879 | 0.906744 | -5.80005 |
| WP\_CALCIUM\_REGULATION\_IN\_CARDIAC\_CELLS | 0.008242 | -0.05087 | 0.321882 | 0.748562 | 0.907399 | -5.80032 |
| BEIER\_GLIOMA\_STEM\_CELL\_UP | -0.01084 | -0.2336 | -0.32153 | 0.748825 | 0.907546 | -5.80042 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_UP | 0.013207 | -0.0761 | 0.321273 | 0.749021 | 0.90761 | -5.8005 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_UP | 0.01599 | -0.10706 | 0.320254 | 0.74979 | 0.908364 | -5.80081 |
| MORI\_EMU\_MYC\_LYMPHOMA\_BY\_ONSET\_TIME\_DN | -0.02797 | -0.06339 | -0.32002 | 0.749965 | 0.908364 | -5.80088 |
| WP\_ALANINE\_AND\_ASPARTATE\_METABOLISM | 0.020222 | -0.00653 | 0.319881 | 0.750071 | 0.908364 | -5.80092 |
| WP\_GENE\_REGULATORY\_NETWORK\_MODELLING\_SOMITOGENESIS | 0.020973 | -0.07556 | 0.319225 | 0.750567 | 0.908628 | -5.80111 |
| MCBRYAN\_PUBERTAL\_BREAST\_6\_7WK\_DN | 0.013133 | -0.01207 | 0.318551 | 0.751075 | 0.908628 | -5.80131 |
| GAVIN\_PDE3B\_TARGETS | 0.024241 | -0.07761 | 0.318523 | 0.751096 | 0.908628 | -5.80132 |
| WONG\_ENDOMETRIAL\_CANCER\_LATE | 0.019429 | -0.10578 | 0.318267 | 0.75129 | 0.908628 | -5.8014 |
| HU\_GENOTOXIC\_DAMAGE\_24HR | -0.02018 | -0.14874 | -0.31795 | 0.751526 | 0.908628 | -5.80149 |
| PID\_ENDOTHELIN\_PATHWAY | -0.01412 | -0.07372 | -0.31753 | 0.751845 | 0.908628 | -5.80161 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_MAPK\_PATHWAY | -0.01662 | -0.07643 | -0.31735 | 0.75198 | 0.908628 | -5.80167 |
| REACTOME\_SIGNALING\_BY\_MST1 | -0.02421 | -0.02708 | -0.31729 | 0.752024 | 0.908628 | -5.80168 |
| KEGG\_HEDGEHOG\_SIGNALING\_PATHWAY | -0.01529 | -0.0685 | -0.31718 | 0.752109 | 0.908628 | -5.80172 |
| BURTON\_ADIPOGENESIS\_3 | -0.01825 | -0.11327 | -0.31707 | 0.752195 | 0.908628 | -5.80175 |
| REACTOME\_BETA\_OXIDATION\_OF\_PRISTANOYL\_COA | -0.02906 | 0.001403 | -0.31684 | 0.752365 | 0.908628 | -5.80182 |
| REACTOME\_FOXO\_MEDIATED\_TRANSCRIPTION\_OF\_OXIDATIVE\_STRESS\_METABOLIC\_AND\_NEURONAL\_GENES | -0.01277 | 0.003986 | -0.31684 | 0.752366 | 0.908628 | -5.80182 |
| REACTOME\_WNT\_MEDIATED\_ACTIVATION\_OF\_DVL | -0.01901 | -0.39723 | -0.31653 | 0.752599 | 0.908628 | -5.80191 |
| TESAR\_ALK\_TARGETS\_HUMAN\_ES\_5D\_DN | 0.019521 | -0.40769 | 0.316421 | 0.752684 | 0.908628 | -5.80194 |
| REACTOME\_PKMTS\_METHYLATE\_HISTONE\_LYSINES | -0.01574 | -0.0993 | -0.31619 | 0.752861 | 0.908628 | -5.80201 |
| PID\_E2F\_PATHWAY | -0.01559 | -0.06609 | -0.31611 | 0.752918 | 0.908628 | -5.80203 |
| BIOCARTA\_IL4\_PATHWAY | 0.022014 | 0.003116 | 0.315941 | 0.753046 | 0.908628 | -5.80208 |
| REACTOME\_ORGANIC\_CATION\_ANION\_ZWITTERION\_TRANSPORT | -0.0204 | 0.017908 | -0.31577 | 0.753176 | 0.908628 | -5.80213 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_OVERALL\_UP | -0.02777 | -0.01355 | -0.31564 | 0.753271 | 0.908628 | -5.80217 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_F | -0.0182 | -0.0173 | -0.31543 | 0.753433 | 0.908628 | -5.80223 |
| LIEN\_BREAST\_CARCINOMA\_METAPLASTIC | 0.024009 | -0.01896 | 0.315399 | 0.753456 | 0.908628 | -5.80224 |
| CAMPS\_COLON\_CANCER\_COPY\_NUMBER\_DN | -0.0113 | -0.21651 | -0.31527 | 0.75355 | 0.908628 | -5.80228 |
| SESTO\_RESPONSE\_TO\_UV\_C0 | -0.01793 | -0.24386 | -0.31519 | 0.753613 | 0.908628 | -5.8023 |
| WILLERT\_WNT\_SIGNALING | 0.028537 | -0.00998 | 0.314938 | 0.753805 | 0.908628 | -5.80238 |
| KEGG\_AUTOIMMUNE\_THYROID\_DISEASE | 0.005736 | -0.68401 | 0.314801 | 0.753908 | 0.908628 | -5.80242 |
| NEWMAN\_ERCC6\_TARGETS\_UP | 0.021306 | -0.0411 | 0.314677 | 0.754002 | 0.908628 | -5.80245 |
| WP\_PURINE\_METABOLISM\_AND\_RELATED\_DISORDERS | 0.025139 | -0.03781 | 0.314238 | 0.754334 | 0.908766 | -5.80258 |
| BIOCARTA\_PPARA\_PATHWAY | -0.017 | -0.18279 | -0.31415 | 0.754401 | 0.908766 | -5.80261 |
| PECE\_MAMMARY\_STEM\_CELL\_UP | 0.018168 | -0.13429 | 0.313819 | 0.75465 | 0.908894 | -5.8027 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_CYAN\_UP | -0.0269 | 0.005589 | -0.31295 | 0.755306 | 0.909511 | -5.80296 |
| REACTOME\_EPH\_EPHRIN\_SIGNALING | 0.015148 | -0.03945 | 0.312509 | 0.755641 | 0.909702 | -5.80309 |
| REACTOME\_ALK\_MUTANTS\_BIND\_TKIS | 0.025677 | -0.0302 | 0.312236 | 0.755847 | 0.909702 | -5.80317 |
| MATSUDA\_NATURAL\_KILLER\_DIFFERENTIATION | -0.01301 | -0.08475 | -0.31218 | 0.755893 | 0.909702 | -5.80318 |
| REACTOME\_REGULATION\_OF\_FOXO\_TRANSCRIPTIONAL\_ACTIVITY\_BY\_ACETYLATION | -0.02571 | -0.02082 | -0.31192 | 0.756086 | 0.909762 | -5.80326 |
| SASSON\_RESPONSE\_TO\_FORSKOLIN\_UP | 0.016955 | -0.02047 | 0.311331 | 0.756533 | 0.91007 | -5.80343 |
| REACTOME\_MAPK1\_ERK2\_ACTIVATION | -0.03024 | -0.00394 | -0.3112 | 0.756628 | 0.91007 | -5.80347 |
| SCHLINGEMANN\_SKIN\_CARCINOGENESIS\_TPA\_UP | 0.014898 | -0.04623 | 0.310898 | 0.75686 | 0.910177 | -5.80355 |
| REACTOME\_CALCITONIN\_LIKE\_LIGAND\_RECEPTORS | -0.02643 | -0.01887 | -0.31054 | 0.757127 | 0.910326 | -5.80366 |
| WP\_UREA\_CYCLE\_AND\_METABOLISM\_OF\_AMINO\_GROUPS | -0.01887 | -0.0119 | -0.31006 | 0.757494 | 0.910596 | -5.8038 |
| REACTOME\_COPI\_DEPENDENT\_GOLGI\_TO\_ER\_RETROGRADE\_TRAFFIC | -0.01385 | -0.06408 | -0.30955 | 0.757878 | 0.910755 | -5.80394 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_GRADES\_1\_2\_DN | -0.01926 | -0.06609 | -0.30951 | 0.757913 | 0.910755 | -5.80396 |
| WP\_PENTOSE\_PHOSPHATE\_PATHWAY\_IN\_SENESCENT\_CELLS | 0.028523 | -0.00064 | 0.308614 | 0.758589 | 0.911395 | -5.80421 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_C\_DN | -0.01426 | -0.04408 | -0.30831 | 0.758818 | 0.911493 | -5.8043 |
| MAHAJAN\_RESPONSE\_TO\_IL1A\_DN | -0.01659 | -0.11361 | -0.30813 | 0.758957 | 0.911493 | -5.80435 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_INTERFERON\_DN | 0.013138 | -0.04128 | 0.30776 | 0.759236 | 0.911657 | -5.80446 |
| YOSHIMURA\_MAPK8\_TARGETS\_DN | -0.01807 | -0.06492 | -0.30747 | 0.759453 | 0.911659 | -5.80454 |
| SHEDDEN\_LUNG\_CANCER\_GOOD\_SURVIVAL\_A12 | 0.00843 | -0.27352 | 0.307296 | 0.759587 | 0.911659 | -5.80459 |
| REACTOME\_CASPASE\_ACTIVATION\_VIA\_DEATH\_RECEPTORS\_IN\_THE\_PRESENCE\_OF\_LIGAND | 0.025862 | 0.010332 | 0.307156 | 0.759694 | 0.911659 | -5.80463 |
| KORKOLA\_YOLK\_SAC\_TUMOR\_UP | -0.02029 | -0.08068 | -0.307 | 0.759811 | 0.911659 | -5.80468 |
| SMITH\_TERT\_TARGETS\_UP | -0.01643 | -0.18099 | -0.30673 | 0.760018 | 0.911734 | -5.80475 |
| KEGG\_AMINO\_SUGAR\_AND\_NUCLEOTIDE\_SUGAR\_METABOLISM | -0.02236 | -0.02106 | -0.30626 | 0.760372 | 0.911757 | -5.80489 |
| CASORELLI\_APL\_SECONDARY\_VS\_DE\_NOVO\_UP | 0.017355 | -0.16906 | 0.306255 | 0.760376 | 0.911757 | -5.80489 |
| PID\_AURORA\_A\_PATHWAY | 0.016664 | -0.05857 | 0.306137 | 0.760466 | 0.911757 | -5.80492 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_RED\_UP | 0.026741 | 0.005879 | 0.305726 | 0.760778 | 0.911959 | -5.80504 |
| WP\_HOSTPATHOGEN\_INTERACTION\_OF\_HUMAN\_CORONAVIRUSES\_MAPK\_SIGNALING | 0.017416 | -0.05358 | 0.305172 | 0.761198 | 0.91218 | -5.8052 |
| LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP | -0.01321 | -0.09192 | -0.30483 | 0.761456 | 0.91218 | -5.80529 |
| WP\_EV\_RELEASE\_FROM\_CARDIAC\_CELLS\_AND\_THEIR\_FUNCTIONAL\_EFFECTS | 0.015564 | -0.48798 | 0.304645 | 0.761597 | 0.91218 | -5.80535 |
| WP\_NOTCH1\_REGULATION\_OF\_ENDOTHELIAL\_CELL\_CALCIFICATION | 0.020678 | -0.05827 | 0.304486 | 0.761718 | 0.91218 | -5.80539 |
| PID\_SMAD2\_3NUCLEAR\_PATHWAY | 0.016167 | -0.00988 | 0.304362 | 0.761812 | 0.91218 | -5.80543 |
| REACTOME\_MET\_ACTIVATES\_PI3K\_AKT\_SIGNALING | 0.023839 | -0.01619 | 0.304348 | 0.761822 | 0.91218 | -5.80543 |
| MARKS\_ACETYLATED\_NON\_HISTONE\_PROTEINS | 0.022752 | -0.01918 | 0.304015 | 0.762075 | 0.912248 | -5.80552 |
| WP\_RENINANGIOTENSINALDOSTERONE\_SYSTEM\_RAAS | 0.009476 | -0.17199 | 0.303653 | 0.762349 | 0.912248 | -5.80563 |
| JI\_RESPONSE\_TO\_FSH\_DN | 0.024438 | -0.00675 | 0.303443 | 0.762509 | 0.912248 | -5.80569 |
| BUYTAERT\_PHOTODYNAMIC\_THERAPY\_STRESS\_UP | -0.0173 | -0.07478 | -0.30342 | 0.762525 | 0.912248 | -5.80569 |
| BIOCARTA\_AGR\_PATHWAY | 0.012628 | -0.0276 | 0.303178 | 0.76271 | 0.912248 | -5.80576 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_YELLOW\_UP | 0.024089 | 0.002774 | 0.302956 | 0.762878 | 0.912248 | -5.80582 |
| HUANG\_GATA2\_TARGETS\_UP | 0.015422 | -0.19788 | 0.30295 | 0.762883 | 0.912248 | -5.80583 |
| SLEBOS\_HEAD\_AND\_NECK\_CANCER\_WITH\_HPV\_UP | -0.01212 | -0.02763 | -0.30153 | 0.763959 | 0.913221 | -5.80622 |
| SAMOLS\_TARGETS\_OF\_KHSV\_MIRNAS\_DN | -0.01931 | -0.07226 | -0.3015 | 0.763983 | 0.913221 | -5.80623 |
| IWANAGA\_CARCINOGENESIS\_BY\_KRAS\_DN | -0.00952 | -0.145 | -0.30114 | 0.764254 | 0.913373 | -5.80633 |
| WP\_IL3\_SIGNALING\_PATHWAY | 0.019854 | -0.05351 | 0.300454 | 0.764777 | 0.913827 | -5.80653 |
| LUI\_TARGETS\_OF\_PAX8\_PPARG\_FUSION | 0.021249 | -0.22641 | 0.300045 | 0.765088 | 0.913944 | -5.80664 |
| AZARE\_STAT3\_TARGETS | 0.023347 | 0.016178 | 0.299802 | 0.765272 | 0.913944 | -5.80671 |
| REACTOME\_DOWNREGULATION\_OF\_ERBB2\_ERBB3\_SIGNALING | 0.01772 | -0.07135 | 0.299758 | 0.765306 | 0.913944 | -5.80672 |
| BARRIER\_COLON\_CANCER\_RECURRENCE\_DN | -0.02007 | 0.004223 | -0.29939 | 0.765582 | 0.914056 | -5.80682 |
| PID\_CD40\_PATHWAY | 0.018439 | -0.02952 | 0.299256 | 0.765687 | 0.914056 | -5.80686 |
| REICHERT\_G1S\_REGULATORS\_AS\_PI3K\_TARGETS | -0.02062 | 0.005172 | -0.29907 | 0.765831 | 0.914057 | -5.80691 |
| INAMURA\_LUNG\_CANCER\_SCC\_DN | 0.01919 | -0.30765 | 0.297791 | 0.7668 | 0.915042 | -5.80727 |
| BIOCARTA\_REELIN\_PATHWAY | 0.01914 | -0.00338 | 0.297577 | 0.766963 | 0.915064 | -5.80733 |
| GRAESSMANN\_APOPTOSIS\_BY\_SERUM\_DEPRIVATION\_UP | -0.0108 | -0.12773 | -0.29732 | 0.767162 | 0.915082 | -5.8074 |
| LI\_CISPLATIN\_RESISTANCE\_DN | -0.0137 | -0.09215 | -0.29718 | 0.767266 | 0.915082 | -5.80744 |
| CEBALLOS\_TARGETS\_OF\_TP53\_AND\_MYC\_DN | -0.01351 | -0.16245 | -0.29671 | 0.767623 | 0.915337 | -5.80757 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_2A\_DN | -0.02211 | -0.00478 | -0.29633 | 0.767913 | 0.915402 | -5.80767 |
| REACTOME\_IRAK2\_MEDIATED\_ACTIVATION\_OF\_TAK1\_COMPLEX | 0.02386 | 0.003855 | 0.296171 | 0.768031 | 0.915402 | -5.80772 |
| GLINSKY\_CANCER\_DEATH\_UP | -0.02377 | 0.001607 | -0.29607 | 0.768109 | 0.915402 | -5.80774 |
| RIZ\_ERYTHROID\_DIFFERENTIATION\_HBZ | 0.013577 | -0.0261 | 0.295288 | 0.768703 | 0.915639 | -5.80796 |
| NAKAMURA\_ADIPOGENESIS\_LATE\_UP | 0.017556 | -0.0441 | 0.295275 | 0.768713 | 0.915639 | -5.80796 |
| REACTOME\_ACETYLCHOLINE\_BINDING\_AND\_DOWNSTREAM\_EVENTS | 0.028266 | 0.036217 | 0.29524 | 0.768739 | 0.915639 | -5.80797 |
| REACTOME\_ACTIVATION\_OF\_THE\_AP\_1\_FAMILY\_OF\_TRANSCRIPTION\_FACTORS | -0.0233 | -0.00959 | -0.29475 | 0.769111 | 0.91591 | -5.80811 |
| KUROKAWA\_LIVER\_CANCER\_EARLY\_RECURRENCE\_DN | 0.016204 | -0.61295 | 0.294201 | 0.769529 | 0.916131 | -5.80826 |
| WP\_PYRIMIDINE\_METABOLISM\_AND\_RELATED\_DISEASES | 0.015179 | -0.01705 | 0.293865 | 0.769785 | 0.916131 | -5.80835 |
| WP\_MAP3K1\_ROLE\_IN\_PROMOTING\_AND\_BLOCKING\_GONADAL\_DETERMINATION | 0.013284 | 0.003318 | 0.293741 | 0.76988 | 0.916131 | -5.80838 |
| STAMBOLSKY\_TARGETS\_OF\_MUTATED\_TP53\_UP | -0.01231 | -0.0216 | -0.29353 | 0.770044 | 0.916131 | -5.80844 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_DN | -0.01421 | -0.51798 | -0.29342 | 0.770124 | 0.916131 | -5.80847 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_RHOTEKIN\_AND\_RHOPHILINS | 0.023718 | -0.00681 | 0.293367 | 0.770164 | 0.916131 | -5.80849 |
| WILLIAMS\_ESR1\_TARGETS\_UP | 0.017755 | -0.04476 | 0.293183 | 0.770304 | 0.916131 | -5.80854 |
| WP\_ONECARBON\_METABOLISM | -0.01561 | -0.10018 | -0.29262 | 0.770731 | 0.916447 | -5.80869 |
| WANG\_METASTASIS\_OF\_BREAST\_CANCER | -0.01386 | -0.06972 | -0.29246 | 0.770858 | 0.916447 | -5.80873 |
| ALFANO\_MYC\_TARGETS | -0.01215 | -0.12018 | -0.29215 | 0.771093 | 0.916556 | -5.80882 |
| BIOCARTA\_ERK5\_PATHWAY | -0.01911 | -0.1002 | -0.29162 | 0.771491 | 0.916832 | -5.80896 |
| DANG\_REGULATED\_BY\_MYC\_UP | -0.01583 | -0.07339 | -0.29117 | 0.771839 | 0.916832 | -5.80908 |
| HOELZEL\_NF1\_TARGETS\_DN | -0.01358 | -0.01554 | -0.29114 | 0.77186 | 0.916832 | -5.80909 |
| BIOCARTA\_PDZS\_PATHWAY | -0.01817 | -0.07346 | -0.29108 | 0.771902 | 0.916832 | -5.80911 |
| PID\_PI3KCI\_PATHWAY | -0.01831 | -0.05556 | -0.29043 | 0.772398 | 0.91725 | -5.80928 |
| TOOKER\_GEMCITABINE\_RESISTANCE\_DN | -0.0206 | -0.01505 | -0.29001 | 0.77272 | 0.917461 | -5.8094 |
| REACTOME\_OXIDATIVE\_STRESS\_INDUCED\_SENESCENCE | -0.01169 | -0.10108 | -0.28971 | 0.772949 | 0.917561 | -5.80948 |
| REACTOME\_BH3\_ONLY\_PROTEINS\_ASSOCIATE\_WITH\_AND\_INACTIVATE\_ANTI\_APOPTOTIC\_BCL\_2\_MEMBERS | 0.018554 | 0.004656 | 0.289365 | 0.773211 | 0.917655 | -5.80957 |
| MEINHOLD\_OVARIAN\_CANCER\_LOW\_GRADE\_UP | 0.027611 | -0.01033 | 0.289228 | 0.773316 | 0.917655 | -5.80961 |
| WP\_IL1\_SIGNALING\_PATHWAY | -0.01724 | -0.04078 | -0.28861 | 0.773787 | 0.917908 | -5.80977 |
| BIOCARTA\_KERATINOCYTE\_PATHWAY | -0.01567 | -0.22133 | -0.28844 | 0.773914 | 0.917908 | -5.80982 |
| BOQUEST\_STEM\_CELL\_UP | 0.019945 | -0.06738 | 0.28838 | 0.773962 | 0.917908 | -5.80984 |
| REACTOME\_NF\_KB\_ACTIVATION\_THROUGH\_FADD\_RIP\_1\_PATHWAY\_MEDIATED\_BY\_CASPASE\_8\_AND\_10 | 0.023578 | -0.00424 | 0.288179 | 0.774115 | 0.917918 | -5.80989 |
| REACTOME\_THE\_PHOTOTRANSDUCTION\_CASCADE | -0.01076 | -0.04285 | -0.28789 | 0.774334 | 0.918007 | -5.80997 |
| BIOCARTA\_BOTULIN\_PATHWAY | 0.025645 | 0.014465 | 0.287577 | 0.774573 | 0.91812 | -5.81005 |
| REACTOME\_LIPID\_PARTICLE\_ORGANIZATION | 0.022553 | -0.10716 | 0.287352 | 0.774745 | 0.918152 | -5.81011 |
| BILD\_E2F3\_ONCOGENIC\_SIGNATURE | -0.00881 | -0.09485 | -0.28601 | 0.775766 | 0.919178 | -5.81047 |
| REACTOME\_RAS\_SIGNALING\_DOWNSTREAM\_OF\_NF1\_LOSS\_OF\_FUNCTION\_VARIANTS | -0.02274 | -0.10434 | -0.28573 | 0.775984 | 0.919178 | -5.81055 |
| PASTURAL\_RIZ1\_TARGETS\_UP | -0.01742 | -0.31812 | -0.28549 | 0.776168 | 0.919178 | -5.81061 |
| BEGUM\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_AND\_PAX3 | 0.021392 | -0.00669 | 0.28546 | 0.776188 | 0.919178 | -5.81062 |
| REACTOME\_SIGNALING\_BY\_MRAS\_COMPLEX\_MUTANTS | -0.03427 | -0.00298 | -0.28475 | 0.776731 | 0.919649 | -5.81081 |
| BREDEMEYER\_RAG\_SIGNALING\_NOT\_VIA\_ATM\_DN | 0.01063 | -0.209 | 0.284515 | 0.776909 | 0.919689 | -5.81087 |
| CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_MESENCHYMAL\_DN | -0.01729 | -0.08838 | -0.28429 | 0.777082 | 0.919722 | -5.81093 |
| PID\_IL12\_STAT4\_PATHWAY | 0.017675 | -0.16167 | 0.283871 | 0.7774 | 0.919928 | -5.81104 |
| BIOCARTA\_ECM\_PATHWAY | 0.023145 | -0.04142 | 0.282988 | 0.778074 | 0.920397 | -5.81127 |
| LOPEZ\_EPITHELIOID\_MESOTHELIOMA | 0.016939 | -0.04488 | 0.282973 | 0.778085 | 0.920397 | -5.81127 |
| JONES\_TCOF1\_TARGETS | -0.03309 | -0.01015 | -0.28254 | 0.778412 | 0.920613 | -5.81139 |
| REACTOME\_SHC1\_EVENTS\_IN\_ERBB4\_SIGNALING | 0.017387 | -0.06768 | 0.282157 | 0.778708 | 0.920667 | -5.81149 |
| REACTOME\_TELOMERE\_EXTENSION\_BY\_TELOMERASE | 0.017475 | -0.06815 | 0.282103 | 0.778749 | 0.920667 | -5.8115 |
| ODONNELL\_METASTASIS\_DN | 0.011888 | -0.18792 | 0.281915 | 0.778892 | 0.920667 | -5.81155 |
| IVANOVA\_HEMATOPOIESIS\_STEM\_CELL | -0.00852 | -0.09591 | -0.2817 | 0.779055 | 0.920688 | -5.81161 |
| CORRE\_MULTIPLE\_MYELOMA\_DN | -0.01763 | -0.0491 | -0.28135 | 0.779322 | 0.920832 | -5.8117 |
| WP\_EBOLA\_VIRUS\_INFECTION\_IN\_HOST | 0.008866 | -0.44753 | 0.281019 | 0.779577 | 0.920963 | -5.81179 |
| REACTOME\_ANTIGEN\_PROCESSING\_CROSS\_PRESENTATION | -0.01385 | -0.3729 | -0.28041 | 0.780042 | 0.921016 | -5.81195 |
| SCHLOSSER\_MYC\_TARGETS\_AND\_SERUM\_RESPONSE\_DN | -0.02599 | -0.03191 | -0.28037 | 0.780073 | 0.921016 | -5.81196 |
| ABRAMSON\_INTERACT\_WITH\_AIRE | -0.02554 | -0.02266 | -0.2803 | 0.780127 | 0.921016 | -5.81198 |
| WP\_COPPER\_HOMEOSTASIS | -0.01545 | -0.07401 | -0.2802 | 0.780201 | 0.921016 | -5.812 |
| WP\_HIPPOMERLIN\_SIGNALING\_DYSREGULATION | -0.00922 | -0.02876 | -0.27917 | 0.780988 | 0.921774 | -5.81227 |
| REACTOME\_MYOGENESIS | 0.011873 | 0.00072 | 0.278959 | 0.78115 | 0.921795 | -5.81233 |
| SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_UP | 0.012551 | -0.13888 | 0.277812 | 0.782027 | 0.922659 | -5.81262 |
| REACTOME\_RA\_BIOSYNTHESIS\_PATHWAY | 0.012998 | -0.30188 | 0.277545 | 0.782231 | 0.922709 | -5.81269 |
| KRIGE\_RESPONSE\_TO\_TOSEDOSTAT\_24HR\_UP | -0.01421 | -0.13312 | -0.27738 | 0.78236 | 0.922709 | -5.81273 |
| RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_UP | 0.017701 | -0.06133 | 0.276846 | 0.782765 | 0.923016 | -5.81287 |
| REACTOME\_EGR2\_AND\_SOX10\_MEDIATED\_INITIATION\_OF\_SCHWANN\_CELL\_MYELINATION | 0.015273 | 0.002839 | 0.276289 | 0.783191 | 0.923309 | -5.81302 |
| ROYLANCE\_BREAST\_CANCER\_16Q\_COPY\_NUMBER\_DN | -0.01186 | -0.10232 | -0.27606 | 0.78337 | 0.923309 | -5.81308 |
| REACTOME\_TETRAHYDROBIOPTERIN\_BH4\_SYNTHESIS\_RECYCLING\_SALVAGE\_AND\_REGULATION | -0.02046 | -0.02768 | -0.27595 | 0.783448 | 0.923309 | -5.8131 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_9 | -0.01049 | -0.25887 | -0.27555 | 0.783759 | 0.923337 | -5.81321 |
| REACTOME\_PYRUVATE\_METABOLISM | 0.017737 | -0.0672 | 0.275269 | 0.783972 | 0.923337 | -5.81328 |
| WP\_EXTRACELLULAR\_VESICLEMEDIATED\_SIGNALING\_IN\_RECIPIENT\_CELLS | -0.01544 | -0.04015 | -0.27523 | 0.784004 | 0.923337 | -5.81329 |
| WELCSH\_BRCA1\_TARGETS\_DN | -0.0145 | -0.20571 | -0.27516 | 0.784053 | 0.923337 | -5.8133 |
| REACTOME\_METAL\_ION\_SLC\_TRANSPORTERS | 0.013336 | -0.15129 | 0.2741 | 0.784866 | 0.923841 | -5.81358 |
| REACTOME\_N\_GLYCAN\_ANTENNAE\_ELONGATION | 0.012183 | -0.15881 | 0.273905 | 0.785015 | 0.923841 | -5.81363 |
| WP\_TCA\_CYCLE\_IN\_SENESCENCE | -0.02926 | -0.01402 | -0.27376 | 0.785126 | 0.923841 | -5.81366 |
| FUNG\_IL2\_TARGETS\_WITH\_STAT5\_BINDING\_SITES | 0.021008 | -0.41566 | 0.273671 | 0.785194 | 0.923841 | -5.81369 |
| IKEDA\_MIR30\_TARGETS\_DN | -0.01246 | -0.14539 | -0.27365 | 0.785207 | 0.923841 | -5.81369 |
| FUNG\_IL2\_SIGNALING\_1 | 0.022942 | -0.33246 | 0.273362 | 0.78543 | 0.923933 | -5.81376 |
| REACTOME\_NOREPINEPHRINE\_NEUROTRANSMITTER\_RELEASE\_CYCLE | -0.01643 | 0.002375 | -0.27236 | 0.786198 | 0.924475 | -5.81402 |
| SUZUKI\_CTCFL\_TARGETS\_UP | 0.01477 | -0.08662 | 0.272339 | 0.786214 | 0.924475 | -5.81402 |
| SASSON\_RESPONSE\_TO\_GONADOTROPHINS\_UP | 0.015202 | -0.02307 | 0.2721 | 0.786396 | 0.924475 | -5.81409 |
| WP\_SEROTONIN\_AND\_ANXIETYRELATED\_EVENTS | -0.01463 | -0.12248 | -0.2718 | 0.786626 | 0.924475 | -5.81416 |
| HORIUCHI\_WTAP\_TARGETS\_UP | 0.01477 | -0.08407 | 0.2717 | 0.786703 | 0.924475 | -5.81419 |
| WALLACE\_JAK2\_TARGETS\_UP | 0.019517 | -0.05483 | 0.271469 | 0.786879 | 0.924475 | -5.81424 |
| TSENG\_ADIPOGENIC\_POTENTIAL\_DN | -0.01912 | -0.04087 | -0.27135 | 0.786968 | 0.924475 | -5.81427 |
| YANG\_BCL3\_TARGETS\_UP | -0.00799 | -0.13828 | -0.27105 | 0.787198 | 0.924475 | -5.81435 |
| NAKAMURA\_TUMOR\_ZONE\_PERIPHERAL\_VS\_CENTRAL\_DN | -0.01303 | -0.10538 | -0.27084 | 0.787361 | 0.924475 | -5.8144 |
| REACTOME\_PKA\_MEDIATED\_PHOSPHORYLATION\_OF\_KEY\_METABOLIC\_FACTORS | -0.02467 | -0.14854 | -0.27071 | 0.787463 | 0.924475 | -5.81444 |
| GALLUZZI\_PREVENT\_MITOCHONDIAL\_PERMEABILIZATION | 0.016636 | 0.0128 | 0.270516 | 0.787609 | 0.924475 | -5.81449 |
| WP\_NONCLASSICAL\_ROLE\_OF\_VITAMIN\_D | 0.018229 | -0.08659 | 0.270438 | 0.787669 | 0.924475 | -5.8145 |
| PID\_NECTIN\_PATHWAY | 0.018844 | -0.00845 | 0.269636 | 0.788283 | 0.924475 | -5.81471 |
| WP\_BIOMARKERS\_FOR\_UREA\_CYCLE\_DISORDERS | -0.01825 | 5.39E-05 | -0.26956 | 0.788343 | 0.924475 | -5.81473 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_NOT\_BY\_GAMMA\_IN\_OLD | 0.011827 | -0.21572 | 0.269447 | 0.788428 | 0.924475 | -5.81475 |
| NIKOLSKY\_MUTATED\_AND\_AMPLIFIED\_IN\_BREAST\_CANCER | -0.00687 | -0.14344 | -0.2694 | 0.788468 | 0.924475 | -5.81477 |
| LE\_NEURONAL\_DIFFERENTIATION\_UP | -0.01142 | -0.31907 | -0.26939 | 0.78847 | 0.924475 | -5.81477 |
| LE\_EGR2\_TARGETS\_DN | 0.015527 | -0.04828 | 0.269295 | 0.788545 | 0.924475 | -5.81479 |
| STAEGE\_EWING\_FAMILY\_TUMOR | -0.01165 | -0.04181 | -0.26916 | 0.788651 | 0.924475 | -5.81483 |
| REACTOME\_REGULATION\_BY\_C\_FLIP | -0.02212 | 0.011334 | -0.26881 | 0.788915 | 0.924614 | -5.81491 |
| MARCHINI\_TRABECTEDIN\_RESISTANCE\_UP | -0.01925 | -0.06006 | -0.26836 | 0.78926 | 0.924707 | -5.81503 |
| FIGUEROA\_AML\_METHYLATION\_CLUSTER\_5\_UP | -0.016 | 0.008895 | -0.26833 | 0.789285 | 0.924707 | -5.81503 |
| CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_UP | 0.018495 | 0.018605 | 0.267334 | 0.790047 | 0.92543 | -5.81528 |
| WP\_PDGF\_PATHWAY | -0.02168 | -0.02296 | -0.26678 | 0.790471 | 0.925642 | -5.81542 |
| BILANGES\_SERUM\_SENSITIVE\_VIA\_TSC2 | -0.01835 | -0.0997 | -0.26648 | 0.790701 | 0.925642 | -5.81549 |
| REACTOME\_CLATHRIN\_MEDIATED\_ENDOCYTOSIS | 0.013285 | -0.02195 | 0.266344 | 0.790807 | 0.925642 | -5.81553 |
| REACTOME\_GLUCOCORTICOID\_BIOSYNTHESIS | 0.018198 | -0.33863 | 0.266339 | 0.790811 | 0.925642 | -5.81553 |
| ALONSO\_METASTASIS\_EMT\_UP | -0.02283 | -0.02429 | -0.26546 | 0.791481 | 0.926248 | -5.81575 |
| PID\_BCR\_5PATHWAY | -0.01755 | -0.08347 | -0.26528 | 0.791619 | 0.926248 | -5.81579 |
| REACTOME\_ACYL\_CHAIN\_REMODELLING\_OF\_PI | 0.014037 | -0.38068 | 0.264636 | 0.792117 | 0.926513 | -5.81595 |
| WP\_AGERAGE\_PATHWAY | 0.014479 | -0.09541 | 0.264609 | 0.792137 | 0.926513 | -5.81596 |
| VISALA\_AGING\_LYMPHOCYTE\_UP | -0.01817 | -0.11077 | -0.26424 | 0.792417 | 0.926577 | -5.81605 |
| NADELLA\_PRKAR1A\_TARGETS\_DN | -0.01971 | -0.12748 | -0.26416 | 0.792483 | 0.926577 | -5.81607 |
| SMID\_BREAST\_CANCER\_BASAL\_DN | -0.00771 | -0.08921 | -0.26365 | 0.792871 | 0.926715 | -5.81619 |
| REACTOME\_ENOS\_ACTIVATION | -0.01863 | -0.3186 | -0.26363 | 0.792892 | 0.926715 | -5.8162 |
| REACTOME\_CHONDROITIN\_SULFATE\_DERMATAN\_SULFATE\_METABOLISM | -0.01401 | -0.01742 | -0.26315 | 0.79326 | 0.926975 | -5.81632 |
| GUO\_HEX\_TARGETS\_DN | -0.01436 | -0.08026 | -0.26256 | 0.793711 | 0.927231 | -5.81646 |
| REACTOME\_TGF\_BETA\_RECEPTOR\_SIGNALING\_ACTIVATES\_SMADS | -0.01898 | -0.05543 | -0.26248 | 0.79377 | 0.927231 | -5.81648 |
| WP\_EICOSANOID\_METABOLISM\_VIA\_CYTOCHROME\_P450\_MONOOXYGENASES\_PATHWAY | -0.0228 | 0.010328 | -0.26221 | 0.793976 | 0.927301 | -5.81655 |
| PID\_EPO\_PATHWAY | -0.01835 | -0.01899 | -0.26175 | 0.794333 | 0.927421 | -5.81666 |
| JIANG\_CORE\_DUPLICON\_GENES | -0.01199 | -0.32369 | -0.26148 | 0.794538 | 0.927421 | -5.81672 |
| GROSS\_ELK3\_TARGETS\_UP | -0.01934 | 0.000668 | -0.26134 | 0.794642 | 0.927421 | -5.81676 |
| REACTOME\_REGULATION\_OF\_LOCALIZATION\_OF\_FOXO\_TRANSCRIPTION\_FACTORS | 0.01818 | -0.05855 | 0.26132 | 0.794662 | 0.927421 | -5.81676 |
| TRAYNOR\_RETT\_SYNDROM\_UP | -0.01387 | -0.07838 | -0.26081 | 0.795052 | 0.927707 | -5.81689 |
| THUM\_SYSTOLIC\_HEART\_FAILURE\_UP | -0.01446 | -0.15989 | -0.26031 | 0.795438 | 0.927987 | -5.81701 |
| WP\_BENZOAPYRENE\_METABOLISM | 0.017449 | 0.004123 | 0.259617 | 0.795969 | 0.928089 | -5.81718 |
| MARTINEZ\_RB1\_AND\_TP53\_TARGETS\_UP | -0.01125 | -0.07609 | -0.25944 | 0.796104 | 0.928089 | -5.81722 |
| REACTOME\_ACTIVATION\_OF\_BAD\_AND\_TRANSLOCATION\_TO\_MITOCHONDRIA | -0.01701 | -0.11235 | -0.25919 | 0.796296 | 0.928089 | -5.81728 |
| RAMPON\_ENRICHED\_LEARNING\_ENVIRONMENT\_EARLY\_UP | 0.021303 | 0.006836 | 0.259164 | 0.796317 | 0.928089 | -5.81729 |
| KIM\_PTEN\_TARGETS\_UP | 0.014304 | 0.011562 | 0.259139 | 0.796337 | 0.928089 | -5.81729 |
| WP\_GASTRIC\_ACID\_PRODUCTION | 0.013266 | -0.43488 | 0.258585 | 0.796762 | 0.928089 | -5.81743 |
| KEGG\_GLYCOSAMINOGLYCAN\_BIOSYNTHESIS\_KERATAN\_SULFATE | -0.01466 | -0.01253 | -0.25827 | 0.797004 | 0.928089 | -5.8175 |
| REACTOME\_SYNTHESIS\_OF\_DOLICHYL\_PHOSPHATE | -0.02025 | 0.005453 | -0.25825 | 0.797016 | 0.928089 | -5.8175 |
| STEIN\_ESR1\_TARGETS | -0.00981 | -0.12684 | -0.25824 | 0.797029 | 0.928089 | -5.81751 |
| REACTOME\_DOWNREGULATION\_OF\_TGF\_BETA\_RECEPTOR\_SIGNALING | -0.01816 | -0.03245 | -0.25815 | 0.797094 | 0.928089 | -5.81753 |
| ROSS\_AML\_WITH\_MLL\_FUSIONS | 0.016048 | -0.11606 | 0.258106 | 0.79713 | 0.928089 | -5.81754 |
| ENGELMANN\_CANCER\_PROGENITORS\_UP | 0.01966 | -0.03036 | 0.257805 | 0.797362 | 0.928189 | -5.81761 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_HIGH\_RISK\_DN | -0.01194 | -0.09421 | -0.25714 | 0.797876 | 0.928618 | -5.81777 |
| WP\_CHROMOSOMAL\_AND\_MICROSATELLITE\_INSTABILITY\_IN\_COLORECTAL\_CANCER | 0.013459 | -0.01097 | 0.256875 | 0.798076 | 0.928681 | -5.81784 |
| WP\_PILOCYTIC\_ASTROCYTOMA | -0.02807 | 0.018636 | -0.25654 | 0.798336 | 0.928767 | -5.81792 |
| REACTOME\_SHC\_MEDIATED\_CASCADE\_FGFR1 | 0.016153 | -0.04306 | 0.256287 | 0.798528 | 0.928767 | -5.81798 |
| PID\_IL2\_PI3K\_PATHWAY | -0.01656 | -0.00237 | -0.25592 | 0.798814 | 0.928767 | -5.81806 |
| PID\_S1P\_S1P2\_PATHWAY | -0.01864 | -0.00287 | -0.25578 | 0.798917 | 0.928767 | -5.8181 |
| KARLSSON\_TGFB1\_TARGETS\_DN | -0.0143 | -0.08686 | -0.25557 | 0.799078 | 0.928767 | -5.81815 |
| MIYAGAWA\_TARGETS\_OF\_EWSR1\_ETS\_FUSIONS\_DN | -0.01312 | -0.04922 | -0.25552 | 0.79912 | 0.928767 | -5.81816 |
| REACTOME\_GLYCEROPHOSPHOLIPID\_CATABOLISM | 0.018119 | -0.02178 | 0.255297 | 0.799289 | 0.928767 | -5.81821 |
| HAHTOLA\_SEZARY\_SYNDROM\_UP | 0.015898 | -0.10778 | 0.25526 | 0.799318 | 0.928767 | -5.81822 |
| PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_UP | 0.017594 | -0.11187 | 0.254804 | 0.799668 | 0.929005 | -5.81833 |
| BIOCARTA\_CD40\_PATHWAY | 0.022834 | -0.0644 | 0.253709 | 0.800511 | 0.929607 | -5.81859 |
| REACTOME\_INTERLEUKIN\_2\_SIGNALING | -0.0171 | -0.00244 | -0.25339 | 0.800758 | 0.929607 | -5.81866 |
| LANG\_MYB\_FAMILY\_TARGETS | -0.02146 | 0.006604 | -0.25327 | 0.800847 | 0.929607 | -5.81869 |
| KEGG\_CYTOSOLIC\_DNA\_SENSING\_PATHWAY | -0.01017 | -0.09987 | -0.25324 | 0.800872 | 0.929607 | -5.8187 |
| VALK\_AML\_WITH\_EVI1 | 0.014402 | -0.14495 | 0.253181 | 0.800917 | 0.929607 | -5.81871 |
| BRUECKNER\_TARGETS\_OF\_MIRLET7A3\_UP | 0.013832 | 0.001904 | 0.252757 | 0.801243 | 0.929816 | -5.81881 |
| WP\_CAMKK2\_PATHWAY | 0.016852 | -0.03762 | 0.252493 | 0.801446 | 0.929882 | -5.81887 |
| KEGG\_ACUTE\_MYELOID\_LEUKEMIA | -0.01515 | -0.0267 | -0.25212 | 0.80173 | 0.930042 | -5.81896 |
| WP\_NCRNAS\_INVOLVED\_IN\_WNT\_SIGNALING\_IN\_HEPATOCELLULAR\_CARCINOMA | 0.007813 | -0.13457 | 0.251736 | 0.802029 | 0.930219 | -5.81905 |
| GINESTIER\_BREAST\_CANCER\_20Q13\_AMPLIFICATION\_DN | -0.00928 | -0.32666 | -0.25117 | 0.802464 | 0.930512 | -5.81918 |
| REACTOME\_SHC1\_EVENTS\_IN\_ERBB2\_SIGNALING | -0.01384 | -0.05022 | -0.25088 | 0.802688 | 0.930512 | -5.81925 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_G1\_G2\_UP | -0.01772 | -0.16064 | -0.25084 | 0.80272 | 0.930512 | -5.81926 |
| JIANG\_HYPOXIA\_CANCER | 0.015274 | -0.07168 | 0.249971 | 0.803388 | 0.930966 | -5.81947 |
| WP\_APOPTOSIS\_MODULATION\_BY\_HSP70 | -0.01538 | -0.16123 | -0.24981 | 0.803516 | 0.930966 | -5.8195 |
| REACTOME\_DISEASES\_OF\_METABOLISM | 0.008014 | -0.08622 | 0.249693 | 0.803602 | 0.930966 | -5.81953 |
| KEGG\_VEGF\_SIGNALING\_PATHWAY | 0.007732 | -0.04577 | 0.249495 | 0.803755 | 0.930966 | -5.81958 |
| ZHOU\_TNF\_SIGNALING\_4HR | -0.01488 | -0.23484 | -0.24917 | 0.804003 | 0.930966 | -5.81965 |
| WP\_ENDOTHELIN\_PATHWAYS | -0.01243 | 0.005504 | -0.24917 | 0.804007 | 0.930966 | -5.81965 |
| REACTOME\_TRANSLATION\_OF\_SARS\_COV\_2\_STRUCTURAL\_PROTEINS | -0.01528 | -0.07401 | -0.249 | 0.804136 | 0.930966 | -5.81969 |
| PARK\_APL\_PATHOGENESIS\_UP | -0.01821 | -0.31237 | -0.24869 | 0.804371 | 0.931069 | -5.81976 |
| FISCHER\_DIRECT\_P53\_TARGETS\_META\_ANALYSIS | 0.009631 | -0.08274 | 0.248293 | 0.80468 | 0.931257 | -5.81985 |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_D7\_DN | -0.00953 | -0.1169 | -0.24809 | 0.804835 | 0.931267 | -5.8199 |
| REACTOME\_PRESYNAPTIC\_DEPOLARIZATION\_AND\_CALCIUM\_CHANNEL\_OPENING | 0.019122 | 0.028635 | 0.247321 | 0.805429 | 0.931616 | -5.82008 |
| REACTOME\_INSULIN\_RECEPTOR\_RECYCLING | 0.014283 | -0.2152 | 0.247153 | 0.805559 | 0.931616 | -5.82012 |
| BRACHAT\_RESPONSE\_TO\_CISPLATIN | -0.02042 | -0.00639 | -0.24713 | 0.805576 | 0.931616 | -5.82012 |
| GARCIA\_TARGETS\_OF\_FLI1\_AND\_DAX1\_UP | -0.0141 | -0.1333 | -0.24641 | 0.806133 | 0.932092 | -5.82029 |
| KEGG\_RIG\_I\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | -0.00833 | -0.10981 | -0.24528 | 0.807003 | 0.932927 | -5.82055 |
| ROSS\_AML\_WITH\_AML1\_ETO\_FUSION | 0.010069 | -0.02276 | 0.244306 | 0.807753 | 0.933626 | -5.82077 |
| REACTOME\_EICOSANOID\_LIGAND\_BINDING\_RECEPTORS | -0.01247 | -0.11339 | -0.24352 | 0.808359 | 0.934051 | -5.82095 |
| HAN\_SATB1\_TARGETS\_DN | 0.009011 | -0.12899 | 0.24327 | 0.808553 | 0.934051 | -5.821 |
| PID\_AR\_PATHWAY | -0.01426 | -0.00049 | -0.24312 | 0.808668 | 0.934051 | -5.82104 |
| WP\_OXIDATIVE\_DAMAGE\_RESPONSE | -0.01175 | -0.3187 | -0.24287 | 0.808863 | 0.934051 | -5.8211 |
| PID\_CDC42\_PATHWAY | 0.011392 | -0.04307 | 0.242863 | 0.808866 | 0.934051 | -5.8211 |
| BOGNI\_TREATMENT\_RELATED\_MYELOID\_LEUKEMIA\_DN | -0.00749 | -0.51923 | -0.24269 | 0.809002 | 0.934051 | -5.82114 |
| KEGG\_TYROSINE\_METABOLISM | -0.0096 | -0.04204 | -0.24222 | 0.809359 | 0.934294 | -5.82124 |
| BIOCARTA\_MAL\_PATHWAY | -0.01961 | -0.03798 | -0.24188 | 0.809626 | 0.934375 | -5.82132 |
| KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_DN | -0.01407 | -0.02656 | -0.24175 | 0.809724 | 0.934375 | -5.82135 |
| MOOTHA\_FFA\_OXYDATION | -0.01901 | -0.00198 | -0.2411 | 0.810227 | 0.934719 | -5.82149 |
| KIM\_PTEN\_TARGETS\_DN | -0.01691 | -0.18818 | -0.24099 | 0.810315 | 0.934719 | -5.82152 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_PLEURA\_UP | -0.01936 | -0.14058 | -0.23968 | 0.811323 | 0.935712 | -5.82181 |
| CASTELLANO\_NRAS\_TARGETS\_DN | 0.01141 | -0.06543 | 0.239308 | 0.81161 | 0.935849 | -5.8219 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_LOW\_RISK\_DN | 0.011674 | -0.31663 | 0.239014 | 0.811837 | 0.935849 | -5.82196 |
| BILBAN\_B\_CLL\_LPL\_DN | 0.017175 | -0.14954 | 0.23892 | 0.81191 | 0.935849 | -5.82198 |
| WP\_REGULATORY\_CIRCUITS\_OF\_THE\_STAT3\_SIGNALING\_PATHWAY | 0.008403 | -0.08171 | 0.238602 | 0.812155 | 0.935849 | -5.82205 |
| MURAKAMI\_UV\_RESPONSE\_6HR\_UP | 0.013672 | 0.001049 | 0.238574 | 0.812177 | 0.935849 | -5.82206 |
| REACTOME\_CIRCADIAN\_CLOCK | -0.01431 | 0.003487 | -0.23733 | 0.813141 | 0.936777 | -5.82234 |
| SAKAI\_CHRONIC\_HEPATITIS\_VS\_LIVER\_CANCER\_DN | 0.008991 | -0.00672 | 0.23715 | 0.813276 | 0.936777 | -5.82237 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_48HR\_DN | 0.007708 | -0.06076 | 0.236407 | 0.81385 | 0.937242 | -5.82254 |
| WP\_GASTRIN\_SIGNALING\_PATHWAY | 0.01428 | -0.06103 | 0.236127 | 0.814067 | 0.937242 | -5.8226 |
| REACTOME\_UPTAKE\_AND\_FUNCTION\_OF\_ANTHRAX\_TOXINS | -0.01784 | 0.008178 | -0.23581 | 0.81431 | 0.937242 | -5.82267 |
| KARAKAS\_TGFB1\_SIGNALING | -0.01704 | 0.013222 | -0.23563 | 0.814454 | 0.937242 | -5.82271 |
| RUTELLA\_RESPONSE\_TO\_HGF\_VS\_CSF2RB\_AND\_IL4\_DN | -0.01536 | -0.05091 | -0.2356 | 0.814478 | 0.937242 | -5.82272 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C5 | 0.013816 | -0.23423 | 0.235484 | 0.814564 | 0.937242 | -5.82274 |
| VANHARANTA\_UTERINE\_FIBROID\_UP | -0.01397 | -0.05205 | -0.23486 | 0.815049 | 0.937585 | -5.82288 |
| WP\_FATTY\_ACID\_BETAOXIDATION | 0.017476 | -0.00679 | 0.234717 | 0.815157 | 0.937585 | -5.82291 |
| REACTOME\_ACTIVATED\_NOTCH1\_TRANSMITS\_SIGNAL\_TO\_THE\_NUCLEUS | 0.014252 | -0.0295 | 0.234305 | 0.815475 | 0.937729 | -5.823 |
| REACTOME\_HIGHLY\_CALCIUM\_PERMEABLE\_NICOTINIC\_ACETYLCHOLINE\_RECEPTORS | 0.022069 | 0.032469 | 0.234174 | 0.815577 | 0.937729 | -5.82303 |
| KAYO\_AGING\_MUSCLE\_DN | -0.01184 | -0.14912 | -0.23384 | 0.815833 | 0.937738 | -5.8231 |
| REACTOME\_SIGNALING\_BY\_TGFB\_FAMILY\_MEMBERS | -0.01109 | -0.01589 | -0.23367 | 0.815966 | 0.937738 | -5.82314 |
| REACTOME\_REDUCTION\_OF\_CYTOSOLIC\_CA\_LEVELS | -0.01489 | -0.00494 | -0.23359 | 0.816027 | 0.937738 | -5.82315 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_GRANULOCYTE\_UP | -0.01186 | -0.1353 | -0.23333 | 0.816232 | 0.937805 | -5.82321 |
| WEIGEL\_OXIDATIVE\_STRESS\_BY\_TBH\_AND\_H2O2 | -0.01327 | -0.17806 | -0.23218 | 0.817119 | 0.938655 | -5.82346 |
| NEBEN\_AML\_WITH\_FLT3\_OR\_NRAS\_UP | -0.0178 | 0.009052 | -0.23184 | 0.81738 | 0.938681 | -5.82353 |
| REACTOME\_MRNA\_EDITING | 0.015496 | -0.07937 | 0.231767 | 0.817438 | 0.938681 | -5.82355 |
| VALK\_AML\_CLUSTER\_2 | -0.01127 | -0.03793 | -0.23148 | 0.817661 | 0.938769 | -5.82361 |
| NUYTTEN\_EZH2\_TARGETS\_UP | 0.011512 | -0.11255 | 0.231177 | 0.817894 | 0.938867 | -5.82368 |
| TURJANSKI\_MAPK11\_TARGETS | -0.02337 | -0.0067 | -0.23071 | 0.818257 | 0.939114 | -5.82378 |
| REACTOME\_RND2\_GTPASE\_CYCLE | 0.01266 | -0.02116 | 0.230353 | 0.818531 | 0.939259 | -5.82385 |
| WP\_MAPK\_SIGNALING\_PATHWAY | 0.006154 | -0.13652 | 0.230035 | 0.818777 | 0.939372 | -5.82392 |
| GOERING\_BLOOD\_HDL\_CHOLESTEROL\_QTL\_CIS | 0.018635 | -0.11385 | 0.229362 | 0.819299 | 0.939712 | -5.82407 |
| BIOCARTA\_ATM\_PATHWAY | -0.01313 | -0.00149 | -0.22919 | 0.819432 | 0.939712 | -5.8241 |
| REACTOME\_PHOSPHOLIPASE\_C\_MEDIATED\_CASCADE\_FGFR2 | 0.017427 | 0.016906 | 0.228947 | 0.81962 | 0.939712 | -5.82415 |
| GROSS\_HYPOXIA\_VIA\_HIF1A\_ONLY | 0.021721 | -0.00951 | 0.228865 | 0.819683 | 0.939712 | -5.82417 |
| GALIE\_TUMOR\_ANGIOGENESIS | -0.0191 | -0.00987 | -0.2287 | 0.819811 | 0.939712 | -5.82421 |
| BIOCARTA\_RACCYCD\_PATHWAY | -0.02053 | -0.02799 | -0.22845 | 0.820006 | 0.939765 | -5.82426 |
| WP\_NOTCH\_SIGNALING | 0.008535 | -0.17288 | 0.227748 | 0.820547 | 0.940107 | -5.82441 |
| FRASOR\_TAMOXIFEN\_RESPONSE\_DN | -0.01401 | 0.009491 | -0.22768 | 0.820603 | 0.940107 | -5.82443 |
| DOANE\_RESPONSE\_TO\_ANDROGEN\_UP | 0.005058 | -0.09697 | 0.227466 | 0.820766 | 0.940107 | -5.82447 |
| PRAMOONJAGO\_SOX4\_TARGETS\_DN | -0.01035 | -0.20731 | -0.2273 | 0.820895 | 0.940107 | -5.82451 |
| WP\_CANNABINOID\_RECEPTOR\_SIGNALING | -0.00894 | -0.08768 | -0.22658 | 0.821452 | 0.940576 | -5.82466 |
| REACTOME\_FCGR3A\_MEDIATED\_IL10\_SYNTHESIS | -0.01288 | -0.06644 | -0.22571 | 0.822123 | 0.941174 | -5.82484 |
| REACTOME\_SYNTHESIS\_OF\_PROSTAGLANDINS\_PG\_AND\_THROMBOXANES\_TX | 0.017816 | -0.01431 | 0.225498 | 0.82229 | 0.941197 | -5.82488 |
| LANDIS\_ERBB2\_BREAST\_TUMORS\_65\_DN | 0.017438 | -0.06565 | 0.225064 | 0.822626 | 0.941412 | -5.82498 |
| BOYLAN\_MULTIPLE\_MYELOMA\_D\_DN | -0.01029 | -0.1462 | -0.22466 | 0.822942 | 0.941605 | -5.82506 |
| WP\_DOPAMINE\_METABOLISM | -0.0131 | -0.0789 | -0.22404 | 0.823421 | 0.941963 | -5.82519 |
| ROY\_WOUND\_BLOOD\_VESSEL\_UP | 0.016971 | -0.05876 | 0.22387 | 0.823552 | 0.941963 | -5.82523 |
| WP\_TNFRELATED\_WEAK\_INDUCER\_OF\_APOPTOSIS\_TWEAK\_SIGNALING\_PATHWAY | 0.013788 | -0.17599 | 0.223528 | 0.823817 | 0.942079 | -5.8253 |
| REACTOME\_CYTOSOLIC\_SULFONATION\_OF\_SMALL\_MOLECULES | 0.011066 | 0.007129 | 0.223357 | 0.823949 | 0.942079 | -5.82533 |
| SWEET\_LUNG\_CANCER\_KRAS\_DN | 0.010981 | -0.09697 | 0.222953 | 0.824262 | 0.942087 | -5.82542 |
| PID\_S1P\_META\_PATHWAY | -0.012 | -0.03861 | -0.22267 | 0.82448 | 0.942087 | -5.82548 |
| WP\_MAMMALIAN\_DISORDER\_OF\_SEXUAL\_DEVELOPMENT | -0.01459 | -0.05959 | -0.22243 | 0.824665 | 0.942087 | -5.82552 |
| KEGG\_BASAL\_CELL\_CARCINOMA | -0.01088 | -0.04946 | -0.22233 | 0.824742 | 0.942087 | -5.82555 |
| KEGG\_VIBRIO\_CHOLERAE\_INFECTION | -0.01214 | -0.19047 | -0.22229 | 0.824774 | 0.942087 | -5.82555 |
| WP\_MEVALONATE\_PATHWAY | -0.02246 | 0.002735 | -0.2222 | 0.824844 | 0.942087 | -5.82557 |
| CLAUS\_PGR\_POSITIVE\_MENINGIOMA\_DN | -0.02163 | -0.01416 | -0.22178 | 0.825172 | 0.942285 | -5.82566 |
| RUIZ\_TNC\_TARGETS\_UP | -0.01674 | -0.05916 | -0.22133 | 0.825522 | 0.942285 | -5.82575 |
| LEE\_METASTASIS\_AND\_RNA\_PROCESSING\_UP | -0.01407 | -0.34467 | -0.22079 | 0.825939 | 0.942285 | -5.82586 |
| PID\_TCR\_PATHWAY | -0.01446 | -0.16317 | -0.22066 | 0.826041 | 0.942285 | -5.82589 |
| JAZAG\_TGFB1\_SIGNALING\_UP | 0.006952 | -0.15529 | 0.220533 | 0.826139 | 0.942285 | -5.82592 |
| REACTOME\_FGFR1\_MUTANT\_RECEPTOR\_ACTIVATION | -0.00996 | 0.00172 | -0.22012 | 0.826462 | 0.942285 | -5.826 |
| WOOD\_EBV\_EBNA1\_TARGETS\_DN | -0.01509 | -0.13168 | -0.22006 | 0.826504 | 0.942285 | -5.82601 |
| REACTOME\_MEIOTIC\_RECOMBINATION | -0.01045 | -0.16062 | -0.21997 | 0.826575 | 0.942285 | -5.82603 |
| RHODES\_UNDIFFERENTIATED\_CANCER | -0.01305 | -0.21356 | -0.21982 | 0.826695 | 0.942285 | -5.82606 |
| SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_DENDRITIC\_CELL | 0.016954 | -0.01709 | 0.219692 | 0.82679 | 0.942285 | -5.82609 |
| DORN\_ADENOVIRUS\_INFECTION\_24HR\_DN | 0.01519 | -0.11508 | 0.219635 | 0.826834 | 0.942285 | -5.8261 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_DN | -0.00843 | -0.00787 | -0.21958 | 0.826879 | 0.942285 | -5.82611 |
| DARWICHE\_PAPILLOMA\_RISK\_LOW\_DN | -0.00735 | -0.06276 | -0.2195 | 0.826942 | 0.942285 | -5.82613 |
| TESAR\_ALK\_AND\_JAK\_TARGETS\_MOUSE\_ES\_D4\_DN | -0.01374 | -0.44556 | -0.21921 | 0.827163 | 0.942367 | -5.82619 |
| REACTOME\_CARGO\_CONCENTRATION\_IN\_THE\_ER | -0.01289 | -0.00581 | -0.21832 | 0.827855 | 0.942987 | -5.82637 |
| DARWICHE\_PAPILLOMA\_RISK\_LOW\_UP | 0.007837 | -0.04923 | 0.218085 | 0.828037 | 0.943026 | -5.82642 |
| GRAHAM\_CML\_QUIESCENT\_VS\_CML\_DIVIDING\_DN | 0.013734 | -0.13554 | 0.217825 | 0.828239 | 0.943087 | -5.82647 |
| RATTENBACHER\_BOUND\_BY\_CELF1 | -0.00525 | -0.15401 | -0.21711 | 0.828797 | 0.943553 | -5.82662 |
| WANG\_RESPONSE\_TO\_GSK3\_INHIBITOR\_SB216763\_UP | 0.010399 | -0.10704 | 0.216689 | 0.829121 | 0.943753 | -5.8267 |
| MULLIGHAN\_NPM1\_MUTATED\_SIGNATURE\_1\_DN | -0.00806 | -0.15167 | -0.21614 | 0.829548 | 0.944071 | -5.82681 |
| REACTOME\_RIPK1\_MEDIATED\_REGULATED\_NECROSIS | -0.01607 | -0.12567 | -0.21571 | 0.829881 | 0.944281 | -5.8269 |
| WANG\_BARRETTS\_ESOPHAGUS\_DN | 0.011632 | -0.04769 | 0.215443 | 0.830087 | 0.944303 | -5.82695 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_13 | -0.0234 | -0.02876 | -0.2153 | 0.830198 | 0.944303 | -5.82698 |
| RAY\_TUMORIGENESIS\_BY\_ERBB2\_CDC25A\_UP | 0.00535 | -0.13871 | 0.214632 | 0.830717 | 0.944726 | -5.82711 |
| LIANG\_HEMATOPOIESIS\_STEM\_CELL\_NUMBER\_SMALL\_VS\_HUGE\_UP | 0.011972 | -0.0112 | 0.214231 | 0.831029 | 0.944753 | -5.82719 |
| GRADE\_COLON\_VS\_RECTAL\_CANCER\_UP | -0.01362 | -0.05564 | -0.21422 | 0.831038 | 0.944753 | -5.8272 |
| BOCHKIS\_FOXA2\_TARGETS | -0.0078 | -0.09233 | -0.214 | 0.831205 | 0.944774 | -5.82724 |
| BARRIER\_CANCER\_RELAPSE\_NORMAL\_SAMPLE\_DN | -0.01446 | -0.15386 | -0.21367 | 0.831468 | 0.944904 | -5.82731 |
| APPIERTO\_RESPONSE\_TO\_FENRETINIDE\_UP | -0.01036 | -0.16455 | -0.2133 | 0.83175 | 0.945055 | -5.82738 |
| PID\_SYNDECAN\_4\_PATHWAY | 0.013205 | -0.02156 | 0.212128 | 0.832662 | 0.945739 | -5.82761 |
| CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_BASAL\_UP | -0.00604 | -0.11693 | -0.21211 | 0.832673 | 0.945739 | -5.82761 |
| WANG\_CISPLATIN\_RESPONSE\_AND\_XPC\_DN | -0.013 | -0.03819 | -0.21195 | 0.832797 | 0.945739 | -5.82764 |
| REACTOME\_DEFECTS\_OF\_CONTACT\_ACTIVATION\_SYSTEM\_CAS\_AND\_KALLIKREIN\_KININ\_SYSTEM\_KKS | 0.011618 | -0.002 | 0.21152 | 0.833135 | 0.945871 | -5.82773 |
| BIOCARTA\_41BB\_PATHWAY | 0.014156 | -0.00438 | 0.211123 | 0.833443 | 0.945871 | -5.82781 |
| JIANG\_AGING\_HYPOTHALAMUS\_UP | 0.019787 | -0.04747 | 0.211013 | 0.833529 | 0.945871 | -5.82783 |
| BASSO\_CD40\_SIGNALING\_DN | 0.008785 | -0.24695 | 0.210819 | 0.833679 | 0.945871 | -5.82787 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLACK\_UP | 0.01395 | -0.03258 | 0.210633 | 0.833824 | 0.945871 | -5.82791 |
| MARTINEZ\_RB1\_TARGETS\_DN | 0.006959 | -0.1059 | 0.21031 | 0.834075 | 0.945871 | -5.82797 |
| FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_DN | 0.008373 | -0.07946 | 0.210267 | 0.834108 | 0.945871 | -5.82798 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX6\_UP | -0.0224 | 0.015986 | -0.21021 | 0.834153 | 0.945871 | -5.82799 |
| LEE\_EARLY\_T\_LYMPHOCYTE\_DN | 0.00981 | -0.31279 | 0.209921 | 0.834377 | 0.945871 | -5.82804 |
| REACTOME\_PROSTACYCLIN\_SIGNALLING\_THROUGH\_PROSTACYCLIN\_RECEPTOR | -0.00982 | -0.05077 | -0.20989 | 0.8344 | 0.945871 | -5.82805 |
| GUO\_HEX\_TARGETS\_UP | -0.01144 | -0.07445 | -0.20935 | 0.834821 | 0.94618 | -5.82816 |
| LIU\_CMYB\_TARGETS\_UP | 0.009651 | -0.05007 | 0.208769 | 0.835273 | 0.946357 | -5.82827 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_MGMT\_48HR\_UP | 0.01036 | -0.27616 | 0.208767 | 0.835274 | 0.946357 | -5.82827 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_FOREVER\_DN | 0.012707 | -0.17171 | 0.208357 | 0.835593 | 0.946436 | -5.82835 |
| REACTOME\_REGULATION\_OF\_FZD\_BY\_UBIQUITINATION | -0.01115 | -0.05205 | -0.2083 | 0.835641 | 0.946436 | -5.82836 |
| TANG\_SENESCENCE\_TP53\_TARGETS\_DN | -0.01399 | -0.04678 | -0.20741 | 0.836328 | 0.947045 | -5.82853 |
| YAMASHITA\_SILENCED\_BY\_METHYLATION | 0.014221 | -0.02119 | 0.206996 | 0.836652 | 0.947196 | -5.82861 |
| WP\_MEASLES\_VIRUS\_INFECTION | -0.00922 | -0.13831 | -0.20686 | 0.836759 | 0.947196 | -5.82864 |
| BIOCARTA\_MCALPAIN\_PATHWAY | -0.00885 | -0.09369 | -0.20661 | 0.836955 | 0.947249 | -5.82869 |
| REACTOME\_SLBP\_DEPENDENT\_PROCESSING\_OF\_REPLICATION\_DEPENDENT\_HISTONE\_PRE\_MRNAS | -0.0194 | -0.00695 | -0.20601 | 0.837416 | 0.947603 | -5.8288 |
| HUANG\_GATA2\_TARGETS\_DN | 0.010887 | -0.05487 | 0.205047 | 0.838168 | 0.948234 | -5.82899 |
| PID\_ERA\_GENOMIC\_PATHWAY | -0.00981 | -0.04239 | -0.20491 | 0.838277 | 0.948234 | -5.82901 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_IL3RA | 0.013055 | -0.00597 | 0.204721 | 0.838421 | 0.948234 | -5.82905 |
| REACTOME\_REGULATION\_OF\_TP53\_EXPRESSION\_AND\_DEGRADATION | 0.00944 | -0.10986 | 0.204301 | 0.838749 | 0.948395 | -5.82913 |
| WP\_ANGIOTENSIN\_II\_RECEPTOR\_TYPE\_1\_PATHWAY | 0.014629 | 0.000366 | 0.204155 | 0.838862 | 0.948395 | -5.82916 |
| REACTOME\_ESTROGEN\_DEPENDENT\_NUCLEAR\_EVENTS\_DOWNSTREAM\_OF\_ESR\_MEMBRANE\_SIGNALING | -0.01141 | -0.03895 | -0.20371 | 0.839207 | 0.948408 | -5.82924 |
| STREICHER\_LSM1\_TARGETS\_DN | 0.010454 | -0.00327 | 0.203279 | 0.839544 | 0.948408 | -5.82932 |
| LIU\_TOPBP1\_TARGETS | -0.01279 | -0.01174 | -0.20293 | 0.839816 | 0.948408 | -5.82939 |
| WP\_SEROTONIN\_AND\_ANXIETY | -0.01079 | 0.008387 | -0.2029 | 0.839842 | 0.948408 | -5.8294 |
| REACTOME\_EGFR\_TRANSACTIVATION\_BY\_GASTRIN | 0.01378 | -0.07896 | 0.202581 | 0.840087 | 0.948408 | -5.82946 |
| BANDRES\_RESPONSE\_TO\_CARMUSTIN\_MGMT\_24HR\_DN | 0.008725 | -0.19439 | 0.202563 | 0.840101 | 0.948408 | -5.82946 |
| REACTOME\_NEUREXINS\_AND\_NEUROLIGINS | 0.010359 | -0.03219 | 0.202561 | 0.840103 | 0.948408 | -5.82946 |
| BLANCO\_MELO\_SARS\_COV\_1\_INFECTION\_MCR5\_CELLS\_DN | 0.013886 | -0.00638 | 0.202541 | 0.840118 | 0.948408 | -5.82946 |
| HEIDENBLAD\_AMPLICON\_8Q24\_DN | 0.012423 | -0.00874 | 0.201837 | 0.840666 | 0.948408 | -5.8296 |
| BIOCARTA\_TERT\_PATHWAY | 0.018275 | -0.01097 | 0.201797 | 0.840697 | 0.948408 | -5.8296 |
| REACTOME\_P75NTR\_NEGATIVELY\_REGULATES\_CELL\_CYCLE\_VIA\_SC1 | 0.022293 | 0.003141 | 0.201547 | 0.840892 | 0.948408 | -5.82965 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_1 | -0.00979 | -0.13764 | -0.20137 | 0.841033 | 0.948408 | -5.82968 |
| REACTOME\_SPHINGOLIPID\_METABOLISM | 0.007454 | -0.09042 | 0.201289 | 0.841093 | 0.948408 | -5.8297 |
| EBAUER\_MYOGENIC\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION | 0.0093 | -0.04191 | 0.201232 | 0.841138 | 0.948408 | -5.82971 |
| GENTLES\_LEUKEMIC\_STEM\_CELL\_UP | -0.01062 | -0.19053 | -0.20089 | 0.841401 | 0.948408 | -5.82977 |
| REACTOME\_ACYL\_CHAIN\_REMODELLING\_OF\_PC | 0.008282 | -0.04016 | 0.200746 | 0.841516 | 0.948408 | -5.8298 |
| BIOCARTA\_PELP1\_PATHWAY | 0.022378 | -0.03521 | 0.20059 | 0.841638 | 0.948408 | -5.82983 |
| WP\_HOSTPATHOGEN\_INTERACTION\_OF\_HUMAN\_CORONAVIRUSES\_APOPTOSIS | -0.00847 | -0.23562 | -0.20011 | 0.842013 | 0.948408 | -5.82992 |
| ZHAN\_V2\_LATE\_DIFFERENTIATION\_GENES | -0.01389 | -0.04612 | -0.19991 | 0.842164 | 0.948408 | -5.82996 |
| REACTOME\_SIGNALING\_BY\_ACTIVIN | -0.01327 | 0.005266 | -0.19959 | 0.842416 | 0.948408 | -5.83002 |
| PID\_RB\_1PATHWAY | 0.009099 | -0.14204 | 0.199444 | 0.84253 | 0.948408 | -5.83004 |
| DESERT\_PERIPORTAL\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | 0.007649 | 0.009251 | 0.199424 | 0.842545 | 0.948408 | -5.83005 |
| SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM5 | -0.00537 | -0.06424 | -0.19928 | 0.842659 | 0.948408 | -5.83007 |
| LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_DN | -0.01354 | -0.06286 | -0.19896 | 0.842908 | 0.948408 | -5.83013 |
| LI\_AMPLIFIED\_IN\_LUNG\_CANCER | 0.01161 | -0.04466 | 0.198937 | 0.842925 | 0.948408 | -5.83014 |
| TOMIDA\_METASTASIS\_UP | -0.0095 | -0.33936 | -0.19891 | 0.842946 | 0.948408 | -5.83014 |
| MAINA\_VHL\_TARGETS\_UP | 0.021475 | -0.08089 | 0.198787 | 0.843042 | 0.948408 | -5.83016 |
| TIEN\_INTESTINE\_PROBIOTICS\_6HR\_UP | 0.014899 | -0.11029 | 0.198781 | 0.843046 | 0.948408 | -5.83017 |
| BIOCARTA\_PTDINS\_PATHWAY | -0.01313 | 0.003179 | -0.19854 | 0.843236 | 0.948454 | -5.83021 |
| REACTOME\_TRANSCRIPTIONAL\_ACTIVITY\_OF\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER | 0.012679 | 0.004499 | 0.197814 | 0.8438 | 0.948485 | -5.83034 |
| REACTOME\_ADP\_SIGNALLING\_THROUGH\_P2Y\_PURINOCEPTOR\_12 | -0.00987 | -0.04826 | -0.19777 | 0.843835 | 0.948485 | -5.83035 |
| REACTOME\_SYNTHESIS\_OF\_VERY\_LONG\_CHAIN\_FATTY\_ACYL\_COAS | 0.011553 | -0.04333 | 0.197546 | 0.844009 | 0.948485 | -5.83039 |
| REACTOME\_FORMYL\_PEPTIDE\_RECEPTORS\_BIND\_FORMYL\_PEPTIDES\_AND\_MANY\_OTHER\_LIGANDS | 0.017742 | -0.10832 | 0.197527 | 0.844023 | 0.948485 | -5.8304 |
| SCHMAHL\_PDGF\_SIGNALING | 0.020671 | -0.00036 | 0.197489 | 0.844053 | 0.948485 | -5.8304 |
| CHEMELLO\_SOLEUS\_VS\_EDL\_MYOFIBERS\_UP | 0.015957 | -0.01141 | 0.197345 | 0.844165 | 0.948485 | -5.83043 |
| CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_UP | -0.00746 | -0.30192 | -0.19702 | 0.844415 | 0.948485 | -5.83049 |
| TOMLINS\_METASTASIS\_DN | -0.01479 | -0.05169 | -0.19696 | 0.844463 | 0.948485 | -5.8305 |
| WP\_COMPLEMENT\_ACTIVATION | -0.00589 | -0.50326 | -0.19678 | 0.844605 | 0.948485 | -5.83053 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_ROCKS | 0.017075 | -0.05837 | 0.195778 | 0.845387 | 0.949093 | -5.83072 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_DN | 0.011296 | -0.18047 | 0.195657 | 0.845481 | 0.949093 | -5.83074 |
| SA\_G2\_AND\_M\_PHASES | 0.015835 | -0.13745 | 0.195315 | 0.845748 | 0.949093 | -5.8308 |
| ROSS\_AML\_WITH\_PML\_RARA\_FUSION | 0.008154 | -0.06528 | 0.195294 | 0.845764 | 0.949093 | -5.83081 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_30 | -0.01641 | -0.15135 | -0.19513 | 0.845892 | 0.949093 | -5.83084 |
| GRUETZMANN\_PANCREATIC\_CANCER\_DN | -0.00768 | -0.1335 | -0.19494 | 0.846044 | 0.949096 | -5.83087 |
| MUNSHI\_MULTIPLE\_MYELOMA\_DN | 0.0058 | -0.76764 | 0.194247 | 0.84658 | 0.949392 | -5.831 |
| REACTOME\_PLATELET\_CALCIUM\_HOMEOSTASIS | -0.00884 | 0.002722 | -0.19394 | 0.846817 | 0.949392 | -5.83105 |
| BIOCARTA\_RANMS\_PATHWAY | -0.01634 | -0.09767 | -0.19383 | 0.846904 | 0.949392 | -5.83107 |
| REACTOME\_ATTACHMENT\_OF\_GPI\_ANCHOR\_TO\_UPAR | 0.019052 | 0.012231 | 0.193832 | 0.846904 | 0.949392 | -5.83107 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_17 | -0.01193 | -0.00037 | -0.19361 | 0.84708 | 0.949422 | -5.83111 |
| WP\_TLR4\_SIGNALING\_AND\_TOLERANCE | -0.01239 | -0.21656 | -0.19341 | 0.847232 | 0.949424 | -5.83115 |
| REACTOME\_PYROPTOSIS | -0.01015 | -0.11065 | -0.19249 | 0.847948 | 0.95006 | -5.83131 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_AND\_CD2\_DN | -0.00882 | -0.14811 | -0.19194 | 0.848378 | 0.950314 | -5.83141 |
| REACTOME\_INTERLEUKIN\_7\_SIGNALING | -0.00974 | -0.00041 | -0.19182 | 0.848474 | 0.950314 | -5.83143 |
| WEIGEL\_OXIDATIVE\_STRESS\_BY\_HNE\_AND\_TBH | -0.0096 | -0.10557 | -0.19054 | 0.84947 | 0.951263 | -5.83166 |
| REACTOME\_PHASE\_0\_RAPID\_DEPOLARISATION | -0.01361 | -0.04091 | -0.19016 | 0.849772 | 0.951272 | -5.83173 |
| SHI\_SPARC\_TARGETS\_DN | 0.013142 | -0.07295 | 0.190114 | 0.849805 | 0.951272 | -5.83174 |
| REACTOME\_REPRODUCTION | 0.005866 | -0.11972 | 0.189958 | 0.849926 | 0.951272 | -5.83176 |
| BIOCARTA\_NOTCH\_PATHWAY | -0.01633 | -0.11687 | -0.1895 | 0.850285 | 0.951506 | -5.83185 |
| PID\_REELIN\_PATHWAY | -0.00955 | -0.06292 | -0.18879 | 0.850835 | 0.951804 | -5.83197 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_DIFFERENTIATION\_OF\_MYELOID\_CELLS | 0.016286 | -0.00113 | 0.188658 | 0.850941 | 0.951804 | -5.83199 |
| SESTO\_RESPONSE\_TO\_UV\_C6 | 0.013773 | -0.06535 | 0.18831 | 0.851213 | 0.951804 | -5.83205 |
| PID\_TELOMERASE\_PATHWAY | -0.01226 | -0.07226 | -0.18815 | 0.851334 | 0.951804 | -5.83208 |
| GU\_PDEF\_TARGETS\_DN | 0.007375 | -0.09615 | 0.188143 | 0.851343 | 0.951804 | -5.83208 |
| DER\_IFN\_BETA\_RESPONSE\_UP | 0.008877 | -0.33182 | 0.187978 | 0.851472 | 0.951804 | -5.83211 |
| MOSERLE\_IFNA\_RESPONSE | -0.01933 | -0.01534 | -0.18772 | 0.851674 | 0.951804 | -5.83216 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_UP | -0.01131 | -0.01349 | -0.18754 | 0.85181 | 0.951804 | -5.83219 |
| LIANG\_HEMATOPOIESIS\_STEM\_CELL\_NUMBER\_LARGE\_VS\_TINY\_UP | -0.01137 | -0.18746 | -0.18743 | 0.851898 | 0.951804 | -5.83221 |
| WP\_KENNEDY\_PATHWAY\_FROM\_SPHINGOLIPIDS | 0.014234 | -0.06957 | 0.187101 | 0.852156 | 0.951818 | -5.83227 |
| KEGG\_DILATED\_CARDIOMYOPATHY | 0.007655 | -0.10122 | 0.187034 | 0.852209 | 0.951818 | -5.83228 |
| ROETH\_TERT\_TARGETS\_DN | 0.011898 | -0.09688 | 0.186405 | 0.8527 | 0.952199 | -5.83239 |
| NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA1\_DN | -0.00974 | -0.05813 | -0.18556 | 0.853359 | 0.952768 | -5.83253 |
| REACTOME\_MHC\_CLASS\_II\_ANTIGEN\_PRESENTATION | 0.006104 | -0.33196 | 0.185162 | 0.853671 | 0.952781 | -5.8326 |
| BIOCARTA\_RANBP2\_PATHWAY | -0.0141 | 0.011628 | -0.18506 | 0.853747 | 0.952781 | -5.83262 |
| PASINI\_SUZ12\_TARGETS\_DN | 0.010452 | -0.10923 | 0.184895 | 0.85388 | 0.952781 | -5.83265 |
| REACTOME\_FCERI\_MEDIATED\_MAPK\_ACTIVATION | 0.01404 | -0.03089 | 0.184658 | 0.854064 | 0.952781 | -5.83269 |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S3 | -0.00667 | -0.0977 | -0.18459 | 0.85412 | 0.952781 | -5.8327 |
| FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_DN | 0.011109 | -0.14441 | 0.183672 | 0.854835 | 0.953412 | -5.83286 |
| KYNG\_WERNER\_SYNDROM\_UP | -0.01295 | 0.003465 | -0.1833 | 0.855126 | 0.953468 | -5.83292 |
| KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_UP | -0.01116 | -0.07516 | -0.18322 | 0.855185 | 0.953468 | -5.83293 |
| REACTOME\_AQUAPORIN\_MEDIATED\_TRANSPORT | -0.00613 | -0.06266 | -0.18303 | 0.855335 | 0.953469 | -5.83297 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_15 | 0.017341 | -0.00564 | 0.182765 | 0.855544 | 0.953499 | -5.83301 |
| REACTOME\_ACETYLCHOLINE\_NEUROTRANSMITTER\_RELEASE\_CYCLE | -0.01148 | 0.006367 | -0.18261 | 0.855662 | 0.953499 | -5.83304 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_EARLY\_UP | -0.01577 | -0.01427 | -0.18217 | 0.85601 | 0.953717 | -5.83311 |
| WP\_PROGERIAASSOCIATED\_LIPODYSTROPHY | -0.01248 | 0.00305 | -0.18182 | 0.85628 | 0.953717 | -5.83317 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BROWN\_UP | 0.014709 | -0.07396 | 0.181684 | 0.856388 | 0.953717 | -5.8332 |
| BECKER\_TAMOXIFEN\_RESISTANCE\_UP | -0.01075 | -0.09938 | -0.1815 | 0.856529 | 0.953717 | -5.83323 |
| DAVICIONI\_RHABDOMYOSARCOMA\_PAX\_FOXO1\_FUSION\_DN | 0.012924 | -0.01073 | 0.181404 | 0.856607 | 0.953717 | -5.83324 |
| WP\_FLUOROPYRIMIDINE\_ACTIVITY | -0.00841 | -0.03799 | -0.18118 | 0.856784 | 0.953747 | -5.83328 |
| CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_MESENCHYMAL\_UP | -0.004 | -0.09122 | -0.18077 | 0.857103 | 0.953789 | -5.83335 |
| REACTOME\_KERATAN\_SULFATE\_DEGRADATION | -0.01597 | -0.01391 | -0.18075 | 0.857122 | 0.953789 | -5.83336 |
| REACTOME\_ROLE\_OF\_PHOSPHOLIPIDS\_IN\_PHAGOCYTOSIS | 0.012108 | -0.01272 | 0.180287 | 0.857481 | 0.953823 | -5.83343 |
| KIM\_MYCL1\_AMPLIFICATION\_TARGETS\_UP | -0.0122 | 0.00033 | -0.18018 | 0.857561 | 0.953823 | -5.83345 |
| WP\_RAS\_SIGNALING | -0.00533 | -0.06624 | -0.17975 | 0.857898 | 0.953823 | -5.83352 |
| WP\_FOLATEALCOHOL\_AND\_CANCER\_PATHWAY\_HYPOTHESES | 0.015366 | -0.00056 | 0.179701 | 0.857939 | 0.953823 | -5.83353 |
| WP\_NANOPARTICLEMEDIATED\_ACTIVATION\_OF\_RECEPTOR\_SIGNALING | -0.00906 | -0.06515 | -0.17948 | 0.858112 | 0.953823 | -5.83357 |
| REACTOME\_RUNX3\_REGULATES\_P14\_ARF | -0.01295 | -0.28418 | -0.1794 | 0.858171 | 0.953823 | -5.83358 |
| REACTOME\_NOTCH3\_ACTIVATION\_AND\_TRANSMISSION\_OF\_SIGNAL\_TO\_THE\_NUCLEUS | 0.010867 | -0.04143 | 0.179367 | 0.858201 | 0.953823 | -5.83359 |
| LEE\_INTRATHYMIC\_T\_PROGENITOR | 0.00979 | -0.05625 | 0.178714 | 0.858711 | 0.954223 | -5.8337 |
| GEISS\_RESPONSE\_TO\_DSRNA\_DN | 0.01042 | -0.1162 | 0.178457 | 0.858912 | 0.95428 | -5.83374 |
| WP\_STRIATED\_MUSCLE\_CONTRACTION\_PATHWAY | 0.010433 | -0.07215 | 0.178096 | 0.859194 | 0.954427 | -5.8338 |
| REACTOME\_LYSOSPHINGOLIPID\_AND\_LPA\_RECEPTORS | -0.00902 | -0.06536 | -0.17784 | 0.859398 | 0.954487 | -5.83384 |
| REACTOME\_PRE\_NOTCH\_PROCESSING\_IN\_GOLGI | -0.01105 | -0.13229 | -0.17744 | 0.859704 | 0.95466 | -5.83391 |
| JAEGER\_METASTASIS\_UP | -0.00873 | -0.0505 | -0.17691 | 0.860121 | 0.954884 | -5.83399 |
| REACTOME\_REACTIONS\_SPECIFIC\_TO\_THE\_COMPLEX\_N\_GLYCAN\_SYNTHESIS\_PATHWAY | 0.011208 | -0.00419 | 0.176802 | 0.860206 | 0.954884 | -5.83401 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLACK\_DN | 0.016294 | -0.00377 | 0.176401 | 0.86052 | 0.955035 | -5.83408 |
| ROYLANCE\_BREAST\_CANCER\_16Q\_COPY\_NUMBER\_UP | -0.00646 | 0.00011 | -0.17624 | 0.860642 | 0.955035 | -5.8341 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_LIGHTGREEN\_DN | 0.015475 | 0.000636 | 0.175576 | 0.861166 | 0.95545 | -5.83421 |
| BIOCARTA\_PKC\_PATHWAY | -0.01789 | -0.0013 | -0.17537 | 0.861324 | 0.955458 | -5.83425 |
| LIANG\_HEMATOPOIESIS\_STEM\_CELL\_NUMBER\_SMALL\_VS\_HUGE\_DN | 0.009059 | -0.03006 | 0.173516 | 0.862778 | 0.956905 | -5.83455 |
| LY\_AGING\_PREMATURE\_DN | 0.013746 | -0.03936 | 0.171713 | 0.86419 | 0.958303 | -5.83484 |
| TOOKER\_GEMCITABINE\_RESISTANCE\_UP | -0.01133 | -0.05249 | -0.17113 | 0.864647 | 0.958643 | -5.83493 |
| REACTOME\_G\_BETA\_GAMMA\_SIGNALLING\_THROUGH\_CDC42 | -0.00836 | -0.05865 | -0.17094 | 0.864797 | 0.958643 | -5.83496 |
| UEDA\_PERIFERAL\_CLOCK | -0.00847 | -0.09462 | -0.17061 | 0.865056 | 0.958695 | -5.83502 |
| REACTOME\_BIOSYNTHESIS\_OF\_MARESIN\_LIKE\_SPMS | 0.015327 | -0.12789 | 0.170493 | 0.865145 | 0.958695 | -5.83503 |
| REACTOME\_PRESYNAPTIC\_NICOTINIC\_ACETYLCHOLINE\_RECEPTORS | 0.015971 | 0.032472 | 0.169882 | 0.865624 | 0.958982 | -5.83513 |
| REACTOME\_NEGATIVE\_REGULATION\_OF\_TCF\_DEPENDENT\_SIGNALING\_BY\_DVL\_INTERACTING\_PROTEINS | -0.01461 | -0.04059 | -0.16955 | 0.865887 | 0.958982 | -5.83518 |
| REACTOME\_REGULATION\_OF\_PTEN\_LOCALIZATION | -0.01227 | -0.00636 | -0.16953 | 0.865897 | 0.958982 | -5.83519 |
| FRASOR\_RESPONSE\_TO\_ESTRADIOL\_DN | 0.008825 | -0.08261 | 0.169393 | 0.866007 | 0.958982 | -5.83521 |
| KORKOLA\_SEMINOMA\_UP | 0.01107 | -0.01622 | 0.168746 | 0.866514 | 0.959376 | -5.83531 |
| GRATIAS\_RETINOBLASTOMA\_16Q24 | -0.01527 | 0.017363 | -0.16846 | 0.866739 | 0.959458 | -5.83535 |
| PID\_AR\_TF\_PATHWAY | -0.00644 | -0.16259 | -0.16786 | 0.867206 | 0.959549 | -5.83545 |
| TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_DN | 0.01043 | -0.06385 | 0.167654 | 0.867369 | 0.959549 | -5.83548 |
| XU\_RESPONSE\_TO\_TRETINOIN\_AND\_NSC682994\_UP | 0.017735 | 0.016728 | 0.167539 | 0.867459 | 0.959549 | -5.8355 |
| SANSOM\_APC\_TARGETS\_UP | -0.00465 | -0.03615 | -0.16741 | 0.867563 | 0.959549 | -5.83552 |
| SA\_FAS\_SIGNALING | 0.015345 | -0.01735 | 0.167313 | 0.867637 | 0.959549 | -5.83553 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_INTERLEUKIN\_SIGNALING | 0.016753 | -0.02649 | 0.167199 | 0.867725 | 0.959549 | -5.83555 |
| REACTOME\_FRS\_MEDIATED\_FGFR2\_SIGNALING | -0.00845 | -0.03079 | -0.16693 | 0.867939 | 0.959618 | -5.83559 |
| ABE\_INNER\_EAR | -0.00899 | -0.04663 | -0.16638 | 0.868367 | 0.959764 | -5.83568 |
| PID\_BETA\_CATENIN\_NUC\_PATHWAY | -0.00676 | -0.04614 | -0.16637 | 0.868372 | 0.959764 | -5.83568 |
| PID\_AR\_NONGENOMIC\_PATHWAY | -0.01071 | -0.02776 | -0.1655 | 0.869056 | 0.960353 | -5.83581 |
| BIOCARTA\_SPPA\_PATHWAY | -0.0143 | -0.07256 | -0.16495 | 0.869486 | 0.960579 | -5.8359 |
| CALVET\_IRINOTECAN\_SENSITIVE\_VS\_REVERTED\_UP | -0.01921 | 0.011702 | -0.16463 | 0.869739 | 0.960579 | -5.83595 |
| PLASARI\_NFIC\_TARGETS\_BASAL\_UP | -0.00967 | -0.02732 | -0.16451 | 0.869831 | 0.960579 | -5.83597 |
| REACTOME\_ELEVATION\_OF\_CYTOSOLIC\_CA2\_LEVELS | -0.00904 | 0.005964 | -0.16447 | 0.869864 | 0.960579 | -5.83597 |
| POOLA\_INVASIVE\_BREAST\_CANCER\_DN | -0.00648 | -0.03429 | -0.16383 | 0.870367 | 0.960844 | -5.83607 |
| REACTOME\_ONCOGENE\_INDUCED\_SENESCENCE | -0.01049 | -0.04879 | -0.16378 | 0.870406 | 0.960844 | -5.83608 |
| REACTOME\_FRS\_MEDIATED\_FGFR3\_SIGNALING | 0.007064 | -0.03668 | 0.163227 | 0.87084 | 0.961069 | -5.83616 |
| LANDIS\_BREAST\_CANCER\_PROGRESSION\_DN | -0.01228 | -0.04546 | -0.16305 | 0.87098 | 0.961069 | -5.83619 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_3 | 0.009361 | -0.19392 | 0.162942 | 0.871063 | 0.961069 | -5.83621 |
| REACTOME\_LIPOPHAGY | -0.01289 | -0.0052 | -0.16244 | 0.871459 | 0.96134 | -5.83628 |
| NATSUME\_RESPONSE\_TO\_INTERFERON\_BETA\_DN | -0.01207 | -0.01471 | -0.16164 | 0.872083 | 0.961611 | -5.8364 |
| LIANG\_HEMATOPOIESIS\_STEM\_CELL\_NUMBER\_QTL | 0.012346 | -0.00481 | 0.161546 | 0.872158 | 0.961611 | -5.83642 |
| TESAR\_JAK\_TARGETS\_MOUSE\_ES\_D3\_DN | 0.014236 | 0.00035 | 0.16139 | 0.87228 | 0.961611 | -5.83644 |
| REACTOME\_ACTIVATION\_OF\_BH3\_ONLY\_PROTEINS | 0.007821 | -0.05763 | 0.161353 | 0.87231 | 0.961611 | -5.83645 |
| WP\_CLEAR\_CELL\_RENAL\_CELL\_CARCINOMA\_PATHWAYS | 0.008046 | -0.08712 | 0.161003 | 0.872584 | 0.961746 | -5.8365 |
| WP\_NEPHROGENESIS | 0.010311 | -0.05537 | 0.160035 | 0.873344 | 0.962417 | -5.83664 |
| KINSEY\_TARGETS\_OF\_EWSR1\_FLII\_FUSION\_DN | 0.008712 | -0.08693 | 0.159131 | 0.874053 | 0.963032 | -5.83678 |
| RIZKI\_TUMOR\_INVASIVENESS\_3D\_DN | -0.00559 | -0.1466 | -0.15811 | 0.874857 | 0.963752 | -5.83693 |
| AIYAR\_COBRA1\_TARGETS\_UP | -0.00899 | -0.1114 | -0.15777 | 0.875118 | 0.963872 | -5.83698 |
| REACTOME\_DISEASES\_OF\_GLYCOSYLATION | 0.006023 | -0.09689 | 0.157306 | 0.875485 | 0.964109 | -5.83705 |
| BIOCARTA\_D4GDI\_PATHWAY | -0.01097 | -0.0033 | -0.15686 | 0.875831 | 0.964183 | -5.83711 |
| REACTOME\_GLUTATHIONE\_CONJUGATION | -0.00761 | -0.03323 | -0.15684 | 0.875855 | 0.964183 | -5.83712 |
| REACTOME\_ETHANOL\_OXIDATION | -0.01283 | -0.00417 | -0.15613 | 0.876406 | 0.964344 | -5.83722 |
| REACTOME\_RUNX3\_REGULATES\_WNT\_SIGNALING | 0.011505 | 0.006276 | 0.155891 | 0.876596 | 0.964344 | -5.83725 |
| BENPORATH\_ES\_2 | 0.007536 | -0.13405 | 0.155881 | 0.876603 | 0.964344 | -5.83726 |
| PID\_P75\_NTR\_PATHWAY | 0.007516 | -0.05178 | 0.155688 | 0.876755 | 0.964344 | -5.83728 |
| ZIRN\_TRETINOIN\_RESPONSE\_DN | -0.01457 | -0.2118 | -0.15568 | 0.876759 | 0.964344 | -5.83728 |
| MANNE\_COVID19\_COMBINED\_COHORT\_VS\_HEALTHY\_DONOR\_PLATELETS\_DN | 0.00441 | 0.002651 | 0.154195 | 0.877928 | 0.965221 | -5.8375 |
| REACTOME\_REGULATION\_OF\_IFNA\_SIGNALING | 0.006958 | 0.0066 | 0.154183 | 0.877937 | 0.965221 | -5.8375 |
| WP\_T\_CELL\_RECEPTOR\_AND\_COSTIMULATORY\_SIGNALING | -0.01111 | -0.06218 | -0.15409 | 0.878012 | 0.965221 | -5.83751 |
| WP\_FOLLICLE\_STIMULATING\_HORMONE\_FSH\_SIGNALING\_PATHWAY | 0.007465 | -0.03568 | 0.153482 | 0.878488 | 0.965261 | -5.8376 |
| MARTINEZ\_RB1\_AND\_TP53\_TARGETS\_DN | -0.00374 | -0.15084 | -0.15314 | 0.878753 | 0.965261 | -5.83765 |
| REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH | -0.00715 | -0.01957 | -0.15309 | 0.878798 | 0.965261 | -5.83766 |
| LU\_AGING\_BRAIN\_DN | -0.0059 | -0.11813 | -0.1529 | 0.878943 | 0.965261 | -5.83768 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_G1\_G2\_DN | -0.01544 | 0.004467 | -0.15276 | 0.879052 | 0.965261 | -5.8377 |
| KEGG\_STEROID\_BIOSYNTHESIS | 0.010974 | -0.11242 | 0.152391 | 0.879344 | 0.965261 | -5.83776 |
| REACTOME\_RELEASE\_OF\_HH\_NP\_FROM\_THE\_SECRETING\_CELL | 0.013746 | 0.013348 | 0.152317 | 0.879403 | 0.965261 | -5.83777 |
| PID\_RETINOIC\_ACID\_PATHWAY | -0.00734 | -0.19238 | -0.1518 | 0.879808 | 0.965261 | -5.83784 |
| VALK\_AML\_CLUSTER\_4 | 0.007876 | -0.10216 | 0.15166 | 0.879919 | 0.965261 | -5.83786 |
| REACTOME\_WNT\_LIGAND\_BIOGENESIS\_AND\_TRAFFICKING | -0.00661 | -0.09448 | -0.15162 | 0.879954 | 0.965261 | -5.83787 |
| WP\_FATTY\_ACID\_TRANSPORTERS | -0.00948 | 0.001123 | -0.1514 | 0.880121 | 0.965261 | -5.8379 |
| WP\_PANCREATIC\_ADENOCARCINOMA\_PATHWAY | 0.008417 | -0.02384 | 0.151386 | 0.880134 | 0.965261 | -5.8379 |
| SIG\_REGULATION\_OF\_THE\_ACTIN\_CYTOSKELETON\_BY\_RHO\_GTPASES | 0.008619 | -0.0084 | 0.151341 | 0.88017 | 0.965261 | -5.83791 |
| WP\_EDA\_SIGNALING\_IN\_HAIR\_FOLLICLE\_DEVELOPMENT | 0.007461 | -0.39572 | 0.151213 | 0.88027 | 0.965261 | -5.83792 |
| MARIADASON\_REGULATED\_BY\_HISTONE\_ACETYLATION\_UP | 0.006959 | -0.08841 | 0.151146 | 0.880323 | 0.965261 | -5.83793 |
| WP\_INCLUSION\_BODY\_MYOSITIS | -0.00892 | -0.13724 | -0.15082 | 0.880579 | 0.965375 | -5.83798 |
| BIOCARTA\_TFF\_PATHWAY | -0.0083 | -0.10713 | -0.15048 | 0.880847 | 0.965502 | -5.83803 |
| REACTOME\_APOPTOTIC\_EXECUTION\_PHASE | -0.00601 | -0.06427 | -0.15001 | 0.881213 | 0.965738 | -5.83809 |
| KUMAMOTO\_RESPONSE\_TO\_NUTLIN\_3A\_DN | -0.01147 | -0.24233 | -0.14945 | 0.881656 | 0.966008 | -5.83817 |
| WP\_FERROPTOSIS | 0.010321 | -0.01725 | 0.149313 | 0.881763 | 0.966008 | -5.83819 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_XPCS\_UP | -0.00887 | -0.07725 | -0.14902 | 0.881993 | 0.966093 | -5.83823 |
| REACTOME\_EXTRINSIC\_PATHWAY\_OF\_FIBRIN\_CLOT\_FORMATION | 0.013826 | -0.0122 | 0.148697 | 0.882247 | 0.966094 | -5.83828 |
| REACTOME\_MET\_ACTIVATES\_PTPN11 | -0.01263 | -0.01379 | -0.14862 | 0.88231 | 0.966094 | -5.83829 |
| CROMER\_METASTASIS\_DN | 0.006578 | -0.07401 | 0.148441 | 0.882449 | 0.966094 | -5.83831 |
| TOMIDA\_LUNG\_CANCER\_POOR\_SURVIVAL | 0.014479 | -0.02283 | 0.147682 | 0.883045 | 0.96658 | -5.83842 |
| REACTOME\_ADAPTIVE\_IMMUNE\_SYSTEM | -0.00455 | -0.27513 | -0.14742 | 0.883255 | 0.966644 | -5.83845 |
| BAE\_BRCA1\_TARGETS\_DN | -0.00899 | -0.07073 | -0.14718 | 0.88344 | 0.96668 | -5.83848 |
| SUNG\_METASTASIS\_STROMA\_DN | 0.008171 | -0.06374 | 0.146497 | 0.883977 | 0.9669 | -5.83858 |
| IM\_SREBF1A\_TARGETS | -0.01057 | 0.013011 | -0.14636 | 0.884081 | 0.9669 | -5.8386 |
| KOBAYASHI\_RESPONSE\_TO\_ROMIDEPSIN | -0.00798 | -0.18455 | -0.14625 | 0.884168 | 0.9669 | -5.83861 |
| DE\_YY1\_TARGETS\_UP | -0.00609 | -0.3074 | -0.14603 | 0.884344 | 0.9669 | -5.83864 |
| LIM\_MAMMARY\_STEM\_CELL\_UP | 0.008321 | -0.06682 | 0.145931 | 0.884422 | 0.9669 | -5.83866 |
| GOTZMANN\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_DN | -0.0074 | -0.08207 | -0.14576 | 0.884553 | 0.9669 | -5.83868 |
| REACTOME\_WNT5A\_DEPENDENT\_INTERNALIZATION\_OF\_FZD4 | -0.01211 | -0.01294 | -0.14544 | 0.884809 | 0.96698 | -5.83872 |
| REACTOME\_ADP\_SIGNALLING\_THROUGH\_P2Y\_PURINOCEPTOR\_1 | -0.00549 | -0.04422 | -0.14523 | 0.884971 | 0.96698 | -5.83875 |
| COATES\_MACROPHAGE\_M1\_VS\_M2\_UP | 0.006444 | -0.0978 | 0.144958 | 0.885187 | 0.96698 | -5.83879 |
| REACTOME\_RHO\_GTPASE\_CYCLE | 0.00621 | -0.0578 | 0.144745 | 0.885354 | 0.96698 | -5.83882 |
| HEDENFALK\_BREAST\_CANCER\_BRACX\_DN | 0.01069 | -0.09289 | 0.144546 | 0.885511 | 0.96698 | -5.83884 |
| KEGG\_HYPERTROPHIC\_CARDIOMYOPATHY\_HCM | 0.006154 | -0.09425 | 0.144513 | 0.885537 | 0.96698 | -5.83885 |
| TSUTSUMI\_FBXW8\_TARGETS | 0.010912 | 0.007706 | 0.144265 | 0.885731 | 0.967026 | -5.83888 |
| WP\_IMMUNE\_RESPONSE\_TO\_TUBERCULOSIS | -0.00657 | -0.40582 | -0.14397 | 0.885966 | 0.967034 | -5.83892 |
| DAUER\_STAT3\_TARGETS\_DN | -0.01027 | -0.19414 | -0.14355 | 0.886291 | 0.967034 | -5.83898 |
| WP\_FBXL10\_ENHANCEMENT\_OF\_MAPERK\_SIGNALING\_IN\_DIFFUSE\_LARGE\_BCELL\_LYMPHOMA | 0.013599 | -0.02043 | 0.143543 | 0.8863 | 0.967034 | -5.83898 |
| REACTOME\_PI\_3K\_CASCADE\_FGFR2 | -0.0089 | 0.012312 | -0.14337 | 0.886435 | 0.967034 | -5.839 |
| IGARASHI\_ATF4\_TARGETS\_UP | -0.01203 | -0.01079 | -0.14329 | 0.886498 | 0.967034 | -5.83901 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_A\_UP | -0.00659 | -0.07726 | -0.14288 | 0.886821 | 0.96722 | -5.83907 |
| REACTOME\_G\_PROTEIN\_BETA\_GAMMA\_SIGNALLING | 0.006275 | -0.06196 | 0.142479 | 0.887137 | 0.967398 | -5.83912 |
| WP\_COMPLEMENT\_SYSTEM\_IN\_NEURONAL\_DEVELOPMENT\_AND\_PLASTICITY | -0.00424 | -0.19352 | -0.14204 | 0.887479 | 0.967566 | -5.83918 |
| PID\_CXCR3\_PATHWAY | 0.007649 | -0.01873 | 0.1418 | 0.887671 | 0.967566 | -5.83921 |
| BIOCARTA\_MTA3\_PATHWAY | -0.00891 | -0.0032 | -0.14157 | 0.88785 | 0.967566 | -5.83924 |
| ROZANOV\_MMP14\_TARGETS\_UP | 0.006021 | -0.15181 | 0.14151 | 0.887899 | 0.967566 | -5.83925 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_AND\_HIF1A\_DN | 0.006373 | -0.12348 | 0.141013 | 0.88829 | 0.967827 | -5.83931 |
| KEGG\_ALANINE\_ASPARTATE\_AND\_GLUTAMATE\_METABOLISM | 0.006203 | -0.03639 | 0.140145 | 0.888973 | 0.968406 | -5.83943 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_1 | 0.005584 | -0.1526 | 0.139392 | 0.889566 | 0.968707 | -5.83952 |
| WP\_SEROTONIN\_HTR1\_GROUP\_AND\_FOS\_PATHWAY | 0.006745 | -0.00089 | 0.139079 | 0.889812 | 0.968707 | -5.83957 |
| PHONG\_TNF\_RESPONSE\_VIA\_P38\_COMPLETE | -0.00752 | -0.11018 | -0.13896 | 0.889903 | 0.968707 | -5.83958 |
| REACTOME\_NOTCH4\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION | 0.007296 | -0.19354 | 0.138874 | 0.889973 | 0.968707 | -5.83959 |
| REACTOME\_FORMATION\_OF\_TUBULIN\_FOLDING\_INTERMEDIATES\_BY\_CCT\_TRIC | -0.00942 | 0.00032 | -0.13868 | 0.890128 | 0.968707 | -5.83962 |
| WP\_GPCRS\_CLASS\_B\_SECRETINLIKE | -0.00699 | -0.14769 | -0.13849 | 0.890278 | 0.968707 | -5.83964 |
| NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA2\_UP | 0.006616 | -0.07331 | 0.13844 | 0.890315 | 0.968707 | -5.83965 |
| REACTOME\_TNFR1\_INDUCED\_NFKAPPAB\_SIGNALING\_PATHWAY | -0.00876 | -0.17989 | -0.13784 | 0.890785 | 0.96889 | -5.83972 |
| ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR | -0.00774 | -0.11649 | -0.13784 | 0.890788 | 0.96889 | -5.83973 |
| DUTERTRE\_ESTRADIOL\_RESPONSE\_24HR\_DN | 0.007144 | -0.04316 | 0.13742 | 0.891118 | 0.969084 | -5.83978 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_DN\_CTNNB1\_INDEPENDENT | -0.00907 | -0.04623 | -0.13718 | 0.891307 | 0.969115 | -5.83981 |
| JIANG\_AGING\_CEREBRAL\_CORTEX\_UP | -0.01123 | -0.0366 | -0.13619 | 0.892088 | 0.969115 | -5.83994 |
| REACTOME\_RND1\_GTPASE\_CYCLE | 0.006265 | -0.02383 | 0.136176 | 0.892098 | 0.969115 | -5.83994 |
| WANG\_SMARCE1\_TARGETS\_UP | -0.00797 | -0.01847 | -0.13612 | 0.89214 | 0.969115 | -5.83994 |
| WP\_IL2\_SIGNALING\_PATHWAY | -0.00894 | -0.05818 | -0.13607 | 0.892185 | 0.969115 | -5.83995 |
| RIGGI\_EWING\_SARCOMA\_PROGENITOR\_DN | -0.00717 | -0.06054 | -0.13586 | 0.892343 | 0.969115 | -5.83998 |
| VISALA\_AGING\_LYMPHOCYTE\_DN | 0.010301 | -0.05748 | 0.135864 | 0.892343 | 0.969115 | -5.83998 |
| SASSON\_RESPONSE\_TO\_GONADOTROPHINS\_DN | 0.008995 | -0.03753 | 0.135658 | 0.892505 | 0.969115 | -5.84 |
| WP\_MYOMETRIAL\_RELAXATION\_AND\_CONTRACTION\_PATHWAYS | 0.004919 | -0.07006 | 0.135643 | 0.892517 | 0.969115 | -5.84001 |
| JINESH\_BLEBBISHIELD\_TO\_IMMUNE\_CELL\_FUSION\_PBSHMS\_UP | 0.007145 | -0.09003 | 0.134885 | 0.893114 | 0.969462 | -5.8401 |
| ZAMORA\_NOS2\_TARGETS\_DN | -0.00849 | -0.02611 | -0.13469 | 0.89327 | 0.969462 | -5.84013 |
| WU\_HBX\_TARGETS\_1\_DN | 0.005946 | -0.21886 | 0.134448 | 0.893458 | 0.969462 | -5.84016 |
| WP\_IL5\_SIGNALING\_PATHWAY | 0.010012 | -0.07398 | 0.134353 | 0.893534 | 0.969462 | -5.84017 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_C | 0.006293 | -0.1548 | 0.134269 | 0.893599 | 0.969462 | -5.84018 |
| GALE\_APL\_WITH\_FLT3\_MUTATED\_DN | -0.00854 | -0.389 | -0.13402 | 0.893799 | 0.969513 | -5.84021 |
| REACTOME\_PARASITE\_INFECTION | -0.00939 | -0.02044 | -0.13303 | 0.894572 | 0.969819 | -5.84033 |
| KANG\_CISPLATIN\_RESISTANCE\_UP | 0.008136 | -0.14414 | 0.133008 | 0.894593 | 0.969819 | -5.84034 |
| NAKAMURA\_ADIPOGENESIS\_LATE\_DN | 0.011062 | -0.03413 | 0.132927 | 0.894657 | 0.969819 | -5.84035 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_VS\_CD2\_UP | 0.004811 | -0.0828 | 0.132729 | 0.894813 | 0.969819 | -5.84037 |
| CHUNG\_BLISTER\_CYTOTOXICITY\_UP | 0.00847 | -0.09968 | 0.132599 | 0.894915 | 0.969819 | -5.84039 |
| REACTOME\_CROSSLINKING\_OF\_COLLAGEN\_FIBRILS | 0.011309 | -0.00439 | 0.132498 | 0.894995 | 0.969819 | -5.8404 |
| WP\_TYPE\_I\_COLLAGEN\_SYNTHESIS\_IN\_THE\_CONTEXT\_OF\_OSTEOGENESIS\_IMPERFECTA | -0.00797 | -0.08708 | -0.13197 | 0.895413 | 0.970107 | -5.84046 |
| BIOCARTA\_TID\_PATHWAY | 0.006161 | -0.38745 | 0.131509 | 0.895773 | 0.97018 | -5.84052 |
| BIOCARTA\_CDMAC\_PATHWAY | -0.00896 | -0.30743 | -0.13147 | 0.895801 | 0.97018 | -5.84052 |
| WILLIAMS\_ESR1\_TARGETS\_DN | 0.011893 | -0.02123 | 0.131108 | 0.89609 | 0.97018 | -5.84057 |
| REACTOME\_SIGNALING\_BY\_VEGF | 0.00604 | -0.04092 | 0.131107 | 0.89609 | 0.97018 | -5.84057 |
| BIOCARTA\_EPO\_PATHWAY | -0.00971 | -0.0461 | -0.13045 | 0.896612 | 0.970416 | -5.84065 |
| LIANG\_HEMATOPOIESIS\_STEM\_CELL\_NUMBER\_LARGE\_VS\_TINY\_DN | 0.006717 | -0.00082 | 0.130269 | 0.89675 | 0.970416 | -5.84067 |
| REACTOME\_POST\_TRANSLATIONAL\_MODIFICATION\_SYNTHESIS\_OF\_GPI\_ANCHORED\_PROTEINS | 0.00341 | -0.14268 | 0.13025 | 0.896766 | 0.970416 | -5.84067 |
| CHARAFE\_BREAST\_CANCER\_BASAL\_VS\_MESENCHYMAL\_DN | -0.00726 | -0.04884 | -0.12963 | 0.897254 | 0.970779 | -5.84075 |
| REACTOME\_HDL\_ASSEMBLY | 0.007813 | -0.10252 | 0.128925 | 0.89781 | 0.970868 | -5.84083 |
| HOWLIN\_CITED1\_TARGETS\_2\_DN | 0.00734 | -0.00555 | 0.128296 | 0.898305 | 0.970868 | -5.84091 |
| BIOCARTA\_SUMO\_PATHWAY | 0.01182 | -0.0123 | 0.127957 | 0.898573 | 0.970868 | -5.84095 |
| WP\_RESISTIN\_AS\_A\_REGULATOR\_OF\_INFLAMMATION | 0.006122 | -0.18875 | 0.127919 | 0.898603 | 0.970868 | -5.84095 |
| WP\_METABOLIC\_REPROGRAMMING\_IN\_COLON\_CANCER | 0.010213 | -0.05721 | 0.127898 | 0.898619 | 0.970868 | -5.84096 |
| NIKOLSKY\_BREAST\_CANCER\_17Q21\_Q25\_AMPLICON | 0.002936 | -0.03088 | 0.127712 | 0.898766 | 0.970868 | -5.84098 |
| REACTOME\_NEUROTRANSMITTER\_RELEASE\_CYCLE | 0.005163 | -0.00064 | 0.127487 | 0.898943 | 0.970868 | -5.84101 |
| PARK\_HSC\_MARKERS | -0.00934 | -0.05523 | -0.12746 | 0.898962 | 0.970868 | -5.84101 |
| BIOCARTA\_IL2RB\_PATHWAY | 0.009168 | -0.02016 | 0.127456 | 0.898968 | 0.970868 | -5.84101 |
| REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_G2\_CELL\_CYCLE\_ARREST | 0.008375 | -0.00832 | 0.127398 | 0.899014 | 0.970868 | -5.84102 |
| HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_2NM\_UP | -0.00627 | -0.03392 | -0.1274 | 0.899014 | 0.970868 | -5.84102 |
| BOQUEST\_STEM\_CELL\_DN | 0.005843 | -0.23166 | 0.127153 | 0.899206 | 0.970911 | -5.84105 |
| REACTOME\_POLO\_LIKE\_KINASE\_MEDIATED\_EVENTS | -0.00873 | 0.001616 | -0.1268 | 0.899485 | 0.97099 | -5.84109 |
| TSENG\_IRS1\_TARGETS\_DN | -0.00639 | -0.11333 | -0.12638 | 0.899818 | 0.97099 | -5.84114 |
| REACTOME\_INTERFERON\_ALPHA\_BETA\_SIGNALING | 0.004486 | -0.35853 | 0.126215 | 0.899947 | 0.97099 | -5.84116 |
| BIOCARTA\_TGFB\_PATHWAY | -0.00744 | 0.004049 | -0.12618 | 0.899973 | 0.97099 | -5.84116 |
| PID\_S1P\_S1P3\_PATHWAY | -0.00812 | -0.02837 | -0.12607 | 0.900064 | 0.97099 | -5.84117 |
| REACTOME\_VITAMIN\_B2\_RIBOFLAVIN\_METABOLISM | 0.008487 | -0.11748 | 0.1259 | 0.900195 | 0.97099 | -5.84119 |
| WP\_ONCOSTATIN\_M\_SIGNALING\_PATHWAY | 0.008214 | -0.03505 | 0.12546 | 0.900542 | 0.97108 | -5.84124 |
| HEDENFALK\_BREAST\_CANCER\_BRACX\_UP | 0.010816 | 0.00079 | 0.125254 | 0.900704 | 0.97108 | -5.84127 |
| REACTOME\_TRAF6\_MEDIATED\_NF\_KB\_ACTIVATION | 0.006252 | -0.2038 | 0.125214 | 0.900736 | 0.97108 | -5.84127 |
| REACTOME\_PTK6\_EXPRESSION | 0.011219 | -0.00933 | 0.124646 | 0.901184 | 0.971398 | -5.84134 |
| REACTOME\_SYNTHESIS\_OF\_16\_20\_HYDROXYEICOSATETRAENOIC\_ACIDS\_HETE | -0.00982 | -0.00588 | -0.12407 | 0.901641 | 0.971726 | -5.84141 |
| HE\_PTEN\_TARGETS\_UP | -0.00779 | 0.019057 | -0.12374 | 0.901898 | 0.971794 | -5.84144 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_KTN1 | 0.008013 | 0.008016 | 0.123599 | 0.902009 | 0.971794 | -5.84146 |
| REACTOME\_FLT3\_SIGNALING\_IN\_DISEASE | 0.009558 | -0.01678 | 0.123317 | 0.902232 | 0.971869 | -5.84149 |
| KEGG\_ENDOCYTOSIS | 0.004219 | -0.25697 | 0.122713 | 0.902708 | 0.972125 | -5.84156 |
| MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_DN | 0.006341 | -0.05034 | 0.122628 | 0.902775 | 0.972125 | -5.84157 |
| WP\_ETHANOL\_EFFECTS\_ON\_HISTONE\_MODIFICATIONS | -0.00703 | -0.14864 | -0.12225 | 0.903071 | 0.972279 | -5.84161 |
| BIOCARTA\_RNA\_PATHWAY | -0.01116 | -0.09112 | -0.12055 | 0.904413 | 0.973559 | -5.84181 |
| VECCHI\_GASTRIC\_CANCER\_EARLY\_DN | -0.00466 | -0.07094 | -0.12032 | 0.904594 | 0.97359 | -5.84183 |
| HSIAO\_HOUSEKEEPING\_GENES | -0.00697 | -0.23157 | -0.12002 | 0.904835 | 0.973613 | -5.84187 |
| SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_B\_LYMPHOCYTE | -0.00843 | -0.07514 | -0.11991 | 0.904921 | 0.973613 | -5.84188 |
| DAWSON\_METHYLATED\_IN\_LYMPHOMA\_TCL1 | 0.005306 | -0.05707 | 0.119641 | 0.905131 | 0.973674 | -5.84191 |
| WP\_EPO\_RECEPTOR\_SIGNALING | 0.007849 | -0.0396 | 0.119332 | 0.905375 | 0.973772 | -5.84194 |
| WP\_NEOVASCULARISATION\_PROCESSES | 0.00649 | -0.13487 | 0.118458 | 0.906065 | 0.974218 | -5.84204 |
| REACTOME\_REGULATED\_NECROSIS | -0.00691 | -0.12625 | -0.11841 | 0.906103 | 0.974218 | -5.84205 |
| REACTOME\_MATURATION\_OF\_SARS\_COV\_2\_SPIKE\_PROTEIN | -0.00746 | -0.11941 | -0.11823 | 0.906249 | 0.974218 | -5.84207 |
| REACTOME\_DNA\_DAMAGE\_TELOMERE\_STRESS\_INDUCED\_SENESCENCE | -0.00607 | -0.04102 | -0.11729 | 0.90699 | 0.974729 | -5.84217 |
| DER\_IFN\_GAMMA\_RESPONSE\_UP | 0.003905 | -0.42218 | 0.117234 | 0.907031 | 0.974729 | -5.84217 |
| WP\_B\_CELL\_RECEPTOR\_SIGNALING\_PATHWAY | -0.00773 | -0.0666 | -0.1166 | 0.907529 | 0.974802 | -5.84224 |
| PID\_ER\_NONGENOMIC\_PATHWAY | 0.005952 | -0.04027 | 0.116593 | 0.907538 | 0.974802 | -5.84224 |
| CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN | 0.006671 | -0.09546 | 0.116566 | 0.907559 | 0.974802 | -5.84225 |
| ROZANOV\_MMP14\_TARGETS\_DN | 0.007365 | -0.02972 | 0.116048 | 0.907968 | 0.975058 | -5.8423 |
| REACTOME\_AKT\_PHOSPHORYLATES\_TARGETS\_IN\_THE\_CYTOSOL | -0.00549 | -0.06229 | -0.11588 | 0.908103 | 0.975058 | -5.84232 |
| WP\_4HYDROXYTAMOXIFEN\_DEXAMETHASONE\_AND\_RETINOIC\_ACIDS\_REGULATION\_OF\_P27\_EXPRESSION | 0.00925 | -0.00704 | 0.115506 | 0.908396 | 0.975208 | -5.84236 |
| IVANOVA\_HEMATOPOIESIS\_MATURE\_CELL | -0.00549 | -0.05421 | -0.11523 | 0.908612 | 0.975275 | -5.84239 |
| REACTOME\_DIGESTION\_OF\_DIETARY\_CARBOHYDRATE | 0.007182 | 0.011817 | 0.11428 | 0.909364 | 0.975796 | -5.84249 |
| REACTOME\_TRAFFICKING\_OF\_AMPA\_RECEPTORS | -0.00491 | -0.06028 | -0.11423 | 0.909404 | 0.975796 | -5.8425 |
| NIKOLSKY\_BREAST\_CANCER\_6P24\_P22\_AMPLICON | -0.0088 | -0.00668 | -0.1139 | 0.909665 | 0.975911 | -5.84253 |
| LEE\_SP4\_THYMOCYTE | -0.00734 | -0.24552 | -0.11334 | 0.910107 | 0.976147 | -5.84259 |
| PID\_RHOA\_PATHWAY | -0.0057 | -0.0447 | -0.11304 | 0.910346 | 0.976147 | -5.84263 |
| OUELLET\_OVARIAN\_CANCER\_INVASIVE\_VS\_LMP\_DN | 0.008938 | 0.000593 | 0.112952 | 0.910412 | 0.976147 | -5.84263 |
| REACTOME\_ACTIVATION\_OF\_C3\_AND\_C5 | -0.0033 | -0.67614 | -0.11284 | 0.910498 | 0.976147 | -5.84265 |
| REACTOME\_SYNTHESIS\_OF\_12\_EICOSATETRAENOIC\_ACID\_DERIVATIVES | 0.00927 | 0.026309 | 0.112434 | 0.910821 | 0.976329 | -5.84269 |
| LEE\_BMP2\_TARGETS\_UP | 0.004294 | -0.14217 | 0.111896 | 0.911247 | 0.976621 | -5.84275 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_9 | -0.0071 | -0.05086 | -0.11082 | 0.9121 | 0.977028 | -5.84286 |
| RADAEVA\_RESPONSE\_TO\_IFNA1\_DN | -0.00787 | 0.003718 | -0.11076 | 0.912147 | 0.977028 | -5.84286 |
| TOMLINS\_PROSTATE\_CANCER\_UP | 0.005792 | -0.20812 | 0.110664 | 0.912219 | 0.977028 | -5.84287 |
| OZEN\_MIR125B1\_TARGETS | 0.008621 | -0.00861 | 0.110627 | 0.912249 | 0.977028 | -5.84288 |
| KIM\_GASTRIC\_CANCER\_CHEMOSENSITIVITY | -0.00312 | -0.18168 | -0.11044 | 0.912394 | 0.977028 | -5.8429 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L1\_G1\_DN | -0.00888 | -0.16923 | -0.10993 | 0.9128 | 0.977153 | -5.84295 |
| SHAFFER\_IRF4\_TARGETS\_IN\_MYELOMA\_VS\_MATURE\_B\_LYMPHOCYTE | -0.00787 | -0.05979 | -0.10967 | 0.913004 | 0.977153 | -5.84297 |
| NUNODA\_RESPONSE\_TO\_DASATINIB\_IMATINIB\_UP | -0.0077 | 0.003932 | -0.10955 | 0.9131 | 0.977153 | -5.84299 |
| REACTOME\_KILLING\_MECHANISMS | -0.00607 | -0.01719 | -0.10935 | 0.913256 | 0.977153 | -5.84301 |
| ZWANG\_EGF\_PERSISTENTLY\_DN | 0.004676 | -0.03972 | 0.109183 | 0.91339 | 0.977153 | -5.84302 |
| REACTOME\_GRB7\_EVENTS\_IN\_ERBB2\_SIGNALING | -0.01258 | 0.025173 | -0.10858 | 0.913868 | 0.977153 | -5.84309 |
| JINESH\_BLEBBISHIELD\_VS\_LIVE\_CONTROL\_UP | 0.005121 | -0.14367 | 0.108391 | 0.914015 | 0.977153 | -5.84311 |
| LIAO\_HAVE\_SOX4\_BINDING\_SITES | 0.005548 | -0.04978 | 0.108313 | 0.914077 | 0.977153 | -5.84311 |
| JINESH\_BLEBBISHIELD\_TRANSFORMED\_STEM\_CELL\_SPHERES\_DN | 0.005365 | -0.15366 | 0.108251 | 0.914126 | 0.977153 | -5.84312 |
| REACTOME\_LISTERIA\_MONOCYTOGENES\_ENTRY\_INTO\_HOST\_CELLS | 0.006948 | -0.00084 | 0.107826 | 0.914461 | 0.977153 | -5.84316 |
| PID\_CD8\_TCR\_PATHWAY | -0.00718 | -0.17091 | -0.10771 | 0.91455 | 0.977153 | -5.84317 |
| TERAMOTO\_OPN\_TARGETS\_CLUSTER\_7 | 0.006067 | -0.00897 | 0.107623 | 0.914622 | 0.977153 | -5.84318 |
| JOHANSSON\_BRAIN\_CANCER\_EARLY\_VS\_LATE\_DN | -0.0068 | -0.06668 | -0.10747 | 0.914746 | 0.977153 | -5.8432 |
| PID\_CXCR4\_PATHWAY | -0.00633 | -0.09351 | -0.10728 | 0.914893 | 0.977153 | -5.84322 |
| GOLDRATH\_ANTIGEN\_RESPONSE | 0.005738 | -0.10669 | 0.107254 | 0.914913 | 0.977153 | -5.84322 |
| BROWN\_MYELOID\_CELL\_DEVELOPMENT\_DN | -0.00526 | -0.13351 | -0.10702 | 0.915102 | 0.977153 | -5.84324 |
| WP\_MITOCHONDRIAL\_LONG\_CHAIN\_FATTY\_ACID\_BETAOXIDATION | 0.009351 | -0.01349 | 0.106746 | 0.915315 | 0.977153 | -5.84327 |
| MIKKELSEN\_MCV6\_ICP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 0.006098 | 0.012741 | 0.106732 | 0.915326 | 0.977153 | -5.84327 |
| HOFFMANN\_PRE\_BI\_TO\_LARGE\_PRE\_BII\_LYMPHOCYTE\_UP | 0.004356 | -0.14502 | 0.106169 | 0.915771 | 0.977153 | -5.84333 |
| WP\_SMC1SMC3\_ROLE\_IN\_DNA\_DAMAGE\_CORNELIA\_DE\_LANGE\_SYNDROME | 0.005789 | -0.43424 | 0.106142 | 0.915792 | 0.977153 | -5.84333 |
| WP\_WNT\_SIGNALING\_PATHWAY | -0.00621 | -0.01845 | -0.10591 | 0.915972 | 0.977153 | -5.84335 |
| REACTOME\_FGFR2B\_LIGAND\_BINDING\_AND\_ACTIVATION | 0.008348 | 0.016094 | 0.105825 | 0.916043 | 0.977153 | -5.84336 |
| BIOCARTA\_TOLL\_PATHWAY | 0.006207 | -0.0306 | 0.105476 | 0.916319 | 0.977153 | -5.8434 |
| KRASNOSELSKAYA\_ILF3\_TARGETS\_DN | 0.003679 | -0.13251 | 0.105383 | 0.916392 | 0.977153 | -5.8434 |
| BIOCARTA\_SARS\_PATHWAY | 0.007975 | -0.13453 | 0.10503 | 0.916672 | 0.977153 | -5.84344 |
| REACTOME\_P2Y\_RECEPTORS | -0.00728 | 0.013185 | -0.10493 | 0.91675 | 0.977153 | -5.84345 |
| WATANABE\_RECTAL\_CANCER\_RADIOTHERAPY\_RESPONSIVE\_DN | -0.00657 | -0.1071 | -0.10459 | 0.917017 | 0.977153 | -5.84348 |
| REACTOME\_CELL\_EXTRACELLULAR\_MATRIX\_INTERACTIONS | 0.009133 | -0.02487 | 0.104287 | 0.917258 | 0.977153 | -5.84351 |
| REACTOME\_REELIN\_SIGNALLING\_PATHWAY | -0.0085 | -0.01504 | -0.10414 | 0.917376 | 0.977153 | -5.84353 |
| NEBEN\_AML\_WITH\_FLT3\_OR\_NRAS\_DN | -0.00805 | -0.00078 | -0.10403 | 0.917464 | 0.977153 | -5.84354 |
| BIOCARTA\_NTHI\_PATHWAY | -0.00641 | -0.23393 | -0.10397 | 0.91751 | 0.977153 | -5.84354 |
| MCCLUNG\_COCAIN\_REWARD\_4WK | 0.00389 | -0.04496 | 0.103653 | 0.917759 | 0.977153 | -5.84357 |
| REACTOME\_SEMA4D\_MEDIATED\_INHIBITION\_OF\_CELL\_ATTACHMENT\_AND\_MIGRATION | -0.00865 | -0.0086 | -0.10334 | 0.918007 | 0.977153 | -5.8436 |
| LI\_CISPLATIN\_RESISTANCE\_UP | -0.00616 | -0.0161 | -0.10321 | 0.918109 | 0.977153 | -5.84362 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_WORST\_VS\_BEST\_UP | 0.006767 | -0.00555 | 0.103159 | 0.91815 | 0.977153 | -5.84362 |
| GINESTIER\_BREAST\_CANCER\_ZNF217\_AMPLIFIED\_DN | -0.00353 | -0.23281 | -0.10294 | 0.918323 | 0.977153 | -5.84364 |
| SATOH\_COLORECTAL\_CANCER\_MYC\_DN | -0.00424 | -0.08544 | -0.10282 | 0.918417 | 0.977153 | -5.84365 |
| MARTORIATI\_MDM4\_TARGETS\_FETAL\_LIVER\_UP | -0.00446 | -0.11095 | -0.10278 | 0.918451 | 0.977153 | -5.84366 |
| IRITANI\_MAD1\_TARGETS\_UP | -0.00646 | -0.33064 | -0.1026 | 0.918589 | 0.977153 | -5.84367 |
| REACTOME\_UPTAKE\_AND\_ACTIONS\_OF\_BACTERIAL\_TOXINS | -0.00571 | -0.00557 | -0.10244 | 0.918718 | 0.977153 | -5.84369 |
| REACTOME\_RUNX2\_REGULATES\_CHONDROCYTE\_MATURATION | 0.01041 | -0.0211 | 0.102241 | 0.918876 | 0.977153 | -5.84371 |
| REACTOME\_SUMOYLATION\_OF\_TRANSCRIPTION\_FACTORS | 0.004481 | 0.003607 | 0.10139 | 0.919549 | 0.977153 | -5.84379 |
| CEBALLOS\_TARGETS\_OF\_TP53\_AND\_MYC\_UP | -0.0086 | -0.04889 | -0.10107 | 0.919799 | 0.977153 | -5.84382 |
| ACEVEDO\_LIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_DN | 0.004303 | -0.05735 | 0.100701 | 0.920094 | 0.977153 | -5.84385 |
| RAGHAVACHARI\_PLATELET\_SPECIFIC\_GENES | 0.006263 | -0.0665 | 0.100622 | 0.920156 | 0.977153 | -5.84386 |
| REACTOME\_SYNTHESIS\_SECRETION\_AND\_INACTIVATION\_OF\_GLUCAGON\_LIKE\_PEPTIDE\_1\_GLP\_1 | 0.004578 | 0.000496 | 0.100376 | 0.920351 | 0.977153 | -5.84388 |
| PID\_TNF\_PATHWAY | 0.005419 | -0.14462 | 0.099863 | 0.920756 | 0.977153 | -5.84393 |
| DELYS\_THYROID\_CANCER\_DN | -0.00496 | -0.06568 | -0.09984 | 0.920773 | 0.977153 | -5.84393 |
| WP\_INTERACTIONS\_OF\_NATURAL\_KILLER\_CELLS\_IN\_PANCREATIC\_CANCER | -0.00209 | -0.63978 | -0.09983 | 0.920785 | 0.977153 | -5.84394 |
| KYNG\_NORMAL\_AGING\_UP | -0.00741 | 0.001308 | -0.09922 | 0.921262 | 0.977153 | -5.84399 |
| HAN\_SATB1\_TARGETS\_UP | -0.00439 | -0.08152 | -0.09887 | 0.921538 | 0.977153 | -5.84402 |
| BIOCARTA\_PML\_PATHWAY | 0.004103 | -0.41041 | 0.098757 | 0.921631 | 0.977153 | -5.84404 |
| KORKOLA\_EMBRYONAL\_CARCINOMA\_UP | 0.006513 | -0.02308 | 0.098754 | 0.921634 | 0.977153 | -5.84404 |
| ODONNELL\_METASTASIS\_UP | -0.00511 | -0.03425 | -0.09862 | 0.92174 | 0.977153 | -5.84405 |
| WP\_IMATINIB\_AND\_CHRONIC\_MYELOID\_LEUKEMIA | -0.00721 | 0.022148 | -0.09861 | 0.92175 | 0.977153 | -5.84405 |
| REACTOME\_HYALURONAN\_UPTAKE\_AND\_DEGRADATION | 0.008383 | 0.001999 | 0.098534 | 0.921808 | 0.977153 | -5.84406 |
| WP\_NUCLEOTIDE\_GPCRS | 0.006569 | -0.06808 | 0.098533 | 0.921808 | 0.977153 | -5.84406 |
| REACTOME\_NOTCH2\_ACTIVATION\_AND\_TRANSMISSION\_OF\_SIGNAL\_TO\_THE\_NUCLEUS | -0.00576 | -0.04477 | -0.09839 | 0.921918 | 0.977153 | -5.84407 |
| HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_UP | -0.00646 | -0.16778 | -0.09834 | 0.921961 | 0.977153 | -5.84407 |
| BIOCARTA\_SRCRPTP\_PATHWAY | 0.009141 | -0.01962 | 0.098268 | 0.922018 | 0.977153 | -5.84408 |
| MIKHAYLOVA\_OXIDATIVE\_STRESS\_RESPONSE\_VIA\_VHL\_DN | 0.01125 | -0.01347 | 0.098244 | 0.922037 | 0.977153 | -5.84408 |
| REACTOME\_FRS\_MEDIATED\_FGFR1\_SIGNALING | -0.00522 | -0.03795 | -0.09822 | 0.922052 | 0.977153 | -5.84408 |
| WP\_OMEGA9\_FATTY\_ACID\_SYNTHESIS | 0.007536 | 0.005309 | 0.097949 | 0.92227 | 0.977153 | -5.84411 |
| REACTOME\_PHOSPHOLIPASE\_C\_MEDIATED\_CASCADE\_FGFR4 | 0.007711 | 0.016304 | 0.09785 | 0.922349 | 0.977153 | -5.84412 |
| DER\_IFN\_GAMMA\_RESPONSE\_DN | -0.00852 | -0.02734 | -0.09767 | 0.922491 | 0.977153 | -5.84413 |
| KEGG\_DORSO\_VENTRAL\_AXIS\_FORMATION | -0.00386 | -0.24127 | -0.09727 | 0.92281 | 0.977216 | -5.84417 |
| VILLANUEVA\_LIVER\_CANCER\_KRT19\_DN | -0.00343 | -0.07537 | -0.09706 | 0.922972 | 0.977216 | -5.84419 |
| PID\_WNT\_CANONICAL\_PATHWAY | -0.00462 | -0.088 | -0.09692 | 0.923086 | 0.977216 | -5.8442 |
| BIOCARTA\_HSP27\_PATHWAY | -0.00453 | -0.43198 | -0.09671 | 0.923252 | 0.977216 | -5.84422 |
| REACTOME\_INTERLEUKIN\_37\_SIGNALING | 0.00548 | -0.00066 | 0.096624 | 0.923319 | 0.977216 | -5.84423 |
| REACTOME\_BIOSYNTHESIS\_OF\_EPA\_DERIVED\_SPMS | -0.00712 | -0.13388 | -0.09634 | 0.923539 | 0.977287 | -5.84425 |
| KEGG\_PATHWAYS\_IN\_CANCER | -0.00324 | -0.04503 | -0.09601 | 0.923806 | 0.977406 | -5.84428 |
| BUFFA\_HYPOXIA\_METAGENE | 0.006839 | -0.10526 | 0.095342 | 0.924333 | 0.977667 | -5.84434 |
| REACTOME\_TRIF\_MEDIATED\_PROGRAMMED\_CELL\_DEATH | 0.008973 | -0.09553 | 0.095309 | 0.924359 | 0.977667 | -5.84435 |
| REACTOME\_SIGNALING\_BY\_TGF\_BETA\_RECEPTOR\_COMPLEX | -0.00571 | -0.02193 | -0.09501 | 0.924598 | 0.977757 | -5.84437 |
| KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_UP | -0.0052 | -0.07011 | -0.09404 | 0.925365 | 0.978267 | -5.84446 |
| UEDA\_CENTRAL\_CLOCK | 0.004795 | -0.14486 | 0.093982 | 0.925409 | 0.978267 | -5.84446 |
| REACTOME\_INTERLEUKIN\_6\_SIGNALING | 0.00944 | 0.009639 | 0.093815 | 0.925541 | 0.978267 | -5.84448 |
| BHATTACHARYA\_EMBRYONIC\_STEM\_CELL | 0.004515 | -0.16932 | 0.093428 | 0.925847 | 0.978427 | -5.84451 |
| GALLUZZI\_PERMEABILIZE\_MITOCHONDRIA | -0.00493 | -0.04316 | -0.09294 | 0.92623 | 0.978614 | -5.84455 |
| DORSAM\_HOXA9\_TARGETS\_UP | 0.00722 | -0.06899 | 0.092816 | 0.926331 | 0.978614 | -5.84457 |
| BILD\_MYC\_ONCOGENIC\_SIGNATURE | 0.003554 | -0.11816 | 0.09247 | 0.926606 | 0.978742 | -5.8446 |
| SA\_PROGRAMMED\_CELL\_DEATH | -0.00462 | -0.12836 | -0.09178 | 0.927153 | 0.978983 | -5.84466 |
| RAMJAUN\_APOPTOSIS\_BY\_TGFB1\_VIA\_SMAD4\_UP | -0.00701 | 0.004827 | -0.09131 | 0.927521 | 0.978983 | -5.84469 |
| STEGMEIER\_PREMITOTIC\_CELL\_CYCLE\_REGULATORS | 0.006006 | -0.29342 | 0.091212 | 0.927601 | 0.978983 | -5.8447 |
| PID\_TCPTP\_PATHWAY | -0.00502 | -0.00461 | -0.0911 | 0.927694 | 0.978983 | -5.84471 |
| REACTOME\_DNA\_REPLICATION\_INITIATION | 0.007948 | -0.00133 | 0.090983 | 0.927782 | 0.978983 | -5.84472 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX2\_UP | -0.01059 | 0.004073 | -0.09072 | 0.927987 | 0.978983 | -5.84474 |
| MANNE\_COVID19\_NONICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_DN | 0.002479 | 0.002118 | 0.090723 | 0.927988 | 0.978983 | -5.84474 |
| WP\_LDLRAD4\_AND\_WHAT\_WE\_KNOW\_ABOUT\_IT | -0.00705 | -0.11734 | -0.09063 | 0.928065 | 0.978983 | -5.84475 |
| LUI\_THYROID\_CANCER\_CLUSTER\_3 | 0.007402 | -0.09248 | 0.09012 | 0.928465 | 0.97914 | -5.8448 |
| PHESSE\_TARGETS\_OF\_APC\_AND\_MBD2\_UP | 0.003619 | -0.41775 | 0.09005 | 0.928521 | 0.97914 | -5.8448 |
| CHESLER\_BRAIN\_HIGHEST\_GENETIC\_VARIANCE | -0.00533 | -0.17812 | -0.08941 | 0.929028 | 0.979377 | -5.84486 |
| KEGG\_TGF\_BETA\_SIGNALING\_PATHWAY | -0.00397 | -0.09552 | -0.08917 | 0.929217 | 0.979377 | -5.84488 |
| ZHAN\_MULTIPLE\_MYELOMA\_MF\_DN | -0.00427 | -0.06988 | -0.08882 | 0.929497 | 0.979377 | -5.8449 |
| WP\_DISORDERS\_OF\_FOLATE\_METABOLISM\_AND\_TRANSPORT | 0.005531 | -0.14116 | 0.088489 | 0.929757 | 0.979377 | -5.84493 |
| REACTOME\_TRAF6\_MEDIATED\_IRF7\_ACTIVATION | -0.00428 | -0.02831 | -0.08832 | 0.929891 | 0.979377 | -5.84495 |
| HOSHIDA\_LIVER\_CANCER\_SURVIVAL\_DN | -0.00318 | -0.09207 | -0.08824 | 0.929951 | 0.979377 | -5.84495 |
| WP\_MAPK\_AND\_NFKB\_SIGNALING\_PATHWAYS\_INHIBITED\_BY\_YERSINIA\_YOPJ | -0.00763 | -0.06653 | -0.08819 | 0.929994 | 0.979377 | -5.84496 |
| WP\_SOMITOGENESIS\_IN\_THE\_CONTEXT\_OF\_SPONDYLOCOSTAL\_DYSOSTOSIS | 0.005578 | -0.10212 | 0.087898 | 0.930224 | 0.979377 | -5.84498 |
| GOZGIT\_ESR1\_TARGETS\_DN | -0.00285 | -0.10903 | -0.08765 | 0.930423 | 0.979377 | -5.845 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_DN | -0.00314 | -0.03886 | -0.08736 | 0.930653 | 0.979377 | -5.84502 |
| OLSSON\_E2F3\_TARGETS\_DN | -0.00458 | 0.00381 | -0.08723 | 0.930752 | 0.979377 | -5.84503 |
| ASGHARZADEH\_NEUROBLASTOMA\_POOR\_SURVIVAL\_DN | -0.003 | -0.08903 | -0.0872 | 0.930777 | 0.979377 | -5.84504 |
| MEINHOLD\_OVARIAN\_CANCER\_LOW\_GRADE\_DN | -0.00786 | -0.01239 | -0.08706 | 0.930891 | 0.979377 | -5.84505 |
| WP\_MONOAMINE\_TRANSPORT | 0.003557 | -0.20799 | 0.08674 | 0.931141 | 0.979377 | -5.84507 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G12\_DN | -0.00548 | -0.05003 | -0.08657 | 0.931279 | 0.979377 | -5.84509 |
| KEGG\_GLYOXYLATE\_AND\_DICARBOXYLATE\_METABOLISM | -0.00702 | -0.00454 | -0.08651 | 0.931322 | 0.979377 | -5.84509 |
| MULLIGHAN\_NPM1\_SIGNATURE\_3\_DN | -0.00362 | -0.05821 | -0.08646 | 0.931362 | 0.979377 | -5.8451 |
| ALCALA\_APOPTOSIS | -0.00596 | -0.10027 | -0.08512 | 0.932428 | 0.980335 | -5.8452 |
| HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_UP | -0.00417 | -0.29363 | -0.08466 | 0.932786 | 0.98055 | -5.84524 |
| SESTO\_RESPONSE\_TO\_UV\_C7 | -0.00544 | -0.0412 | -0.08434 | 0.933043 | 0.980654 | -5.84527 |
| REACTOME\_GLYCEROPHOSPHOLIPID\_BIOSYNTHESIS | 0.002272 | -0.21465 | 0.084149 | 0.933193 | 0.980654 | -5.84528 |
| SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_DN | -0.00245 | -0.09469 | -0.08346 | 0.933739 | 0.981066 | -5.84533 |
| BIOCARTA\_TOB1\_PATHWAY | 0.005204 | -0.01505 | 0.082898 | 0.934184 | 0.981241 | -5.84538 |
| PALOMERO\_GSI\_SENSITIVITY\_UP | 0.005301 | -0.13411 | 0.082851 | 0.934222 | 0.981241 | -5.84538 |
| REACTOME\_RUNX3\_REGULATES\_NOTCH\_SIGNALING | 0.005352 | -0.07022 | 0.08232 | 0.934642 | 0.981241 | -5.84542 |
| WP\_OSX\_AND\_MIRNAS\_IN\_TOOTH\_DEVELOPMENT | -0.00399 | -0.27316 | -0.08228 | 0.93467 | 0.981241 | -5.84543 |
| HOLLEMAN\_VINCRISTINE\_RESISTANCE\_ALL\_UP | 0.004999 | -0.03431 | 0.082276 | 0.934677 | 0.981241 | -5.84543 |
| DOANE\_BREAST\_CANCER\_CLASSES\_DN | 0.00525 | -0.04114 | 0.080674 | 0.935946 | 0.982411 | -5.84555 |
| REACTOME\_SARS\_COV\_1\_INFECTION | 0.004788 | -0.04375 | 0.080236 | 0.936293 | 0.982457 | -5.84558 |
| SA\_TRKA\_RECEPTOR | 0.004762 | -0.0848 | 0.080229 | 0.936298 | 0.982457 | -5.84558 |
| SIG\_CD40PATHWAYMAP | 0.003898 | -0.15051 | 0.079866 | 0.936586 | 0.98254 | -5.84561 |
| BIOCARTA\_VOBESITY\_PATHWAY | -0.00476 | -0.42783 | -0.07974 | 0.936686 | 0.98254 | -5.84562 |
| REACTOME\_CLASS\_B\_2\_SECRETIN\_FAMILY\_RECEPTORS | 0.003681 | -0.0595 | 0.079392 | 0.936961 | 0.982667 | -5.84564 |
| REACTOME\_NICOTINATE\_METABOLISM | -0.00372 | -0.07177 | -0.07892 | 0.937334 | 0.982755 | -5.84568 |
| WEST\_ADRENOCORTICAL\_TUMOR\_DN | 0.003125 | -0.1253 | 0.078896 | 0.937355 | 0.982755 | -5.84568 |
| BIOCARTA\_HCMV\_PATHWAY | 0.006425 | -0.00503 | 0.078173 | 0.937928 | 0.983194 | -5.84573 |
| REACTOME\_SYNTHESIS\_OF\_PYROPHOSPHATES\_IN\_THE\_CYTOSOL | -0.00427 | -0.10532 | -0.07787 | 0.938167 | 0.983263 | -5.84575 |
| REACTOME\_SYNTHESIS\_OF\_SUBSTRATES\_IN\_N\_GLYCAN\_BIOSYTHESIS | 0.003472 | -0.10179 | 0.07765 | 0.938342 | 0.983263 | -5.84577 |
| BIOCARTA\_PARKIN\_PATHWAY | 0.006839 | -0.00451 | 0.077327 | 0.938598 | 0.983263 | -5.84579 |
| REACTOME\_LINOLEIC\_ACID\_LA\_METABOLISM | 0.006428 | -0.00386 | 0.077136 | 0.938749 | 0.983263 | -5.84581 |
| WP\_SPHINGOLIPID\_METABOLISM\_IN\_SENESCENCE | 0.004094 | -0.06338 | 0.077115 | 0.938766 | 0.983263 | -5.84581 |
| REACTOME\_EFFECTS\_OF\_PIP2\_HYDROLYSIS | -0.00342 | -0.0377 | -0.07622 | 0.939472 | 0.983705 | -5.84587 |
| BILANGES\_SERUM\_RESPONSE\_TRANSLATION | 0.004881 | -0.02721 | 0.075697 | 0.93989 | 0.983705 | -5.84591 |
| REACTOME\_ACTIVATION\_OF\_KAINATE\_RECEPTORS\_UPON\_GLUTAMATE\_BINDING | 0.002871 | -0.04217 | 0.075573 | 0.939988 | 0.983705 | -5.84592 |
| SIMBULAN\_PARP1\_TARGETS\_DN | 0.006157 | -0.01241 | 0.075556 | 0.940001 | 0.983705 | -5.84592 |
| GHO\_ATF5\_TARGETS\_DN | 0.006791 | -0.05652 | 0.075231 | 0.940259 | 0.983705 | -5.84594 |
| BOYLAN\_MULTIPLE\_MYELOMA\_D\_CLUSTER\_DN | -0.00329 | -0.17635 | -0.07522 | 0.940268 | 0.983705 | -5.84594 |
| BHAT\_ESR1\_TARGETS\_NOT\_VIA\_AKT1\_DN | -0.00455 | -0.05529 | -0.07487 | 0.940548 | 0.983705 | -5.84597 |
| DING\_LUNG\_CANCER\_MUTATED\_RECURRENTLY | -0.00561 | 0.015292 | -0.07468 | 0.940697 | 0.983705 | -5.84598 |
| REACTOME\_G\_ALPHA\_Z\_SIGNALLING\_EVENTS | -0.00301 | -0.04715 | -0.07466 | 0.940709 | 0.983705 | -5.84598 |
| BIOCARTA\_LONGEVITY\_PATHWAY | -0.00564 | -0.07286 | -0.07463 | 0.940734 | 0.983705 | -5.84599 |
| ZHU\_CMV\_24\_HR\_UP | 0.004308 | -0.17493 | 0.074334 | 0.94097 | 0.98379 | -5.84601 |
| VERHAAK\_GLIOBLASTOMA\_PRONEURAL | -0.00225 | -0.09586 | -0.07406 | 0.941189 | 0.983858 | -5.84602 |
| GUTIERREZ\_WALDENSTROEMS\_MACROGLOBULINEMIA\_2 | 0.002442 | -0.61234 | 0.073821 | 0.941377 | 0.983892 | -5.84604 |
| KYNG\_DNA\_DAMAGE\_BY\_4NQO\_OR\_UV | -0.00365 | -0.09131 | -0.07357 | 0.941575 | 0.983938 | -5.84606 |
| BENITEZ\_GBM\_PROTEASOME\_INHIBITION\_RESPONSE | 0.00412 | -0.02443 | 0.072978 | 0.942045 | 0.984213 | -5.8461 |
| WP\_G13\_SIGNALING\_PATHWAY | 0.004189 | -0.03998 | 0.072708 | 0.942259 | 0.984213 | -5.84612 |
| WP\_DIFFERENTIATION\_OF\_WHITE\_AND\_BROWN\_ADIPOCYTE | 0.004575 | -0.00197 | 0.072654 | 0.942302 | 0.984213 | -5.84612 |
| FIRESTEIN\_PROLIFERATION | 0.001565 | -0.04676 | 0.072318 | 0.942568 | 0.984308 | -5.84614 |
| TCGA\_GLIOBLASTOMA\_MUTATED | -0.0054 | -0.11056 | -0.07215 | 0.942703 | 0.984308 | -5.84616 |
| REACTOME\_MAP3K8\_TPL2\_DEPENDENT\_MAPK1\_3\_ACTIVATION | -0.00687 | 0.013023 | -0.07192 | 0.942887 | 0.98434 | -5.84617 |
| REACTOME\_SEMA4D\_INDUCED\_CELL\_MIGRATION\_AND\_GROWTH\_CONE\_COLLAPSE | 0.005101 | -0.04852 | 0.071455 | 0.943252 | 0.984559 | -5.8462 |
| MIKKELSEN\_MEF\_ICP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | -0.00432 | 0.013784 | -0.07097 | 0.943639 | 0.984746 | -5.84623 |
| MANN\_RESPONSE\_TO\_AMIFOSTINE\_UP | 0.004699 | -0.05815 | 0.070617 | 0.943917 | 0.984746 | -5.84626 |
| CHANGOLKAR\_H2AFY\_TARGETS\_UP | 0.002814 | -0.08957 | 0.070479 | 0.944026 | 0.984746 | -5.84627 |
| BRUNO\_HEMATOPOIESIS | 0.00426 | -0.10623 | 0.070415 | 0.944077 | 0.984746 | -5.84627 |
| REACTOME\_KERATAN\_SULFATE\_BIOSYNTHESIS | 0.004016 | 6.68E-05 | 0.070218 | 0.944233 | 0.984746 | -5.84628 |
| ZERBINI\_RESPONSE\_TO\_SULINDAC\_DN | -0.00585 | 0.020205 | -0.07006 | 0.94436 | 0.984746 | -5.84629 |
| HEIDENBLAD\_AMPLIFIED\_IN\_BONE\_CANCER | -0.00508 | -0.0183 | -0.06909 | 0.945127 | 0.985384 | -5.84636 |
| INGA\_TP53\_TARGETS | 0.003755 | -0.24172 | 0.068747 | 0.945399 | 0.985507 | -5.84638 |
| KEGG\_NOTCH\_SIGNALING\_PATHWAY | 0.002583 | -0.16675 | 0.068271 | 0.945776 | 0.985514 | -5.84641 |
| RAY\_TARGETS\_OF\_P210\_BCR\_ABL\_FUSION\_UP | 0.00497 | -0.00196 | 0.06823 | 0.945809 | 0.985514 | -5.84641 |
| BERENJENO\_ROCK\_SIGNALING\_NOT\_VIA\_RHOA\_DN | -0.00554 | -0.00018 | -0.06815 | 0.945871 | 0.985514 | -5.84642 |
| REACTOME\_ACYL\_CHAIN\_REMODELLING\_OF\_PG | -0.00366 | -0.04668 | -0.06759 | 0.94632 | 0.985628 | -5.84645 |
| REACTOME\_CHOLINE\_CATABOLISM | -0.00485 | 0.016843 | -0.06729 | 0.946555 | 0.985628 | -5.84647 |
| REACTOME\_SEMA4D\_IN\_SEMAPHORIN\_SIGNALING | 0.004851 | -0.04324 | 0.067155 | 0.946662 | 0.985628 | -5.84648 |
| REACTOME\_SUMOYLATION | -0.00313 | -0.12244 | -0.06707 | 0.946731 | 0.985628 | -5.84648 |
| REACTOME\_GLUCOSE\_METABOLISM | -0.00345 | -0.04049 | -0.06704 | 0.946754 | 0.985628 | -5.84649 |
| WP\_ATR\_SIGNALING | 0.004521 | -0.02666 | 0.066782 | 0.946958 | 0.985678 | -5.8465 |
| REACTOME\_INTERFERON\_SIGNALING | -0.00235 | -0.32217 | -0.06599 | 0.947583 | 0.986168 | -5.84655 |
| PID\_NCADHERIN\_PATHWAY | -0.00487 | -0.02417 | -0.06548 | 0.947992 | 0.986187 | -5.84658 |
| REACTOME\_REGULATION\_OF\_COMMISSURAL\_AXON\_PATHFINDING\_BY\_SLIT\_AND\_ROBO | 0.004173 | -0.00668 | 0.065445 | 0.948018 | 0.986187 | -5.84659 |
| EINAV\_INTERFERON\_SIGNATURE\_IN\_CANCER | -0.0054 | -0.06214 | -0.06538 | 0.948066 | 0.986187 | -5.84659 |
| KEGG\_ARRHYTHMOGENIC\_RIGHT\_VENTRICULAR\_CARDIOMYOPATHY\_ARVC | 0.002741 | -0.03246 | 0.064707 | 0.948603 | 0.986423 | -5.84663 |
| WP\_ARRHYTHMOGENIC\_RIGHT\_VENTRICULAR\_CARDIOMYOPATHY | 0.002741 | -0.03246 | 0.064707 | 0.948603 | 0.986423 | -5.84663 |
| SENESE\_HDAC3\_TARGETS\_UP | -0.00315 | -0.06179 | -0.06433 | 0.948905 | 0.986484 | -5.84665 |
| VERHAAK\_AML\_WITH\_NPM1\_MUTATED\_DN | 0.002587 | -0.10209 | 0.064032 | 0.949139 | 0.986484 | -5.84667 |
| SENESE\_HDAC1\_AND\_HDAC2\_TARGETS\_DN | 0.00332 | -0.03741 | 0.063768 | 0.949348 | 0.986484 | -5.84669 |
| REACTOME\_MUSCLE\_CONTRACTION | 0.002942 | -0.02675 | 0.063729 | 0.949379 | 0.986484 | -5.84669 |
| TIEN\_INTESTINE\_PROBIOTICS\_24HR\_DN | 0.004341 | -0.06657 | 0.063657 | 0.949436 | 0.986484 | -5.84669 |
| GRASEMANN\_RETINOBLASTOMA\_WITH\_6P\_AMPLIFICATION | -0.00217 | -0.61642 | -0.06329 | 0.949726 | 0.9865 | -5.84671 |
| KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_DN | -0.00336 | -0.02858 | -0.06277 | 0.950136 | 0.9865 | -5.84674 |
| WP\_CALORIC\_RESTRICTION\_AND\_AGING | 0.006564 | 0.007637 | 0.062734 | 0.950168 | 0.9865 | -5.84675 |
| GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P6 | -0.0033 | -0.10185 | -0.06268 | 0.950215 | 0.9865 | -5.84675 |
| QI\_PLASMACYTOMA\_DN | 0.00378 | -0.03262 | 0.062634 | 0.950248 | 0.9865 | -5.84675 |
| REACTOME\_MATURATION\_OF\_SARS\_COV\_1\_NUCLEOPROTEIN | -0.0044 | -0.01575 | -0.06242 | 0.950414 | 0.9865 | -5.84677 |
| BLANCO\_MELO\_COVID19\_BRONCHIAL\_EPITHELIAL\_CELLS\_SARS\_COV\_2\_INFECTION\_DN | -0.00228 | -0.01589 | -0.06214 | 0.950639 | 0.9865 | -5.84678 |
| BIOCARTA\_IL22BP\_PATHWAY | -0.0061 | 0.012567 | -0.06207 | 0.950692 | 0.9865 | -5.84679 |
| REACTOME\_SYNTHESIS\_SECRETION\_AND\_DEACYLATION\_OF\_GHRELIN | 0.003133 | 0.003352 | 0.061699 | 0.950989 | 0.986524 | -5.84681 |
| GRUETZMANN\_PANCREATIC\_CANCER\_UP | 0.003674 | -0.13937 | 0.061634 | 0.951041 | 0.986524 | -5.84681 |
| BURTON\_ADIPOGENESIS\_4 | -0.00332 | -0.18149 | -0.06146 | 0.95118 | 0.986524 | -5.84682 |
| PID\_THROMBIN\_PAR1\_PATHWAY | 0.003318 | -0.01734 | 0.061097 | 0.951467 | 0.98666 | -5.84684 |
| REACTOME\_SENESCENCE\_ASSOCIATED\_SECRETORY\_PHENOTYPE\_SASP | 0.003336 | -0.08778 | 0.060722 | 0.951764 | 0.986808 | -5.84686 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G23\_UP | -0.00385 | -0.01375 | -0.06038 | 0.952038 | 0.986932 | -5.84688 |
| REACTOME\_GRB2\_SOS\_PROVIDES\_LINKAGE\_TO\_MAPK\_SIGNALING\_FOR\_INTEGRINS | -0.00389 | -0.01115 | -0.05987 | 0.952438 | 0.987035 | -5.84691 |
| PID\_WNT\_SIGNALING\_PATHWAY | 0.00266 | -0.09087 | 0.05983 | 0.952472 | 0.987035 | -5.84691 |
| WP\_ESTROGEN\_SIGNALING\_PATHWAY | -0.00451 | -0.04079 | -0.05966 | 0.952603 | 0.987035 | -5.84692 |
| WP\_ACUTE\_VIRAL\_MYOCARDITIS | -0.00233 | -0.20529 | -0.05932 | 0.952874 | 0.987065 | -5.84694 |
| GRADE\_COLON\_VS\_RECTAL\_CANCER\_DN | 0.002509 | -0.04839 | 0.059237 | 0.952943 | 0.987065 | -5.84695 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_POLYSOMY7\_UP | 0.002181 | -0.05549 | 0.05879 | 0.953298 | 0.987272 | -5.84697 |
| DOANE\_BREAST\_CANCER\_CLASSES\_UP | -0.0021 | -0.06525 | -0.05801 | 0.953915 | 0.98775 | -5.84701 |
| DELASERNA\_TARGETS\_OF\_MYOD\_AND\_SMARCA4 | -0.00382 | -0.16152 | -0.05763 | 0.95422 | 0.987834 | -5.84703 |
| REACTOME\_DEFECTIVE\_B4GALT7\_CAUSES\_EDS\_PROGEROID\_TYPE | 0.003487 | 0.01276 | 0.057411 | 0.954391 | 0.987834 | -5.84705 |
| REACTOME\_SUMOYLATION\_OF\_DNA\_METHYLATION\_PROTEINS | -0.00223 | -0.2776 | -0.05732 | 0.954461 | 0.987834 | -5.84705 |
| WP\_DNA\_DAMAGE\_RESPONSE | 0.0024 | -0.00835 | 0.056623 | 0.955017 | 0.988248 | -5.84709 |
| ZIRN\_TRETINOIN\_RESPONSE\_UP | -0.00453 | -0.00884 | -0.05611 | 0.955423 | 0.988508 | -5.84711 |
| REACTOME\_PP2A\_MEDIATED\_DEPHOSPHORYLATION\_OF\_KEY\_METABOLIC\_FACTORS | 0.004275 | -0.01651 | 0.05589 | 0.955599 | 0.988512 | -5.84713 |
| WANG\_THOC1\_TARGETS\_UP | -0.00491 | -0.14894 | -0.05571 | 0.955738 | 0.988512 | -5.84713 |
| REACTOME\_VLDLR\_INTERNALISATION\_AND\_DEGRADATION | 0.004556 | 0.003677 | 0.055467 | 0.955934 | 0.988532 | -5.84715 |
| REACTOME\_NEGATIVE\_REGULATORS\_OF\_DDX58\_IFIH1\_SIGNALING | 0.004268 | -0.01368 | 0.0553 | 0.956067 | 0.988532 | -5.84716 |
| WP\_CHOLESTEROL\_METABOLISM\_WITH\_BLOCH\_AND\_KANDUTSCHRUSSELL\_PATHWAYS | 0.003695 | -0.03578 | 0.054787 | 0.956474 | 0.988624 | -5.84718 |
| REACTOME\_GLI\_PROTEINS\_BIND\_PROMOTERS\_OF\_HH\_RESPONSIVE\_GENES\_TO\_PROMOTE\_TRANSCRIPTION | -0.00551 | -0.02612 | -0.05469 | 0.956553 | 0.988624 | -5.84719 |
| BROWNE\_HCMV\_INFECTION\_12HR\_UP | -0.00213 | -0.1117 | -0.0546 | 0.956623 | 0.988624 | -5.84719 |
| REACTOME\_TRAF6\_MEDIATED\_INDUCTION\_OF\_TAK1\_COMPLEX\_WITHIN\_TLR4\_COMPLEX | -0.00431 | -0.00243 | -0.05402 | 0.957082 | 0.988778 | -5.84722 |
| REACTOME\_MATURATION\_OF\_PROTEIN\_3A | 0.003887 | 0.00493 | 0.05374 | 0.957305 | 0.988778 | -5.84724 |
| YAMAZAKI\_TCEB3\_TARGETS\_UP | 0.002843 | -0.07544 | 0.053439 | 0.957544 | 0.988778 | -5.84725 |
| WP\_MAPK\_CASCADE | -0.0033 | -0.04865 | -0.05338 | 0.957589 | 0.988778 | -5.84725 |
| ZHAN\_MULTIPLE\_MYELOMA\_LB\_DN | 0.004188 | -0.05425 | 0.053293 | 0.95766 | 0.988778 | -5.84726 |
| YAGI\_AML\_WITH\_T\_8\_21\_TRANSLOCATION | -0.00177 | -0.23148 | -0.05324 | 0.957704 | 0.988778 | -5.84726 |
| REACTOME\_HISTIDINE\_CATABOLISM | -0.00382 | 0.010139 | -0.05198 | 0.9587 | 0.989646 | -5.84732 |
| COLDREN\_GEFITINIB\_RESISTANCE\_DN | -0.00148 | -0.08302 | -0.05169 | 0.958933 | 0.989726 | -5.84734 |
| PID\_P38\_ALPHA\_BETA\_DOWNSTREAM\_PATHWAY | -0.00265 | -0.15903 | -0.05087 | 0.959586 | 0.990239 | -5.84738 |
| REACTOME\_ADRENOCEPTORS | -0.00291 | -0.00571 | -0.05008 | 0.960207 | 0.990384 | -5.84741 |
| MANALO\_HYPOXIA\_UP | -0.00268 | -0.13782 | -0.04986 | 0.960383 | 0.990384 | -5.84742 |
| CHICAS\_RB1\_TARGETS\_CONFLUENT | -0.00243 | -0.07999 | -0.04981 | 0.960427 | 0.990384 | -5.84743 |
| WP\_THYROID\_HORMONES\_PRODUCTION\_AND\_PERIPHERAL\_DOWNSTREAM\_SIGNALING\_EFFECTS | 0.001268 | -0.03652 | 0.049437 | 0.96072 | 0.990384 | -5.84744 |
| REACTOME\_FGFR1B\_LIGAND\_BINDING\_AND\_ACTIVATION | -0.00468 | 0.025793 | -0.04926 | 0.960864 | 0.990384 | -5.84745 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_UNFOLDED\_PROTEIN\_RESPONSE | 0.003919 | 0.002821 | 0.049058 | 0.961022 | 0.990384 | -5.84746 |
| BRACHAT\_RESPONSE\_TO\_CAMPTOTHECIN\_UP | -0.00352 | -0.04793 | -0.0489 | 0.96115 | 0.990384 | -5.84747 |
| HUANG\_DASATINIB\_SENSITIVITY\_UP | -0.00252 | -0.22791 | -0.04855 | 0.961426 | 0.990384 | -5.84748 |
| REACTOME\_INTEGRATION\_OF\_PROVIRUS | -0.00415 | 0.011899 | -0.04785 | 0.961983 | 0.990384 | -5.84751 |
| REACTOME\_DETOXIFICATION\_OF\_REACTIVE\_OXYGEN\_SPECIES | 0.003148 | -0.03288 | 0.047768 | 0.962046 | 0.990384 | -5.84752 |
| REACTOME\_FCGAMMA\_RECEPTOR\_FCGR\_DEPENDENT\_PHAGOCYTOSIS | 0.003184 | -0.02109 | 0.047723 | 0.962081 | 0.990384 | -5.84752 |
| RODRIGUES\_THYROID\_CARCINOMA\_DN | 0.002655 | -0.04123 | 0.047625 | 0.962159 | 0.990384 | -5.84752 |
| WENG\_POR\_TARGETS\_GLOBAL\_UP | 0.002922 | -0.10468 | 0.047529 | 0.962236 | 0.990384 | -5.84753 |
| HASLINGER\_B\_CLL\_WITH\_13Q14\_DELETION | 0.001836 | -0.32547 | 0.047505 | 0.962254 | 0.990384 | -5.84753 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_UP | 0.001749 | -0.3277 | 0.047289 | 0.962426 | 0.990384 | -5.84754 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_UP | -0.002 | -0.21447 | -0.04702 | 0.962637 | 0.990384 | -5.84755 |
| REACTOME\_SYNTHESIS\_OF\_GDP\_MANNOSE | -0.00491 | 0.000222 | -0.04698 | 0.962668 | 0.990384 | -5.84755 |
| MILI\_PSEUDOPODIA\_HAPTOTAXIS\_DN | 0.002264 | -0.14378 | 0.046965 | 0.962683 | 0.990384 | -5.84755 |
| GUO\_TARGETS\_OF\_IRS1\_AND\_IRS2 | -0.00206 | -0.12097 | -0.04682 | 0.9628 | 0.990384 | -5.84756 |
| REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_DIFFERENTIATION\_OF\_KERATINOCYTES | 0.003914 | 0.015204 | 0.046769 | 0.962839 | 0.990384 | -5.84756 |
| JI\_CARCINOGENESIS\_BY\_KRAS\_AND\_STK11\_DN | 0.002941 | -0.25978 | 0.046462 | 0.963083 | 0.990475 | -5.84758 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G1\_DN | 0.003297 | -0.07627 | 0.046198 | 0.963293 | 0.990531 | -5.84759 |
| REACTOME\_VITAMIN\_D\_CALCIFEROL\_METABOLISM | 0.002332 | 0.011865 | 0.04595 | 0.96349 | 0.990573 | -5.8476 |
| WP\_ACQUIRED\_PARTIAL\_LIPODYSTROPHY\_BARRAQUERSIMONS\_SYNDROME | -0.00298 | -0.36534 | -0.04538 | 0.963942 | 0.990648 | -5.84762 |
| CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_5\_DN | -0.00343 | -0.25591 | -0.04513 | 0.964139 | 0.990648 | -5.84763 |
| MCBRYAN\_TERMINAL\_END\_BUD\_UP | -0.00274 | -0.07933 | -0.04511 | 0.964152 | 0.990648 | -5.84763 |
| REACTOME\_SIGNALING\_BY\_ERBB2 | 0.001842 | -0.04036 | 0.044962 | 0.964273 | 0.990648 | -5.84764 |
| REACTOME\_DEFECTIVE\_FACTOR\_VIII\_CAUSES\_HEMOPHILIA\_A | -0.00405 | -0.00787 | -0.04488 | 0.964341 | 0.990648 | -5.84764 |
| MATTIOLI\_MGUS\_VS\_MULTIPLE\_MYELOMA | 0.00407 | 0.001785 | 0.044467 | 0.964667 | 0.990823 | -5.84766 |
| WP\_PROSTAGLANDIN\_AND\_LEUKOTRIENE\_METABOLISM\_IN\_SENESCENCE | 0.002113 | -0.0998 | 0.044182 | 0.964893 | 0.990867 | -5.84767 |
| REACTOME\_REGULATION\_OF\_BACH1\_ACTIVITY | -0.00378 | -0.00089 | -0.04402 | 0.965021 | 0.990867 | -5.84768 |
| YAGI\_AML\_RELAPSE\_PROGNOSIS | -0.00318 | -0.0389 | -0.04366 | 0.96531 | 0.990914 | -5.84769 |
| REACTOME\_INTERLEUKIN\_1\_FAMILY\_SIGNALING | -0.002 | -0.16515 | -0.04357 | 0.965378 | 0.990914 | -5.8477 |
| REACTOME\_GLUTAMATE\_NEUROTRANSMITTER\_RELEASE\_CYCLE | 0.002047 | -0.00558 | 0.042968 | 0.965857 | 0.991245 | -5.84772 |
| WP\_EICOSANOID\_METABOLISM\_VIA\_CYCLOOXYGENASES\_COX | -0.0021 | -0.0055 | -0.04257 | 0.96617 | 0.99133 | -5.84774 |
| BIOCARTA\_TALL1\_PATHWAY | 0.002892 | -0.04094 | 0.042472 | 0.966251 | 0.99133 | -5.84774 |
| PID\_IFNG\_PATHWAY | 0.003498 | -0.02333 | 0.042102 | 0.966545 | 0.991337 | -5.84776 |
| REACTOME\_REGULATION\_OF\_SIGNALING\_BY\_NODAL | 0.003425 | 0.027069 | 0.042017 | 0.966613 | 0.991337 | -5.84776 |
| WP\_IL7\_SIGNALING\_PATHWAY | -0.00325 | 0.003807 | -0.04155 | 0.966984 | 0.991337 | -5.84778 |
| MEBARKI\_HCC\_PROGENITOR\_FZD8CRD\_UP | 0.001378 | -0.09009 | 0.041436 | 0.967073 | 0.991337 | -5.84778 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_7 | -0.0015 | -0.1128 | -0.04141 | 0.967094 | 0.991337 | -5.84778 |
| REACTOME\_PROTEIN\_PROTEIN\_INTERACTIONS\_AT\_SYNAPSES | -0.00172 | -0.08184 | -0.04086 | 0.967528 | 0.991337 | -5.8478 |
| REACTOME\_FCERI\_MEDIATED\_CA\_2\_MOBILIZATION | 0.003287 | 0.003776 | 0.040609 | 0.96773 | 0.991337 | -5.84781 |
| WP\_DNA\_DAMAGE\_RESPONSE\_ONLY\_ATM\_DEPENDENT | 0.001486 | -0.05089 | 0.040467 | 0.967844 | 0.991337 | -5.84782 |
| HOWLIN\_CITED1\_TARGETS\_1\_DN | 0.002753 | -0.04306 | 0.040129 | 0.968112 | 0.991337 | -5.84783 |
| BIOCARTA\_ERK\_PATHWAY | -0.00252 | -0.05909 | -0.03999 | 0.968223 | 0.991337 | -5.84784 |
| REACTOME\_NEUROTRANSMITTER\_CLEARANCE | -0.00268 | -0.09665 | -0.03982 | 0.968358 | 0.991337 | -5.84784 |
| REACTOME\_RHO\_GTPASES\_ACTIVATE\_PKNS | 0.002757 | -0.04989 | 0.039622 | 0.968514 | 0.991337 | -5.84785 |
| REACTOME\_PECAM1\_INTERACTIONS | -0.00313 | -0.0772 | -0.03961 | 0.968527 | 0.991337 | -5.84785 |
| BIOCARTA\_INTRINSIC\_PATHWAY | 0.002121 | 0.006313 | 0.039544 | 0.968576 | 0.991337 | -5.84785 |
| KEGG\_CALCIUM\_SIGNALING\_PATHWAY | 0.001322 | -0.02599 | 0.039098 | 0.968931 | 0.991337 | -5.84787 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_2FC\_DN | 0.00326 | 0.007998 | 0.039017 | 0.968995 | 0.991337 | -5.84787 |
| REACTOME\_ANTIGEN\_PRESENTATION\_FOLDING\_ASSEMBLY\_AND\_PEPTIDE\_LOADING\_OF\_CLASS\_I\_MHC | -0.0012 | -0.66768 | -0.03889 | 0.969094 | 0.991337 | -5.84788 |
| AMBROSINI\_FLAVOPIRIDOL\_TREATMENT\_TP53 | -0.00141 | -0.06877 | -0.03887 | 0.969112 | 0.991337 | -5.84788 |
| XU\_GH1\_AUTOCRINE\_TARGETS\_UP | 0.001253 | -0.13643 | 0.038737 | 0.969217 | 0.991337 | -5.84788 |
| MCCABE\_HOXC6\_TARGETS\_CANCER\_UP | -0.00161 | -0.06234 | -0.03854 | 0.969373 | 0.991337 | -5.84789 |
| REACTOME\_MISCELLANEOUS\_TRANSPORT\_AND\_BINDING\_EVENTS | 0.001696 | -0.04035 | 0.038188 | 0.969654 | 0.991405 | -5.8479 |
| WP\_SARSCOV2\_B117\_VARIANT\_ANTAGONISES\_INNATE\_IMMUNE\_ACTIVATION | -0.00293 | -0.0084 | -0.03806 | 0.969751 | 0.991405 | -5.84791 |
| BIOCARTA\_CSK\_PATHWAY | -0.00147 | -0.43956 | -0.0376 | 0.97012 | 0.991623 | -5.84792 |
| BURTON\_ADIPOGENESIS\_7 | 0.002465 | -0.11962 | 0.037382 | 0.970293 | 0.991635 | -5.84793 |
| BIOCARTA\_ALK\_PATHWAY | 0.001794 | -0.0251 | 0.037194 | 0.970443 | 0.991635 | -5.84794 |
| DURAND\_STROMA\_S\_UP | 0.001382 | -0.08403 | 0.036735 | 0.970808 | 0.991848 | -5.84795 |
| JAZAERI\_BREAST\_CANCER\_BRCA1\_VS\_BRCA2\_DN | 0.00184 | -0.18418 | 0.036358 | 0.971107 | 0.991994 | -5.84797 |
| BIOCARTA\_IFNG\_PATHWAY | 0.003807 | -0.145 | 0.035714 | 0.971619 | 0.992207 | -5.84799 |
| REN\_ALVEOLAR\_RHABDOMYOSARCOMA\_DN | 0.002788 | -0.07996 | 0.035552 | 0.971748 | 0.992207 | -5.84799 |
| MULLIGHAN\_MLL\_SIGNATURE\_2\_UP | -0.00188 | -0.12524 | -0.03551 | 0.971783 | 0.992207 | -5.84799 |
| VANLOO\_SP3\_TARGETS\_UP | 0.002142 | -0.00152 | 0.035005 | 0.972182 | 0.992412 | -5.84801 |
| BIOCARTA\_PRION\_PATHWAY | -0.00304 | -0.00929 | -0.0345 | 0.972585 | 0.992412 | -5.84803 |
| REACTOME\_ONCOGENIC\_MAPK\_SIGNALING | -0.0017 | -0.05376 | -0.03449 | 0.97259 | 0.992412 | -5.84803 |
| WP\_PHASE\_I\_BIOTRANSFORMATIONS\_NON\_P450 | 0.001887 | -0.18234 | 0.03441 | 0.972655 | 0.992412 | -5.84803 |
| KEGG\_FOLATE\_BIOSYNTHESIS | -0.00229 | -0.01286 | -0.03427 | 0.972763 | 0.992412 | -5.84803 |
| CAFFAREL\_RESPONSE\_TO\_THC\_UP | 0.002751 | 0.013782 | 0.03329 | 0.973544 | 0.992724 | -5.84807 |
| WP\_FAMILIAL\_PARTIAL\_LIPODYSTROPHY\_FPLD | -0.00212 | 0.002933 | -0.03326 | 0.97357 | 0.992724 | -5.84807 |
| KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_UP | 0.001895 | -0.18922 | 0.033245 | 0.973579 | 0.992724 | -5.84807 |
| REACTOME\_PYRIMIDINE\_SALVAGE | 0.002555 | 0.005404 | 0.032905 | 0.973849 | 0.992724 | -5.84808 |
| DESERT\_STEM\_CELL\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | 0.002477 | -0.00059 | 0.032728 | 0.973991 | 0.992724 | -5.84808 |
| WP\_TYPE\_II\_DIABETES\_MELLITUS | -0.00114 | -0.28231 | -0.0327 | 0.974013 | 0.992724 | -5.84808 |
| REACTOME\_ERYTHROPOIETIN\_ACTIVATES\_RAS | 0.002492 | -0.05075 | 0.032369 | 0.974276 | 0.992724 | -5.84809 |
| OHM\_EMBRYONIC\_CARCINOMA\_DN | -0.00258 | -0.03399 | -0.03232 | 0.974317 | 0.992724 | -5.84809 |
| YAN\_ESCAPE\_FROM\_ANOIKIS | 0.001319 | -0.46517 | 0.03211 | 0.974482 | 0.992733 | -5.8481 |
| REACTOME\_ERYTHROPOIETIN\_ACTIVATES\_PHOSPHOINOSITIDE\_3\_KINASE\_PI3K | 0.002528 | 0.003696 | 0.031787 | 0.974738 | 0.992772 | -5.84811 |
| BROWNE\_HCMV\_INFECTION\_24HR\_UP | -0.00124 | -0.04455 | -0.03167 | 0.974833 | 0.992772 | -5.84811 |
| WP\_MIR222\_IN\_EXERCISEINDUCED\_CARDIAC\_GROWTH | -0.00235 | -0.00216 | -0.03136 | 0.975074 | 0.992795 | -5.84812 |
| DAVICIONI\_MOLECULAR\_ARMS\_VS\_ERMS\_DN | 0.001563 | -0.07771 | 0.031247 | 0.975167 | 0.992795 | -5.84813 |
| REACTOME\_ALPHA\_PROTEIN\_KINASE\_1\_SIGNALING\_PATHWAY | 0.002414 | 0.002303 | 0.030879 | 0.975459 | 0.992934 | -5.84814 |
| REACTOME\_CD209\_DC\_SIGN\_SIGNALING | 0.002295 | -0.08099 | 0.030512 | 0.975751 | 0.993072 | -5.84815 |
| NIKOLSKY\_BREAST\_CANCER\_16P13\_AMPLICON | 0.001122 | -0.0667 | 0.02969 | 0.976404 | 0.993171 | -5.84817 |
| REACTOME\_FASL\_CD95L\_SIGNALING | -0.00264 | 0.039962 | -0.02945 | 0.976597 | 0.993171 | -5.84818 |
| CHIARETTI\_T\_ALL\_RELAPSE\_PROGNOSIS | 0.002341 | -0.0636 | 0.029418 | 0.97662 | 0.993171 | -5.84818 |
| MARTINEZ\_RESPONSE\_TO\_TRABECTEDIN\_UP | 0.002065 | -0.03906 | 0.029328 | 0.976692 | 0.993171 | -5.84818 |
| ABRAHAM\_ALPC\_VS\_MULTIPLE\_MYELOMA\_DN | -0.00202 | -0.05343 | -0.02905 | 0.976911 | 0.993171 | -5.84819 |
| PID\_ILK\_PATHWAY | -0.00207 | -0.03896 | -0.02889 | 0.977037 | 0.993171 | -5.84819 |
| KYNG\_RESPONSE\_TO\_H2O2 | -0.00145 | -0.20879 | -0.02851 | 0.977339 | 0.993171 | -5.8482 |
| SCHEIDEREIT\_IKK\_TARGETS | -0.00195 | -0.05471 | -0.02844 | 0.977394 | 0.993171 | -5.8482 |
| BROWNE\_HCMV\_INFECTION\_12HR\_DN | -0.00143 | -0.05064 | -0.02824 | 0.977553 | 0.993171 | -5.84821 |
| KORKOLA\_EMBRYONIC\_CARCINOMA\_VS\_SEMINOMA\_UP | 0.001335 | -0.00329 | 0.028143 | 0.977633 | 0.993171 | -5.84821 |
| ABDULRAHMAN\_KIDNEY\_CANCER\_VHL\_DN | 0.002151 | 0.00561 | 0.027863 | 0.977855 | 0.993171 | -5.84822 |
| MASSARWEH\_TAMOXIFEN\_RESISTANCE\_DN | 0.000782 | -0.07608 | 0.027581 | 0.97808 | 0.993171 | -5.84823 |
| SEKI\_INFLAMMATORY\_RESPONSE\_LPS\_DN | 0.001331 | -0.08569 | 0.027484 | 0.978157 | 0.993171 | -5.84823 |
| KEGG\_OTHER\_GLYCAN\_DEGRADATION | -0.00165 | -0.34383 | -0.02743 | 0.9782 | 0.993171 | -5.84823 |
| REACTOME\_STAT5\_ACTIVATION | 0.002645 | 0.019413 | 0.027257 | 0.978337 | 0.993171 | -5.84824 |
| KESHELAVA\_MULTIPLE\_DRUG\_RESISTANCE | -0.00113 | -0.18621 | -0.02725 | 0.978345 | 0.993171 | -5.84824 |
| REACTOME\_SIGNALING\_BY\_NUCLEAR\_RECEPTORS | -0.00119 | -0.08131 | -0.02673 | 0.978753 | 0.993193 | -5.84825 |
| KATSANOU\_ELAVL1\_TARGETS\_UP | -0.00113 | -0.07595 | -0.02666 | 0.978811 | 0.993193 | -5.84825 |
| KEGG\_ASTHMA | 0.000509 | -0.72554 | 0.02663 | 0.978836 | 0.993193 | -5.84825 |
| SHEDDEN\_LUNG\_CANCER\_GOOD\_SURVIVAL\_A4 | -0.00094 | -0.03624 | -0.02623 | 0.979154 | 0.993358 | -5.84826 |
| WP\_INTEGRINMEDIATED\_CELL\_ADHESION | -0.00122 | -0.06995 | -0.02599 | 0.979346 | 0.993395 | -5.84827 |
| WP\_S1P\_RECEPTOR\_SIGNAL\_TRANSDUCTION | -0.00121 | -0.0776 | -0.02535 | 0.97985 | 0.993525 | -5.84828 |
| OKAWA\_NEUROBLASTOMA\_1P36\_31\_DELETION | -0.00148 | 0.017789 | -0.02531 | 0.979882 | 0.993525 | -5.84828 |
| AZARE\_NEOPLASTIC\_TRANSFORMATION\_BY\_STAT3\_UP | -0.00142 | -0.05794 | -0.02498 | 0.980147 | 0.993525 | -5.84829 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_8 | 0.002091 | 0.000956 | 0.0246 | 0.980448 | 0.993525 | -5.8483 |
| MARKS\_HDAC\_TARGETS\_DN | -0.00147 | -0.29566 | -0.02459 | 0.980455 | 0.993525 | -5.8483 |
| WP\_HOSTPATHOGEN\_INTERACTION\_OF\_HUMAN\_CORONAVIRUSES\_INTERFERON\_INDUCTION | 0.00195 | -0.02729 | 0.024536 | 0.9805 | 0.993525 | -5.8483 |
| REACTOME\_VITAMINS | -0.00182 | 0.016677 | -0.02427 | 0.980713 | 0.993525 | -5.84831 |
| KOINUMA\_TARGETS\_OF\_SMAD2\_OR\_SMAD3 | -0.00107 | -0.11489 | -0.02425 | 0.980724 | 0.993525 | -5.84831 |
| WP\_NAD\_METABOLISM | 0.001249 | -0.07344 | 0.023924 | 0.980985 | 0.993598 | -5.84831 |
| MAGRANGEAS\_MULTIPLE\_MYELOMA\_IGG\_VS\_IGA\_UP | 0.001687 | -0.00081 | 0.02377 | 0.981108 | 0.993598 | -5.84832 |
| REACTOME\_CARDIAC\_CONDUCTION | 0.001198 | -0.01531 | 0.023469 | 0.981347 | 0.993682 | -5.84833 |
| REACTOME\_RUNX3\_REGULATES\_BCL2L11\_BIM\_TRANSCRIPTION | 0.002238 | -0.01153 | 0.023227 | 0.981539 | 0.993719 | -5.84833 |
| WP\_GLYCEROPHOSPHOLIPID\_BIOSYNTHETIC\_PATHWAY | 0.001661 | -0.01247 | 0.022639 | 0.982007 | 0.993987 | -5.84834 |
| WP\_VEGFAVEGFR2\_SIGNALING\_PATHWAY | -0.00118 | -0.07543 | -0.02225 | 0.982317 | 0.993987 | -5.84835 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_0 | 0.001235 | -0.10789 | 0.022112 | 0.982425 | 0.993987 | -5.84835 |
| REACTOME\_HIGHLY\_SODIUM\_PERMEABLE\_POSTSYNAPTIC\_ACETYLCHOLINE\_NICOTINIC\_RECEPTORS | -0.00221 | 0.028342 | -0.02189 | 0.9826 | 0.993987 | -5.84836 |
| REACTOME\_SIGNALING\_BY\_FLT3\_FUSION\_PROTEINS | -0.00155 | -0.0417 | -0.02171 | 0.982748 | 0.993987 | -5.84836 |
| VALK\_AML\_CLUSTER\_10 | -0.001 | -0.13696 | -0.02158 | 0.982849 | 0.993987 | -5.84836 |
| BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_DN | 0.001114 | -0.27026 | 0.021199 | 0.983151 | 0.993987 | -5.84837 |
| SASSON\_RESPONSE\_TO\_FORSKOLIN\_DN | 0.001434 | -0.037 | 0.020988 | 0.983318 | 0.993987 | -5.84838 |
| FRIDMAN\_IMMORTALIZATION\_DN | 0.001443 | -0.09215 | 0.020948 | 0.983351 | 0.993987 | -5.84838 |
| REACTOME\_BIOSYNTHESIS\_OF\_THE\_N\_GLYCAN\_PRECURSOR\_DOLICHOL\_LIPID\_LINKED\_OLIGOSACCHARIDE\_LLO\_AND\_TRANSFER\_TO\_A\_NASCENT\_PROTEIN | 0.000998 | -0.08364 | 0.020928 | 0.983367 | 0.993987 | -5.84838 |
| BIOCARTA\_CTCF\_PATHWAY | -0.00149 | -0.04946 | -0.02018 | 0.983962 | 0.994431 | -5.84839 |
| REACTOME\_ACTIVATION\_OF\_RAC1 | 0.001072 | 0.002845 | 0.019117 | 0.984806 | 0.995126 | -5.84841 |
| WP\_NONSMALL\_CELL\_LUNG\_CANCER | -0.00085 | -0.09618 | -0.01851 | 0.985286 | 0.995338 | -5.84842 |
| DAVICIONI\_TARGETS\_OF\_PAX\_FOXO1\_FUSIONS\_DN | -0.00068 | -0.057 | -0.01846 | 0.985328 | 0.995338 | -5.84842 |
| WIERENGA\_STAT5A\_TARGETS\_DN | 0.000699 | -0.16463 | 0.017216 | 0.986316 | 0.995876 | -5.84844 |
| REACTOME\_ABACAVIR\_METABOLISM | -0.00163 | -0.00416 | -0.01719 | 0.986337 | 0.995876 | -5.84844 |
| REACTOME\_SHC\_MEDIATED\_CASCADE\_FGFR4 | -0.00101 | -0.04285 | -0.0169 | 0.986569 | 0.995876 | -5.84845 |
| REACTOME\_ACYL\_CHAIN\_REMODELING\_OF\_CL | -0.00149 | -0.02805 | -0.01686 | 0.986601 | 0.995876 | -5.84845 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_12 | -0.00122 | -0.15491 | -0.01681 | 0.986643 | 0.995876 | -5.84845 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_2 | -0.00159 | -0.00179 | -0.01572 | 0.987509 | 0.996542 | -5.84847 |
| BIOCARTA\_CLASSIC\_PATHWAY | -0.00059 | -0.51085 | -0.01558 | 0.987617 | 0.996542 | -5.84847 |
| REACTOME\_SUMOYLATION\_OF\_IMMUNE\_RESPONSE\_PROTEINS | 0.001116 | -0.00053 | 0.015217 | 0.987905 | 0.996675 | -5.84847 |
| BOWIE\_RESPONSE\_TO\_EXTRACELLULAR\_MATRIX | -0.00073 | -0.45695 | -0.01481 | 0.988228 | 0.996843 | -5.84848 |
| LOPEZ\_MESOTHELIOMA\_SURVIVAL\_DN | 0.001028 | -0.00139 | 0.013844 | 0.988997 | 0.99746 | -5.84849 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_12HR\_UP | 0.000695 | -0.04977 | 0.013183 | 0.989521 | 0.9976 | -5.8485 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_F\_UP | 0.000719 | -0.0562 | 0.013101 | 0.989587 | 0.9976 | -5.8485 |
| GRAESSMANN\_RESPONSE\_TO\_MC\_AND\_DOXORUBICIN\_UP | 0.00043 | -0.10711 | 0.013066 | 0.989615 | 0.9976 | -5.8485 |
| JIANG\_AGING\_CEREBRAL\_CORTEX\_DN | -0.00082 | -0.03849 | -0.0125 | 0.990068 | 0.9976 | -5.84851 |
| MULLIGHAN\_MLL\_SIGNATURE\_1\_DN | -0.00037 | -0.24517 | -0.01238 | 0.990162 | 0.9976 | -5.84851 |
| MIKKELSEN\_ES\_ICP\_WITH\_H3K4ME3 | -0.00022 | -0.17117 | -0.01231 | 0.990215 | 0.9976 | -5.84851 |
| PID\_ECADHERIN\_KERATINOCYTE\_PATHWAY | 0.000532 | -0.04784 | 0.011976 | 0.990481 | 0.9976 | -5.84851 |
| REACTOME\_PI\_3K\_CASCADE\_FGFR1 | 0.000766 | 0.015319 | 0.011942 | 0.990508 | 0.9976 | -5.84852 |
| REACTOME\_DDX58\_IFIH1\_MEDIATED\_INDUCTION\_OF\_INTERFERON\_ALPHA\_BETA | 0.000519 | -0.08859 | 0.011394 | 0.990944 | 0.9976 | -5.84852 |
| ZHENG\_FOXP3\_TARGETS\_UP | -0.00075 | -0.00995 | -0.01127 | 0.991043 | 0.9976 | -5.84852 |
| WP\_INTERFERON\_TYPE\_I\_SIGNALING\_PATHWAYS | 0.000753 | -0.03431 | 0.011046 | 0.99122 | 0.9976 | -5.84852 |
| REACTOME\_PTK6\_REGULATES\_PROTEINS\_INVOLVED\_IN\_RNA\_PROCESSING | -0.00081 | 0.010548 | -0.01102 | 0.99124 | 0.9976 | -5.84853 |
| WP\_INTERLEUKIN1\_IL1\_STRUCTURAL\_PATHWAY | -0.00065 | -0.04746 | -0.011 | 0.991255 | 0.9976 | -5.84853 |
| BIOCARTA\_MYOSIN\_PATHWAY | -0.0008 | 0.007611 | -0.01071 | 0.991485 | 0.9976 | -5.84853 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_29 | -0.00071 | 0.00594 | -0.01057 | 0.991598 | 0.9976 | -5.84853 |
| REACTOME\_PRE\_NOTCH\_EXPRESSION\_AND\_PROCESSING | -0.00047 | -0.10602 | -0.01051 | 0.991643 | 0.9976 | -5.84853 |
| BIOCARTA\_SPRY\_PATHWAY | 0.000703 | -0.053 | 0.010059 | 0.992004 | 0.997805 | -5.84853 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G56\_DN | 0.000599 | -0.27499 | 0.009674 | 0.992311 | 0.997864 | -5.84854 |
| MORI\_PRE\_BI\_LYMPHOCYTE\_DN | 0.000647 | -0.05256 | 0.009592 | 0.992376 | 0.997864 | -5.84854 |
| IBRAHIM\_NRF1\_DOWN | -0.00033 | -0.10636 | -0.00909 | 0.992772 | 0.997885 | -5.84854 |
| REACTOME\_SPRY\_REGULATION\_OF\_FGF\_SIGNALING | 0.000874 | 0.02008 | 0.008967 | 0.992873 | 0.997885 | -5.84854 |
| BECKER\_TAMOXIFEN\_RESISTANCE\_DN | 0.000368 | -0.18972 | 0.008555 | 0.9932 | 0.997885 | -5.84855 |
| RUAN\_RESPONSE\_TO\_TNF\_UP | 0.000316 | -0.62832 | 0.008315 | 0.993391 | 0.997885 | -5.84855 |
| HOSHIDA\_LIVER\_CANCER\_LATE\_RECURRENCE\_UP | 0.000379 | -0.23753 | 0.008299 | 0.993403 | 0.997885 | -5.84855 |
| NEWMAN\_ERCC6\_TARGETS\_DN | 0.000456 | -0.05229 | 0.008102 | 0.99356 | 0.997885 | -5.84855 |
| PID\_EPHA2\_FWD\_PATHWAY | 0.000539 | -0.05031 | 0.008071 | 0.993585 | 0.997885 | -5.84855 |
| FERRANDO\_T\_ALL\_WITH\_MLL\_ENL\_FUSION\_DN | 0.000524 | -0.09505 | 0.007787 | 0.993811 | 0.997885 | -5.84855 |
| HOWLIN\_CITED1\_TARGETS\_2\_UP | 0.00044 | -0.23886 | 0.007721 | 0.993863 | 0.997885 | -5.84855 |
| REACTOME\_SIGNALING\_BY\_ALK\_IN\_CANCER | 0.000532 | -0.0202 | 0.007504 | 0.994036 | 0.997885 | -5.84856 |
| HWANG\_PROSTATE\_CANCER\_MARKERS | 0.000463 | -0.1223 | 0.007395 | 0.994122 | 0.997885 | -5.84856 |
| COWLING\_MYCN\_TARGETS | 0.000276 | -0.27386 | 0.006728 | 0.994652 | 0.998117 | -5.84856 |
| CROONQUIST\_NRAS\_SIGNALING\_UP | 0.00039 | -0.15698 | 0.00671 | 0.994667 | 0.998117 | -5.84856 |
| KYNG\_WERNER\_SYNDROM\_AND\_NORMAL\_AGING\_UP | 0.000306 | -0.04378 | 0.006257 | 0.995027 | 0.998175 | -5.84856 |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_METHYLATION | -0.00039 | -0.17555 | -0.00615 | 0.995115 | 0.998175 | -5.84856 |
| KYNG\_DNA\_DAMAGE\_UP | 0.000238 | -0.07632 | 0.00586 | 0.995342 | 0.998175 | -5.84857 |
| KUMAR\_TARGETS\_OF\_MLL\_AF9\_FUSION | 0.000201 | -0.14873 | 0.005757 | 0.995424 | 0.998175 | -5.84857 |
| HAEGERSTRAND\_RESPONSE\_TO\_IMATINIB | 0.000565 | -0.00042 | 0.005558 | 0.995583 | 0.998175 | -5.84857 |
| MYLLYKANGAS\_AMPLIFICATION\_HOT\_SPOT\_24 | -0.00035 | -0.00849 | -0.00528 | 0.995801 | 0.998175 | -5.84857 |
| WP\_MIRNA\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE | 0.000224 | -0.00977 | 0.005256 | 0.995822 | 0.998175 | -5.84857 |
| DER\_IFN\_BETA\_RESPONSE\_DN | 0.000315 | -0.18033 | 0.005006 | 0.996021 | 0.998193 | -5.84857 |
| GRAESSMANN\_APOPTOSIS\_BY\_DOXORUBICIN\_UP | 0.000167 | -0.12113 | 0.004839 | 0.996154 | 0.998193 | -5.84857 |
| REACTOME\_NUCLEOTIDE\_BIOSYNTHESIS | 0.000327 | -0.08992 | 0.004399 | 0.996503 | 0.998253 | -5.84857 |
| PID\_ARF6\_TRAFFICKING\_PATHWAY | -0.00026 | -0.04129 | -0.00437 | 0.996527 | 0.998253 | -5.84857 |
| WP\_TRANSSULFURATION\_AND\_ONECARBON\_METABOLISM | 0.000258 | -0.0427 | 0.004021 | 0.996804 | 0.998373 | -5.84857 |
| ACEVEDO\_LIVER\_CANCER\_DN | 0.000171 | -0.07925 | 0.003507 | 0.997213 | 0.998625 | -5.84858 |
| LIAO\_METASTASIS | 7.55E-05 | -0.11466 | 0.002481 | 0.998028 | 0.999074 | -5.84858 |
| BIOCARTA\_HIF\_PATHWAY | -0.00019 | -0.08358 | -0.00242 | 0.998078 | 0.999074 | -5.84858 |
| REACTOME\_DISEASES\_ASSOCIATED\_WITH\_GLYCOSAMINOGLYCAN\_METABOLISM | 0.000157 | 0.005868 | 0.002349 | 0.998133 | 0.999074 | -5.84858 |
| REACTOME\_SIGNALING\_BY\_EGFR\_IN\_CANCER | 0.000105 | -0.03805 | 0.001869 | 0.998514 | 0.999177 | -5.84858 |
| CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_UP | 0.00012 | -0.02598 | 0.001825 | 0.998549 | 0.999177 | -5.84858 |
| JIANG\_AGING\_HYPOTHALAMUS\_DN | ####### | -0.02345 | -0.00098 | 0.999221 | 0.99962 | -5.84858 |
| REACTOME\_LOSS\_OF\_FUNCTION\_OF\_SMAD2\_3\_IN\_CANCER | 7.12E-05 | -0.01556 | 0.000834 | 0.999337 | 0.99962 | -5.84858 |
| WP\_MAPK\_PATHWAY\_IN\_CONGENITAL\_THYROID\_CANCER | 5.41E-05 | -0.00156 | 0.000676 | 0.999463 | 0.99962 | -5.84858 |
| RADAEVA\_RESPONSE\_TO\_IFNA1\_UP | ####### | -0.37455 | ####### | 0.999965 | 0.999965 | -5.84858 |

**Supplementary Table 5. The results of GSEA enrichment analysis of the differential expression genes from the high and low PRGs group patients.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **setSize** | **enrichmentScore** | **NES** | **pvalue** | **p.adjust** | **qvalue** | **rank** | **leading\_edge** | **core\_enrichment** |
| MCLACHLAN\_DENTAL\_CARIES\_UP | MCLACHLAN\_DENTAL\_CARIES\_UP | 233 | 0.72136 | 3.562659 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2535 | tags=55%, list=14%, signal=48% | SPP1/IL1B/APOE/HLA-DRB1/CXCL8/C5AR1/ICAM1/UCP2/APOC1/CAPG/CCL2/NCF2/HLA-DQB1/PLAUR/CD74/HLA-DRB4/ACP5/CCL18/NAMPT/SLC2A3/C1QB/MMP9/CCL8/CD4/LYZ/TNFRSF1B/HLA-DRA/IFI30/TREM1/PLAU/TNFAIP3/ITGB2/SOD2/MT1G/LAPTM5/ANPEP/CEBPD/TYMP/LSP1/C3/CCL3/CXCL1/RAC2/BCL3/RNASE1/IL6/HLA-DRB6/MMP1/HLA-DPA1/CORO1A/RGS2/IL1RN/CTSH/G0S2/HBB/LYN/HLA-DPB1/PLA2G7/ADM/SAT1/PIM2/MT2A/PLEK/CD79A/TRIB1/SCO2/GABBR1/SOCS3/SAMSN1/TYROBP/SELE/CSF2RB/POU2AF1/FCER1G/NCF4/CYBA/MNDA/IL10RA/SLPI/GPNMB/JCHAIN/LCP2/ADAMDEC1/CFB/CSF1R/TNFRSF21/MZB1/LCP1/CD14/HLA-DMB/HCK/SERPINA1/IER3/CXCL5/CD27/FCN1/CHI3L1/RPS4Y1/FPR1/SEL1L3/MAN2B1/FCGR2B/BCL2A1/SLAMF8/VCAM1/MCL1/HCLS1/F13A1/C3AR1/CD53/LY96/PTGER4/CD37/IRF8/CFD/TIMP1/CD48/BIRC3/MS4A6A/ACSL1/ORM1/IGFBP4/IL7R/KYNU/SERPINB2/CD84/NFIL3/CXCL9/CTSB |
| GAURNIER\_PSMD4\_TARGETS | GAURNIER\_PSMD4\_TARGETS | 71 | 0.752945 | 3.076701 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2028 | tags=56%, list=11%, signal=50% | HLA-DRB1/CXCL8/C5AR1/HLA-H/CCL2/HLA-DQB1/HLA-DRB4/CCL18/CCL8/HLA-DRA/HLA-DRB3/HLA-F/HLA-E/C3/CCL3/CXCL1/CXCL2/IL6/HLA-DPA1/HLA-DPB1/CCL20/HLA-B/HLA-A/HLA-DRB5/NFKB2/HLA-G/CXCL16/CCR7/RELB/CCL1/HLA-DMB/HLA-C/HLA-DOA/IL12B/CCR10/C3AR1/B2M/TNF/C2/IL17RA |
| ALTEMEIER\_RESPONSE\_TO\_LPS\_WITH\_MECHANICAL\_VENTILATION | ALTEMEIER\_RESPONSE\_TO\_LPS\_WITH\_MECHANICAL\_VENTILATION | 121 | 0.675896 | 3.073896 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2340 | tags=50%, list=13%, signal=44% | IL1B/CCL2/PLAUR/TNFAIP3/SOD2/ITGAM/SLC15A3/JUNB/SELL/CEBPD/GPR84/CCL3/GK/CXCL2/BCL3/IL4I1/IL6/IRF7/IL1RN/PFKFB3/PLA2G7/ADM/GEM/TNFAIP2/CCL20/PLEK/OPRPN/RAB20/MXD1/SOCS3/CSF2RB/FCER1G/RELB/ATF3/HPX/LCP2/SERPINE1/CD14/ST3GAL1/FPR2/ADAMTS4/MT1A/MAP3K8/FCGR1A/CH25H/CLEC4D/LST1/CSF2/BCL2A1/F13A1/OAS3/EBI3/TIMP1/CSF3R/TNFSF9/CMPK2/GBP2/CCL17/IL1A/MS4A6A/LILRB5 |
| GALINDO\_IMMUNE\_RESPONSE\_TO\_ENTEROTOXIN | GALINDO\_IMMUNE\_RESPONSE\_TO\_ENTEROTOXIN | 75 | 0.741086 | 3.070396 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1988 | tags=57%, list=11%, signal=51% | SPP1/IL1B/PLAUR/CD83/GADD45B/FOSL1/DUSP2/PHLDA1/BHLHE40/TNFAIP3/PKM/SQSTM1/SCD/JUNB/PIM1/CCL3/RAC2/SLC11A1/BCL3/IL1RN/TNFAIP2/IL18RAP/CEBPB/VEGFA/SOCS3/NFKB2/CSF2RB/PTPRE/BCL6B/ITGA5/SRPRA/RHOB/CD14/ERRFI1/IER3/CSF3/TAPBP/TNIP1/DUSP1/TNF/NOCT/UBC/TNFSF9 |
| WIELAND\_UP\_BY\_HBV\_INFECTION | WIELAND\_UP\_BY\_HBV\_INFECTION | 95 | 0.691075 | 2.981986 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2048 | tags=46%, list=11%, signal=41% | HLA-DRB1/UCP2/HLA-DQB1/CD74/CD83/C1QB/LYZ/HLA-DRA/IFI30/SOD2/HLA-F/HLA-E/LAPTM5/COTL1/RAC2/HLA-DPA1/HLA-DPB1/VSIG4/HLA-B/RNASET2/RAB20/HLA-A/GABBR1/GZMK/TYROBP/FCER1G/LPXN/IL10RA/GPNMB/THEMIS2/IGSF6/HLA-DMB/GBP1/FCGR1A/TAPBP/PPT1/S100A10/C3AR1/LAP3/B2M/CD53/GM2A/CD48/GBP2 |
| BASSO\_CD40\_SIGNALING\_UP | BASSO\_CD40\_SIGNALING\_UP | 100 | 0.682145 | 2.962326 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1791 | tags=45%, list=10%, signal=41% | IL1B/HLA-DRB1/ICAM1/CAPG/NCF2/HLA-DQB1/NCKAP1L/CD74/HLA-DRB4/CD83/GADD45B/SIK1/DUSP2/ADAM8/IFI30/RGS1/TNFAIP3/HLA-F/LAPTM5/JUNB/CCL3/RAC2/LYN/HLA-DPB1/TNFAIP2/IRF5/PLEK/SH2B3/NFKB2/TRIP10/PTPRE/CCR7/KCNN4/IER3/NFKBIE/MAP3K8/TMSB4X/IRF9/BCL2A1/GPR183/VOPP1/BATF/ELL2/TNF/SLAMF1 |
| NAGASHIMA\_NRG1\_SIGNALING\_UP | NAGASHIMA\_NRG1\_SIGNALING\_UP | 168 | 0.613922 | 2.907603 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2880 | tags=46%, list=16%, signal=39% | PLAUR/GADD45B/FOSL1/SIK1/DUSP2/DUSP5/BHLHE40/FOSB/HBEGF/GAL/JUNB/TNFRSF12A/SPHK1/EGR3/LIF/TUBB2A/AVPI1/RGS2/SPATA2L/PFKFB3/ADM/GEM/NR4A2/MYC/ARC/TNFRSF11B/KDM6B/CEBPB/PLEKHO2/SPRR1B/TRIB1/VEGFA/CGA/SGK1/JMJD6/SLCO4A1/ATF3/CLCF1/ZNF331/PER1/IER5/TNFRSF21/MAP2K3/SOCS1/FOS/IER3/GDF15/EPHA2/TNFRSF10B/MAP3K8/EPPK1/HIC2/CSNK1D/ZYX/MCL1/DUSP1/EIF5/KLF2/PHLDA2/SERPINB8/C3orf52/NPC1/DUSP10/DST/EGR1/F2RL1/AREG/RARA/EZR/NFIL3/IER2/KLF10/LAMA3/DUSP4/PPRC1/YRDC/LAMC2/DDIT3 |
| REACTOME\_INTERLEUKIN\_10\_SIGNALING | REACTOME\_INTERLEUKIN\_10\_SIGNALING | 46 | 0.762713 | 2.882096 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2327 | tags=57%, list=13%, signal=49% | IL1B/CXCL8/ICAM1/CCL3L3/CCL2/TNFRSF1B/CCL3L1/CCL3/LIF/CXCL1/CXCL2/IL6/IL1RN/CCL20/PTAFR/IL10RA/FPR1/CSF1/CSF2/CSF3/IL12B/CD80/TNF/TIMP1/IL1A/IL18 |
| BLANCO\_MELO\_COVID19\_BRONCHIAL\_EPITHELIAL\_CELLS\_SARS\_COV\_2\_INFECTION\_UP | BLANCO\_MELO\_COVID19\_BRONCHIAL\_EPITHELIAL\_CELLS\_SARS\_COV\_2\_INFECTION\_UP | 139 | 0.62247 | 2.881295 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2377 | tags=41%, list=13%, signal=36% | IL1B/CXCL8/ICAM1/PLAUR/ADAM8/ZC3H12A/STC1/TNFAIP3/SOD2/HBEGF/C3/LIF/S100P/CXCL1/CXCL2/BCL3/IL6/MMP1/IRF7/CORO1A/G0S2/TNFAIP2/CCL20/IL32/MMP13/C15orf48/SERPINB1/SOCS3/NFKB2/PRSS3/RELB/TRIM47/LGALS9/SPRR2D/TUBA1C/CFB/IER3/CXCL5/MAP3K8/PLSCR1/OAS1/XDH/IRF9/CSF2/CSF3/TUBB3/OAS3/TNIP1/TNF/KRT24/BIRC3/GBP5/NRCAM/TRIML2/S100A12/EPSTI1/IL7R |
| NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA1\_UP | NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA1\_UP | 74 | 0.696073 | 2.877033 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2715 | tags=57%, list=15%, signal=48% | CCL2/HLA-DQB1/NCKAP1L/HLA-DRB4/C1QB/LYZ/HLA-DRA/IFI30/ITGAM/SLC15A3/C3/ECM1/PLTP/HLA-DPA1/ITGBL1/VSIG4/GABBR1/GZMK/NCF4/GPNMB/CFB/SERPINE1/CSF1R/CD14/FAP/SERPINA1/FCGR2B/FCGR1A/FCGR3A/SLAMF8/F13A1/AIF1/LY96/IL4R/TIMP1/EFEMP1/HSPA6/THBS2/KYNU/CXCL9/GZMA/MRC1 |
| HESS\_TARGETS\_OF\_HOXA9\_AND\_MEIS1\_DN | HESS\_TARGETS\_OF\_HOXA9\_AND\_MEIS1\_DN | 81 | 0.679607 | 2.869383 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2964 | tags=49%, list=17%, signal=41% | IL1B/PHLDA1/MMP9/LIPA/LYZ/LSP1/NDRG1/CA4/SLC11A1/BTG2/PLEK/PSAP/OPRPN/EGR2/CSF2RB/TGFBI/CD300LF/KLF4/LPL/CSF1R/GPR137B/HCK/FOS/FPR2/FPR1/PLSCR1/FCGR1A/CHIA/MCL1/C3AR1/AQP9/DUSP1/DAB2/EGR1/MS4A6A/IL18/MRC1/TLR2/MYADM/SIRPA |
| REACTOME\_INTERFERON\_GAMMA\_SIGNALING | REACTOME\_INTERFERON\_GAMMA\_SIGNALING | 90 | 0.66673 | 2.862641 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2155 | tags=46%, list=12%, signal=40% | HLA-DRB1/ICAM1/HLA-H/HLA-DQB1/HLA-DRB4/HLA-DRA/IFI30/HLA-DRB3/HLA-F/HLA-E/HLA-DPA1/IRF7/HLA-DPB1/MT2A/IRF5/PTPN6/HLA-B/PTAFR/HLA-A/SOCS3/HLA-DRB5/HLA-G/IRF1/SOCS1/OASL/HLA-C/TRIM14/TRIM48/GBP1/TRIM21/OAS1/FCGR1A/IRF9/IRF2/VCAM1/OAS3/B2M/IRF8/IRF3/GBP2/GBP5 |
| BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_UP | BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_UP | 269 | 0.567446 | 2.856592 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2377 | tags=37%, list=13%, signal=33% | IL1B/CXCL8/ICAM1/CCL2/NCF2/PLAUR/CRTAC1/KRT17/HK2/MMP9/TNFRSF1B/ZC3H12A/STC1/PLAU/TNFAIP3/SOD2/HBEGF/ANPEP/C3/CCL3/GK/CXCL1/CXCL2/IL6/MMP1/IRF7/RGS2/SAMD4A/EMP1/HCAR2/STX11/SH2B3/CDH3/C15orf48/PTAFR/MXD1/GPAT3/SOCS3/RAET1L/TNC/SPOCD1/PLEKHA4/LACC1/IRF1/PTPRE/CD68/ATF3/KLF4/ITGA5/CFB/OASL/NRIP3/THEMIS2/LCP1/NIPAL1/ST3GAL1/MX2/LAMP3/GFPT2/CDK5R2/ZBTB32/TNIP3/GBP1/CD274/CSF1/OAS1/XDH/CH25H/SBSN/SPOCK1/CSF3/BCL2A1/VDR/MYH16/LY6K/HIVEP3/OAS3/CHST11/LAP3/TNFSF13B/MAP2/B2M/TNF/DTX3L/IL4R/PTGER4/SERPINB8/PTPRH/CDCP1/CMPK2/BIRC3/GBP2/HSPA6/GALNT12/GBP5/IL1A/EGR1/TRAF1/ACHE/IL7R |
| LIAN\_LIPA\_TARGETS\_6M | LIAN\_LIPA\_TARGETS\_6M | 78 | 0.674554 | 2.834893 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2567 | tags=49%, list=14%, signal=42% | MARCO/ACP5/MMP12/HMOX1/C1QC/ADAM8/C1QB/RGS1/RAB7B/TREM2/SLC15A3/SLC11A1/PLA2G7/TNFAIP2/KIF1A/MMP13/FCER1G/CD68/GPNMB/MMP19/LIPF/IGSF6/MAFB/LY9/GDF15/FCGR2B/SEMA7A/GALC/CLEC4D/FCGR3A/C3AR1/ATP6V0D2/DST/MS4A6A/LILRB5/CD84/CTSB/SLC6A2 |
| PHONG\_TNF\_TARGETS\_UP | PHONG\_TNF\_TARGETS\_UP | 63 | 0.709159 | 2.824883 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2222 | tags=51%, list=12%, signal=45% | CXCL8/ICAM1/CD83/DUSP5/BHLHE40/PLAU/TNFAIP3/JUNB/CEBPD/LIF/CXCL1/CXCL2/IL6/ZFP36L2/GEM/TNFAIP2/CCL20/EGR2/NFKB2/IRF1/ATF3/IER5/FOS/IER3/EPHA2/TNFRSF10B/CSF2/MCL1/DUSP1/BIRC3/DUSP10/EGR1 |
| WP\_MICROGLIA\_PATHOGEN\_PHAGOCYTOSIS\_PATHWAY | WP\_MICROGLIA\_PATHOGEN\_PHAGOCYTOSIS\_PATHWAY | 40 | 0.766572 | 2.810294 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1641 | tags=50%, list=9%, signal=46% | NCF2/NCKAP1L/C1QC/C1QB/TREM1/ITGB2/ITGAM/TREM2/RAC2/LYN/PTPN6/TYROBP/VAV1/FCER1G/NCF4/CYBA/HCK/SIGLEC7/FCGR1A/VAV2 |
| KEGG\_TYPE\_I\_DIABETES\_MELLITUS | KEGG\_TYPE\_I\_DIABETES\_MELLITUS | 42 | 0.745196 | 2.809517 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1877 | tags=50%, list=10%, signal=45% | IL1B/HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-F/HLA-E/HLA-DPA1/HLA-DPB1/HLA-B/HLA-A/HLA-DRB5/HLA-G/HLA-DMB/HLA-C/HLA-DOA/IL12B/CD80/TNF/GAD1 |
| NAGASHIMA\_EGF\_SIGNALING\_UP | NAGASHIMA\_EGF\_SIGNALING\_UP | 54 | 0.721945 | 2.807546 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2615 | tags=56%, list=15%, signal=48% | FOSL1/SIK1/DUSP2/DUSP5/BHLHE40/FOSB/HBEGF/JUNB/TNFRSF12A/EGR3/LIF/GEM/NR4A2/MYC/ARC/TNFRSF11B/KDM6B/PLEKHO2/TRIB1/ATF3/FOS/IER3/EPHA2/MCL1/DUSP1/EGR1/F2RL1/AREG/IER2/KLF10 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_A | LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_A | 61 | 0.705807 | 2.799879 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3392 | tags=64%, list=19%, signal=52% | IL1B/CXCL8/ICAM1/CCL2/CCL8/SLC7A5/SOD2/CCL3/CXCL1/CXCL2/IL6/IL1RN/PLA2G7/CCL20/PLEK/TNC/CCL1/SCARF1/GPR137B/NFKBIE/GBP1/RAB5A/CSF2/IL12B/TNF/PTGER4/ATF5/CD48/TNFSF9/IL7R/KYNU/P2RX4/SLC3A2/TLR2/CCL4/STAT4/TNFRSF4/CXCL11/NFE2L3 |
| SMIRNOV\_CIRCULATING\_ENDOTHELIOCYTES\_IN\_CANCER\_UP | SMIRNOV\_CIRCULATING\_ENDOTHELIOCYTES\_IN\_CANCER\_UP | 155 | 0.596739 | 2.797024 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2695 | tags=44%, list=15%, signal=38% | CXCL8/C5AR1/MARCO/NCF2/HMOX1/SLC2A3/BHLHE40/TNFRSF1B/SLC7A5/RGS1/PLAU/HBEGF/FBP1/CYP27A1/ANPEP/GNA15/SPHK1/TMBIM1/PLIN2/PFKFB3/ADM/CCL20/CTSL/RGS16/NOD2/CEBPB/RAB13/VEGFA/MPP1/CDKN1A/RRAGD/TGFBI/INSIG1/SLCO4A1/ABCG1/SGSH/THBD/CD14/PPARD/HCK/IER3/CHI3L1/FPR1/SMAD7/BCAT1/GLUL/ENG/PPBP/CD9/CXCR1/C3AR1/AQP9/HPSE/GM2A/TLR8/TIMP2/HSPA6/DAPK2/SLC16A6/EGR1/ACSL1/BLVRA/RARA/SERPINB2/CTSB/ARHGAP8/DSE/DUSP4 |
| WP\_TYROBP\_CAUSAL\_NETWORK\_IN\_MICROGLIA | WP\_TYROBP\_CAUSAL\_NETWORK\_IN\_MICROGLIA | 59 | 0.708493 | 2.79523 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1885 | tags=47%, list=11%, signal=43% | SPP1/CAPG/NCF2/NCKAP1L/C1QC/ITGAX/CD4/TNFRSF1B/RGS1/ITGB2/ITGAM/C3/ZFP36L2/PLEK/NRROS/SH2B3/SAMSN1/TYROBP/CXCL16/IL10RA/GAL3ST4/IGSF6/TCIRG1/RUNX3/SLC1A5/HCLS1/PPP1R18/CD37 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | 55 | 0.715183 | 2.791661 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 317 | tags=35%, list=2%, signal=34% | IL1B/APOE/CXCL8/APOC1/GADD45B/HBG1/CCL8/RGS1/RGCC/SOD2/CCL3/CXCL2/BCL3/TUBB2A/IL1RN/HBB/CCL20/NR4A2/TPSAB1 |
| KEGG\_GRAFT\_VERSUS\_HOST\_DISEASE | KEGG\_GRAFT\_VERSUS\_HOST\_DISEASE | 38 | 0.76174 | 2.789349 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1828 | tags=58%, list=10%, signal=52% | IL1B/HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-F/HLA-E/IL6/HLA-DPA1/HLA-DPB1/HLA-B/HLA-A/HLA-DRB5/HLA-G/KIR3DL2/HLA-DMB/HLA-C/HLA-DOA/CD80/TNF/KIR2DL1 |
| VERHAAK\_GLIOBLASTOMA\_MESENCHYMAL | VERHAAK\_GLIOBLASTOMA\_MESENCHYMAL | 208 | 0.572724 | 2.786901 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2815 | tags=43%, list=16%, signal=37% | C5AR1/UCP2/NCF2/PLAUR/CD4/TNFRSF1B/IFI30/SLC16A3/SIGLEC9/PLAU/PLA2G15/TNFAIP3/ITGB2/ITGAM/LAPTM5/BLVRB/TYMP/GNA15/CYTH4/TMBIM1/PLBD1/RAC2/SLC11A1/MAPK13/PLK3/STXBP2/ST14/SAT1/HK3/NOD2/PTPN6/SH2B3/CEBPB/SCPEP1/GRN/TGFBI/NCF4/FPR3/FXYD5/RELB/CLCF1/FOLR2/RHOG/COL1A2/LCP2/ITGA5/SERPINE1/THBD/THEMIS2/LCP1/MAFB/CD14/FURIN/COL5A1/TCIRG1/MYO1F/SIGLEC7/SERPINA1/MGAT1/CHI3L1/MAN2B1/FCGR2B/COL1A1/ENG/LAIR1/SLAMF8/VDR/TNFRSF11A/BATF/PROCR/LY96/IL4R/PTGER4/TIMP1/CDCP1/DAB2/LILRB3/MCUB/ACSL1/KYNU/PDPN/CTSB/DSE/ALDH3B1/ANXA2/MFSD1/IQGAP1/FMNL1/TLR2 |
| DIRMEIER\_LMP1\_RESPONSE\_EARLY | DIRMEIER\_LMP1\_RESPONSE\_EARLY | 61 | 0.700309 | 2.778071 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2288 | tags=56%, list=13%, signal=49% | ICAM1/CD83/GADD45B/DUSP2/DUSP5/ZC3H12A/TNFAIP3/JUNB/EGR3/CCL3/BTG2/IRF7/MYC/KDM6B/EGR2/EIF1/NFKB2/INSIG1/RPS16/FTH1/LCP1/NFKBIE/MAN2B1/ACTB/BCL2A1/GPR183/MCL1/NPPB/TNF/SLAMF1/TNFSF9/BIRC3/EGR1/TRAF1 |
| POOLA\_INVASIVE\_BREAST\_CANCER\_UP | POOLA\_INVASIVE\_BREAST\_CANCER\_UP | 260 | 0.552577 | 2.770868 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1972 | tags=33%, list=11%, signal=30% | HLA-DRB1/APOC1/NCF2/PLAUR/CD74/CCL18/MMP12/ITGAX/CEMIP/MMP9/CCL8/LYZ/IFI30/SLC7A5/SLC16A3/ITGB2/LAPTM5/SELL/COTL1/CCL3/S100P/CST7/ECM1/HLA-DRB6/MMP1/PLA2G7/MMP11/PLEK/CD79A/RGS16/IL32/MMP13/GZMK/SAMSN1/TNC/CCL11/CSF2RB/IL2RG/SULF1/FCER1G/LPXN/MNDA/CCR7/FPR3/LGALS2/LGALS9/MMP19/LCP2/ADAMDEC1/STK17B/SERPINE1/THEMIS2/MAFB/ADCY7/HLA-DMB/CD19/FAP/GNLY/COL5A1/CD2/GDF15/ITK/LAMP3/CD27/GBP1/EPPK1/BCAT1/COL6A3/FCGR1A/CH25H/LST1/BCL2A1/FCGR3A/SLAMF8/GPR183/VCAM1/CEACAM5/HCLS1/AIF1/CHST11/RGS4/CD53/LY96/IRF8/CD48/SLC18A2 |
| FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_UP | FLECHNER\_BIOPSY\_KIDNEY\_TRANSPLANT\_REJECTED\_VS\_OK\_UP | 85 | 0.647796 | 2.748808 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2048 | tags=45%, list=11%, signal=40% | APOC1/C1QB/MMP9/TNFRSF1B/IFI30/ITGB2/HLA-F/LAPTM5/TYMP/RAC2/CORO1A/PIM2/VSIG4/AOAH/TYROBP/FCER1G/IL10RA/LGALS9/CD8A/LCP1/CD14/RHOH/CD2/CD27/FCN1/GLUL/COL6A3/FCGR1A/LST1/FCGR3A/HCLS1/AIF1/CD53/IL4R/CFD/UBC/CD48/GBP2 |
| KEGG\_ASTHMA | KEGG\_ASTHMA | 29 | 0.798927 | 2.732356 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 898 | tags=52%, list=5%, signal=49% | HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-DPA1/HLA-DPB1/HLA-DRB5/PRG2/CCL11/FCER1G/IL3/IL9/HLA-DMB/HLA-DOA |
| HINATA\_NFKB\_TARGETS\_KERATINOCYTE\_UP | HINATA\_NFKB\_TARGETS\_KERATINOCYTE\_UP | 83 | 0.642787 | 2.723364 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1735 | tags=39%, list=10%, signal=35% | IL1B/CXCL8/ICAM1/CD83/MMP9/KRT14/PLAU/TNFAIP3/SOD2/IL6/MMP1/IL1RN/ARHGDIA/TNFAIP2/CCL20/IL32/CDH3/SPRR1B/VEGFA/VIM/CDKN1A/TNC/IRF1/SERPINE1/MAP2K3/GABARAPL1/GBP1/CSF2/BCL2A1/CD9/TNIP1/TNF |
| BURTON\_ADIPOGENESIS\_PEAK\_AT\_2HR | BURTON\_ADIPOGENESIS\_PEAK\_AT\_2HR | 44 | 0.721908 | 2.718319 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 989 | tags=48%, list=6%, signal=45% | PHLDA1/HK2/FOSB/TNFRSF1B/JUNB/CEBPD/CXCL2/IL6/BTG2/SLC20A1/RGS2/ADM/NR4A2/MYC/KLF4/SERPINE1/RHOB/MAP2K3/ERRFI1/FOS/IER3 |
| WALLACE\_PROSTATE\_CANCER\_RACE\_UP | WALLACE\_PROSTATE\_CANCER\_RACE\_UP | 271 | 0.539629 | 2.713582 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1958 | tags=31%, list=11%, signal=28% | APOE/HLA-DRB1/C5AR1/UCP2/HLA-DQB1/NCKAP1L/CD83/DUSP2/C1QB/MMP9/CCL8/LYZ/HLA-DRA/SLC7A5/RGS1/ITGB2/HLA-F/HLA-E/LAPTM5/ANPEP/SELL/CEBPD/TYMP/COTL1/LSP1/RAC2/PLTP/RNASE1/CORO1A/HLA-DPB1/NR4A2/PIM2/PLEK/RGS16/VSIG4/HLA-B/PLEKHO2/GZMK/SAMSN1/SELE/CSF2RB/SERPINB9/IL2RG/POU2AF1/FCER1G/HLA-G/IRF1/IL10RA/SOX17/CCR7/CD207/FYN/MMP19/JCHAIN/LCP2/ADAMDEC1/STK17B/THBD/CD8A/SOCS1/THEMIS2/APOLD1/ADCY7/CD2/MX2/ITK/LAMP3/RUNX3/CD27/GBP1/POM121L9P/FCGR2B/PTPN7/IRF9/BCL2A1/SCGB1A1/GPR183/HCLS1/CD53/LY96/SLAMF1/CD37/IRF8/OLFML2A/CD48 |
| SANA\_TNF\_SIGNALING\_UP | SANA\_TNF\_SIGNALING\_UP | 82 | 0.64138 | 2.709835 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2171 | tags=40%, list=12%, signal=36% | CXCL8/ICAM1/CCL2/CCL8/TNFAIP3/SOD2/SLC15A3/HLA-E/CXCL2/TNFAIP2/CCL20/SAT1/IL32/LGALS3BP/HLA-B/HLA-A/CCL11/LGALS9/SERPINE1/RHOB/FTH1/HLA-C/MX2/GBP1/CSF1/OAS1/TAPBP/VCAM1/OAS3/TNIP1/CMPK2/BIRC3/ANO9 |
| REACTOME\_GENERATION\_OF\_SECOND\_MESSENGER\_MOLECULES | REACTOME\_GENERATION\_OF\_SECOND\_MESSENGER\_MOLECULES | 31 | 0.777098 | 2.707373 | 1.63E-10 | 6.65E-09 | 4.72E-09 | 1126 | tags=42%, list=6%, signal=39% | HLA-DRB1/HLA-DQB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DPA1/HLA-DPB1/WAS/HLA-DRB5/LCP2/ITK/CD3E |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_UP | HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_UP | 59 | 0.686162 | 2.707129 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1285 | tags=37%, list=7%, signal=35% | IL1B/CXCL8/PLAUR/HLA-DRB4/SOD2/HBEGF/CCL3/CXCL1/CXCL2/BTG2/G0S2/PFKFB3/ADM/NLRP3/TRIB1/RAB20/CDKN1A/ATF3/KLF4/RHOB/IER3/GLUL |
| REACTOME\_IMMUNOREGULATORY\_INTERACTIONS\_BETWEEN\_A\_LYMPHOID\_AND\_A\_NON\_LYMPHOID\_CELL | REACTOME\_IMMUNOREGULATORY\_INTERACTIONS\_BETWEEN\_A\_LYMPHOID\_AND\_A\_NON\_LYMPHOID\_CELL | 127 | 0.591588 | 2.704342 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2743 | tags=39%, list=15%, signal=34% | ICAM1/TREM1/SIGLEC9/ITGB2/TREM2/HLA-F/HLA-E/HCST/OSCAR/SELL/C3/HLA-B/ITGB7/PILRA/HLA-A/PVR/TYROBP/HLA-G/CD300LF/CD81/COL1A2/KIR3DL2/CD8A/HLA-C/CD19/SIGLEC7/SLAMF7/CD300C/CD3E/LILRA3/FCGR2B/FCGR1A/COL1A1/FCGR3A/LAIR1/COLEC12/CD300LB/VCAM1/B2M/CD1A/KIR2DL1/NECTIN2/LILRB3/CD300LG/LILRB5/CD247/TREML1/ULBP1/NCR1/CLEC4G |
| UZONYI\_RESPONSE\_TO\_LEUKOTRIENE\_AND\_THROMBIN | UZONYI\_RESPONSE\_TO\_LEUKOTRIENE\_AND\_THROMBIN | 35 | 0.756974 | 2.704126 | 1.11E-10 | 4.73E-09 | 3.36E-09 | 1805 | tags=54%, list=10%, signal=49% | CXCL8/SIK1/HBEGF/NDRG1/EGR3/CXCL2/RGS2/GEM/NR4A2/FOSL2/SELE/ATF3/KLF4/APOLD1/MAP3K8/MCL1/DUSP1/ELL2/KLF2 |
| ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_UP | ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_UP | 211 | 0.556227 | 2.703689 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1509 | tags=30%, list=8%, signal=28% | IL1B/CXCL8/ICAM1/PLAUR/CD83/ZC3H12A/PLAU/TNFAIP3/HBEGF/SQSTM1/OLR1/LIF/AMOTL2/CXCL1/CXCL2/BCL3/TUBB2A/IL4I1/BTG2/IL1RN/SAMD4A/G0S2/LYN/GPR132/TNFAIP2/CCL20/RNF19B/IL32/MMP13/CEBPB/C15orf48/PTAFR/MXD1/SERPINB1/SOCS3/NFKB2/CDKN1A/LACC1/SERPINB9/SGK1/IRF1/CXCL16/SPSB1/CYTH1/RELB/ATF3/PELI1/STARD5/MAP2K3/OASL/PPARD/ABTB2/NCOA7/NFKBIE/TNFRSF10B/NINJ1/TIAM2/TNFRSF10D/SEMA7A/IGFL1/IRF9/BCL2A1/OAF |
| KEGG\_ALLOGRAFT\_REJECTION | KEGG\_ALLOGRAFT\_REJECTION | 36 | 0.752523 | 2.695808 | 3.68E-10 | 1.45E-08 | 1.03E-08 | 1735 | tags=53%, list=10%, signal=48% | HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-F/HLA-E/HLA-DPA1/HLA-DPB1/HLA-B/HLA-A/HLA-DRB5/HLA-G/HLA-DMB/HLA-C/HLA-DOA/IL12B/CD80/TNF |
| CROMER\_TUMORIGENESIS\_UP | CROMER\_TUMORIGENESIS\_UP | 58 | 0.686252 | 2.692034 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 919 | tags=38%, list=5%, signal=36% | SPP1/IL1B/CXCL8/MMP12/KRT17/SLC2A3/MMP9/POSTN/PLAU/TNFAIP3/CCL3/CXCL1/IL6/MMP1/G0S2/MMP11/TNC/COL4A2/COL1A2/SERPINE1/OASL/FAP |
| VERHAAK\_AML\_WITH\_NPM1\_MUTATED\_UP | VERHAAK\_AML\_WITH\_NPM1\_MUTATED\_UP | 176 | 0.563366 | 2.688472 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1735 | tags=35%, list=10%, signal=32% | IL1B/C5AR1/PLAUR/HMOX1/NAMPT/C1QB/IFI30/TREM1/SLC16A3/TNFAIP3/SOD2/SLC15A3/FBP1/TYMP/CCL3/CXCL2/IL6/G0S2/CTSD/TNFAIP2/CCL20/SAT1/HK3/CTSL/PLEK/LGALS3BP/TRIB1/SCPEP1/PTAFR/SCO2/PILRA/NFKB2/LGALS2/CCL1/DMXL2/PELI1/CFB/LMNA/MAFB/CD14/HCK/TCIRG1/SERPINA1/IER3/GDF15/CD300C/FCN1/NINJ1/LILRA3/FPR1/EPB41L3/TMEM176A/PPBP/BCL2A1/FCGR3A/BASP1/CTSG/C3AR1/AQP9/IRX5/TNF |
| BROWN\_MYELOID\_CELL\_DEVELOPMENT\_UP | BROWN\_MYELOID\_CELL\_DEVELOPMENT\_UP | 155 | 0.571625 | 2.679307 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2361 | tags=37%, list=13%, signal=32% | IL1B/CAPG/PLAUR/ITGAX/ITGB2/ITGAM/TREM2/SLC15A3/OLR1/JUNB/ANPEP/CEBPD/C3/MCEMP1/IL4I1/CLEC5A/IL1RN/PLK3/SAT1/SLC31A2/PGD/OPRPN/SGMS2/MXD1/AOAH/GRN/TYROBP/TGFBI/GRINA/CD68/HCK/NOS1/LALBA/PLG/FPR2/FPR1/EDAR/GSN/FCGR1A/XDH/ATP6V1B2/CNDP2/BCL2A1/CCDC125/ZYX/MCL1/TECPR1/CD80/TNF/C2/RACK1/DAB2/NPC1/EGR1/G6PD/LILRB5/GP5 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_10D\_DN | TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_10D\_DN | 138 | 0.579739 | 2.674226 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2093 | tags=34%, list=12%, signal=30% | APOE/C5AR1/HS3ST2/ACP5/CCL18/MMP12/C1QC/C1QB/MMP9/RGCC/TREM2/SLC16A10/CCL3/S100P/CXCL1/CXCL2/CST7/RNASE1/MAPK13/MMP1/CLEC5A/PLA2G7/EMP1/ST14/TEX15/TGFBI/SGK1/FPR3/SLPI/GPNMB/OLFML2B/CXCL5/SGTB/CHI3L1/GLUL/NRP2/PPBP/SLC7A8/SLAMF8/SLCO2B1/ABHD12/CD9/F13A1/KLF2/DAB2/ATP6V0D2/RGL4 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_1 | PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_1 | 45 | 0.707743 | 2.671888 | 1.66E-10 | 6.75E-09 | 4.80E-09 | 1097 | tags=44%, list=6%, signal=42% | FOSL1/DUSP5/PHLDA1/RASD1/BHLHE40/CEMIP/HBEGF/GAL/EGR3/LIF/PLK3/GEM/TRIB1/MXD1/GOLT1A/PLEK2/DUSP6/TNFRSF21/ERRFI1/EPHA2 |
| KEGG\_HEMATOPOIETIC\_CELL\_LINEAGE | KEGG\_HEMATOPOIETIC\_CELL\_LINEAGE | 85 | 0.629505 | 2.671194 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3261 | tags=49%, list=18%, signal=41% | IL1B/HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/ITGAM/ANPEP/IL6/HLA-DRB5/IL3/ITGA5/EPOR/CSF1R/IL9R/CD8A/CD14/CD19/CD2/TFRC/CD3E/CSF1/FCGR1A/GP9/CSF2/CSF3/CD9/TNF/CD5/IL4R/CD1A/CD37/CSF3R/IL1A/GP5/IL7R/CD7/CD36/CD34/IL4/CD59/IL5 |
| PID\_FRA\_PATHWAY | PID\_FRA\_PATHWAY | 37 | 0.739764 | 2.671111 | 1.32E-10 | 5.50E-09 | 3.91E-09 | 788 | tags=41%, list=4%, signal=39% | CXCL8/CCL2/PLAUR/FOSL1/HMOX1/MMP9/PLAU/JUNB/LIF/IL6/MMP1/FOSL2/NFATC1/COL1A2/THBD |
| LENAOUR\_DENDRITIC\_CELL\_MATURATION\_DN | LENAOUR\_DENDRITIC\_CELL\_MATURATION\_DN | 126 | 0.584112 | 2.670935 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2423 | tags=39%, list=13%, signal=34% | IL1B/CXCL8/C5AR1/PLAUR/NAMPT/MMP9/LYZ/TNFRSF1B/SOD2/OLR1/FBP1/ANPEP/C3/GK/CXCL2/SLC11A1/BTG2/ZFP36L2/IRF7/CORO1A/EMP1/PTAFR/IL2RG/FCER1G/LGALS2/DUSP6/CSF1R/CD14/SERPINA1/IER3/CXCL5/FCN1/GLA/CHI3L1/NINJ1/PPIF/PLSCR1/BCAT1/LST1/PPBP/TLR1/C3AR1/TNF/CD37/TUBA4A/S100A12/KYNU/SLC1A3/DOK1 |
| REACTOME\_INTERLEUKIN\_4\_AND\_INTERLEUKIN\_13\_SIGNALING | REACTOME\_INTERLEUKIN\_4\_AND\_INTERLEUKIN\_13\_SIGNALING | 107 | 0.600678 | 2.666416 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2327 | tags=36%, list=13%, signal=32% | IL1B/CXCL8/ICAM1/CCL2/OSM/HMOX1/ITGAX/MMP9/TNFRSF1B/ITGB2/ITGAM/JUNB/CEBPD/PIM1/LIF/IL6/MMP1/MYC/VEGFA/SOCS3/VIM/CDKN1A/CCL11/IL2RG/COL1A2/SOCS1/FOS/HIF1A/IL12B/VCAM1/MCL1/F13A1/BATF/TNF/IL4R/TIMP1/IL1A/IL13RA2/IL18 |
| WIERENGA\_STAT5A\_TARGETS\_GROUP2 | WIERENGA\_STAT5A\_TARGETS\_GROUP2 | 53 | 0.686476 | 2.664605 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1805 | tags=45%, list=10%, signal=41% | SPP1/CXCL8/CCL2/CD83/GADD45B/BHLHE40/RGS1/PLAU/SQSTM1/OLR1/CCL3/BTG2/MAPK13/EMP1/SLC2A14/CCR7/FPR3/LAMP3/GABARAPL1/GALC/CSF2/PSAT1/CA2/KLF2 |
| KEGG\_VIRAL\_MYOCARDITIS | KEGG\_VIRAL\_MYOCARDITIS | 69 | 0.654913 | 2.655807 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1636 | tags=38%, list=9%, signal=34% | HLA-DRB1/ICAM1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/ITGB2/HLA-F/HLA-E/RAC2/HLA-DPA1/HLA-DPB1/HLA-B/HLA-A/HLA-DRB5/HLA-G/FYN/MYH1/HLA-DMB/HLA-C/HLA-DOA/MYH2/MYH6/ACTB/ABL2/CD80 |
| SEKI\_INFLAMMATORY\_RESPONSE\_LPS\_UP | SEKI\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 74 | 0.64128 | 2.650562 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2222 | tags=41%, list=12%, signal=36% | ICAM1/CCL2/GADD45B/FOSL1/ZC3H12A/TNFAIP3/SOD2/SLC15A3/EGR3/CCL3/LIF/CXCL1/TNFAIP2/STX11/EGR2/RAB20/NFKB2/SELE/CXCL16/PTPRE/SLCO4A1/JDP2/IER3/NFKBIE/CSF1/VCAM1/TNIP1/BIRC3/GBP2/EGR1 |
| WP\_OVERVIEW\_OF\_PROINFLAMMATORY\_AND\_PROFIBROTIC\_MEDIATORS | WP\_OVERVIEW\_OF\_PROINFLAMMATORY\_AND\_PROFIBROTIC\_MEDIATORS | 125 | 0.583228 | 2.65036 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2338 | tags=38%, list=13%, signal=33% | SPP1/IL1B/CXCL8/CCL3L3/CCL2/OSM/CCL18/MMP9/CCL8/CCL3L1/CCL3/LIF/CXCL1/CXCL2/IL6/MMP1/IL1RN/CCL20/VEGFA/CCL11/CCL27/IL3/CXCL16/CCL1/CCL26/IL9/XCL2/IL24/CXCL5/CSF1/PPBP/CSF2/CSF3/IL12B/CXCL14/CCL21/TNFSF13B/EBI3/TNF/IL22/CCL17/IL17C/IL21/IL1A/IL36B/IL18/AREG |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_D7\_UP | ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_D7\_UP | 109 | 0.591346 | 2.646283 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2166 | tags=38%, list=12%, signal=33% | HLA-DRB1/ICAM1/MARCO/CCL2/CD74/C1QC/NAMPT/C1QB/LYZ/HLA-DRA/PKM/CXCL2/SLC11A1/IRF7/IL1RN/RNF19B/LGALS3BP/TYROBP/SERPINA10/IRF1/CYBA/MNDA/LCP2/SOCS1/CD14/HLA-DMB/HCK/CRYAA/PLD4/MT1A/TMSB4X/XDH/BCL2A1/TAPBP/VCAM1/PROCR/CD53/IRF8/GBP2/ITPK1/PTGS1 |
| KEGG\_AUTOIMMUNE\_THYROID\_DISEASE | KEGG\_AUTOIMMUNE\_THYROID\_DISEASE | 51 | 0.685615 | 2.639221 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1044 | tags=35%, list=6%, signal=33% | HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-F/HLA-E/HLA-DPA1/HLA-DPB1/HLA-B/HLA-A/HLA-DRB5/CGA/HLA-G/HLA-DMB/HLA-C/HLA-DOA/CTLA4 |
| GESERICK\_TERT\_TARGETS\_DN | GESERICK\_TERT\_TARGETS\_DN | 21 | 0.83784 | 2.626018 | 7.21E-10 | 2.70E-08 | 1.92E-08 | 1171 | tags=57%, list=7%, signal=53% | GADD45B/BHLHE40/FOSB/HBEGF/JUNB/BTG2/EGR2/KLF4/DUSP6/ERRFI1/IER3/ELN |
| LIAN\_LIPA\_TARGETS\_3M | LIAN\_LIPA\_TARGETS\_3M | 62 | 0.657729 | 2.617381 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2535 | tags=45%, list=14%, signal=39% | MARCO/ACP5/MMP12/HMOX1/C1QC/C1QB/RGS1/TREM2/SLC15A3/SLC11A1/PLA2G7/TNFAIP2/FCER1G/CD68/GPNMB/MMP19/IGSF6/MAFB/LY9/GDF15/FCGR2B/SEMA7A/CLEC4D/C3AR1/ATP6V0D2/MS4A6A/LILRB5/CTSB |
| GRAHAM\_CML\_QUIESCENT\_VS\_CML\_DIVIDING\_UP | GRAHAM\_CML\_QUIESCENT\_VS\_CML\_DIVIDING\_UP | 23 | 0.816503 | 2.609168 | 9.31E-10 | 3.37E-08 | 2.40E-08 | 244 | tags=43%, list=1%, signal=43% | IL1B/CXCL8/CCL8/RGS1/SOD2/CCL3/CXCL1/CXCL2/EMP1/CCL20 |
| DASU\_IL6\_SIGNALING\_UP | DASU\_IL6\_SIGNALING\_UP | 57 | 0.663317 | 2.604168 | 2.80E-10 | 1.11E-08 | 7.89E-09 | 3594 | tags=51%, list=20%, signal=41% | CXCL8/CCL2/IFI30/SOD2/HLA-F/ANPEP/IL6/ZFP36L2/MMP1/GEM/CEBPB/VEGFB/STMN2/IER3/FCHO1/ENG/IRF9/TAPBP/IRAK1/LY6E/SERPINB2/MGRN1/PDPN/KHSRP/SREBF1/NMB/NAGPA/PTGES/TFAP2C |
| PLASARI\_TGFB1\_TARGETS\_1HR\_UP | PLASARI\_TGFB1\_TARGETS\_1HR\_UP | 33 | 0.741956 | 2.603677 | 1.85E-09 | 6.36E-08 | 4.52E-08 | 1428 | tags=55%, list=8%, signal=50% | GADD45B/BHLHE40/HBEGF/CSRNP1/JUNB/EGR3/LIF/IL6/SLC20A1/SNAI1/EGR2/SPSB1/SERPINE1/IER5/IER3/SMAD7/SPATA13/ZMIZ1 |
| GHANDHI\_DIRECT\_IRRADIATION\_UP | GHANDHI\_DIRECT\_IRRADIATION\_UP | 96 | 0.59984 | 2.587199 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2812 | tags=41%, list=16%, signal=34% | IL1B/CXCL8/DUSP2/NAMPT/TNFAIP3/SOD2/MT1G/LIF/CXCL1/CXCL2/IL6/MMP1/G0S2/FAM20A/MT2A/BBC3/CDKN1A/PTPRE/PLEK2/RELB/GDF15/OR11A1/CXCL5/BLOC1S2/TNFRSF10B/BCL2A1/PPP6R1/MYPN/EYA3/C3orf52/BIRC3/SLC16A6/IL1A/KYNU/SERPINB2/DKK1/MDM2/MT1E/LAMC2 |
| LIEN\_BREAST\_CARCINOMA\_METAPLASTIC\_VS\_DUCTAL\_UP | LIEN\_BREAST\_CARCINOMA\_METAPLASTIC\_VS\_DUCTAL\_UP | 79 | 0.611355 | 2.581643 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1695 | tags=34%, list=9%, signal=31% | CXCL8/ICAM1/HMOX1/SOD2/GAL/FLNA/TNFRSF12A/IL6/G0S2/ADM/MYC/TNFRSF11B/CEBPB/VIM/HAS2/ANGPTL4/SULT1B1/EVA1A/BCAT1/IGF2BP2/TEX12/BCL2A1/CDH19/PCOLCE2/LRRC8C/HAPLN1/LINC00839 |
| PID\_UPA\_UPAR\_PATHWAY | PID\_UPA\_UPAR\_PATHWAY | 42 | 0.684688 | 2.581391 | 2.49E-08 | 7.14E-07 | 5.07E-07 | 1585 | tags=43%, list=9%, signal=39% | PLAUR/MMP12/MMP9/PLAU/ITGB2/ITGAM/LRP1/MMP13/FPR3/ITGA5/SERPINE1/KLK4/PLG/FPR2/FPR1/NCL/CTSG/FGB |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | 140 | 0.557629 | 2.580388 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2987 | tags=39%, list=17%, signal=33% | CXCL8/ICAM1/CCL2/CD83/RASD1/CEMIP/FOSB/ZC3H12A/TNFAIP3/CSRNP1/JUNB/EGR3/CXCL1/CXCL2/BCL3/IRF7/CCL20/ARC/BBC3/KDM6B/HLA-B/EGR2/SOCS3/SELE/ARHGAP30/IRF1/ATF3/PER1/IER5/SCARNA15/FOS/IER3/NFKBIE/GPR142/RLF/CSF3/CD300LB/ARHGAP40/ZNF596/FGB/TNF/SNORD15B/NFKBID/FGF18/IL1A/EGR1/ACHE/C11orf96/NFIL3/IER2/KLF10/ZNF555/DDIT3/CCL4/LTB |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFKB\_SURVIVAL\_SIGNALING | WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFKB\_SURVIVAL\_SIGNALING | 35 | 0.715707 | 2.556708 | 5.32E-09 | 1.70E-07 | 1.21E-07 | 2218 | tags=51%, list=12%, signal=45% | IL1B/CXCL8/ICAM1/MMP9/CXCL2/IL6/MMP1/VEGFA/NFKB2/SELE/RELB/CSF2/BCL2A1/VCAM1/TNF/BIRC3/IKBKB/IL1A |
| HARRIS\_HYPOXIA | HARRIS\_HYPOXIA | 81 | 0.605486 | 2.556433 | 1.42E-10 | 5.87E-09 | 4.17E-09 | 991 | tags=28%, list=6%, signal=27% | SPP1/CXCL8/CCL2/PLAUR/HMOX1/SLC2A3/BHLHE40/HK2/STC1/PKM/FTL/IL6/ADM/SAT1/MMP13/VEGFA/VIM/CDKN1A/IGFBP2/ENO1/COL5A1/FOS/TFRC |
| TIAN\_TNF\_SIGNALING\_VIA\_NFKB | TIAN\_TNF\_SIGNALING\_VIA\_NFKB | 25 | 0.773811 | 2.529238 | 1.61E-08 | 4.81E-07 | 3.42E-07 | 1094 | tags=52%, list=6%, signal=49% | CXCL8/CD83/TNFAIP3/CXCL1/CXCL2/IL6/TNFAIP2/CCL20/NFKB2/IRF1/RELB/GFPT2/NFKBIE |
| BURTON\_ADIPOGENESIS\_1 | BURTON\_ADIPOGENESIS\_1 | 30 | 0.731954 | 2.526262 | 2.98E-08 | 8.38E-07 | 5.96E-07 | 989 | tags=50%, list=6%, signal=47% | DUSP2/PHLDA1/CEBPD/IL6/NR4A2/FOSL2/CEBPB/VEGFA/SGK1/SLC25A25/PER1/THBD/RHOB/ERRFI1/IER3 |
| RUTELLA\_RESPONSE\_TO\_HGF\_VS\_CSF2RB\_AND\_IL4\_UP | RUTELLA\_RESPONSE\_TO\_HGF\_VS\_CSF2RB\_AND\_IL4\_UP | 391 | 0.486899 | 2.524114 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2615 | tags=32%, list=15%, signal=28% | SPP1/IL1B/APOE/C5AR1/APOC1/CCL2/HLA-DRB4/ACP5/CCL18/NAMPT/SLC2A3/HK2/MMP9/CCL8/TREM1/RGCC/SOD2/HBEGF/MT1G/SQSTM1/FBP1/NR1H3/HLA-E/SCD/CYP27A1/SELL/SPHK1/NDRG1/C3/CCL3/CXCL1/PLTP/CLEC5A/SLC12A8/PLIN2/PLA2G7/CTSD/EMP1/TMEM51/DCSTAMP/NLRP3/NR4A2/CTSL/MT2A/VSIG4/MATK/RNASET2/RAB13/RAB20/SCO2/PNP/AOAH/SGK1/SLC5A3/LPXN/IQGAP2/APLP2/DENND3/CD81/FYN/GPNMB/DMXL2/ADAMDEC1/DUSP6/SERPINE1/FTH1/NRIP3/MAFB/CD14/PPARD/ST3GAL1/TCIRG1/IGFBP7/MX2/TFRC/SLAMF7/CXCL5/FCN1/GLA/CHI3L1/TNIP3/FPR1/PPIF/ST6GAL1/TMBIM6/PLSCR1/EPB41L3/GCLM/BCAT1/FCGR1A/GALC/LAIR1/SLAMF8/TLR1/CD9/VAT1/AIF1/C3AR1/AQP9/DNTTIP2/GM2A/EMC7/SLC43A3/CFD/CD48/ITPK1/NPC1/TIMP2/TNS3/ACADVL/TUBA4A/SLC16A6/IL1A/EGR1/IL18/S100A12/SCAMP2/KMO/KYNU/SLC1A3/SLC3A2/CXCL9/CTSB/ANXA5/VWA5A/ATP6V0A1/KLF10 |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S1 | HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S1 | 225 | 0.513475 | 2.521617 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3405 | tags=39%, list=19%, signal=32% | HLA-DQB1/PLAUR/CD74/ACP5/DUSP5/ADAM8/C1QB/POSTN/TNFRSF1B/IFI30/SLC7A5/ITGB2/LAPTM5/FLNA/LSP1/CCL3/CXCL1/ATP6V1F/RNASE1/M6PR/CORO1A/LYN/HLA-DPB1/GEM/PIM2/LGALS3BP/PNP/CRABP2/GRN/COL4A2/IL2RG/TRIP10/IRF1/CYBA/CCR7/GPNMB/LGALS9/COL1A2/COL6A2/CD8A/LCP1/HLA-DOA/IER3/TMSB4X/HIF1A/ATP6V1B2/SLC1A5/GNAI2/BCL2A1/RALGDS/S100A10/HCLS1/ACTA2/F13A1/AIF1/C3AR1/PROCR/CD53/FCGBP/CD37/EFEMP1/CD48/DAB2/ATP6AP1/TIMP2/PKMYT1/TCF4/TUBA4A/BLVRA/IL7R/ALDOA/OAZ1/ANXA5/CRIP2/IQGAP1/AQP1/DGKA/IL2RB/DDR1/PLD3/CDC20/TFF3/IGLL1/IL15RA/COL3A1/FCGR2A/PRKD2/HLA-DMA |
| JOHNSTONE\_PARVB\_TARGETS\_2\_UP | JOHNSTONE\_PARVB\_TARGETS\_2\_UP | 133 | 0.54655 | 2.52 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1948 | tags=34%, list=11%, signal=30% | HLA-DRB1/CD74/TNFAIP3/PKM/FLNA/COTL1/ECM1/HLA-DPA1/ARHGDIA/STXBP2/KRT8/HLA-B/HLA-A/GPRC5A/VEGFB/APLP2/FXYD5/YWHAE/GRINA/PLEK2/SERPINE1/OASL/FURIN/SBNO2/NCOA7/ERGIC3/FKBP1A/EEF1A2/SEL1L3/CMTM6/IRX3/GALC/ACTB/GNAI2/ZYX/BASP1/OAF/PCOLCE2/B2M/UAP1L1/NECTIN2/HEG1/AGPAT2/PPP1R9B/LY6E |
| ZWANG\_CLASS\_3\_TRANSIENTLY\_INDUCED\_BY\_EGF | ZWANG\_CLASS\_3\_TRANSIENTLY\_INDUCED\_BY\_EGF | 210 | 0.518823 | 2.51967 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1210 | tags=27%, list=7%, signal=25% | IL1B/CXCL8/PLAUR/SIK1/DUSP5/BHLHE40/FOSB/ZC3H12A/METRNL/TNFAIP3/HBEGF/OLR1/CSRNP1/JUNB/CEBPD/NDRG1/CXCL1/CXCL2/BCL3/IL6/SLC20A1/RGS2/IL1RN/PFKFB3/ADM/GEM/EMP1/CCL20/NR4A2/STX11/FOSL2/KDM6B/ITPRIP/TRIB1/SGMS2/CHMP1B/SOCS3/NFKB2/DENND3/SYT12/ATF3/PELI1/KLF4/MMP19/PPFIBP1/PER1/SERPINE1/SBNO2/NCOA7/FOS/IER3/TFRC/EPHA2/SMAD7/NCL/MAP3K8 |
| WP\_ALLOGRAFT\_REJECTION | WP\_ALLOGRAFT\_REJECTION | 87 | 0.591567 | 2.515141 | 1.05E-10 | 4.48E-09 | 3.19E-09 | 2218 | tags=38%, list=12%, signal=33% | IL1B/HLA-DRB1/CXCL8/HLA-DQB1/C1QC/C1QB/HLA-DRA/HLA-F/HLA-E/C3/HLA-DPA1/HLA-DPB1/HLA-B/VEGFA/HLA-A/HLA-DRB5/VIM/HLA-G/C8B/HLA-DMB/HLA-C/HLA-DOA/GNLY/COL5A1/CTLA4/IL12B/CCL21/CD80/TNF/IL22/C2/IL21/IL1A |
| DELYS\_THYROID\_CANCER\_UP | DELYS\_THYROID\_CANCER\_UP | 433 | 0.481147 | 2.515029 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2715 | tags=31%, list=15%, signal=27% | MMP7/SPP1/APOE/CXCL8/ICAM1/MARCO/UCP2/APOC1/CAPG/APOC2/NCF2/NCKAP1L/CCL18/HMOX1/KRT17/DUSP5/C1QB/BHLHE40/KRT14/IFI30/SLC7A5/TREM1/PLAU/TREM2/PKM/C3/LIF/CXCL2/ECM1/MAPK13/MMP1/IL1RN/CTSH/PLK3/SAMD4A/G0S2/PLIN2/LYN/CTSD/ADM/ST14/MMP11/CDH3/PLXND1/ITGB7/PNP/CDKN1A/CRABP2/TNC/CYBA/MNDA/IL10RA/PTPRE/PRSS3/APLP2/FXYD5/COMP/FYN/SLPI/KCNN4/HAS2/MAPKAPK3/NMU/BIRC7/LPL/DUSP6/CFB/CSF1R/TNFRSF21/IGSF6/FAP/TRIM14/STMN2/PASK/SERPINA1/IER3/GDF15/CHI3L1/EPHA2/TNFRSF10B/NINJ1/NPTX2/ATP10B/SEL1L3/ADORA1/BCAT1/EMILIN2/SPOCK2/IGF2BP2/ATP6V1B2/COL1A1/SLC1A5/NRP2/LST1/SPOCK1/BCL2A1/PTPRU/FLVCR2/S100A10/SH3GL1/C3AR1/MAP2/MED13/KRT6A/MYEF2/CD1A/PHLDA2/MFGE8/C2/INHBB/TIMP1/LY6E/MET/GBP2/CCL17/DAPK2/GALNT12/SLIT1/TMC6/MS4A6A/NRCAM/THBS2/ELF3/AREG/MAP4K1/MGRN1/SCEL/CTSB/SLC22A18/GJB3/ALDH3B1/ANXA2/DUSP4/MRC1 |
| WP\_LUNG\_FIBROSIS | WP\_LUNG\_FIBROSIS | 60 | 0.634724 | 2.50971 | 8.45E-10 | 3.10E-08 | 2.21E-08 | 3261 | tags=50%, list=18%, signal=41% | SPP1/IL1B/CXCL8/CCL2/HMOX1/MMP9/PLAU/CCL3/CXCL2/IL6/MT2A/CEBPB/CCL11/SERPINA1/ELN/SMAD7/CALCA/CSF2/CSF3/IL12B/TNF/TIMP1/PDGFA/CYSLTR2/RTEL1/CCL4/TGFA/MMP2/IL4/IL5 |
| KEGG\_LEISHMANIA\_INFECTION | KEGG\_LEISHMANIA\_INFECTION | 70 | 0.614427 | 2.505996 | 7.77E-10 | 2.89E-08 | 2.06E-08 | 1750 | tags=36%, list=10%, signal=32% | IL1B/HLA-DRB1/NCF2/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/ITGB2/ITGAM/C3/MAPK13/HLA-DPA1/HLA-DPB1/PTPN6/HLA-DRB5/NCF4/CYBA/HLA-DMB/HLA-DOA/FOS/FCGR1A/FCGR3A/IL12B/TNF/IRAK1 |
| AMIT\_EGF\_RESPONSE\_120\_HELA | AMIT\_EGF\_RESPONSE\_120\_HELA | 66 | 0.623133 | 2.502655 | 4.96E-10 | 1.90E-08 | 1.35E-08 | 1730 | tags=39%, list=10%, signal=36% | CXCL8/PLAUR/FOSL1/HBEGF/AMOTL2/CXCL1/CXCL2/ZFP36L2/GEM/SAT1/SNAI1/KDM6B/MATK/CDKN1A/CYTH1/CLCF1/DUSP6/IER5/MAP2K3/GDF15/RUNX3/EPHA2/TNFRSF10B/DAXX/MCL1/VPS37B |
| JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_DN | JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_DN | 223 | 0.509768 | 2.502158 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3175 | tags=38%, list=18%, signal=31% | C5AR1/NCF2/HBG1/SLC2A3/MMP9/LYZ/IFI30/RGS1/TNFAIP3/RGCC/ITGB2/ITGAM/BLVRB/CEBPD/COTL1/CCL3/PLBD1/CST7/TUBB2A/IL1RN/CTSH/HBB/HBD/IL18RAP/STX11/PSAP/GZMK/PNP/HBM/TYROBP/TGFBI/SGK1/FCER1G/CXCL16/MNDA/IL10RA/CCR7/LGALS2/KLF4/SGSH/CD8A/IGSF6/CD14/HCK/CYSTM1/GNLY/CD2/LY9/PASK/SERPINA1/ITK/TUBB1/CD27/FCN1/CHI3L1/GABARAPL1/FPR1/AHSP/PPBP/SNCA/F13A1/CD5/KLF2/CDKN2D/CA1/ALAS2/MS4A6A/S100A12/CD247/IL7R/SERPINB2/CMTM5/CTSB/ANKRD9/GZMA/TOB1/PF4/IL2RB/CCL4/RCAN3/CPVL/RBP7/CD36/CRISPLD2 |
| KHETCHOUMIAN\_TRIM24\_TARGETS\_UP | KHETCHOUMIAN\_TRIM24\_TARGETS\_UP | 46 | 0.661726 | 2.500491 | 1.17E-08 | 3.59E-07 | 2.55E-07 | 1522 | tags=39%, list=8%, signal=36% | SPP1/ICAM1/UCP2/HBEGF/LAPTM5/JUNB/BTG2/SAMD4A/EMP1/VIM/CDKN1A/COL4A2/COL1A2/SERPINE1/HCK/FOS/COL1A1/VCAM1 |
| LIANG\_SILENCED\_BY\_METHYLATION\_2 | LIANG\_SILENCED\_BY\_METHYLATION\_2 | 54 | 0.642831 | 2.499881 | 2.33E-09 | 7.91E-08 | 5.62E-08 | 1415 | tags=35%, list=8%, signal=33% | ICAM1/KRT17/STC1/TNFAIP3/SOD2/HBEGF/C3/CXCL2/IL6/MMP1/IRF7/CCL20/SLPI/THBD/MX2/CXCL5/MAGEA4/OAS1/CSF2 |
| BIOCARTA\_IL5\_PATHWAY | BIOCARTA\_IL5\_PATHWAY | 13 | 0.914937 | 2.498376 | 1.55E-09 | 5.44E-08 | 3.87E-08 | 440 | tags=69%, list=2%, signal=68% | IL1B/HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/IL6/HLA-DRB5/CCL11 |
| DAUER\_STAT3\_TARGETS\_UP | DAUER\_STAT3\_TARGETS\_UP | 46 | 0.66017 | 2.494611 | 1.32E-08 | 3.98E-07 | 2.83E-07 | 622 | tags=35%, list=3%, signal=34% | ICAM1/CCL2/FOSL1/DUSP5/SLC2A3/SOD2/CEBPD/C3/BCL3/SAMD4A/PFKFB3/ADM/TRIB1/SOCS3/SLC2A14/ATF3 |
| MARZEC\_IL2\_SIGNALING\_UP | MARZEC\_IL2\_SIGNALING\_UP | 112 | 0.553782 | 2.492432 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2218 | tags=36%, list=12%, signal=31% | SPP1/CXCL8/OSM/GADD45B/DUSP2/PHLDA1/HK2/TNFRSF1B/RGCC/CSRNP1/PIM1/TNFRSF12A/CCL3/LIF/PDE4A/IL18RAP/MYC/VEGFA/PNP/CSF2RB/SERPINB9/IL10RA/DUSP6/TNFRSF21/RHOB/SOCS1/IL24/IER3/DUSP7/SPRED1/PTPN7/CSF2/CCNE1/CISH/PHLDA2/CARD9/UMPS/BIRC3/DHODH/IL1A |
| WP\_PROSTAGLANDIN\_SIGNALING | WP\_PROSTAGLANDIN\_SIGNALING | 33 | 0.70937 | 2.489328 | 3.46E-08 | 9.53E-07 | 6.78E-07 | 2530 | tags=48%, list=14%, signal=42% | IL1B/CXCL8/CCL2/MMP9/CCL3/CXCL1/IL6/IRF7/NLRP3/VEGFA/CSF1/TNF/PTGER4/IL1A/AREG/CXCL9 |
| KEGG\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS | KEGG\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS | 55 | 0.637646 | 2.489 | 6.30E-09 | 1.99E-07 | 1.41E-07 | 1888 | tags=42%, list=11%, signal=38% | HLA-DRB1/HLA-DQB1/HLA-DRB4/C1QC/C1QB/HLA-DRA/HLA-DRB3/C3/HLA-DPA1/HLA-DPB1/HLA-DRB5/C8B/HLA-DMB/HLA-DOA/TRIM21/FCGR2B/FCGR1A/FCGR3A/CTSG/CD80/TNF/SNRPB/C2 |
| ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_35D\_UP | ICHIBA\_GRAFT\_VERSUS\_HOST\_DISEASE\_35D\_UP | 135 | 0.539054 | 2.483557 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3056 | tags=41%, list=17%, signal=35% | HLA-DRB1/CCL2/CD74/MMP12/C1QC/NAMPT/C1QB/LYZ/ITGB2/PKM/HLA-E/LAPTM5/SCD/CXCL2/BTG2/GRN/TYROBP/NCF4/CYBA/MNDA/CD68/SLPI/HPX/LCP2/LPL/CSF1R/CD14/PROM1/HLA-DMB/HCK/PLD4/FPR1/MT1A/TMSB4X/FCGR1A/BCL2A1/TAPBP/CHIA/VCAM1/SH3GL1/AIF1/PROCR/CD53/SULT2A1/GBP2/ORM1/LILRB5/CXCL9/TRAF3IP2/CD7/LRG1/IQGAP1/SIRPA/PTPN1/CLIC1/PLD3 |
| HINATA\_NFKB\_TARGETS\_FIBROBLAST\_UP | HINATA\_NFKB\_TARGETS\_FIBROBLAST\_UP | 79 | 0.587927 | 2.482709 | 1.55E-09 | 5.44E-08 | 3.87E-08 | 1012 | tags=29%, list=6%, signal=28% | IL1B/CXCL8/ICAM1/CD83/TNFAIP3/SOD2/CXCL1/IL6/MMP1/G0S2/ARHGDIA/TNFAIP2/CCL20/VEGFA/GABBR1/VIM/NFKB2/SELE/IRF1/RELB/SERPINE1/IER3/CXCL5 |
| KUROZUMI\_RESPONSE\_TO\_ONCOCYTIC\_VIRUS | KUROZUMI\_RESPONSE\_TO\_ONCOCYTIC\_VIRUS | 45 | 0.657245 | 2.481246 | 2.37E-08 | 6.87E-07 | 4.88E-07 | 544 | tags=29%, list=3%, signal=28% | SPP1/IL1B/CCL2/CCL8/TNFRSF1B/ITGAM/C3/CCL3/CXCL2/CCL20/IL2RG/IL10RA/CCR7 |
| KEGG\_ANTIGEN\_PROCESSING\_AND\_PRESENTATION | KEGG\_ANTIGEN\_PROCESSING\_AND\_PRESENTATION | 85 | 0.584578 | 2.480555 | 2.26E-10 | 9.12E-09 | 6.48E-09 | 898 | tags=26%, list=5%, signal=25% | HLA-DRB1/HLA-DQB1/CD74/HLA-DRB4/CD4/HLA-DRA/IFI30/HLA-DRB3/HLA-F/HLA-E/HLA-DPA1/HLA-DPB1/CTSL/HLA-B/HLA-A/HLA-DRB5/HLA-G/KIR3DL2/CD8A/HLA-DMB/HLA-C/HLA-DOA |
| REACTOME\_BINDING\_AND\_UPTAKE\_OF\_LIGANDS\_BY\_SCAVENGER\_RECEPTORS | REACTOME\_BINDING\_AND\_UPTAKE\_OF\_LIGANDS\_BY\_SCAVENGER\_RECEPTORS | 41 | 0.666335 | 2.480257 | 6.05E-08 | 1.55E-06 | 1.11E-06 | 1838 | tags=41%, list=10%, signal=37% | APOE/MARCO/FTL/LRP1/HBB/HBA2/SCARB1/COL4A2/COL1A2/JCHAIN/HPX/SCARF1/FTH1/COL1A1/COLEC12/SCARA5/SSC5D |
| VILIMAS\_NOTCH1\_TARGETS\_UP | VILIMAS\_NOTCH1\_TARGETS\_UP | 51 | 0.64321 | 2.475987 | 4.53E-09 | 1.45E-07 | 1.03E-07 | 2611 | tags=43%, list=15%, signal=37% | ICAM1/CD74/CD83/JUNB/IRF7/EGR2/NFATC1/NFKB2/IL10RA/CCR7/RELB/PTCRA/CD2/CTLA4/BCL2A1/IL12B/CD80/BIRC3/EGR1/TRAF1/CD7/GZMA |
| REACTOME\_PD\_1\_SIGNALING | REACTOME\_PD\_1\_SIGNALING | 21 | 0.788912 | 2.472665 | 7.21E-08 | 1.83E-06 | 1.30E-06 | 1177 | tags=57%, list=7%, signal=53% | HLA-DRB1/HLA-DQB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DPA1/HLA-DPB1/PTPN6/HLA-DRB5/CD3E/CD274 |
| KIM\_GLIS2\_TARGETS\_UP | KIM\_GLIS2\_TARGETS\_UP | 81 | 0.584627 | 2.468364 | 2.13E-09 | 7.26E-08 | 5.16E-08 | 2067 | tags=40%, list=12%, signal=35% | HLA-DRB1/ICAM1/CCL2/CD74/ADAM8/BOK/CCL8/POSTN/HLA-DRA/LSP1/C3/BBC3/SOCS3/VIM/TGFBI/FCER1G/IRF1/IGFBP2/COL1A2/ANGPTL4/SERPINE1/HLA-DMB/ADAMTS2/COL1A1/BCL2A1/CXCL14/VCAM1/AIF1/TNFSF13B/CMTM3/SYCP1/CIDEC |
| QI\_PLASMACYTOMA\_UP | QI\_PLASMACYTOMA\_UP | 248 | 0.493348 | 2.463823 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3006 | tags=36%, list=17%, signal=30% | MARCO/CAPG/DUSP2/BHLHE40/CD4/RGS1/TNFAIP3/ITGB2/LIMK1/NR1H3/GNA15/LSP1/CCL3/CST7/RAC2/RNASE1/TNFAIP2/IL18RAP/GPSM3/PLEK/CD79A/RGS16/PTPN6/ITGB7/RBP4/VAV1/IL2RG/IRF1/RELB/LGALS9/STK17B/EPOR/CSF1R/SEMA4A/SOCS1/LCP1/ADCY7/GATA1/HCK/CD19/SH3BP1/LAG3/RRAD/NFKBIE/CD3E/MOB1A/TMBIM6/PLSCR1/TRIM21/HRK/UBE2D1/TMSB4X/LST1/PPBP/TUBB3/TLR1/IRF2/ZYX/HCLS1/BATF/TNFSF13B/CD53/TNF/PCSK1N/IL4R/SLAMF1/CISH/PHLDA2/CD37/IRF8/SLC43A3/PTPN18/GBP2/STK10/PTGS1/TRAF1/ARAP1/IL18/DOK1/CNP/CD7/SCIN/PF4/TGM2/CD82/GRB2/IL2RB/LTB/PTPN1 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_POS\_PATIENT\_LUNG\_TISSUE\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_POS\_PATIENT\_LUNG\_TISSUE\_UP | 148 | 0.527675 | 2.455089 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2373 | tags=36%, list=13%, signal=31% | SPI1/CCL8/TREM1/OLR1/SELL/HAMP/GPR84/S100P/IL1RN/PLEK/DNAAF1/WAS/ARRB2/MXD1/TYROBP/RBP4/CCL11/SERPINB9/IL2RG/FCER1G/METTL7B/LCP2/LCP1/IGSF6/RHOH/CACNA1A/CCDC60/SYN1/MX2/LAMP3/CHI3L1/CLDN2/FPR1/OAS1/CLEC4D/BCL2A1/ZDHHC19/BASP1/OAS3/C3AR1/AQP9/TNFSF13B/CD53/TNF/LY96/CA1/CD37/CSF3R/IL17C/GBP5/HS3ST3A1/S100A12/EPSTI1 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_CALU3\_CELLS\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_CALU3\_CELLS\_UP | 304 | 0.482467 | 2.447903 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2664 | tags=31%, list=15%, signal=27% | IL1B/CXCL8/ICAM1/SDS/CCL2/FOSB/TNFAIP3/ITGAM/HBEGF/SLC15A3/CSRNP1/CYTH4/AMOTL2/CXCL2/IL6/IRF7/G0S2/TNFAIP2/CCL20/NLRP3/MT2A/STX11/TNFRSF11B/BBC3/NOD2/MMP13/EGR2/PTAFR/RAET1L/SELE/FSD1L/SERPINB9/SERPINA10/IRF1/IL10RA/ATF3/KLF4/LGALS9/PER1/SERPINE1/OASL/THEMIS2/NCOA7/FAP/MX2/LAMP3/KCNV1/INHBE/GBP1/CD274/MAP3K8/TRIM21/HAND1/CSF1/BCAT1/SEMA7A/OAS1/CH25H/LST1/NDUFA4L2/CSF2/CSF3/BCL2A1/VCAM1/PDE4B/OAS3/TNFSF13B/DUSP1/PLEKHG7/TNF/DTX3L/PTGER4/NOCT/CMPK2/BIRC3/DDO/GBP5/SLC16A6/IL1A/EGR1/PCK1/TRAF1/SPRY2/KLHDC7B/KMO/EPSTI1/C11orf96/SERPINB2/DUOX1/MUC4/CXCL9/IRAK2/KLF10/ULBP1/RBM11 |
| BIOCARTA\_MHC\_PATHWAY | BIOCARTA\_MHC\_PATHWAY | 14 | 0.878721 | 2.445762 | 2.75E-08 | 7.80E-07 | 5.55E-07 | 397 | tags=50%, list=2%, signal=49% | HLA-DRB1/CD74/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-A/HLA-DRB5 |
| HUMMERICH\_SKIN\_CANCER\_PROGRESSION\_UP | HUMMERICH\_SKIN\_CANCER\_PROGRESSION\_UP | 86 | 0.575139 | 2.444852 | 6.44E-10 | 2.43E-08 | 1.73E-08 | 2028 | tags=37%, list=11%, signal=33% | APOC2/NCF2/GADD45B/HMOX1/ADAM8/MMP9/SOD2/JUNB/TNFRSF12A/RGS2/IL1RN/CTSD/MYC/MMP13/SERPINB1/CDKN1A/CRABP2/CYBA/LGALS9/COL1A2/ITGA5/ENO1/SOCS1/FOS/PLG/MT1A/COL6A3/COL1A1/VCAM1/IL4R/LGALS7/IL17RA |
| LENAOUR\_DENDRITIC\_CELL\_MATURATION\_UP | LENAOUR\_DENDRITIC\_CELL\_MATURATION\_UP | 112 | 0.539869 | 2.429813 | 4.75E-10 | 1.83E-08 | 1.30E-08 | 2100 | tags=31%, list=12%, signal=28% | SPP1/APOE/APOC1/HLA-DQB1/CD74/CD83/MMP12/DUSP5/C1QB/LIPA/NR1H3/ECM1/RNASE1/CCDC85B/HLA-DPA1/HLA-DPB1/LGALS3BP/SCARB1/CRABP2/SHB/CCR7/LPL/ABCG1/FABP4/TFRC/GDF15/ST6GAL1/CSF1/F13A1/DUSP1/CCNA1/CD1A/KCNAB2/BIRC3/CCL17 |
| SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_UP | SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_UP | 50 | 0.628137 | 2.429138 | 6.34E-08 | 1.61E-06 | 1.15E-06 | 1103 | tags=36%, list=6%, signal=34% | CD83/FOSL1/PIM1/CCL3/ZFP36L2/HLA-DPA1/RNF19B/RGS16/BBC3/CDKN1A/SGK1/ATF3/IER5/IER3/GDF15/RRAD/TNFRSF10B/MNT |
| WP\_PATHOGENESIS\_OF\_SARSCOV2\_MEDIATED\_BY\_NSP9NSP10\_COMPLEX | WP\_PATHOGENESIS\_OF\_SARSCOV2\_MEDIATED\_BY\_NSP9NSP10\_COMPLEX | 21 | 0.77487 | 2.428652 | 2.01E-07 | 4.61E-06 | 3.28E-06 | 1126 | tags=48%, list=6%, signal=45% | HLA-DRB1/CXCL8/CD4/HLA-DRA/IL6/HLA-DRB5/FYN/CD8A/CD2/CD3E |
| THEILGAARD\_NEUTROPHIL\_AT\_SKIN\_WOUND\_UP | THEILGAARD\_NEUTROPHIL\_AT\_SKIN\_WOUND\_UP | 75 | 0.58616 | 2.428523 | 5.63E-09 | 1.79E-07 | 1.27E-07 | 1735 | tags=32%, list=10%, signal=29% | IL1B/CXCL8/CCL2/NAMPT/PLAU/EGR3/CCL3/CXCL2/M6PR/PLEK/TRIB1/VEGFA/PTPRE/ATP1A1/LCP2/RPS16/MAP2K3/HMGA1/IER3/BCL2A1/VDR/AQP9/EIF5/TNF |
| STEARMAN\_TUMOR\_FIELD\_EFFECT\_UP | STEARMAN\_TUMOR\_FIELD\_EFFECT\_UP | 34 | 0.681719 | 2.424485 | 3.03E-07 | 6.70E-06 | 4.76E-06 | 3056 | tags=62%, list=17%, signal=51% | SPP1/APOC1/ACP5/ITGAX/CSTB/LYZ/CTSD/SAT1/SOCS3/CSF2RB/SERPINA10/CD68/LPL/CHI3L1/MYO7A/PTGS1/LILRB5/LRG1/IQGAP1/SIRPA/PLD3 |
| WIERENGA\_STAT5A\_TARGETS\_UP | WIERENGA\_STAT5A\_TARGETS\_UP | 195 | 0.500511 | 2.419882 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2510 | tags=33%, list=14%, signal=29% | SPP1/CXCL8/CCL2/OSM/CD83/GADD45B/DUSP5/PHLDA1/BHLHE40/RGS1/PLAU/SQSTM1/OLR1/PIM1/NDRG1/CCL3/CST7/IL4I1/BTG2/MAPK13/CTSH/PLIN2/ADM/EMP1/IL18RAP/TRIB1/GPAT3/SAMSN1/PLEKHA4/SLC2A14/CCR7/FPR3/VASN/CALB2/STK17B/CYSTM1/LAMP3/SMAP2/GABARAPL1/XIRP1/PLXNA3/TRIM58/CH25H/GALC/CSF2/PSAT1/TP53INP2/TMEFF2/IL4R/CA2/KLF2/CISH/CD1A/PIK3IP1/DAB2/A4GALT/HSPA6/EGR1/F2RL1/TRAF1/IGFBP4/IL7R/P2RX4/NFIL3/RAP1GAP |
| GHANDHI\_BYSTANDER\_IRRADIATION\_UP | GHANDHI\_BYSTANDER\_IRRADIATION\_UP | 76 | 0.580318 | 2.41868 | 4.10E-09 | 1.33E-07 | 9.42E-08 | 2415 | tags=34%, list=13%, signal=30% | IL1B/CXCL8/DUSP2/NAMPT/DUSP5/STC1/TNFAIP3/SOD2/MT1G/LIF/CXCL1/CXCL2/MMP1/G0S2/SAT1/PLEK2/RELB/CXCL5/GCLM/BCL2A1/BIRC3/SLC16A6/IL1A/IL13RA2/KYNU/SERPINB2 |
| PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_UP | PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_UP | 53 | 0.622199 | 2.415109 | 5.63E-08 | 1.47E-06 | 1.04E-06 | 1423 | tags=40%, list=8%, signal=37% | NCKAP1L/ACP5/CCL18/IFI30/RGCC/SOD2/CXCL2/PLA2G7/SAT1/RNASET2/SAMSN1/GRN/CSF2RB/SGK1/HLA-G/DUSP6/F11R/SEL1L3/GLUL/CREG1/FCGR3A |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_HSC\_DN | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_HSC\_DN | 184 | 0.504419 | 2.413831 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2377 | tags=33%, list=13%, signal=29% | CAPG/CCL2/SPI1/TIMP3/HBG1/SLC7A5/SLC16A3/LAPTM5/ANPEP/EGR3/CST7/ZFP36L2/IL1RN/HBB/HBD/APOBR/SH3BGRL3/NOD2/HDC/TYROBP/PRG2/CSF2RB/TGFBI/NCF4/IL10RA/CCR7/NFE2/IGFBP2/LCP2/EHD3/IL9R/SOCS1/RHOH/ADCY7/GATA1/RUNX3/MGAT1/FPR2/RBM38/CSF1/GMPR/TFR2/LST1/GPR183/CTSG/CCNA1/GPR35/IRF8/SLC43A3/CD48/IL17RA/BIRC3/STK10/DUSP10/TUBA4A/ACSL1/IGFBP4/FUT7/RARA/IL7R |
| BIOCARTA\_TCRA\_PATHWAY | BIOCARTA\_TCRA\_PATHWAY | 14 | 0.867204 | 2.413707 | 1.00E-07 | 2.44E-06 | 1.73E-06 | 1126 | tags=57%, list=6%, signal=54% | HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DRB5/FYN/CD3E |
| HELLER\_SILENCED\_BY\_METHYLATION\_UP | HELLER\_SILENCED\_BY\_METHYLATION\_UP | 268 | 0.478501 | 2.409773 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1829 | tags=24%, list=10%, signal=22% | APOE/HLA-DRB1/C5AR1/ICAM1/APOC1/CAPG/NCF2/HLA-DQB1/HLA-DRB4/MMP9/TNFRSF1B/HLA-DRA/RGS1/LSP1/S100P/CST7/TUBB2A/HLA-DRB6/HLA-DPA1/CTSH/HLA-DPB1/TNFAIP2/SAT1/PLEK/RNF19B/IL32/RAB13/SOCS3/SAMSN1/CDKN1A/CSF2RB/LPXN/NCF4/CCR7/LRFN4/GPNMB/KLF4/CRYBB1/OLFML2B/ADAMDEC1/CFB/COL9A2/SOCS1/LCP1/MAFB/HLA-DMB/SBNO2/HCK/IER3/SLAMF7/LAMP3/MAGEA4/DDAH2/MAGEB1/CHI3L1/GBP1/MAP3K8/IRF9/GPR183/VCAM1/TNFRSF11A/EBI3/PTGER4/PHLDA2/MAGEA9 |
| PLASARI\_TGFB1\_TARGETS\_10HR\_UP | PLASARI\_TGFB1\_TARGETS\_10HR\_UP | 183 | 0.502673 | 2.40141 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2775 | tags=35%, list=15%, signal=30% | PLAUR/GADD45B/FOSL1/TIMP3/DUSP5/BHLHE40/HK2/MMP9/TNFAIP3/HBEGF/OLR1/CSRNP1/JUNB/TNFRSF12A/GPR84/SPHK1/LIF/IL6/SLC20A1/PLK3/CCL20/ARC/SNAI1/RNF19B/TNFRSF11B/RGS16/EGR2/VEGFA/NFATC1/TNC/PVR/GJB2/HAS2/DUSP6/ITGA5/SERPINE1/NIPAL1/HCK/IER3/GFPT2/ELN/PTHLH/SEMA7A/SPATA13/STMN4/CXCL14/LRRC8C/HIVEP3/CHST11/ALDH1A2/NPPB/IVNS1ABP/PPP1R13L/CCL17/FGF18/F2RL1/NFIL3/IER2/FOXS1/GJB3/PDGFA/GJA3/LMO1/PRKG2 |
| WP\_CYTOKINES\_AND\_INFLAMMATORY\_RESPONSE | WP\_CYTOKINES\_AND\_INFLAMMATORY\_RESPONSE | 26 | 0.727695 | 2.396201 | 6.37E-07 | 1.34E-05 | 9.50E-06 | 3261 | tags=65%, list=18%, signal=54% | IL1B/HLA-DRB1/CD4/HLA-DRA/CXCL1/CXCL2/IL6/IL3/CSF1/CSF2/CSF3/IL12B/TNF/IL1A/PDGFA/IL4/IL5 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_D | LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_D | 63 | 0.600902 | 2.393648 | 2.03E-08 | 5.97E-07 | 4.25E-07 | 2818 | tags=37%, list=16%, signal=31% | NCF2/HLA-DRB4/ACP5/ITGAX/ITGB2/ITGAM/FCGRT/EGR2/TGFBI/PTPRE/PRSS3/ITGA5/IGSF6/ADCY7/HLA-DMB/SLC1A5/LST1/F13A1/DAB2/RAP1GAP/SLC6A2/ATP6V1A/TPP1 |
| KEGG\_INTESTINAL\_IMMUNE\_NETWORK\_FOR\_IGA\_PRODUCTION | KEGG\_INTESTINAL\_IMMUNE\_NETWORK\_FOR\_IGA\_PRODUCTION | 47 | 0.628803 | 2.3932 | 9.84E-08 | 2.40E-06 | 1.71E-06 | 3405 | tags=53%, list=19%, signal=43% | HLA-DRB1/HLA-DQB1/HLA-DRB4/HLA-DRA/HLA-DRB3/IL6/HLA-DPA1/HLA-DPB1/ITGB7/HLA-DRB5/CCL27/LTBR/HLA-DMB/HLA-DOA/CCR10/CD80/TNFSF13B/ICOS/ICOSLG/PIGR/CCL25/IL4/IL5/IL15RA/HLA-DMA |
| KEGG\_CELL\_ADHESION\_MOLECULES\_CAMS | KEGG\_CELL\_ADHESION\_MOLECULES\_CAMS | 132 | 0.520809 | 2.391897 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1862 | tags=27%, list=10%, signal=25% | HLA-DRB1/ICAM1/HLA-DQB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/ITGB2/ITGAM/HLA-F/HLA-E/SELL/HLA-DPA1/HLA-DPB1/CDH3/HLA-B/ITGB7/HLA-A/HLA-DRB5/PVR/SELE/HLA-G/CD8A/HLA-DMB/HLA-C/HLA-DOA/CD2/CTLA4/CLDN2/F11R/CD274/CD276/VCAM1/CD80/ICOS/NECTIN2 |
| REACTOME\_CHEMOKINE\_RECEPTORS\_BIND\_CHEMOKINES | REACTOME\_CHEMOKINE\_RECEPTORS\_BIND\_CHEMOKINES | 58 | 0.609292 | 2.390135 | 5.86E-08 | 1.52E-06 | 1.08E-06 | 3150 | tags=47%, list=18%, signal=39% | CXCL8/CCL3L3/CCL2/CCL3L1/CCL3/CXCL1/CXCL2/CCL20/CCR8/CCL11/CCL27/CXCL16/CCR7/CCL1/XCL2/CXCL5/PPBP/CCL21/CCR10/CXCR1/CCL17/CXCL9/CXCR2/PF4/CCL25/CCL4/CXCR3 |
| WP\_NETWORK\_MAP\_OF\_SARSCOV2\_SIGNALING\_PATHWAY | WP\_NETWORK\_MAP\_OF\_SARSCOV2\_SIGNALING\_PATHWAY | 216 | 0.489413 | 2.385769 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2661 | tags=31%, list=15%, signal=27% | IL1B/HLA-DRB1/CXCL8/APOC1/CCL2/APOD/CCL8/CD4/HLA-DRA/JUNB/CCL3/CXCL1/CXCL2/IL6/HBB/CTSD/HBD/CCL20/IL18RAP/NLRP3/CTSL/LGALS3BP/PTPN6/CEBPB/HLA-DRB5/NFKB2/CCL11/CCL27/SERPINA10/CXCL16/FYN/CCL1/CFB/SERPINE1/CD8A/CCL26/CD14/IL9/CD2/FOS/CXCL5/CD3E/ATG13/GSN/HIF1A/ACTB/HRG/IRF9/CCL21/FGB/CXCR1/DUSP1/TNF/IRAK1/IL22/CPN1/IRF3/IL21/IL1A/EGR1/IL18/CD247/MAVS/CXCL9/CTSB/LRG1/CXCR2/APOA2 |
| KEGG\_CYTOKINE\_CYTOKINE\_RECEPTOR\_INTERACTION | KEGG\_CYTOKINE\_CYTOKINE\_RECEPTOR\_INTERACTION | 259 | 0.475774 | 2.384992 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3361 | tags=35%, list=19%, signal=29% | IL1B/CXCL8/CCL3L3/CCL2/OSM/CCL18/CCL8/TNFRSF1B/CCL3L1/TNFRSF12A/CCL3/LIF/CXCL1/CXCL2/IL6/CCL20/IL18RAP/CCR8/TNFRSF11B/CD70/PLEKHO2/VEGFA/CCL11/CCL27/CSF2RB/IL2RG/VEGFB/IL3/CXCL16/IL10RA/CCR7/LTBR/CLCF1/CCL1/EPOR/CSF1R/TNFRSF21/IL9R/CCL26/IL9/XCL2/IL24/CXCL5/CD27/TNFRSF10B/INHBE/EDAR/CSF1/TNFRSF10D/PPBP/CSF2/CSF3/IL12B/CXCL14/CCL21/CCR10/TNFRSF11A/CXCR1/TNFSF13B/TNF/IL22/IL4R/INHBB/CSF3R/MET/TNFSF9/IL17RA/CCL17/IL21/IL1A/IL18/IL7R/CXCL9/INHBC/PDGFA/CXCR2/PF4/AMHR2/CCL25/IL2RB/CCL4/CNTFR/LTB/CXCR3/IFNA16/IFNGR1/IL4/IL5/TNFRSF4/IL15RA/CXCL11 |
| KIM\_LRRC3B\_TARGETS | KIM\_LRRC3B\_TARGETS | 30 | 0.69041 | 2.382877 | 8.60E-07 | 1.72E-05 | 1.22E-05 | 1897 | tags=50%, list=11%, signal=45% | HLA-DRB1/HLA-DQB1/CD74/LYZ/HLA-E/CXCL1/HLA-DPB1/HLA-B/HLA-A/FTH1/HLA-C/SERPINA1/TAPBP/B2M/GM2A |
| WP\_IL1\_AND\_MEGAKARYOCYTES\_IN\_OBESITY | WP\_IL1\_AND\_MEGAKARYOCYTES\_IN\_OBESITY | 23 | 0.742863 | 2.373848 | 7.54E-07 | 1.54E-05 | 1.09E-05 | 2327 | tags=52%, list=13%, signal=45% | IL1B/ICAM1/CCL2/MMP9/HBEGF/PLA2G7/NLRP3/TLR1/IRAK1/TIMP1/TIMP2/IL18 |
| WILENSKY\_RESPONSE\_TO\_DARAPLADIB | WILENSKY\_RESPONSE\_TO\_DARAPLADIB | 28 | 0.709214 | 2.372567 | 4.09E-07 | 8.93E-06 | 6.35E-06 | 2218 | tags=50%, list=12%, signal=44% | UCP2/PLAUR/HMOX1/CD4/ITGB2/PLA2G7/ARRB2/PTAFR/CD68/CHI3L1/LAIR1/GM2A/CD48/IL1A |
| PID\_AMB2\_NEUTROPHILS\_PATHWAY | PID\_AMB2\_NEUTROPHILS\_PATHWAY | 40 | 0.646939 | 2.371711 | 4.11E-07 | 8.94E-06 | 6.35E-06 | 1058 | tags=32%, list=6%, signal=31% | ICAM1/PLAUR/MMP9/PLAU/ITGB2/ITGAM/LRP1/IL6/LYN/FYN/HCK/MYH2/PLG |
| AMIT\_SERUM\_RESPONSE\_40\_MCF10A | AMIT\_SERUM\_RESPONSE\_40\_MCF10A | 30 | 0.68632 | 2.368759 | 1.16E-06 | 2.25E-05 | 1.60E-05 | 2222 | tags=53%, list=12%, signal=47% | NAMPT/FOSB/CXCL2/RGS2/ADM/NR4A2/PVR/ATF3/FOS/FPR1/GLUL/MCL1/DUSP1/GM2A/IL1A/EGR1 |
| PHONG\_TNF\_RESPONSE\_VIA\_P38\_PARTIAL | PHONG\_TNF\_RESPONSE\_VIA\_P38\_PARTIAL | 157 | 0.500881 | 2.36009 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2686 | tags=36%, list=15%, signal=31% | CXCL8/PLAUR/NAMPT/PLAU/TNFAIP3/SQSTM1/JUNB/CEBPD/SPHK1/LIF/CXCL1/CXCL2/TUBB2A/IL6/SLC20A1/RGS2/ADM/CCL20/SLC31A2/FOSL2/KDM6B/GPRC5A/NFKB2/CDKN1A/TNC/INSIG1/SLC5A3/IRGQ/KCNN4/HAS2/SERPINE1/TNFRSF21/IER3/NFKBIE/TNFRSF10B/GABARAPL1/PPIF/PTHLH/KLHL21/CDH19/TAPBP/VDR/MCL1/SNCA/CHST11/DUSP1/IL4R/PTGER4/C3orf52/DUSP10/TNS3/KYNU/SERPINB2/DKK1/SLC12A7/TOB1/TCF7L2 |
| BIOCARTA\_BLYMPHOCYTE\_PATHWAY | BIOCARTA\_BLYMPHOCYTE\_PATHWAY | 14 | 0.847623 | 2.359206 | 6.05E-07 | 1.28E-05 | 9.10E-06 | 1636 | tags=64%, list=9%, signal=58% | HLA-DRB1/ICAM1/HLA-DRB4/HLA-DRA/HLA-DRB3/ITGB2/HLA-DRB5/FCGR2B/CD80 |
| APPEL\_IMATINIB\_RESPONSE | APPEL\_IMATINIB\_RESPONSE | 32 | 0.671799 | 2.353878 | 1.57E-06 | 2.86E-05 | 2.03E-05 | 2030 | tags=41%, list=11%, signal=36% | APOE/C5AR1/APOC1/ACP5/APOD/CTSH/CTSD/CTSL/CD68/PLSCR1/ENG/GM2A/LILRB3 |
| LU\_TUMOR\_VASCULATURE\_UP | LU\_TUMOR\_VASCULATURE\_UP | 29 | 0.688243 | 2.353812 | 1.98E-06 | 3.52E-05 | 2.50E-05 | 972 | tags=28%, list=5%, signal=26% | SPP1/MMP9/POSTN/STC1/MXRA5/LCP2/TNFRSF21/FZD10 |
| SATO\_SILENCED\_BY\_DEACETYLATION\_IN\_PANCREATIC\_CANCER | SATO\_SILENCED\_BY\_DEACETYLATION\_IN\_PANCREATIC\_CANCER | 41 | 0.632132 | 2.352944 | 8.99E-07 | 1.79E-05 | 1.27E-05 | 1760 | tags=29%, list=10%, signal=26% | CXCL8/UCP2/GADD45B/HMOX1/STC1/MMP1/ADM/ATF3/PER1/GDF15/HPSE/MAGED4B |
| BILD\_HRAS\_ONCOGENIC\_SIGNATURE | BILD\_HRAS\_ONCOGENIC\_SIGNATURE | 236 | 0.476204 | 2.351628 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2699 | tags=33%, list=15%, signal=28% | IL1B/CXCL8/PLAUR/FOSL1/NAMPT/DUSP5/ADAM8/SLC2A3/HK2/SLC16A3/HBEGF/JUNB/PIM1/MYDGF/TNFRSF12A/NDRG1/LIF/GK/CXCL1/CXCL2/SLC20A1/G0S2/LYN/DDX17/CCL20/KDM6B/ITPRIP/TRIB1/VEGFA/MXD1/SERPINB1/GPAT3/SESN2/PVR/PTPRE/CLCF1/KCNN4/DUSP6/ANGPTL4/SOCS1/RNF152/NIPAL1/FOS/IER3/GDF15/CXCL5/EPHA2/TNFRSF10B/PPIF/CD274/PTHLH/DNAJC6/PPBP/CSNK1D/MCL1/LRRC8C/CHST11/DUSP1/HPSE/LPAR2/CCNA1/PHLDA2/TIMP1/FGFBP1/CDCP1/TUBA4A/IL1A/EGR1/IL13RA2/SERPINB2/PALMD/IER2/SREK1IP1/GJB3/PDGFA/TCF7L2/DUSP4/ELK3 |
| ABE\_VEGFA\_TARGETS\_30MIN | ABE\_VEGFA\_TARGETS\_30MIN | 26 | 0.713505 | 2.349476 | 2.00E-06 | 3.52E-05 | 2.50E-05 | 2222 | tags=50%, list=12%, signal=44% | APOE/DUSP5/HBEGF/EGR3/PPY/EGR2/TRIB1/HDC/GZMK/MYO7A/TAC1/C2/EGR1 |
| BIOCARTA\_INFLAM\_PATHWAY | BIOCARTA\_INFLAM\_PATHWAY | 29 | 0.686775 | 2.348793 | 2.20E-06 | 3.81E-05 | 2.70E-05 | 1735 | tags=45%, list=10%, signal=41% | HLA-DRB1/CXCL8/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/IL6/HLA-DRB5/IL3/CSF1/CSF2/CSF3/TNF |
| RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_UP | RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_UP | 72 | 0.569881 | 2.346414 | 4.20E-08 | 1.14E-06 | 8.10E-07 | 2417 | tags=36%, list=13%, signal=31% | CXCL8/DUSP5/LYZ/SLC7A5/ITGAM/RGS2/G0S2/DDX17/NR4A2/FOSL2/CEBPB/MNDA/ZNF331/PELI1/GABARAPL1/SEL1L3/MAP3K8/GLUL/CH25H/GPR183/LY96/CA1/ALAS2/BIRC3/AREG/EZR |
| PARK\_APL\_PATHOGENESIS\_DN | PARK\_APL\_PATHOGENESIS\_DN | 48 | 0.615215 | 2.345484 | 2.04E-07 | 4.67E-06 | 3.32E-06 | 1766 | tags=44%, list=10%, signal=40% | CXCL8/SPI1/LYZ/IFI30/GAL/JUNB/LSP1/S100P/SLC20A1/CORO1A/CTSD/IL32/COL4A2/MNDA/GPNMB/NFKBIE/GLUL/SLC29A1/ZYX/VAT1/GPI |
| DIRMEIER\_LMP1\_RESPONSE\_LATE\_UP | DIRMEIER\_LMP1\_RESPONSE\_LATE\_UP | 54 | 0.602951 | 2.344795 | 1.29E-07 | 3.10E-06 | 2.20E-06 | 1782 | tags=35%, list=10%, signal=32% | HMOX1/TNFRSF1B/SLC7A5/SQSTM1/TUBB2A/SLC20A1/LYN/IRF5/PLEK/NFKB2/SERPINB9/TRIP10/RHOG/RUNX3/CSNK1D/VOPP1/BATF/TNIP1/IL4R |
| REACTOME\_SCAVENGING\_BY\_CLASS\_A\_RECEPTORS | REACTOME\_SCAVENGING\_BY\_CLASS\_A\_RECEPTORS | 19 | 0.764466 | 2.341312 | 2.55E-06 | 4.30E-05 | 3.06E-05 | 1546 | tags=47%, list=9%, signal=43% | APOE/MARCO/FTL/COL4A2/COL1A2/FTH1/COL1A1/COLEC12/SCARA5 |
| WANG\_ESOPHAGUS\_CANCER\_VS\_NORMAL\_UP | WANG\_ESOPHAGUS\_CANCER\_VS\_NORMAL\_UP | 117 | 0.518585 | 2.340062 | 1.37E-09 | 4.87E-08 | 3.46E-08 | 960 | tags=26%, list=5%, signal=24% | MMP7/UCP2/MMP12/DUSP2/MMP9/FOSB/TNFRSF1B/IFI30/TNFAIP3/ITGAM/LAPTM5/TNFRSF12A/PNPLA2/CTSH/PIM2/HLA-A/EIF1/SOCS3/HLA-DRB5/CSF2RB/FCER1G/CCR7/LGALS2/ATF3/JCHAIN/DUSP6/SERPINE1/COL9A2/PROM1/IGFBP7 |
| XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_6HR | XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_6HR | 25 | 0.715524 | 2.338725 | 1.46E-06 | 2.72E-05 | 1.93E-05 | 1825 | tags=36%, list=10%, signal=32% | PLAUR/PLAU/HBEGF/PFKFB3/SAT1/PXN/ANGPTL4/TNFRSF10B/PHLDA2 |
| MARKEY\_RB1\_ACUTE\_LOF\_DN | MARKEY\_RB1\_ACUTE\_LOF\_DN | 219 | 0.477932 | 2.336394 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2048 | tags=33%, list=11%, signal=30% | NCF2/NCKAP1L/C1QC/ITGAX/NAMPT/APOD/ADAM8/C1QB/BHLHE40/CCL8/LYZ/ITGB2/SOD2/ITGAM/HLA-E/SPHK1/NDRG1/CCL3/ACP2/RAC2/IRF7/CTSH/PLIN2/PLA2G7/SAT1/LGALS3BP/PTPN6/OPRPN/HLA-B/FERMT3/PNP/SOCS3/CRABP2/GRN/TYROBP/TGFBI/VAV1/SERPINB9/NCF4/GRINA/NDRG2/ABCG1/CSF1R/LCP1/EDEM2/HCK/CD300C/FPR1/MT1A/FCGR2B/SEMA7A/FCGR1A/XDH/CH25H/ATP6V1B2/CLEC4D/LST1/IRF9/BCL2A1/DAXX/CXCL14/CSNK1D/TAPBP/HCLS1/C3AR1/ALDH1A2/PROCR/MID1IP1/C2/TMEM229B/TNFSF9/CMPK2/GBP2 |
| WINTER\_HYPOXIA\_METAGENE | WINTER\_HYPOXIA\_METAGENE | 234 | 0.472878 | 2.3354 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3019 | tags=32%, list=17%, signal=27% | MMP7/SPP1/CXCL8/ICAM1/HLA-DQB1/PLAUR/HMOX1/SLC2A3/BHLHE40/HK2/KRT14/PLAU/TNFAIP3/PKM/FTL/PIM1/LRP1/NDRG1/IL6/SLC20A1/PLIN2/PFKFB3/CTSD/ADM/SAT1/PIM2/MMP13/VEGFA/PNP/VIM/NFKB2/CDKN1A/TGFBI/INSIG1/VEGFB/IGFBP2/ITGA5/ENO1/ANGPTL4/SERPINE1/NOS1/ERRFI1/COL5A1/FOS/TFRC/ALDH1A1/ARHGAP5/HIF1A/ENG/ELL2/GPI/ART1/MET/UMPS/SLC16A1/PTGS1/EGR1/THBS2/ELF3/SERPINB2/SLC3A2/ALDOA/NFIL3/ANXA5/LDHA/TP53/ANXA2/RRP9/EDN2/DDIT3/EIF4A3/TGM2/SIRPA/FABP5/TGFA |
| SALVADOR\_MARTIN\_PEDIATRIC\_TBD\_ANTI\_TNF\_THERAPY\_NONRESPONDER\_POST\_TREATMENT\_UP | SALVADOR\_MARTIN\_PEDIATRIC\_TBD\_ANTI\_TNF\_THERAPY\_NONRESPONDER\_POST\_TREATMENT\_UP | 23 | 0.730594 | 2.334643 | 1.87E-06 | 3.33E-05 | 2.37E-05 | 4017 | tags=70%, list=22%, signal=54% | IL1B/HLA-H/TYMP/IRF1/HLA-C/GBP1/FCGR1A/RHBDF2/GBP2/GBP5/ODF3B/GZMA/DHRS9/BATF2/ANKRD22/IGFLR1 |
| VILIMAS\_NOTCH1\_TARGETS\_DN | VILIMAS\_NOTCH1\_TARGETS\_DN | 27 | 0.700037 | 2.333939 | 2.17E-06 | 3.77E-05 | 2.68E-05 | 2597 | tags=52%, list=14%, signal=44% | NCF2/LYZ/ITGB2/ITGAM/TREM2/LRRC25/MATK/PGLYRP1/NCF4/CSF1R/CTSG/CSF3R/LILRB5/TREML1 |
| MISHRA\_CARCINOMA\_ASSOCIATED\_FIBROBLAST\_UP | MISHRA\_CARCINOMA\_ASSOCIATED\_FIBROBLAST\_UP | 24 | 0.721467 | 2.330472 | 2.67E-06 | 4.44E-05 | 3.15E-05 | 942 | tags=42%, list=5%, signal=40% | CCL2/KRT17/MMP9/PLAU/GEM/HBA2/SESN2/TNC/COL6A2/FOS |
| PID\_INTEGRIN2\_PATHWAY | PID\_INTEGRIN2\_PATHWAY | 28 | 0.69663 | 2.330469 | 9.95E-07 | 1.94E-05 | 1.38E-05 | 1660 | tags=43%, list=9%, signal=39% | ICAM1/PLAUR/ITGAX/PLAU/ITGB2/ITGAM/C3/TGFBI/F11R/VCAM1/FGB/PROC |
| MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_UP | MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_UP | 118 | 0.515972 | 2.329972 | 2.66E-09 | 8.97E-08 | 6.37E-08 | 2365 | tags=34%, list=13%, signal=30% | IL1B/PLAUR/DUSP5/TNFAIP3/SOD2/SQSTM1/HLA-E/S100P/TNFAIP2/CCL20/SAT1/CTSL/PSAP/IL32/CDKN1A/GRN/SLPI/ATF3/LGALS9/DUSP6/SERPINE1/MAP2K3/MX2/RBM38/TRIM21/GSN/OAS1/COL1A1/PMEL/CD9/PPT2/DUSP1/MFGE8/TIMP1/LY6E/BIRC3/PRSS8/TMEM184B/AREG/SCAMP2 |
| REACTOME\_PEPTIDE\_LIGAND\_BINDING\_RECEPTORS | REACTOME\_PEPTIDE\_LIGAND\_BINDING\_RECEPTORS | 194 | 0.482407 | 2.325225 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3176 | tags=35%, list=18%, signal=29% | CXCL8/C5AR1/CCL3L3/CCL2/GAL/CCL3L1/C3/CCL3/CXCL1/CXCL2/SST/QRFPR/AVPR2/CCL20/CCR8/PPY/PSAP/TACR3/BDKRB1/CCL11/CCL27/PROKR2/CXCL16/CCR7/FPR3/OPRK1/CCL1/NMU/XCL2/HCRTR1/RXFP4/CXCL5/FPR2/TACR2/FPR1/PPBP/PROK2/CCL21/CCR10/RLN3/CXCR1/C3AR1/MC5R/BRS3/TAC1/OXT/CCKBR/CCL17/PRLH/NPFFR2/F2RL1/AVP/UTS2R/CXCL9/CXCR2/RXFP2/PDYN/NTSR1/EDN2/PF4/GRP/CCL25/CCL4/NMB/TRHR/CXCR3/INSL3 |
| AMIT\_EGF\_RESPONSE\_60\_HELA | AMIT\_EGF\_RESPONSE\_60\_HELA | 44 | 0.61669 | 2.322124 | 2.10E-06 | 3.67E-05 | 2.61E-05 | 1215 | tags=39%, list=7%, signal=36% | SLC2A3/BHLHE40/FOSB/SOD2/PKM/LIF/SLC20A1/TNFAIP2/NR4A2/FOSL2/VEGFA/GPRC5A/PER1/SERPINE1/RHOB/RUNX3/PLSCR1 |
| BIOCARTA\_BBCELL\_PATHWAY | BIOCARTA\_BBCELL\_PATHWAY | 11 | 0.895755 | 2.321622 | 4.73E-07 | 1.02E-05 | 7.28E-06 | 397 | tags=55%, list=2%, signal=53% | HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DRB5 |
| WANG\_METHYLATED\_IN\_BREAST\_CANCER | WANG\_METHYLATED\_IN\_BREAST\_CANCER | 34 | 0.652645 | 2.321085 | 2.93E-06 | 4.81E-05 | 3.42E-05 | 2631 | tags=44%, list=15%, signal=38% | FOSL1/KRT17/SLC7A5/HBEGF/SPHK1/FYN/GDF15/EPHA2/TNFRSF10B/ZYX/DUSP1/SERPINB8/SLC3A2/GJB3/DKK1 |
| NADLER\_OBESITY\_UP | NADLER\_OBESITY\_UP | 59 | 0.587931 | 2.319574 | 7.76E-08 | 1.96E-06 | 1.39E-06 | 1831 | tags=42%, list=10%, signal=38% | UCP2/CAPG/C1QB/CSTB/POSTN/IFI30/LAPTM5/FLNA/LRP1/PLTP/PLIN2/CTSD/PSAP/GRN/FCER1G/FXYD5/CD68/CSF1R/BGN/COL1A1/BASP1/HCLS1/DUSP1/CD53/MFGE8 |
| WP\_BURN\_WOUND\_HEALING | WP\_BURN\_WOUND\_HEALING | 100 | 0.533867 | 2.318404 | 2.84E-09 | 9.46E-08 | 6.72E-08 | 2636 | tags=37%, list=15%, signal=32% | IL1B/CXCL8/ICAM1/CCL2/MMP9/TNFAIP3/CXCL1/IL6/MMP1/NOD2/MMP13/VEGFA/VIM/TNC/MIAT/SFRP2/KLF4/COL1A2/CD3E/ELN/COL1A1/FOXE1/TLR1/CXCL14/F13A1/TNF/LY96/KRT6A/TIMP1/GAS5/TLR8/TIMP2/IL1A/ACHE/SCEL/TP53/CXCR2 |
| DORN\_ADENOVIRUS\_INFECTION\_48HR\_DN | DORN\_ADENOVIRUS\_INFECTION\_48HR\_DN | 37 | 0.64162 | 2.316737 | 6.71E-07 | 1.40E-05 | 9.93E-06 | 1901 | tags=41%, list=11%, signal=36% | CD83/KRT14/JUNB/TNFRSF12A/EGR3/IL6/SGK1/CYTH1/MAP2K3/IER3/EPHA2/SDCBP/MCL1/ELL2/SYNCRIP |
| PID\_AP1\_PATHWAY | PID\_AP1\_PATHWAY | 68 | 0.574076 | 2.314806 | 1.37E-07 | 3.25E-06 | 2.31E-06 | 1415 | tags=31%, list=8%, signal=29% | CXCL8/CCL2/FOSL1/MMP9/FOSB/PLAU/JUNB/IL6/MMP1/MT2A/MYC/FOSL2/NFATC1/HLA-A/NPPA/ATF3/COL1A2/FABP4/FOS/HIF1A/CSF2 |
| IIZUKA\_LIVER\_CANCER\_EARLY\_RECURRENCE | IIZUKA\_LIVER\_CANCER\_EARLY\_RECURRENCE | 11 | 0.893059 | 2.314636 | 5.58E-07 | 1.19E-05 | 8.45E-06 | 486 | tags=55%, list=3%, signal=53% | HLA-DRA/TNFAIP3/LAPTM5/DDX17/VIM/SGK1 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G5\_DN | BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G5\_DN | 28 | 0.691627 | 2.313733 | 1.41E-06 | 2.64E-05 | 1.88E-05 | 2964 | tags=54%, list=17%, signal=45% | ICAM1/LAPTM5/BCL3/HLA-DPA1/HLA-DPB1/CYBA/IL10RA/PELI1/THEMIS2/SEL1L3/PTGER4/DAB2/EZR/TGM2/SIRPA |
| MARKEY\_RB1\_CHRONIC\_LOF\_DN | MARKEY\_RB1\_CHRONIC\_LOF\_DN | 117 | 0.511412 | 2.307696 | 3.21E-09 | 1.06E-07 | 7.55E-08 | 1113 | tags=26%, list=6%, signal=25% | APOE/CCL2/SPI1/MMP12/HMOX1/C1QC/TIMP3/ADAM8/C1QB/IFI30/SQSTM1/CCL3/IL6/PLIN2/PLA2G7/IRF5/RNF19B/MMP13/FERMT3/TYROBP/VAV1/IGFBP2/LGALS9/LCP2/CSF1R/RHOB/CD14/SLC22A23/CD300C/NINJ1/GABARAPL1 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_6HR\_DN | TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_6HR\_DN | 42 | 0.611585 | 2.30578 | 7.55E-06 | 0.00011 | 7.81E-05 | 4044 | tags=52%, list=23%, signal=41% | CCL2/HMOX1/RGCC/NR4A2/KDM6B/GAS7/HTRA3/SERPINE1/RHOB/NINJ1/CD80/ATP6V0D2/TRAF1/RARA/IRAK2/PDGFA/AQP1/CCL4/SLC4A2/P2RX7/CD200/TNFSF8 |
| KIM\_WT1\_TARGETS\_UP | KIM\_WT1\_TARGETS\_UP | 212 | 0.474149 | 2.305325 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2358 | tags=31%, list=13%, signal=27% | CXCL8/UCP2/CCL2/PLAUR/CD83/FOSL1/KRT17/TIMP3/DUSP5/BHLHE40/TNFAIP3/HBEGF/JUNB/TNFRSF12A/SPHK1/LIF/SLC20A1/SPATA2L/GEM/MYC/ARC/SH2B3/FOSL2/KDM6B/SPRR1B/TRIB1/NFATC1/DOK5/NFKB2/SHB/SGK1/PTPRE/SLPI/RELB/SERPINE1/MAP2K3/ST3GAL1/HMGA1/IER3/GFPT2/NFKBIE/EPHA2/CSF1/PTHLH/ACTB/ZMIZ1/TNFAIP1/CSNK1D/ZYX/RGS4/HPGDS/IL4R/CA2/PHLDA2/MTMR1/C3orf52/NPC1/TNS3/EGR1/TMC6/SPRY2/BAIAP2/AREG/RARA/SOX9 |
| ONDER\_CDH1\_TARGETS\_2\_DN | ONDER\_CDH1\_TARGETS\_2\_DN | 458 | 0.437402 | 2.303748 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3028 | tags=29%, list=17%, signal=25% | IL1B/CXCL8/ICAM1/APOC1/HS3ST2/NCF2/CD83/KRT17/TIMP3/ADAM8/SLC2A3/MMP9/KRT14/IFI30/ZC3H12A/SLC7A5/PLAU/TNFAIP3/HBEGF/TREM2/GNA15/NDRG1/C3/S100P/CXCL1/CXCL2/MAPK13/MMP1/CORO1A/IL1RN/CTSH/SLC12A8/G0S2/LYN/CCL20/TMEM51/ST14/KRT8/SLC31A2/CDH3/SPRR1B/MIA/PTAFR/SERPINB1/GPRC5A/ADIRF/PTPRE/SLPI/KCNN4/PELI1/NMU/RAB38/DUSP6/SMPDL3B/TNFRSF21/THBD/FZD5/FOS/TINAGL1/SERPINA1/IER3/TFRC/DSG3/F11R/KLK8/SEL1L3/ST6GAL1/NBEAL2/PTHLH/XDH/CREG1/MCOLN3/CSF2/CSF3/SLC7A8/EPS8L2/CD9/VDR/RHBDF2/VGLL1/SNCA/ADGRG1/CELSR2/OAS3/HPSE/LPAR2/CYB5R2/KRT6A/GPR87/IL4R/CCNA1/CA2/TFCP2L1/SH2D3A/PAK6/GM2A/FGFBP1/CDCP1/LGALS7/TMPRSS11E/BIRC3/ESRP1/DUSP10/DST/PRSS8/SLC2A9/IL1A/RIMS2/NRCAM/IL13RA2/LPCAT4/IL18/AREG/SOX9/SLC1A3/SERPINB2/DUOX1/NUP62CL/SLC3A2/SCEL/PDPN/ARHGAP8/LAMA3/GJB3/S100A7/LAMC2/TLR2/ZNF185/CD82/SIRPA/LTB/FAM169A/TGFA/KLK11/DDR1 |
| TAVOR\_CEBPA\_TARGETS\_UP | TAVOR\_CEBPA\_TARGETS\_UP | 49 | 0.601326 | 2.30364 | 1.22E-06 | 2.33E-05 | 1.65E-05 | 2574 | tags=35%, list=14%, signal=30% | HMOX1/SOD2/BTG2/RGS2/IL1RN/ARC/TRIB1/EEF1A2/GBP1/LST1/BCL2A1/C3AR1/CA2/KIAA0513/ACSL1/NFIL3/CD7 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_CELLS\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_CELLS\_UP | 77 | 0.548573 | 2.300356 | 8.38E-08 | 2.09E-06 | 1.49E-06 | 3997 | tags=43%, list=22%, signal=33% | IL1B/CXCL8/ICAM1/TREM1/OLR1/IL6/MMP1/CDH3/C15orf48/PTPRE/FYN/ATF3/CFB/INHBE/BCAT1/NDUFA4L2/CSF2/BCL2A1/MAP2/GAS5/CDCP1/IL1A/PGM5P2/ULBP1/LAMC2/DDIT3/N4BP3/GBP4/CCBE1/ATP6V1C2/HSD11B1/TRIM36/PTX3 |
| WP\_OREXIN\_RECEPTOR\_PATHWAY | WP\_OREXIN\_RECEPTOR\_PATHWAY | 151 | 0.491445 | 2.299071 | 1.33E-10 | 5.52E-09 | 3.93E-09 | 2695 | tags=35%, list=15%, signal=30% | SPP1/IL1B/CXCL8/ICAM1/GADD45B/BHLHE40/FOSB/HBEGF/JUNB/EGR3/CXCL2/IL6/MYC/ARC/IRF5/MMP13/FOSL2/EGR2/VEGFA/SP7/CDKN1A/TNC/SELE/CGA/SGK1/GLIS1/OPRK1/KLF4/LPL/IL9/HCRTR1/HMGA1/FOS/CALCA/HIF1A/BGLAP/VCAM1/NPVF/UCP1/LRRC8C/TNF/NOCT/GRIA2/EGR1/NOG/AVP/RARA/KCNK3/CYP11A1/LDHA/KLF10/GJA3/DUSP4 |
| PARK\_TRETINOIN\_RESPONSE\_AND\_PML\_RARA\_FUSION | PARK\_TRETINOIN\_RESPONSE\_AND\_PML\_RARA\_FUSION | 30 | 0.666032 | 2.298739 | 4.62E-06 | 7.18E-05 | 5.10E-05 | 989 | tags=33%, list=6%, signal=32% | SPI1/TNFRSF1B/PIM1/LSP1/NDRG1/TNFAIP2/PSAP/ARHGAP45/IRF1/IER3 |
| ONGUSAHA\_BRCA1\_TARGETS\_UP | ONGUSAHA\_BRCA1\_TARGETS\_UP | 12 | 0.864939 | 2.29864 | 1.39E-06 | 2.61E-05 | 1.85E-05 | 458 | tags=50%, list=3%, signal=49% | APOE/HMOX1/ECM1/MMP13/RBP4/TGFBI |
| ANDERSEN\_CHOLANGIOCARCINOMA\_CLASS2 | ANDERSEN\_CHOLANGIOCARCINOMA\_CLASS2 | 174 | 0.482506 | 2.29773 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3392 | tags=33%, list=19%, signal=27% | CAPG/PLAUR/MMP12/KRT17/ADAM8/CEMIP/HK2/SLC16A3/OLR1/PLBD1/S100P/MXRA5/ST14/CDH3/C15orf48/GPRC5A/SPOCD1/MSLN/IGFL2/PLEK2/KCNN4/COL1A2/NMU/SMPDL3B/LEMD1/CYP2S1/AP1S3/SLC4A11/COL6A3/NRP2/SAPCD2/SLC6A20/VDR/CEACAM5/GPR87/GPR35/TFCP2L1/FGFBP1/CDCP1/WNK4/GALNT12/KRT20/SERPINB2/ST6GALNAC1/SCEL/GJB3/ALDH3B1/DKK1/SCIN/LAMC2/SOX21/CDH17/C19orf33/CDC20/KIF15/CLDN4/CBLC/NFE2L3 |
| REACTOME\_COLLAGEN\_DEGRADATION | REACTOME\_COLLAGEN\_DEGRADATION | 63 | 0.574064 | 2.286741 | 2.59E-07 | 5.79E-06 | 4.12E-06 | 1353 | tags=27%, list=8%, signal=25% | MMP7/MMP12/MMP9/MMP1/CTSD/CTSL/MMP11/MMP13/COL4A2/COL1A2/MMP19/COL6A2/COL9A2/FURIN/COL5A1/COL6A3/COL1A1 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_DN | TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_DN | 187 | 0.475334 | 2.28519 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2535 | tags=28%, list=14%, signal=25% | C5AR1/MARCO/NCF2/MMP12/C1QC/C1QB/MMP9/ITGAM/PLBD1/S100P/CXCL1/CST7/SLC11A1/RNASE1/MMP1/CLEC5A/PLA2G7/EMP1/HK3/TEX15/TGFBI/SGK1/FPR3/PLXDC2/SLPI/GPNMB/NDRG2/GXYLT2/LCP2/CD14/SERPINA1/CXCL5/FCN1/CHI3L1/FPR1/FCGR2B/GLUL/PPBP/SLAMF8/ZDHHC19/SLCO2B1/COLEC12/CD9/KLF2/CD1A/DAB2/ATP6V0D2/SLC16A6/S100A12/IL7R/RAB30/ARPC5/CTSB |
| AMIT\_EGF\_RESPONSE\_40\_HELA | AMIT\_EGF\_RESPONSE\_40\_HELA | 42 | 0.605735 | 2.283725 | 1.22E-05 | 0.000167 | 0.000119 | 2525 | tags=48%, list=14%, signal=41% | DUSP2/DUSP5/SLC2A3/JUNB/EGR3/BCL3/IL6/BTG2/CEBPB/SGK1/ATF3/IER3/DUSP1/CCNA1/KLF2/CBX4/CDKN2AIP/EGR1/PALMD/IER2 |
| KRIEG\_HYPOXIA\_VIA\_KDM3A | KRIEG\_HYPOXIA\_VIA\_KDM3A | 49 | 0.595356 | 2.280766 | 1.83E-06 | 3.27E-05 | 2.32E-05 | 2893 | tags=47%, list=16%, signal=39% | PLAUR/HMOX1/ZC3H12A/JUNB/CXCL1/ADM/C15orf48/RRAGD/INSIG1/TM4SF19/SERPINE1/GDF15/CXCL5/NFKBIE/NRP2/PHLDA2/SERPINB8/PIK3IP1/BIRC3/NECAP2/LAMC2/EDN2/TGM2 |
| PID\_IL23\_PATHWAY | PID\_IL23\_PATHWAY | 37 | 0.631549 | 2.280373 | 1.26E-06 | 2.38E-05 | 1.69E-05 | 3792 | tags=49%, list=21%, signal=38% | IL1B/CCL2/CD4/CXCL1/IL6/IL18RAP/SOCS3/IL24/CD3E/IL12B/TNF/IL18/CXCL9/STAT4/STAT3/TYK2/NFKBIA/NFKB1 |
| LI\_INDUCED\_T\_TO\_NATURAL\_KILLER\_UP | LI\_INDUCED\_T\_TO\_NATURAL\_KILLER\_UP | 295 | 0.450538 | 2.279395 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2693 | tags=31%, list=15%, signal=27% | SPP1/CAPG/OSM/DUSP5/BHLHE40/HK2/CSTB/IFI30/RGS1/FTL/SERTAD1/JUNB/COTL1/EGR3/CCL3/PLTP/MYO1G/FAM20A/EMP1/APOBR/CTSL/STX11/SH3BGRL3/HBA2/RNF19B/TNFRSF11B/LGALS3BP/FOSL2/ZNF296/C15orf48/KHNYN/PLEKHO2/ITGB7/PGLYRP1/VIM/CDKN1A/MIAT/TYROBP/SGK1/FCER1G/NCF4/IQGAP2/FXYD5/DENND3/MAPKAPK3/TUBA1C/DUSP6/SEMA4A/LMNA/ELOVL1/FURIN/ERRFI1/LAG3/MYO1F/IER3/SLAMF7/TPST2/HAAO/ZBTB32/KLK8/MT1A/PLSCR1/EMILIN2/NRGN/CD9/S100A10/LRRC8C/BATF/AQP9/TNF/XBP1/CISH/UAP1L1/CAPNS1/GBP2/PRMT2/DAPK2/SLC19A2/B4GALNT4/EGR1/TRAF1/TMEM238/RAB19/CYB5R4/ALDOA/NFIL3/CXCL9/CD7/IRAK2/PDGFA/SCIN/ANXA2 |
| VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C2 | VERRECCHIA\_RESPONSE\_TO\_TGFB1\_C2 | 21 | 0.724511 | 2.270813 | 4.68E-06 | 7.24E-05 | 5.14E-05 | 1936 | tags=48%, list=11%, signal=43% | ICAM1/TIMP3/ITGB2/LRP1/ARHGDIA/RHOG/COL1A2/DVL1/COL6A3/TIMP1 |
| SANA\_RESPONSE\_TO\_IFNG\_UP | SANA\_RESPONSE\_TO\_IFNG\_UP | 72 | 0.550628 | 2.267142 | 2.37E-07 | 5.33E-06 | 3.79E-06 | 1755 | tags=25%, list=10%, signal=23% | HLA-DRB1/HLA-DQB1/CD74/HLA-DRB4/HLA-DRB3/HLA-E/HLA-DPA1/LGALS3BP/HLA-B/HLA-A/HLA-DRB5/LGALS9/HLA-C/GBP1/CD274/OAS1/LAP3/DTX3L |
| VALK\_AML\_CLUSTER\_5 | VALK\_AML\_CLUSTER\_5 | 30 | 0.656742 | 2.266676 | 7.80E-06 | 0.000113 | 8.01E-05 | 2072 | tags=47%, list=12%, signal=41% | SLC15A3/TYMP/PSAP/NOD2/PTAFR/EFHD2/PILRA/MAFB/SIGLEC7/UBE2D1/EPB41L3/VDR/LILRB3/TLR8 |
| XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_48HR\_UP | XU\_HGF\_SIGNALING\_NOT\_VIA\_AKT1\_48HR\_UP | 34 | 0.636504 | 2.263682 | 9.65E-06 | 0.000135 | 9.58E-05 | 1990 | tags=32%, list=11%, signal=29% | HMOX1/PHLDA1/STC1/PLAU/MMP1/CCL20/PPP1R1A/FYN/HMGA1/TIMP1/CDCP1 |
| BIOCARTA\_EOSINOPHILS\_PATHWAY | BIOCARTA\_EOSINOPHILS\_PATHWAY | 11 | 0.871136 | 2.257815 | 4.32E-06 | 6.82E-05 | 4.84E-05 | 1415 | tags=73%, list=8%, signal=67% | HLA-DRB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-DRB5/CCL11/IL3/CSF2 |
| BIOCARTA\_ASBCELL\_PATHWAY | BIOCARTA\_ASBCELL\_PATHWAY | 15 | 0.794806 | 2.257768 | 7.84E-06 | 0.000113 | 8.04E-05 | 397 | tags=40%, list=2%, signal=39% | HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DRB5 |
| BLANCO\_MELO\_HUMAN\_PARAINFLUENZA\_VIRUS\_3\_INFECTION\_A594\_CELLS\_UP | BLANCO\_MELO\_HUMAN\_PARAINFLUENZA\_VIRUS\_3\_INFECTION\_A594\_CELLS\_UP | 188 | 0.469205 | 2.256846 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3682 | tags=40%, list=21%, signal=32% | IL1B/NCF2/PLAUR/DUSP5/PHLDA1/HK2/STC1/TNFAIP3/SLC15A3/HLA-F/CCL3/IL4I1/IL6/IRF7/RGS2/HCAR2/MXD1/RAET1L/PLEKHA4/IRF1/CD68/ATF3/KLF4/CFB/OASL/THEMIS2/TRIM14/MX2/LAMP3/GBP1/CD274/PLSCR1/TRIM21/GMPR/OAS1/XDH/CH25H/IRF9/MCL1/MYPN/OAS3/LAP3/TNFSF13B/MAP2/B2M/DTX3L/PTGER4/KIAA1549L/NOCT/CDCP1/CMPK2/BIRC3/GBP5/IL1A/EGR1/TRAF1/EPSTI1/RET/LAMC2/TGM2/CCL4/PIK3AP1/TLR3/SP140L/IL15RA/CXCL11/NFE2L3/IFNL1/KLF6/UBA7/GBP4/ZNFX1/PPP1R15A/SP100/CCBE1/TAP1 |
| ZHAN\_MULTIPLE\_MYELOMA\_DN | ZHAN\_MULTIPLE\_MYELOMA\_DN | 42 | 0.597494 | 2.252654 | 1.89E-05 | 0.000246 | 0.000175 | 3116 | tags=45%, list=17%, signal=37% | APOE/APOC1/LIPA/LYZ/ITGB2/CEBPD/CTSH/PLA2G7/COL1A2/CD27/ALDH1A1/LST1/VCAM1/AIF1/S100A12/GP5/MRC1/PF4/SMPDL3A |
| SAGIV\_CD24\_TARGETS\_DN | SAGIV\_CD24\_TARGETS\_DN | 44 | 0.597596 | 2.250226 | 8.03E-06 | 0.000115 | 8.19E-05 | 993 | tags=27%, list=6%, signal=26% | CXCL8/ICAM1/DUSP5/PLAU/SPHK1/ECM1/GEM/CDKN1A/RELB/ATF3/OASL/GDF15 |
| RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_DN | RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_DN | 304 | 0.443167 | 2.248505 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2615 | tags=30%, list=15%, signal=26% | IL1B/C5AR1/CCL2/NAMPT/SLC2A3/HK2/TREM1/RGCC/SOD2/HBEGF/MT1G/FBP1/NR1H3/HLA-E/CYP27A1/SELL/SPHK1/C3/CCL3/CXCL1/PLTP/CLEC5A/RGS2/PLIN2/PLA2G7/CTSD/EMP1/NLRP3/NR4A2/CTSL/MT2A/VSIG4/RNASET2/RAB20/SCO2/PNP/AOAH/SGK1/LPXN/IQGAP2/APLP2/DENND3/FYN/DMXL2/PELI1/STK17B/DUSP6/NRIP3/MAFB/CD14/TCIRG1/IGFBP7/MX2/CXCL5/FCN1/GLA/FPR1/PPIF/ST6GAL1/PLSCR1/EPB41L3/BCAT1/FCGR1A/GALC/SPOCK1/LAIR1/TLR1/MCL1/AIF1/C3AR1/AQP9/DNTTIP2/EMC7/SLC43A3/CFD/CD48/ITPK1/TIMP2/ACADVL/TUBA4A/SLC16A6/EGR1/F2RL1/MS4A6A/IL18/S100A12/MAP4K1/CTSB/ANXA5/VWA5A/ATP6V0A1/KLF10 |
| OSWALD\_HEMATOPOIETIC\_STEM\_CELL\_IN\_COLLAGEN\_GEL\_UP | OSWALD\_HEMATOPOIETIC\_STEM\_CELL\_IN\_COLLAGEN\_GEL\_UP | 215 | 0.46089 | 2.245609 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2790 | tags=34%, list=16%, signal=29% | IL1B/CXCL8/ICAM1/CCL2/CD83/GADD45B/DUSP2/FOSB/ZC3H12A/RGS1/TREM1/TNFAIP3/SOD2/JUNB/DLEU2/EGR3/CCL3/CXCL1/CXCL2/RNASE1/IL6/BTG2/RGS2/IL1RN/NR4A2/CTSL/TRIB1/CDKN1A/SGK1/SPSB1/ATF3/PHOX2A/KLF4/IER5/CD14/FOS/IER3/ALDH1A1/AHSP/BCL2A1/SLCO2B1/GPR183/PDE4B/TGM4/MCL1/C3AR1/DUSP1/VPS37B/TNF/PTGER4/KLF2/GAD1/CA1/DAB2/BIRC3/CASQ1/HOMER3/TCF4/IL1A/EGR1/EPB42/SPRY2/AMIGO2/AREG/CENPI/SERPINB2/IER2/GANAB/POU4F1/TBC1D5/YRDC/ODF2/GCFC2 |
| MARTIN\_NFKB\_TARGETS\_UP | MARTIN\_NFKB\_TARGETS\_UP | 44 | 0.596055 | 2.244424 | 8.90E-06 | 0.000125 | 8.91E-05 | 1970 | tags=39%, list=11%, signal=34% | SPP1/CCL2/TTYH3/C3/CXCL2/MYC/VEGFA/DUSP6/IGFBP7/PLD4/SLC29A1/VCAM1/GTF3C1/CA2/OPN4/INHBB/TRPV6 |
| STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_DN | STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_DN | 56 | 0.572593 | 2.243788 | 8.24E-07 | 1.66E-05 | 1.18E-05 | 2747 | tags=43%, list=15%, signal=36% | SPP1/APOC1/ACP5/ITGAX/CSTB/LYZ/COTL1/CCL3/CTSD/SAT1/SOCS3/CSF2RB/CD68/LPL/POU3F2/SMAP2/BASP1/MYO7A/LILRB5/AGAP3/LRG1/SND1/ATG7/IQGAP1 |
| HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_UP | HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_UP | 21 | 0.714408 | 2.239149 | 8.14E-06 | 0.000116 | 8.25E-05 | 1726 | tags=38%, list=10%, signal=34% | TIMP3/POSTN/GEM/TNFRSF11B/CDKN1A/SGK1/PMEL/CD53 |
| FERRARI\_RESPONSE\_TO\_FENRETINIDE\_UP | FERRARI\_RESPONSE\_TO\_FENRETINIDE\_UP | 19 | 0.728639 | 2.231588 | 2.33E-05 | 0.000293 | 0.000209 | 886 | tags=47%, list=5%, signal=45% | BHLHE40/SLC7A5/CXCL2/CCL20/GPRC5A/SELE/IRF1/ATF3/ST3GAL1 |
| AMIT\_DELAYED\_EARLY\_GENES | AMIT\_DELAYED\_EARLY\_GENES | 18 | 0.744325 | 2.231529 | 2.99E-05 | 0.000358 | 0.000255 | 622 | tags=39%, list=3%, signal=38% | FOSL1/BHLHE40/JUNB/BTG2/ZFP36L2/FOSL2/ATF3 |
| WP\_ANTIVIRAL\_AND\_ANTIINFLAMMATORY\_EFFECTS\_OF\_NRF2\_ON\_SARSCOV2\_PATHWAY | WP\_ANTIVIRAL\_AND\_ANTIINFLAMMATORY\_EFFECTS\_OF\_NRF2\_ON\_SARSCOV2\_PATHWAY | 29 | 0.651663 | 2.228707 | 2.14E-05 | 0.000272 | 0.000193 | 3792 | tags=59%, list=21%, signal=46% | IL1B/CXCL8/CCL2/HMOX1/IL6/MMP1/GCLM/TNF/IRF3/IKBKB/TMPRSS2/PRKG2/ACE2/GUCY1A2/NQO1/NFKBIA/NFKB1 |
| LUI\_THYROID\_CANCER\_CLUSTER\_4 | LUI\_THYROID\_CANCER\_CLUSTER\_4 | 11 | 0.859739 | 2.228278 | 8.96E-06 | 0.000126 | 8.93E-05 | 225 | tags=64%, list=1%, signal=63% | HLA-DRB1/HLA-DQB1/CD74/HLA-DRA/PLTP/HLA-DPA1/HLA-DPB1 |
| LIAN\_NEUTROPHIL\_GRANULE\_CONSTITUENTS | LIAN\_NEUTROPHIL\_GRANULE\_CONSTITUENTS | 25 | 0.681135 | 2.226322 | 1.20E-05 | 0.000166 | 0.000118 | 1559 | tags=32%, list=9%, signal=29% | MMP9/LYZ/ITGB2/CTSH/CTSD/MMP13/FPR1/CTSG |
| CROONQUIST\_STROMAL\_STIMULATION\_UP | CROONQUIST\_STROMAL\_STIMULATION\_UP | 53 | 0.573468 | 2.225954 | 3.71E-06 | 5.97E-05 | 4.25E-05 | 3158 | tags=57%, list=18%, signal=47% | FOSB/CCL3/CXCL1/CXCL2/IL6/RGS2/NR4A2/PIM2/TGFBI/SULF1/COL1A2/SERPINE1/FOS/IGFBP7/IER3/RPS4Y1/TMSB4X/COL6A3/BASP1/ACTA2/DUSP1/SPTBN1/GABRA5/THBS2/IGFBP4/IER2/TGM2/CCL4/GUCY1A2/NUPR1 |
| PRAMOONJAGO\_SOX4\_TARGETS\_UP | PRAMOONJAGO\_SOX4\_TARGETS\_UP | 52 | 0.575516 | 2.225151 | 3.13E-06 | 5.12E-05 | 3.64E-05 | 993 | tags=29%, list=6%, signal=27% | IL1B/SLC2A3/BHLHE40/STC1/TNFAIP3/SOD2/NDRG1/PLIN2/ADM/VEGFA/ARHGAP45/GPRC5A/SERPINE1/IER3/GDF15 |
| WP\_HEMATOPOIETIC\_STEM\_CELL\_DIFFERENTIATION | WP\_HEMATOPOIETIC\_STEM\_CELL\_DIFFERENTIATION | 55 | 0.570044 | 2.225122 | 2.46E-06 | 4.17E-05 | 2.97E-05 | 1416 | tags=33%, list=8%, signal=30% | IL1B/NCKAP1L/SPI1/FOSB/PIM1/IL6/IRF5/VAV1/IL3/NFE2/RHOH/GATA1/FOS/IKZF1/CSF1/GP9/CSF2/CSF3 |
| FERRANDO\_T\_ALL\_WITH\_MLL\_ENL\_FUSION\_UP | FERRANDO\_T\_ALL\_WITH\_MLL\_ENL\_FUSION\_UP | 83 | 0.52493 | 2.224026 | 3.72E-07 | 8.15E-06 | 5.79E-06 | 2723 | tags=34%, list=15%, signal=29% | SLC7A5/TNFAIP3/HLA-E/LAPTM5/FLNA/SELL/FCGRT/CTSH/GPSM3/IL32/PTPN6/WAS/VIM/IL2RG/PRSS3/MBOAT7/LCP2/CD3E/IKZF1/SPOCK2/RALGDS/SPTBN1/TCF4/G6PD/FUT7/NFIL3/CBLB/ADCYAP1 |
| RASHI\_NFKB1\_TARGETS | RASHI\_NFKB1\_TARGETS | 19 | 0.726151 | 2.223968 | 2.53E-05 | 0.000314 | 0.000223 | 2683 | tags=63%, list=15%, signal=54% | TNFAIP3/CXCL2/BTG2/NFKB2/IRF1/RELB/DUSP6/MAP3K8/CSF1/TNIP1/BIRC3/MDM2 |
| PID\_INTEGRIN\_A9B1\_PATHWAY | PID\_INTEGRIN\_A9B1\_PATHWAY | 24 | 0.688345 | 2.223481 | 2.03E-05 | 0.00026 | 0.000185 | 1628 | tags=38%, list=9%, signal=34% | SPP1/ADAM8/SAT1/VEGFA/TNC/PXN/CSF2/VCAM1/F13A1 |
| WP\_IL18\_SIGNALING\_PATHWAY | WP\_IL18\_SIGNALING\_PATHWAY | 267 | 0.442836 | 2.222474 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2422 | tags=28%, list=13%, signal=25% | SPP1/IL1B/CXCL8/ICAM1/CCL2/NCF2/CD83/CCL18/HMOX1/TIMP3/MMP9/ZC3H12A/TNFAIP3/NR1H3/CCL3/CXCL2/IL6/BTG2/MMP1/PLA2G7/TNFAIP2/CCL20/IL18RAP/HCAR2/TNFRSF11B/RGS16/MMP13/CEBPB/VEGFA/SOCS3/NFKB2/GPAT4/GSK3B/GRN/IRF1/CXCL16/CD81/NPPA/ATF3/CCL1/COL1A2/ENO1/IL9/GATA1/FOS/IER3/CDK5R2/CRYGC/MEF2A/SYT10/NFKBIE/TNIP3/MYH6/TMSB4X/COL1A1/PTPN7/IL12B/PPT2/ACTA2/NPPB/NRN1/B2M/TNF/IRAK1/KLF2/TIMP1/PPP1R13L/BIRC3/IL17RC/IKBKB/CCDC9/TRAF1/PRCC/IL18/BAX/PRM1 |
| SARTIPY\_NORMAL\_AT\_INSULIN\_RESISTANCE\_UP | SARTIPY\_NORMAL\_AT\_INSULIN\_RESISTANCE\_UP | 29 | 0.649413 | 2.221012 | 2.35E-05 | 0.000294 | 0.000209 | 739 | tags=31%, list=4%, signal=30% | CCL2/FOSL1/HMOX1/PHLDA1/BHLHE40/TUBB2A/SRXN1/SPSB1/DUSP6 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G28 | DAZARD\_UV\_RESPONSE\_CLUSTER\_G28 | 17 | 0.755915 | 2.220034 | 7.27E-06 | 0.000106 | 7.53E-05 | 989 | tags=47%, list=6%, signal=45% | CXCL8/GADD45B/MT1G/CXCL2/CCDC85B/CCL20/ATF3/IER3 |
| BIOCARTA\_IL17\_PATHWAY | BIOCARTA\_IL17\_PATHWAY | 15 | 0.781182 | 2.219068 | 1.86E-05 | 0.000244 | 0.000173 | 1416 | tags=53%, list=8%, signal=49% | CXCL8/CD4/IL6/IL3/CD8A/CD2/CD3E/CSF3 |
| BIOCARTA\_STEM\_PATHWAY | BIOCARTA\_STEM\_PATHWAY | 15 | 0.78081 | 2.21801 | 1.89E-05 | 0.000246 | 0.000175 | 1416 | tags=60%, list=8%, signal=55% | CXCL8/CD4/IL6/IL3/CD8A/IL9/CSF1/CSF2/CSF3 |
| BIOCARTA\_CTLA4\_PATHWAY | BIOCARTA\_CTLA4\_PATHWAY | 22 | 0.704533 | 2.217539 | 1.19E-05 | 0.000166 | 0.000118 | 2947 | tags=59%, list=16%, signal=49% | HLA-DRB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-DRB5/ITK/CTLA4/CD3E/CD80/ICOS/CD247/ICOSLG/GRB2 |
| REACTOME\_KERATINIZATION | REACTOME\_KERATINIZATION | 195 | 0.458435 | 2.216455 | 4.66E-10 | 1.81E-08 | 1.29E-08 | 4354 | tags=43%, list=24%, signal=33% | KRT17/KRT14/KRTAP11-1/ST14/KRT8/KRTAP10-3/SPRR1B/KRTAP4-1/KRTAP9-9/KRT79/KRTAP6-2/SPRR2D/KRTAP12-1/SPINK5/LIPN/FURIN/KRTAP19-3/KRTAP19-2/LCE2A/KRTAP27-1/LIPM/KRTAP15-1/DSG3/KLK8/KRTAP4-4/KRTAP20-1/LCE2C/KRTAP21-1/KRTAP13-4/KRTAP21-2/KRTAP13-3/LIPJ/KLK14/KRTAP24-1/RPTN/KRT6A/LCE3C/KRT78/KRT36/KRTAP12-2/KRT24/KRTAP4-2/CAPNS1/KRTAP25-1/LCE1A/PRSS8/KRT85/KRT20/KRTAP17-1/CELA2A/KRT4/KRTAP10-12/KRTAP12-3/KRT6C/LCE3D/KRTAP10-2/KRT12/KRTAP10-1/KRT77/KRT33B/KRTAP2-2/KRTAP4-11/KRT34/LCE1F/LCE3B/FLG/KRT83/KRT16/KRTAP4-5/DSC2/SPRR2B/CDSN/KRT35/KRTAP3-2/SPRR1A/KRTAP4-3/KRTAP5-5/KRTAP5-1/DSC1/DSG2/SPRR2A/TCHH/LCE1D/TGM5 |
| ONDER\_CDH1\_TARGETS\_3\_DN | ONDER\_CDH1\_TARGETS\_3\_DN | 56 | 0.565573 | 2.216279 | 1.60E-06 | 2.91E-05 | 2.07E-05 | 3305 | tags=45%, list=18%, signal=37% | IL1B/CXCL8/HS3ST2/HBEGF/CXCL1/CXCL2/KRT8/SERPINB1/GPRC5A/SPRR2D/DUSP6/PTHLH/CSF2/CSF3/VGLL1/CYB5R2/TMPRSS11E/SOX9/SERPINB2/SCEL/S100A7/TGFA/KLK11/TP63/EPN3 |
| DORN\_ADENOVIRUS\_INFECTION\_32HR\_DN | DORN\_ADENOVIRUS\_INFECTION\_32HR\_DN | 37 | 0.613754 | 2.216119 | 5.08E-06 | 7.72E-05 | 5.49E-05 | 1901 | tags=41%, list=11%, signal=36% | CD83/KRT14/JUNB/TNFRSF12A/EGR3/NFKB2/SGK1/CYTH1/MAP2K3/IER3/EPHA2/SDCBP/MCL1/ELL2/SYNCRIP |
| DALESSIO\_TSA\_RESPONSE | DALESSIO\_TSA\_RESPONSE | 23 | 0.69303 | 2.214604 | 1.55E-05 | 0.000206 | 0.000146 | 942 | tags=35%, list=5%, signal=33% | GADD45B/MMP12/ARC/SNAI1/FOSL2/CGA/ATF3/FOS |
| PARK\_TRETINOIN\_RESPONSE\_AND\_RARA\_PLZF\_FUSION | PARK\_TRETINOIN\_RESPONSE\_AND\_RARA\_PLZF\_FUSION | 23 | 0.692832 | 2.213972 | 1.55E-05 | 0.000206 | 0.000146 | 989 | tags=39%, list=6%, signal=37% | SPI1/PIM1/NDRG1/PLEK/PLCB2/PTPN6/ARHGAP45/ST3GAL1/IER3 |
| PID\_NFAT\_TFPATHWAY | PID\_NFAT\_TFPATHWAY | 45 | 0.585921 | 2.211984 | 4.65E-06 | 7.20E-05 | 5.12E-05 | 3261 | tags=42%, list=18%, signal=35% | CXCL8/FOSL1/JUNB/EGR3/EGR2/NFATC1/IL3/FOS/CTLA4/IKZF1/CSF2/TNF/EGR1/SLC3A2/CBLB/DGKA/PTPN1/IL4/IL5 |
| WP\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | WP\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | 56 | 0.564384 | 2.211617 | 1.76E-06 | 3.17E-05 | 2.26E-05 | 1920 | tags=34%, list=11%, signal=30% | C5AR1/PLAUR/C1QC/C1QB/PLAU/C3/LMAN1/BDKRB1/CFB/SERPINE1/THBD/SERPINA1/PLG/SERPIND1/FGB/C3AR1/PROC/C2/CFD |
| WEST\_ADRENOCORTICAL\_CARCINOMA\_VS\_ADENOMA\_DN | WEST\_ADRENOCORTICAL\_CARCINOMA\_VS\_ADENOMA\_DN | 24 | 0.6846 | 2.211384 | 2.34E-05 | 0.000294 | 0.000209 | 225 | tags=29%, list=1%, signal=29% | APOE/HLA-DRB1/C1QB/HLA-DRA/SLC25A24/HLA-DPA1/HLA-DPB1 |
| WP\_COMPLEMENT\_SYSTEM | WP\_COMPLEMENT\_SYSTEM | 95 | 0.512425 | 2.211112 | 9.79E-08 | 2.40E-06 | 1.71E-06 | 1933 | tags=29%, list=11%, signal=26% | SPP1/C5AR1/ICAM1/PLAUR/ITGAX/ITGB2/SELL/GNA15/C3/ADM/VSIG4/WAS/ARRB2/SELE/CFB/RPS19/CD19/PLG/FCN1/FPR1/GNAI2/FCGR3A/FGB/F13A1/C3AR1/C2/CFD/CPN1 |
| WP\_VITAMIN\_B12\_METABOLISM | WP\_VITAMIN\_B12\_METABOLISM | 46 | 0.582993 | 2.20298 | 6.26E-06 | 9.23E-05 | 6.56E-05 | 1227 | tags=28%, list=7%, signal=26% | IL1B/APOE/ICAM1/CCL2/SOD2/IL6/HBB/SCARB1/NFKB2/SOD3/SERPINE1/PLG/MTHFR |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_2 | RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_2 | 119 | 0.486412 | 2.200845 | 5.60E-08 | 1.47E-06 | 1.04E-06 | 3775 | tags=40%, list=21%, signal=32% | ICAM1/TIMP3/TNFAIP3/SQSTM1/JUNB/CEBPD/CXCL2/TUBB2A/BTG2/RNF19B/NFKB2/CDKN1A/PVR/IRF1/RELB/ATF3/KLF4/DUSP6/SRPRA/CD14/MAP3K8/PLSCR1/MAN2B1/CSF1/GALC/PDE4B/ACTA2/TNIP1/VPS37B/PCP4L1/CISH/INPP5A/BIRC3/BAX/KLF10/MDM2/LAMC2/HIVEP1/TGIF1/DENND5A/STAT3/CLDN4/STXBP1/KLF6/N4BP1/DSC2/NFKBIA/SPRR1A |
| MORI\_LARGE\_PRE\_BII\_LYMPHOCYTE\_DN | MORI\_LARGE\_PRE\_BII\_LYMPHOCYTE\_DN | 54 | 0.565028 | 2.197316 | 3.34E-06 | 5.42E-05 | 3.85E-05 | 2037 | tags=37%, list=11%, signal=33% | CAPG/CD74/CD83/IL4I1/CTSH/PTPN6/SERPINB1/IL2RG/IL10RA/GMIP/LCP1/ADCY7/HLA-DMB/VCAM1/MCL1/IL4R/RGL2/IRF8/SEMA4D/BIRC3 |
| RODWELL\_AGING\_KIDNEY\_UP | RODWELL\_AGING\_KIDNEY\_UP | 448 | 0.418319 | 2.195429 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2243 | tags=27%, list=12%, signal=24% | MMP7/HLA-DRB1/CCL2/HLA-DQB1/C1QC/ADAM8/C1QB/LYZ/HLA-DRA/RGS1/ITGB2/SLC15A3/HLA-F/HLA-E/LAPTM5/HCST/TYMP/MYDGF/CXCL1/RAC2/ISLR/IL4I1/HLA-DRB6/HLA-DPA1/CORO1A/RPLP2/LYN/TNFAIP2/MMP11/TNFRSF11B/IL32/PALD1/TPSAB1/PTPN6/C15orf48/HLA-B/TOR4A/ARHGAP45/HLA-A/GABBR1/GZMK/SOCS3/VIM/TNC/GRN/TYROBP/LACC1/TGFBI/ARHGAP30/FCER1G/HLA-G/CXCL16/IL10RA/PTPRE/USP31/FXYD5/COMP/CORO7/TKT/LTBR/GPNMB/TRIM47/COL1A2/JCHAIN/ABRACL/LCP2/CFB/CSF1R/RNF166/THEMIS2/RPS19/CD14/PROM1/ADRA2A/COL5A1/MYO1F/LIX1/RUNX3/MGAT1/TPM3/RPL18/PPM1M/SEL1L3/IKZF1/MAN2B1/COL1A1/MRAS/LST1/IRF9/BCL2A1/SLAMF8/CXCL14/TAPBP/VCAM1/VOPP1/SNCA/HCLS1/ADGRG1/KXD1/PRB1/CD53/IRAK1/DTX3L/PPP1R18/MFGE8/APRT/IRF8/TIMP1/LY6E/CMTM3/SLC18A2/IL17RA/BIRC3/RBCK1/STK10/TIMP2/GBP5/IKBKB/PGGHG/ODF3B/TMC6/MS4A6A |
| WP\_COVID19\_ADVERSE\_OUTCOME\_PATHWAY | WP\_COVID19\_ADVERSE\_OUTCOME\_PATHWAY | 15 | 0.772411 | 2.194151 | 2.82E-05 | 0.000342 | 0.000243 | 2253 | tags=53%, list=13%, signal=47% | IL1B/CXCL8/CCL2/CCL3/IL6/CSF3/TNF/TMPRSS2 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_DN | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_DN | 52 | 0.566491 | 2.190256 | 4.77E-06 | 7.33E-05 | 5.21E-05 | 747 | tags=25%, list=4%, signal=24% | HLA-DQB1/HBG1/ADAM8/BTG2/RGS2/HBB/PDE4A/NR4A2/HDC/ITGB7/ADAMDEC1/STK17B/SRPRA |
| GERY\_CEBP\_TARGETS | GERY\_CEBP\_TARGETS | 124 | 0.480575 | 2.190018 | 6.32E-08 | 1.61E-06 | 1.15E-06 | 1691 | tags=24%, list=9%, signal=22% | PLAUR/GADD45B/HMOX1/POSTN/LYZ/HBEGF/JUNB/PIM1/C3/CXCL2/BTG2/RGS2/SAT1/CRABP2/SERPINB9/MNDA/CD68/ATF3/KLF4/LPL/ANGPTL4/FOS/TFRC/RRAD/GLA/XDH/TGM3/ACTA2/PROCR/DUSP1 |
| BIOCARTA\_THELPER\_PATHWAY | BIOCARTA\_THELPER\_PATHWAY | 12 | 0.823599 | 2.188774 | 2.50E-05 | 0.000311 | 0.000221 | 1126 | tags=42%, list=6%, signal=39% | ICAM1/CD4/ITGB2/CD2/CD3E |
| DIAZ\_CHRONIC\_MYELOGENOUS\_LEUKEMIA\_DN | DIAZ\_CHRONIC\_MYELOGENOUS\_LEUKEMIA\_DN | 110 | 0.486566 | 2.186028 | 1.60E-07 | 3.75E-06 | 2.66E-06 | 2622 | tags=35%, list=15%, signal=30% | GADD45B/IFI30/SELL/CEBPD/CST7/BTG2/IRF7/CLEC5A/HLA-B/TGFBI/GAS7/MNDA/IL10RA/PTPRE/CCR7/KLF4/LPL/CSF1R/MAFB/GPR137B/PROM1/HLA-DMB/NINJ1/SATB1/EPB41L3/FCGR1A/MCL1/F13A1/HMHB1/CD53/KLF2/IRF8/LILRB3/RPS12/MS4A6A/IL7R/SLC1A3/ANXA5/BLNK |
| WUNDER\_INFLAMMATORY\_RESPONSE\_AND\_CHOLESTEROL\_UP | WUNDER\_INFLAMMATORY\_RESPONSE\_AND\_CHOLESTEROL\_UP | 62 | 0.549119 | 2.185176 | 3.00E-06 | 4.92E-05 | 3.50E-05 | 2048 | tags=29%, list=11%, signal=26% | HLA-DRB1/CD74/CCL8/HLA-E/GK/LYN/HLA-B/PRSS3/SOCS1/CD14/HLA-DMB/SERPINA1/TFRC/AIF1/B2M/SLC16A1/CMPK2/GBP2 |
| HELLEBREKERS\_SILENCED\_DURING\_TUMOR\_ANGIOGENESIS | HELLEBREKERS\_SILENCED\_DURING\_TUMOR\_ANGIOGENESIS | 76 | 0.524132 | 2.184504 | 1.51E-06 | 2.78E-05 | 1.97E-05 | 989 | tags=25%, list=6%, signal=24% | APOE/CXCL8/ICAM1/UCP2/TNFAIP3/LRP1/CXCL1/IL6/ADM/IL32/CDKN1A/CCL11/COL4A2/RELB/FABP4/FTH1/HLA-C/IGFBP7/IER3 |
| LEE\_LIVER\_CANCER\_ACOX1\_UP | LEE\_LIVER\_CANCER\_ACOX1\_UP | 60 | 0.552344 | 2.183979 | 1.31E-06 | 2.48E-05 | 1.76E-05 | 2693 | tags=45%, list=15%, signal=38% | CD74/CSTB/NDRG1/SLC20A1/RGS2/PLIN2/CTSL/MT2A/KRT8/LGALS3BP/COL4A2/SGK1/SLPI/IGFBP2/LPL/FABP4/PLSCR1/IMPACT/MFGE8/UAP1L1/LY6E/SLC16A1/CIDEC/PALMD/RAP1GAP/ANXA5/ANXA2 |
| WP\_MATRIX\_METALLOPROTEINASES | WP\_MATRIX\_METALLOPROTEINASES | 30 | 0.632735 | 2.183816 | 3.39E-05 | 0.000399 | 0.000284 | 2314 | tags=40%, list=13%, signal=35% | MMP7/MMP12/TIMP3/MMP9/MMP1/MMP11/MMP13/MMP19/TNF/TIMP1/TIMP2/MMP26 |
| DORN\_ADENOVIRUS\_INFECTION\_12HR\_DN | DORN\_ADENOVIRUS\_INFECTION\_12HR\_DN | 29 | 0.638356 | 2.183199 | 4.01E-05 | 0.000456 | 0.000324 | 2769 | tags=48%, list=15%, signal=41% | CD83/ANPEP/TNFRSF12A/IL6/MYC/SGK1/MAP2K3/IER3/SDCBP/MCL1/SYNCRIP/ELF3/KYNU/SRSF5 |
| PID\_ATF2\_PATHWAY | PID\_ATF2\_PATHWAY | 58 | 0.556164 | 2.181727 | 4.31E-06 | 6.82E-05 | 4.84E-05 | 2318 | tags=26%, list=13%, signal=23% | CXCL8/HBG2/DUSP5/PLAU/JUNB/IL6/SOCS3/SELE/ATF3/JDP2/FOS/HRK/DUSP1/DUSP10/ACHE |
| REACTOME\_INITIAL\_TRIGGERING\_OF\_COMPLEMENT | REACTOME\_INITIAL\_TRIGGERING\_OF\_COMPLEMENT | 22 | 0.692977 | 2.181167 | 2.63E-05 | 0.000324 | 0.00023 | 1920 | tags=41%, list=11%, signal=37% | C1QC/C1QB/C3/COLEC10/GZMM/CFB/FCN1/C2/CFD |
| BIOCARTA\_TH1TH2\_PATHWAY | BIOCARTA\_TH1TH2\_PATHWAY | 23 | 0.68235 | 2.180476 | 2.79E-05 | 0.000339 | 0.000241 | 3218 | tags=43%, list=18%, signal=36% | HLA-DRB1/HLA-DRB4/HLA-DRA/HLA-DRB3/HLA-DRB5/IL12B/IL4R/IL18/IFNGR1/IL4 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_CTNNB1\_DN | CHIANG\_LIVER\_CANCER\_SUBCLASS\_CTNNB1\_DN | 164 | 0.461455 | 2.179514 | 4.09E-09 | 1.33E-07 | 9.42E-08 | 2399 | tags=32%, list=13%, signal=28% | CAPG/ACP5/DUSP5/MMP9/RGS1/FBP1/SPHK1/PLBD1/S100P/ISLR/PLTP/MXRA5/GEM/CCL20/C15orf48/EGR2/SOCS3/SERPINB9/POU2AF1/SULF1/CXCL16/CYBA/SLPI/GPNMB/PELI1/COL1A2/SERPINE1/FURIN/COL5A1/CD2/INHBE/SEL1L3/BGN/COL6A3/COL1A1/CCL21/BASP1/GPR183/PAPLN/CHST11/TNFSF13B/TIMP1/EFEMP1/CMTM3/TIMP2/MCUB/SLC2A9/EGR1/AMIGO2/THBS2/IL7R/C11orf96 |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_ALL\_DN | HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_ALL\_DN | 11 | 0.840871 | 2.179374 | 2.67E-05 | 0.000328 | 0.000233 | 744 | tags=55%, list=4%, signal=52% | CST7/CA4/SLC11A1/MATK/MATN1/KIR3DL2 |
| ADDYA\_ERYTHROID\_DIFFERENTIATION\_BY\_HEMIN | ADDYA\_ERYTHROID\_DIFFERENTIATION\_BY\_HEMIN | 68 | 0.540232 | 2.178338 | 2.83E-06 | 4.67E-05 | 3.32E-05 | 2251 | tags=32%, list=13%, signal=28% | CXCL8/UCP2/APOC1/PIM1/CXCL2/CTSH/CTSL/MT2A/CEBPB/SLC2A14/INSIG1/ATF3/IER5/FTH1/IER3/PTPN7/AKR1C2/MCL1/ATF5/SLC43A3/EGR1/AAK1 |
| GOLUB\_ALL\_VS\_AML\_DN | GOLUB\_ALL\_VS\_AML\_DN | 23 | 0.681676 | 2.178322 | 3.11E-05 | 0.00037 | 0.000263 | 2064 | tags=48%, list=11%, signal=42% | CXCL8/ITGAX/LYZ/SQSTM1/LYN/CTSD/PPIF/ZYX/MCL1/CFD/CST3 |
| REACTOME\_COSTIMULATION\_BY\_THE\_CD28\_FAMILY | REACTOME\_COSTIMULATION\_BY\_THE\_CD28\_FAMILY | 67 | 0.541384 | 2.177959 | 1.64E-06 | 2.97E-05 | 2.11E-05 | 1745 | tags=28%, list=10%, signal=26% | HLA-DRB1/HLA-DQB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DPA1/LYN/HLA-DPB1/PTPN6/HLA-DRB5/VAV1/FYN/CTLA4/CD3E/CD274/MAP3K8/CD80/ICOS |
| WP\_GLUCOCORTICOID\_RECEPTOR\_PATHWAY | WP\_GLUCOCORTICOID\_RECEPTOR\_PATHWAY | 69 | 0.536863 | 2.17709 | 9.76E-07 | 1.92E-05 | 1.36E-05 | 2299 | tags=30%, list=13%, signal=27% | CCL2/GADD45B/BHLHE40/TNFAIP3/S100P/RGS2/CCL20/NFKB2/SERPINB9/ANGPTL4/THBD/PDE4B/ZIC2/MFGE8/DNER/ARL5B/FGFBP1/BIRC3/SLC19A2/CPEB4/AMIGO2 |
| REACTOME\_ENDOSOMAL\_VACUOLAR\_PATHWAY | REACTOME\_ENDOSOMAL\_VACUOLAR\_PATHWAY | 11 | 0.839016 | 2.174566 | 2.83E-05 | 0.000342 | 0.000243 | 1713 | tags=73%, list=10%, signal=66% | HLA-F/HLA-E/CTSL/HLA-B/HLA-A/HLA-G/HLA-C/B2M |
| WANG\_TNF\_TARGETS | WANG\_TNF\_TARGETS | 24 | 0.672105 | 2.171024 | 4.42E-05 | 0.000497 | 0.000353 | 1594 | tags=46%, list=9%, signal=42% | TNFAIP3/LIMK1/IL6/MMP13/SELE/CD68/GDF15/CSF2/CSF3/VCAM1/ADGRG1 |
| REACTOME\_ACTIVATION\_OF\_MATRIX\_METALLOPROTEINASES | REACTOME\_ACTIVATION\_OF\_MATRIX\_METALLOPROTEINASES | 33 | 0.618558 | 2.17065 | 2.74E-05 | 0.000335 | 0.000238 | 4701 | tags=61%, list=26%, signal=45% | MMP7/MMP9/MMP1/MMP11/MMP13/TPSAB1/FURIN/PLG/CTSG/TIMP1/TIMP2/CTRB1/MMP2/MMP24/PRSS1/CMA1/MMP17/CTSK/MMP3/SPOCK3 |
| CHIBA\_RESPONSE\_TO\_TSA\_UP | CHIBA\_RESPONSE\_TO\_TSA\_UP | 49 | 0.565157 | 2.165077 | 1.54E-05 | 0.000206 | 0.000146 | 2099 | tags=35%, list=12%, signal=31% | TIMP3/KRT14/FOSB/HBEGF/JUNB/MMP11/MMP13/HLA-A/IGFBP2/RHOG/COL1A2/MMP19/SOD3/FOS/CD9/APRT/TIMP2 |
| PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_DN | PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_DN | 129 | 0.47197 | 2.164165 | 3.17E-08 | 8.77E-07 | 6.24E-07 | 3155 | tags=36%, list=18%, signal=30% | GADD45B/SIK1/DUSP2/NAMPT/SLC2A3/FOSB/RGS1/TNFAIP3/RGCC/CSRNP1/TUBB2A/RGS2/NR4A2/FOSL2/KDM6B/MXD1/EIF1/ZNF331/PELI1/KLF4/STK17B/PER1/IER5/LY9/GABARAPL1/MAP3K8/MCL1/TP53INP2/EIF5/PTGER4/CBX4/DUSP10/NDUFA10/AREG/SARAF/IRF2BP2/AMD1/KLF10/EIF4G3/TOB1/DUSP4/SRSF5/JMY/CHD1/MGAT4A/CD6 |
| BIOCARTA\_CSK\_PATHWAY | BIOCARTA\_CSK\_PATHWAY | 22 | 0.687538 | 2.164047 | 3.55E-05 | 0.000415 | 0.000295 | 1126 | tags=32%, list=6%, signal=30% | HLA-DRB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DRB5/CD3E |
| WP\_SPINAL\_CORD\_INJURY | WP\_SPINAL\_CORD\_INJURY | 116 | 0.478997 | 2.161063 | 2.70E-07 | 6.01E-06 | 4.27E-06 | 3051 | tags=31%, list=17%, signal=26% | IL1B/CXCL8/ICAM1/CCL2/MMP12/GAP43/C1QB/MMP9/CXCL1/CXCL2/IL6/BTG2/MYC/VIM/RHOB/NOS1/FOS/FKBP1A/KLK8/AIF1/CHST11/TNFSF13B/PRB1/TNF/RTN4R/LILRB3/SLIT1/IL1A/EGR1/SOX9/TP53/AQP1/PDYN/MAG/LTB/GJA1 |
| KEGG\_NOD\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | KEGG\_NOD\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 62 | 0.542806 | 2.160055 | 4.06E-06 | 6.46E-05 | 4.59E-05 | 440 | tags=19%, list=2%, signal=19% | IL1B/CXCL8/CCL2/CCL8/TNFAIP3/CXCL1/CXCL2/IL6/MAPK13/NLRP3/NOD2/CCL11 |
| GERHOLD\_ADIPOGENESIS\_UP | GERHOLD\_ADIPOGENESIS\_UP | 48 | 0.566162 | 2.158472 | 8.76E-06 | 0.000124 | 8.84E-05 | 3368 | tags=50%, list=19%, signal=41% | APOE/SQSTM1/SCD/PLIN2/CEBPB/VEGFA/CRAT/VEGFB/FABP4/MNT/GCLM/MCL1/CFD/CIDEC/ACADVL/ACSL1/ADRB3/LDHA/DDIT3/ADIPOQ/FABP5/CD36/STAT3/SCP2 |
| ZHU\_CMV\_8\_HR\_UP | ZHU\_CMV\_8\_HR\_UP | 39 | 0.588034 | 2.157381 | 3.09E-05 | 0.00037 | 0.000263 | 2222 | tags=31%, list=12%, signal=27% | NAMPT/TNFAIP3/HLA-E/IL6/MX2/GBP1/TRIM21/OAS1/IRF2/ATF5/RIPK1/EGR1 |
| BROCKE\_APOPTOSIS\_REVERSED\_BY\_IL6 | BROCKE\_APOPTOSIS\_REVERSED\_BY\_IL6 | 140 | 0.465926 | 2.156035 | 5.29E-08 | 1.41E-06 | 1.00E-06 | 2585 | tags=30%, list=14%, signal=26% | SPP1/ICAM1/CCL2/GADD45B/SIK1/NAMPT/DUSP5/SLC2A3/BHLHE40/HBEGF/JUNB/PIM1/BCL3/ZFP36L2/PIM2/RGS16/SH2D2A/CEBPB/SOCS3/SGK1/POU2AF1/IRF1/STK17B/SOCS1/SBNO2/HCK/MAP3K8/PLSCR1/OAS1/IRF9/MCL1/EIF5/ELL2/HEG1/RALA/SLC16A6/TPM4/LPCAT4/TMEM184B/IER2/SREK1IP1/VWA5A |
| SUH\_COEXPRESSED\_WITH\_ID1\_AND\_ID2\_UP | SUH\_COEXPRESSED\_WITH\_ID1\_AND\_ID2\_UP | 18 | 0.719129 | 2.155989 | 0.000105 | 0.001062 | 0.000755 | 1840 | tags=50%, list=10%, signal=45% | GADD45B/BHLHE40/PLAU/SQSTM1/NDRG1/RAB20/MYO1F/GABARAPL1/ATF5 |
| NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_UP | NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 81 | 0.510388 | 2.154917 | 2.61E-06 | 4.35E-05 | 3.09E-05 | 2096 | tags=36%, list=12%, signal=32% | TNFRSF1B/SQSTM1/CEBPD/CCL3/GK/SLC11A1/SLC20A1/IL1RN/SAT1/RGS16/EIF1/PNP/CDKN1A/BCL6B/SLPI/ATF3/LCP2/FURIN/HCK/IER3/FCGR2B/CLEC4D/HCLS1/TNIP1/C3AR1/TNF/TNFSF9/DAB2/STK10 |
| DORN\_ADENOVIRUS\_INFECTION\_24HR\_DN | DORN\_ADENOVIRUS\_INFECTION\_24HR\_DN | 39 | 0.587339 | 2.154832 | 3.21E-05 | 0.000381 | 0.000271 | 1712 | tags=36%, list=10%, signal=33% | CD83/JUNB/TNFRSF12A/EGR3/IL6/NFKB2/SGK1/CYTH1/MAP2K3/IER3/EPHA2/SDCBP/MCL1/ELL2 |
| DUTTA\_APOPTOSIS\_VIA\_NFKB | DUTTA\_APOPTOSIS\_VIA\_NFKB | 33 | 0.613778 | 2.153875 | 3.67E-05 | 0.000424 | 0.000302 | 2683 | tags=45%, list=15%, signal=39% | GADD45B/TNFAIP3/SOD2/TNFRSF21/FTH1/IER3/TNFRSF10B/CD274/BCL2A1/TNF/BIRC3/TRAF1/BAX/TP53/MDM2 |
| BIOCARTA\_TCYTOTOXIC\_PATHWAY | BIOCARTA\_TCYTOTOXIC\_PATHWAY | 12 | 0.810149 | 2.15303 | 5.32E-05 | 0.000589 | 0.000419 | 1126 | tags=42%, list=6%, signal=39% | ICAM1/ITGB2/CD8A/CD2/CD3E |
| PID\_HIF1\_TFPATHWAY | PID\_HIF1\_TFPATHWAY | 66 | 0.535032 | 2.14882 | 2.45E-06 | 4.17E-05 | 2.96E-05 | 1573 | tags=27%, list=9%, signal=25% | HMOX1/BHLHE40/HK2/ITGB2/PKM/NDRG1/PLIN2/PFKFB3/ADM/VEGFA/ENO1/SERPINE1/FURIN/FOS/TFRC/HIF1A/ENG/MCL1 |
| LEE\_LIVER\_CANCER\_MYC\_E2F1\_UP | LEE\_LIVER\_CANCER\_MYC\_E2F1\_UP | 53 | 0.553189 | 2.14724 | 1.41E-05 | 0.000193 | 0.000137 | 2693 | tags=36%, list=15%, signal=31% | SPP1/ICAM1/CD74/MMP12/CSTB/KRT8/COL1A2/LPL/FABP4/PLSCR1/COL1A1/BCL2A1/CISH/UAP1L1/LY6E/PALMD/CXCL9/ANXA5/ANXA2 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_UP | GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_UP | 86 | 0.505031 | 2.14683 | 1.37E-06 | 2.59E-05 | 1.84E-05 | 3347 | tags=35%, list=19%, signal=29% | APOE/APOC1/HBG1/CCL8/RGCC/BLVRB/CCL3/TUBB2A/IL1RN/HBB/HBD/CCL20/CTSL/TPSAB1/HDC/LMNA/PPIF/TFR2/HPGDS/CA2/CA1/CLEC11A/SERPINB2/GINS1/PF4/ICAM4/CDC20/CD36/DHFR/KIF15 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_5 | YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_5 | 30 | 0.621599 | 2.145382 | 6.81E-05 | 0.000729 | 0.000518 | 2983 | tags=53%, list=17%, signal=45% | GAP43/ADM/VEGFA/ATF3/KLF4/PER1/IER3/USP2/BPIFA2/XDH/CNDP2/BASP1/PCK1/KLF10/PPTC7/S100G |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G4 | DAZARD\_UV\_RESPONSE\_CLUSTER\_G4 | 18 | 0.715258 | 2.144385 | 0.000125 | 0.001241 | 0.000882 | 1916 | tags=50%, list=11%, signal=45% | GADD45B/ARHGDIA/TUBB4B/PRSS3/TUBB3/DUSP1/XBP1/APRT/CAPNS1 |
| RUTELLA\_RESPONSE\_TO\_HGF\_UP | RUTELLA\_RESPONSE\_TO\_HGF\_UP | 407 | 0.412431 | 2.143592 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2609 | tags=28%, list=15%, signal=24% | SPP1/IL1B/APOE/APOC1/CCL2/HLA-DRB4/ACP5/CCL18/MMP12/DUSP5/HK2/MMP9/CCL8/SOD2/MT1G/SQSTM1/FBP1/NR1H3/SCD/CYP27A1/SPHK1/NDRG1/C3/CCL3/CXCL1/PLTP/CLEC5A/SLC12A8/PLA2G7/CTSD/EMP1/TMEM51/DCSTAMP/CTSL/MT2A/VSIG4/MATK/RAB13/RAB20/GABBR1/PVR/SGK1/SLC5A3/TRIP10/LPXN/CCR7/CD81/GPNMB/DMXL2/TUBA1C/RAB38/ADAMDEC1/ABCG1/SERPINE1/FTH1/NRIP3/PPARD/GPR137B/ST3GAL1/FZD5/TCIRG1/TFRC/SLAMF7/LAMP3/CXCL5/GLA/CHI3L1/TNIP3/PPIF/MOB1A/TMBIM6/EPB41L3/GCLM/BCAT1/FCGR1A/CREG1/LAIR1/SLAMF8/TLR1/CD9/VDR/VAT1/CD80/C3AR1/AQP9/EBI3/SLAMF1/NECTIN2/GM2A/EMC7/SLC43A3/BIRC3/NPC1/TIMP2/CCL17/TNS3/SLC16A6/IL1A/TRAF1/IL18/SCAMP2/KMO/KYNU/SLC1A3/DUOX1/CD84/SLC3A2/CXCL9/CTSB/ANXA5/CREBL2/VWA5A/ATP6V0A1 |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_DN | TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_DN | 70 | 0.525175 | 2.141973 | 4.44E-06 | 6.95E-05 | 4.94E-05 | 1353 | tags=26%, list=8%, signal=24% | SPP1/C5AR1/POSTN/LYZ/RGS1/MXRA5/MMP11/TACC3/COL4A2/COMP/SFRP2/COL1A2/LCP2/COL5A1/EPPK1/BGN/COL6A3/COL1A1 |
| LU\_TUMOR\_ENDOTHELIAL\_MARKERS\_UP | LU\_TUMOR\_ENDOTHELIAL\_MARKERS\_UP | 22 | 0.680266 | 2.141158 | 4.82E-05 | 0.000539 | 0.000383 | 972 | tags=32%, list=5%, signal=30% | MMP9/POSTN/STC1/MXRA5/LCP2/TNFRSF21/FZD10 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_8 | SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_8 | 36 | 0.597388 | 2.140059 | 5.77E-05 | 0.000632 | 0.000449 | 1636 | tags=25%, list=9%, signal=23% | ICAM1/SPI1/ITGAM/LYN/SNAI1/TYROBP/MAFB/SMAD7/CD80 |
| REACTOME\_DEGRADATION\_OF\_THE\_EXTRACELLULAR\_MATRIX | REACTOME\_DEGRADATION\_OF\_THE\_EXTRACELLULAR\_MATRIX | 137 | 0.462279 | 2.139378 | 1.19E-07 | 2.88E-06 | 2.05E-06 | 4437 | tags=39%, list=25%, signal=29% | MMP7/SPP1/MMP12/ADAM8/MMP9/MMP1/CTSD/CTSL/MMP11/MMP13/TPSAB1/COL4A2/CAPN15/COL1A2/MMP19/COL6A2/COL9A2/FURIN/COL5A1/PLG/ADAMTS4/ELN/COL6A3/COL1A1/CTSG/COL19A1/CAPNS1/TIMP1/TIMP2/CTSB/TMPRSS6/LAMA3/COL6A6/LAMC2/CTRB1/COL6A5/CAPNS2/MMP2/COL3A1/MMP24/ADAM9/PRSS1/ADAMTS18/ADAMTS16/CMA1/FN1/MMP17/CAPN11/COL9A3/A2M/CTSK/MMP3/CAPN9 |
| WP\_MIRNAS\_INVOLVEMENT\_IN\_THE\_IMMUNE\_RESPONSE\_IN\_SEPSIS | WP\_MIRNAS\_INVOLVEMENT\_IN\_THE\_IMMUNE\_RESPONSE\_IN\_SEPSIS | 37 | 0.592159 | 2.138146 | 1.93E-05 | 0.00025 | 0.000178 | 2218 | tags=41%, list=12%, signal=36% | CXCL8/ICAM1/CCL3/IL6/IRF7/IRF5/NFKB2/IRF1/RELB/VCAM1/TNF/IRAK1/TLR8/IKBKB/IL1A |
| BIOCARTA\_GRANULOCYTES\_PATHWAY | BIOCARTA\_GRANULOCYTES\_PATHWAY | 15 | 0.751488 | 2.134716 | 8.23E-05 | 0.000859 | 0.000611 | 2218 | tags=53%, list=12%, signal=47% | CXCL8/ICAM1/ITGB2/ITGAM/SELL/CSF3/TNF/IL1A |
| BIOCARTA\_MONOCYTE\_PATHWAY | BIOCARTA\_MONOCYTE\_PATHWAY | 11 | 0.822395 | 2.131488 | 6.37E-05 | 0.000689 | 0.00049 | 437 | tags=45%, list=2%, signal=44% | ICAM1/ITGB2/ITGAM/SELL/SELE |
| PID\_INTEGRIN3\_PATHWAY | PID\_INTEGRIN3\_PATHWAY | 42 | 0.56531 | 2.131314 | 8.94E-05 | 0.000918 | 0.000653 | 1585 | tags=29%, list=9%, signal=26% | SPP1/PLAUR/PLAU/SPHK1/VEGFA/TNC/PVR/TGFBI/COL1A2/F11R/COL1A1/FGB |
| CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_DN | CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_DN | 96 | 0.492525 | 2.124333 | 9.34E-07 | 1.85E-05 | 1.32E-05 | 1958 | tags=29%, list=11%, signal=26% | CD74/TNFAIP3/PKM/LSP1/CCL3/ATP6V1F/TUBB2A/BTG2/ZFP36L2/ADM/DDX17/PIM2/PTPN6/VIM/IL2RG/HLA-G/CTDNEP1/UBE2S/TMSB4X/TAPBP/MCL1/S100A10/HCLS1/B2M/XBP1/CAPNS1/UBC/CD48 |
| REACTOME\_CLASS\_A\_1\_RHODOPSIN\_LIKE\_RECEPTORS | REACTOME\_CLASS\_A\_1\_RHODOPSIN\_LIKE\_RECEPTORS | 326 | 0.414192 | 2.12414 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3219 | tags=31%, list=18%, signal=26% | CXCL8/C5AR1/CCL3L3/CCL2/GAL/CCL3L1/C3/CCL3/CXCL1/CXCL2/SST/QRFPR/AVPR2/GPR132/CCL20/HCAR2/CCR8/PPY/PSAP/TACR3/PTAFR/BDKRB1/CCL11/CCL27/CGA/PROKR2/HTR1B/CXCL16/CCR7/FPR3/TAAR6/OXER1/OPRK1/CCL1/NMU/GPR39/XCL2/ADRA2A/HCRTR1/RXFP4/CXCL5/FPR2/TACR2/DRD5/FPR1/ADORA1/PPBP/P2RY11/PROK2/GPR31/CCL21/GPR183/CCR10/RLN3/CXCR1/C3AR1/MC5R/BRS3/LPAR2/PTGER4/TAC1/OPN4/OXT/CHRM4/CCKBR/GPR35/GPHB5/CCL17/ADRB1/TAAR2/FFAR3/PRLH/NPFFR2/F2RL1/AVP/UTS2R/ADRB3/OPN1MW/CXCL9/CXCR2/CYSLTR2/MTNR1A/CHRM3/RXFP2/PDYN/NTSR1/GNRHR/EDN2/PF4/GRP/CCL25/CCL4/NMB/OPN5/GPR17/HTR1A/S1PR2/TRHR/CXCR3/INSL3/TAAR5 |
| SCHUETZ\_BREAST\_CANCER\_DUCTAL\_INVASIVE\_UP | SCHUETZ\_BREAST\_CANCER\_DUCTAL\_INVASIVE\_UP | 337 | 0.412174 | 2.117588 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1763 | tags=23%, list=10%, signal=21% | APOE/HLA-DRB1/HLA-DQB1/PLAUR/CD74/HLA-DRB4/HMOX1/TIMP3/SLC2A3/C1QB/CEMIP/POSTN/HLA-DRA/IFI30/RGS1/SLC16A3/PLAU/RGCC/OLR1/FTL/LAPTM5/SPHK1/ISLR/HLA-DRB6/MMP1/HLA-DPA1/RGS2/SAMD4A/MXRA5/LYN/HLA-DPB1/GEM/ITGBL1/EMP1/MMP11/MMP13/SAMSN1/TYROBP/COL4A2/CSF2RB/TGFBI/SGK1/SULF1/FCER1G/LPXN/MNDA/FXYD5/COMP/FYN/GPNMB/COL1A2/OLFML2B/COL6A2/LCP2/MAFB/ADCY7/HLA-DMB/FAP/COL5A1/IGFBP7/GFPT2/GBP1/SMAD7/BGN/DNM3/COL6A3/FCGR1A/CH25H/COL1A1/SPOCK1/SLAMF8/COLEC12/HCLS1/C3AR1/RGS4/CD53/HPGDS/LY96 |
| GAL\_LEUKEMIC\_STEM\_CELL\_DN | GAL\_LEUKEMIC\_STEM\_CELL\_DN | 224 | 0.432088 | 2.117313 | 1.06E-09 | 3.80E-08 | 2.70E-08 | 3398 | tags=31%, list=19%, signal=26% | IL1B/CAPG/NCF2/MMP9/LYZ/IFI30/SLC15A3/CEBPD/TYMP/S100P/CXCL1/SLC11A1/MAPK13/CLEC5A/IL1RN/G0S2/STX11/DNAAF1/VSIG4/PILRA/AOAH/MNDA/LGALS2/LMNB1/IGFBP2/DMXL2/NDRG2/COL6A2/IGSF6/MAFB/CD14/IGFBP7/PASK/SERPINA1/RRAD/FCN1/ORC1/FPR1/FER1L4/FCGR1A/OR2F2/VDR/TEP1/CTSG/C3AR1/HPSE/ART1/GM2A/CARD9/LILRB3/HOMER3/GALNT12/SLC16A6/MS4A6A/S100A12/KIFC1/SHCBP1/MS4A3/PRKG2/TLR2/IL2RB/SIRPA/CCL4/CXCR3/CDC20/IGLL1/DHFR/PRDM1/AZU1/FCGR2A |
| TIAN\_TNF\_SIGNALING\_NOT\_VIA\_NFKB | TIAN\_TNF\_SIGNALING\_NOT\_VIA\_NFKB | 22 | 0.672498 | 2.116709 | 7.14E-05 | 0.000758 | 0.000539 | 3564 | tags=64%, list=20%, signal=51% | DUSP2/FOSB/JUNB/RGS16/INSIG1/IER3/MNT/EXT1/TPTEP1/EGR1/KLF10/KLF6/PTGES/PPP1R15A |
| AGARWAL\_AKT\_PATHWAY\_TARGETS | AGARWAL\_AKT\_PATHWAY\_TARGETS | 10 | 0.838584 | 2.110081 | 0.000155 | 0.001484 | 0.001054 | 493 | tags=50%, list=3%, signal=49% | SPP1/MMP9/PLAU/VEGFA/VEGFB |
| AMIT\_EGF\_RESPONSE\_120\_MCF10A | AMIT\_EGF\_RESPONSE\_120\_MCF10A | 40 | 0.575067 | 2.108226 | 5.14E-05 | 0.000571 | 0.000406 | 2415 | tags=42%, list=13%, signal=37% | IL1B/PLAUR/FOSL1/HBEGF/LIF/CCL20/EIF1/DUSP6/EPOR/GDF15/EPHA2/TRIM21/LSM4/SH2D3A/IL1A/BAX/SERPINB2 |
| COLIN\_PILOCYTIC\_ASTROCYTOMA\_VS\_GLIOBLASTOMA\_DN | COLIN\_PILOCYTIC\_ASTROCYTOMA\_VS\_GLIOBLASTOMA\_DN | 28 | 0.629681 | 2.106502 | 6.08E-05 | 0.000661 | 0.00047 | 1080 | tags=32%, list=6%, signal=30% | SPP1/TIMP3/BHLHE40/SQSTM1/PLIN2/TGFBI/GPNMB/TFRC/CHI3L1 |
| REACTOME\_SIGNALING\_BY\_INTERLEUKINS | REACTOME\_SIGNALING\_BY\_INTERLEUKINS | 441 | 0.402492 | 2.105815 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2697 | tags=26%, list=15%, signal=23% | IL1B/CXCL8/ICAM1/CCL3L3/CCL2/OSM/HMOX1/ITGAX/MMP9/CD4/TNFRSF1B/ITGB2/SOD2/ITGAM/SQSTM1/JUNB/CEBPD/PIM1/CCL3L1/CCL3/LIF/CXCL1/CXCL2/IL6/MMP1/IL1RN/LYN/STXBP2/CCL20/IL18RAP/MYC/IL32/NOD2/PTPN6/PTAFR/VEGFA/SOCS3/VIM/NFKB2/CDKN1A/CCL11/CSF2RB/VAV1/IL2RG/IL3/IL10RA/FYN/LMNB1/CLCF1/PELI1/LGALS9/MAPKAPK3/COL1A2/DUSP6/CSF1R/IL9R/MAP2K3/SOCS1/LCP1/IL9/HCK/FOS/IL24/PSMB11/MEF2A/FPR1/MAP3K8/DUSP7/CSF1/HIF1A/PTPN7/CSF2/CSF3/IL12B/VCAM1/CTSG/MCL1/F13A1/CD80/BATF/PSMD3/EBI3/TNF/IRAK1/IL22/IL4R/CISH/CA1/HNRNPA2B1/TIMP1/CSF3R/UBC/IL17RA/PTPN18/IL17C/IL17RC/RALA/IL21/IKBKB/IL1A/IL36B/PSMF1/IL13RA2/IL18/S100A12/IL7R/SERPINB2/YWHAZ/IRAK2/TP53/BLNK/ANXA2/DUSP4/IL1RL2 |
| MAHAJAN\_RESPONSE\_TO\_IL1A\_UP | MAHAJAN\_RESPONSE\_TO\_IL1A\_UP | 76 | 0.505077 | 2.105086 | 5.87E-06 | 8.75E-05 | 6.22E-05 | 2415 | tags=32%, list=13%, signal=27% | IL1B/MMP12/APOD/CCL8/SOD2/HBEGF/CXCL2/IL6/TNFAIP2/CCL20/PIM2/MYC/RHOB/OASL/CXCL5/CSF2/MAP2/DUSP1/SPTBN1/RIPK1/SLC16A1/NRCAM/IL7R/SERPINB2 |
| MCDOWELL\_ACUTE\_LUNG\_INJURY\_UP | MCDOWELL\_ACUTE\_LUNG\_INJURY\_UP | 43 | 0.56013 | 2.103874 | 9.97E-05 | 0.001014 | 0.00072 | 4193 | tags=60%, list=23%, signal=46% | SPP1/CSTB/SPHK1/BTG2/PLA2G7/MYC/CDKN1A/TNC/TGFBI/ANGPTL4/FOS/ELN/SERPIND1/MCL1/DUSP1/LRG1/COL3A1/FCGR2A/KLF6/PTGES/NFKBIA/RBM3/PTX3/STEAP4/LTF/SFN |
| HECKER\_IFNB1\_TARGETS | HECKER\_IFNB1\_TARGETS | 91 | 0.489739 | 2.101173 | 5.67E-07 | 1.20E-05 | 8.56E-06 | 2597 | tags=35%, list=14%, signal=30% | CXCL8/CCL2/C1QC/C1QB/MMP9/CCL8/TYMP/IRF7/G0S2/LGALS3BP/EGR2/SCO2/OASL/CABP5/MX2/LAMP3/CHI3L1/LILRA3/GBP1/PLSCR1/OAS1/GP9/OAS3/C3AR1/LAP3/DTX3L/LY6E/CMPK2/EGR1/EPSTI1/CMTM5/TREML1 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G2 | DAZARD\_UV\_RESPONSE\_CLUSTER\_G2 | 25 | 0.642169 | 2.09896 | 9.86E-05 | 0.001006 | 0.000715 | 1948 | tags=44%, list=11%, signal=39% | CXCL8/HLA-F/JUNB/CXCL2/CCL20/SGK1/ATF3/UBE2S/IER3/PHLDA2/LY6E |
| MORI\_IMMATURE\_B\_LYMPHOCYTE\_UP | MORI\_IMMATURE\_B\_LYMPHOCYTE\_UP | 47 | 0.551257 | 2.098064 | 3.97E-05 | 0.000453 | 0.000322 | 2037 | tags=36%, list=11%, signal=32% | CAPG/CD74/CD83/IFI30/LYN/PTPN6/IL10RA/DUSP6/GMIP/ADCY7/HLA-DMB/HCK/SMAP2/MCL1/RGL2/SEMA4D/BIRC3 |
| ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_UP | ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_UP | 74 | 0.507595 | 2.098012 | 5.45E-06 | 8.20E-05 | 5.83E-05 | 2297 | tags=32%, list=13%, signal=28% | UCP2/HLA-DQB1/SLC2A3/LYZ/RGS1/ITGAM/MYO1G/SAT1/PTAFR/GSDMB/LGALS9/LCP2/STK17B/CD27/F11R/SATB1/PDE4B/SCARA5/IL4R/CD37/DAPK2/PTGS1/IKBKB/NRCAM |
| PID\_REG\_GR\_PATHWAY | PID\_REG\_GR\_PATHWAY | 82 | 0.496107 | 2.096056 | 3.47E-06 | 5.63E-05 | 4.00E-05 | 516 | tags=17%, list=3%, signal=17% | CXCL8/ICAM1/SPI1/KRT17/KRT14/IL6/MMP1/NFATC1/CDKN1A/GSK3B/SELE/CGA/SGK1/IRF1 |
| BROWNE\_HCMV\_INFECTION\_2HR\_UP | BROWNE\_HCMV\_INFECTION\_2HR\_UP | 37 | 0.579369 | 2.091964 | 4.07E-05 | 0.000461 | 0.000328 | 3773 | tags=49%, list=21%, signal=39% | APOE/CXCL8/ICAM1/RGS2/NR4A2/IRF1/ATF3/FOS/MAP3K8/SLC29A1/CFD/EGR1/VWA5A/COL21A1/SSX2/PTGDS/DHRS3/NFKBIA |
| REACTOME\_CREATION\_OF\_C4\_AND\_C2\_ACTIVATORS | REACTOME\_CREATION\_OF\_C4\_AND\_C2\_ACTIVATORS | 14 | 0.751321 | 2.091168 | 0.000235 | 0.002145 | 0.001524 | 1069 | tags=29%, list=6%, signal=27% | C1QC/C1QB/COLEC10/FCN1 |
| AMIT\_SERUM\_RESPONSE\_60\_MCF10A | AMIT\_SERUM\_RESPONSE\_60\_MCF10A | 56 | 0.533011 | 2.088681 | 1.78E-05 | 0.000233 | 0.000166 | 838 | tags=27%, list=5%, signal=26% | CXCL8/DUSP5/BHLHE40/ZC3H12A/TNFAIP3/HBEGF/SCD/EGR3/CCL20/NR4A2/TRIB1/TNC/SGK1/RHOB/MAFB |
| MA\_MYELOID\_DIFFERENTIATION\_DN | MA\_MYELOID\_DIFFERENTIATION\_DN | 42 | 0.553684 | 2.087485 | 0.000144 | 0.0014 | 0.000995 | 1747 | tags=33%, list=10%, signal=30% | CCL2/HBEGF/PLA2G7/FOSL2/CRAT/CD14/SH3BP1/FOS/YBX1/CTLA4/VCAM1/VAV2/TLX2/XBP1 |
| YU\_MYC\_TARGETS\_DN | YU\_MYC\_TARGETS\_DN | 54 | 0.535576 | 2.082782 | 2.83E-05 | 0.000342 | 0.000243 | 1885 | tags=33%, list=11%, signal=30% | HLA-DRB1/CD74/ACP5/HLA-E/IL4I1/CTSH/ARHGAP45/MNDA/IL10RA/ARHGEF1/HLA-DMB/CD2/PLD4/MYO7A/KLF2/RGL2/GAD1/CD37 |
| WP\_TYPE\_II\_INTERFERON\_SIGNALING\_IFNG | WP\_TYPE\_II\_INTERFERON\_SIGNALING\_IFNG | 36 | 0.58132 | 2.082498 | 0.00013 | 0.001279 | 0.000909 | 1910 | tags=36%, list=11%, signal=32% | IL1B/ICAM1/SPI1/HLA-B/SOCS3/IRF1/REG1A/SOCS1/GBP1/OAS1/IRF9/IRF2/IRF8 |
| MORI\_MATURE\_B\_LYMPHOCYTE\_UP | MORI\_MATURE\_B\_LYMPHOCYTE\_UP | 83 | 0.491472 | 2.082269 | 4.83E-06 | 7.40E-05 | 5.26E-05 | 1910 | tags=28%, list=11%, signal=25% | APOE/HLA-DRB1/CD74/CD83/SELL/CTSH/GNPNAT1/PTPN6/IL2RG/NCF4/IL10RA/LCP1/ADCY7/HLA-DMB/HLA-DOA/SMAP2/PPM1M/MAP3K8/CMTM6/BGLAP/MCL1/EBI3/IRF8 |
| BIOCARTA\_CYTOKINE\_PATHWAY | BIOCARTA\_CYTOKINE\_PATHWAY | 19 | 0.67975 | 2.081857 | 0.00024 | 0.002166 | 0.001539 | 3261 | tags=47%, list=18%, signal=39% | CXCL8/IL6/IL3/IL9/TNF/IL1A/IL18/IL4/IL5 |
| KONDO\_PROSTATE\_CANCER\_WITH\_H3K27ME3 | KONDO\_PROSTATE\_CANCER\_WITH\_H3K27ME3 | 188 | 0.432601 | 2.080785 | 7.96E-09 | 2.47E-07 | 1.75E-07 | 5161 | tags=47%, list=29%, signal=34% | MARCO/GAP43/POSTN/TREM1/PRG2/NRG4/STOML3/SULF1/OR10A7/ZIC1/LEMD1/IL9/CCDC60/OR6C6/LALBA/SIGLEC7/ITK/CTLA4/OR6C70/FPR2/TNIP3/SEMG2/ATOH7/PTH/KCNA10/NPVF/OR9A2/KIRREL3/TAC1/CD1A/GRM3/OR2AT4/OR2G3/SDR9C7/GPHB5/PCK1/EPB42/LONRF2/LILRB5/OVCH2/BLNK/F11/MEIOB/SLC22A25/OR10P1/GPR15/GAS2/OR5V1/ABCA9/A1CF/SLC17A6/ALDH8A1/ELMOD1/CCDC181/VAX1/TAT/OR5K4/NLRP14/CDH20/OR4D11/SIAH3/TRIM36/ACADL/RNASE9/TMPRSS11A/RNASE6/ANXA13/SPIC/ALB/NLRP9/NR1H4/OTC/ATOH1/OR6C74/BRINP2/OR11G2/G6PC2/MOBP/ZIC4/ASTN1/HOXB9/AMER2/SIGLEC6/ASAH2/MC2R/TFAP2D/PHACTR1/DLGAP1 |
| REACTOME\_NGF\_STIMULATED\_TRANSCRIPTION | REACTOME\_NGF\_STIMULATED\_TRANSCRIPTION | 39 | 0.566074 | 2.076814 | 0.000109 | 0.001097 | 0.00078 | 1043 | tags=28%, list=6%, signal=27% | FOSL1/FOSB/JUNB/EGR3/ARC/EGR2/TRIB1/SGK1/FOS/RRAD/CDK5R2 |
| WP\_LTF\_DANGER\_SIGNAL\_RESPONSE\_PATHWAY | WP\_LTF\_DANGER\_SIGNAL\_RESPONSE\_PATHWAY | 19 | 0.677811 | 2.075916 | 0.000268 | 0.002367 | 0.001682 | 2218 | tags=42%, list=12%, signal=37% | IL1B/CXCL8/TREM1/IL6/CD14/TNF/IRAK1/IL1A |
| NABA\_ECM\_REGULATORS | NABA\_ECM\_REGULATORS | 235 | 0.42072 | 2.074783 | 2.71E-09 | 9.07E-08 | 6.45E-08 | 3670 | tags=32%, list=20%, signal=26% | MMP7/MMP12/TIMP3/ADAM8/CSTB/MMP9/PLAU/CST7/MMP1/CTSH/FAM20A/CTSD/ST14/CTSL/MMP11/HTRA4/MMP13/SERPINB1/P4HTM/SERPINB9/SULF1/SERPINA10/ITIH6/PRSS3/SLPI/HTRA3/MMP19/ADAMDEC1/ADAM11/SERPINE1/SERPINA1/PLG/ADAMTS4/CPAMD8/ADAMTS2/SERPIND1/HRG/TGM3/HYAL4/TGM4/CTSG/F13A1/HPSE/HPSE2/SERPINB8/TIMP1/SERPINB12/CST3/ADAM30/TGM6/TIMP2/CELA2A/MMP26/EGLN1/ADAM2/ADAMTS17/SERPINB2/ITIH2/ADAMTSL3/CTSB/ADAMTSL4/ADAM29/CPN2/TGM2/ADAMTS20/HYAL3/MMP2/F9/A2ML1/MMP24/ADAM32/CTSA/ADAM9/PRSS1/TGM7/ADAMTS18 |
| BIOCARTA\_LYM\_PATHWAY | BIOCARTA\_LYM\_PATHWAY | 14 | 0.745298 | 2.074404 | 0.000291 | 0.002527 | 0.001796 | 123 | tags=29%, list=1%, signal=28% | CXCL8/ICAM1/ITGB2/SELL |
| MARTINELLI\_IMMATURE\_NEUTROPHIL\_DN | MARTINELLI\_IMMATURE\_NEUTROPHIL\_DN | 13 | 0.759528 | 2.074008 | 0.00019 | 0.001775 | 0.001261 | 3604 | tags=77%, list=20%, signal=62% | CXCL8/NCF2/SOD2/AOAH/CXCR1/CSF3R/CXCR2/FCGR2A/ALPL/FCGR3B |
| MARSON\_FOXP3\_TARGETS\_DN | MARSON\_FOXP3\_TARGETS\_DN | 49 | 0.540304 | 2.069867 | 6.12E-05 | 0.000664 | 0.000472 | 1344 | tags=27%, list=7%, signal=25% | UCP2/GADD45B/ZFP36L2/M6PR/RGS2/FAM107B/MYC/NFATC1/POU2AF1/DUSP6/ITK/NFKBIE/SLC29A1 |
| WP\_OSTEOPONTIN\_SIGNALING | WP\_OSTEOPONTIN\_SIGNALING | 13 | 0.756981 | 2.067054 | 0.000211 | 0.001946 | 0.001383 | 84 | tags=23%, list=0%, signal=23% | SPP1/MMP9/PLAU |
| HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_B\_ALL\_DN | HOLLEMAN\_PREDNISOLONE\_RESISTANCE\_B\_ALL\_DN | 12 | 0.777452 | 2.066135 | 0.000267 | 0.002358 | 0.001676 | 2132 | tags=50%, list=12%, signal=44% | SLC2A3/BLVRB/CA4/MATN1/NECTIN2/CNTN5 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_UP | 453 | 0.392893 | 2.062818 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4122 | tags=37%, list=23%, signal=29% | CXCL8/CCL2/CD83/FOSL1/ADAM8/FOSB/ZC3H12A/TNFAIP3/HLA-F/CYP27A1/CSRNP1/PIM1/PLEKHG2/LIF/CXCL1/CXCL2/BCL3/IL6/BTG2/IRF7/CRTC2/GEM/CCL20/ARC/SNAI1/BBC3/NOD2/KDM6B/ZNF296/CEBPB/FERMT3/REC8/MXD1/ETV3/SOCS3/NFKB2/PLEKHA4/SELE/ARHGAP30/MYOD1/NRG4/ADIRF/SERPINA10/IRF1/FTH1P3/RELB/ATF3/CNTD1/KLF4/LGALS9/NIPAL4/PER1/IER5/SEMA4A/TEX29/SCARNA15/SOCS1/THEMIS2/RASSF8/PROM1/ABTB2/FOS/IER3/GDF15/LAMP3/ZNF136/NFKBIE/CD274/PLSCR1/TRIM21/GMPR/SEMA7A/SPOCK2/BCL2A1/CCDC73/ARHGAP40/VDR/ABL2/PDE4B/OAS3/EFNA3/TNFSF13B/DUSP1/KLK14/HOTAIRM1/TNF/MSC/NFKBID/C2/NOCT/ARL5B/GOLGA7B/CDKN2AIP/CMPK2/BIRC3/NPTX1/DUSP10/PPP4R1L/EGR1/PCK1/ZNF547/TRAF1/USP43/SOX9/EPSTI1/KLF7/NFIL3/RAB30/IER2/LINC01089/IRAK2/PSMD6-AS2/DCHS1/DCP1A/ZNF555/PPTC7/ZNF8/PIGR/DDIT3/TGM2/MLKL/CCL4/LTB/HIVEP1/DLL1/ZNF280B/SUMO4/GPBP1/HYMAI/CD200R1/ZNF267/CNIH2/ALDH8A1/N4BP3/CCDC13/IL15RA/KLKP1/KLF6/ADAM32/GBP4/ZNFX1/CFP/PPP1R15A/SP100/KLRC2/NPC1L1/HCG27/SNORD38B/ZNF764/ODC1/AOC2/NFKBIA/NFKB1/REM2/MED26/PPP1R10/TICAM1/ADAM20P1/BATF2/PTX3/SALL1/PYGM/LSMEM1/ZNF567/ELL/C12orf50 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LPS\_UP | ZHOU\_INFLAMMATORY\_RESPONSE\_LPS\_UP | 355 | 0.401248 | 2.061324 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3082 | tags=28%, list=17%, signal=24% | IL1B/ICAM1/PLAUR/OSM/CCL18/FOSL1/C1QC/NAMPT/DUSP5/CAMK1G/CEMIP/CCL8/ZC3H12A/CSRNP1/GPR84/CXCL1/CXCL2/IL6/BTG2/IRF7/MXRA5/G0S2/ADM/TNFAIP2/ANP32D/CCL20/SNAI1/RNF19B/NFKB2/NEFL/TRIP10/SPSB1/RELB/ZNF815P/KLF4/NIPAL4/SERPINE1/SIAE/MAP2K3/SOCS1/OASL/NCOA7/ARHGAP31/MX2/IER3/NINJ1/USF3/SLC28A2/OAS1/CH25H/SCN2B/CSF3/STMN4/IL12B/CDH19/ABL2/CATSPERG/TP53INP2/CD80/OAS3/KXD1/IRX5/TNF/ACOT6/RPTN/MBD3L2/KRT36/IRF8/CNBD2/ANKS6/RIPK1/TNFSF9/GLYATL1/CYP2F1/SULT1E1/WNK4/ACSL1/MCF2L/ELF3/IL18/C11orf96/SERPINB2/CYP3A7/CXCL9/TMPRSS6/CBLB/IRAK2/LAMA3/UPK2/TLR2/CT47A11/CTRB1/SOX21/KRTAP2-2/CCL4/ADAMTS20/FAM218A/ST7-AS1/PTPN1/SYT9/FCRL5 |
| DAZARD\_RESPONSE\_TO\_UV\_NHEK\_UP | DAZARD\_RESPONSE\_TO\_UV\_NHEK\_UP | 205 | 0.422966 | 2.060996 | 3.27E-09 | 1.08E-07 | 7.64E-08 | 1948 | tags=25%, list=11%, signal=22% | APOE/CXCL8/GADD45B/PHLDA1/TNFAIP3/HBEGF/MT1G/PKM/HLA-F/JUNB/TYMP/CXCL1/CXCL2/TUBB2A/IL6/CCDC85B/ARHGDIA/STXBP2/ADM/GEM/CCL20/NR4A2/TRIB1/TUBB4B/SGK1/CYBA/PRSS3/ATF3/STK17B/UBE2S/FOS/ERGIC3/IER3/PPIF/PLXNA3/TOM1/PPBP/TGM3/TUBB3/MYF6/DUSP1/SPTBN1/XBP1/GPI/CCNA1/PHLDA2/APRT/COL19A1/RACK1/CAPNS1/LY6E |
| FINAK\_BREAST\_CANCER\_SDPP\_SIGNATURE | FINAK\_BREAST\_CANCER\_SDPP\_SIGNATURE | 24 | 0.63785 | 2.060373 | 0.000216 | 0.001987 | 0.001412 | 2611 | tags=54%, list=15%, signal=46% | SPP1/ADM/ITGBL1/PLEK/CD8A/LCP1/ADRA2A/RUNX3/CXCL14/VGLL1/CD48/CD247/GZMA |
| REACTOME\_NR1H2\_AND\_NR1H3\_MEDIATED\_SIGNALING | REACTOME\_NR1H2\_AND\_NR1H3\_MEDIATED\_SIGNALING | 47 | 0.540331 | 2.056478 | 7.51E-05 | 0.000795 | 0.000565 | 1259 | tags=23%, list=7%, signal=22% | APOE/APOC1/APOC2/APOD/NR1H3/SCD/PLTP/PLIN1/ABCG1/KDM1B/ABCG8 |
| KOBAYASHI\_EGFR\_SIGNALING\_6HR\_DN | KOBAYASHI\_EGFR\_SIGNALING\_6HR\_DN | 17 | 0.699685 | 2.054893 | 0.00017 | 0.001611 | 0.001145 | 3019 | tags=59%, list=17%, signal=49% | FOSL1/DUSP5/G0S2/VEGFA/DUSP6/IER3/EPHA2/PHLDA2/DUSP4/TGFA |
| WP\_STATIN\_INHIBITION\_OF\_CHOLESTEROL\_PRODUCTION | WP\_STATIN\_INHIBITION\_OF\_CHOLESTEROL\_PRODUCTION | 29 | 0.600747 | 2.054573 | 0.000248 | 0.002221 | 0.001578 | 1728 | tags=31%, list=10%, signal=28% | APOE/APOC1/APOC2/LRP1/PLTP/SCARB1/LPL/ABCG8/LIPC |
| CAVARD\_LIVER\_CANCER\_MALIGNANT\_VS\_BENIGN | CAVARD\_LIVER\_CANCER\_MALIGNANT\_VS\_BENIGN | 32 | 0.586258 | 2.054154 | 0.000193 | 0.001796 | 0.001277 | 1585 | tags=38%, list=9%, signal=34% | SPP1/CD74/HLA-DRB3/REG1A/FTH1/CD14/HLA-C/FABP1/CHI3L1/GLUL/ACTB/FGB |
| PID\_IL12\_2PATHWAY | PID\_IL12\_2PATHWAY | 62 | 0.515917 | 2.053051 | 2.67E-05 | 0.000328 | 0.000233 | 3467 | tags=42%, list=19%, signal=34% | IL1B/GADD45B/CD4/HLA-DRA/CCL3/IL18RAP/HLA-A/NFKB2/IL2RG/RELB/CD8A/MAP2K3/SOCS1/FOS/CD3E/IL12B/B2M/IL18/CD247/GZMA/IL2RB/CCL4/STAT4/IL4/STAT3/TYK2 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_UP | ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_UP | 400 | 0.395842 | 2.05283 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3082 | tags=28%, list=17%, signal=24% | IL1B/ICAM1/PLAUR/OSM/CD83/FOSL1/DUSP2/NAMPT/DUSP5/ZC3H12A/TNFAIP3/SOD2/PKM/SQSTM1/GPR84/NDRG1/LIF/CXCL1/CXCL2/IL6/BTG2/PLK3/G0S2/ADM/TNFAIP2/ANP32D/CYB5D1/CCL20/RGS16/KDM6B/ITPRIP/SGMS2/VEGFA/STON2/NFKB2/GSK3B/NEFL/TRIP10/SPSB1/RELB/CLCF1/DMXL2/NIPAL4/SOD3/SERPINE1/MAP2K3/SLC22A23/ST3GAL1/ARHGAP31/IER3/VAPB/ZNF131/NINJ1/XIRP1/USF3/SLC28A2/STARD8/CSF3/IL12B/BASP1/OAF/ABL2/DCAF12L1/TP53INP2/CD80/TNIP1/LINC00112/KXD1/HAPLN1/DUSP1/EIF5/TNF/ACOT6/KIR2DL1/MSC/KRT36/SERPINB8/NFKBID/IRF8/TNFSF9/WNK4/ODF3B/WDR87/IL1A/TMC6/CPEB4/TPM4/ACSL1/TRAF1/IL18/C11orf96/SERPINB2/C5orf47/HOXA6/TMPRSS6/IRAK2/LAMA3/ICOSLG/UPK2/TCF7L2/KLC2/NECAP2/SFPQ/YRDC/TLR2/RND3/SLC2A13/CCL4/ST7-AS1/PTPN1/AKNAD1/SYT9/ICAM4/FCRL5 |
| REACTOME\_NR1H3\_NR1H2\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_CHOLESTEROL\_TRANSPORT\_AND\_EFFLUX | REACTOME\_NR1H3\_NR1H2\_REGULATE\_GENE\_EXPRESSION\_LINKED\_TO\_CHOLESTEROL\_TRANSPORT\_AND\_EFFLUX | 37 | 0.568206 | 2.051658 | 7.69E-05 | 0.000812 | 0.000577 | 1259 | tags=24%, list=7%, signal=23% | APOE/APOC1/APOC2/APOD/NR1H3/PLTP/ABCG1/KDM1B/ABCG8 |
| MARCHINI\_TRABECTEDIN\_RESISTANCE\_DN | MARCHINI\_TRABECTEDIN\_RESISTANCE\_DN | 45 | 0.542577 | 2.048349 | 4.88E-05 | 0.000544 | 0.000387 | 3356 | tags=42%, list=19%, signal=34% | BHLHE40/SLC7A5/SLC16A3/ADM/HLA-B/COL4A2/IMPDH1/IGFBP7/SLC1A5/ACTA2/GPI/GABRA5/PSMF1/SLC3A2/CBLB/RND3/SIRPA/CALR/COL3A1 |
| LIU\_VAV3\_PROSTATE\_CARCINOGENESIS\_UP | LIU\_VAV3\_PROSTATE\_CARCINOGENESIS\_UP | 83 | 0.483383 | 2.048 | 7.66E-06 | 0.000111 | 7.90E-05 | 3160 | tags=39%, list=18%, signal=32% | MMP7/SPP1/CD74/APOD/ITGB2/C3/PLA2G7/SAT1/SERPINB1/TNC/TYROBP/CCL11/KLK3/FCER1G/IRF1/GPNMB/SIM2/FABP4/FBLN1/BCL2A1/TNFSF13B/TAC1/LILRB3/GBP2/TIMP2/AMD1/PLEKHB1/TLR2/TGM2/ADIPOQ/IBSP/CD36 |
| KEGG\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | KEGG\_COMPLEMENT\_AND\_COAGULATION\_CASCADES | 67 | 0.50899 | 2.047641 | 1.48E-05 | 0.0002 | 0.000142 | 1920 | tags=30%, list=11%, signal=27% | C5AR1/PLAUR/C1QC/C1QB/PLAU/C3/BDKRB1/C8B/CFB/SERPINE1/THBD/SERPINA1/PLG/SERPIND1/FGB/F13A1/C3AR1/PROC/C2/CFD |
| WP\_FOLATE\_METABOLISM | WP\_FOLATE\_METABOLISM | 66 | 0.509683 | 2.04701 | 1.47E-05 | 0.000199 | 0.000141 | 1735 | tags=27%, list=10%, signal=25% | IL1B/ICAM1/CCL2/SOD2/IL6/HBB/SCARB1/NFKB2/FOLR2/SOD3/SERPINE1/NOS1/SLC46A1/PLG/MTHFR/CSF1/FGB/TNF |
| MATTHEWS\_SKIN\_CARCINOGENESIS\_VIA\_JUN | MATTHEWS\_SKIN\_CARCINOGENESIS\_VIA\_JUN | 17 | 0.696643 | 2.04596 | 0.000189 | 0.001773 | 0.00126 | 2616 | tags=47%, list=15%, signal=40% | SPP1/NCF2/PLAUR/CXCL2/FPR2/GUCA2A/IL36B/LAMA3 |
| ZHENG\_IL22\_SIGNALING\_UP | ZHENG\_IL22\_SIGNALING\_UP | 56 | 0.521992 | 2.0455 | 3.57E-05 | 0.000415 | 0.000295 | 4337 | tags=50%, list=24%, signal=38% | CCL8/OLR1/C3/CXCL1/PFKFB3/HBD/HBA2/SLPI/CFB/THBD/CD14/SBNO2/STXBP5L/TAC1/CFD/TIMP1/MS4A6A/LILRB5/DMKN/LRG1/PF4/SLITRK1/DSC2/RTN1/PTX3/PLAT/HP/MFSD2A |
| MARTENS\_BOUND\_BY\_PML\_RARA\_FUSION | MARTENS\_BOUND\_BY\_PML\_RARA\_FUSION | 425 | 0.392206 | 2.044968 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 1946 | tags=22%, list=11%, signal=20% | C5AR1/ICAM1/CAPG/ACP5/SPI1/HMOX1/SIK1/DUSP5/ADAM8/BHLHE40/MMP9/FOSB/ZC3H12A/SLC7A5/TNFAIP3/ITGB2/PKM/SQSTM1/LAPTM5/COTL1/NDRG1/CYTH4/FCGRT/RAC2/BCL3/LYN/STXBP2/GPR132/CTSD/TNFAIP2/NLRP3/SH3BGRL3/PLEK/PSAP/PGD/PLCB2/PTPN6/FOSL2/PLXND1/RFX2/FERMT3/RAB20/ARHGAP45/EFHD2/SERPINB1/SCARB1/TYROBP/ARHGAP30/GAS7/PXN/IRF1/APLP2/DENND3/TMEM115/NFE2/TUBA1C/LCP2/TARS2/MAP2K3/RPS19/MAFB/SLC9A3/HCK/HMGA1/MYO1F/CCDC88B/ATG16L2/MX2/RUNX3/FCN1/TNFRSF10B/NINJ1/DEF6/F11R/SYT2/GALC/ZMIZ1/PGC/ZDHHC19/RHBDF2/TMC8/SLC25A19/HIVEP3/HECW1/PSMD3/SPTBN1/KLF2/CISH/NUP210/KCNAB2/ADCY10/IRF8/OLIG2 |
| HAN\_JNK\_SINGALING\_DN | HAN\_JNK\_SINGALING\_DN | 38 | 0.557584 | 2.041767 | 0.000122 | 0.001209 | 0.000859 | 2311 | tags=37%, list=13%, signal=32% | CD74/C3/PLTP/RGS2/SOCS3/HAS2/COL6A2/SOD3/CD14/SLC29A1/CD9/WNT6/CYP2F1/IGFBP4 |
| WP\_EBOLA\_VIRUS\_INFECTION\_IN\_HOST | WP\_EBOLA\_VIRUS\_INFECTION\_IN\_HOST | 125 | 0.449152 | 2.04108 | 2.64E-06 | 4.40E-05 | 3.12E-05 | 3795 | tags=34%, list=21%, signal=27% | HLA-DRB1/HLA-DQB1/HLA-DRA/HLA-F/HLA-E/FLNA/HLA-DPA1/IRF7/HLA-DPB1/CTSL/HLA-B/HLA-A/SOCS3/HLA-DRB5/NFKB2/HLA-G/RELB/ITGA5/RHOB/HLA-DMB/HLA-C/HLA-DOA/GSN/RAB5A/ACTB/VAV2/MFGE8/IRF3/NPC1/CLTA/CTSB/SCIN/CLEC4G/IQGAP1/ASGR1/IL4/TOP1/TIAM1/HLA-DMA/VPS18/HAVCR2/NFKB1/TPCN2 |
| MATTHEWS\_AP1\_TARGETS | MATTHEWS\_AP1\_TARGETS | 17 | 0.694357 | 2.039246 | 0.000191 | 0.001785 | 0.001268 | 404 | tags=29%, list=2%, signal=29% | SPP1/PLAUR/HBEGF/BCL3/VIM |
| LEE\_EARLY\_T\_LYMPHOCYTE\_DN | LEE\_EARLY\_T\_LYMPHOCYTE\_DN | 56 | 0.520078 | 2.038 | 3.93E-05 | 0.00045 | 0.00032 | 2299 | tags=32%, list=13%, signal=28% | SLC2A3/HLA-F/HLA-E/COTL1/HLA-B/RNASET2/HLA-A/CCR7/CD27/GPR183/IL4R/KLF2/PIK3IP1/MAP3K1/GBP2/PRMT2/TUBA4A/AMIGO2 |
| AMIT\_EGF\_RESPONSE\_60\_MCF10A | AMIT\_EGF\_RESPONSE\_60\_MCF10A | 37 | 0.563906 | 2.03613 | 0.000102 | 0.001029 | 0.000731 | 3133 | tags=43%, list=17%, signal=36% | CXCL8/BHLHE40/ZC3H12A/TNFAIP3/JUNB/CXCL2/IL6/TRIB1/IER3/PTGER4/EGR1/KLF7/IER2/C11orf68/RND3/TP63 |
| SERVITJA\_ISLET\_HNF1A\_TARGETS\_UP | SERVITJA\_ISLET\_HNF1A\_TARGETS\_UP | 164 | 0.430813 | 2.034791 | 1.81E-07 | 4.18E-06 | 2.97E-06 | 1669 | tags=23%, list=9%, signal=21% | APOE/CAPG/CCL2/C1QC/GAP43/C1QB/POSTN/LYZ/ITGB2/SLC15A3/LAPTM5/BLVRB/EGR3/RNASE1/TNFAIP2/PLXND1/HLA-B/EGR2/SERPINB1/VIM/NEFL/CYBA/ATF3/NDRG2/RAB38/STK17B/ADCY7/STMN2/SYCN/PCOLCE/CPLX1/BGN/CSF1/DNM3/VCAM1/SNCA/STXBP5L/PROCR |
| XU\_HGF\_TARGETS\_INDUCED\_BY\_AKT1\_48HR\_UP | XU\_HGF\_TARGETS\_INDUCED\_BY\_AKT1\_48HR\_UP | 12 | 0.765124 | 2.033373 | 0.000469 | 0.00377 | 0.002679 | 2893 | tags=58%, list=16%, signal=49% | PLAUR/ECM1/SPSB1/THEMIS2/TNIP1/F2RL1/TGM2 |
| HOFFMANN\_SMALL\_PRE\_BII\_TO\_IMMATURE\_B\_LYMPHOCYTE\_UP | HOFFMANN\_SMALL\_PRE\_BII\_TO\_IMMATURE\_B\_LYMPHOCYTE\_UP | 63 | 0.510331 | 2.032865 | 2.57E-05 | 0.000317 | 0.000226 | 1141 | tags=24%, list=6%, signal=22% | HLA-DRB1/ICAM1/CD74/CD83/SLC2A3/IFI30/IL4I1/CTSH/ZNF385A/SERPINB1/VEGFB/NCF4/HLA-DMB/MAPK8IP3/PLD4 |
| LEE\_LIVER\_CANCER\_HEPATOBLAST | LEE\_LIVER\_CANCER\_HEPATOBLAST | 16 | 0.706528 | 2.028251 | 0.000457 | 0.003713 | 0.002639 | 2616 | tags=56%, list=15%, signal=48% | PLAUR/IL6/MMP1/VIM/TNC/FOS/TIMP1/EZR/LAMA3 |
| VERRECCHIA\_EARLY\_RESPONSE\_TO\_TGFB1 | VERRECCHIA\_EARLY\_RESPONSE\_TO\_TGFB1 | 54 | 0.52141 | 2.027691 | 6.45E-05 | 0.000696 | 0.000494 | 4432 | tags=54%, list=25%, signal=41% | ICAM1/TIMP3/ITGB2/LRP1/ARHGDIA/PXN/IGFBP2/RHOG/COL1A2/MMP19/SERPINE1/RHOB/DVL1/COL6A3/ZYX/TIMP1/TCF7L2/RND3/CD59/COL3A1/ADAM9/APC/CYTH2/FN1/MARCKSL1/ITGB5/NME2/PLAT/MMP3 |
| WP\_VITAMIN\_D\_RECEPTOR\_PATHWAY | WP\_VITAMIN\_D\_RECEPTOR\_PATHWAY | 180 | 0.424804 | 2.027354 | 5.35E-08 | 1.42E-06 | 1.01E-06 | 2301 | tags=28%, list=13%, signal=24% | SPP1/HLA-DRB1/TIMP3/TREM1/TNFAIP3/ITGAM/LRRC25/JUNB/G0S2/MYC/IRF5/TNFRSF11B/SPRR1B/MXD1/SERPINB1/CDKN1A/KRTAP4-1/BDKRB1/KLF4/LGALS9/GXYLT2/CYP2B6/THBD/CD14/PPARD/CYP2S1/MX2/CTLA4/CLDN2/NINJ1/SATB1/PTHLH/PTH/HIF1A/CD9/VDR/BGLAP/CREG2/CCNE1/PTGER4/CDKN2D/KRTAP12-2/DNER/IRF8/SULT2A1/TRPV6/DUSP10/TIMP2/G6PD/ORM1 |
| SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_1 | SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_1 | 394 | 0.391287 | 2.027298 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2281 | tags=24%, list=13%, signal=22% | IL1B/ICAM1/APOC2/PLAUR/CD74/TIMP3/DUSP5/ADAM8/STC1/SOD2/HBEGF/LAPTM5/SCD/C3/CCL3/RAC2/IRF7/STXBP2/TMEM51/APOBR/ST14/SNAI1/CNIH3/IL32/CDH3/HLA-B/HDC/MIA/NFKB2/CDKN1A/CRABP2/RBP4/CCL11/HLA-G/MATN1/OPRK1/PLEK2/PELI1/MMP19/HPX/RAB38/DUSP6/PER1/SERPINE1/CYP2B6/CACNA1A/MAPK8IP3/SERPINA1/IER3/GDF15/MAGEB1/CHI3L1/F11R/NPTX2/SYT2/ATP4B/CSF1/TMEM176A/TNFRSF10D/OAS1/COL6A3/MCOLN3/FOXE1/DNAJC6/MRAS/CSF2/NRGN/PSAT1/PLXNB3/KLHL11/EPB41L4A/PROCR/OR7A10/LIPC/TNF/HPGDS/MAGED4B/CYB5R2/KIR2DL1/MAGEA9/IL1RAPL2/PRDM14/EFEMP1/CEP162/BIRC3/NPTX1/LMTK2/ATXN3L/DUSP10/CCL17/CAMKK2/RPRM/KRT85/DPEP3/CLEC11A |
| WOO\_LIVER\_CANCER\_RECURRENCE\_UP | WOO\_LIVER\_CANCER\_RECURRENCE\_UP | 103 | 0.460635 | 2.023286 | 6.89E-06 | 0.000101 | 7.16E-05 | 1483 | tags=25%, list=8%, signal=23% | CXCL8/CCL2/PLAUR/HK2/POSTN/RGS1/PLAU/TREM2/PKM/FLNA/CXCL1/RGS2/GEM/ARHGAP4/GAS7/VEGFB/MAB21L2/COL1A2/COL9A2/SOCS1/HMGA1/LAMP3/COL6A3/EXT1/COL1A1/PPT1 |
| XU\_HGF\_TARGETS\_REPRESSED\_BY\_AKT1\_UP | XU\_HGF\_TARGETS\_REPRESSED\_BY\_AKT1\_UP | 10 | 0.802741 | 2.019891 | 0.000587 | 0.004541 | 0.003227 | 2456 | tags=60%, list=14%, signal=52% | CCL2/SOD2/SAT1/ANGPTL4/AREG/POLR3G |
| KEGG\_OLFACTORY\_TRANSDUCTION | KEGG\_OLFACTORY\_TRANSDUCTION | 380 | 0.390761 | 2.019274 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4950 | tags=43%, list=28%, signal=32% | ARRB2/OR5A1/OR5F1/OR4K13/OR11H1/OR56A3/OR2T29/OR10A7/OR2T33/OR2A14/OR5AS1/OR5P2/OR2S2/OR52I1/OR4K14/OR5C1/OR2D2/OR4F15/OR4S1/OR2Y1/OR10T2/OR10H3/OR4N4/OR6K6/OR2L2/OR2J3/OR2M4/OR4M2/OR6C6/OR8K3/OR11H6/OR5M8/OR11A1/OR1C1/OR6C70/OR1Q1/OR2T6/OR56B1/OR4N5/OR3A1/GUCY2D/OR5D18/OR11H4/OR51B4/OR52K2/OR51M1/OR10J3/OR10H4/OR5A2/OR9I1/OR2F2/OR10G9/OR2T4/OR8I2/OR4N2/OR9A2/CALML6/OR7A10/OR4X1/OR5H6/CLCA4/OR13C5/OR4A16/OR2B2/OR51G1/OR2T1/OR52B6/OR4C11/OR2AT4/OR8J3/OR2G3/OR1E1/OR8S1/OR8J1/OR10H5/OR1J4/OR7G2/OR52N1/OR4A5/OR5AN1/OR4K1/OR1J2/OR10C1/OR5AR1/OR4C6/OR4D9/OR4K17/OR6M1/PRKG2/OR14I1/OR10P1/OR1L4/OR1L3/OR10H1/OR4S2/OR5V1/OR51A4/PDC/OR2B6/OR4D5/OR6C2/OR2T34/OR4C12/OR13C9/CNGA4/OR2H1/OR10G7/OR52R1/OR10A3/OR2M5/OR51Q1/OR4F5/OR9K2/OR9A4/OR10Q1/OR5D13/OR5M11/OR5D16/OR2AK2/OR13C2/OR4D11/OR6C68/OR10R2/OR4M1/OR4D2/OR10G2/OR10G3/OR6C3/OR2B11/OR10A6/OR14C36/GRK3/GUCA1C/OR4C3/OR51G2/OR2A2/OR8K5/OR5T2/OR4C15/OR6C74/OR2T5/PDE1C/OR2L13/OR9Q1/OR6T1/OR11G2/OR4F6/CNGA3/OR52J3/OR13C8/OR8G1/OR12D3/OR2T10/OR1A1/OR1S1/OR52D1/OR6C1/OR4F16/OR7A17/OR3A3/OR52L1/OR6N2/OR13D1 |
| SENESE\_HDAC1\_AND\_HDAC2\_TARGETS\_UP | SENESE\_HDAC1\_AND\_HDAC2\_TARGETS\_UP | 220 | 0.412829 | 2.019141 | 1.47E-08 | 4.40E-07 | 3.13E-07 | 2893 | tags=31%, list=16%, signal=27% | CXCL8/PLAUR/FOSL1/NAMPT/MMP9/ZC3H12A/SLC16A3/PLAU/TNFAIP3/LAPTM5/TNFRSF12A/SPHK1/C3/RAC2/MMP1/RGS2/G0S2/GEM/CCL20/TNFRSF11B/SH2B3/LMAN1/GPAT3/NFKB2/RRAGD/PXN/LPXN/HAS2/TMEM200A/NRIP3/ST3GAL1/HMGA1/IL24/SERPINA1/TFRC/GFPT2/CXCL5/TNFRSF10B/PPIF/KLHL21/COL6A3/CSF2/BCL2A1/MCL1/MYH16/CHST11/MC5R/CCNE1/CA2/SLC16A1/BIRC3/STK10/HOMER3/IL1A/CPEB4/IL13RA2/TRIML2/IL7R/ADAMTS17/KYNU/SERPINB2/IRAK2/DKK1/ELK3/IQGAP1/PPTC7/LAMC2/ROBO4/TGM2 |
| GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_UP | 55 | 0.517176 | 2.018757 | 9.62E-05 | 0.000983 | 0.000699 | 2686 | tags=31%, list=15%, signal=26% | IL1B/SOD2/CXCL1/CXCL2/DDX17/EMP1/NR4A2/PPFIBP1/FTH1/ALDH1A1/EBI3/SPTBN1/GBP2/DST/AREG/KYNU/TCF7L2 |
| RAY\_ALZHEIMERS\_DISEASE | RAY\_ALZHEIMERS\_DISEASE | 13 | 0.738201 | 2.015772 | 0.0005 | 0.003972 | 0.002823 | 2218 | tags=54%, list=12%, signal=47% | CXCL8/CCL18/IL3/CSF1/CSF3/TNF/IL1A |
| HUMMERICH\_MALIGNANT\_SKIN\_TUMOR\_UP | HUMMERICH\_MALIGNANT\_SKIN\_TUMOR\_UP | 18 | 0.672108 | 2.015017 | 0.0008 | 0.005903 | 0.004195 | 681 | tags=33%, list=4%, signal=32% | COTL1/ECM1/HBA2/SLPI/RHOG/COL1A2 |
| KAMIKUBO\_MYELOID\_CEBPA\_NETWORK | KAMIKUBO\_MYELOID\_CEBPA\_NETWORK | 30 | 0.58376 | 2.014783 | 0.000319 | 0.002741 | 0.001948 | 4316 | tags=40%, list=24%, signal=30% | LYZ/ITGAM/PGD/HDC/SERPINB1/FPR2/IRF8/IL18/CD177/GLRX/LTF/HP |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_2B | LINDGREN\_BLADDER\_CANCER\_CLUSTER\_2B | 371 | 0.390531 | 2.014475 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3074 | tags=31%, list=17%, signal=26% | HLA-DRB1/ICAM1/CCL2/HLA-DQB1/PLAUR/GADD45B/DUSP5/POSTN/LYZ/HLA-DRA/IFI30/TNFAIP3/MT1G/HLA-E/LAPTM5/ANPEP/SELL/COTL1/CYTH4/AMOTL2/CST7/RAC2/HLA-DRB6/RGS2/HLA-DPB1/GEM/PIM2/MT2A/IL32/SH2B3/FERMT3/NFATC1/SOCS3/HLA-DRB5/SAMSN1/MPP1/TNC/MIAT/SELE/ARHGAP30/IL2RG/IL10RA/IQGAP2/WHRN/FYN/LGALS2/FOLR2/PELI1/KLF4/HTRA3/COL1A2/COL6A2/LCP2/THBD/LCP1/MAFB/RHOH/MYO1F/IGFBP7/ITK/RUNX3/NFKBIE/PCOLCE/ST6GAL1/ELN/FCGR2B/GSN/COL6A3/CH25H/NRP2/PTPN7/BCL2A1/COLEC12/VCAM1/FLVCR2/CTSG/LRRC8C/ACTA2/AIF1/C3AR1/NRN1/EBI3/PPP1R18/SLC43A3/EFEMP1/DAB2/BIRC3/TIMP2/TCF4/DHODH/IL1A/EGR1/TRAF1/THBS2/IL7R/NFIL3/CFL2/IER2/PDPN/YWHAZ/S100A7/LATS2/MT1E/AQP1/PPTC7/STUM/SREBF1/STARD4/FBLN2/MYADM/RND3/MAP1A/SIRPA/SEMA6D/RCAN2/PARVG |
| WP\_FIBRIN\_COMPLEMENT\_RECEPTOR\_3\_SIGNALING\_PATHWAY | WP\_FIBRIN\_COMPLEMENT\_RECEPTOR\_3\_SIGNALING\_PATHWAY | 43 | 0.53562 | 2.011815 | 0.000331 | 0.002834 | 0.002014 | 2602 | tags=37%, list=14%, signal=32% | CCL2/ITGB2/ITGAM/IL6/TYROBP/CD14/PLG/IL12B/FGB/TNF/IRAK1/LY96/IRF3/IKBKB/CBLB/IRAK2 |
| LY\_AGING\_MIDDLE\_UP | LY\_AGING\_MIDDLE\_UP | 14 | 0.722598 | 2.011222 | 0.00081 | 0.005969 | 0.004242 | 2415 | tags=50%, list=13%, signal=43% | CXCL8/MMP12/TNFRSF11B/COMP/PTGS1/THBS2/SERPINB2 |
| MURATA\_VIRULENCE\_OF\_H\_PILORI | MURATA\_VIRULENCE\_OF\_H\_PILORI | 21 | 0.640949 | 2.008907 | 0.000253 | 0.00226 | 0.001606 | 700 | tags=24%, list=4%, signal=23% | SOD2/MMP1/MMP13/CDKN1A/COL6A2 |
| KERLEY\_RESPONSE\_TO\_CISPLATIN\_UP | KERLEY\_RESPONSE\_TO\_CISPLATIN\_UP | 44 | 0.533409 | 2.008532 | 0.000176 | 0.001663 | 0.001182 | 1669 | tags=32%, list=9%, signal=29% | FOSL1/BTG2/PLK3/PDE4A/CDKN1A/NEFL/SERPINE1/LMNA/IER3/GDF15/EPS8L2/CXCL14/ACTA2/PROCR |
| WP\_BLADDER\_CANCER | WP\_BLADDER\_CANCER | 40 | 0.546998 | 2.005324 | 0.000241 | 0.002175 | 0.001546 | 416 | tags=20%, list=2%, signal=20% | CXCL8/MMP9/HBEGF/TYMP/MMP1/MYC/VEGFA/CDKN1A |
| JACKSON\_DNMT1\_TARGETS\_UP | JACKSON\_DNMT1\_TARGETS\_UP | 81 | 0.474928 | 2.005203 | 3.62E-05 | 0.00042 | 0.000298 | 1784 | tags=27%, list=10%, signal=25% | CCL2/PHLDA1/HLA-E/JUNB/CXCL2/IRF7/PLIN2/RGS16/HLA-B/SOCS3/CDKN1A/SLPI/KLF4/MAP2K3/HMGA1/TRIM28/EPHA2/CSF1/HIF1A/ENG/PROCR/RAD52 |
| SCHOEN\_NFKB\_SIGNALING | SCHOEN\_NFKB\_SIGNALING | 32 | 0.572101 | 2.004551 | 0.000379 | 0.003191 | 0.002268 | 659 | tags=31%, list=4%, signal=30% | IL1B/CXCL8/CCL2/GADD45B/MMP9/CSRNP1/C3/CXCL2/SULF1/KLF4 |
| MIKKELSEN\_NPC\_ICP\_WITH\_H3K27ME3 | MIKKELSEN\_NPC\_ICP\_WITH\_H3K27ME3 | 13 | 0.733182 | 2.002066 | 0.000586 | 0.004541 | 0.003227 | 2083 | tags=54%, list=12%, signal=48% | HLA-E/POU2AF1/MATN1/MLPH/TTLL6/HOXB13/ESRP1 |
| DUNNE\_TARGETS\_OF\_AML1\_MTG8\_FUSION\_UP | DUNNE\_TARGETS\_OF\_AML1\_MTG8\_FUSION\_UP | 50 | 0.517701 | 2.002059 | 0.000132 | 0.001296 | 0.000921 | 2724 | tags=38%, list=15%, signal=32% | LYZ/LAPTM5/CST7/SAMSN1/PRG2/OS9/NFE2/LCP1/MYO1F/IGFBP7/ATG16L2/LST1/CTSG/PTGER4/CSF3R/CMTM3/HSPA6/ALDH3B1/MS4A3 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_UP | HAHTOLA\_MYCOSIS\_FUNGOIDES\_UP | 14 | 0.718148 | 1.998835 | 0.000932 | 0.006777 | 0.004816 | 1798 | tags=50%, list=10%, signal=45% | MMP9/SOD2/S100P/G0S2/HBD/SNCA/CA2 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_ERYTHROCYTE\_UP | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_ERYTHROCYTE\_UP | 150 | 0.427875 | 1.998582 | 8.52E-07 | 1.71E-05 | 1.21E-05 | 3484 | tags=39%, list=19%, signal=31% | TREM1/SLC15A3/OLR1/NDRG1/ECM1/PLTP/CLEC5A/IL1RN/EMP1/CTSL/VSIG4/SOCS3/RRAGD/SLC5A3/SLCO4A1/GPNMB/COL1A2/LPL/DUSP6/TNFRSF21/PPARD/SERPINA1/GDF15/CXCL5/EEF1A2/TMEM176A/FCGR1A/EXT1/CH25H/BCL2A1/LAIR1/SLAMF8/VAT1/C3AR1/ALDH1A2/KLF2/GBP2/HOMER3/ACSL1/NRCAM/AMIGO2/P2RX4/SLC1A3/TNNT1/PDGFA/TCF7L2/ANXA2/ADAMTSL4/TLR2/DDR1/DHRS9/NUPR1/DENND5A/TIAM1/NQO1/TMEM176B/KLF6/PALM |
| AMIT\_SERUM\_RESPONSE\_120\_MCF10A | AMIT\_SERUM\_RESPONSE\_120\_MCF10A | 65 | 0.494995 | 1.992672 | 3.76E-05 | 0.000435 | 0.000309 | 2929 | tags=34%, list=16%, signal=28% | PLAUR/GADD45B/SIK1/JUNB/PIM1/SPHK1/LIF/CLCF1/KLF4/MNT/GBP1/TRIM21/MCL1/C3orf52/DUSP10/SOX9/EZR/CIZ1/KLF10/YRDC/SUN1/RND3 |
| PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_DN | PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_DN | 159 | 0.422001 | 1.992138 | 3.02E-07 | 6.70E-06 | 4.76E-06 | 2049 | tags=26%, list=11%, signal=24% | CXCL8/ICAM1/CAPG/CCL2/HMOX1/PLAU/ANPEP/CXCL1/RAC2/PLTP/RNASE1/IL6/BTG2/MMP1/IL32/CDKN1A/SELE/TGFBI/LPXN/MBOAT7/MAPKAPK3/COL1A2/ITGA5/SERPINE1/SGSH/TNFRSF21/RHOB/FAP/IER3/MT1A/BGN/KLHL21/EXT1/FAM107A/BASP1/ACTA2/PROCR/RGS4/IL4R/EFEMP1/GBP2/NPTX1 |
| DEMAGALHAES\_AGING\_UP | DEMAGALHAES\_AGING\_UP | 52 | 0.515086 | 1.991507 | 7.90E-05 | 0.000831 | 0.00059 | 2048 | tags=35%, list=11%, signal=31% | SPP1/C1QC/APOD/C1QB/LYZ/LAPTM5/HCST/NDRG1/C3/SGK1/HLA-G/GPNMB/JCHAIN/FCGR2B/VAT1/B2M/EFEMP1/GBP2 |
| REACTOME\_NEUTROPHIL\_DEGRANULATION | REACTOME\_NEUTROPHIL\_DEGRANULATION | 466 | 0.377214 | 1.991186 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2844 | tags=27%, list=16%, signal=24% | C5AR1/NCKAP1L/PLAUR/ITGAX/ADAM8/SLC2A3/CSTB/MMP9/LYZ/TNFRSF1B/SIGLEC9/PLAU/ITGB2/ITGAM/PKM/OLR1/FTL/OSCAR/ANPEP/SELL/COTL1/GPR84/C3/TMBIM1/S100P/CXCL1/MCEMP1/SLC11A1/CLEC5A/CTSH/HBB/CTSD/HK3/PSAP/PTPN6/HLA-B/PLEKHO2/RNASET2/PTAFR/ARHGAP45/SERPINB1/HLA-A/PGLYRP1/PNP/GRN/TYROBP/PRG2/TUBB4B/FCER1G/CYBA/MNDA/IQGAP2/PRSS3/CD68/SLPI/RHOG/FTH1/ATP6AP2/CD14/IMPDH1/HLA-C/CYSTM1/TCIRG1/SERPINA1/FPR2/FCN1/GLA/CHI3L1/LILRA3/FPR1/CMTM6/MAN2B1/NBEAL2/GSN/CREG1/SDCBP/TTR/CLEC4D/TOM1/PPBP/LAIR1/ORMDL3/CTSG/VAT1/CXCR1/C3AR1/PSMD3/ARSA/HPSE/B2M/CD53/GPI/DIAPH1/APRT/KCNAB2/GM2A/AGPAT2/CFD/DPP7/LILRB3/SERPINB12/CST3/STK10/TIMP2/HSPA6/BRI3/TBC1D10C/TMC6/ORM1/S100A12/ALDOA/GALNS/ARPC5/CTSB/GAA/LRG1/ATP6V0A1/ALDH3B1/CXCR2/S100A7/ATG7/ANXA2/MS4A3/IQGAP1/TLR2/CSNK2B/PIGR |
| LEE\_LIVER\_CANCER\_MYC\_TGFA\_UP | LEE\_LIVER\_CANCER\_MYC\_TGFA\_UP | 58 | 0.507254 | 1.989862 | 9.61E-05 | 0.000983 | 0.000699 | 1948 | tags=29%, list=11%, signal=26% | ICAM1/MMP12/CSTB/NDRG1/BTG2/MT2A/KRT8/SLPI/LPL/TFRC/PLSCR1/TLR1/CSN3/MFGE8/UAP1L1/RACK1/LY6E |
| BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_INFECTION\_UP | BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_INFECTION\_UP | 121 | 0.437173 | 1.988214 | 8.56E-06 | 0.000122 | 8.66E-05 | 4312 | tags=42%, list=24%, signal=32% | ICAM1/CD83/POSTN/TNFAIP3/HLA-F/IL6/RGS16/ETV3/FSD1L/SLC5A3/NIPAL1/MAFB/NR1D2/TFRC/NBEAL1/GBP1/ZKSCAN1/CSF1/IRF9/MED13/TNF/DTX3L/ARL5B/BIRC3/HSPA6/CRYBG3/PTGS1/GTF3C4/TRAF1/DDI2/EPSTI1/IL7R/VWA7/LINC01089/ULBP1/ZPLD1/SDK1/DDIT3/CXCL11/ZNFX1/TAP1/KIF17/AOC2/BATF2/PTX3/ZNF778/XIST/PYGM/UGDH/DPP4/PLAT |
| MIKKELSEN\_MEF\_LCP\_WITH\_H3K4ME3 | MIKKELSEN\_MEF\_LCP\_WITH\_H3K4ME3 | 113 | 0.441135 | 1.987641 | 1.42E-05 | 0.000194 | 0.000138 | 2712 | tags=30%, list=15%, signal=26% | CAPG/CCL2/POSTN/RAB7B/LSP1/ECM1/IL1RN/IL18RAP/GPSM3/LGALS3BP/SERPINB9/LGALS9/MMP19/GAL3ST4/ELOVL1/ACOT11/PCOLCE/TRIM21/TMEM176A/XDH/SCN2B/C6orf118/SARDH/MYO7A/SERPINB8/GBP2/IL17RC/CCDC9/ARAP1/MAB21L3/IQSEC2/VWA5A/NYAP1/TREX1 |
| WP\_NUCLEAR\_RECEPTORS\_METAPATHWAY | WP\_NUCLEAR\_RECEPTORS\_METAPATHWAY | 315 | 0.389141 | 1.985442 | 8.90E-10 | 3.25E-08 | 2.31E-08 | 2946 | tags=26%, list=16%, signal=22% | IL1B/CCL2/GADD45B/HMOX1/SLC2A3/BHLHE40/SLC7A5/TNFAIP3/HBEGF/SQSTM1/NR1H3/FTL/SCD/JUNB/BLVRB/S100P/PLTP/RGS2/CCL20/MYC/PGD/NFKB2/CES3/SLC2A14/SRXN1/SLC6A5/SERPINB9/SLC5A3/SOD3/ANGPTL4/CYP2B6/THBD/FTH1/PPARD/SLC39A5/SERPINA1/FABP1/EPHA2/SLC6A7/GCLM/ABCG8/IL12B/SLCO2B1/SLC6A20/VDR/PDE4B/TNF/ZIC2/MFGE8/UGT1A9/DNER/ARL5B/FGFBP1/SULT2A1/BIRC3/ABCB11/SLC19A2/SLC2A9/EGR1/G6PD/CPEB4/PCK1/AMIGO2/BAX/SERPINB2/APOA5/CYP3A7/SLC6A2/APOA2/UGT2B4/CES5A/SLC2A2/SLC6A17/SPINK13/SREBF1/ADH7/EDN2/CYP2C19/SLC10A1/GGTLC2/SLC2A13/SLC6A19 |
| BIOCARTA\_LAIR\_PATHWAY | BIOCARTA\_LAIR\_PATHWAY | 17 | 0.675637 | 1.984266 | 0.000413 | 0.003427 | 0.002436 | 2218 | tags=47%, list=12%, signal=41% | CXCL8/ICAM1/ITGB2/C3/IL6/VCAM1/TNF/IL1A |
| WP\_CELLS\_AND\_MOLECULES\_INVOLVED\_IN\_LOCAL\_ACUTE\_INFLAMMATORY\_RESPONSE | WP\_CELLS\_AND\_MOLECULES\_INVOLVED\_IN\_LOCAL\_ACUTE\_INFLAMMATORY\_RESPONSE | 17 | 0.675637 | 1.984266 | 0.000413 | 0.003427 | 0.002436 | 2218 | tags=47%, list=12%, signal=41% | CXCL8/ICAM1/ITGB2/C3/IL6/VCAM1/TNF/IL1A |
| SA\_MMP\_CYTOKINE\_CONNECTION | SA\_MMP\_CYTOKINE\_CONNECTION | 15 | 0.698497 | 1.984188 | 0.000811 | 0.005969 | 0.004242 | 1735 | tags=40%, list=10%, signal=36% | IL1B/TNFRSF1B/SELL/CSF1/FCGR3A/TNF |
| VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_UP | VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_UP | 158 | 0.420095 | 1.98354 | 9.53E-07 | 1.88E-05 | 1.34E-05 | 3121 | tags=30%, list=17%, signal=25% | SPP1/IL1B/PLAUR/HMOX1/TIMP3/MMP9/PLAU/SPHK1/CXCL2/IL6/MMP1/ADM/TNFAIP2/SH2D2A/VEGFA/CCL11/COL4A2/SFRP2/MMP19/PROM1/SYN1/CXCL5/HIF1A/ENG/NRP2/EFNA2/CXCR1/EFNA3/HPSE/TNF/HEG1/TIMP1/TIMP2/PTGS1/THBS2/IL18/CXCL9/EPHA8/TMPRSS6/TNNT1/PDGFA/WNT1/ROBO4/PF4/GRB2/STAB1/DLL1/MMP2 |
| REACTOME\_GPVI\_MEDIATED\_ACTIVATION\_CASCADE | REACTOME\_GPVI\_MEDIATED\_ACTIVATION\_CASCADE | 34 | 0.557699 | 1.983415 | 0.000712 | 0.005339 | 0.003794 | 2529 | tags=41%, list=14%, signal=35% | RAC2/LYN/PTPN6/VAV1/FCER1G/FYN/RHOG/COL1A2/LCP2/RHOB/COL1A1/VAV2/PIK3R6/PDPN |
| REACTOME\_CLASS\_C\_3\_METABOTROPIC\_GLUTAMATE\_PHEROMONE\_RECEPTORS | REACTOME\_CLASS\_C\_3\_METABOTROPIC\_GLUTAMATE\_PHEROMONE\_RECEPTORS | 36 | 0.553564 | 1.983066 | 0.000536 | 0.004225 | 0.003003 | 4658 | tags=56%, list=26%, signal=41% | GABBR1/TAS2R41/TAS2R46/TAS2R40/TAS1R2/TAS2R42/TAS2R20/GRM3/TAS1R3/TAS2R9/CASR/GRM4/TAS2R16/GRM5/TAS2R4/TAS2R43/TAS2R19/GRM6/TAS2R14/TAS2R8 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_CLEARANCE | REACTOME\_PLASMA\_LIPOPROTEIN\_CLEARANCE | 33 | 0.56504 | 1.982844 | 0.000341 | 0.002908 | 0.002067 | 2449 | tags=33%, list=14%, signal=29% | APOE/APOC1/LIPA/NR1H3/APOBR/SCARB1/CES3/AMN/LIPC/NPC1/CLTA |
| WORSCHECH\_TUMOR\_EVASION\_AND\_TOLEROGENICITY\_UP | WORSCHECH\_TUMOR\_EVASION\_AND\_TOLEROGENICITY\_UP | 30 | 0.574395 | 1.982464 | 0.000441 | 0.003614 | 0.002569 | 3218 | tags=50%, list=18%, signal=41% | CCL2/BOK/IL4I1/IL6/IRF7/IL2RG/CCR7/LCP2/IL9/IL12B/IL7R/CXCL9/BLNK/STAT4/IL4 |
| MUELLER\_METHYLATED\_IN\_GLIOBLASTOMA | MUELLER\_METHYLATED\_IN\_GLIOBLASTOMA | 42 | 0.525786 | 1.982304 | 0.000469 | 0.00377 | 0.002679 | 3656 | tags=48%, list=20%, signal=38% | KRT17/LAPTM5/S100P/CXCL2/MMP13/GZMM/IL24/IER3/RUNX3/F11R/NPTX2/SERPIND1/KRT4/AREG/TLR2/SSX2/SSX3/CLDN4/TES/MAGEB2 |
| DER\_IFN\_ALPHA\_RESPONSE\_UP | DER\_IFN\_ALPHA\_RESPONSE\_UP | 73 | 0.479645 | 1.977155 | 2.59E-05 | 0.00032 | 0.000228 | 1713 | tags=32%, list=10%, signal=29% | LIPA/IFI30/HLA-E/IL6/ZFP36L2/DDX17/BBC3/HLA-A/IRF1/MAP3K10/OASL/HLA-C/TRIM14/MX2/GBP1/PLSCR1/TRIM21/GMPR/OAS1/SDCBP/IRF9/IRF2/B2M |
| ELVIDGE\_HYPOXIA\_BY\_DMOG\_UP | ELVIDGE\_HYPOXIA\_BY\_DMOG\_UP | 131 | 0.429487 | 1.972373 | 2.35E-06 | 4.04E-05 | 2.87E-05 | 2495 | tags=31%, list=14%, signal=26% | HLA-DRB1/PLAUR/BHLHE40/CEMIP/HK2/STC1/PIM1/NDRG1/SAMD4A/PFKFB3/ADM/SAT1/VEGFA/GPRC5A/RRAGD/TGFBI/SLCO4A1/FYN/ATF3/ANGPTL4/SERPINE1/OBSL1/FOS/GDF15/RLF/SFXN3/SPOCK1/GPR87/OLFML2A/MET/INHA/RBCK1/DST/EGR1/ELF3/EGLN1/SOX9/KLF7/DTNA/NFIL3 |
| PEPPER\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_UP | PEPPER\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_UP | 31 | 0.566048 | 1.972085 | 0.000446 | 0.00365 | 0.002594 | 2064 | tags=42%, list=11%, signal=37% | IL1B/LYZ/CEBPD/CCL3/CXCL2/VEGFA/AOAH/HTR1B/IGFBP7/EPB41L3/XYLB/OR1E1/CST3 |
| LEE\_AGING\_NEOCORTEX\_UP | LEE\_AGING\_NEOCORTEX\_UP | 74 | 0.477024 | 1.971651 | 5.45E-05 | 0.000603 | 0.000428 | 2925 | tags=38%, list=16%, signal=32% | SPP1/C1QC/APOD/JUNB/NDRG1/M6PR/CTSD/SAT1/LGALS3BP/VEGFA/VIM/CD68/RHOG/FOS/CSNK1D/PSAT1/CCL21/CD9/S100A10/B2M/OXT/UBC/PTGS1/AVP/WWOX/DLG1/DDIT3/MAG |
| GROSS\_HYPOXIA\_VIA\_ELK3\_DN | GROSS\_HYPOXIA\_VIA\_ELK3\_DN | 145 | 0.422154 | 1.969175 | 2.00E-06 | 3.52E-05 | 2.50E-05 | 2006 | tags=24%, list=11%, signal=22% | CCL2/DUSP2/BHLHE40/HBEGF/CSRNP1/ANPEP/NDRG1/C3/CXCL2/IL6/SLC20A1/PFKFB3/ADM/SAT1/MYC/PLEK/CEBPB/VEGFA/SAMSN1/TNC/SLPI/KLF4/ENO1/THBD/ERRFI1/FOS/TIAM2/FBXO42/RABGEF1/CSF3/FGB/XBP1/PTGER4/NOCT/MAP3K1 |
| AUJLA\_IL22\_AND\_IL17A\_SIGNALING | AUJLA\_IL22\_AND\_IL17A\_SIGNALING | 11 | 0.759416 | 1.96826 | 0.000737 | 0.005511 | 0.003916 | 3922 | tags=82%, list=22%, signal=64% | CCL3/CXCL1/CXCL5/CSF3/S100A12/CXCL9/S100A7/IL36G/DUOX2 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_B | LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_B | 48 | 0.515795 | 1.966448 | 0.000184 | 0.001728 | 0.001228 | 3993 | tags=52%, list=22%, signal=41% | CD83/TNFAIP3/LYN/ADM/TNFAIP2/NFKB2/RELB/LAMP3/CD80/TNIP1/SLAMF1/BIRC3/TRAF1/PDGFA/DUSP4/HIVEP1/ZNF267/IL15RA/JRK/STK4/TAP1/NFKBIA/MARCKS/NFKB1/MARCKSL1 |
| SWEET\_LUNG\_CANCER\_KRAS\_UP | SWEET\_LUNG\_CANCER\_KRAS\_UP | 448 | 0.374405 | 1.964962 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 2747 | tags=27%, list=15%, signal=23% | SPP1/HLA-DRB1/MARCO/APOC1/CD74/MMP12/C1QC/ITGAX/PHLDA1/C1QB/BHLHE40/HK2/CSTB/HLA-DRA/IFI30/RGCC/ITGB2/PKM/LAPTM5/MYDGF/COTL1/PLBD1/CXCL2/AVPI1/CTSH/PLIN2/STXBP2/PLA2G7/CTSD/SAT1/KRT8/PSAP/RNASET2/HDC/PGLYRP1/CDKN1A/TYROBP/CES3/RBP4/CSF2RB/TGFBI/GJB2/VEGFB/CYBA/GRINA/CD68/SLPI/ATP1A1/DUSP6/ENO1/SERPINE1/ELOVL1/LCP1/CD14/ADCY7/HLA-DMB/ERRFI1/FPR2/CHI3L1/ST6GAL1/MT1A/SLC25A39/NCL/FCGR2B/HIF1A/CH25H/CNDP2/FBP2/CLCN5/CSF2/BCL2A1/TNFAIP1/PSAT1/BASP1/CD9/CHIA/CDK2AP2/TAOK3/ADGRG1/LAP3/PRB1/ELL2/XBP1/GPI/IL4R/PHLDA2/TFCP2L1/INHBB/RACK1/GAS5/TNFSF9/SLC16A1/ETV2/ESRP1/PTGS1/G6PD/MRPS34/NEK4/TPM4/PRCC/ORM1/IL13RA2/IL18/AREG/CKMT1A/ALDOA/NFIL3/CAPZA3/RAP1GAP/CTSB/REEP6/LRG1/TNNT1/LDHA/ATP6V0A1/SND1/GJB3/GJA3/TOB1/MRC1/IQGAP1 |
| ZHAN\_MULTIPLE\_MYELOMA\_MF\_UP | ZHAN\_MULTIPLE\_MYELOMA\_MF\_UP | 47 | 0.515969 | 1.96376 | 0.000318 | 0.002735 | 0.001944 | 1649 | tags=28%, list=9%, signal=25% | SPP1/CEBPD/TYMP/COTL1/ITGB7/WHRN/TRIM47/SFRP2/NMU/LCP2/TMEM255A/ABHD12/ARID5A |
| BORLAK\_LIVER\_CANCER\_EGF\_UP | BORLAK\_LIVER\_CANCER\_EGF\_UP | 52 | 0.507842 | 1.963496 | 0.000118 | 0.001177 | 0.000836 | 3153 | tags=38%, list=18%, signal=32% | SPP1/SCD/JUNB/BTG2/KRT8/ATF3/LPL/SERPINE1/FOS/PLSCR1/CA2/ELF3/BLNK/PDGFA/ANXA2/LTB/TGFA/DDR1/TGIF1/TFF3 |
| RICKMAN\_METASTASIS\_DN | RICKMAN\_METASTASIS\_DN | 247 | 0.394125 | 1.963492 | 2.89E-08 | 8.16E-07 | 5.80E-07 | 4450 | tags=38%, list=25%, signal=29% | CAPG/SPI1/KRT17/RAB7B/SLC16A3/PKM/TYMP/GNA15/NDRG1/MYO1G/AVPI1/STXBP2/SH3BGRL3/RNF19B/FOSL2/SPRR1B/PTAFR/SCO2/CDKN1A/FCER1G/CD300LF/RHOG/LCP2/LMNA/ADCY7/GNLY/TBC1D2/DSG3/CACTIN/GBP1/EPPK1/DUSP7/ATP6V1B2/NDUFA4L2/SLAMF8/RALGDS/SPATA24/SH3GL1/KRT6A/TNFSF9/CDCP1/GBP2/A4GALT/DST/CAMKK2/TPM4/BAIAP2/IL18/SCAMP2/AGAP3/PALMD/ZDHHC12/ARPC5/GJB3/ADAMTSL4/RNH1/DOCK8/PTK2B/CENPT/MIER2/ALS2CL/C15orf39/PRF1/PITPNM3/LOC154761/PPP2R1B/IGSF3/ALDH16A1/TOM1L2/NLRP1/ZBTB7A/GTPBP1/CD177/SGMS1/ANXA2P3/TAP1/CKMT1B/ARF1/MOB3A/FARSA/PGAM1/TFEB/SLC27A3/R3HDM4/NUAK2/PAFAH1B2/PCSK7/SFN/HES7/MEGF11/SLC19A1/MYO1E/ITGB4/AKIRIN2/TSPAN14 |
| SCIAN\_INVERSED\_TARGETS\_OF\_TP53\_AND\_TP73\_DN | SCIAN\_INVERSED\_TARGETS\_OF\_TP53\_AND\_TP73\_DN | 30 | 0.568391 | 1.961742 | 0.000563 | 0.004393 | 0.003122 | 2312 | tags=37%, list=13%, signal=32% | BHLHE40/SLC7A5/DDX17/HBD/EIF1/NFKB2/RELB/ATF3/BASP1/TRAF1/BAIAP2 |
| HENDRICKS\_SMARCA4\_TARGETS\_DN | HENDRICKS\_SMARCA4\_TARGETS\_DN | 46 | 0.51844 | 1.959051 | 0.000263 | 0.002332 | 0.001657 | 2298 | tags=28%, list=13%, signal=25% | CD74/HLA-DRA/HLA-DRB3/TREM2/HCST/PLEKHG2/MYC/NRP2/GPR183/MC5R/NPFFR2/IL36B/SPRY2 |
| GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_DN | GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_DN | 41 | 0.526143 | 1.95843 | 0.000362 | 0.003075 | 0.002185 | 2338 | tags=37%, list=13%, signal=32% | HLA-DQB1/HLA-DRB4/SELL/CXCL1/HLA-DPA1/HLA-DPB1/EMP1/DUSP6/PPFIBP1/PROM1/HLA-DMB/AIF1/SPTBN1/GBP2/AREG |
| HADDAD\_T\_LYMPHOCYTE\_AND\_NK\_PROGENITOR\_DN | HADDAD\_T\_LYMPHOCYTE\_AND\_NK\_PROGENITOR\_DN | 63 | 0.491402 | 1.957466 | 8.92E-05 | 0.000918 | 0.000653 | 3376 | tags=44%, list=19%, signal=36% | LYZ/CEBPD/CCL3/CST7/G0S2/PLEK/ITGB7/TYROBP/CCR7/JCHAIN/CSF1R/HCK/NPTX2/GPR183/CTSG/F13A1/TNF/IRF8/CFD/MS4A6A/IL7R/CD7/BLNK/MS4A3/LTB/CDC20/KIF15/AZU1 |
| WP\_OVERVIEW\_OF\_NANOPARTICLE\_EFFECTS | WP\_OVERVIEW\_OF\_NANOPARTICLE\_EFFECTS | 19 | 0.638622 | 1.955894 | 0.001327 | 0.00902 | 0.00641 | 2616 | tags=42%, list=15%, signal=36% | CXCL8/HMOX1/IL6/CDH3/TNF/PTGS1/BAX/LAMA3 |
| VARELA\_ZMPSTE24\_TARGETS\_UP | VARELA\_ZMPSTE24\_TARGETS\_UP | 42 | 0.518764 | 1.955829 | 0.000659 | 0.004991 | 0.003547 | 842 | tags=24%, list=5%, signal=23% | GADD45B/TNFRSF1B/BTG2/ZFP36L2/SLC20A1/MYC/RGS16/CDKN1A/ATF3/CD14 |
| PAL\_PRMT5\_TARGETS\_DN | PAL\_PRMT5\_TARGETS\_DN | 28 | 0.584563 | 1.955565 | 0.000479 | 0.003821 | 0.002715 | 3184 | tags=46%, list=18%, signal=38% | KRT17/HLA-E/HLA-B/SERPINE1/FABP4/VCAM1/IL1A/UTS2R/GZMA/KLF10/TOB1/NUPR1/PDIA6 |
| NAKAJIMA\_MAST\_CELL | NAKAJIMA\_MAST\_CELL | 45 | 0.517556 | 1.953891 | 0.000237 | 0.002149 | 0.001528 | 3015 | tags=38%, list=17%, signal=32% | CAPG/CCL2/TPSAB1/HDC/PRG2/GPNMB/CALB2/GDF15/MT1A/CTSG/VAT1/HPGDS/PHLDA2/TIMP1/VWA5A/MT1E/BTK |
| WP\_OLIGODENDROCYTE\_SPECIFICATION\_AND\_DIFFERENTIATION\_LEADING\_TO\_MYELIN\_COMPONENTS\_FOR\_CNS | WP\_OLIGODENDROCYTE\_SPECIFICATION\_AND\_DIFFERENTIATION\_LEADING\_TO\_MYELIN\_COMPONENTS\_FOR\_CNS | 30 | 0.565761 | 1.952664 | 0.000631 | 0.004827 | 0.00343 | 3436 | tags=43%, list=19%, signal=35% | IL1B/LIF/CXCL1/CXCL2/NKX2-2/TNF/OLIG2/SOX9/CNP/PLP1/MAG/SOX10/SOX5 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_UP | GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_UP | 37 | 0.540689 | 1.9523 | 0.000349 | 0.002973 | 0.002113 | 2577 | tags=41%, list=14%, signal=35% | CD83/NAMPT/SLC2A3/HLA-DPA1/CHMP1B/GABBR1/HLA-G/FTH1/DNM3/ATP6V1B2/LST1/IRF9/SEMA4D/BAX/ANXA5 |
| REACTOME\_DISSOLUTION\_OF\_FIBRIN\_CLOT | REACTOME\_DISSOLUTION\_OF\_FIBRIN\_CLOT | 13 | 0.714498 | 1.951048 | 0.001062 | 0.007512 | 0.005339 | 2693 | tags=69%, list=15%, signal=59% | PLAUR/PLAU/SERPINE1/PLG/HRG/S100A10/SERPINB8/SERPINB2/ANXA2 |
| REACTOME\_INTERFERON\_SIGNALING | REACTOME\_INTERFERON\_SIGNALING | 194 | 0.404758 | 1.950951 | 1.73E-07 | 4.01E-06 | 2.85E-06 | 2222 | tags=24%, list=12%, signal=21% | HLA-DRB1/ICAM1/HLA-H/HLA-DQB1/HLA-DRB4/HLA-DRA/IFI30/HLA-DRB3/HLA-F/HLA-E/FLNA/HLA-DPA1/IRF7/HLA-DPB1/MT2A/IRF5/PTPN6/HLA-B/PTAFR/HLA-A/SOCS3/HLA-DRB5/HLA-G/IRF1/SOCS1/OASL/HLA-C/TRIM14/MX2/TRIM48/GBP1/TRIM21/OAS1/FCGR1A/IRF9/IRF2/VCAM1/OAS3/B2M/NUP210/IRF8/IRF3/UBC/KPNA7/GBP2/GBP5/EGR1 |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_PLEURA\_DN | SMID\_BREAST\_CANCER\_RELAPSE\_IN\_PLEURA\_DN | 25 | 0.596389 | 1.949327 | 0.000634 | 0.004837 | 0.003437 | 608 | tags=28%, list=3%, signal=27% | HLA-DQB1/CCL18/S100P/CDH3/MIA/GABBR1/SLPI |
| RYAN\_MANTLE\_CELL\_LYMPHOMA\_NOTCH\_DIRECT\_UP | RYAN\_MANTLE\_CELL\_LYMPHOMA\_NOTCH\_DIRECT\_UP | 146 | 0.417863 | 1.948552 | 2.56E-06 | 4.30E-05 | 3.06E-05 | 3222 | tags=30%, list=18%, signal=25% | ICAM1/GADD45B/SIK1/DUSP2/TNFRSF1B/LYN/MYC/PTPN6/UBALD2/GRN/POU2AF1/IL10RA/FYN/PELI1/THEMIS2/RHOH/MX2/CLEC17A/RUNX3/CD27/ST6GAL1/IKZF1/SEMA7A/BCL2A1/ZMIZ1/P2RY11/BATF/TNIP1/TNF/IRF8/ARAP1/CD84/TET2/BLNK/DSE/RILPL2/CD82/HIVEP1/PTK2B/PIK3AP1/ARID1B/IFNGR1/FCRL4/TOP1 |
| WP\_PI3KAKTMTOR\_VITD3\_SIGNALING | WP\_PI3KAKTMTOR\_VITD3\_SIGNALING | 22 | 0.619068 | 1.948536 | 0.000655 | 0.004971 | 0.003533 | 1636 | tags=32%, list=9%, signal=29% | SLC2A3/HLA-DRA/HK3/MYC/GSK3B/VDR/CD80 |
| YAMASHITA\_METHYLATED\_IN\_PROSTATE\_CANCER | YAMASHITA\_METHYLATED\_IN\_PROSTATE\_CANCER | 59 | 0.493585 | 1.94735 | 7.86E-05 | 0.000829 | 0.000589 | 3512 | tags=39%, list=20%, signal=31% | MMP7/SPP1/G0S2/MMP13/OCM2/MYOD1/GPNMB/LGALS9/AQP8/SERPINE1/KLK8/COL1A1/SCGB1A1/DYSF/RBP2/MCUB/SLC6A2/ADH7/S100G/RBP7/DPEP2/PTGES/PRAF2 |
| KEGG\_BLADDER\_CANCER | KEGG\_BLADDER\_CANCER | 41 | 0.523151 | 1.947291 | 0.000381 | 0.003206 | 0.002278 | 493 | tags=20%, list=3%, signal=19% | CXCL8/MMP9/TYMP/MMP1/MYC/VEGFA/CDKN1A/VEGFB |
| KAN\_RESPONSE\_TO\_ARSENIC\_TRIOXIDE | KAN\_RESPONSE\_TO\_ARSENIC\_TRIOXIDE | 119 | 0.43005 | 1.945824 | 1.89E-05 | 0.000246 | 0.000175 | 1681 | tags=24%, list=9%, signal=21% | CXCL8/HMOX1/SLC2A3/STC1/MT1G/SCD/NDRG1/ADM/MT2A/GRN/INSIG1/C6orf15/LMNB1/ATF3/GPNMB/SERPINE1/FABP4/GDF15/GFPT2/SLC12A1/GABARAPL1/SEL1L3/PTHLH/CXCL14/PSAT1/VAT1/FEZF2/RGS4 |
| CHEN\_HOXA5\_TARGETS\_6HR\_UP | CHEN\_HOXA5\_TARGETS\_6HR\_UP | 10 | 0.773188 | 1.945528 | 0.00182 | 0.011502 | 0.008174 | 2615 | tags=60%, list=15%, signal=51% | CXCL8/GADD45B/SAT1/EGR1/IER2/KLF10 |
| HASINA\_NOL7\_TARGETS\_UP | HASINA\_NOL7\_TARGETS\_UP | 13 | 0.712134 | 1.944592 | 0.00112 | 0.007826 | 0.005562 | 2099 | tags=46%, list=12%, signal=41% | PLAUR/ADM/CD70/HIF1A/TIMP1/TIMP2 |
| FALVELLA\_SMOKERS\_WITH\_LUNG\_CANCER | FALVELLA\_SMOKERS\_WITH\_LUNG\_CANCER | 77 | 0.463716 | 1.944523 | 9.95E-05 | 0.001013 | 0.00072 | 2769 | tags=34%, list=15%, signal=29% | NAMPT/STC1/SOD2/BTG2/ZFP36L2/MMP1/HAS1/CCL20/EIF1/CYTH1/SRPRA/SERPINE1/RHOB/ENG/MCL1/DUSP1/ITLN1/MET/ATP6V0D2/CAMKK2/SERPINB2/EZR/MICALL2/IQGAP1/MAT2A/SRSF5 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY\_REMODELING\_AND\_CLEARANCE | REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY\_REMODELING\_AND\_CLEARANCE | 71 | 0.475643 | 1.943582 | 0.000165 | 0.00157 | 0.001116 | 2661 | tags=30%, list=15%, signal=25% | APOE/APOC1/APOC2/LIPA/NR1H3/PLTP/APOBR/SCARB1/CES3/LPL/ABCG1/ANGPTL4/FURIN/CREB3L3/AMN/LIPC/CIDEC/NPC1/APOA5/CLTA/APOA2 |
| TSAI\_RESPONSE\_TO\_IONIZING\_RADIATION | TSAI\_RESPONSE\_TO\_IONIZING\_RADIATION | 148 | 0.417554 | 1.942733 | 6.15E-06 | 9.10E-05 | 6.46E-05 | 1840 | tags=23%, list=10%, signal=21% | CD83/CCL18/KRT14/PLAU/TNFAIP3/HBEGF/JUNB/CCL3L1/CCL3/BTG2/CCL20/MYC/KRT8/CD79A/BBC3/PTPN6/NFKB2/CDKN1A/PKD2L1/GRN/COL4A2/SGK1/CRAT/KLF4/DUSP6/ENO1/GDF15/NFKBIE/IRF9/CCL21/CD80/BATF/MSC/ATF5 |
| AMUNDSON\_DNA\_DAMAGE\_RESPONSE\_TP53 | AMUNDSON\_DNA\_DAMAGE\_RESPONSE\_TP53 | 16 | 0.676728 | 1.942702 | 0.001024 | 0.007328 | 0.005208 | 416 | tags=31%, list=2%, signal=31% | LIF/BTG2/CTSD/ST14/CDKN1A |
| MARSON\_FOXP3\_CORE\_DIRECT\_TARGETS | MARSON\_FOXP3\_CORE\_DIRECT\_TARGETS | 18 | 0.647696 | 1.94183 | 0.001931 | 0.012043 | 0.008559 | 1910 | tags=44%, list=11%, signal=40% | UCP2/GADD45B/MYC/POU2AF1/DUSP6/ITK/NFKBID/IRF8 |
| TSAI\_RESPONSE\_TO\_RADIATION\_THERAPY | TSAI\_RESPONSE\_TO\_RADIATION\_THERAPY | 30 | 0.562499 | 1.941405 | 0.0007 | 0.005275 | 0.003748 | 2222 | tags=40%, list=12%, signal=35% | IL6/HBB/TNFRSF11B/LGALS3BP/VEGFA/COL6A2/CFB/SERPINE1/COL6A3/OAS3/LIPC/EGR1 |
| IYENGAR\_RESPONSE\_TO\_ADIPOCYTE\_FACTORS | IYENGAR\_RESPONSE\_TO\_ADIPOCYTE\_FACTORS | 10 | 0.771293 | 1.94076 | 0.001991 | 0.012374 | 0.008794 | 622 | tags=40%, list=3%, signal=39% | STC1/TNFAIP3/MMP1/ATF3 |
| HAMAI\_APOPTOSIS\_VIA\_TRAIL\_DN | HAMAI\_APOPTOSIS\_VIA\_TRAIL\_DN | 193 | 0.40115 | 1.935859 | 8.19E-07 | 1.66E-05 | 1.18E-05 | 1920 | tags=23%, list=11%, signal=21% | APOE/ICAM1/PLAUR/TIMP3/HLA-DRB3/SLC15A3/NR1H3/OSCAR/TYMP/SPHK1/BCL3/PLTP/CCDC85B/SERPINB1/CYBA/SLCO4A1/FXYD5/CACNA1E/KMT5C/ANGPTL4/SGSH/IMPDH1/FZD5/CD19/SH3BP1/IL24/GDF15/DDAH2/DEF6/PRDM13/HIF1A/SLC29A1/GALC/SLC1A5/FBLN1/MAGEA1/TRPM4/STK16/POMK/IL4R/KLF2/CISH/PHLDA2/CCKBR/CFD |
| CHO\_NR4A1\_TARGETS | CHO\_NR4A1\_TARGETS | 29 | 0.565543 | 1.934175 | 0.001158 | 0.008074 | 0.005738 | 2983 | tags=48%, list=17%, signal=40% | HMOX1/INSIG1/HOXD10/ATF3/NOS1/EAF1/ABL2/BIRC3/FUT7/CROCCP3/PDCD1/SLC3A2/DDIT3/S100G |
| ANASTASSIOU\_MULTICANCER\_INVASIVENESS\_SIGNATURE | ANASTASSIOU\_MULTICANCER\_INVASIVENESS\_SIGNATURE | 64 | 0.483438 | 1.934045 | 0.00013 | 0.001279 | 0.000909 | 1625 | tags=30%, list=9%, signal=27% | TIMP3/POSTN/PLAU/MXRA5/ITGBL1/MMP11/SULF1/COMP/COL1A2/OLFML2B/COL6A2/FAP/COL5A1/PCOLCE/BGN/COL6A3/COL1A1/SPOCK1/ACTA2 |
| ONDER\_CDH1\_SIGNALING\_VIA\_CTNNB1 | ONDER\_CDH1\_SIGNALING\_VIA\_CTNNB1 | 82 | 0.457713 | 1.933838 | 7.02E-05 | 0.000749 | 0.000532 | 1625 | tags=26%, list=9%, signal=23% | CXCL8/ICAM1/CD83/POSTN/TNFAIP3/NDRG1/C3/CXCL1/CXCL2/PELI1/COL1A2/MMP19/SERPINE1/MLPH/IGFBP7/TFRC/BGN/COL6A3/CREG1/SPOCK1/ACTA2 |
| PHONG\_TNF\_RESPONSE\_NOT\_VIA\_P38 | PHONG\_TNF\_RESPONSE\_NOT\_VIA\_P38 | 327 | 0.376884 | 1.932745 | 3.95E-09 | 1.29E-07 | 9.19E-08 | 2096 | tags=23%, list=12%, signal=21% | ICAM1/PLAUR/CD83/BHLHE40/MMP9/TNFRSF1B/PLAU/SOD2/DLEU2/AMOTL2/RAC2/BCL3/TUBB2A/ZFP36L2/MMP1/SAMD4A/G0S2/PDE4A/GEM/TNFAIP2/EMP1/RNF19B/STRA6/CEBPB/CD70/HLA-B/TRIB1/RAB13/EFHD2/HLA-A/GPRC5A/NFKB2/SHB/SGK1/TRIP10/HLA-G/LPXN/IRF1/SLCO4A1/HTATSF1/GRINA/RELB/PELI1/COL6A2/SERPINE1/IER5/TNFRSF21/MAP2K3/ABTB2/SBNO2/FZD5/GFPT2/BSDC1/EPHA2/TNFRSF10B/GBP1/PPIF/TRIM21/CSF1/NRP2/CSF2/BCL2A1/IRF2/VDR/RHBDF2/VCAM1/TNIP1/PHLDA2/ATF5/KCNAB2/IVNS1ABP/CDCP1/BIRC3/GBP2/UVRAG/STK10 |
| FULCHER\_INFLAMMATORY\_RESPONSE\_LECTIN\_VS\_LPS\_DN | FULCHER\_INFLAMMATORY\_RESPONSE\_LECTIN\_VS\_LPS\_DN | 420 | 0.370768 | 1.929836 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3623 | tags=30%, list=20%, signal=25% | MARCO/APOC1/HS3ST2/SDS/GADD45B/HMOX1/NAMPT/CEMIP/CD4/PLA2G15/BLVRB/CEBPD/HAMP/ZFP36L2/MYO1G/SAMD4A/PLIN2/LYN/PFKFB3/FAM20A/CTSD/SAT1/RNF19B/DNAAF1/LGALS3BP/RNASET2/ARHGAP45/MXD1/SOCS3/SCARB1/MPP1/LACC1/TGFBI/SGK1/GAS7/MNDA/GPNMB/DMXL2/KLF4/OLFML2B/LCP2/CFB/SEMA4A/CHST13/OASL/MAFB/CD14/AP1B1/SLC22A23/HLA-DMB/NCOA7/LY9/TRIM14/MX2/TCAF1/FPR2/DDAH2/FCN1/SGTB/TBC1D2/ALDH1A1/FPR1/GBP1/MAP3K8/OAS1/FCGR1A/SPATA13/LST1/FCGR3A/LAIR1/P2RY11/RHBDF2/SPATA24/F13A1/AIF1/OAS3/C3AR1/DYSF/DUSP1/PTGER4/KLF2/HEG1/CD37/HNRNPA2B1/LY6E/CSF3R/CMPK2/LILRB3/GBP2/TLR8/SLC16A6/MS4A6A/IL18/BLVRA/RARA/EPSTI1/CD84/CXCL9/SETX/KLF10/SORT1/SLC12A7/COMT/SLC26A11/STAB1/PIK3AP1/PARVG/DPEP2/ZNF665/SLC39A8/NUPR1/CD36/PDIA6/RAB42/KCNJ5/IL15RA/IFI27L2/CXCL11/PRKD2/KLF6/VMP1/NPIPB3/SP100/NFAM1/FCGR3B/DSC2/APOBEC3C |
| PID\_SYNDECAN\_1\_PATHWAY | PID\_SYNDECAN\_1\_PATHWAY | 46 | 0.510695 | 1.929783 | 0.000389 | 0.003257 | 0.002315 | 1982 | tags=26%, list=11%, signal=23% | MMP7/MMP9/MMP1/COL1A2/COL6A2/COL9A2/COL5A1/COL6A3/COL1A1/SDCBP/HPSE/MET |
| KEGG\_CHEMOKINE\_SIGNALING\_PATHWAY | KEGG\_CHEMOKINE\_SIGNALING\_PATHWAY | 185 | 0.40346 | 1.929326 | 1.21E-06 | 2.32E-05 | 1.65E-05 | 1641 | tags=22%, list=9%, signal=20% | CXCL8/CCL3L3/CCL2/CCL18/CCL8/CCL3L1/CCL3/CXCL1/CXCL2/RAC2/LYN/CCL20/CCR8/PLCB2/WAS/ARRB2/GSK3B/CCL11/CCL27/VAV1/PXN/CXCL16/CCR7/CCL1/GRK1/GNG13/CCL26/GNG8/XCL2/ADCY7/HCK/ITK/CXCL5/TIAM2/GNAI2/PPBP/CXCL14/CCL21/CCR10/CXCR1/VAV2 |
| CHEN\_ETV5\_TARGETS\_SERTOLI | CHEN\_ETV5\_TARGETS\_SERTOLI | 26 | 0.585626 | 1.928387 | 0.001224 | 0.008448 | 0.006004 | 2311 | tags=42%, list=13%, signal=37% | MMP12/C1QB/CEMIP/IL6/PLEK/GPNMB/THBD/FCGR2B/CD53/MS4A6A/IGFBP4 |
| REACTOME\_NF\_KB\_IS\_ACTIVATED\_AND\_SIGNALS\_SURVIVAL | REACTOME\_NF\_KB\_IS\_ACTIVATED\_AND\_SIGNALS\_SURVIVAL | 13 | 0.705934 | 1.927662 | 0.001388 | 0.009302 | 0.00661 | 3825 | tags=62%, list=21%, signal=48% | SQSTM1/IRAK1/UBC/IKBKB/NGFR/NFKBIA/NFKB1/UBA52 |
| IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_DN | IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_DN | 16 | 0.671414 | 1.927449 | 0.001196 | 0.008286 | 0.005889 | 826 | tags=38%, list=5%, signal=36% | HLA-F/PLTP/HLA-DPB1/HLA-A/CYBA/RPS19 |
| REACTOME\_COMPLEMENT\_CASCADE | REACTOME\_COMPLEMENT\_CASCADE | 55 | 0.493687 | 1.927069 | 0.000379 | 0.003191 | 0.002268 | 1933 | tags=27%, list=11%, signal=24% | C5AR1/C1QC/C1QB/C3/COLEC10/CD81/C8B/GZMM/CFB/CD19/FCN1/C3AR1/C2/CFD/CPN1 |
| WANG\_CLASSIC\_ADIPOGENIC\_TARGETS\_OF\_PPARG | WANG\_CLASSIC\_ADIPOGENIC\_TARGETS\_OF\_PPARG | 26 | 0.585149 | 1.926815 | 0.001224 | 0.008448 | 0.006004 | 4340 | tags=65%, list=24%, signal=50% | NR1H3/PNPLA2/CRAT/FABP4/ALDH1A1/GLUL/CFD/CIDEC/ACSL1/ORM1/AQP7/FABP5/CD36/LGALS12/HSD11B1/RETN/MGST1 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_INVOLUTION\_STAGE\_4\_OF\_4 | WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_INVOLUTION\_STAGE\_4\_OF\_4 | 10 | 0.765488 | 1.926154 | 0.002294 | 0.013892 | 0.009872 | 3340 | tags=70%, list=19%, signal=57% | MMP9/MYC/SOCS3/CHI3L1/BAX/TP53/STAT3 |
| WP\_RANKLRANK\_SIGNALING\_PATHWAY | WP\_RANKLRANK\_SIGNALING\_PATHWAY | 55 | 0.492981 | 1.924314 | 0.000389 | 0.003257 | 0.002315 | 1567 | tags=22%, list=9%, signal=20% | ICAM1/ACP5/SPI1/SQSTM1/LYN/TNFRSF11B/NFATC1/NFKB2/RELB/FOS/VCAM1/TNFRSF11A |
| REACTOME\_FORMATION\_OF\_THE\_CORNIFIED\_ENVELOPE | REACTOME\_FORMATION\_OF\_THE\_CORNIFIED\_ENVELOPE | 124 | 0.421831 | 1.922318 | 2.27E-05 | 0.000286 | 0.000204 | 4354 | tags=42%, list=24%, signal=32% | KRT17/KRT14/ST14/KRT8/SPRR1B/KRT79/SPRR2D/SPINK5/LIPN/FURIN/LCE2A/LIPM/DSG3/KLK8/LCE2C/LIPJ/KLK14/RPTN/KRT6A/LCE3C/KRT78/KRT36/KRT24/CAPNS1/LCE1A/PRSS8/KRT85/KRT20/CELA2A/KRT4/KRT6C/LCE3D/KRT12/KRT77/KRT33B/KRT34/LCE1F/LCE3B/FLG/KRT83/KRT16/DSC2/SPRR2B/CDSN/KRT35/SPRR1A/DSC1/DSG2/SPRR2A/TCHH/LCE1D/TGM5 |
| REACTOME\_DAP12\_INTERACTIONS | REACTOME\_DAP12\_INTERACTIONS | 42 | 0.509655 | 1.921486 | 0.001077 | 0.007586 | 0.005391 | 3119 | tags=38%, list=17%, signal=32% | TREM1/TREM2/HLA-E/CLEC5A/HLA-B/TYROBP/FYN/LCP2/HLA-C/CD300LB/VAV2/B2M/KIR2DS5/GRB2/BTK/SIGLEC15 |
| BIOCARTA\_NO2IL12\_PATHWAY | BIOCARTA\_NO2IL12\_PATHWAY | 15 | 0.676329 | 1.921216 | 0.001782 | 0.011327 | 0.00805 | 3467 | tags=47%, list=19%, signal=38% | CD4/CD2/CD3E/CD247/CXCR3/STAT4/TYK2 |
| REACTOME\_HDL\_REMODELING | REACTOME\_HDL\_REMODELING | 10 | 0.763183 | 1.920352 | 0.002446 | 0.014571 | 0.010355 | 738 | tags=40%, list=4%, signal=38% | APOE/APOC2/PLTP/ABCG1 |
| DELPUECH\_FOXO3\_TARGETS\_UP | DELPUECH\_FOXO3\_TARGETS\_UP | 64 | 0.479572 | 1.91858 | 0.000169 | 0.001599 | 0.001137 | 3375 | tags=39%, list=19%, signal=32% | PLAUR/DUSP5/S100P/CORO1A/EMP1/SAT1/SLC31A2/MXD1/DUSP6/TNFRSF21/GSN/AKR1C2/CD9/PHLDA2/SERPINB8/GM2A/PIK3IP1/TIMP2/CTSB/TGFA/CDC42EP2/SMPDL3A/CD59/DAPK1/CLDN4 |
| ABE\_VEGFA\_TARGETS\_2HR | ABE\_VEGFA\_TARGETS\_2HR | 31 | 0.550381 | 1.9175 | 0.00076 | 0.005666 | 0.004027 | 416 | tags=16%, list=2%, signal=16% | APOE/HBEGF/PPY/EIF1/CDKN1A |
| DEBOSSCHER\_NFKB\_TARGETS\_REPRESSED\_BY\_GLUCOCORTICOIDS | DEBOSSCHER\_NFKB\_TARGETS\_REPRESSED\_BY\_GLUCOCORTICOIDS | 21 | 0.611781 | 1.917486 | 0.000882 | 0.006419 | 0.004562 | 3261 | tags=52%, list=18%, signal=43% | CXCL8/IL6/CCL11/IL3/IL9/CSF2/VCAM1/TNF/IL18/IL4/IL5 |
| PID\_IL4\_2PATHWAY | PID\_IL4\_2PATHWAY | 60 | 0.48486 | 1.917146 | 0.000128 | 0.001263 | 0.000897 | 3261 | tags=35%, list=18%, signal=29% | SPI1/PTPN6/CEBPB/EGR2/SOCS3/CCL11/IL2RG/COL1A2/CCL26/SOCS1/HMGA1/COL1A1/IL4R/CCL17/IL13RA2/PIGR/GRB2/FES/TFF3/IL4/IL5 |
| REACTOME\_INTEGRIN\_CELL\_SURFACE\_INTERACTIONS | REACTOME\_INTEGRIN\_CELL\_SURFACE\_INTERACTIONS | 85 | 0.451747 | 1.916907 | 5.95E-05 | 0.00065 | 0.000462 | 1585 | tags=22%, list=9%, signal=20% | SPP1/ICAM1/ITGAX/ITGB2/ITGAM/ITGB7/TNC/COL4A2/COMP/COL1A2/COL6A2/ITGA5/COL9A2/COL5A1/F11R/COL6A3/COL1A1/VCAM1/FGB |
| SESTO\_RESPONSE\_TO\_UV\_C3 | SESTO\_RESPONSE\_TO\_UV\_C3 | 19 | 0.625832 | 1.916722 | 0.001986 | 0.012366 | 0.008788 | 3389 | tags=53%, list=19%, signal=43% | IL1B/CXCL8/HBEGF/ATF3/IER3/DUSP1/PHLDA2/SOX9/RND3/BRD2 |
| YIH\_RESPONSE\_TO\_ARSENITE\_C5 | YIH\_RESPONSE\_TO\_ARSENITE\_C5 | 11 | 0.739411 | 1.91641 | 0.001279 | 0.008739 | 0.006211 | 417 | tags=27%, list=2%, signal=27% | CCL2/PLAU/CRABP2 |
| REACTOME\_GPCR\_LIGAND\_BINDING | REACTOME\_GPCR\_LIGAND\_BINDING | 453 | 0.364934 | 1.916025 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3176 | tags=29%, list=18%, signal=24% | CXCL8/C5AR1/CCL3L3/CCL2/GAL/CCL3L1/C3/CCL3/CXCL1/CXCL2/SST/QRFPR/AVPR2/GPR132/ADM/CCL20/HCAR2/CCR8/PPY/PSAP/TACR3/PTAFR/GABBR1/BDKRB1/CCL11/CCL27/CGA/PROKR2/HTR1B/CXCL16/CCR7/FPR3/TAAR6/OXER1/OPRK1/CCL1/NMU/GNG13/TAS2R41/GPR39/GNG8/XCL2/ADRA2A/TAS2R46/HCRTR1/RXFP4/FZD5/TAS2R40/FZD10/CXCL5/FPR2/TACR2/DRD5/FPR1/ADORA1/PTHLH/TAS1R2/TAS2R42/TAS2R20/VIPR2/PTH/CALCA/PPBP/P2RY11/PROK2/GPR31/CCL21/GPR183/CCR10/RLN3/CXCR1/C3AR1/MC5R/BRS3/LPAR2/WNT6/PTGER4/TAC1/OPN4/OXT/CHRM4/CCKBR/GPR35/GRM3/TAS1R3/IHH/GPHB5/TAS2R9/CCL17/ADRB1/TAAR2/CASR/GRM4/FFAR3/PRLH/NPFFR2/GNG7/F2RL1/TAS2R16/AVP/UTS2R/ADRB3/GRM5/OPN1MW/CXCL9/CXCR2/CYSLTR2/GLP2R/MTNR1A/ADCYAP1/CHRM3/RXFP2/PDYN/NTSR1/GNRHR/WNT1/EDN2/PF4/GRP/CCL25/CCL4/NMB/OPN5/WNT7A/GPR17/HTR1A/S1PR2/TRHR/CXCR3/INSL3 |
| GROSS\_HYPOXIA\_VIA\_ELK3\_ONLY\_UP | GROSS\_HYPOXIA\_VIA\_ELK3\_ONLY\_UP | 31 | 0.549717 | 1.915188 | 0.00077 | 0.005715 | 0.004061 | 3063 | tags=45%, list=17%, signal=38% | AMOTL2/IL6/SLC20A1/ADM/CEBPB/SLPI/THBD/LCP1/CH25H/RABGEF1/EGLN1/NFIL3/RND3/DHRS9 |
| SABATES\_COLORECTAL\_ADENOMA\_UP | SABATES\_COLORECTAL\_ADENOMA\_UP | 131 | 0.416927 | 1.914694 | 8.96E-06 | 0.000126 | 8.93E-05 | 3508 | tags=31%, list=20%, signal=25% | MMP7/CXCL8/CEMIP/SLC7A5/S100P/CXCL1/CXCL2/MMP1/CCL20/CDH3/TGFBI/MSLN/REG1A/IGFBP2/NMU/LPL/AP1S3/CHI3L1/CLDN2/DSG3/IRX3/PSAT1/LCN15/DEFA5/ART3/IL13RA2/DUSP4/LY6G6D/RTEL1/PF4/C4BPB/ETV4/KLK11/RPL22L1/MSX2/CXCL11/NQO1/NFE2L3/GABRP/C2CD4A |
| TARTE\_PLASMA\_CELL\_VS\_PLASMABLAST\_UP | TARTE\_PLASMA\_CELL\_VS\_PLASMABLAST\_UP | 374 | 0.370103 | 1.913854 | 1.07E-09 | 3.81E-08 | 2.71E-08 | 3800 | tags=34%, list=21%, signal=27% | APOE/CXCL8/APOC1/APOC2/ITGAX/TIMP3/ADAM8/MMP9/FOSB/LYZ/TNFAIP3/HLA-F/FBP1/FTL/LRP1/S100P/FCGRT/RNASE1/BTG2/RGS2/PDE4A/ADM/HBD/TNFAIP2/CTSL/PSAP/PLCB2/TACR3/HLA-B/RAB13/NFKB2/CRABP2/TNC/GRN/KLK3/FCER1G/HTR1B/CYBA/CCR7/REG1A/HOXD10/RELB/GPNMB/LGALS9/CALB2/SMPDL3B/RPS16/CFB/SGSH/FOS/MX2/SERPINA1/CTLA4/FCN1/CD3E/SATB1/ALDH1A1/PCOLCE/HOXB13/CSF1/GMPR/COL1A1/ACTB/LST1/TLR1/CD9/VCAM1/SNCA/CSN3/DEFA5/DUSP1/B2M/KRT6A/IL4R/CHRM4/DAB2/BIRC3/CST3/EGR1/PCK1/FEV/TRAF1/IGFBP4/SLC18A1/IL7R/ADRB3/WWOX/AQP2/AQP5/OAZ1/KRT6C/CBLB/GAA/GZMA/CXCR2/TBC1D5/ZNF141/ADCYAP1/KRT33B/MAG/SIRPA/DDR1/NFIC/TDGF1P3/TGIF1/CD34/TIAM1/SLC10A2/DAPK1/GPC1/STXBP1/CEACAM4/STX1A/PTGDS/PALM/MLN/KRT83/FCGR3B/TCN2/RPL7A/CDSN/GPX3/TCL1A/NFKBIA/SPRR1A/AMPD1 |
| JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_UP | JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_UP | 68 | 0.474486 | 1.913235 | 0.00023 | 0.002108 | 0.001498 | 2166 | tags=31%, list=12%, signal=27% | CCL2/MMP12/CXCL2/BCL3/IRF7/PLA2G7/SNAI1/MMP13/RNASET2/VIM/TNC/CD68/SLPI/COL6A2/PCOLCE/HIF1A/CSN3/PROCR/B2M/DAB2/PTGS1 |
| PID\_AVB3\_OPN\_PATHWAY | PID\_AVB3\_OPN\_PATHWAY | 31 | 0.548736 | 1.911769 | 0.00077 | 0.005715 | 0.004061 | 3792 | tags=35%, list=21%, signal=28% | SPP1/MMP9/PLAU/FOS/GSN/MAP3K1/PTK2B/MMP2/PIP5K1A/NFKBIA/NFKB1 |
| REACTOME\_NUCLEAR\_EVENTS\_KINASE\_AND\_TRANSCRIPTION\_FACTOR\_ACTIVATION | REACTOME\_NUCLEAR\_EVENTS\_KINASE\_AND\_TRANSCRIPTION\_FACTOR\_ACTIVATION | 61 | 0.480872 | 1.907581 | 0.000341 | 0.002908 | 0.002067 | 1245 | tags=23%, list=7%, signal=21% | FOSL1/FOSB/JUNB/EGR3/ARC/EGR2/TRIB1/SGK1/DUSP6/FOS/RRAD/CDK5R2/MEF2A/DUSP7 |
| LEE\_LIVER\_CANCER\_DENA\_UP | LEE\_LIVER\_CANCER\_DENA\_UP | 58 | 0.486108 | 1.90691 | 0.000255 | 0.002271 | 0.001614 | 2875 | tags=36%, list=16%, signal=31% | SPP1/MMP12/NDRG1/RGS2/PLEK/COL4A2/POU2AF1/PTPRE/LPL/FABP4/PPBP/BCL2A1/TLR1/VCAM1/CSN3/MFGE8/LY6E/SOX9/ANXA5/ANXA2/FBLN2 |
| HANSON\_HRAS\_SIGNALING\_VIA\_NFKB | HANSON\_HRAS\_SIGNALING\_VIA\_NFKB | 22 | 0.605836 | 1.906888 | 0.000976 | 0.007028 | 0.004995 | 3628 | tags=59%, list=20%, signal=47% | RNF19B/PVR/CLCF1/TMOD2/ADRA2A/OAS1/NPPB/LGALS7/STK10/C11orf96/SERPINB2/SOX5/PIP5K1A |
| SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BONE\_DN | SMID\_BREAST\_CANCER\_RELAPSE\_IN\_BONE\_DN | 289 | 0.377781 | 1.906188 | 1.90E-08 | 5.64E-07 | 4.01E-07 | 2631 | tags=27%, list=15%, signal=23% | MMP7/CXCL8/MARCO/KRT17/SLC2A3/KRT14/SLC7A5/SLC16A3/SOD2/GAL/FLNA/RAC2/TUBB2A/ZFP36L2/CCL20/TNFRSF11B/IL32/MIA/VEGFA/RRAGD/COL4A2/POU2AF1/HLA-G/CYBA/MSLN/YWHAE/FYN/SLPI/LGALS2/KCNN4/ZIC1/NMU/SMPDL3B/ENO1/TNFRSF21/YBX1/FNDC4/LAMP3/CXCL5/RUNX3/MAGEA4/NPTX2/GBP1/ELN/PRDM13/BGN/IGF2BP2/MRAS/NDUFA4L2/CDH19/PRELP/PSAT1/VGLL1/MCL1/CSN3/HAPLN1/KRT6A/MFGE8/TFCP2L1/SLC43A3/FGFBP1/SLC16A1/SYCP1/ART3/SOX9/KYNU/SERPINB2/MAP4K1/AMD1/PDPN/AQP5/YWHAZ/PLEKHB1/ATP6V1A/TP53/GJB3/DKK1 |
| WEINMANN\_ADAPTATION\_TO\_HYPOXIA\_DN | WEINMANN\_ADAPTATION\_TO\_HYPOXIA\_DN | 38 | 0.520557 | 1.906182 | 0.000712 | 0.005339 | 0.003794 | 989 | tags=26%, list=6%, signal=25% | PLAUR/SLC16A3/RGCC/SOD2/IL6/MMP1/NMU/LPL/IGFBP7/IER3 |
| REACTOME\_ANTIGEN\_PRESENTATION\_FOLDING\_ASSEMBLY\_AND\_PEPTIDE\_LOADING\_OF\_CLASS\_I\_MHC | REACTOME\_ANTIGEN\_PRESENTATION\_FOLDING\_ASSEMBLY\_AND\_PEPTIDE\_LOADING\_OF\_CLASS\_I\_MHC | 23 | 0.595689 | 1.903546 | 0.001229 | 0.008455 | 0.006009 | 1713 | tags=35%, list=10%, signal=32% | HLA-F/HLA-E/HLA-B/HLA-A/HLA-G/HLA-C/TAPBP/B2M |
| MIKKELSEN\_IPS\_LCP\_WITH\_H3K4ME3 | MIKKELSEN\_IPS\_LCP\_WITH\_H3K4ME3 | 156 | 0.405477 | 1.903379 | 4.17E-06 | 6.62E-05 | 4.70E-05 | 2712 | tags=29%, list=15%, signal=25% | CAPG/SPI1/LAPTM5/VWA3A/SLC12A8/PDE4A/GPSM3/CD79A/STRA6/PTPN6/HDC/STON2/SERPINB9/NLRC3/CD68/OPRK1/CYSRT1/KCNN4/SEMA4A/ELOVL1/CCDC88B/ACOT11/PCOLCE/TRIM21/SLC29A1/LST1/SCN2B/C6orf118/TSPAN32/SYNE4/DQX1/OAS3/TNIP1/EBI3/ART1/GPR35/C16orf92/IL17RC/TBC1D10C/ARAP1/MAB21L3/VWA5A/NYAP1/ALDH3B1/TREX1 |
| AMIT\_EGF\_RESPONSE\_480\_HELA | AMIT\_EGF\_RESPONSE\_480\_HELA | 155 | 0.405356 | 1.899975 | 6.67E-06 | 9.78E-05 | 6.95E-05 | 2348 | tags=27%, list=13%, signal=24% | PLAUR/KRT17/STC1/PLAU/HBEGF/TNFRSF12A/SPHK1/TUBB2A/ZFP36L2/ARHGDIA/MT2A/SH3BGRL3/SH2D2A/TOR4A/EFHD2/GPRC5A/NFKB2/PVR/COL4A2/TUBB4B/LTBR/ITGA5/SERPINE1/TNFRSF21/MAP2K3/HMGA1/TBC1D2/PPIF/DUSP7/EXT1/SLC1A5/ZYX/CHST11/PHLDA2/DIAPH1/LY6E/HOMER3/PTGS1/AMIGO2/IGFBP4/LPCAT4/EGLN1 |
| BIOCARTA\_IL10\_PATHWAY | BIOCARTA\_IL10\_PATHWAY | 13 | 0.695563 | 1.89934 | 0.001828 | 0.011536 | 0.008198 | 2346 | tags=54%, list=13%, signal=47% | HMOX1/BLVRB/IL6/IL10RA/TNF/IL1A/BLVRA |
| PID\_CMYB\_PATHWAY | PID\_CMYB\_PATHWAY | 83 | 0.448293 | 1.899331 | 0.000101 | 0.001027 | 0.00073 | 2824 | tags=33%, list=16%, signal=28% | SPI1/CD4/LYZ/ANPEP/CEBPD/PIM1/MYC/CEBPB/CDKN1A/MYOD1/COL1A2/CSF1R/GATA1/PTCRA/TRIM28/TOM1/MYF6/CCNA1/CA1/CBX4/PPID/BIRC3/CLTA/SND1/IQGAP1/MAT2A/WNT1 |
| BARRIER\_CANCER\_RELAPSE\_TUMOR\_SAMPLE\_DN | BARRIER\_CANCER\_RELAPSE\_TUMOR\_SAMPLE\_DN | 10 | 0.754084 | 1.897459 | 0.003507 | 0.019651 | 0.013966 | 1918 | tags=50%, list=11%, signal=45% | PKM/SZT2/FOXO4/PMEL/ADPRH |
| BEGUM\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_DN | BEGUM\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_DN | 46 | 0.501922 | 1.896632 | 0.000607 | 0.004676 | 0.003323 | 2615 | tags=39%, list=15%, signal=34% | GADD45B/TIMP3/TNFRSF12A/MYC/CD70/VEGFA/TNC/SERPINE1/MAFB/COL5A1/EPHA2/VDR/CFD/DGKD/F2RL1/THBS2/SOX9/KLF10 |
| AMIT\_EGF\_RESPONSE\_240\_MCF10A | AMIT\_EGF\_RESPONSE\_240\_MCF10A | 20 | 0.610618 | 1.896152 | 0.00297 | 0.017141 | 0.012182 | 3574 | tags=50%, list=20%, signal=40% | PLAU/TNFRSF12A/TUBB2A/PTAFR/INSIG1/PTHLH/DUSP4/GABPB1/TGFA/EHD4 |
| BIOCARTA\_RHO\_PATHWAY | BIOCARTA\_RHO\_PATHWAY | 21 | 0.604958 | 1.896103 | 0.001059 | 0.007511 | 0.005338 | 4533 | tags=57%, list=25%, signal=43% | LIMK1/ARHGAP4/ARHGEF1/GSN/ARHGAP5/OPHN1/DIAPH1/BAIAP2/PIP5K1A/PIP5K1B/ARHGAP6/MYL2 |
| FERRANDO\_TAL1\_NEIGHBORS | FERRANDO\_TAL1\_NEIGHBORS | 18 | 0.632261 | 1.895556 | 0.003307 | 0.018645 | 0.013251 | 1609 | tags=39%, list=9%, signal=35% | TNFRSF1B/ITGB2/CSF1R/CD2/CD3E/BCL2A1/CXCR1 |
| WESTON\_VEGFA\_TARGETS\_12HR | WESTON\_VEGFA\_TARGETS\_12HR | 26 | 0.575622 | 1.895446 | 0.001889 | 0.01185 | 0.008421 | 3374 | tags=50%, list=19%, signal=41% | CCL2/DLEU2/GEM/SAT1/COL1A2/ELN/BGN/COL6A3/FGFBP1/SULT1E1/AQP7/MMP2/MEST |
| DELACROIX\_RAR\_TARGETS\_UP | DELACROIX\_RAR\_TARGETS\_UP | 45 | 0.501873 | 1.894681 | 0.000468 | 0.003768 | 0.002678 | 3664 | tags=44%, list=20%, signal=35% | BHLHE40/JUNB/TNFRSF12A/SAT1/TNFRSF11B/CEBPB/CRABP2/MSLN/DUSP6/HMGA1/TCIRG1/DUSP1/FGF18/PRSS8/PLEKHB1/BLNK/MMP2/NUPR1/TYK2/DHRS3 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_2\_UP | VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_2\_UP | 15 | 0.666529 | 1.893378 | 0.002662 | 0.015719 | 0.011171 | 2083 | tags=47%, list=12%, signal=41% | HK2/PFKFB3/VEGFA/TFRC/MT1A/NDUFA4L2/ESRP1 |
| REACTOME\_FCGR\_ACTIVATION | REACTOME\_FCGR\_ACTIVATION | 12 | 0.712108 | 1.892478 | 0.003084 | 0.017665 | 0.012554 | 3398 | tags=58%, list=19%, signal=47% | LYN/FYN/HCK/FCGR1A/FCGR3A/CD247/FCGR2A |
| KEGG\_LYSOSOME | KEGG\_LYSOSOME | 117 | 0.418377 | 1.887883 | 2.21E-05 | 0.00028 | 0.000199 | 2618 | tags=31%, list=15%, signal=26% | ACP5/LIPA/PLA2G15/LAPTM5/ACP2/SLC11A1/M6PR/CTSH/CTSD/CTSL/PSAP/CD68/SGSH/AP1B1/AP1S3/TCIRG1/LAMP3/AP3B2/GLA/GGA3/MAN2B1/GALC/PPT1/CTSG/PPT2/ARSA/GM2A/ATP6AP1/ATP6V0D2/NPC1/CLTA/GALNS/CTSB/GAA/ATP6V0A1/SORT1 |
| REACTOME\_CELL\_SURFACE\_INTERACTIONS\_AT\_THE\_VASCULAR\_WALL | REACTOME\_CELL\_SURFACE\_INTERACTIONS\_AT\_THE\_VASCULAR\_WALL | 135 | 0.409557 | 1.886931 | 2.45E-05 | 0.000306 | 0.000217 | 2020 | tags=24%, list=11%, signal=22% | CD74/ITGAX/SLC7A5/TREM1/SLC16A3/ITGB2/ITGAM/OLR1/SELL/MMP1/LYN/PTPN6/SELE/FCER1G/FYN/COL1A2/JCHAIN/ITGA5/THBD/CD2/TNFRSF10B/F11R/TNFRSF10D/PSG3/COL1A1/SLC7A8/CEACAM5/PROC/PROCR/PSG4/PSG2/CD48/SLC16A1 |
| CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_DN | CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_DN | 21 | 0.601726 | 1.885973 | 0.001116 | 0.007807 | 0.005548 | 3571 | tags=57%, list=20%, signal=46% | TNFRSF12A/ATP6V1F/KRT8/TUBB4B/TOM1/GPI/RGL2/ATP6AP1/ALDOA/PFKL/CTSA/ATP6V0B |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_1\_UP | HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_1\_UP | 31 | 0.5407 | 1.883773 | 0.001022 | 0.007323 | 0.005204 | 1691 | tags=26%, list=9%, signal=23% | SPP1/TIMP3/RGCC/TNFRSF11B/CGA/SGK1/CCL21/DUSP1 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_5 | SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_5 | 19 | 0.614394 | 1.88169 | 0.002819 | 0.016408 | 0.011661 | 2461 | tags=42%, list=14%, signal=36% | BCL3/IL6/CEBPB/SOCS3/B2M/TNF/IL21/HMGB2 |
| KAAB\_FAILED\_HEART\_VENTRICLE\_DN | KAAB\_FAILED\_HEART\_VENTRICLE\_DN | 42 | 0.499097 | 1.881683 | 0.001515 | 0.010101 | 0.007179 | 3582 | tags=43%, list=20%, signal=34% | C1QB/SLC31A2/SERPINB1/FCER1G/CD68/CD14/NQO2/MYH6/VAT1/F13A1/ATP2A2/IRAK1/LPCAT4/AMD1/LDHA/IFNGR1/STAT3/SLC39A14 |
| LEI\_MYB\_TARGETS | LEI\_MYB\_TARGETS | 313 | 0.36885 | 1.880852 | 2.04E-08 | 5.98E-07 | 4.25E-07 | 2141 | tags=23%, list=12%, signal=21% | IL1B/CXCL8/CCL2/HMOX1/KRT17/TIMP3/SLC2A3/BHLHE40/KRT14/SLC7A5/SLC16A3/FBP1/S100P/TUBB2A/IL6/ZFP36L2/MMP1/SLC20A1/RGS2/IL1RN/CTSD/NXF1/SAT1/MYC/KRT8/LGALS3BP/SH2B3/CEBPB/PNP/VIM/CDKN1A/CRABP2/GRN/TGFBI/MBOAT7/COL1A2/EPOR/SERPINE1/FAP/IGFBP7/RRAD/NINJ1/EEF1A2/MT1A/PTHLH/COL6A3/DAXX/BASP1/CDK2AP2/MCL1/S100A10/ADGRG1/ACTA2/TNIP1/EFNA3/XBP1/GPI/KRT6A/APRT/GM2A/LY6E/UBC/FGFBP1/AP1G2/PPID/LGALS7/DAB2/LMTK2/NPC1/HSPA6/DST/TUBA4A |
| ABE\_VEGFA\_TARGETS | ABE\_VEGFA\_TARGETS | 17 | 0.63962 | 1.87849 | 0.001668 | 0.010817 | 0.007687 | 788 | tags=29%, list=4%, signal=28% | HBEGF/EGR3/PPY/EGR2/THBD |
| REACTOME\_MHC\_CLASS\_II\_ANTIGEN\_PRESENTATION | REACTOME\_MHC\_CLASS\_II\_ANTIGEN\_PRESENTATION | 118 | 0.415742 | 1.877367 | 8.46E-05 | 0.000878 | 0.000624 | 1008 | tags=19%, list=6%, signal=18% | HLA-DRB1/HLA-DQB1/CD74/HLA-DRB4/HLA-DRA/IFI30/HLA-DRB3/TUBB2A/HLA-DPA1/CTSH/HLA-DPB1/CTSD/CTSL/HLA-DRB5/TUBB4B/TUBA1C/AP1B1/HLA-DMB/AP1S3/HLA-DOA/LAG3/TUBB1 |
| ELVIDGE\_HYPOXIA\_UP | ELVIDGE\_HYPOXIA\_UP | 165 | 0.397694 | 1.876135 | 4.05E-06 | 6.46E-05 | 4.59E-05 | 2495 | tags=27%, list=14%, signal=24% | HLA-DRB1/PLAUR/GADD45B/BHLHE40/CEMIP/HK2/STC1/PIM1/NDRG1/SAMD4A/PLIN2/PFKFB3/ADM/SAT1/VEGFA/SCARB1/GPRC5A/RRAGD/TGFBI/SLCO4A1/FYN/ATF3/ANGPTL4/SERPINE1/OBSL1/FOS/GDF15/RLF/SFXN3/SPOCK1/EFNA3/DUSP1/GPR87/OLFML2A/MET/INHA/RBCK1/DST/EGR1/ELF3/EGLN1/SOX9/KLF7/DTNA/NFIL3 |
| REACTOME\_P75NTR\_SIGNALS\_VIA\_NF\_KB | REACTOME\_P75NTR\_SIGNALS\_VIA\_NF\_KB | 16 | 0.652903 | 1.874308 | 0.002212 | 0.013456 | 0.009563 | 4066 | tags=56%, list=23%, signal=44% | SQSTM1/IRAK1/UBC/IKBKB/NGFR/NFKBIA/NFKB1/UBA52/RIPK2 |
| KIM\_WT1\_TARGETS\_8HR\_UP | KIM\_WT1\_TARGETS\_8HR\_UP | 164 | 0.396629 | 1.873332 | 8.84E-06 | 0.000125 | 8.89E-05 | 2358 | tags=26%, list=13%, signal=23% | PLAUR/FOSL1/TIMP3/HBEGF/JUNB/PIM1/SPHK1/SLC20A1/ARHGDIA/LYN/ADM/GEM/EMP1/ARC/PLXND1/TRIB1/DOK5/SERPINE1/MAP2K3/ST3GAL1/HMGA1/TPST2/GFPT2/TBC1D2/RLF/DUSP7/CSF1/PTHLH/BCL2A1/ZMIZ1/ZYX/RGS4/IL4R/PHLDA2/MTMR1/IVNS1ABP/DAB2/HSPA6/TUBA4A/DPEP3/BAIAP2/AREG/SOX9 |
| ISSAEVA\_MLL2\_TARGETS | ISSAEVA\_MLL2\_TARGETS | 57 | 0.47715 | 1.87328 | 0.000671 | 0.00506 | 0.003596 | 2729 | tags=32%, list=15%, signal=27% | C5AR1/KRT17/PLAU/ARHGAP45/DENND3/COL5A1/GSN/OAS1/CD9/SNCA/ADGRG1/HPSE/ELF3/IL18/DKK1/TJP2/LMO1/CRIP2 |
| LEE\_LIVER\_CANCER\_E2F1\_UP | LEE\_LIVER\_CANCER\_E2F1\_UP | 60 | 0.473547 | 1.872412 | 0.000247 | 0.002218 | 0.001576 | 2693 | tags=33%, list=15%, signal=28% | CD74/MMP12/CSTB/TUBB2A/KRT8/LPL/FABP4/RHOB/PLSCR1/XDH/COL1A1/BCL2A1/MCL1/MFGE8/UAP1L1/LY6E/PALMD/SHCBP1/ANXA5/ANXA2 |
| REACTOME\_CHYLOMICRON\_REMODELING | REACTOME\_CHYLOMICRON\_REMODELING | 10 | 0.743856 | 1.871722 | 0.004839 | 0.025599 | 0.018192 | 2661 | tags=50%, list=15%, signal=43% | APOE/APOC2/LPL/APOA5/APOA2 |
| WP\_OXIDATIVE\_DAMAGE\_RESPONSE | WP\_OXIDATIVE\_DAMAGE\_RESPONSE | 40 | 0.510326 | 1.870882 | 0.001356 | 0.009152 | 0.006504 | 2288 | tags=30%, list=13%, signal=26% | C5AR1/C1QC/C1QB/TNFRSF1B/MAPK13/CDKN1A/NFKBIE/C3AR1/TNF/C2/MAP3K1/TRAF1 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_ENDOTHELIUM | ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_ENDOTHELIUM | 68 | 0.463558 | 1.86917 | 0.000458 | 0.003713 | 0.002639 | 4496 | tags=49%, list=25%, signal=37% | SPP1/ARHGDIA/CTSD/LGALS3BP/VIM/TKT/YWHAE/TUBA1C/ENO1/CFB/IGFBP7/TPM3/EEF1A2/BGN/COL1A1/ACTB/VCAM1/C2/IGFBP4/ALDOA/CFL2/YWHAZ/LDHA/SRSF2/CTSA/YWHAG/ACTC1/PEBP1/FN1/TNXB/ALB/A2M/CLSTN1 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_REMODELING | REACTOME\_PLASMA\_LIPOPROTEIN\_REMODELING | 34 | 0.525437 | 1.86868 | 0.002183 | 0.013293 | 0.009447 | 2661 | tags=35%, list=15%, signal=30% | APOE/APOC2/PLTP/LPL/ABCG1/ANGPTL4/FURIN/CREB3L3/LIPC/CIDEC/APOA5/APOA2 |
| XIE\_LT\_HSC\_S1PR3\_OE\_UP | XIE\_LT\_HSC\_S1PR3\_OE\_UP | 28 | 0.558387 | 1.868 | 0.001286 | 0.008772 | 0.006234 | 4733 | tags=54%, list=26%, signal=40% | RGCC/CST7/PDE4A/NR4A2/CA2/GAD1/AREG/TGM2/ETV4/CD36/ARHGAP6/NTRK1/ZFP36L1/A2M/MICAL2 |
| SHIPP\_DLBCL\_VS\_FOLLICULAR\_LYMPHOMA\_UP | SHIPP\_DLBCL\_VS\_FOLLICULAR\_LYMPHOMA\_UP | 45 | 0.494259 | 1.865937 | 0.000635 | 0.004837 | 0.003437 | 2601 | tags=36%, list=14%, signal=30% | IFI30/PKM/CTSD/SAT1/ENO1/HCK/HMGA1/TFRC/SLC29A1/SLC1A5/BCL2A1/SNRPB/GM2A/CLTA/ALDOA/LDHA |
| ROVERSI\_GLIOMA\_COPY\_NUMBER\_UP | ROVERSI\_GLIOMA\_COPY\_NUMBER\_UP | 95 | 0.432336 | 1.865528 | 6.69E-05 | 0.000719 | 0.000511 | 660 | tags=15%, list=4%, signal=14% | APOE/APOC1/APOC2/SPI1/NAMPT/FOSB/NR1H3/ZNF408/ACP2/BCL3/ZNF296/MYBPC3/RELB/SYT13 |
| NABA\_SECRETED\_FACTORS | NABA\_SECRETED\_FACTORS | 334 | 0.363749 | 1.865424 | 1.31E-08 | 3.96E-07 | 2.81E-07 | 3554 | tags=29%, list=20%, signal=24% | IL1B/CXCL8/CCL3L3/CCL2/OSM/CCL18/CCL8/HBEGF/CCL3/LIF/S100P/CXCL1/CXCL2/IL6/IL1RN/CCL20/VEGFA/CCL11/CCL27/NRG4/VEGFB/IL3/CLCF1/CCL1/SFRP2/ANGPTL5/ANGPTL4/CCL26/IL9/XCL2/IL24/FGF20/GDF15/CXCL5/INHBE/CSF1/VWC2L/PPBP/CSF2/CSF3/IL12B/BRINP3/CXCL14/CCL21/S100A10/TNFSF13B/S100Z/EBI3/TNF/RPTN/IL22/WNT6/INHBB/PIK3IP1/FGFBP1/TNFSF9/INHA/IHH/CCL17/IL17C/FGF18/IL1A/IL36B/IL18/S100A12/AREG/CXCL9/NRG3/INHBC/CHRD/PDGFA/S100A7/WNT1/PF4/CCL25/CCL4/S100G/LTB/WNT7A/TGFA/HHIP/INSL6/INSL3/IFNA16/IL4/IL5/WNT8A/WNT11/IL1F10/CXCL11/MEGF10/FLG2/CFC1/FLG/IFNA13/SFRP4/ANGPTL3 |
| NAKAMURA\_CANCER\_MICROENVIRONMENT\_UP | NAKAMURA\_CANCER\_MICROENVIRONMENT\_UP | 25 | 0.570379 | 1.86431 | 0.001534 | 0.010172 | 0.007229 | 3404 | tags=40%, list=19%, signal=32% | APOE/POSTN/PRSS3/COL1A2/RHOB/COL1A1/SOX9/RET/COL3A1/SEMA4C |
| LEONARD\_HYPOXIA | LEONARD\_HYPOXIA | 40 | 0.50762 | 1.86096 | 0.00157 | 0.010353 | 0.007358 | 764 | tags=25%, list=4%, signal=24% | SLC2A3/BHLHE40/SLC7A5/SLC16A3/JUNB/PLIN2/FOSL2/VEGFA/JMJD6/SERPINE1 |
| REACTOME\_SCAVENGING\_OF\_HEME\_FROM\_PLASMA | REACTOME\_SCAVENGING\_OF\_HEME\_FROM\_PLASMA | 12 | 0.69991 | 1.860062 | 0.004812 | 0.025508 | 0.018128 | 703 | tags=42%, list=4%, signal=40% | LRP1/HBB/HBA2/JCHAIN/HPX |
| LU\_TUMOR\_ANGIOGENESIS\_UP | LU\_TUMOR\_ANGIOGENESIS\_UP | 25 | 0.568775 | 1.859068 | 0.001571 | 0.010353 | 0.007358 | 2632 | tags=40%, list=15%, signal=34% | SPP1/MMP9/STC1/TYMP/VEGFA/FYN/VAV2/CCNE1/FGF18/PDGFA |
| GNATENKO\_PLATELET\_SIGNATURE | GNATENKO\_PLATELET\_SIGNATURE | 38 | 0.507677 | 1.859018 | 0.001144 | 0.007983 | 0.005673 | 3205 | tags=45%, list=18%, signal=37% | PKM/HLA-E/FLNA/HBB/FTH1/HLA-C/TMSB4X/ACTB/PPBP/NRGN/F13A1/B2M/UBC/TUBA4A/OAZ1/PF4/MYL12A |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_DN | BOYLAN\_MULTIPLE\_MYELOMA\_C\_DN | 56 | 0.474331 | 1.858734 | 0.000426 | 0.003511 | 0.002495 | 1572 | tags=21%, list=9%, signal=20% | SPP1/APOE/RGS1/SAT1/RAB20/SERPINB1/KCNN4/TNFRSF21/CYSTM1/BPIFA2/KIF13A/VOPP1 |
| REACTOME\_HEME\_DEGRADATION | REACTOME\_HEME\_DEGRADATION | 14 | 0.667747 | 1.858555 | 0.004221 | 0.022797 | 0.016201 | 2346 | tags=36%, list=13%, signal=31% | HMOX1/BLVRB/FABP1/SLCO2B1/BLVRA |
| BOSCO\_EPITHELIAL\_DIFFERENTIATION\_MODULE | BOSCO\_EPITHELIAL\_DIFFERENTIATION\_MODULE | 62 | 0.466859 | 1.857828 | 0.000412 | 0.003427 | 0.002436 | 4158 | tags=44%, list=23%, signal=34% | KRT17/ECM1/SPRR1B/GPRC5A/NDRG2/SPINK5/PARD6B/TGM3/CEACAM5/CLCA4/RDH10/KRT78/TMPRSS11E/TMPRSS2/KRT4/ELF3/SERPINB2/MUC4/SCEL/CEACAM7/A2ML1/GABRP/KRT16/SPRR1A/DUOX2/TMPRSS11A/SPRR2A |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_INDEPENDENT | MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_INDEPENDENT | 22 | 0.590163 | 1.857556 | 0.001866 | 0.011762 | 0.008358 | 1412 | tags=27%, list=8%, signal=25% | PLAUR/SPOCD1/TGFBI/FAP/COL5A1/SPOCK1 |
| EHRLICH\_ICF\_SYNDROM\_DN | EHRLICH\_ICF\_SYNDROM\_DN | 13 | 0.680252 | 1.857534 | 0.002674 | 0.015767 | 0.011205 | 1025 | tags=38%, list=6%, signal=36% | HMOX1/BTG2/ITGB7/TFRC/CD27 |
| BIOCARTA\_DC\_PATHWAY | BIOCARTA\_DC\_PATHWAY | 17 | 0.632448 | 1.857426 | 0.002356 | 0.014183 | 0.010079 | 3261 | tags=53%, list=18%, signal=43% | ITGAX/ANPEP/IL3/CD2/CSF2/CD5/CD7/IL4/IL5 |
| REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY | REACTOME\_PLASMA\_LIPOPROTEIN\_ASSEMBLY | 19 | 0.606205 | 1.856612 | 0.003727 | 0.020605 | 0.014643 | 16 | tags=16%, list=0%, signal=16% | APOE/APOC1/APOC2 |
| WP\_EXTRACELLULAR\_VESICLES\_IN\_THE\_CROSSTALK\_OF\_CARDIAC\_CELLS | WP\_EXTRACELLULAR\_VESICLES\_IN\_THE\_CROSSTALK\_OF\_CARDIAC\_CELLS | 18 | 0.618788 | 1.855162 | 0.004802 | 0.02548 | 0.018108 | 571 | tags=22%, list=3%, signal=22% | SPP1/MMP9/IL6/CD81 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_UP | ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_UP | 454 | 0.352993 | 1.855152 | 7.89E-10 | 2.92E-08 | 2.07E-08 | 3044 | tags=27%, list=17%, signal=23% | IL1B/CXCL8/ICAM1/PLAUR/CD83/CCL18/FOSL1/NAMPT/CEMIP/POSTN/ZC3H12A/TNFAIP3/GPR84/CXCL1/CXCL2/IL6/BTG2/PLK3/G0S2/GEM/TNFAIP2/ANP32D/CCL20/SNAI1/RNF19B/RGS16/TPSAB1/KDM6B/SGMS2/VEGFA/TACC3/NFKB2/GSK3B/NEFL/FSD1L/TRIP10/RELB/CLCF1/HAS2/ZNF815P/HTRA3/NIPAL4/GAL3ST4/SOD3/ANGPTL4/SERPINE1/MAP2K3/SLC22A23/PIF1/COL5A1/FNDC4/ARHGAP31/IER3/ZNF131/AP3B2/FPR2/NINJ1/USF3/CSF1/SLC28A2/WFDC9/CSF3/STMN4/IL12B/GALNT13/ABL2/CATSPERG/TNN/TP53INP2/CD80/VAV2/LINC00112/KXD1/HAPLN1/TNF/KRT6A/CCNA1/KIR2DL1/MSC/KRT36/SERPINB8/NFKBID/ADCY10/IRF8/EFEMP1/TNFSF9/GLYATL1/DRC3/WNK4/ODF3B/IL1A/TMC6/ACSL1/MCF2L/TRAF1/IL13RA2/IL18/COL28A1/C11orf96/SERPINB2/C5orf47/SEZ6/HOXA6/TMPRSS6/IRAK2/FSCB/ICOSLG/DNAH14/PIKFYVE/MEIOB/NECAP2/YRDC/HNF4G/TLR2/RASAL1/SOX21/CD82/TBX5/CCL4/ST7-AS1/PTPN1/RTKN2/SYT9 |
| WP\_NAD\_METABOLISM\_IN\_ONCOGENEINDUCED\_SENESCENCE\_AND\_MITOCHONDRIAL\_DYSFUNCTIONASSOCIATED\_SENESCENCE | WP\_NAD\_METABOLISM\_IN\_ONCOGENEINDUCED\_SENESCENCE\_AND\_MITOCHONDRIAL\_DYSFUNCTIONASSOCIATED\_SENESCENCE | 24 | 0.574318 | 1.855152 | 0.002798 | 0.016324 | 0.011601 | 929 | tags=25%, list=5%, signal=24% | IL1B/NAMPT/IL6/SCO2/CCL27/HMGA1 |
| DER\_IFN\_GAMMA\_RESPONSE\_UP | DER\_IFN\_GAMMA\_RESPONSE\_UP | 70 | 0.453595 | 1.850026 | 0.000457 | 0.003713 | 0.002639 | 1713 | tags=27%, list=10%, signal=25% | ICAM1/FOSL1/IFI30/HLA-E/CEBPD/IL6/ZFP36L2/BBC3/HLA-A/IRF1/MAP3K10/HLA-C/GBP1/PLSCR1/TRIM21/SDCBP/IRF9/VAT1/B2M |
| BIOCARTA\_CTL\_PATHWAY | BIOCARTA\_CTL\_PATHWAY | 13 | 0.675924 | 1.845714 | 0.002904 | 0.016816 | 0.01195 | 2370 | tags=46%, list=13%, signal=40% | ICAM1/ITGB2/HLA-A/CD3E/B2M/CD247 |
| LIU\_IL13\_MEMORY\_MODEL\_UP | LIU\_IL13\_MEMORY\_MODEL\_UP | 17 | 0.627843 | 1.843902 | 0.002701 | 0.015893 | 0.011294 | 3242 | tags=53%, list=18%, signal=43% | CCL8/CCL27/MAP3K10/CCL26/MAP3K11/MAP4K1/RAB4B/MAPK8IP1/SPRY4 |
| REACTOME\_INTERFERON\_ALPHA\_BETA\_SIGNALING | REACTOME\_INTERFERON\_ALPHA\_BETA\_SIGNALING | 70 | 0.451712 | 1.842347 | 0.000501 | 0.003972 | 0.002823 | 2222 | tags=33%, list=12%, signal=29% | HLA-H/HLA-F/HLA-E/IRF7/IRF5/PTPN6/HLA-B/HLA-A/SOCS3/HLA-G/IRF1/SOCS1/OASL/HLA-C/MX2/OAS1/IRF9/IRF2/OAS3/IRF8/IRF3/GBP2/EGR1 |
| ELVIDGE\_HIF1A\_AND\_HIF2A\_TARGETS\_DN | ELVIDGE\_HIF1A\_AND\_HIF2A\_TARGETS\_DN | 102 | 0.421079 | 1.839353 | 0.000111 | 0.001114 | 0.000792 | 2358 | tags=25%, list=13%, signal=22% | HLA-DRB1/PLAUR/BHLHE40/HK2/STC1/NDRG1/SAMD4A/PLIN2/PFKFB3/ADM/VEGFA/GPRC5A/RRAGD/FYN/ANGPTL4/SERPINE1/OBSL1/FOS/SFXN3/SPOCK1/EFNA3/MAGED4B/DST/EGR1/EGLN1/SOX9 |
| NOJIMA\_SFRP2\_TARGETS\_UP | NOJIMA\_SFRP2\_TARGETS\_UP | 30 | 0.53282 | 1.838971 | 0.002274 | 0.013785 | 0.009797 | 2129 | tags=40%, list=12%, signal=35% | GADD45B/TNFAIP3/MXD1/SFRP2/IL24/INHBE/CSF1/TNFRSF10D/TNN/CIDEC/HSPA6/DEDD2 |
| ENK\_UV\_RESPONSE\_EPIDERMIS\_DN | ENK\_UV\_RESPONSE\_EPIDERMIS\_DN | 498 | 0.347275 | 1.838372 | 3.97E-10 | 1.55E-08 | 1.10E-08 | 2348 | tags=22%, list=13%, signal=20% | APOE/PLAUR/CD83/FOSL1/KRT17/DUSP2/NAMPT/HK2/FOSB/POSTN/SLC7A5/PLAU/TNFAIP3/PIM1/GNA15/LSP1/NDRG1/EGR3/CXCL2/BCL3/ZFP36L2/SLC20A1/CTSH/PLIN2/PFKFB3/ADM/EMP1/CCL20/ST14/NR4A2/STX11/NOD2/CDH3/TRIB1/RNASET2/SCPEP1/VEGFA/NFATC1/MXD1/PNP/SCARB1/SHB/TGFBI/DDX21/PBXIP1/SLCO4A1/CYTH1/CD207/FYN/ATF3/ZNF331/PELI1/STK17B/DUSP6/THBD/RHOB/MAP2K3/SPINK5/FZD10/TFRC/DSG3/EPHA2/TNFRSF10B/SATB1/RLF/EEF1A2/SMAD7/MAP3K8/GSN/RAB5A/EXT1/HIF1A/CH25H/GALC/CXCL14/CSNK1D/GPR183/PDE4B/CYP2C18/DBF4/ELL2/FCGBP/CLCA4/KRT6A/GPR87/IL4R/PTGER4/KLF2/ATF5/NECTIN2/DNTTIP2/SH2D3A/CBX4/SYNCRIP/IVNS1ABP/IRF8/CFD/INPP5A/SEMA4D/GBP2/UVRAG/DUSP10/TIMP2/BNC1/TCF4/HERC1/EGR1/F2RL1/ACSL1/SPRY2/AREG/EGLN1 |
| WP\_DEVELOPMENT\_OF\_PULMONARY\_DENDRITIC\_CELLS\_AND\_MACROPHAGE\_SUBSETS | WP\_DEVELOPMENT\_OF\_PULMONARY\_DENDRITIC\_CELLS\_AND\_MACROPHAGE\_SUBSETS | 13 | 0.67302 | 1.837785 | 0.003212 | 0.018245 | 0.012966 | 2135 | tags=46%, list=12%, signal=41% | SPI1/IKZF1/CSF1/CSF2/IRF8/TCF4 |
| REACTOME\_ASSEMBLY\_OF\_COLLAGEN\_FIBRILS\_AND\_OTHER\_MULTIMERIC\_STRUCTURES | REACTOME\_ASSEMBLY\_OF\_COLLAGEN\_FIBRILS\_AND\_OTHER\_MULTIMERIC\_STRUCTURES | 61 | 0.463092 | 1.837048 | 0.000948 | 0.00685 | 0.004868 | 3356 | tags=33%, list=19%, signal=27% | MMP7/MMP9/CTSL/MMP13/COL4A2/COL1A2/COL6A2/COL9A2/COL5A1/PCOLCE/COL6A3/COL1A1/DST/CTSB/LAMA3/COL6A6/LAMC2/COL6A5/COL24A1/COL3A1 |
| BOQUEST\_STEM\_CELL\_DN | BOQUEST\_STEM\_CELL\_DN | 203 | 0.378383 | 1.836001 | 2.70E-06 | 4.47E-05 | 3.18E-05 | 1706 | tags=21%, list=10%, signal=19% | HLA-DRB1/HLA-DQB1/CD74/TNFRSF1B/HLA-DRA/STC1/HBEGF/HLA-F/LAPTM5/CA4/RNASE1/MMP1/HLA-DPA1/CTSH/G0S2/HLA-DPB1/STX11/SH2B3/HLA-B/PNP/SCARB1/SELE/CSF2RB/SHB/PTPRE/SLCO4A1/SOX17/CYTH1/LCP2/ABCG1/DUSP6/SCARF1/THBD/APOLD1/F11R/ST6GAL1/DNM3/ENG/CSF3/FAM107A/ADGRG1/ALDH1A2/NRN1 |
| BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP | BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP | 342 | 0.357332 | 1.835453 | 3.92E-08 | 1.07E-06 | 7.58E-07 | 3729 | tags=32%, list=21%, signal=26% | CXCL8/HS3ST2/PLAUR/DUSP2/APOD/PHLDA1/TNFAIP3/SOD2/HBEGF/CSRNP1/C3/CXCL2/IL6/G0S2/KRT8/HCAR2/RNF19B/MMP13/SGMS2/PTAFR/REC8/GPAT3/SOCS3/SPOCD1/PLEKHA4/FSD1L/SERPINB9/IRF1/PTPRE/SPSB1/SYT12/RELB/HAS2/STARD5/ANGPTL4/SOCS1/THEMIS2/LCP1/NIPAL1/RASSF8/NCOA7/IL24/TRIM14/TFRC/GDF15/GBP1/CD274/PLSCR1/TRIM21/CSF1/SEMA7A/LRRC3/IRF9/CSF2/BCL2A1/IRF2/OAS3/LAP3/DUSP1/EIF5/MED13/DTX3L/CCNA1/NOCT/TMEM229B/ARL5B/CDCP1/C3orf52/BIRC3/GBP2/NPC1/GBP5/IL1A/RIMS2/NRCAM/SPRY2/IL13RA2/TRIML2/IL7R/CNP/SREK1IP1/DUSP4/DCP1A/ZPLD1/TLR2/SDK1/STARD4/B3GNT7/TGM2/MLKL/ZMYND15/KRT34/TGFA/PTK2B/ACE2/DRAM1/SP140L/IL15RA/NFE2L3/KLF6/UBA7/N4BP1/CYP27B1/OGFR/ZNFX1/EHD4/SP100/PDK4/TAP1/ATP13A3/B4GALNT2 |
| WU\_CELL\_MIGRATION | WU\_CELL\_MIGRATION | 177 | 0.383696 | 1.833084 | 9.74E-06 | 0.000136 | 9.65E-05 | 3051 | tags=29%, list=17%, signal=24% | CAPG/FOSL1/KRT17/TIMP3/CSTB/MT1G/OLR1/S100P/CXCL1/RAC2/MAPK13/CTSH/PLIN2/TNFAIP2/ST14/MT2A/CDH3/VIM/COL4A2/TGFBI/ADIRF/FYN/SLPI/NMU/COL6A2/SERPINE1/TNFRSF21/IGFBP7/EEF1A2/GLUL/IGF2BP2/FBLN1/VGLL1/GPR87/PTGER4/EFEMP1/ESRP1/TUBA4A/UGT1A10/IL1A/F2RL1/SOX9/KYNU/LAMA3/DSE/GJB3/MT1E/TGM2/SIRPA/FABP5/GJA1 |
| WP\_PLATELETMEDIATED\_INTERACTIONS\_WITH\_VASCULAR\_AND\_CIRCULATING\_CELLS | WP\_PLATELETMEDIATED\_INTERACTIONS\_WITH\_VASCULAR\_AND\_CIRCULATING\_CELLS | 17 | 0.623877 | 1.832255 | 0.003199 | 0.018191 | 0.012928 | 437 | tags=24%, list=2%, signal=23% | IL1B/ICAM1/CCL2/SELE |
| FOSTER\_TOLERANT\_MACROPHAGE\_UP | FOSTER\_TOLERANT\_MACROPHAGE\_UP | 155 | 0.390844 | 1.831957 | 2.77E-05 | 0.000338 | 0.00024 | 3477 | tags=33%, list=19%, signal=27% | MARCO/CCL8/TNFRSF1B/RGS1/SLC16A3/HLA-E/SELL/CST7/IRF7/IL1RN/GEM/SLC31A2/RNASET2/RAB20/AOAH/PVR/TGFBI/SERPINB9/SGK1/CFB/IGSF6/SLAMF9/FPR2/FPR1/AGTRAP/SMAD7/SLC7A8/LRRC8C/OAS3/ELL2/SMURF1/MET/RTN4R/MS4A6A/ACSL1/ORM1/ORAI2/IQSEC2/CXCL9/ARHGAP8/ELK3/RNF149/ZDHHC18/CDC42EP2/SLX4IP/PIK3AP1/NUPR1/RIOK3/WNK2/PTGES/CCDC71L |
| SEMENZA\_HIF1\_TARGETS | SEMENZA\_HIF1\_TARGETS | 36 | 0.511128 | 1.831044 | 0.002791 | 0.016301 | 0.011584 | 991 | tags=31%, list=6%, signal=29% | HMOX1/SLC2A3/HK2/PKM/ADM/VEGFA/CDKN1A/IGFBP2/ENO1/SERPINE1/TFRC |
| LEE\_AGING\_CEREBELLUM\_UP | LEE\_AGING\_CEREBELLUM\_UP | 78 | 0.435581 | 1.830579 | 0.000542 | 0.004256 | 0.003025 | 1491 | tags=24%, list=8%, signal=22% | SPP1/APOE/HMOX1/C1QC/C1QB/CST7/SLC11A1/IRF7/CTSH/CTSD/LGALS3BP/PGLYRP1/CD68/LMNB1/RHOG/FOS/SLC7A3/BCL2A1/CCL21 |
| FOSTER\_TOLERANT\_MACROPHAGE\_DN | FOSTER\_TOLERANT\_MACROPHAGE\_DN | 387 | 0.353287 | 1.829311 | 6.52E-09 | 2.05E-07 | 1.45E-07 | 2551 | tags=25%, list=14%, signal=22% | IL1B/PLAUR/CD83/DUSP2/NAMPT/DUSP5/TNFAIP3/HBEGF/OLR1/CSRNP1/SERTAD1/JUNB/CEBPD/PIM1/GNA15/TNFRSF12A/GPR84/SPHK1/GK/CXCL1/CXCL2/BCL3/IL4I1/IL6/PFKFB3/RGS16/MMP13/HDC/MXD1/ETV3/SOCS3/CDKN1A/TNC/PLEKHA4/TRIP10/MNDA/SPSB1/LCP2/JDP2/ETV6/PPFIBP1/SERPINE1/LMNA/SOCS1/RHOH/ABTB2/ERRFI1/FZD5/NCOA7/FOS/ADAMTS4/ZBTB32/F11R/IKZF1/MT1A/MAP3K8/CMTM6/TRIM21/CSF1/SPATA13/EXT1/SPRED1/CH25H/ENG/DAXX/IL12B/IRF2/ZYX/RHBDF2/VCAM1/PDE4B/S100A10/ARID5A/CHST11/IL4R/CA2/NFKBID/NECTIN2/NOCT/TMEM229B/TNFSF9/SLC16A1/TCF4/PIK3R6/TPM4/MCF2L/TRAF1/MTMR14/IL18/KLF7/EZR/TRIM26/DENND6B/NFIL3/TET2/IQSEC2/TRAF3IP2 |
| BURTON\_ADIPOGENESIS\_8 | BURTON\_ADIPOGENESIS\_8 | 79 | 0.433165 | 1.829178 | 0.000431 | 0.003546 | 0.00252 | 2577 | tags=24%, list=14%, signal=21% | CAPG/SLC7A5/SERTAD1/PLTP/ZFP36L2/PLA2G7/EMP1/PSAP/SCPEP1/FXYD5/DAXX/CD276/TAPBP/VCAM1/ACTA2/CMTM3/BAX/PDPN/ANXA5 |
| GAJATE\_RESPONSE\_TO\_TRABECTEDIN\_UP | GAJATE\_RESPONSE\_TO\_TRABECTEDIN\_UP | 61 | 0.460967 | 1.828621 | 0.001046 | 0.00743 | 0.00528 | 1944 | tags=28%, list=11%, signal=25% | DUSP5/TNFAIP3/S100P/IL6/RGS2/CDKN1A/TGFBI/ATF3/GPNMB/TRAPPC6A/OASL/HLA-C/FOS/IGFBP7/GSN/CFD/OLFML2A |
| WP\_P53\_TRANSCRIPTIONAL\_GENE\_NETWORK | WP\_P53\_TRANSCRIPTIONAL\_GENE\_NETWORK | 66 | 0.455165 | 1.828056 | 0.000305 | 0.002638 | 0.001875 | 1409 | tags=20%, list=8%, signal=18% | ICAM1/CCL2/NCF2/LIF/BTG2/SAT1/IRF5/BBC3/SESN2/CDKN1A/SERPINE1/TNFRSF10D/IRF9 |
| MENSE\_HYPOXIA\_UP | MENSE\_HYPOXIA\_UP | 97 | 0.422869 | 1.826618 | 0.000102 | 0.001029 | 0.000731 | 947 | tags=20%, list=5%, signal=19% | NAMPT/SLC2A3/BHLHE40/HK2/SOD2/SCD/CEBPD/NDRG1/PLIN2/PFKFB3/ADM/CEBPB/VEGFA/INSIG1/JMJD6/ATF3/KLF4/ANGPTL4/ANKRD37 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_UP | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_UP | 400 | 0.352029 | 1.825616 | 9.03E-09 | 2.78E-07 | 1.98E-07 | 4122 | tags=36%, list=23%, signal=28% | CXCL8/CCL2/CD83/FOSL1/ADAM8/FOSB/ZC3H12A/TNFAIP3/HLA-F/CYP27A1/CSRNP1/PIM1/PLEKHG2/LIF/CXCL1/CXCL2/BCL3/BTG2/CRTC2/ADM/GEM/CCL20/ARC/STX11/NOD2/KDM6B/ZNF296/SNORD28/FERMT3/MXD1/ETV3/NFKB2/SELE/ARHGAP30/NRG4/ADIRF/SERPINA10/IRF1/FTH1P3/RELB/ATF3/KLF4/LGALS9/SIM2/PER1/IER5/SEMA4A/TEX29/SCARNA15/OASL/ZNF639/PROM1/ABTB2/FOS/IER3/GDF15/NFKBIE/SPOCK2/BCL2A1/CCDC73/ARHGAP40/ABL2/EFNA3/KLK14/TNF/TBX4/NFKBID/NOCT/ARL5B/GOLGA7B/CARD9/CDKN2AIP/BIRC3/NPTX1/DUSP10/FGF18/PPP4R1L/IL1A/EGR1/PCK1/TRAF1/USP43/SOX9/KLF7/NFIL3/RAB30/TET2/IER2/LINC01089/IRAK2/KLF10/PSMD6-AS2/DCHS1/DCP1A/ZNF555/PPTC7/ZNF8/PIGR/B3GALNT2/DDIT3/LTB/HIVEP1/KCNQ4/ZNF280B/SUMO4/HYMAI/CD200R1/ZNF267/CNIH2/ALDH8A1/N4BP3/CCDC13/KLKP1/KLF6/ADAM32/DNAH2/CFP/PPP1R15A/NPC1L1/ZNF557/SNORD38B/ZNF764/ODC1/NGFR/AOC2/NFKBIA/MARCKS/HAVCR2/NFKB1/MED26/PPP1R10/LILRA6/ADAM20P1/KRTAP5-1/PTX3/SALL1/ZNF778/PYGM/LSMEM1/ZNF567/ELL/C12orf50 |
| HENDRICKS\_SMARCA4\_TARGETS\_UP | HENDRICKS\_SMARCA4\_TARGETS\_UP | 53 | 0.470218 | 1.825185 | 0.001582 | 0.0104 | 0.007391 | 2535 | tags=30%, list=14%, signal=26% | CCL2/COTL1/MMP1/CTSH/FOSL2/CDKN1A/SPOCD1/ITGA5/LMNA/PTPN7/ADGRG1/MFGE8/PSG4/IGFBP4/MIR503HG/CTSB |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_GRANULOCYTE\_DN | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_GRANULOCYTE\_DN | 16 | 0.635448 | 1.824201 | 0.003751 | 0.020694 | 0.014707 | 526 | tags=25%, list=3%, signal=24% | ADAM8/HDC/PILRA/IL10RA |
| VANTVEER\_BREAST\_CANCER\_ESR1\_DN | VANTVEER\_BREAST\_CANCER\_ESR1\_DN | 214 | 0.374329 | 1.822573 | 1.99E-06 | 3.52E-05 | 2.50E-05 | 2106 | tags=23%, list=12%, signal=21% | MMP7/MARCO/CCL18/DUSP2/CSTB/TNFAIP3/ITGB2/SOD2/PIM1/NDRG1/PLTP/SAMD4A/LYN/FAM20A/ADM/ST14/HK3/CDH3/LPXN/AGFG1/CYBA/KCNN4/ABRACL/ENO1/TNFRSF21/THEMIS2/PROM1/SH3BP1/YBX1/LAMP3/CHI3L1/NFKBIE/EPHA2/GBP1/PLSCR1/GPRIN2/HIF1A/MRAS/BCL2A1/PSAT1/VGLL1/S100A10/DYSF/TNF/CYB5R2/SYNCRIP/SLC43A3/TRPV6/LILRB3/CLCN4 |
| MIKKELSEN\_MEF\_HCP\_WITH\_H3\_UNMETHYLATED | MIKKELSEN\_MEF\_HCP\_WITH\_H3\_UNMETHYLATED | 218 | 0.373259 | 1.819903 | 5.50E-06 | 8.24E-05 | 5.86E-05 | 5277 | tags=44%, list=29%, signal=31% | APOC1/SLC15A3/ARHGAP4/ZNF385A/PTPN6/REC8/RIIAD1/HORMAD2/CLVS2/TEX19/GPR101/DDX4/WBP2NL/TRPM1/NOS1/LAG3/ABHD16B/LYPD2/EPPK1/GSN/NAA11/TEX12/RCVRN/GLRA1/SYP/BASP1/TMC8/LY6K/TNFSF13B/PCSK1N/IL1RAPL2/CHRM4/MSH4/PCDHB1/TBX22/SYCP1/GABRQ/CAMKK2/SLC2A9/KRT85/DPEP3/KRT4/C10orf67/FXYD2/C5orf47/MTNR1A/CES5A/LGI3/PDZD3/GNMT/PCDHB18P/SLC26A8/PDHA2/CRYBB3/PCDHA11/CNIH2/CNGA4/NR0B1/ADAM32/SYNPR/DMC1/TSSK2/EDN3/PCDHA4/SPAG6/PCDHAC1/ASPHD2/RBM28/MYH14/PCDHA9/ZNF516/PLCXD1/DDX3X/RPH3A/GPR50/COL9A3/ACRBP/GIGYF1/HTR2C/DPP6/SLC2A5/CCIN/HMGCLL1/FAR2/SYCP3/GPR158/GDAP1/CCDC185/PCDHB10/SCG3/DLGAP1/HTR5A/GFAP/CHST6/PCDHA2 |
| HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_UP | HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_UP | 415 | 0.349992 | 1.819813 | 1.24E-08 | 3.78E-07 | 2.69E-07 | 2371 | tags=22%, list=13%, signal=20% | SPP1/APOE/HLA-DRB1/HLA-DRB4/DUSP2/TIMP3/SLC16A3/SQSTM1/FTL/GAL/FLNA/COTL1/C3/ZNF10/TUBB2A/HLA-DPA1/SLC12A8/PFKFB3/MFSD12/HLA-DPB1/ITGBL1/SAT1/NR4A2/MT2A/SNAI1/HBA2/PSAP/EGR2/RAB13/CDKN1A/NEFL/GRN/CGA/OGDHL/APLP2/DDX4/COL6A2/PRPH/RHOB/ATP6AP2/MAFB/PPARD/UBE2S/ABTB2/SYN1/FZD5/FOS/IER3/TFRC/LAMP3/RRAD/MAGEA4/DDAH2/CSPG5/NPTX2/SFXN3/MLF1/DNM3/GMPR/GLUL/GSN/FBP2/PMEL/TUBB3/CDH19/NRGN/PLXNB3/CD9/SLC25A44/TAOK3/AP5Z1/DUSP1/HPSE/CCNA1/PTGER4/TAC1/KLF2/PHLDA2/MAGEA9/GM2A/KIAA0513/TIMP1/MET/KATNB1/DMRT1/BIRC3/EGR1/G6PD/DPEP3/MAPRE3/BAIAP2/AREG/TROAP |
| ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_DN | ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_DN | 110 | 0.405011 | 1.819618 | 0.000184 | 0.001728 | 0.001228 | 2009 | tags=25%, list=11%, signal=23% | ADAM8/SLC2A3/JUNB/PIM1/RAC2/HBB/CTSD/MYC/KRT8/TOR4A/RAB13/SAMSN1/MPP1/NFE2/RHOG/LRP10/LCP2/EPOR/GATA1/SH3BP1/CMTM6/AKR1C2/SLCO2B1/MCL1/ADGRG1/AIF1/CARD9/ALAS2 |
| REACTOME\_SENSORY\_PERCEPTION\_OF\_TASTE | REACTOME\_SENSORY\_PERCEPTION\_OF\_TASTE | 41 | 0.488311 | 1.817609 | 0.001369 | 0.009196 | 0.006535 | 2296 | tags=32%, list=13%, signal=28% | PLCB2/TRPM5/GNG13/TAS2R41/TAS2R46/TAS2R40/TAS1R2/TAS2R20/SCN2B/TRPM4/TAS1R3/GRM4/TAS2R16 |
| WP\_TOLLLIKE\_RECEPTOR\_SIGNALING\_PATHWAY | WP\_TOLLLIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 103 | 0.413628 | 1.816815 | 0.00044 | 0.003614 | 0.002569 | 2180 | tags=21%, list=12%, signal=19% | SPP1/IL1B/CXCL8/CCL3/IL6/MAPK13/IRF7/IRF5/MAP2K3/CD14/FOS/MAP3K8/IL12B/TLR1/CD80/TNF/IRAK1/LY96/IRF3/RIPK1/TLR8/IKBKB |
| SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_DN | SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_DN | 110 | 0.404381 | 1.816788 | 0.000193 | 0.001792 | 0.001274 | 2525 | tags=25%, list=14%, signal=22% | DUSP2/SLC2A3/HK2/RGS1/SLC16A3/RGCC/SCD/EGR3/RGS2/NR4A2/MYC/TRIB1/RNASET2/INSIG1/ACAP1/LCP2/UBE2S/CACNA1A/ZBTB32/MNT/OAS1/TNF/KLF2/EGR1/LPCAT4/EGLN1/POLR3G/IER2 |
| WP\_PEPTIDE\_GPCRS | WP\_PEPTIDE\_GPCRS | 75 | 0.438481 | 1.816672 | 0.000424 | 0.003504 | 0.00249 | 3150 | tags=31%, list=18%, signal=25% | C5AR1/AVPR2/CCR8/TACR3/BDKRB1/CCR7/FPR3/OPRK1/HCRTR1/FPR2/TACR2/FPR1/CCR10/CXCR1/C3AR1/MC5R/BRS3/CCKBR/CXCR2/NTSR1/GNRHR/TRHR/CXCR3 |
| MARSON\_FOXP3\_TARGETS\_UP | MARSON\_FOXP3\_TARGETS\_UP | 67 | 0.451536 | 1.816505 | 0.000482 | 0.00384 | 0.002729 | 2096 | tags=30%, list=12%, signal=26% | CAPG/SLC2A3/ECM1/RAC2/CORO1A/PLIN2/RGS16/PNP/VIM/NCF4/CD81/CD2/CSNK1D/BASP1/MCL1/S100A10/LRRC8C/GM2A/IRF8/STK10 |
| REACTOME\_P75NTR\_RECRUITS\_SIGNALLING\_COMPLEXES | REACTOME\_P75NTR\_RECRUITS\_SIGNALLING\_COMPLEXES | 13 | 0.665218 | 1.81648 | 0.004137 | 0.022455 | 0.015958 | 4066 | tags=54%, list=23%, signal=42% | SQSTM1/IRAK1/UBC/IKBKB/NGFR/UBA52/RIPK2 |
| FURUKAWA\_DUSP6\_TARGETS\_PCI35\_UP | FURUKAWA\_DUSP6\_TARGETS\_PCI35\_UP | 68 | 0.450216 | 1.815375 | 0.001 | 0.007175 | 0.005099 | 1944 | tags=21%, list=11%, signal=18% | HMOX1/KRT17/KRT14/IFI30/SLC15A3/HLA-F/RNASE1/IL32/C15orf48/THEMIS2/BTN1A1/EPB41L4A/TNFSF13B/OLFML2A |
| JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_DN | JECHLINGER\_EPITHELIAL\_TO\_MESENCHYMAL\_TRANSITION\_DN | 61 | 0.457421 | 1.814552 | 0.001183 | 0.008213 | 0.005837 | 2615 | tags=33%, list=15%, signal=28% | TIMP3/KRT14/FLNA/BTG2/CTSH/SAT1/EGR2/SGK1/ATF3/ATP1A1/ARHGEF1/FOS/FBP2/DUSP1/CA2/KLF2/CYP2F1/EGR1/AMD1/KLF10 |
| BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_DN | BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_DN | 30 | 0.525602 | 1.814058 | 0.002788 | 0.016297 | 0.011582 | 1920 | tags=37%, list=11%, signal=33% | APOE/APOD/FOSB/RGCC/C3/SOCS3/FABP4/CD14/CXCL14/PTGER4/CFD |
| HAHTOLA\_CTCL\_CUTANEOUS | HAHTOLA\_CTCL\_CUTANEOUS | 23 | 0.567589 | 1.813752 | 0.003505 | 0.019651 | 0.013966 | 1576 | tags=30%, list=9%, signal=28% | MMP9/S100P/G0S2/HBD/TRIB1/GLUL/SNCA |
| WP\_APOPTOSISRELATED\_NETWORK\_DUE\_TO\_ALTERED\_NOTCH3\_IN\_OVARIAN\_CANCER | WP\_APOPTOSISRELATED\_NETWORK\_DUE\_TO\_ALTERED\_NOTCH3\_IN\_OVARIAN\_CANCER | 53 | 0.467172 | 1.813359 | 0.00187 | 0.011775 | 0.008368 | 2577 | tags=26%, list=14%, signal=23% | APOE/SQSTM1/BCL3/SOCS3/VIM/CDKN1A/TNFRSF21/IER3/TNFRSF10B/SMAD7/TNF/TRAF1/IL7R/ANXA5 |
| SANSOM\_APC\_TARGETS\_DN | SANSOM\_APC\_TARGETS\_DN | 345 | 0.352841 | 1.812694 | 1.38E-07 | 3.25E-06 | 2.31E-06 | 2964 | tags=28%, list=17%, signal=24% | ACP5/C1QC/ITGAX/LIPA/ITGB2/NR1H3/HLA-E/LAPTM5/LSP1/LRP1/SST/CST7/RAC2/CA4/PLTP/IL4I1/CORO1A/RGS2/GPSM3/CD79A/CD70/ITGB7/ARHGAP45/TYROBP/RBP4/RRAGD/SRXN1/TGFBI/VAV1/SERPINB9/CRAT/POU2AF1/IRF1/PTPRE/REG1A/GRINA/SLPI/TRIM47/JCHAIN/SOD3/CD8A/MLPH/CYP2S1/HLA-DMB/CD2/FABP1/USP2/PLD4/PCOLCE/ST6GAL1/XDH/TFR2/SLC7A8/CXCL14/CCL21/BASP1/VDR/FLVCR2/TEP1/CDK2AP2/TP53INP2/VAV2/ARSA/RBP2/CD53/GSTK1/FCGBP/ICOS/CD5/MYO7A/CCNA1/CDKN2D/CD48/HIC1/MAP3K1/GBP2/CIDEC/STK10/LTBP4/MOV10/MAPRE3/IL18/TCF21/MOGAT2/SLC22A18/CD7/ATP6V0A1/GZMA/TOB1/SLC2A2/DGKA/FMNL1/EDN2/CD82/CCL25/IL2RB/SIRPA |
| KEGG\_TOLL\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | KEGG\_TOLL\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY | 102 | 0.41496 | 1.812626 | 0.00016 | 0.001526 | 0.001085 | 2180 | tags=22%, list=12%, signal=19% | SPP1/IL1B/CXCL8/CCL3/IL6/MAPK13/IRF7/IRF5/MAP2K3/CD14/FOS/MAP3K8/IL12B/TLR1/CD80/TNF/IRAK1/LY96/IRF3/RIPK1/TLR8/IKBKB |
| KANG\_AR\_TARGETS\_DN | KANG\_AR\_TARGETS\_DN | 18 | 0.604489 | 1.812292 | 0.007261 | 0.035171 | 0.024995 | 1353 | tags=33%, list=8%, signal=31% | SPP1/SLC20A1/VEGFA/VEGFB/COL1A2/COL1A1 |
| WANG\_BARRETTS\_ESOPHAGUS\_AND\_ESOPHAGUS\_CANCER\_DN | WANG\_BARRETTS\_ESOPHAGUS\_AND\_ESOPHAGUS\_CANCER\_DN | 37 | 0.501647 | 1.811328 | 0.001781 | 0.011327 | 0.00805 | 2279 | tags=27%, list=13%, signal=24% | CSTB/ECM1/EMP1/PGD/CRABP2/OBSL1/VAT1/KRT6A/LGALS7/KRT4 |
| BROWNE\_INTERFERON\_RESPONSIVE\_GENES | BROWNE\_INTERFERON\_RESPONSIVE\_GENES | 65 | 0.449771 | 1.810615 | 0.000454 | 0.003704 | 0.002632 | 1301 | tags=25%, list=7%, signal=23% | CCL8/IFI30/HLA-F/TYMP/IRF7/STX11/CYTH1/OASL/THEMIS2/TRIM14/MX2/GBP1/PLSCR1/TRIM21/GMPR/OAS1 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_2\_DN | LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_2\_DN | 47 | 0.475565 | 1.809984 | 0.001747 | 0.011207 | 0.007965 | 1015 | tags=17%, list=6%, signal=16% | SPP1/APOE/TIMP3/MYC/VEGFA/COL4A2/COL5A1/RUNX3 |
| WP\_TP53\_NETWORK | WP\_TP53\_NETWORK | 19 | 0.590952 | 1.809896 | 0.006198 | 0.030909 | 0.021966 | 3618 | tags=47%, list=20%, signal=38% | BOK/MYC/BBC3/CDKN1A/BAX/TP53/MDM2/TP63/CDKN2A |
| MOREIRA\_RESPONSE\_TO\_TSA\_DN | MOREIRA\_RESPONSE\_TO\_TSA\_DN | 18 | 0.603567 | 1.809528 | 0.007338 | 0.035416 | 0.025169 | 3590 | tags=44%, list=20%, signal=36% | ICAM1/CD3E/FGF18/CD247/SLC3A2/WNT7A/ALPL/ENTPD2 |
| WENG\_POR\_DOSAGE | WENG\_POR\_DOSAGE | 22 | 0.574812 | 1.80924 | 0.002989 | 0.017229 | 0.012244 | 3204 | tags=36%, list=18%, signal=30% | GADD45B/HMOX1/CYP2B6/CYP2C18/RETSAT/ANXA5/CYP2C19/LGALSL |
| PID\_IL8\_CXCR2\_PATHWAY | PID\_IL8\_CXCR2\_PATHWAY | 34 | 0.508547 | 1.808611 | 0.003612 | 0.020093 | 0.014279 | 1386 | tags=26%, list=8%, signal=24% | CXCL8/GNA15/RAC2/LYN/PLCB2/ARRB2/HCK/RAB5A/GNAI2 |
| WIERENGA\_STAT5A\_TARGETS\_GROUP1 | WIERENGA\_STAT5A\_TARGETS\_GROUP1 | 122 | 0.39667 | 1.808563 | 0.000218 | 0.002003 | 0.001424 | 3492 | tags=34%, list=19%, signal=28% | DUSP5/PHLDA1/PIM1/NDRG1/CST7/IL4I1/CTSH/ADM/IL18RAP/GPAT3/SAMSN1/PLEKHA4/VASN/CALB2/STK17B/CYSTM1/SMAP2/XIRP1/PLXNA3/TRIM58/TP53INP2/TMEFF2/IL4R/CISH/CD1A/PIK3IP1/DAB2/A4GALT/HSPA6/F2RL1/IGFBP4/P2RX4/RAP1GAP/TJP2/TULP3/TGM2/MAP1A/LTB/DAPK1/TNFRSF4/CDHR1/GBP4 |
| FINETTI\_BREAST\_CANCER\_KINOME\_GREEN | FINETTI\_BREAST\_CANCER\_KINOME\_GREEN | 16 | 0.629687 | 1.807662 | 0.004214 | 0.022797 | 0.016201 | 3015 | tags=56%, list=17%, signal=47% | LYN/PIM2/STK17B/HCK/ITK/STK10/MAP4K1/MLKL/BTK |
| XIE\_ST\_HSC\_S1PR3\_OE\_UP | XIE\_ST\_HSC\_S1PR3\_OE\_UP | 174 | 0.379234 | 1.805938 | 2.10E-05 | 0.000268 | 0.00019 | 2155 | tags=24%, list=12%, signal=21% | SPP1/RGS1/SIGLEC9/HBEGF/EGR3/IRF7/IL1RN/PLEK/LGALS3BP/KRT79/RELB/TMIGD3/SERPINE1/OASL/NCOA7/IL24/MX2/LAMP3/EPHA2/XIRP1/GPR142/GBP1/ANKRD45/PLSCR1/GSN/OAS1/COL6A3/IRF9/BCL2A1/CD276/OAS3/MAP2/HPSE/RDH10/DTX3L/PTGER4/OCSTAMP/LY6E/CDCP1/DAB2/GBP2/GBP5 |
| KLEIN\_PRIMARY\_EFFUSION\_LYMPHOMA\_DN | KLEIN\_PRIMARY\_EFFUSION\_LYMPHOMA\_DN | 53 | 0.465243 | 1.805872 | 0.002062 | 0.012748 | 0.009059 | 1168 | tags=23%, list=7%, signal=21% | CAPG/HLA-DQB1/BTG2/CTSH/CD79A/PTPN6/NCF4/HLA-DMB/CD19/CD27/SEL1L3/ST6GAL1 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_E | RICKMAN\_HEAD\_AND\_NECK\_CANCER\_E | 82 | 0.42732 | 1.805429 | 0.000474 | 0.003798 | 0.002699 | 5721 | tags=51%, list=32%, signal=35% | IL1RN/MSLN/UPK1B/ALDH1A1/TGM3/CYP2C18/CEACAM5/CLCA4/RPTN/KRT78/KRT24/TMPRSS11E/UGT1A10/TMPRSS2/KRT4/ST6GALNAC1/MUC4/SCEL/NTRK2/CEACAM7/FAM83C/ADH7/HLF/NPR3/A2ML1/CD177/DUOX2/CXCL17/CYP2E1/C12orf54/PAX9/TMEM45B/PRSS27/SERPINB13/MFSD4A/KLK13/RARRES1/ALOX12/POF1B/AADAC/TMPRSS11D/UGT1A8 |
| GERHOLD\_ADIPOGENESIS\_DN | GERHOLD\_ADIPOGENESIS\_DN | 59 | 0.457576 | 1.805281 | 0.000599 | 0.004627 | 0.003288 | 2693 | tags=31%, list=15%, signal=26% | UCP2/CCL2/CEBPD/ECM1/G0S2/TNFAIP2/GAS7/CD81/THBD/IER3/XDH/CD9/VDR/IL4R/THBS2/BAX/ANXA5/ANXA2 |
| LU\_IL4\_SIGNALING | LU\_IL4\_SIGNALING | 89 | 0.422054 | 1.804579 | 0.000425 | 0.003504 | 0.00249 | 3441 | tags=29%, list=19%, signal=24% | NCF2/BHLHE40/TNFAIP3/SELL/IL6/CTSD/HLA-DRB5/SAMSN1/SOCS1/SEL1L3/CMTM6/TNFRSF11A/BATF/XBP1/IL4R/CISH/IRF8/EGR1/KMO/NFIL3/ARPC5/CCL4/SLC39A8/STAT4/TLR3/STK4 |
| HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_DN | HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_DN | 54 | 0.463865 | 1.803907 | 0.001534 | 0.010172 | 0.007229 | 2631 | tags=33%, list=15%, signal=29% | HLA-F/ANPEP/TNFAIP2/KRT8/IL32/HLA-B/MIA/GPRC5A/HLA-G/MLPH/PROM1/HMGA1/GAD1/INHBB/EFEMP1/TPM4/IGFBP4/DKK1 |
| REACTOME\_PURINERGIC\_SIGNALING\_IN\_LEISHMANIASIS\_INFECTION | REACTOME\_PURINERGIC\_SIGNALING\_IN\_LEISHMANIASIS\_INFECTION | 26 | 0.547782 | 1.803773 | 0.005866 | 0.029554 | 0.021003 | 2405 | tags=38%, list=13%, signal=33% | IL1B/HMOX1/C3/NLRP3/NFKB2/CTSG/C3AR1/IL1A/IL18/P2RX4 |
| SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_DN | SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_DN | 137 | 0.389649 | 1.803256 | 0.00013 | 0.001279 | 0.000909 | 3605 | tags=35%, list=20%, signal=28% | KRT14/TNFAIP3/RGCC/SCD/CCL3/CXCL1/RGS2/IL1RN/CTSD/GEM/SAT1/PSAP/FOSL2/PLEKHO2/SPRR1B/SCPEP1/INSIG1/TKT/ATF3/CFB/MAFB/ERRFI1/FOS/F11R/CREG1/ENG/CCL21/CD9/CA2/FGFBP1/BIRC3/GBP2/DST/EGR1/ACSL1/KYNU/NFIL3/SND1/CYP4B1/THBS3/TP63/IFNGR1/DAPK1/STAT3/KLF6/TCF3/KRT16/DSC2 |
| WARTERS\_IR\_RESPONSE\_5GY | WARTERS\_IR\_RESPONSE\_5GY | 44 | 0.477924 | 1.799605 | 0.001928 | 0.012038 | 0.008555 | 1713 | tags=30%, list=10%, signal=27% | BTG2/PLK3/BBC3/SH2D2A/CDKN1A/ATF3/GDF15/OR11A1/RRAD/BLOC1S2/NINJ1/ACER2/B2M |
| HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_UP | HUPER\_BREAST\_BASAL\_VS\_LUMINAL\_UP | 53 | 0.463264 | 1.79819 | 0.002101 | 0.012926 | 0.009186 | 3775 | tags=40%, list=21%, signal=31% | IL1B/POSTN/NDRG1/S100P/SPRR1B/SLPI/PTHLH/CXCL14/KRT6A/LGALS7/DST/IL1A/AMIGO2/PDPN/S100A7/FABP5/GJA1/TP63/PTGES/KRT16/SPRR1A |
| REACTOME\_ERYTHROCYTES\_TAKE\_UP\_CARBON\_DIOXIDE\_AND\_RELEASE\_OXYGEN | REACTOME\_ERYTHROCYTES\_TAKE\_UP\_CARBON\_DIOXIDE\_AND\_RELEASE\_OXYGEN | 12 | 0.676296 | 1.797306 | 0.009363 | 0.04296 | 0.03053 | 2760 | tags=67%, list=15%, signal=56% | CA4/HBB/HBA2/CYB5R2/CA2/CA1/CYB5R4/AQP1 |
| DORSEY\_GAB2\_TARGETS | DORSEY\_GAB2\_TARGETS | 30 | 0.52068 | 1.797071 | 0.003183 | 0.018137 | 0.01289 | 2307 | tags=37%, list=13%, signal=32% | DUSP5/STC1/GK/PRSS3/SERPINE1/SMAD7/GSN/COL6A3/COL1A1/PHLDA2/IL13RA2 |
| WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_3 | WP\_FAMILIAL\_HYPERLIPIDEMIA\_TYPE\_3 | 13 | 0.65804 | 1.796879 | 0.005064 | 0.026505 | 0.018836 | 1728 | tags=46%, list=10%, signal=42% | APOE/LRP1/PLTP/SCARB1/LPL/LIPC |
| PID\_IL8\_CXCR1\_PATHWAY | PID\_IL8\_CXCR1\_PATHWAY | 28 | 0.53699 | 1.796418 | 0.002861 | 0.016616 | 0.011808 | 1609 | tags=32%, list=9%, signal=29% | CXCL8/GNA15/LYN/PLCB2/ARRB2/HCK/RAB5A/GNAI2/CXCR1 |
| WP\_TNFRELATED\_WEAK\_INDUCER\_OF\_APOPTOSIS\_TWEAK\_SIGNALING\_PATHWAY | WP\_TNFRELATED\_WEAK\_INDUCER\_OF\_APOPTOSIS\_TWEAK\_SIGNALING\_PATHWAY | 42 | 0.476442 | 1.796269 | 0.003888 | 0.021301 | 0.015138 | 2288 | tags=29%, list=13%, signal=25% | CCL2/MMP9/TNFRSF12A/IL6/NFKB2/GSK3B/RELB/TNF/RIPK1/BIRC3/IKBKB/TRAF1 |
| KLEIN\_TARGETS\_OF\_BCR\_ABL1\_FUSION | KLEIN\_TARGETS\_OF\_BCR\_ABL1\_FUSION | 45 | 0.47516 | 1.793834 | 0.001544 | 0.010223 | 0.007265 | 3517 | tags=38%, list=20%, signal=30% | ANPEP/CD79A/POU2AF1/NCF4/MNDA/CSF1R/GATA1/PROM1/CD19/IKZF1/IRAK1/CSF3R/IL7R/BLNK/BTK/MLF2/TCF3 |
| FUNG\_IL2\_SIGNALING\_2 | FUNG\_IL2\_SIGNALING\_2 | 12 | 0.674687 | 1.793031 | 0.009363 | 0.04296 | 0.03053 | 1940 | tags=50%, list=11%, signal=45% | CCL3/MYC/TNFRSF11B/DDX21/IL9/CARD9 |
| KRIGE\_AMINO\_ACID\_DEPRIVATION | KRIGE\_AMINO\_ACID\_DEPRIVATION | 25 | 0.548351 | 1.792311 | 0.003233 | 0.018325 | 0.013023 | 1840 | tags=36%, list=10%, signal=32% | CXCL8/CEBPB/VEGFA/SESN2/CDKN1A/FYN/ATF3/PSAT1/ATF5 |
| VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_DN | VART\_KSHV\_INFECTION\_ANGIOGENIC\_MARKERS\_DN | 128 | 0.391613 | 1.791883 | 8.23E-05 | 0.000859 | 0.000611 | 3160 | tags=30%, list=18%, signal=25% | CXCL8/CCL2/OSM/TIMP3/ANPEP/TYMP/TNFRSF12A/CXCL1/VEGFA/KLK3/VEGFB/LPXN/MMP19/ANGPTL4/RHOB/FZD5/DVL1/FZD10/CXCL5/PLG/EPHA2/NRP2/CSF3/PROK2/NPPB/CHRM4/TMEM198B/CHGA/PTGS1/F2RL1/EPHA8/TMPRSS6/CXCR2/WNT7A/TGFA/STAB1/DLL1/MMP2/CD36 |
| VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_4\_UP | VANDESLUIS\_COMMD1\_TARGETS\_GROUP\_4\_UP | 16 | 0.623872 | 1.790967 | 0.004523 | 0.024141 | 0.017156 | 1369 | tags=31%, list=8%, signal=29% | APOE/SLC2A3/CA4/NR6A1/TTR |
| VECCHI\_GASTRIC\_CANCER\_ADVANCED\_VS\_EARLY\_UP | VECCHI\_GASTRIC\_CANCER\_ADVANCED\_VS\_EARLY\_UP | 163 | 0.378828 | 1.790297 | 1.78E-05 | 0.000233 | 0.000166 | 2001 | tags=22%, list=11%, signal=20% | SPP1/APOC1/HLA-DQB1/TIMP3/SLC2A3/CEMIP/PLAU/SOD2/IL6/PLA2G7/ITGBL1/MMP11/SULF1/SLC5A3/PLXDC2/GPNMB/SFRP2/COL1A2/GXYLT2/LPL/MAFB/ST3GAL1/FAP/IL24/GFPT2/HES2/BGN/ADAMTS2/BCAT1/SPOCK1/PRELP/C3AR1/CHST11/EFEMP1/CMTM3/DAB2 |
| JINESH\_BLEBBISHIELD\_TO\_IMMUNE\_CELL\_FUSION\_PBSHMS\_DN | JINESH\_BLEBBISHIELD\_TO\_IMMUNE\_CELL\_FUSION\_PBSHMS\_DN | 357 | 0.348416 | 1.790086 | 5.56E-08 | 1.46E-06 | 1.04E-06 | 1852 | tags=18%, list=10%, signal=17% | MMP7/CXCL8/UCP2/APOC1/CD74/BHLHE40/CSTB/HLA-DRA/SOD2/FBP1/NR1H3/FTL/CEBPD/NDRG1/C3/PLBD1/FCGRT/CXCL1/IL4I1/RGS2/IL1RN/PLIN2/TNFAIP2/CCL20/HCAR2/PGD/C15orf48/SCPEP1/VEGFA/CRABP2/PLEKHS1/INSIG1/SGK1/PLXDC2/SLPI/GPNMB/RAB38/STARD5/CFB/THBD/MLPH/MAFB/HLA-DMB/IMPDH1/SH3BP1/FOS/MX2/MTFP1/IER3/LAMP3/MT1A/OAS1/IRX3/XDH/AKR1C2/IRF9/SLC7A8/HCLS1/RHBDL3/OAS3/FCGBP/DTX3L/MID1IP1/ZIC2/SERPINB8 |
| WP\_TCELL\_RECEPTOR\_TCR\_SIGNALING\_PATHWAY | WP\_TCELL\_RECEPTOR\_TCR\_SIGNALING\_PATHWAY | 89 | 0.418653 | 1.790036 | 0.000468 | 0.003768 | 0.002678 | 2583 | tags=26%, list=14%, signal=22% | IL1B/CD83/CD4/IL6/SH2B3/WAS/NFATC1/VIM/VAV1/FYN/LCP2/CD8A/IL9/FOS/ITK/CD3E/MAP3K8/ICOS/IKBKB/IL1A/CD247/MAP4K1/CBLB |
| UROSEVIC\_RESPONSE\_TO\_IMIQUIMOD | UROSEVIC\_RESPONSE\_TO\_IMIQUIMOD | 18 | 0.596944 | 1.789672 | 0.008571 | 0.03987 | 0.028334 | 812 | tags=22%, list=5%, signal=21% | CCL8/IL6/IRF7/OASL |
| LEE\_DIFFERENTIATING\_T\_LYMPHOCYTE | LEE\_DIFFERENTIATING\_T\_LYMPHOCYTE | 179 | 0.374077 | 1.788616 | 3.48E-05 | 0.000409 | 0.000291 | 2492 | tags=25%, list=14%, signal=21% | UCP2/NCKAP1L/RGCC/ITGB2/LAPTM5/SELL/RAC2/BTG2/ZFP36L2/CORO1A/FAM107B/RNASET2/ARHGAP45/VAV1/ARHGAP30/LPXN/CYTH1/NLRC3/P2RY8/TRAPPC6A/RHOH/CD2/TRIM14/ITK/SATB1/IKZF1/USF3/SPATA13/HCLS1/AIF1/CD53/ICOS/NUP210/CBX4/CD48/AP1G2/SEMA4D/TBC1D10C/PGGHG/TMC6/CD247/IL7R/MAP4K1/SEC31B |
| HOFFMANN\_IMMATURE\_TO\_MATURE\_B\_LYMPHOCYTE\_UP | HOFFMANN\_IMMATURE\_TO\_MATURE\_B\_LYMPHOCYTE\_UP | 38 | 0.488225 | 1.787787 | 0.002376 | 0.014228 | 0.010111 | 2243 | tags=32%, list=12%, signal=28% | APOE/SELL/FCGRT/FXYD5/LRFN4/NGEF/SIAE/RHOH/CSF1/BGLAP/GAD1/MS4A6A |
| TENEDINI\_MEGAKARYOCYTE\_MARKERS | TENEDINI\_MEGAKARYOCYTE\_MARKERS | 61 | 0.450376 | 1.786607 | 0.001769 | 0.011323 | 0.008047 | 1761 | tags=23%, list=10%, signal=21% | IL1B/CXCL8/CXCL1/IL6/MYC/VEGFA/NFE2/GATA1/FOS/GP9/PPBP/CD9/MCL1/CCNE1 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_MACROPHAGE | ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_MACROPHAGE | 75 | 0.430813 | 1.784904 | 0.000616 | 0.004736 | 0.003366 | 2730 | tags=33%, list=15%, signal=28% | CTSH/CTSD/LGALS3BP/MSLN/PRSS3/CD81/ENO1/CFB/BGN/CREG1/ACTB/PSAT1/VCAM1/C2/RACK1/CST3/TIMP2/IGFBP4/ITIH2/ALDOA/CTSB/YWHAZ/LDHA/ANXA2/PGAM2 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_CDC25\_UP | CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_CDC25\_UP | 54 | 0.458856 | 1.784429 | 0.001901 | 0.011905 | 0.00846 | 1512 | tags=26%, list=8%, signal=24% | SPP1/CAPG/RGS16/ITGB7/CDKN1A/TGFBI/FXYD5/NGEF/KCNN4/SERPINA1/SEMA7A/TMSB4X/CRABP1/CD9 |
| RUTELLA\_RESPONSE\_TO\_HGF\_DN | RUTELLA\_RESPONSE\_TO\_HGF\_DN | 224 | 0.36407 | 1.784011 | 1.42E-05 | 0.000193 | 0.000137 | 2243 | tags=23%, list=12%, signal=21% | C5AR1/CD83/GADD45B/NAMPT/ADAM8/SLC2A3/TREM1/RGCC/HBEGF/HLA-E/SELL/RGS2/PLIN2/NLRP3/NR4A2/RNASET2/SCO2/PNP/AOAH/CDKN1A/IQGAP2/APLP2/DENND3/CYTH1/FYN/LMNB1/PELI1/STK17B/DUSP6/IER5/MAFB/CD14/IGFBP7/MX2/RUNX3/FCN1/FPR1/ST6GAL1/PLSCR1/GALC/SPOCK1/MCL1/AIF1/DNTTIP2/CFD/CD48/ITPK1/ACADVL/TUBA4A/EGR1/F2RL1/MS4A6A |
| ABBUD\_LIF\_SIGNALING\_1\_UP | ABBUD\_LIF\_SIGNALING\_1\_UP | 39 | 0.486231 | 1.783883 | 0.003472 | 0.019495 | 0.013854 | 3708 | tags=49%, list=21%, signal=39% | FBP1/BCL3/HAS1/CEBPB/SOCS3/IRF1/ST3GAL1/TMEM176A/CXCL14/TAPBP/RGS4/XBP1/ELF3/LRG1/KLF10/PTPN1/STAT3/TMEM176B/GPX3 |
| BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_UP | BOQUEST\_STEM\_CELL\_CULTURED\_VS\_FRESH\_UP | 408 | 0.343657 | 1.783847 | 2.47E-08 | 7.14E-07 | 5.07E-07 | 2246 | tags=21%, list=13%, signal=19% | APOE/CXCL8/APOC1/CCL2/CD83/GADD45B/NAMPT/SLC2A3/BHLHE40/CEMIP/CCL8/SLC7A5/SLC16A3/TNFAIP3/SOD2/HBEGF/NR1H3/JUNB/CCL3/PLBD1/CXCL1/CXCL2/PLTP/BTG2/MMP1/HLA-DPA1/RGS2/PFKFB3/GEM/MYC/TNFRSF11B/RGS16/TRIB1/DOK5/EIF1/GPRC5A/GAS7/SULF1/SLC5A3/IRF1/COMP/ATF3/GPNMB/PELI1/KLF4/NDRG2/LPL/ANGPTL4/SERPINE1/IER5/RHOB/OASL/MAFB/APOLD1/MX2/GDF15/TPST2/RRAD/CHI3L1/SEL1L3/MAP3K8/TMEM176A/GSN/ENG/PRELP/PSAT1/COLEC12/CD9/VCAM1/HAPLN1/RGS4/DUSP1/EIF5/SPTBN1/ATF5/SLC43A3/OLFML2A/PIK3IP1/MET/GBP2/HSPA6/SLC19A2/LTBP4/ANKRD36B/EGR1/G6PD/TPM4 |
| WP\_CANCER\_IMMUNOTHERAPY\_BY\_PD1\_BLOCKADE | WP\_CANCER\_IMMUNOTHERAPY\_BY\_PD1\_BLOCKADE | 23 | 0.558224 | 1.783826 | 0.004735 | 0.025149 | 0.017873 | 2488 | tags=39%, list=14%, signal=34% | HLA-DRB1/NFATC1/HLA-A/CD8A/CD3E/CD274/BATF/PDCD1/NFATC4 |
| PARK\_TRETINOIN\_RESPONSE | PARK\_TRETINOIN\_RESPONSE | 12 | 0.671201 | 1.783766 | 0.010755 | 0.04757 | 0.033806 | 788 | tags=33%, list=4%, signal=32% | PIM1/NDRG1/PLEK/THBD |
| TSUNODA\_CISPLATIN\_RESISTANCE\_DN | TSUNODA\_CISPLATIN\_RESISTANCE\_DN | 48 | 0.467867 | 1.783727 | 0.001707 | 0.01103 | 0.007839 | 2535 | tags=31%, list=14%, signal=27% | CD74/SLC7A5/HLA-DRB3/C3/S100P/HLA-DPA1/SGK1/FOLR2/CFB/ELL2/MAGEA9/IGFBP4/KYNU/SLC3A2/CTSB |
| WP\_SELENIUM\_MICRONUTRIENT\_NETWORK | WP\_SELENIUM\_MICRONUTRIENT\_NETWORK | 71 | 0.436268 | 1.782687 | 0.001062 | 0.007512 | 0.005339 | 2396 | tags=25%, list=13%, signal=22% | IL1B/ICAM1/CCL2/SOD2/IL6/HBB/SCARB1/NFKB2/SOD3/SERPINE1/PLG/MTHFR/XDH/FGB/TNF/PTGS1/KMO/KYNU |
| BAUS\_TFF2\_TARGETS\_UP | BAUS\_TFF2\_TARGETS\_UP | 31 | 0.511361 | 1.781558 | 0.002836 | 0.016493 | 0.011721 | 3682 | tags=39%, list=21%, signal=31% | APOC2/CCL8/HLA-E/IRF7/RBP2/ITLN1/SLC2A2/DGKA/LTB/TFF3/OGFR/TAP1 |
| PID\_INTEGRIN1\_PATHWAY | PID\_INTEGRIN1\_PATHWAY | 66 | 0.443502 | 1.781215 | 0.000515 | 0.004075 | 0.002896 | 1875 | tags=27%, list=10%, signal=25% | SPP1/PLAUR/PLAU/VEGFA/TNC/TGFBI/CD81/COL1A2/COL6A2/ITGA5/CD14/COL5A1/COL6A3/COL1A1/VCAM1/FGB/F13A1/IGSF8 |
| JEON\_SMAD6\_TARGETS\_UP | JEON\_SMAD6\_TARGETS\_UP | 24 | 0.551337 | 1.78092 | 0.005089 | 0.026555 | 0.018872 | 1253 | tags=21%, list=7%, signal=19% | MMP7/CXCL8/TRIB1/SERPINE1/CSF1 |
| ODONNELL\_TFRC\_TARGETS\_UP | ODONNELL\_TFRC\_TARGETS\_UP | 339 | 0.346033 | 1.779149 | 5.04E-07 | 1.09E-05 | 7.72E-06 | 3497 | tags=29%, list=19%, signal=24% | UCP2/HLA-DQB1/GADD45B/SIK1/SLC2A3/LYZ/RGS1/ITGAM/SQSTM1/CSRNP1/JUNB/PIM1/MYO1G/RGS2/SAMD4A/AVPR2/SAT1/BBC3/TRPM5/PTAFR/MXD1/EIF1/SESN2/CDKN1A/SPOCD1/SGK1/ADIRF/GSDMB/LTBR/LGALS9/LCP2/BIRC7/STK17B/FTH1/MYH1/CACNA1A/SLC22A23/PTCRA/SERPINA1/RRAD/CD27/AP3B2/TPM3/F11R/SATB1/PSORS1C2/HOXB13/FER1L4/TNFRSF10D/JSRP1/FOXE1/SLAMF8/GALNT13/PDE4B/SCARA5/DCANP1/CYP4F2/DUSP1/IQCF5/IL4R/MYO7A/CD37/TNFSF9/LILRB3/C3orf52/GPSM1/DAPK2/PTGS1/IL21/IKBKB/PLIN5/AAK1/NRCAM/ORM1/PRM1/LINC00520/AQP2/CD7/KLF10/MTNR1A/SCIN/HSPB9/PRKG2/DGKA/SLC10A1/SLC6A19/CARMIL3/OR5V1/UNC13D/PLCXD2/FCRL4/TIAM1/IL5/CCDC13/KCNH6/IGSF3/PRKD2/FAM83E/KLF6/CASS4 |
| WINZEN\_DEGRADED\_VIA\_KHSRP | WINZEN\_DEGRADED\_VIA\_KHSRP | 95 | 0.412204 | 1.778657 | 0.00027 | 0.002382 | 0.001693 | 3361 | tags=34%, list=19%, signal=28% | CXCL8/PLAUR/DUSP5/HBEGF/AMOTL2/CXCL2/IL6/GEM/CCL20/NR4A2/CTSL/SELE/HAS2/DUSP6/ERRFI1/GDF15/F11R/PTHLH/CSF2/GPR183/TNF/PTGER4/CPEB4/SPRY2/DKK1/PDGFA/YRDC/EDN2/TGFA/SMPDL3A/SPRY4/CXCL11 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_DN | CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_DN | 140 | 0.384249 | 1.778084 | 0.000155 | 0.001486 | 0.001056 | 3201 | tags=28%, list=18%, signal=23% | CAPG/TIMP3/BHLHE40/IFI30/TMBIM1/PNPLA2/ACP2/PLTP/AVPI1/PLIN2/ADM/COL4A2/GAS7/MSLN/FXYD5/TRIM47/KLF4/LGALS9/KLK8/ELN/SLC29A1/SLC35E4/SLC1A5/CD9/RNPEPL1/DUSP1/NPPB/KLF2/DAB2/IGFBP4/BAIAP2/TOB1/AQP1/LAMC2/CLIC1/MAP6/NFIC/NUPR1/CD34 |
| BAKER\_HEMATOPOIESIS\_STAT3\_TARGETS | BAKER\_HEMATOPOIESIS\_STAT3\_TARGETS | 15 | 0.625499 | 1.776826 | 0.007584 | 0.036286 | 0.025787 | 1573 | tags=40%, list=9%, signal=37% | MMP9/PIM1/PIM2/MYC/HIF1A/MCL1 |
| ROZANOV\_MMP14\_TARGETS\_SUBSET | ROZANOV\_MMP14\_TARGETS\_SUBSET | 33 | 0.506331 | 1.776819 | 0.004225 | 0.022797 | 0.016201 | 2166 | tags=36%, list=12%, signal=32% | TIMP3/TNFRSF11B/PLXND1/COL4A2/GJB2/HAS2/COL6A2/COL5A1/EMILIN2/HIF1A/EFEMP1/PTGS1 |
| GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_DN | GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_DN | 85 | 0.418451 | 1.775625 | 0.000585 | 0.00454 | 0.003226 | 757 | tags=15%, list=4%, signal=15% | IL1B/CXCL8/HLA-DQB1/HLA-DRB4/ADAM8/SOD2/SELL/CXCL1/CXCL2/HLA-DPA1/EMP1/DUSP6/PPFIBP1 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_CLUSTER\_DN | BOYLAN\_MULTIPLE\_MYELOMA\_C\_CLUSTER\_DN | 30 | 0.513857 | 1.773524 | 0.003618 | 0.020106 | 0.014289 | 384 | tags=17%, list=2%, signal=16% | SPP1/RGS1/SAT1/RAB20/SERPINB1 |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_16D\_DN | TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_16D\_DN | 114 | 0.392203 | 1.772221 | 0.00028 | 0.002443 | 0.001736 | 4430 | tags=37%, list=25%, signal=28% | APOE/SDS/CSTB/MMP9/SLC16A10/S100P/CXCL1/ALK/PLTP/MMP1/PGLYRP1/NUDT7/SLPI/OLFML2B/TMIGD3/CXCL5/CHI3L1/NRP2/ELL2/FCGBP/KLF2/RGL4/IGFBP4/VSTM1/NUPR1/LGALS12/CD59/KCNJ5/CEACAM8/PYROXD2/ITGA9/PTX3/TNS1/BPI/LTF/DPP4/SULT1C2/HP/ADGRG3/ABCA13/CYP4F3/PADI4 |
| SCHLESINGER\_METHYLATED\_DE\_NOVO\_IN\_CANCER | SCHLESINGER\_METHYLATED\_DE\_NOVO\_IN\_CANCER | 86 | 0.416504 | 1.770511 | 0.00098 | 0.007048 | 0.005008 | 2624 | tags=31%, list=15%, signal=27% | CEBPD/NDRG1/EGR3/RBP4/MYOD1/GJB2/KLF4/DUSP6/THBD/APBA1/MT1A/HOXB13/AMN/HRK/PTHLH/CALCA/FOXE1/VDR/EVA1C/CCNA1/HIC1/TNFSF9/NPTX1/SLIT1/RARA/LAMA3/NTRK2 |
| JOHNSTONE\_PARVB\_TARGETS\_3\_UP | JOHNSTONE\_PARVB\_TARGETS\_3\_UP | 405 | 0.340311 | 1.769701 | 5.98E-08 | 1.54E-06 | 1.10E-06 | 2257 | tags=22%, list=13%, signal=20% | HLA-DRB1/ICAM1/HMOX1/DUSP5/BHLHE40/CSTB/LIPA/HLA-DRA/PLAU/SQSTM1/HLA-F/NR1H3/HLA-E/SCD/FLNA/CEBPD/LRP1/C3/LIF/BCL3/HLA-DPA1/PLIN2/HLA-DPB1/CTSD/TNFAIP2/CTSL/PSAP/LGALS3BP/CEBPB/HLA-B/TRIB1/RNASET2/EFHD2/VIM/GRN/TGFBI/HLA-G/PBXIP1/PTPRE/APLP2/FXYD5/TKT/ATP1A1/KLF4/PPFIBP1/THBD/RHOB/MAP2K3/ST3GAL1/ERRFI1/TCIRG1/GFPT2/F11R/SFXN3/SLC25A39/CSF1/GSN/ARHGAP5/PARD6B/CREG1/ACTB/CD276/TAPBP/ABHD12/SARDH/CD9/ADGRG1/TMC8/VAT1/VAV2/TNIP1/SPTBN1/GSTK1/SMURF1/TIMP1/CMTM3/DPP7/CDCP1/SEZ6L2/RETSAT/LMTK2/RBCK1/CST3/TIMP2/BRI3/ACADVL/IKBKB/TMC6/MOV10/ACSL1 |
| ONO\_AML1\_TARGETS\_DN | ONO\_AML1\_TARGETS\_DN | 39 | 0.482248 | 1.76927 | 0.004327 | 0.02328 | 0.016544 | 4044 | tags=46%, list=23%, signal=36% | SELL/CCR8/SOCS3/CCR7/CD81/RUNX3/SGO1/IL4R/IL17RA/IL21/IGFBP4/CD84/CXCR3/IL4/TCF3/GPR83/ADGRE5/TNFSF8 |
| RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_UP | RUTELLA\_RESPONSE\_TO\_CSF2RB\_AND\_IL4\_UP | 327 | 0.344852 | 1.768474 | 6.68E-07 | 1.40E-05 | 9.93E-06 | 2581 | tags=23%, list=14%, signal=20% | SPP1/APOE/APOC1/HLA-DRB4/CD83/GADD45B/ACP5/CCL18/MMP12/DUSP5/ADAM8/MMP9/CCL8/SQSTM1/SCD/NDRG1/SLC12A8/TMEM51/DCSTAMP/MATK/RAB13/GABBR1/CDKN1A/PVR/SLC5A3/TRIP10/CCR7/CYTH1/CD81/LMNB1/GPNMB/TUBA1C/RAB38/ADAMDEC1/ABCG1/SERPINE1/IER5/FTH1/PPARD/GPR137B/ST3GAL1/FZD5/TFRC/SLAMF7/LAMP3/RUNX3/CHI3L1/TNIP3/MOB1A/TMBIM6/GCLM/CREG1/SLAMF8/CD9/VDR/VAT1/CD80/EBI3/SLAMF1/NECTIN2/GM2A/BIRC3/NPC1/CCL17/TNS3/IL1A/TRAF1/SCAMP2/KMO/KYNU/SLC1A3/DUOX1/CD84/SLC3A2/CXCL9/CREBL2 |
| LIN\_NPAS4\_TARGETS\_DN | LIN\_NPAS4\_TARGETS\_DN | 65 | 0.439295 | 1.768442 | 0.00073 | 0.005461 | 0.003881 | 2575 | tags=28%, list=14%, signal=24% | CRTAC1/SERTAD1/EGR3/ARC/ITPRIP/EGR2/ETV3/IER5/KCNA4/ERRFI1/NPTX2/RGS4/ARL5B/NPTX1/EGR1/DDI2/IER2/SORCS3 |
| COATES\_MACROPHAGE\_M1\_VS\_M2\_DN | COATES\_MACROPHAGE\_M1\_VS\_M2\_DN | 76 | 0.424275 | 1.768316 | 0.000942 | 0.006816 | 0.004844 | 2019 | tags=28%, list=11%, signal=25% | C1QC/ADAM8/C1QB/RGCC/HLA-E/SCD/CTSL/HLA-B/VEGFA/EFHD2/ANKRD37/MYO1F/GDF15/CD300C/XDH/MCOLN3/TLR1/CHIA/PROCR/MFGE8/ATP6V0D2 |
| WOTTON\_RUNX\_TARGETS\_UP | WOTTON\_RUNX\_TARGETS\_UP | 20 | 0.568806 | 1.766314 | 0.010011 | 0.045056 | 0.032019 | 1948 | tags=30%, list=11%, signal=27% | CCL2/RGCC/RNF19B/ANGPTL4/RDH10/LY6E |
| HOLLERN\_SQUAMOUS\_BREAST\_TUMOR | HOLLERN\_SQUAMOUS\_BREAST\_TUMOR | 168 | 0.372914 | 1.766164 | 3.26E-05 | 0.000386 | 0.000274 | 4493 | tags=39%, list=25%, signal=29% | MMP7/KRT17/KRT14/PIM1/EGR2/KRTAP4-1/SERPINB9/GAS7/KRT79/CYSRT1/KLF4/KRTAP19-3/IL24/KRTAP15-1/PSORS1C2/TGM3/TUBB3/KRTAP13-3/RDH10/RPTN/KRT6A/GPR87/WNT6/KRT36/SERPINB8/FGFBP1/DST/KRT85/C11orf96/SERPINB2/POLR3G/SCEL/KRT6C/GSDMA/ADH7/KRT33B/ZNF703/FABP5/KRT34/SYT9/GJA1/TP63/SP6/N4BP3/MSX2/HOXC13/NFE2L3/KRT83/KRT16/CRYM/CDSN/KRT35/SPRR1A/KRTAP4-3/ACSBG1/IL36RN/DSC1/ATG9B/SFN/TCHH/ATP12A/TUBA8/PADI4/LRP4/BMP7 |
| ZHU\_SKIL\_TARGETS\_UP | ZHU\_SKIL\_TARGETS\_UP | 19 | 0.576473 | 1.765552 | 0.008483 | 0.039563 | 0.028116 | 764 | tags=26%, list=4%, signal=25% | PLAU/JUNB/VEGFA/CDKN1A/SERPINE1 |
| WP\_THYMIC\_STROMAL\_LYMPHOPOIETIN\_TSLP\_SIGNALING\_PATHWAY | WP\_THYMIC\_STROMAL\_LYMPHOPOIETIN\_TSLP\_SIGNALING\_PATHWAY | 47 | 0.46354 | 1.764215 | 0.002308 | 0.013947 | 0.009912 | 890 | tags=19%, list=5%, signal=18% | CXCL8/IL6/LYN/MYC/NFKB2/CCL11/FYN/RELB/HCK |
| MARKS\_HDAC\_TARGETS\_DN | MARKS\_HDAC\_TARGETS\_DN | 15 | 0.620954 | 1.763914 | 0.008125 | 0.038355 | 0.027258 | 1735 | tags=33%, list=10%, signal=30% | IL1B/IL6/VEGFA/HIF1A/TNF |
| REACTOME\_TRANSPORT\_OF\_CONNEXONS\_TO\_THE\_PLASMA\_MEMBRANE | REACTOME\_TRANSPORT\_OF\_CONNEXONS\_TO\_THE\_PLASMA\_MEMBRANE | 20 | 0.567845 | 1.76333 | 0.010317 | 0.046086 | 0.032751 | 3098 | tags=45%, list=17%, signal=37% | TUBB2A/GJB2/TUBB4B/TUBA1C/TUBB1/TUBB3/TUBA4A/GJA1/TUBA4B |
| STEGER\_ADIPOGENESIS\_UP | STEGER\_ADIPOGENESIS\_UP | 21 | 0.562156 | 1.76195 | 0.004431 | 0.023741 | 0.016872 | 5275 | tags=62%, list=29%, signal=44% | NR1H3/PNPLA2/FABP4/CIDEC/PCK1/ACSL1/ADIPOQ/CD36/HSD11B1/RETN/HP/FFAR2/CEBPA |
| HIRSCH\_CELLULAR\_TRANSFORMATION\_SIGNATURE\_UP | HIRSCH\_CELLULAR\_TRANSFORMATION\_SIGNATURE\_UP | 237 | 0.356545 | 1.760526 | 4.51E-06 | 7.03E-05 | 5.00E-05 | 1990 | tags=23%, list=11%, signal=21% | IL1B/PLAUR/FOSL1/PHLDA1/SLC2A3/STC1/PLAU/SOD2/OLR1/JUNB/BCL3/IL6/IRF7/RGS2/SAT1/CTSL/RNF19B/TOR4A/VEGFA/SERPINB1/EIF1/PNP/SOCS3/GRN/AGFG1/SLCO4A1/CYTH1/CD68/FYN/PELI1/TNFRSF21/SBNO2/SERPINA1/LAMP3/EPHA2/EEF1A2/PLSCR1/ANKRD28/HIF1A/IRF9/CSF3/BCL2A1/TNFAIP1/IRF2/PDE4B/PROCR/DUSP1/LY96/CYB5R2/MID1IP1/KLF2/IVNS1ABP/TIMP1/CDCP1 |
| BLANCO\_MELO\_INFLUENZA\_A\_INFECTION\_A594\_CELLS\_UP | BLANCO\_MELO\_INFLUENZA\_A\_INFECTION\_A594\_CELLS\_UP | 36 | 0.49139 | 1.760334 | 0.00561 | 0.028667 | 0.020373 | 1012 | tags=22%, list=6%, signal=21% | CXCL8/CCL2/PLAUR/STC1/HBEGF/RGS2/DUSP6/CXCL5 |
| PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_5 | PEDERSEN\_METASTASIS\_BY\_ERBB2\_ISOFORM\_5 | 11 | 0.67916 | 1.76025 | 0.007548 | 0.036173 | 0.025707 | 1801 | tags=45%, list=10%, signal=41% | RGCC/NR4A2/FOS/S100A10/PTGER4 |
| THUM\_MIR21\_TARGETS\_HEART\_DISEASE\_UP | THUM\_MIR21\_TARGETS\_HEART\_DISEASE\_UP | 16 | 0.612859 | 1.759353 | 0.006688 | 0.032822 | 0.023325 | 1353 | tags=44%, list=8%, signal=40% | APOD/POSTN/COL1A2/IGFBP7/ELN/BGN/COL1A1 |
| NAKAJIMA\_EOSINOPHIL | NAKAJIMA\_EOSINOPHIL | 25 | 0.537803 | 1.757835 | 0.004845 | 0.025608 | 0.018199 | 4097 | tags=44%, list=23%, signal=34% | CCL3/S100P/SMAD7/SLC29A1/CFD/OLIG2/CCL4/TFF3/MARCKSL1/PNPLA6/CNR2 |
| BROWNE\_HCMV\_INFECTION\_6HR\_UP | BROWNE\_HCMV\_INFECTION\_6HR\_UP | 62 | 0.441597 | 1.757303 | 0.001781 | 0.011327 | 0.00805 | 3476 | tags=35%, list=19%, signal=29% | HBEGF/FBP1/IRF7/PNP/JMJD6/MNDA/MSLN/OASL/OAS1/CH25H/PRB1/RIPK1/TNFSF9/TRIM26/CNP/AMD1/SFPQ/PDYN/C4BPB/SOX10/HLF/PTGDS |
| KASLER\_HDAC7\_TARGETS\_1\_DN | KASLER\_HDAC7\_TARGETS\_1\_DN | 17 | 0.598343 | 1.757265 | 0.007276 | 0.035213 | 0.025024 | 1316 | tags=35%, list=7%, signal=33% | SPP1/HK2/C3/TRIP10/SEMA4A/COL6A3 |
| DER\_IFN\_BETA\_RESPONSE\_UP | DER\_IFN\_BETA\_RESPONSE\_UP | 101 | 0.40269 | 1.756234 | 0.000291 | 0.002527 | 0.001796 | 1497 | tags=24%, list=8%, signal=22% | PLAUR/FOSL1/LIPA/IFI30/HLA-E/CEBPD/IL6/ZFP36L2/DDX17/HLA-A/DDX21/IRF1/MAP3K10/OASL/HLA-C/TRIM14/MX2/GBP1/PLSCR1/TRIM21/OAS1/HIF1A/IRF9/IRF2 |
| SERVITJA\_LIVER\_HNF1A\_TARGETS\_UP | SERVITJA\_LIVER\_HNF1A\_TARGETS\_UP | 134 | 0.380497 | 1.755634 | 0.000146 | 0.001411 | 0.001003 | 1717 | tags=19%, list=10%, signal=18% | UCP2/CCL2/GADD45B/MMP12/SCD/TNFRSF12A/CXCL2/PLTP/SLC20A1/RGS2/RGS16/SERPINB1/RRAGD/CRAT/SLPI/HTRA3/LPL/SERPINE1/FABP4/CYP2B6/ADRA2A/ADAMTS4/ADORA1/PSAT1/LY6K/TRPM4 |
| REACTOME\_SENSORY\_PERCEPTION | REACTOME\_SENSORY\_PERCEPTION | 267 | 0.349753 | 1.755317 | 3.81E-06 | 6.09E-05 | 4.33E-05 | 4138 | tags=35%, list=23%, signal=27% | APOE/APOC2/LRP1/PLCB2/STRA6/TRPM5/MPP1/RBP4/WHRN/RDH8/GRK1/OR2S2/LRP10/LPL/GNG13/TAS2R41/PDE6A/TAS2R46/SYN1/OR2J3/TAS2R40/OR8K3/OR11H6/OR11A1/CLPS/MYO15A/OR1C1/OR3A1/GUCY2D/OR11H4/EPB41L3/TAS1R2/GSN/TAS2R20/TTR/ACTB/RCVRN/SYP/SCN2B/EPS8L2/LHFPL5/RBP2/TRPM4/SPTBN1/EPB41L1/RDH10/MYO7A/OR2T1/TAS1R3/OR52B6/OR2AT4/OR1E1/SDR9C7/RETSAT/GRM4/CHRNA10/OR10H5/TAS2R16/OR7G2/EZR/MYO3A/RLBP1/OPN1MW/APOA2/GRK7/KCNQ4/DHRS9/KCNN2/LRAT/RAB3A/AWAT2/PDE6B/OR4C12/XIRP2/CNGA4/GPC1/STX1A/OR10G7/TAS2R4/LRRC52/RGS9BP/DHRS3/CABP2/TAS2R43/ATP2B2/MSN/APOA1/OR4D2/OR10G3/USH1G/OR2B11/OR10A6/GUCA1C/GNGT1 |
| DOANE\_BREAST\_CANCER\_ESR1\_DN | DOANE\_BREAST\_CANCER\_ESR1\_DN | 43 | 0.467308 | 1.75523 | 0.005485 | 0.028216 | 0.020052 | 657 | tags=19%, list=4%, signal=18% | MMP7/CXCL8/SOD2/GAL/MIA/MSLN/SLPI/ZIC1 |
| PID\_IL6\_7\_PATHWAY | PID\_IL6\_7\_PATHWAY | 47 | 0.461144 | 1.755098 | 0.002541 | 0.015034 | 0.010684 | 942 | tags=23%, list=5%, signal=22% | JUNB/CEBPD/IL6/MYC/CEBPB/SOCS3/VAV1/IRF1/PTPRE/HCK/FOS |
| JINESH\_BLEBBISHIELD\_TRANSFORMED\_STEM\_CELL\_SPHERES\_UP | JINESH\_BLEBBISHIELD\_TRANSFORMED\_STEM\_CELL\_SPHERES\_UP | 165 | 0.372033 | 1.755078 | 5.72E-05 | 0.000628 | 0.000447 | 1301 | tags=16%, list=7%, signal=15% | MMP7/SPP1/HMOX1/CEMIP/RGCC/SOD2/OLR1/FTL/PIM1/GK/EMP1/PGD/EFHD2/CHMP1B/GPAT3/SPOCD1/SRXN1/SERPINE1/TNFRSF21/FTH1/MLPH/ST3GAL1/LAMP3/ALDH1A1/MT1A/OAS1 |
| WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_PUBERTY\_STAGE\_2\_OF\_4 | WP\_MAMMARY\_GLAND\_DEVELOPMENT\_PATHWAY\_PUBERTY\_STAGE\_2\_OF\_4 | 13 | 0.641778 | 1.752472 | 0.008469 | 0.039533 | 0.028095 | 2338 | tags=38%, list=13%, signal=33% | FOSL1/MYC/VIM/TIMP1/AREG |
| SCHLINGEMANN\_SKIN\_CARCINOGENESIS\_TPA\_DN | SCHLINGEMANN\_SKIN\_CARCINOGENESIS\_TPA\_DN | 25 | 0.535824 | 1.751366 | 0.005296 | 0.027452 | 0.019509 | 2935 | tags=44%, list=16%, signal=37% | APOC1/GRN/CCL27/COL1A2/TMEM255A/GMPR/COL1A1/CCL21/CD247/THRSP/MXRA8 |
| IZADPANAH\_STEM\_CELL\_ADIPOSE\_VS\_BONE\_UP | IZADPANAH\_STEM\_CELL\_ADIPOSE\_VS\_BONE\_UP | 124 | 0.384285 | 1.751216 | 0.000406 | 0.003388 | 0.002408 | 1894 | tags=20%, list=11%, signal=18% | FOSL1/HMOX1/GAP43/MT1G/HLA-F/COTL1/GPR84/TUBB2A/LYN/MT2A/C15orf48/HLA-B/VEGFA/SERPINB1/MAB21L2/HAS2/DUSP6/LMNA/TCIRG1/TPST2/SNX8/LAP3/IRX5/PHLDA2/NOCT |
| GUENTHER\_GROWTH\_SPHERICAL\_VS\_ADHERENT\_UP | GUENTHER\_GROWTH\_SPHERICAL\_VS\_ADHERENT\_UP | 21 | 0.558505 | 1.750507 | 0.004885 | 0.025772 | 0.018315 | 1973 | tags=38%, list=11%, signal=34% | CSPG5/ADGRG1/CELSR2/MAP2/PCSK1N/MAGED4B/OLIG2/GRIA2 |
| SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_2 | SHIN\_B\_CELL\_LYMPHOMA\_CLUSTER\_2 | 30 | 0.506996 | 1.749843 | 0.004411 | 0.023659 | 0.016814 | 4085 | tags=37%, list=23%, signal=28% | GADD45B/FOSB/MYC/POU2AF1/TNFSF13B/XBP1/MBD1/PRDM1/HOXC13/RFNG/BTG3 |
| MARTIN\_VIRAL\_GPCR\_SIGNALING\_UP | MARTIN\_VIRAL\_GPCR\_SIGNALING\_UP | 86 | 0.41151 | 1.749282 | 0.001244 | 0.008529 | 0.006061 | 3232 | tags=33%, list=18%, signal=27% | SPP1/CCL2/TTYH3/C3/CXCL2/GNPNAT1/MYC/VEGFA/SOD3/TARS2/IGFBP7/PLD4/EPB41L3/SLC29A1/VCAM1/ACTA2/GTF3C1/CA2/OPN4/INHBB/TRPV6/EPHX1/CXCL9/LATS2/IQGAP1/KLK11/SP6/PDE6B |
| WP\_ADIPOGENESIS | WP\_ADIPOGENESIS | 129 | 0.381357 | 1.74867 | 0.000245 | 0.002207 | 0.001569 | 2985 | tags=29%, list=17%, signal=24% | OSM/GADD45B/NAMPT/NR1H3/SCD/CEBPD/LIF/IL6/PLIN2/PLIN1/CEBPB/EGR2/SOCS3/CDKN1A/LPL/SERPINE1/LMNA/SOCS1/PPARD/DVL1/HMGA1/MEF2A/HIF1A/SPOCK1/UCP1/TNF/AGPAT2/CFD/ASIP/PCK1/RARA/KLF7/WNT1/SREBF1/DDIT3/ADIPOQ/CNTFR |
| BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_UP | BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_UP | 187 | 0.363362 | 1.74688 | 3.90E-05 | 0.000448 | 0.000319 | 1177 | tags=15%, list=7%, signal=14% | APOE/ICAM1/ADAM8/TNFRSF1B/IFI30/RGS1/SOD2/NR1H3/CEBPD/TYMP/M6PR/TNFAIP2/PIM2/PSAP/IL32/PTPN6/ITGB7/GABBR1/SOCS3/NFKB2/IRF1/CYBA/RELB/ETV6/LAG3/NFKBIE/PPIF/CD274 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_DN | HAHTOLA\_MYCOSIS\_FUNGOIDES\_DN | 15 | 0.614711 | 1.746181 | 0.009208 | 0.04243 | 0.030153 | 1951 | tags=47%, list=11%, signal=42% | HLA-DQB1/FLNA/ZFP36L2/JCHAIN/IKZF1/CD37/PIK3IP1 |
| BIOCARTA\_AHSP\_PATHWAY | BIOCARTA\_AHSP\_PATHWAY | 11 | 0.673583 | 1.745796 | 0.008744 | 0.040537 | 0.028808 | 2009 | tags=45%, list=11%, signal=40% | HBB/HBA2/GATA1/AHSP/ALAS2 |
| BOSCO\_ALLERGEN\_INDUCED\_TH2\_ASSOCIATED\_MODULE | BOSCO\_ALLERGEN\_INDUCED\_TH2\_ASSOCIATED\_MODULE | 141 | 0.376035 | 1.745528 | 0.00028 | 0.002443 | 0.001736 | 3261 | tags=28%, list=18%, signal=23% | IL1B/CD83/DUSP5/BHLHE40/LIF/RRAGD/CCL1/JCHAIN/LCP2/DCDC1/STK17B/ENO1/SGSH/SOCS1/FURIN/ITK/LRFN2/IKZF1/CSF1/SEMA7A/BATF/ELL2/XBP1/IL4R/CISH/IMMT/NRCAM/RAB19/OR5AN1/CD84/RAB30/CYSLTR2/DUSP4/SLC26A11/SNTB1/SLC39A8/STAT4/CD200R1/TIAM1/IL5 |
| BIOCARTA\_ETS\_PATHWAY | BIOCARTA\_ETS\_PATHWAY | 17 | 0.594314 | 1.74543 | 0.008279 | 0.038814 | 0.027584 | 1253 | tags=24%, list=7%, signal=22% | ETV3/CSF1R/FOS/CSF1 |
| KEGG\_PRION\_DISEASES | KEGG\_PRION\_DISEASES | 35 | 0.488519 | 1.745129 | 0.006237 | 0.031047 | 0.022064 | 606 | tags=17%, list=3%, signal=17% | IL1B/C1QC/C1QB/IL6/C8B/FYN |
| ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN | ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN | 42 | 0.462724 | 1.74455 | 0.006814 | 0.033336 | 0.02369 | 2247 | tags=26%, list=13%, signal=23% | SPI1/EGR3/MYC/LMNB1/RHOG/RHOH/RUNX3/GBP1/TNF/IL4R/FOXM1 |
| REACTOME\_AMYLOID\_FIBER\_FORMATION | REACTOME\_AMYLOID\_FIBER\_FORMATION | 51 | 0.452891 | 1.743369 | 0.002058 | 0.012748 | 0.009059 | 2064 | tags=29%, list=11%, signal=26% | APOE/LYZ/TGFBI/NPPA/FURIN/GGA3/GSN/CALCA/TTR/SNCA/B2M/MFGE8/UBC/NAT8/CST3 |
| JEPSEN\_SMRT\_TARGETS | JEPSEN\_SMRT\_TARGETS | 33 | 0.496726 | 1.743115 | 0.005725 | 0.029089 | 0.020672 | 3242 | tags=42%, list=18%, signal=35% | APOE/HMOX1/TNFRSF12A/KDM6B/SRXN1/PPP1R1A/SYT12/HMGA1/PRDM15/TIMP1/EGR1/PDGFA/ARL8B/SPRY4 |
| WP\_CCL18\_SIGNALING\_PATHWAY | WP\_CCL18\_SIGNALING\_PATHWAY | 38 | 0.475826 | 1.742384 | 0.003999 | 0.021772 | 0.015473 | 1625 | tags=34%, list=9%, signal=31% | MMP9/MYC/CCR8/SNAI1/VIM/NEFL/MIAT/ATF3/COL1A2/HIF1A/CSF2/VCAM1/ACTA2 |
| SHEN\_SMARCA2\_TARGETS\_DN | SHEN\_SMARCA2\_TARGETS\_DN | 290 | 0.344918 | 1.742117 | 2.16E-06 | 3.77E-05 | 2.68E-05 | 3691 | tags=30%, list=21%, signal=24% | TREM1/CYTH4/IL1RN/TNFAIP2/NLRP3/PLEK/SNAI1/TEX15/NFATC1/ETV3/C6orf15/NPPA/CLCF1/NR6A1/CALB2/BPY2/MMP19/AQP8/KIR3DL2/KCNJ10/PDE6A/HLA-DOA/PTCRA/SIGLEC7/SULT1B1/ATP10B/PSORS1C2/TNR/GABRG2/DDN/FBLN1/GLRA1/CSNK1D/HYAL4/GPR31/VDR/FGB/LIPC/TNF/SEMA6B/KCNJ4/DIAPH1/NOX5/NOCT/PRDM14/ALAS2/LILRB3/CCDC9/KRT85/TYR/TAS2R16/RSPH6A/KMO/TROAP/CENPI/CYP11A1/CPSF1/AQP5/ALDH3B1/ICOSLG/UPK2/KHSRP/TBX6/SOX21/MAT1A/CD82/ADAM5/AMHR2/MAP1A/MEPE/KIR2DS3/SOX10/CHRNA3/MIER2/CACNG3/CYP2D7/C15orf39/TTTY2/CLCN1/SSX3/KIR3DL3/CPNE7/FOXA2/CFP/GPR75/TRMT61A/FUT2 |
| REACTOME\_ASSEMBLY\_OF\_ACTIVE\_LPL\_AND\_LIPC\_LIPASE\_COMPLEXES | REACTOME\_ASSEMBLY\_OF\_ACTIVE\_LPL\_AND\_LIPC\_LIPASE\_COMPLEXES | 19 | 0.568798 | 1.742045 | 0.010776 | 0.047621 | 0.033843 | 2442 | tags=42%, list=14%, signal=36% | APOC2/LPL/ANGPTL4/FURIN/CREB3L3/LIPC/CIDEC/APOA5 |
| REACTOME\_G\_ALPHA\_I\_SIGNALLING\_EVENTS | REACTOME\_G\_ALPHA\_I\_SIGNALLING\_EVENTS | 304 | 0.342693 | 1.73873 | 3.74E-06 | 6.01E-05 | 4.27E-05 | 2225 | tags=22%, list=12%, signal=19% | CXCL8/C5AR1/RGS1/GAL/GNA15/C3/CXCL1/CXCL2/SST/PDE4A/CCL20/GPSM3/HCAR2/CCR8/PPY/PSAP/RGS16/PLCB2/GABBR1/BDKRB1/CCL27/HTR1B/CXCL16/CCR7/FPR3/OXER1/OPRK1/CCL1/NMU/GNG13/TAS2R41/GNG8/ADCY7/ADRA2A/TAS2R46/RXFP4/TAS2R40/CXCL5/FPR2/FPR1/ADORA1/TAS1R2/TAS2R42/TAS2R20/GNAI2/PPBP/GPR31/CCL21/GPR183/CCR10/RLN3/PDE4B/CXCR1/C3AR1/RGS4/PCP2/LPAR2/CHRM4/GRM3/TAS1R3/TAS2R9/GPSM1/CAMKK2/CASR/GRM4/GNG7 |
| DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_DN | DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_DN | 25 | 0.531231 | 1.736353 | 0.005822 | 0.029388 | 0.020885 | 2423 | tags=40%, list=13%, signal=35% | SAT1/FCER1G/CD27/GLUL/TMSB4X/PPBP/TLR1/CTSG/LY96/DOK1 |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_DN | CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_DN | 136 | 0.37625 | 1.736337 | 0.000136 | 0.001325 | 0.000942 | 2096 | tags=26%, list=12%, signal=24% | TIMP3/IFI30/AMOTL2/PLTP/TUBB2A/ADM/PNP/SOCS3/COL4A2/MSLN/SLPI/ATF3/TRIM47/LGALS9/COL1A2/LPL/PER1/COL5A1/FOS/ALDH1A1/PCOLCE/ELN/MAN2B1/GSN/SLC29A1/COL1A1/SLC1A5/CD9/VDR/RNPEPL1/TP53INP2/DUSP1/SPTBN1/KLF2/INPP5A/STK10 |
| WP\_TRANSCRIPTIONAL\_CASCADE\_REGULATING\_ADIPOGENESIS | WP\_TRANSCRIPTIONAL\_CASCADE\_REGULATING\_ADIPOGENESIS | 13 | 0.635712 | 1.735908 | 0.009712 | 0.044189 | 0.031404 | 2880 | tags=46%, list=16%, signal=39% | CEBPD/CEBPB/EGR2/KLF2/SREBF1/DDIT3 |
| BERENJENO\_TRANSFORMED\_BY\_RHOA\_FOREVER\_DN | BERENJENO\_TRANSFORMED\_BY\_RHOA\_FOREVER\_DN | 28 | 0.518814 | 1.735612 | 0.00456 | 0.024314 | 0.017279 | 1097 | tags=25%, list=6%, signal=24% | PLAUR/PHLDA1/POSTN/HBEGF/CXCL2/IER3/EPHA2 |
| SWEET\_KRAS\_TARGETS\_UP | SWEET\_KRAS\_TARGETS\_UP | 76 | 0.41632 | 1.735162 | 0.001428 | 0.009546 | 0.006784 | 1594 | tags=26%, list=9%, signal=24% | CCL2/NCF2/GADD45B/TIMP3/BHLHE40/JUNB/SNAI1/COL4A2/TGFBI/SGK1/SERPINE1/HGD/ADCY7/COL5A1/IGFBP7/GABARAPL1/MAP3K8/COL1A1/SPOCK1/ADGRG1 |
| BROWNE\_HCMV\_INFECTION\_8HR\_DN | BROWNE\_HCMV\_INFECTION\_8HR\_DN | 42 | 0.460171 | 1.734923 | 0.007661 | 0.036577 | 0.025994 | 2585 | tags=33%, list=14%, signal=29% | PLAU/CEBPD/PIM1/PLIN2/MYC/PLEKHO2/GZMK/LPXN/ZIC1/VDR/MSC/DST/GINS1/VWA5A |
| MIKKELSEN\_MCV6\_LCP\_WITH\_H3K4ME3 | MIKKELSEN\_MCV6\_LCP\_WITH\_H3K4ME3 | 153 | 0.369532 | 1.732789 | 8.59E-05 | 0.000888 | 0.000631 | 3058 | tags=31%, list=17%, signal=26% | LAPTM5/RNASE1/MYO1G/GPSM3/LGALS3BP/PLEKHS1/SERPINB9/CRB1/MSLN/KCNN4/LGALS9/ELOVL1/TRIM40/ALDH1A1/PCOLCE/TRIM21/TMEM176A/XDH/SLC29A1/LST1/C6orf118/CSF3/TGM3/PRELP/SCARA5/ADGRG1/DQX1/NPPB/SERPINB8/GPR35/FGFBP1/GBP2/IL17RC/TBC1D10C/CCDC9/ARAP1/MAB21L3/IL7R/GBGT1/IQSEC2/VWA5A/NYAP1/ALDH3B1/TREX1/SLC13A2/ROBO4/KLK11/UNC13D |
| WP\_ONCOSTATIN\_M\_SIGNALING\_PATHWAY | WP\_ONCOSTATIN\_M\_SIGNALING\_PATHWAY | 64 | 0.433027 | 1.732372 | 0.002362 | 0.014183 | 0.010079 | 942 | tags=19%, list=5%, signal=18% | CCL2/OSM/TIMP3/JUNB/MMP1/MMP13/CEBPB/VEGFA/SOCS3/PXN/SERPINE1/FOS |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINDED\_IN\_ERYTHROCYTE\_UP | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_SUSTAINDED\_IN\_ERYTHROCYTE\_UP | 44 | 0.45995 | 1.731927 | 0.003643 | 0.020191 | 0.014349 | 3454 | tags=43%, list=19%, signal=35% | ECM1/IL1RN/EMP1/DUSP6/GDF15/CH25H/ALDH1A2/GBP2/HOMER3/ACSL1/NRCAM/AMIGO2/P2RX4/TCF7L2/ANXA2/DDR1/NQO1/TMEM176B/KLF6 |
| BEIER\_GLIOMA\_STEM\_CELL\_DN | BEIER\_GLIOMA\_STEM\_CELL\_DN | 62 | 0.435211 | 1.731887 | 0.002367 | 0.014191 | 0.010085 | 1067 | tags=19%, list=6%, signal=18% | HLA-DRB1/HLA-DQB1/CD74/HLA-DRA/HBEGF/LAPTM5/HLA-DPA1/GPNMB/FTH1/CACNA1A/HLA-DMB/DDAH2 |
| WP\_OXIDATIVE\_STRESS\_RESPONSE | WP\_OXIDATIVE\_STRESS\_RESPONSE | 33 | 0.493432 | 1.731557 | 0.006357 | 0.031585 | 0.022446 | 3792 | tags=42%, list=21%, signal=34% | HMOX1/SOD2/JUNB/SOD3/FOS/XDH/NOX5/TXN2/NOX3/UGT1A6/NQO1/GPX3/CAT/NFKB1 |
| WP\_ACUTE\_VIRAL\_MYOCARDITIS | WP\_ACUTE\_VIRAL\_MYOCARDITIS | 86 | 0.407306 | 1.731411 | 0.001518 | 0.010101 | 0.007179 | 1735 | tags=23%, list=10%, signal=21% | MMP9/CD4/ITGB2/RAC2/IL6/KRT8/NOD2/NFKB2/GSK3B/FYN/SOCS1/NOS1/PTCRA/MYH6/ACTB/IL12B/ABL2/CD80/AIF1/TNF |
| MCBRYAN\_PUBERTAL\_BREAST\_3\_4WK\_UP | MCBRYAN\_PUBERTAL\_BREAST\_3\_4WK\_UP | 202 | 0.355805 | 1.730142 | 4.16E-05 | 0.000471 | 0.000334 | 4028 | tags=35%, list=22%, signal=27% | SPP1/HLA-DRB1/APOC2/PHLDA1/KRT14/SCD/TNFRSF12A/SLC25A24/ADM/TMEM51/ST14/KRT8/EGR2/TNC/HAS2/IGFBP2/JCHAIN/MLPH/MAFB/LALBA/SERPINA1/PI16/SGTB/CHI3L1/GABARAPL1/BTN1A1/GMPR/GSN/IRX3/ACSF2/GALC/CXCL14/BASP1/CSN3/KCNB1/MFGE8/TFCP2L1/GM2A/INHBB/SOCS6/EFEMP1/CDCP1/ESRP1/TMPRSS2/SLC38A10/SOX9/AQP5/MUC15/ATP6V0A1/TJP2/RNF149/COMT/GJA1/C1orf210/SLC39A8/TGIF1/MAPK8IP1/NFE2L3/GABRP/CITED1/TFAP2C/TSPAN8/SPRR1A/CSPG4/HSD11B1/GATA3/FSCN1/FN1/ATP1A3/LGALS3 |
| IGLESIAS\_E2F\_TARGETS\_UP | IGLESIAS\_E2F\_TARGETS\_UP | 143 | 0.372125 | 1.729223 | 0.000274 | 0.002403 | 0.001707 | 2009 | tags=24%, list=11%, signal=22% | APOE/CD74/C1QC/C1QB/POSTN/LYZ/LAPTM5/C3/TUBB2A/EMP1/SAT1/HBA2/TYROBP/APLP2/COL1A2/COL6A2/LPL/RHOB/LMNA/LCP1/ELN/GSN/COL6A3/COL1A1/GNAI2/CD9/S100A10/ACTA2/ARSA/B2M/CD53/CFD/HNRNPA2B1/DAB2/ALAS2 |
| WP\_INTERACTIONS\_BETWEEN\_IMMUNE\_CELLS\_AND\_MICRORNAS\_IN\_TUMOR\_MICROENVIRONMENT | WP\_INTERACTIONS\_BETWEEN\_IMMUNE\_CELLS\_AND\_MICRORNAS\_IN\_TUMOR\_MICROENVIRONMENT | 28 | 0.516633 | 1.728318 | 0.005036 | 0.026408 | 0.018767 | 3340 | tags=46%, list=19%, signal=38% | CCL2/NFKB2/IL2RG/SOCS1/CTLA4/CD274/CD80/IL4R/TLR8/PDCD1/IL2RB/IL4/STAT3 |
| WP\_COMPLEMENT\_ACTIVATION | WP\_COMPLEMENT\_ACTIVATION | 22 | 0.548346 | 1.725937 | 0.00593 | 0.02985 | 0.021213 | 1920 | tags=32%, list=11%, signal=28% | C1QC/C1QB/C3/C8B/CFB/C2/CFD |
| WENG\_POR\_TARGETS\_LIVER\_UP | WENG\_POR\_TARGETS\_LIVER\_UP | 40 | 0.470631 | 1.725357 | 0.005949 | 0.029918 | 0.021262 | 1543 | tags=22%, list=9%, signal=21% | GADD45B/HMOX1/PGD/AQP8/LPL/CYP2B6/ALDH1A1/TMEM176A/CYP2C18 |
| BAELDE\_DIABETIC\_NEPHROPATHY\_UP | BAELDE\_DIABETIC\_NEPHROPATHY\_UP | 88 | 0.403029 | 1.725286 | 0.001358 | 0.009152 | 0.006504 | 1679 | tags=20%, list=9%, signal=19% | HLA-DRB1/LYZ/MT1G/FBP1/FTL/CCL3/CTSH/HBB/MT2A/MYC/ENO1/ATP10B/SLC6A7/STARD8/ENG/ADGRG1/VAT1/CYP4F2 |
| HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_LOW\_RISK\_UP | HOFMANN\_MYELODYSPLASTIC\_SYNDROM\_LOW\_RISK\_UP | 21 | 0.550182 | 1.724419 | 0.006551 | 0.032342 | 0.022985 | 1489 | tags=33%, list=8%, signal=31% | CCL18/GNA15/CDKN1A/ATF3/ZNF136/PTPN7/TBR1 |
| NABA\_ECM\_AFFILIATED | NABA\_ECM\_AFFILIATED | 161 | 0.364623 | 1.724093 | 0.000101 | 0.001027 | 0.00073 | 5547 | tags=47%, list=31%, signal=33% | C1QC/C1QB/CLEC5A/COLEC10/PLXND1/OPRPN/LMAN1/REG1A/LGALS16/PLXDC2/LGALS2/LGALS9/HPX/SEMA4A/SFTA3/CLEC17A/FCN1/CSPG5/PLXNA3/SEMA7A/CLEC4D/C1QTNF2/COLEC12/PLXNB3/SEMA6B/ITLN1/LGALS7/SEMA4D/CLEC18C/CLEC11A/CLEC2A/MUC12/MUC4/ANXA5/MUC15/ANXA2/CLEC4G/CLEC3A/PLXNA4/C1QL2/SEMA6D/LGALSL/LGALS12/ELFN1/MUC2/GPC1/SEMA4C/CSPG4/PLXNA2/LGALS3/CLEC10A/C1QL1/ANXA13/SFTPB/SFTPA1/LGALS8/SFTPD/C1QTNF9/OVGP1/SEMA3G/SFTPC/CLEC18B/LGALS9B/SDC2/REG3A/SEMA3D/MUC5B/MUC6/SEMA4G/CLEC18A/CLEC3B/SEMA5B/SDC1/ANXA10/CLEC4A/GPC5 |
| CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_UP | CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_UP | 230 | 0.349459 | 1.723769 | 3.29E-05 | 0.000388 | 0.000276 | 2954 | tags=29%, list=16%, signal=24% | SPP1/HMOX1/SLC7A5/SLC16A3/SQSTM1/BLVRB/ZNF10/GEM/SAT1/BBC3/CEBPB/MXD1/CDKN1A/JMJD6/LPXN/MBOAT7/ATF3/ABCG1/SERPINE1/LMNA/FOS/GDF15/LAMP3/RRAD/NQO2/MAGEB1/GLA/TNFRSF10B/GABARAPL1/SEL1L3/SYT2/GCLM/KLHL21/TAF13/CALCA/TOM1/ZYX/ACTA2/ALDH1A2/CYP4F2/MAP2/DUSP1/EIF5/ELL2/TAC1/PHLDA2/SERPINB8/ADRM1/HEG1/TNFSF9/HSPA6/ACADVL/TUBA4A/F2RL1/ACHE/DTNA/DOK1/SLC3A2/MDM2/ANXA2/DUSP4/SLC38A6/TNKS/ZNF185/DDIT3/MAP1A |
| GERHOLD\_RESPONSE\_TO\_TZD\_DN | GERHOLD\_RESPONSE\_TO\_TZD\_DN | 13 | 0.63113 | 1.723399 | 0.011422 | 0.049905 | 0.035465 | 1920 | tags=46%, list=11%, signal=41% | APOE/CEBPD/CD81/MNT/MCL1/CFD |
| BIOCARTA\_NTHI\_PATHWAY | BIOCARTA\_NTHI\_PATHWAY | 23 | 0.539291 | 1.723325 | 0.007045 | 0.034248 | 0.024339 | 2180 | tags=26%, list=12%, signal=23% | IL1B/CXCL8/MAP2K3/DUSP1/TNF/IKBKB |
| XU\_RESPONSE\_TO\_TRETINOIN\_UP | XU\_RESPONSE\_TO\_TRETINOIN\_UP | 16 | 0.599683 | 1.721527 | 0.009557 | 0.043649 | 0.03102 | 3026 | tags=38%, list=17%, signal=31% | PIM1/PGD/WAS/COL9A2/ELF4/PTK2B |
| MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_UP | MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_UP | 78 | 0.409464 | 1.720822 | 0.001771 | 0.011323 | 0.008047 | 1836 | tags=19%, list=10%, signal=17% | HS3ST2/PLAUR/CXCL1/SPATA2L/GABBR1/NPPA/BIRC7/LMNA/MAP2K3/PI16/AMN/HRK/NOXA1/C3AR1/NUP210 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_AP1\_SURVIVAL\_SIGNALING | WP\_PHOTODYNAMIC\_THERAPYINDUCED\_AP1\_SURVIVAL\_SIGNALING | 50 | 0.444736 | 1.719888 | 0.004495 | 0.024038 | 0.017083 | 1761 | tags=22%, list=10%, signal=20% | HBEGF/JUNB/BCL3/IL6/MAPK13/CDKN1A/MAP2K3/FOS/MCL1/TNF/CCNE1 |
| KANNAN\_TP53\_TARGETS\_UP | KANNAN\_TP53\_TARGETS\_UP | 56 | 0.43852 | 1.718404 | 0.002116 | 0.012972 | 0.009219 | 1960 | tags=27%, list=11%, signal=24% | APOC1/BTG2/PLK3/PLIN2/BBC3/CDKN1A/NEFL/ATF3/GDF15/NINJ1/SMAD7/MAN2B1/ENG/ACTA2/SCGB2A2 |
| REACTOME\_GP1B\_IX\_V\_ACTIVATION\_SIGNALLING | REACTOME\_GP1B\_IX\_V\_ACTIVATION\_SIGNALLING | 11 | 0.662944 | 1.718221 | 0.009491 | 0.04344 | 0.030871 | 2578 | tags=55%, list=14%, signal=47% | FLNA/COL1A2/COL1A1/GP9/GP5/YWHAZ |
| WP\_MONOAMINE\_TRANSPORT | WP\_MONOAMINE\_TRANSPORT | 32 | 0.490104 | 1.717247 | 0.006658 | 0.032752 | 0.023276 | 2567 | tags=28%, list=14%, signal=24% | IL1B/TNFRSF11B/NOS1/SYN1/TNF/NECTIN2/ACHE/SCAMP2/SLC6A2 |
| FOROUTAN\_INTEGRATED\_TGFB\_EMT\_DN | FOROUTAN\_INTEGRATED\_TGFB\_EMT\_DN | 71 | 0.419727 | 1.715099 | 0.002533 | 0.015001 | 0.010661 | 2680 | tags=27%, list=15%, signal=23% | MMP7/CEBPD/S100P/EMP1/SERPINB1/SLPI/CFB/GDF15/CD9/INHBB/LY6E/FGFBP1/BIRC3/ESRP1/DST/ELF3/AREG/GRTP1/TJP2 |
| KEGG\_TASTE\_TRANSDUCTION | KEGG\_TASTE\_TRANSDUCTION | 49 | 0.447637 | 1.714865 | 0.00552 | 0.028314 | 0.020122 | 2296 | tags=31%, list=13%, signal=27% | PLCB2/TRPM5/GNG13/TAS2R41/CACNA1A/TAS2R46/TAS2R40/TAS1R2/TAS2R42/TAS2R20/KCNB1/TAS1R3/TAS2R9/GRM4/TAS2R16 |
| SHIPP\_DLBCL\_CURED\_VS\_FATAL\_UP | SHIPP\_DLBCL\_CURED\_VS\_FATAL\_UP | 39 | 0.46715 | 1.713879 | 0.007836 | 0.037253 | 0.026474 | 2425 | tags=26%, list=14%, signal=22% | GNA15/SLC11A1/MMP1/ARC/SELE/GATA1/NPTX2/EYA3/SERPINB8/FXYD2 |
| KEGG\_LEUKOCYTE\_TRANSENDOTHELIAL\_MIGRATION | KEGG\_LEUKOCYTE\_TRANSENDOTHELIAL\_MIGRATION | 114 | 0.379245 | 1.713668 | 0.000787 | 0.005819 | 0.004135 | 1641 | tags=18%, list=9%, signal=17% | ICAM1/NCF2/MMP9/ITGB2/ITGAM/RAC2/MAPK13/VAV1/PXN/NCF4/CYBA/RHOH/ITK/CLDN2/F11R/ARHGAP5/ACTB/GNAI2/CTNNA3/VCAM1/VAV2 |
| BURTON\_ADIPOGENESIS\_2 | BURTON\_ADIPOGENESIS\_2 | 69 | 0.422258 | 1.712342 | 0.001345 | 0.009105 | 0.00647 | 1936 | tags=28%, list=11%, signal=25% | FOSL1/LIMK1/SPHK1/AVPI1/SNAI1/PGD/SRXN1/SPSB1/KCNN4/ITGA5/ST3GAL1/FTSJ3/BCAT1/XDH/TUBB3/VDR/MCL1/IVNS1ABP/TIMP1 |
| REACTOME\_ANTIMICROBIAL\_PEPTIDES | REACTOME\_ANTIMICROBIAL\_PEPTIDES | 85 | 0.403049 | 1.710269 | 0.00135 | 0.009128 | 0.006487 | 4363 | tags=39%, list=24%, signal=30% | CD4/LYZ/SLC11A1/BPIFA1/PGLYRP1/PRSS3/GNLY/DEFB128/DEFB104B/BPIFA2/TLR1/CTSG/DEFA5/ART1/BPIFB1/ITLN1/CHGA/RNASE8/DEFB104A/DEFB114/S100A7/TLR2/DEFB106B/DEFB129/DEFB125/PGLYRP2/RNASE6/BPI/LTF/HTN3/DEFB103B/DEFB106A/PGLYRP3 |
| SPIRA\_SMOKERS\_LUNG\_CANCER\_UP | SPIRA\_SMOKERS\_LUNG\_CANCER\_UP | 38 | 0.466794 | 1.70931 | 0.005862 | 0.029554 | 0.021003 | 1423 | tags=26%, list=8%, signal=24% | CXCL8/RGS1/CXCL2/YWHAE/DUSP6/ATP6AP2/FOS/SERPINA1/PPBP/FCGR3A |
| GU\_PDEF\_TARGETS\_UP | GU\_PDEF\_TARGETS\_UP | 70 | 0.418925 | 1.708624 | 0.002691 | 0.015854 | 0.011267 | 1397 | tags=23%, list=8%, signal=21% | RAC2/VEGFA/VIM/TNC/COL4A2/TGFBI/VEGFB/COL6A2/ITGA5/SERPINE1/COL5A1/SERPINA1/COL6A3/HIF1A/COL1A1/SERPIND1 |
| BOSCO\_TH1\_CYTOTOXIC\_MODULE | BOSCO\_TH1\_CYTOTOXIC\_MODULE | 111 | 0.381135 | 1.707866 | 0.001169 | 0.008139 | 0.005784 | 3999 | tags=34%, list=22%, signal=27% | SDS/CEMIP/CCL8/HAMP/IL4I1/FAM20A/GZMK/SOCS1/OR6K6/GNLY/RUNX3/CTLA4/FCGR2B/CH25H/CRABP1/RHBDF2/F13A1/CD5/SLAMF1/ATF5/TMEM229B/CMPK2/IL21/FFAR3/LILRB5/CXCL9/STAB1/STAT4/PRF1/IL15RA/CXCL11/SMOX/FUT2/ITGA9/BATF2/HAPLN3/ANKRD22/NKG7 |
| FOROUTAN\_INTEGRATED\_TGFB\_EMT\_UP | FOROUTAN\_INTEGRATED\_TGFB\_EMT\_UP | 116 | 0.378488 | 1.707605 | 0.00095 | 0.006853 | 0.00487 | 1412 | tags=20%, list=8%, signal=18% | NCF2/GADD45B/HMOX1/POSTN/STC1/GAL/JUNB/SPHK1/MMP1/COL4A2/TGFBI/PLEK2/ITGA5/ANGPTL4/SERPINE1/COL5A1/IGFBP7/GFPT2/SMAD7/PTHLH/COL6A3/COL1A1/SPOCK1 |
| GEISS\_RESPONSE\_TO\_DSRNA\_UP | GEISS\_RESPONSE\_TO\_DSRNA\_UP | 39 | 0.464712 | 1.704934 | 0.008227 | 0.038637 | 0.027458 | 1154 | tags=26%, list=6%, signal=24% | CCL2/PLAUR/TNFAIP3/TNFAIP2/SAT1/IRF1/IQGAP2/ATF3/KLF4/GBP1 |
| KEGG\_NATURAL\_KILLER\_CELL\_MEDIATED\_CYTOTOXICITY | KEGG\_NATURAL\_KILLER\_CELL\_MEDIATED\_CYTOTOXICITY | 134 | 0.369496 | 1.704878 | 0.000374 | 0.003163 | 0.002248 | 3697 | tags=32%, list=21%, signal=26% | ICAM1/ITGB2/HLA-E/HCST/RAC2/PTPN6/HLA-B/NFATC1/HLA-A/RAET1L/TYROBP/VAV1/FCER1G/HLA-G/FYN/LCP2/KIR3DL2/HLA-C/TNFRSF10B/TNFRSF10D/CSF2/FCGR3A/VAV2/TNF/KIR2DL1/CD48/CD247/KIR2DS5/NFATC4/KIR2DL5A/ULBP1/NCR1/GRB2/KIR2DS3/PTK2B/IFNA16/IFNGR1/PRF1/KLRC1/IFNA13/KLRC2/FCGR3B/CHP1 |
| BIOCARTA\_EPONFKB\_PATHWAY | BIOCARTA\_EPONFKB\_PATHWAY | 11 | 0.657736 | 1.704723 | 0.010687 | 0.047307 | 0.03362 | 1334 | tags=36%, list=7%, signal=34% | SOD2/CDKN1A/EPOR/HIF1A |
| TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_UP | TURASHVILI\_BREAST\_LOBULAR\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_UP | 66 | 0.424262 | 1.703939 | 0.001213 | 0.008388 | 0.005961 | 1353 | tags=20%, list=8%, signal=18% | C5AR1/POSTN/LYZ/RGS1/MXRA5/SULF1/COMP/SFRP2/COL1A2/COL5A1/BGN/COL6A3/COL1A1 |
| KEGG\_PPAR\_SIGNALING\_PATHWAY | KEGG\_PPAR\_SIGNALING\_PATHWAY | 69 | 0.420018 | 1.70326 | 0.001521 | 0.010111 | 0.007185 | 3418 | tags=36%, list=19%, signal=29% | OLR1/NR1H3/SCD/CYP27A1/GK/PLTP/MMP1/PLIN1/LPL/ANGPTL4/FABP4/PPARD/FABP1/UCP1/UBC/PCK1/ACSL1/APOA5/APOA2/AQP7/ADIPOQ/FABP5/CD36/SCP2/CPT1B |
| NATSUME\_RESPONSE\_TO\_INTERFERON\_BETA\_UP | NATSUME\_RESPONSE\_TO\_INTERFERON\_BETA\_UP | 67 | 0.422965 | 1.701566 | 0.002363 | 0.014183 | 0.010079 | 3017 | tags=27%, list=17%, signal=22% | MMP7/TIMP3/BCL3/RGS2/FOSL2/HLA-B/IRF1/HLA-C/HRK/VCAM1/DST/IL18/CXCL9/TP53/PDGFA/SFPQ/DDIT3/ETV4 |
| MOREIRA\_RESPONSE\_TO\_TSA\_UP | MOREIRA\_RESPONSE\_TO\_TSA\_UP | 28 | 0.508503 | 1.701118 | 0.006067 | 0.030424 | 0.021621 | 3155 | tags=32%, list=18%, signal=27% | BHLHE40/MYC/CD2/TMSB4X/IGFBP4/RARA/TP53/CD82/CD6 |
| PID\_INTEGRIN5\_PATHWAY | PID\_INTEGRIN5\_PATHWAY | 16 | 0.592488 | 1.700873 | 0.011111 | 0.048863 | 0.034725 | 1522 | tags=25%, list=8%, signal=23% | PLAUR/PLAU/ITGB7/VCAM1 |
| MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_DN | MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_DN | 63 | 0.426771 | 1.700011 | 0.002181 | 0.013293 | 0.009447 | 1604 | tags=25%, list=9%, signal=23% | APOC2/APOD/PHLDA1/SOD2/BCL3/RGS2/ADM/TNFAIP2/NFKB2/SLPI/JCHAIN/VAPB/CHI3L1/ALDH1A1/CD9/CSN3 |
| ZWANG\_CLASS\_1\_TRANSIENTLY\_INDUCED\_BY\_EGF | ZWANG\_CLASS\_1\_TRANSIENTLY\_INDUCED\_BY\_EGF | 464 | 0.321443 | 1.697974 | 1.21E-07 | 2.92E-06 | 2.07E-06 | 3692 | tags=28%, list=21%, signal=23% | GADD45B/FOSL1/PLAU/SERTAD1/PIM1/LIF/AMOTL2/ZFP36L2/AVPI1/CTSH/PLK3/LYN/SAT1/MYC/RNF19B/EGR2/VEGFA/GPRC5A/TNC/PVR/SHB/SLC6A5/SGK1/SULF1/IRF1/PTPRE/SLC25A25/CYTH1/SLPI/HAS2/OR4F15/STK17B/ANGPTL4/IER5/SCARNA15/RHOB/MAP2K3/NIPAL1/XCL2/RASSF8/ST3GAL1/HLA-DOA/TCAF1/SGTB/TBC1D2/MNT/RPS4Y1/GBP1/CD274/NT5DC3/DUSP7/COQ10B/ANKRD28/SEMA7A/KLHL21/IRX3/EXT1/HIF1A/PARD6B/TNFAIP1/ABL2/FAM210A/LRRC8C/IRX5/EIF5/CCNA1/PTGER4/PHLDA2/SERPINB8/NOCT/CBX4/SOCS6/KIAA0513/PITX3/MET/CDCP1/DUSP10/DST/BNC1/DGKD/SLC19A2/GABRQ/GRM4/TPM4/RNASE8/SPRY2/AREG/VWA5B2/SOX9/KLF7/SERPINB2/MIR503HG/IRF2BP2/IER2/CBLB/ATP6V0A1/LAMA3/SLC12A7/DUSP4/MAT2A/SUN1/LAMC2/TLR2/RNH1/EDN2/CHD1/PTPN1/TGFA/PTK2B/RCAN3/LYPD5/STK40/ARL8A/LEKR1/TOMM34/SPRY4/TIAM1/LDHAL6A/SLC7A14/KLF6/OR10G7/FRMD8/KRT16/EHD4/TFAP2C/PIP5K1A/SGMS1/SMOX/SDE2/ZNF536/ZNF557 |
| DANG\_REGULATED\_BY\_MYC\_DN | DANG\_REGULATED\_BY\_MYC\_DN | 240 | 0.343238 | 1.697912 | 2.02E-05 | 0.00026 | 0.000185 | 2120 | tags=22%, list=12%, signal=19% | PLAUR/ACP5/HMOX1/CSTB/POSTN/LYZ/HBEGF/FTL/PIM1/NDRG1/DLEU2/FCGRT/SLC11A1/IRF7/ADM/MYC/FOSL2/OPRPN/SCPEP1/VEGFA/SERPINB1/CDKN1A/KLF4/COL1A2/DUSP6/CFB/SERPINE1/FTH1/ERRFI1/COL5A1/IER3/CD3E/SFXN3/MT1A/MAN2B1/GABRG2/OAS1/TMSB4X/COL6A3/COL1A1/SDCBP/VCAM1/SNCA/DUSP1/NPPB/IMPACT/GM2A/CD48/MAP3K1/GBP2/TIMP2/RPS12 |
| ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_FIBROBLAST | ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_FIBROBLAST | 132 | 0.369281 | 1.695983 | 0.000501 | 0.003972 | 0.002823 | 2730 | tags=28%, list=15%, signal=24% | SPP1/CAPG/PKM/ECM1/ARHGDIA/CTSD/LGALS3BP/PNP/MSLN/PRSS3/CD81/YWHAE/ENO1/CFB/ATP6AP2/LMNA/TINAGL1/EEF1A2/BGN/COL1A1/ACTB/CD9/VCAM1/ACTA2/KXD1/LAP3/GPI/C2/RACK1/CST3/TIMP2/ITIH2/ALDOA/CTSB/YWHAZ/LDHA/PGAM2 |
| SENESE\_HDAC2\_TARGETS\_UP | SENESE\_HDAC2\_TARGETS\_UP | 108 | 0.380152 | 1.695103 | 0.001626 | 0.010584 | 0.007521 | 2893 | tags=29%, list=16%, signal=24% | CXCL8/NAMPT/MMP9/ZC3H12A/PLAU/TNFAIP3/G0S2/TNFRSF11B/LMAN1/PXN/LPXN/HMGA1/TFRC/GFPT2/TNFRSF10B/RAB5A/CSF2/BCL2A1/MCL1/MYH16/CA2/TAF3/SLC16A1/BCLAF1/IL1A/IL7R/KYNU/CREBL2/ELK3/IQGAP1/TGM2 |
| KRASNOSELSKAYA\_ILF3\_TARGETS\_UP | KRASNOSELSKAYA\_ILF3\_TARGETS\_UP | 37 | 0.469425 | 1.694981 | 0.005465 | 0.028138 | 0.019996 | 1681 | tags=27%, list=9%, signal=25% | APOE/HBG1/PLAU/HLA-E/EMP1/FAP/MX2/PLSCR1/OAS1/RGS4 |
| SHEPARD\_BMYB\_MORPHOLINO\_DN | SHEPARD\_BMYB\_MORPHOLINO\_DN | 200 | 0.34939 | 1.693452 | 7.06E-05 | 0.000752 | 0.000534 | 2249 | tags=20%, list=13%, signal=18% | APOE/UCP2/KRT17/BLVRB/CEBPD/COTL1/C3/SLC25A24/RGS2/DDX17/CTSL/MT2A/STRA6/TACC3/RBP4/SULF1/MAB21L2/ATP1A1/IGFBP2/COL1A2/CFB/RAX/HMGA1/POU3F2/ACSF2/GALC/COL1A1/PSAT1/SARDH/PPP1R3G/S100A10/LYZL6/RGS4/PRB1/OTP/CA1/HNRNPA2B1/CIDEC/GPSM1/FOXM1/PCK1 |
| WP\_OVERLAP\_BETWEEN\_SIGNAL\_TRANSDUCTION\_PATHWAYS\_CONTRIBUTING\_TO\_LMNA\_LAMINOPATHIES | WP\_OVERLAP\_BETWEEN\_SIGNAL\_TRANSDUCTION\_PATHWAYS\_CONTRIBUTING\_TO\_LMNA\_LAMINOPATHIES | 55 | 0.433604 | 1.692539 | 0.005792 | 0.029298 | 0.020821 | 797 | tags=16%, list=4%, signal=16% | SPP1/JUNB/CEBPD/TNFRSF11B/CEBPB/CDKN1A/GSK3B/MYOD1/LMNA |
| WINNEPENNINCKX\_MELANOMA\_METASTASIS\_DN | WINNEPENNINCKX\_MELANOMA\_METASTASIS\_DN | 44 | 0.449029 | 1.690803 | 0.006237 | 0.031047 | 0.022064 | 3476 | tags=41%, list=19%, signal=33% | HLA-DQB1/LSP1/LGALS2/STMN2/PI16/EMX2OS/GPRIN2/CXCL14/CD1A/PIK3IP1/CST3/CRY2/SPPL3/LTB/ST7-AS1/KCTD11/TOM1L2/PTGDS |
| WP\_DEVELOPMENT\_AND\_HETEROGENEITY\_OF\_THE\_ILC\_FAMILY | WP\_DEVELOPMENT\_AND\_HETEROGENEITY\_OF\_THE\_ILC\_FAMILY | 32 | 0.482486 | 1.690555 | 0.007998 | 0.03789 | 0.026927 | 3261 | tags=34%, list=18%, signal=28% | IL1B/IL6/IL9/IL12B/TNF/IL22/IL18/AREG/NFIL3/IL4/IL5 |
| DARWICHE\_SKIN\_TUMOR\_PROMOTER\_UP | DARWICHE\_SKIN\_TUMOR\_PROMOTER\_UP | 133 | 0.366393 | 1.689345 | 0.00086 | 0.006295 | 0.004473 | 3049 | tags=29%, list=17%, signal=25% | SPP1/ICAM1/APOD/LYZ/FTL/HAMP/LIF/ARHGAP4/GSK3B/PLEKHA4/CXCL16/CACNA1E/SLPI/SOD3/ENO1/FABP4/RHOH/CHI3L1/DRD5/NCL/LYPD2/ENG/ACTA2/IRAK1/LY6E/CMPK2/SDR9C7/SMU1/HOMER3/RUBCN/LTBP4/ARAP1/BAIAP2/LDHA/CCDC38/SUN1/RBM12/TGFA/MAP6 |
| REACTOME\_EXTRACELLULAR\_MATRIX\_ORGANIZATION | REACTOME\_EXTRACELLULAR\_MATRIX\_ORGANIZATION | 297 | 0.333326 | 1.688461 | 8.88E-06 | 0.000125 | 8.91E-05 | 3129 | tags=24%, list=17%, signal=20% | MMP7/SPP1/ICAM1/MMP12/ITGAX/ADAM8/MMP9/ITGB2/ITGAM/MMP1/CTSD/CTSL/MMP11/MMP13/TPSAB1/ITGB7/TNC/COL4A2/MATN1/COMP/CAPN15/COL1A2/MMP19/COL6A2/ITGA5/SERPINE1/COL9A2/FURIN/COL5A1/PLG/ADAMTS4/F11R/PCOLCE/ELN/TNR/BGN/ADAMTS2/EMILIN2/COL6A3/COL1A1/TTR/FBLN1/VCAM1/CTSG/FGB/PCOLCE2/TNN/HAPLN1/COL19A1/CAPNS1/TIMP1/EFEMP1/TIMP2/DST/LTBP4/COL28A1/LAMC3/CTSB/TMPRSS6/LAMA3/PDGFA/COL6A6/LAMC2/COL21A1/CTRB1/FBLN2/COL6A5/CAPNS2/DDR1/ICAM4/MMP2/IBSP |
| SIMBULAN\_UV\_RESPONSE\_NORMAL\_DN | SIMBULAN\_UV\_RESPONSE\_NORMAL\_DN | 33 | 0.481147 | 1.688444 | 0.008491 | 0.039567 | 0.028119 | 1573 | tags=24%, list=9%, signal=22% | GADD45B/PHLDA1/EMP1/MYC/VEGFA/HAS2/DUSP7/MCL1 |
| REACTOME\_CHAPERONE\_MEDIATED\_AUTOPHAGY | REACTOME\_CHAPERONE\_MEDIATED\_AUTOPHAGY | 22 | 0.53619 | 1.687675 | 0.007384 | 0.035607 | 0.025305 | 1955 | tags=27%, list=11%, signal=24% | RNASE1/PLIN2/HBB/VIM/CETN1/UBC |
| JISON\_SICKLE\_CELL\_DISEASE\_UP | JISON\_SICKLE\_CELL\_DISEASE\_UP | 176 | 0.353083 | 1.684967 | 0.000204 | 0.00189 | 0.001343 | 3744 | tags=31%, list=21%, signal=25% | MARCO/GADD45B/HMOX1/SLC2A3/LIPA/IFI30/BLVRB/TYMP/TUBB2A/HBB/ADM/CTSL/PLEK/VSIG4/RAB13/HLA-A/MPP1/CDKN1A/NFE2/LMNB1/ATF3/OASL/PTCRA/NFKBIE/GBP1/FCGR1A/CD9/CTSG/F13A1/GM2A/TIMP1/LY6E/GBP2/NEK4/BLVRA/KYNU/P2RX4/DOK1/ATP6V0A1/ANXA2/SLC36A1/DDIT3/EIF4A3/CLIC1/ZNF267/CALR/AZU1/CTSA/TP53I11/TCN2/SMOX/TAP1/NGFR/SLC22A4 |
| SMID\_BREAST\_CANCER\_ERBB2\_UP | SMID\_BREAST\_CANCER\_ERBB2\_UP | 131 | 0.366536 | 1.683278 | 0.000563 | 0.004393 | 0.003122 | 2396 | tags=22%, list=13%, signal=19% | UCP2/APOD/SQSTM1/SCD/LRP1/GSDMB/SLPI/HPX/DUSP6/SLC37A1/SLC12A1/SCGB1D2/BRINP3/FGB/EFNA3/PSMD3/ELL2/TRPM4/KIAA0319L/MED24/KRT24/SCGB2A2/TRPV6/STARD3/G6PD/TMPRSS2/ACSL1/KMO/KYNU |
| GRUETZMANN\_PANCREATIC\_CANCER\_UP | GRUETZMANN\_PANCREATIC\_CANCER\_UP | 346 | 0.327449 | 1.68257 | 5.10E-06 | 7.73E-05 | 5.50E-05 | 3222 | tags=25%, list=18%, signal=21% | APOC1/PLAUR/TIMP3/DUSP5/CSTB/MMP9/POSTN/HLA-DRA/IFI30/PLAU/TNFAIP3/ITGB2/PKM/LAPTM5/NDRG1/GK/S100P/ECM1/IL1RN/ARHGDIA/GEM/CTSL/MMP11/HBA2/RGS16/PNP/CRABP2/GRN/TRIP10/APLP2/CYTH1/FYN/SLPI/MBOAT7/ATF3/KLF4/RHOG/LCP2/ABCG1/DUSP6/ENO1/SERPINE1/LCP1/FAP/MX2/SERPINA1/PCOLCE/GBP1/OAS1/COL1A1/FCGR3A/CD9/S100A10/CD53/GPI/IL4R/C2/GM2A/ATP6AP1/BIRC3/GBP2/DGKD/PTGS1/THBS2/AREG/KYNU/SLC1A3/HMGB2/RAP1GAP/ANXA5/YWHAZ/LDHA/LAMA3/EIF4G3/CRIP2/IQGAP1/DGKA/FBLN2/GRB2/FABP5/ELF4/CLIC1/MMP2/TFF3/MYL12A/TOP1 |
| MEISSNER\_NPC\_HCP\_WITH\_H3\_UNMETHYLATED | MEISSNER\_NPC\_HCP\_WITH\_H3\_UNMETHYLATED | 500 | 0.317416 | 1.680894 | 2.10E-07 | 4.78E-06 | 3.39E-06 | 4429 | tags=32%, list=25%, signal=25% | HS3ST2/CD83/RASD1/SLC16A3/RGCC/GAL/CYGB/PLBD1/CA4/BCL3/MAPK13/CTSH/QRFPR/KCNK13/TNFAIP2/ST14/HTRA4/TACR3/P4HTM/CLVS2/INSRR/MYOD1/ADAD1/CXCL16/CYBA/DDX4/LTBR/TRIM47/PHOX2A/HTRA3/NDRG2/NIPAL4/LPL/GNG13/GMIP/THBD/THEMIS2/SLC9A3/ADCY7/ITPRIPL2/AP1S3/RAX/FGF20/FOXI2/DRD5/F11R/EEF1A2/KLK8/SOX7/GUCY2D/AMN/EPPK1/HAND1/BCAT1/GSN/NAA11/TRIM58/CCDC125/SPTBN4/EPS8L2/PITPNM1/TBR1/BASP1/TMC8/PAQR5/LHFPL5/TTC22/ACOT6/RMDN2/OXT/TFCP2L1/PRDM14/PRSS50/AP1G2/SLC18A2/CDCP1/GRIN3B/MSH4/BIRC3/SYCP1/GABRQ/SLIT1/PKDREJ/MCUB/CAMKK2/ODF3B/F2RL1/TMPRSS2/DPEP3/STK32A/KCNK9/SYCE2/LAMC3/SEC31B/C5orf47/SLC6A2/ACP7/GPR176/SCIN/LGI3/LAMC2/NTSR1/RNH1/SHTN1/C20orf144/GNMT/ANO5/RHBG/DOC2B/CHRNA3/SLC26A8/MMP2/PDHA2/LEKR1/SLC39A8/CRISPLD2/CLIC6/RAB42/CLDN4/PARVB/CBLC/CPNE7/DMC1/RASSF10/C9orf50/HORMAD1/GPR83/ENTPD2/EDN3/DSC2/SPAG6/RAB3B/SPATA32/GPX3/LBX2/SLC22A4/BARHL1/KDF1/CSPG4/CRACR2B/PKIB/TRIM36/ARHGAP27/LGALS3/USH1G/ADGRE5/DSG2/CYP24A1/CD164L2/TNXB/DDX3X/GPR156/CDK18/ASIC2/GFRA2/B3GNT3/MATN4/PARP14/KCNIP1/SMC1B/ITGB4/SSTR4 |
| HELLER\_SILENCED\_BY\_METHYLATION\_DN | HELLER\_SILENCED\_BY\_METHYLATION\_DN | 101 | 0.385338 | 1.680559 | 0.000755 | 0.005639 | 0.004007 | 2880 | tags=28%, list=16%, signal=23% | HMOX1/HBG1/OLR1/LAPTM5/PLTP/HBB/MYC/RGS16/CEBPB/SLC5A3/ATF3/JCHAIN/PPFIBP1/RPS19/GDF15/PLG/INHBE/PSAT1/CA2/HSPA6/USH2A/F2RL1/AAK1/SLC3A2/RFPL2/ADCYAP1/TPP1/DDIT3 |
| CHEOK\_RESPONSE\_TO\_HD\_MTX\_UP | CHEOK\_RESPONSE\_TO\_HD\_MTX\_UP | 21 | 0.535684 | 1.678977 | 0.008753 | 0.040541 | 0.028811 | 2693 | tags=38%, list=15%, signal=32% | LYZ/FLNA/IL32/NFKB2/TYROBP/CTSG/BAX/ANXA2 |
| WESTON\_VEGFA\_TARGETS | WESTON\_VEGFA\_TARGETS | 93 | 0.390196 | 1.678914 | 0.001553 | 0.010272 | 0.0073 | 2142 | tags=25%, list=12%, signal=22% | CCL2/POSTN/FBP1/PIM1/DLEU2/CXCL1/MMP1/GEM/SAT1/IL32/PNP/COL1A2/FAP/ELN/BGN/COL6A3/CD9/PDE4B/HCLS1/EFEMP1/FGFBP1/SULT1E1/RALA |
| SHAFFER\_IRF4\_TARGETS\_IN\_PLASMA\_CELL\_VS\_MATURE\_B\_LYMPHOCYTE | SHAFFER\_IRF4\_TARGETS\_IN\_PLASMA\_CELL\_VS\_MATURE\_B\_LYMPHOCYTE | 66 | 0.417641 | 1.677349 | 0.001666 | 0.010817 | 0.007687 | 2948 | tags=29%, list=16%, signal=24% | NAMPT/DUSP5/TNFAIP3/TNFRSF12A/NDRG1/CCL3/AVPI1/PIM2/VEGFA/ATF3/SLAMF7/ELL2/AGPAT2/TIMP2/SLC3A2/NFIL3/SORT1/DDIT3/PABPC4 |
| FOROUTAN\_PRODRANK\_TGFB\_EMT\_UP | FOROUTAN\_PRODRANK\_TGFB\_EMT\_UP | 180 | 0.351313 | 1.676622 | 0.000147 | 0.001419 | 0.001009 | 2388 | tags=23%, list=13%, signal=20% | NCF2/PLAUR/GADD45B/HMOX1/SIK1/BHLHE40/MMP9/POSTN/STC1/GAL/JUNB/SPHK1/MMP1/VIM/COL4A2/TGFBI/CYTH1/PLEK2/ITGA5/ANGPTL4/SERPINE1/NRIP3/COL5A1/IGFBP7/TPST2/GFPT2/SMAD7/PTHLH/COL1A1/SPOCK1/CHST11/RGS4/C3orf52/DUSP10/TIMP2/TCF4/TUBA4A/RALA/TPM4/HS3ST3A1/AMIGO2/KLF7 |
| KEGG\_JAK\_STAT\_SIGNALING\_PATHWAY | KEGG\_JAK\_STAT\_SIGNALING\_PATHWAY | 153 | 0.357488 | 1.676314 | 0.00021 | 0.001936 | 0.001376 | 3534 | tags=30%, list=20%, signal=24% | OSM/PIM1/LIF/IL6/MYC/PTPN6/SOCS3/CSF2RB/IL2RG/IL3/IL10RA/CLCF1/EPOR/IL9R/SOCS1/IL9/IL24/SPRED1/IRF9/CSF2/CSF3/IL12B/IL22/IL4R/CISH/CSF3R/IL21/SPRY2/IL13RA2/IL7R/CBLB/GRB2/IL2RB/CNTFR/STAT4/IFNA16/IFNGR1/IL4/SPRY4/IL5/IL15RA/STAT3/CBLC/IFNL1/TYK2/IFNA13 |
| MIKKELSEN\_MEF\_ICP\_WITH\_H3K27ME3 | MIKKELSEN\_MEF\_ICP\_WITH\_H3K27ME3 | 193 | 0.347276 | 1.675877 | 0.000155 | 0.001487 | 0.001057 | 5293 | tags=41%, list=29%, signal=30% | HLA-E/TYMP/GPR84/BSX/NRG4/C6orf15/SOX17/NFE2/SLC9A4/TTLL6/LRRC4B/HOXB13/LY6G6E/BRINP3/NOXA1/NPVF/CDH12/UCP1/C11orf97/TNF/GRM3/SEZ6L2/ETV2/TBX22/ART3/ESRP1/NME8/SCN1A/NOTO/FFAR3/PRR19/NR5A1/CKMT1A/AQP2/DKK1/UPK2/WFDC10A/PDYN/RESP18/ARHGAP9/CPLX3/GAS2L2/LPO/KCNG4/EPN3/KCNJ5/KCNJ9/GFI1B/SLITRK1/ADAMTS16/OR2B11/CFC1B/NPY4R/MOGAT1/GNAT1/PDE1C/SLC38A5/TBATA/CD40/TMEM232/CALCB/NPHS1/TMEM45B/GIPR/ZIC4/LINGO4/SPINT4/PVALB/CD72/MIOX/ENTPD3/RLN1/NRL/TMEM63C/SOGA3/GDAP1L1/PHACTR1/APOA4/PDE11A/LRRC36 |
| WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFE2L2\_NRF2\_SURVIVAL\_SIGNALING | WP\_PHOTODYNAMIC\_THERAPYINDUCED\_NFE2L2\_NRF2\_SURVIVAL\_SIGNALING | 23 | 0.524421 | 1.675807 | 0.009982 | 0.044996 | 0.031977 | 1258 | tags=26%, list=7%, signal=24% | HMOX1/MAPK13/SRXN1/FOS/NQO2/GCLM |
| REACTOME\_METABOLISM\_OF\_FAT\_SOLUBLE\_VITAMINS | REACTOME\_METABOLISM\_OF\_FAT\_SOLUBLE\_VITAMINS | 48 | 0.43926 | 1.674664 | 0.005083 | 0.026549 | 0.018867 | 2661 | tags=25%, list=15%, signal=21% | APOE/APOC2/LRP1/RBP4/LRP10/LPL/CLPS/TTR/RBP2/RETSAT/TTPA/APOA2 |
| HOLLERN\_EMT\_BREAST\_TUMOR\_UP | HOLLERN\_EMT\_BREAST\_TUMOR\_UP | 134 | 0.362444 | 1.672337 | 0.000616 | 0.004736 | 0.003366 | 2519 | tags=28%, list=14%, signal=25% | SPI1/CCL8/PLA2G15/LSP1/LRP1/FCGRT/NRROS/VSIG4/PLXND1/WAS/NFATC1/VIM/MEDAG/PVR/FXYD5/FOLR2/HTRA3/STK17B/JDP2/ITGA5/CSF1R/RRAD/PCOLCE/CSF1/FCGR2B/SEMA7A/NRP2/MRAS/F13A1/SPTBN1/ADPRH/DAB2/TIMP2/MCUB/TRAF1/IGFBP4/DOK1/CFL2 |
| REACTOME\_REGULATION\_OF\_INSULIN\_LIKE\_GROWTH\_FACTOR\_IGF\_TRANSPORT\_AND\_UPTAKE\_BY\_INSULIN\_LIKE\_GROWTH\_FACTOR\_BINDING\_PROTEINS\_IGFBPS | REACTOME\_REGULATION\_OF\_INSULIN\_LIKE\_GROWTH\_FACTOR\_IGF\_TRANSPORT\_AND\_UPTAKE\_BY\_INSULIN\_LIKE\_GROWTH\_FACTOR\_BINDING\_PROTEINS\_IGFBPS | 121 | 0.36762 | 1.671892 | 0.001817 | 0.011494 | 0.008168 | 3184 | tags=29%, list=18%, signal=24% | SPP1/APOE/C3/PNPLA2/IL6/MMP1/FAM20A/TNC/KLK3/SERPINA10/MSLN/APLP2/IGFBP2/IGFBP7/SERPINA1/PLG/EVA1A/CSF1/SERPIND1/CTSG/PROC/CHGB/MFGE8/TIMP1/CST3/IGFBP4/APOA5/ITIH2/APOA2/MXRA8/MEPE/MGAT4A/MMP2/IGFALS/PDIA6 |
| BROWNE\_HCMV\_INFECTION\_10HR\_UP | BROWNE\_HCMV\_INFECTION\_10HR\_UP | 95 | 0.387143 | 1.670519 | 0.001395 | 0.00934 | 0.006638 | 1319 | tags=18%, list=7%, signal=17% | NCF2/CCL8/FOSB/SLC7A5/JUNB/ZNF10/SST/IL6/RGS2/NXF1/MNDA/PTPRE/IL24/RRAD/GBP1/HIC2/TAF13 |
| KIM\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_UP | KIM\_RESPONSE\_TO\_TSA\_AND\_DECITABINE\_UP | 120 | 0.368083 | 1.66903 | 0.001338 | 0.009069 | 0.006445 | 3656 | tags=32%, list=20%, signal=26% | KRT17/IFI30/S100P/SST/IRF7/PLIN2/SAT1/CD70/RNASET2/CDKN1A/NEFL/ADIRF/ATF3/TNXA/IL24/GDF15/MAGEA4/MAGEB1/CSPG5/TRIM58/HCLS1/TAC1/MAGEA9/CDCP1/F2RL1/IL18/TOB1/HNF4G/LAMC2/TGM2/NMB/FAM169A/GCHFR/SSX2/SSX3/COL3A1/TES/CYP3A5/MAGEB2 |
| WP\_INFLAMMATORY\_RESPONSE\_PATHWAY | WP\_INFLAMMATORY\_RESPONSE\_PATHWAY | 30 | 0.48352 | 1.668816 | 0.008706 | 0.040426 | 0.028729 | 4569 | tags=53%, list=25%, signal=40% | TNFRSF1B/IL2RG/COL1A2/COL1A1/CD80/IL4R/LAMC2/IL2RB/THBS3/IL4/IL5/COL3A1/FN1/THBS1/ZAP70/CD40 |
| GOLDRATH\_ANTIGEN\_RESPONSE | GOLDRATH\_ANTIGEN\_RESPONSE | 332 | 0.3258 | 1.668489 | 4.40E-06 | 6.90E-05 | 4.90E-05 | 2495 | tags=20%, list=14%, signal=18% | HLA-DRB1/CAPG/CD74/GADD45B/ITGAX/ADAM8/SLC2A3/BHLHE40/IFI30/HLA-E/PIM1/C3/CCL3/PLBD1/M6PR/LYN/CTSD/GEM/HBD/EMP1/IL18RAP/SCPEP1/EFHD2/GZMK/PGLYRP1/TACC3/TYROBP/SERPINB9/NCF4/CD68/FYN/SLPI/LMNB1/GZMM/JCHAIN/ABRACL/LMNA/MAP2K3/ERRFI1/LAG3/MYO1F/IER3/CTLA4/CBX5/PLD4/MT1A/PLSCR1/BCL2A1/CHIA/S100A10/DUSP1/ELL2/CA2/PTGER4/CISH/CA1/IRF8/CD48/ALAS2/CST3/UGT1A10/TPM4/FUT7/PDCD1/SYCE2/HMGB2/NFIL3 |
| KIM\_LIVER\_CANCER\_POOR\_SURVIVAL\_UP | KIM\_LIVER\_CANCER\_POOR\_SURVIVAL\_UP | 21 | 0.531451 | 1.66571 | 0.010123 | 0.045292 | 0.032187 | 2747 | tags=43%, list=15%, signal=36% | RGS1/PKM/SPHK1/RGS2/PFKFB3/PPT1/RALA/ALDOA/IQGAP1 |
| MITSIADES\_RESPONSE\_TO\_APLIDIN\_UP | MITSIADES\_RESPONSE\_TO\_APLIDIN\_UP | 405 | 0.320065 | 1.664417 | 2.54E-06 | 4.30E-05 | 3.06E-05 | 2535 | tags=21%, list=14%, signal=19% | ICAM1/GADD45B/FOSL1/DUSP2/NAMPT/DUSP5/SLC2A3/FOSB/HBEGF/SQSTM1/HLA-E/CCL3/BCL3/HLA-DRB6/IRF7/AVPI1/RGS2/PLIN2/PFKFB3/PDE4A/NXF1/GEM/ARC/DNAAF1/BBC3/SH2D2A/KDM6B/CEBPB/TRIB1/EIF1/SAMSN1/JMJD6/IRF1/SLCO4A1/COMP/DENND3/WHRN/KLF4/STK17B/ABCG1/DUSP6/RHOB/MAP2K3/SOCS1/OASL/THEMIS2/HLA-DOA/LY9/ZNF131/GLA/BSDC1/GABARAPL1/PLSCR1/PTHLH/GMPR/KLHL21/ATF7IP/OAS1/EXT1/COL1A1/FBP2/SPTBN4/BASP1/VDR/MCL1/AP5Z1/C3AR1/DUSP1/KLF2/GAD1/TIMP1/PIK3IP1/TNFSF9/CDKN2AIP/C3orf52/CIDEC/RUBCN/TPM4/MCF2L/AREG/KMO/TERF2IP/EZR/CD84/SLC3A2/CTSB |
| HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_UP | HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_UP | 256 | 0.332915 | 1.664055 | 5.57E-05 | 0.000615 | 0.000437 | 2049 | tags=20%, list=11%, signal=18% | CAPG/NCF2/TIMP3/DUSP5/TNFRSF1B/SLC16A3/CEBPD/CCL3/BTG2/IRF7/ARHGDIA/STXBP2/PIM2/BPIFA1/PNP/CDKN1A/GRN/TYROBP/FCER1G/PXN/HLA-G/PBXIP1/PRSS3/TKT/GRINA/ACAP1/ARHGEF1/LPL/DUSP6/MZB1/RHOB/THEMIS2/OR10H3/LAG3/TPST2/GGA3/MAN2B1/GLUL/CLCN5/ZYX/CD9/ARID5A/SNRNP70/CD5/OR2B2/DIAPH1/ATF5/GM2A/CBX4/TIMP1/PTPN18/NPTX1 |
| WESTON\_VEGFA\_TARGETS\_6HR | WESTON\_VEGFA\_TARGETS\_6HR | 49 | 0.434366 | 1.664024 | 0.009836 | 0.044525 | 0.031642 | 2042 | tags=24%, list=11%, signal=22% | CCL2/POSTN/FBP1/GEM/SAT1/COL1A2/FAP/ELN/BGN/COL6A3/FGFBP1/SULT1E1 |
| KIM\_BIPOLAR\_DISORDER\_OLIGODENDROCYTE\_DENSITY\_CORR\_DN | KIM\_BIPOLAR\_DISORDER\_OLIGODENDROCYTE\_DENSITY\_CORR\_DN | 85 | 0.392009 | 1.663421 | 0.002167 | 0.013256 | 0.00942 | 3322 | tags=34%, list=19%, signal=28% | MMP11/CGA/IL3/CCL1/SERPINE1/GPR39/SBNO2/EPHA2/ORC1/HRK/FBP2/P2RY11/CYP2C18/TNF/ICOS/MSC/PITX3/TRPV6/PRSS8/PLA2G1B/FUT7/GABRA3/CYP2A13/SCEL/ALX1/PMM2/CRYBB3/IL5/WNT11 |
| WP\_NRF2ARE\_REGULATION | WP\_NRF2ARE\_REGULATION | 23 | 0.520332 | 1.662742 | 0.01122 | 0.04926 | 0.035007 | 1258 | tags=22%, list=7%, signal=20% | HMOX1/CEBPB/GSK3B/FYN/GCLM |
| BIOCARTA\_IL1R\_PATHWAY | BIOCARTA\_IL1R\_PATHWAY | 31 | 0.476716 | 1.660855 | 0.00688 | 0.033628 | 0.023898 | 2602 | tags=32%, list=14%, signal=28% | IL1B/IL6/IL1RN/MAP2K3/TNF/IRAK1/MAP3K1/IKBKB/IL1A/IRAK2 |
| NAKAMURA\_ADIPOGENESIS\_EARLY\_UP | NAKAMURA\_ADIPOGENESIS\_EARLY\_UP | 58 | 0.423302 | 1.660534 | 0.00472 | 0.025094 | 0.017833 | 2910 | tags=34%, list=16%, signal=29% | GADD45B/SOD2/MT1G/CEBPD/SST/PLIN2/MYC/CHMP1B/INSIG1/NFE2/FYN/COL6A3/SIK2/GM2A/PDE6H/NFIL3/DKK1/MT1E/ELK3/MYADM |
| BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_DN | BLANCO\_MELO\_RESPIRATORY\_SYNCYTIAL\_VIRUS\_INFECTION\_A594\_CELLS\_DN | 103 | 0.377933 | 1.660029 | 0.004221 | 0.022797 | 0.016201 | 5296 | tags=50%, list=30%, signal=35% | VMO1/CCDC113/CHST13/CACNG4/TM4SF20/HLA-DMB/PROCA1/CLDN2/ELN/HOXB13/SLC52A1/CRIP3/AKR1C2/SCARA5/NT5M/FCGBP/INHBB/CIDEC/KRT4/MCF2L/VWA5B2/TONSL/RTN4RL1/RAP1GAP/SLC29A4/LTB/CDH17/SYNGR4/APOH/BCAS1/MMP24/RDM1/SFRP4/CKMT1B/ABHD1/CCDC74B/KIF12/ANXA13/NEB/BAAT/SLC3A1/PADI2/FUZ/CPLX2/USH1C/OPRL1/DDC/MUC5B/C9orf152/SEMA4G/MB |
| BROWNE\_HCMV\_INFECTION\_30MIN\_DN | BROWNE\_HCMV\_INFECTION\_30MIN\_DN | 133 | 0.359962 | 1.65969 | 0.001173 | 0.008156 | 0.005796 | 3051 | tags=26%, list=17%, signal=22% | DUSP2/TNFRSF1B/ITGB2/NR1H3/LAPTM5/DDX17/GPSM3/COLEC10/GZMK/VAV1/OPRK1/IL9R/SOCS1/XCL2/VAPB/SLC12A1/TAF13/PTH/TGM3/OPHN1/CYP4F2/OLIG2/DST/RUBCN/EPB42/KIFC1/MUC4/GRM5/VWA5A/DUSP4/NTSR1/KCNF1/SIRPA/FAM169A/GJA1 |
| PID\_P38\_ALPHA\_BETA\_PATHWAY | PID\_P38\_ALPHA\_BETA\_PATHWAY | 30 | 0.480644 | 1.65889 | 0.009824 | 0.044508 | 0.03163 | 2142 | tags=27%, list=12%, signal=24% | LYN/FYN/MAP2K3/HCK/DUSP1/RIPK1/DUSP10/RALA |
| PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_UP | PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_UP | 136 | 0.359404 | 1.658597 | 0.000448 | 0.003663 | 0.002603 | 2103 | tags=21%, list=12%, signal=18% | NCF2/HMOX1/ITGAX/DUSP5/SQSTM1/TUBB2A/RGS2/SAT1/PLEK/DNAAF1/BBC3/CEBPB/TRIB1/VEGFA/FYN/ATF3/IER5/FTH1/GLA/BSDC1/GABARAPL1/GCLM/KLHL21/PSAT1/DUSP1/KLF2/TNFSF9/HSPA6 |
| JAZAG\_TGFB1\_SIGNALING\_VIA\_SMAD4\_UP | JAZAG\_TGFB1\_SIGNALING\_VIA\_SMAD4\_UP | 102 | 0.379299 | 1.656853 | 0.001566 | 0.010346 | 0.007352 | 1912 | tags=22%, list=11%, signal=19% | C5AR1/NAMPT/C1QB/SERTAD1/LSP1/PILRA/EIF1/CGA/YWHAE/ENO1/SPINK5/HMGA1/MYO1F/CD27/SATB1/CBX5/ACTB/TOM1/DAXX/LPAR2/NOCT/RACK1 |
| BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_UP | BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_UP | 242 | 0.333186 | 1.655641 | 8.14E-05 | 0.000853 | 0.000606 | 4388 | tags=35%, list=24%, signal=27% | C5AR1/BHLHE40/ZC3H12A/TNFAIP3/HBEGF/CSRNP1/PTPN6/FBLL1/ITGB7/FERMT3/PTAFR/MXD1/SLC25A25/NPPA/NGEF/IER5/CSF1R/SLC25A34/ABTB2/LAG3/FOS/TUBB1/NFKBIE/XIRP1/EPPK1/SPOCK2/CDC42BPG/SLC22A14/DDN/ABL2/SYNE4/HIVEP3/DUSP1/SLC7A5P2/MYO7A/PTGER4/FAM90A1/GPR35/NOCT/TAS1R3/CDKN2AIP/TMPRSS9/HSPA6/DEDD2/SCN1A/FSTL4/TRIML2/SLC1A3/VWA7/KLF10/GRTP1/PSMD6-AS2/PPRC1/COL21A1/CPN2/NIM1K/UNC13D/ALDH8A1/LAT2/ADAM32/PPP1R15A/GPRASP1/PHEX/AOC2/ACVR1C/UBAP1L/NFKBIA/ITGA9/MED26/SLC5A11/GATA3/RNF144B/ZBTB37/ZNF778/PYGM/TNXB/NEB/DGCR5/CDK5R1/CHD5/OTUD3/GPR156/DNAJB1/BAAT/RASGRF1 |
| JOHANSSON\_GLIOMAGENESIS\_BY\_PDGFB\_UP | JOHANSSON\_GLIOMAGENESIS\_BY\_PDGFB\_UP | 55 | 0.423828 | 1.65438 | 0.007998 | 0.03789 | 0.026927 | 3993 | tags=38%, list=22%, signal=30% | SPP1/HLA-DRB1/HMOX1/FTL/PPFIBP1/FOS/YBX1/CD9/CHST11/B2M/PPP1R18/TPM4/HMGB2/CDC20/STAT3/TMEM176B/KLF6/FRMD8/MARCKS/FN1/MARCKSL1 |
| FOROUTAN\_TGFB\_EMT\_UP | FOROUTAN\_TGFB\_EMT\_UP | 187 | 0.342442 | 1.646307 | 0.000237 | 0.002149 | 0.001528 | 2388 | tags=23%, list=13%, signal=20% | NCF2/PLAUR/GADD45B/HMOX1/SIK1/BHLHE40/MMP9/POSTN/STC1/GAL/JUNB/SPHK1/MMP1/VIM/COL4A2/TGFBI/CYTH1/PLEK2/ITGA5/ANGPTL4/SERPINE1/NRIP3/COL5A1/IGFBP7/TPST2/GFPT2/SMAD7/PTHLH/COL6A3/COL1A1/SPOCK1/CHST11/RGS4/C3orf52/DUSP10/TIMP2/TCF4/TUBA4A/RALA/TPM4/HS3ST3A1/AMIGO2/KLF7 |
| WP\_NRF2\_PATHWAY | WP\_NRF2\_PATHWAY | 143 | 0.354022 | 1.645097 | 0.001034 | 0.007378 | 0.005243 | 3378 | tags=26%, list=19%, signal=21% | HMOX1/SLC2A3/HBEGF/SQSTM1/FTL/BLVRB/PGD/CES3/SLC2A14/SRXN1/SLC6A5/SLC5A3/SOD3/FTH1/PPARD/SLC39A5/SERPINA1/EPHA2/SLC6A7/GCLM/SLC6A20/UGT1A9/SLC2A9/EGR1/G6PD/SLC6A2/CES5A/SLC2A2/SLC6A17/ADH7/GGTLC2/SLC2A13/SLC6A19/TGFA/SLC39A8/UGT1A6/NQO1 |
| REACTOME\_INTERLEUKIN\_2\_FAMILY\_SIGNALING | REACTOME\_INTERLEUKIN\_2\_FAMILY\_SIGNALING | 44 | 0.436301 | 1.642877 | 0.010044 | 0.045166 | 0.032098 | 3340 | tags=36%, list=19%, signal=30% | PTPN6/CSF2RB/IL2RG/IL3/LGALS9/IL9R/IL9/CSF2/IL21/GRB2/IL2RB/PTK2B/STAT4/IL5/IL15RA/STAT3 |
| SESTO\_RESPONSE\_TO\_UV\_C1 | SESTO\_RESPONSE\_TO\_UV\_C1 | 69 | 0.404512 | 1.64038 | 0.003255 | 0.018412 | 0.013085 | 2882 | tags=30%, list=16%, signal=26% | NAMPT/DUSP5/TNFAIP3/SOD2/PIM1/EMP1/SLC31A2/EIF4H/CDKN1A/SPRR2D/MAP2K3/GLUL/ATP6V1B2/TNIP1/SAFB/SERPINB2/IER2/S100A7/TJP2/CSNK2B/VDAC2 |
| BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_DN | BLANCO\_MELO\_MERS\_COV\_INFECTION\_MCR5\_CELLS\_DN | 31 | 0.470562 | 1.639417 | 0.007509 | 0.036079 | 0.02564 | 1270 | tags=26%, list=7%, signal=24% | APOE/HBG2/RGCC/HLA-A/GPRC5A/FTH1/CHI3L1/TMEM176A |
| WP\_DOPAMINERGIC\_NEUROGENESIS | WP\_DOPAMINERGIC\_NEUROGENESIS | 30 | 0.474871 | 1.638965 | 0.011421 | 0.049905 | 0.035465 | 3521 | tags=37%, list=20%, signal=30% | NEUROG2/NR4A2/NKX2-2/ALDH1A1/NEUROD1/PITX3/SLC18A2/RET/WNT1/STAT3/FOXA2 |
| AMIT\_SERUM\_RESPONSE\_240\_MCF10A | AMIT\_SERUM\_RESPONSE\_240\_MCF10A | 52 | 0.42358 | 1.637709 | 0.00599 | 0.030066 | 0.021367 | 3019 | tags=37%, list=17%, signal=30% | EMP1/ITGA5/ANGPTL4/SERPINE1/TNFRSF21/MAP3K11/DSG3/GBP1/KRT6A/PHLDA2/NECTIN2/FBXL18/PRSS8/SERPINB2/EZR/DKK1/TLR2/GABPB1/TGFA |
| SMID\_BREAST\_CANCER\_NORMAL\_LIKE\_UP | SMID\_BREAST\_CANCER\_NORMAL\_LIKE\_UP | 449 | 0.311469 | 1.634506 | 1.80E-06 | 3.23E-05 | 2.29E-05 | 2463 | tags=23%, list=14%, signal=20% | HLA-DRB1/CCL2/HLA-DQB1/NCKAP1L/CD74/KRT14/CD4/LYZ/TNFRSF1B/HLA-DRA/SELL/COTL1/C3/CXCL2/RAC2/PLTP/IL6/HLA-DPA1/CORO1A/HBB/LYN/GEM/NLRP3/ARHGAP4/CD79A/PLCB2/OPRPN/MATK/ITGB7/ARHGAP45/GZMK/AOAH/SELE/IL2RG/POU2AF1/NCF4/CCR7/ACAP1/FYN/LGALS2/FOLR2/GZMM/JCHAIN/LCP2/TNXA/LPL/FABP4/GMIP/MZB1/THBD/CD8A/SPINK5/THEMIS2/CD19/CD2/LY9/FNDC4/ITK/LAMP3/RUNX3/CD27/CHI3L1/DEF6/SATB1/ALDH1A1/LIME1/SEL1L3/ST6GAL1/CH25H/LST1/FAM107A/CCL21/GPR183/VCAM1/TEP1/CTSG/CSN3/ACTA2/F13A1/AIF1/ARID5A/ICOS/LY96/PTGER4/CD37/IRF8/EFEMP1/CD48/MET/LILRB3/BIRC3/STK10/DST/CRY2/TCF4/MS4A6A/SPRY2/LPCAT4/CD247/IL7R/PALMD/MAP4K1/LAMC3 |
| REACTOME\_SIGNALING\_BY\_VEGF | REACTOME\_SIGNALING\_BY\_VEGF | 105 | 0.368977 | 1.632216 | 0.001732 | 0.011138 | 0.007915 | 675 | tags=14%, list=4%, signal=14% | NCF2/NCKAP1L/SPHK1/MAPK13/SH2D2A/VEGFA/SHB/VAV1/VEGFB/PXN/NCF4/CYBA/FYN/AAMP/MAPKAPK3 |
| MCBRYAN\_PUBERTAL\_BREAST\_4\_5WK\_UP | MCBRYAN\_PUBERTAL\_BREAST\_4\_5WK\_UP | 254 | 0.326504 | 1.632066 | 8.08E-05 | 0.000848 | 0.000603 | 3278 | tags=27%, list=18%, signal=22% | SPP1/HLA-DRB1/CAPG/APOD/KRT14/RAB7B/COTL1/TNFRSF12A/PLA2G7/TNFAIP2/IRX1/ST14/SAT1/KRT8/EGR2/NFKB2/TNC/SLPI/ATP1A1/IGFBP2/VASN/DUSP6/MAFB/CD14/PROM1/CYSTM1/ERRFI1/FOS/LALBA/CHI3L1/ALDH1A1/SFXN3/BTN1A1/IRX3/CXCL14/CD9/CSN3/ACTA2/IRX5/IRAK1/MFGE8/INHBB/TIMP1/CDCP1/ESRP1/TUBA4A/TMPRSS2/THBS2/AREG/TTPA/SOX9/EZR/FXYD2/NFIL3/AQP5/PLEKHB1/MUC15/GZMA/SCIN/TGM2/RND3/DDR1/C1orf210/TP63/TGIF1/MBOAT1/NPR3/SESN3 |
| DANG\_MYC\_TARGETS\_DN | DANG\_MYC\_TARGETS\_DN | 31 | 0.468031 | 1.630596 | 0.007667 | 0.036577 | 0.025994 | 1173 | tags=23%, list=7%, signal=21% | ACP5/HMOX1/NDRG1/DLEU2/MYC/SERPINE1/SFXN3 |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_DEPENDENT | MEBARKI\_HCC\_PROGENITOR\_WNT\_UP\_CTNNB1\_DEPENDENT | 78 | 0.387937 | 1.630352 | 0.004935 | 0.025932 | 0.018429 | 2413 | tags=26%, list=13%, signal=22% | MMP7/RGCC/SLC12A8/MMP13/COL1A2/SERPINE1/CSF1R/LCP1/CLDN2/GBP1/EYA2/IGFL1/COL1A1/HAPLN1/RDH10/MAGED4B/IHH/TPM4/NOG/SLC1A3 |
| SWEET\_KRAS\_TARGETS\_DN | SWEET\_KRAS\_TARGETS\_DN | 62 | 0.409578 | 1.629883 | 0.006644 | 0.032712 | 0.023247 | 3827 | tags=39%, list=21%, signal=31% | FOSL1/PHLDA1/RGS2/CTSL/PPP1R3A/CXCL5/TNFRSF10D/PARD6B/ATP6V1B2/TEP1/EIF5/SEMA6B/INHBB/F2RL1/EPB42/NUP62CL/DKK1/DUSP4/PDZD3/CC2D1A/SSX2/MLX/ODC1/GPD1 |
| MIKKELSEN\_MCV6\_HCP\_WITH\_H3K27ME3 | MIKKELSEN\_MCV6\_HCP\_WITH\_H3K27ME3 | 407 | 0.31351 | 1.629455 | 6.03E-06 | 8.96E-05 | 6.36E-05 | 6231 | tags=50%, list=35%, signal=33% | HS3ST2/MMP9/GAL/SERINC2/QRFPR/FAM83F/IRX1/IRF5/DOCK3/FBLL1/NFATC1/RIMS4/RBP4/TGFBI/INSRR/SLC6A5/MYOD1/COMP/KLHL40/ZIC1/SIM2/COL9A2/CACNG4/MAFB/SLC9A3/ADCY7/HCRTR1/RAX/HMX1/FZD10/RRAD/SYT10/DRD5/NPTX2/IGSF21/PRDM13/SYT2/NEUROD1/EPB41L3/SLC6A7/ADAMTS2/SEMA7A/TRIM58/PRMT8/FOXE1/CXCL14/EFNA2/OAF/PAQR5/KCNH1/NEUROG1/FEZF2/DYSF/KCNJ4/PTF1A/CCKBR/IRF8/LHX5/SLC18A2/GRIA2/RTN4R/GRIN3B/SLITRK3/IHH/PACSIN1/TIMP2/SLIT1/GABRA5/YBX2/DPP10/FEV/FSTL4/FAM184A/ACHE/NOG/HS3ST6/LAMC3/EPHA8/NRG3/AQP5/SLC6A2/IL1RL2/LMO1/LGI3/SLC6A17/STUM/POU2F3/NTSR1/PANX2/STK32C/GRP/TBX5/SLC2A13/C1QL2/KCNQ4/DOC2B/CHRNA3/INSL3/HOXD4/HOXC12/NKX2-4/KCNH6/LBX1/TCTE1/PCDHAC2/ONECUT3/TRHDE/ZNF804A/ITPKA/ADAMTS18/SYT6/KDF1/SPTBN2/TMEM215/NKD2/DPYSL4/ATP2B2/WNT7B/FGF3/FIBCD1/EMX1/C1QL1/CYP24A1/CRLF1/NEFH/SLC30A10/CHD5/ASIC2/MATN4/CACNA1D/KCNQ3/SLIT2/FAR2/CLDN7/TMEM91/RASL10B/SLC38A3/SCN5A/CELF4/POU3F3/LYZL4/FGF5/DBNDD1/FOXC2/TFAP2E/FGF12/HBZ/FAM83G/ATP2B3/HOXC10/CPNE5/NHLH2/GDF7/TP73/EFCC1/SLC18A3/BSN/WNT10B/FGF8/CBLN1/GABBR2/FOXF1/SCTR/FNDC5/MYO16/ALOX12/PLPPR5/P4HA3/KCNC3/GSX2/ADORA2A/FBXO41/NPAS3/NKX2-5/MMD2/CABP7/HBQ1/COL15A1/GJB6/IRX4/NEUROG3/GRB10/PDE4DIP/LMX1B/L1CAM/NKX6-2/COL8A2/KCNK15/KCNA2/PAX2/CCDC184/SLC34A2/PDE1B/ATP8A2/ELOVL3/PSD2/FAM43B/KCND3/DIO3/TCERG1L/PTH2/ARX |
| REACTOME\_LEISHMANIA\_INFECTION | REACTOME\_LEISHMANIA\_INFECTION | 247 | 0.326891 | 1.628537 | 0.000152 | 0.00146 | 0.001038 | 2822 | tags=25%, list=16%, signal=21% | IL1B/NCKAP1L/HMOX1/GPR84/C3/IL6/AVPR2/LYN/ADM/NLRP3/WAS/NFKB2/CGA/VAV1/CYBA/TAAR6/FYN/GNG13/GPR39/GNG8/ADCY7/FURIN/HCK/DVL1/MYH2/DRD5/PTHLH/FCGR1A/VIPR2/PTH/CALCA/ACTB/GNAI2/FCGR3A/P2RY11/NOXA1/RHBDF2/RLN3/CTSG/VAV2/C3AR1/MC5R/PTGER4/GPHB5/ADRB1/TAAR2/IL1A/GNG7/DPEP3/BAIAP2/IL18/AVP/CD247/ADRB3/P2RX4/ARPC5/CYSLTR2/GPR176/GLP2R/ADCYAP1/RXFP2/GPR15 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_A\_DN | GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_A\_DN | 92 | 0.377728 | 1.62853 | 0.003071 | 0.017611 | 0.012515 | 3405 | tags=30%, list=19%, signal=25% | SLC2A3/LYZ/HLA-E/COLEC10/HLA-B/ATF3/SOD3/LCP1/SLAMF9/ALDH1A1/EPPK1/GALNT13/FAM107A/PDE4B/CYP2C18/PCOLCE2/KLF2/PHLDA2/COL19A1/B4GALNT4/SLC22A18/ANKS3/CDH17/MACC1/AGMO/CD59/ASRGL1/HLA-DMA |
| WEST\_ADRENOCORTICAL\_TUMOR\_MARKERS\_UP | WEST\_ADRENOCORTICAL\_TUMOR\_MARKERS\_UP | 22 | 0.517197 | 1.627895 | 0.010535 | 0.046787 | 0.03325 | 1537 | tags=23%, list=9%, signal=21% | STC1/IL32/UBE2S/NPTX2/PDE4B |
| BROWNE\_HCMV\_INFECTION\_8HR\_UP | BROWNE\_HCMV\_INFECTION\_8HR\_UP | 99 | 0.374093 | 1.621874 | 0.003129 | 0.017869 | 0.012699 | 2816 | tags=29%, list=16%, signal=25% | APOE/ICAM1/LYZ/SOD2/GK/PIM2/IGFBP2/RHOB/FOS/MX2/TFRC/CSPG5/NPTX2/RBM38/RAB5A/OAS1/SPOCK1/DBF4/EIF5/CCNE1/ACSM1/CBX4/FGF18/AMD1/DLG1/BLNK/SFPQ/PCDHGA12/COL21A1 |
| MIYAGAWA\_TARGETS\_OF\_EWSR1\_ETS\_FUSIONS\_DN | MIYAGAWA\_TARGETS\_OF\_EWSR1\_ETS\_FUSIONS\_DN | 216 | 0.332593 | 1.621309 | 0.000358 | 0.003042 | 0.002162 | 1349 | tags=17%, list=8%, signal=16% | CXCL8/CCL2/SLC2A3/CEMIP/STC1/PLAU/CCL3/LIF/IL6/ADM/TNFRSF11B/DOK5/SPOCD1/MAB21L2/NUDT7/LTBR/GPNMB/CLCF1/HAS2/DMXL2/VASN/COL1A2/PLPP4/SLC22A23/COL5A1/HMGA1/GFPT2/TCAF1/CHI3L1/APCDD1L/SMAD7/SEMA7A/TAF13/SPRED1/CREG1/LSM11 |
| ZHU\_CMV\_ALL\_UP | ZHU\_CMV\_ALL\_UP | 105 | 0.365845 | 1.618358 | 0.002103 | 0.012926 | 0.009186 | 2377 | tags=24%, list=13%, signal=21% | NAMPT/SLC7A5/TNFAIP3/HLA-E/GAL/PIM1/TUBB2A/IL6/REC8/PNP/IRF1/ENO1/UBE2S/MX2/GBP1/TRIM21/OAS1/IRF2/EIF5/ATF5/NUBP1/RIPK1/TUBA4A/EGR1/IL7R |
| JOSEPH\_RESPONSE\_TO\_SODIUM\_BUTYRATE\_DN | JOSEPH\_RESPONSE\_TO\_SODIUM\_BUTYRATE\_DN | 57 | 0.412113 | 1.617947 | 0.011102 | 0.048861 | 0.034724 | 3267 | tags=35%, list=18%, signal=29% | TIMP3/NAMPT/ACP2/IL6/VEGFB/CD300C/ALDH1A1/NCL/CSF1/COL6A3/IRF2/USP7/GRM3/SULT1E1/TUBA4A/GAA/ELK3/AQP1/FES/PFKL |
| PID\_TXA2PATHWAY | PID\_TXA2PATHWAY | 56 | 0.412002 | 1.614487 | 0.007431 | 0.035769 | 0.02542 | 1731 | tags=21%, list=10%, signal=19% | ICAM1/GNA15/LYN/PLCB2/ARRB2/SELE/FYN/ARHGEF1/HCK/GNAI2/VCAM1/ARR3 |
| GARY\_CD5\_TARGETS\_UP | GARY\_CD5\_TARGETS\_UP | 444 | 0.307947 | 1.614349 | 1.20E-05 | 0.000166 | 0.000118 | 2616 | tags=20%, list=15%, signal=18% | ICAM1/UCP2/CD74/CD83/SPI1/DUSP5/SLC2A3/RGS1/METRNL/TNFAIP3/SQSTM1/HLA-E/SCD/JUNB/LSP1/CCL3/BCL3/BTG2/ZFP36L2/ARHGDIA/DDX17/SHKBP1/SAT1/PIM2/PLEK/RGS16/PTPN6/KDM6B/CEBPB/CD70/WAS/VEGFA/SCARB1/NFKB2/SESN2/CDKN1A/GSK3B/INSIG1/IL2RG/PBXIP1/IRF1/CCR7/FXYD5/TKT/YWHAE/GRINA/FYN/RELB/MAP2K3/CYSTM1/HMGA1/RUNX3/MEF2A/INHBE/NBEAL2/SDCBP/SLC1A5/GNAI2/IRF9/BCL2A1/PSAT1/TMC8/KIAA0319L/GPI/PPP1R18/MID1IP1/NUP210/CD37/GM2A/CAPNS1/PPP1R9B/PIK3IP1/CD48/GAS5/DPP7/TNFSF9/TCF4/RALA/GNG7/TMC6/TPM4/LPCAT4/CARMIL2/WWOX/MAP4K1/IRF2BP2/SLC3A2/GAA/DLG1/TP53/LAMA3 |
| CASTELLANO\_NRAS\_TARGETS\_UP | CASTELLANO\_NRAS\_TARGETS\_UP | 66 | 0.401643 | 1.613095 | 0.003824 | 0.021034 | 0.014948 | 3997 | tags=39%, list=22%, signal=31% | LSP1/PLTP/TUBB2A/IL1RN/MMP13/HLA-B/CRABP2/SARDH/B2M/GBP2/UGT1A10/CLEC11A/BAX/ITIH2/EPHX1/PLSCR2/CRIP2/ZNF703/GJA1/NPR3/IFI27L2/MEST/NQO1/TAP1/KCTD12/PTX3 |
| LI\_LUNG\_CANCER | LI\_LUNG\_CANCER | 41 | 0.432794 | 1.61096 | 0.009402 | 0.043102 | 0.030631 | 3840 | tags=34%, list=21%, signal=27% | MMP7/KRT17/KRT8/HCK/EEF1A2/ALDH1A1/CSF2/CCNE1/YWHAZ/MDM2/FABP5/CALR/NFKB1/MAP4 |
| CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN | CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN | 89 | 0.376693 | 1.610628 | 0.004189 | 0.022695 | 0.016128 | 3158 | tags=34%, list=18%, signal=28% | FOSB/POSTN/IL6/SLC20A1/NR4A2/PIM2/TGFBI/SULF1/CD81/COL1A2/SBNO2/FOS/IGFBP7/IER3/RPS4Y1/COL6A3/ZMIZ1/BASP1/ACTA2/DUSP1/FOXM1/HSPB6/THBS2/IGFBP4/TROAP/IER2/RECQL4/GJA1/CDC20/NUPR1 |
| HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_2\_UP | HERNANDEZ\_MITOTIC\_ARREST\_BY\_DOCETAXEL\_2\_UP | 56 | 0.410917 | 1.610237 | 0.007828 | 0.03725 | 0.026472 | 3062 | tags=32%, list=17%, signal=27% | PHLDA1/PLAU/SQSTM1/MT2A/IL32/CD68/MBOAT7/LCP1/HMGA1/CSF1/SLC1A5/SPTSSB/TYR/RGP1/THBS2/C11orf68/ETV4/TPR |
| STAMBOLSKY\_TARGETS\_OF\_MUTATED\_TP53\_DN | STAMBOLSKY\_TARGETS\_OF\_MUTATED\_TP53\_DN | 48 | 0.422246 | 1.609797 | 0.011165 | 0.049062 | 0.034867 | 4802 | tags=42%, list=27%, signal=31% | CCL18/KRT17/IRF7/HLA-B/OAS1/IRF9/CD9/OAS3/DTX3L/RBCK1/TMEM52B/TMEM44/RTEL1/RAB4B/SP100/COX4I1/IFIT1/CAPN8/SSH2/CHRM1 |
| VANTVEER\_BREAST\_CANCER\_BRCA1\_UP | VANTVEER\_BREAST\_CANCER\_BRCA1\_UP | 31 | 0.461656 | 1.608387 | 0.009561 | 0.043649 | 0.03102 | 2078 | tags=29%, list=12%, signal=26% | CCL2/PIM2/MYC/POU2AF1/KCNN4/THEMIS2/CD19/DNTTIP2/ART3 |
| PID\_P53\_DOWNSTREAM\_PATHWAY | PID\_P53\_DOWNSTREAM\_PATHWAY | 132 | 0.350116 | 1.607963 | 0.002171 | 0.013267 | 0.009429 | 3133 | tags=27%, list=17%, signal=22% | SPP1/DUSP5/RGCC/NDRG1/LIF/BTG2/PLK3/CTSD/IRF5/ZNF385A/BBC3/CDKN1A/ATF3/SERPINE1/GDF15/EPHA2/TNFRSF10B/TNFRSF10D/BCL2A1/VDR/MCL1/DUSP1/HIC1/MET/BAX/POU4F1/TP53/DKK1/MDM2/JMY/EDN2/CD82/TGFA/MMP2/TP63 |
| OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_DN | OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_DN | 261 | 0.320281 | 1.607394 | 0.000189 | 0.001773 | 0.00126 | 3029 | tags=26%, list=17%, signal=22% | CCL18/ADAM8/HK2/LYZ/MT1G/GNA15/LSP1/LRP1/NDRG1/TMBIM1/ECM1/PLTP/GEM/EMP1/MT2A/STX11/RNF19B/TPSAB1/EFHD2/SERPINB1/GPRC5A/IL2RG/PRSS3/KCNN4/COL6A2/SMPDL3B/IER5/DVL1/FAP/COL5A1/CHPF/MX2/SULT1B1/FABP1/EPHA2/BGN/FER1L4/ADAMTS2/SEMA7A/IGF2BP2/NRP2/IRF2/VDR/VCAM1/SNCA/ACTA2/PROCR/AQP9/MSC/TIMP1/EFEMP1/SULT1E1/LTBP4/TMC6/THBS2/CACNA2D1/TCF21/TRAF3IP2/DKK1/ELK3/DGKA/CD82/MXRA8/SGCA/CDH17/PTK2B/CDC42EP2 |
| WP\_SARSCOV2\_INNATE\_IMMUNITY\_EVASION\_AND\_CELLSPECIFIC\_IMMUNE\_RESPONSE | WP\_SARSCOV2\_INNATE\_IMMUNITY\_EVASION\_AND\_CELLSPECIFIC\_IMMUNE\_RESPONSE | 65 | 0.398684 | 1.604957 | 0.005061 | 0.026505 | 0.018836 | 3125 | tags=31%, list=17%, signal=26% | CXCL8/CCL2/CCL3/CXCL1/CXCL2/IL6/IRF7/LAG3/CXCL5/PPBP/CSF2/TNF/IRF3/RIPK1/MAVS/CXCL9/CXCR2/PF4/CCL4/ACE2 |
| ZHANG\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION | ZHANG\_TARGETS\_OF\_EWSR1\_FLI1\_FUSION | 87 | 0.377057 | 1.603117 | 0.005126 | 0.026699 | 0.018974 | 3523 | tags=34%, list=20%, signal=28% | HLA-E/FCGRT/G0S2/GPSM3/MYC/CD79A/SH2B3/CEBPB/EGR2/ATP1A1/ARHGEF1/RHOH/FOS/RUNX3/CSPG5/GABARAPL1/SEL1L3/ST6GAL1/LY96/ATF5/IGFBP4/RAP1GAP/VWA5A/CRIP2/SIRPA/SYT1/DAPK1/WDR47/SLC17A7/CSNK1E |
| REACTOME\_COLLAGEN\_FORMATION | REACTOME\_COLLAGEN\_FORMATION | 89 | 0.374366 | 1.600679 | 0.004502 | 0.024053 | 0.017094 | 2904 | tags=26%, list=16%, signal=22% | MMP7/MMP9/CTSL/MMP13/COL4A2/COL1A2/COL6A2/COL9A2/COL5A1/PCOLCE/ADAMTS2/COL6A3/COL1A1/PCOLCE2/COL19A1/DST/COL28A1/CTSB/LAMA3/COL6A6/LAMC2/COL21A1/COL6A5 |
| NABA\_CORE\_MATRISOME | NABA\_CORE\_MATRISOME | 255 | 0.320585 | 1.600135 | 0.00028 | 0.002443 | 0.001736 | 3356 | tags=30%, list=19%, signal=25% | SPP1/POSTN/VWA3A/ECM1/MXRA5/TNC/PRG2/COL4A2/TGFBI/MATN1/COMP/IGFBP2/COL1A2/COL6A2/COL9A2/KERA/COL5A1/IGFBP7/TINAGL1/PCOLCE/ELN/TNR/BGN/EMILIN2/SPOCK2/COL6A3/COL1A1/FBLN1/SPOCK1/VWA5B1/PRELP/BGLAP/FGB/PAPLN/TSPEAR/PCOLCE2/TNN/HAPLN1/NDNF/MFGE8/COL19A1/IMPG1/NTN5/EFEMP1/USH2A/SLIT1/LTBP4/THBS2/IGFBP4/COL28A1/VWA5B2/LGI4/CILP/LAMC3/VWA7/VWA5A/LRG1/LAMA3/TINAG/COL6A6/LGI3/ZPLD1/LAMC2/COL21A1/FBLN2/COL6A5/ADIPOQ/MEPE/HAPLN4/IGFBPL1/THBS3/IBSP/IGFALS/CRISPLD2/NTN3/COL24A1/COL3A1 |
| BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_DN | BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_INFECTION\_A594\_ACE2\_EXPRESSING\_CELLS\_RUXOLITINIB\_DN | 73 | 0.388089 | 1.59975 | 0.005228 | 0.027126 | 0.019277 | 2792 | tags=30%, list=16%, signal=26% | SPP1/UCP2/CTSD/CTSL/PSAP/RBP4/PBXIP1/CYBA/APLP2/TRAPPC6A/TM4SF20/CLDN2/ALDH1A1/GBP1/SCARA5/FGB/KCNAB2/G6PD/KRT4/EPHX1/SCIN/SLC51B |
| ROY\_WOUND\_BLOOD\_VESSEL\_UP | ROY\_WOUND\_BLOOD\_VESSEL\_UP | 47 | 0.42 | 1.598505 | 0.011048 | 0.048665 | 0.034584 | 1936 | tags=21%, list=11%, signal=19% | HLA-DRB4/POSTN/STC1/PLAU/MMP1/SULF1/GBP1/SEL1L3/HEG1/TIMP1 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_UP | GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_UP | 123 | 0.350808 | 1.598444 | 0.002868 | 0.016638 | 0.011824 | 2495 | tags=23%, list=14%, signal=20% | CXCL8/PLAUR/FOSL1/HBEGF/SERTAD1/EMP1/UBALD2/TRIB1/MXD1/PNP/GPAT3/SAMSN1/SESN2/SRXN1/JMJD6/RELB/ATF3/GLA/KLHL21/EIF5/SMURF1/TNFSF9/HSPA6/DEDD2/SLC19A2/CPEB4/SLC3A2/NFIL3 |
| ZHU\_CMV\_ALL\_DN | ZHU\_CMV\_ALL\_DN | 117 | 0.354151 | 1.598069 | 0.00207 | 0.012781 | 0.009083 | 2302 | tags=24%, list=13%, signal=21% | APOE/TIMP3/POSTN/FTL/ANPEP/FLNA/CEBPD/MMP1/ADM/MATK/RAB13/IGFBP2/COL1A2/COL6A2/SERPINE1/LMNA/ADRA2A/COL1A1/ENG/FBLN1/RALGDS/ACTA2/CFD/EFEMP1/TMEM198B/SULT1E1/TPM4/THBS2 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_DN | RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_DN | 104 | 0.363133 | 1.596697 | 0.004829 | 0.025572 | 0.018173 | 4248 | tags=39%, list=24%, signal=30% | KRT17/KRT14/MMP1/SPRR1B/CDKN1A/GJB2/LRFN4/PLEK2/GPR39/PPARD/GDPD2/IL24/KLK8/HIF1A/PAQR5/NOCT/GOLGA7B/CDCP1/SDR9C7/BNC1/HOMER3/TUBA4A/PTGS1/IL1A/AREG/PDPN/TRAF3IP2/DMKN/LCE3D/CDC42EP2/LYPD5/IMPA2/KRT16/EHD4/CDSN/MAP4/IL36RN/DEPDC7/SFN/DEFB103B/MAPK6 |
| WP\_PPAR\_SIGNALING\_PATHWAY | WP\_PPAR\_SIGNALING\_PATHWAY | 67 | 0.396743 | 1.596075 | 0.007223 | 0.03502 | 0.024888 | 3926 | tags=39%, list=22%, signal=30% | OLR1/NR1H3/SCD/CYP27A1/PLTP/MMP1/PLIN1/LPL/ANGPTL4/FABP4/PPARD/FABP1/UCP1/PCK1/ACSL1/APOA5/APOA2/AQP7/ADIPOQ/FABP5/CD36/SCP2/CPT1B/ACSBG1/ACADL/APOA1 |
| BOYLAN\_MULTIPLE\_MYELOMA\_C\_D\_DN | BOYLAN\_MULTIPLE\_MYELOMA\_C\_D\_DN | 264 | 0.31882 | 1.594414 | 0.000238 | 0.002154 | 0.001531 | 4227 | tags=31%, list=24%, signal=24% | MMP9/LYZ/RGCC/HLA-E/C3/SLC25A24/MCEMP1/IL18RAP/PLEK/HBA2/TPSAB1/FOSL2/C15orf48/HDC/SGMS2/PGLYRP1/PRG2/TGFBI/PTPRE/IQGAP2/SLPI/SEMA4A/RHOB/IGSF6/ITPRIPL2/FOS/MYO1F/OOSP2/ITK/CD3E/FPR1/C7orf57/PLSCR1/TMEM176A/XDH/BASP1/CD9/GPR183/CHIA/VCAM1/CTSG/F13A1/ELL2/ICOS/RMDN2/TNS3/F2RL1/LILRB5/SARAF/NFIL3/CD7/LRG1/ATP6V0A1/GZMA/ANXA2/IL2RB/LTB/SNTB1/STAT4/TIAM1/PRDM1/GPR174/GPC1/TMEM176B/CACNA1S/KLRC1/CFP/FRMPD2/SPAG6/CD177/DHRS3/KDF1/HSD11B1/HID1/CD226/FSCN1/NKG7/DSG2/ARHGAP6/STEAP4/ITGB5/LTF/ADA |
| PID\_AVB3\_INTEGRIN\_PATHWAY | PID\_AVB3\_INTEGRIN\_PATHWAY | 73 | 0.386608 | 1.593645 | 0.005547 | 0.0284 | 0.020183 | 1353 | tags=16%, list=8%, signal=15% | SPP1/VEGFA/PXN/COL1A2/COL6A2/CSF1R/COL9A2/COL5A1/F11R/CSF1/COL6A3/COL1A1 |
| WP\_CORTICOTROPINRELEASING\_HORMONE\_SIGNALING\_PATHWAY | WP\_CORTICOTROPINRELEASING\_HORMONE\_SIGNALING\_PATHWAY | 91 | 0.371105 | 1.592185 | 0.00289 | 0.016751 | 0.011904 | 1042 | tags=12%, list=6%, signal=11% | CXCL8/FOSL1/KRT14/FOSB/JUNB/NR4A2/FOSL2/ARRB2/GSK3B/FOS/TRIM28 |
| HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_DN | HELLER\_HDAC\_TARGETS\_SILENCED\_BY\_METHYLATION\_DN | 268 | 0.316015 | 1.591482 | 0.000121 | 0.001206 | 0.000857 | 3184 | tags=26%, list=18%, signal=22% | HMOX1/HBG1/BHLHE40/SLC7A5/OLR1/LAPTM5/SCD/BCL3/MAPK13/HBB/HBD/ST14/PIM2/MYC/CEBPB/TRIB1/ITGB7/VEGFA/POU2AF1/SULF1/IQGAP2/FXYD5/GSDMB/ATF3/JCHAIN/DUSP6/EHD3/LY9/GDF15/INHBE/ST6GAL1/EYA2/TNFRSF10D/KLHL21/OAS1/ZMIZ1/PSAT1/EIF5/XBP1/IRAK1/LY96/NUP210/ATF5/KIAA1549L/IRF8/CD48/TNS3/HSPA6/DST/HOMER3/TCF4/MAP4K1/SLC3A2/BLNK/ALDH3B1/DOCK10/PMM2/PPRC1/ADCYAP1/DNAJB12/FMNL1/TPP1/DDIT3/LIMD2/SUMO3/GAS2/GJA1/NFIC/SNTB1/SOHLH2/PDIA6 |
| CHEN\_LVAD\_SUPPORT\_OF\_FAILING\_HEART\_UP | CHEN\_LVAD\_SUPPORT\_OF\_FAILING\_HEART\_UP | 97 | 0.367825 | 1.588852 | 0.003612 | 0.020093 | 0.014279 | 770 | tags=16%, list=4%, signal=16% | GADD45B/TIMP3/POSTN/RGCC/CEBPD/BTG2/PLIN2/MT2A/FOSL2/CEBPB/CDKN1A/SLCO4A1/ATF3/PER1/SERPINE1/IER5 |
| DESERT\_STEM\_CELL\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | DESERT\_STEM\_CELL\_HEPATOCELLULAR\_CARCINOMA\_SUBCLASS\_UP | 234 | 0.320451 | 1.58261 | 0.000283 | 0.002459 | 0.001748 | 2631 | tags=22%, list=15%, signal=19% | SPP1/CXCL8/CAPG/MMP12/HK2/MMP9/POSTN/PKM/SPHK1/PLBD1/MAPK13/SLC12A8/RPLP2/CCL20/MMP11/TACC3/SULF1/PRSS3/TKT/PELI1/TUBA1C/COL1A2/ITGA5/ENO1/TNFRSF21/TFRC/TRIM28/NCL/HIC2/IGF2BP2/EXT1/HIF1A/COL1A1/ZMIZ1/MID1IP1/PHLDA2/DAB2/TIMP2/G6PD/NRCAM/ELF3/TMEM184B/SOX9/TROAP/P2RX4/AMD1/ALDOA/RAP1GAP/ANXA5/YWHAZ/DKK1 |
| LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_C | LINDSTEDT\_DENDRITIC\_CELL\_MATURATION\_C | 61 | 0.398513 | 1.580869 | 0.010554 | 0.046835 | 0.033284 | 1782 | tags=21%, list=10%, signal=19% | CAPG/HLA-DRB3/TUBB2A/HLA-DPB1/TNFRSF11B/TRIP10/ATF3/LGALS9/TFRC/SEMA7A/TNFRSF11A/ARID5A/IL4R |
| REACTOME\_OLFACTORY\_SIGNALING\_PATHWAY | REACTOME\_OLFACTORY\_SIGNALING\_PATHWAY | 59 | 0.400295 | 1.579289 | 0.005421 | 0.027991 | 0.019892 | 4103 | tags=37%, list=23%, signal=29% | OR2S2/GNG13/OR2J3/OR8K3/OR11H6/OR11A1/OR1C1/OR3A1/OR11H4/OR2T1/OR52B6/OR2AT4/OR1E1/OR10H5/OR7G2/OR4C12/CNGA4/OR10G7/OR4D2/OR10G3/OR2B11/OR10A6 |
| WP\_SUDDEN\_INFANT\_DEATH\_SYNDROME\_SIDS\_SUSCEPTIBILITY\_PATHWAYS | WP\_SUDDEN\_INFANT\_DEATH\_SYNDROME\_SIDS\_SUSCEPTIBILITY\_PATHWAYS | 154 | 0.335454 | 1.579219 | 0.001323 | 0.009005 | 0.006399 | 3145 | tags=25%, list=18%, signal=21% | IL1B/CXCL8/BHLHE40/SST/IL6/IL1RN/CEBPB/VEGFA/NFKB2/YWHAE/PHOX2A/NKX2-2/SLC9A3/YBX1/POU3F2/RUNX3/NEUROD1/VIPR2/HIF1A/MAP2/SPTBN1/TNF/TAC1/IL1A/EGR1/FOXM1/FEV/AVP/SLC1A3/ALDOA/YWHAZ/PLP1/NTRK2/ADCYAP1/RET/GJA1/MBD1/HTR1A/CC2D1A |
| PID\_FCER1\_PATHWAY | PID\_FCER1\_PATHWAY | 59 | 0.400151 | 1.578723 | 0.005421 | 0.027991 | 0.019892 | 3107 | tags=34%, list=17%, signal=28% | SPHK1/LYN/VAV1/FCER1G/PXN/FYN/LCP2/FOS/ITK/FCGR2B/HCLS1/DUSP1/MAP3K1/IKBKB/PLA2G1B/DOK1/CBLB/GRB2/BTK/PLD2 |
| OHGUCHI\_LIVER\_HNF4A\_TARGETS\_DN | OHGUCHI\_LIVER\_HNF4A\_TARGETS\_DN | 161 | 0.333377 | 1.576349 | 0.00123 | 0.008455 | 0.006009 | 3314 | tags=27%, list=18%, signal=22% | APOC2/ACP5/CTSH/SPATA2L/FAM107B/PNPLA7/CES3/GJB2/NUDT7/C8B/AQP8/PLA2G12B/SULT1B1/SERPINA1/HAAO/CLDN2/TFR2/XYLB/HRG/HSD3B7/SLCO2B1/SARDH/S100A10/LIPC/ACSM1/SULT2A1/NAT8/ALAS2/CYP2F1/SDR9C7/KMO/CA5A/SLC22A9/F11/UGT2B4/HAO1/FITM1/CPN2/ARHGAP9/GCHFR/KCNN2/ASGR1/ALDH8A1/SLC22A7 |
| WORSCHECH\_TUMOR\_REJECTION\_UP | WORSCHECH\_TUMOR\_REJECTION\_UP | 60 | 0.397146 | 1.570321 | 0.009545 | 0.043649 | 0.03102 | 1520 | tags=20%, list=8%, signal=18% | IL1B/CCL8/TNFRSF1B/CXCL2/IL4I1/CCL11/IL2RG/CCL1/JCHAIN/ITK/BCL2A1/CCR10 |
| KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_UP | KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_UP | 127 | 0.343295 | 1.569312 | 0.004398 | 0.023616 | 0.016783 | 2218 | tags=20%, list=12%, signal=17% | IL1B/CXCL8/PLAUR/TIMP3/PLAU/TNFRSF12A/EGR3/IL6/BTG2/PNP/CDKN1A/IGFBP2/RHOB/IGFBP7/TNFRSF10B/SMAD7/BGN/CCNE1/TIMP1/UMPS/MAP3K1/BHMT/BIRC3/TIMP2/IL1A |
| CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_UP | CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_UP | 118 | 0.347419 | 1.568837 | 0.006185 | 0.030874 | 0.021941 | 2020 | tags=21%, list=11%, signal=19% | CCL2/PHLDA1/CEBPD/LSP1/C3/IL6/CEBPB/TNC/MNDA/HTATSF1/NGEF/HAS2/ERRFI1/CHI3L1/PLSCR1/CSF1/TMEM176A/XDH/CRABP1/VCAM1/IMPACT/NOCT/IVNS1ABP/PPID/SLC16A1 |
| WESTON\_VEGFA\_TARGETS\_3HR | WESTON\_VEGFA\_TARGETS\_3HR | 65 | 0.389562 | 1.568236 | 0.00765 | 0.036564 | 0.025985 | 2142 | tags=26%, list=12%, signal=23% | CCL2/PIM1/DLEU2/CXCL1/MMP1/SAT1/IL32/PNP/ELN/BGN/CD9/PDE4B/HCLS1/EFEMP1/FGFBP1/SULT1E1/RALA |
| BOYLAN\_MULTIPLE\_MYELOMA\_PCA1\_UP | BOYLAN\_MULTIPLE\_MYELOMA\_PCA1\_UP | 114 | 0.346659 | 1.566426 | 0.005442 | 0.028047 | 0.019932 | 1776 | tags=20%, list=10%, signal=18% | MMP9/LYZ/HLA-E/C3/SLC25A24/HBA2/HDC/PGLYRP1/PRG2/TGFBI/JCHAIN/IGSF6/ITK/FPR1/PLSCR1/TMEM176A/XDH/BASP1/CD9/CHIA/CTSG/ELL2/RMDN2 |
| WP\_TCELL\_ACTIVATION\_SARSCOV2 | WP\_TCELL\_ACTIVATION\_SARSCOV2 | 87 | 0.367914 | 1.564246 | 0.008226 | 0.038637 | 0.027458 | 3792 | tags=30%, list=21%, signal=24% | HLA-DRB1/CD4/HLA-DRA/NFATC1/CDKN1A/GSK3B/FYN/LCP2/FOS/CTLA4/CD3E/IL12B/CD80/TNF/ICOS/IKBKB/CD247/BAX/TP53/GRB2/STAT4/IL4/TYK2/CDKN2A/NFKBIA/NFKB1 |
| SAFFORD\_T\_LYMPHOCYTE\_ANERGY | SAFFORD\_T\_LYMPHOCYTE\_ANERGY | 87 | 0.367164 | 1.561059 | 0.008386 | 0.039213 | 0.027867 | 3586 | tags=32%, list=20%, signal=26% | GADD45B/NDRG1/CCL3/NR4A2/STX11/EGR2/NFATC1/FYN/CCL1/DUSP6/ETV6/FURIN/LAG3/IER3/CSF1/ANKRD28/LRRC3/NOCT/TNFSF9/DTNA/TINAG/DDR1/HLF/TNFRSF4/KIF15/KIFC3/SFRP4/FOXP1 |
| KOBAYASHI\_EGFR\_SIGNALING\_24HR\_UP | KOBAYASHI\_EGFR\_SIGNALING\_24HR\_UP | 89 | 0.364888 | 1.560152 | 0.007399 | 0.035648 | 0.025334 | 2836 | tags=28%, list=16%, signal=24% | CD74/ACP5/HMOX1/CEBPD/S100P/IRF7/CTSH/GRN/PBXIP1/GPNMB/PELI1/FTH1/FZD5/GLUL/GSN/PSG3/EPB41L1/PSG4/HEG1/PIK3IP1/ACSL1/EPHX1/CBLB/TPP1/VPS13C |
| MANALO\_HYPOXIA\_UP | MANALO\_HYPOXIA\_UP | 195 | 0.32213 | 1.55744 | 0.001084 | 0.00763 | 0.005422 | 1254 | tags=15%, list=7%, signal=14% | GADD45B/SIK1/APOD/SLC2A3/BHLHE40/STC1/TNFAIP3/HLA-E/NDRG1/ADM/HLA-B/VEGFA/COL4A2/TGFBI/PXN/SPSB1/GPNMB/COL1A2/DUSP6/EPOR/ANGPTL4/SERPINE1/COL5A1/IER3/MEF2A/TNFRSF10B/INHBE/BGN/FER1L4 |
| WP\_COMPLEMENT\_SYSTEM\_IN\_NEURONAL\_DEVELOPMENT\_AND\_PLASTICITY | WP\_COMPLEMENT\_SYSTEM\_IN\_NEURONAL\_DEVELOPMENT\_AND\_PLASTICITY | 104 | 0.354053 | 1.556772 | 0.008024 | 0.037983 | 0.026993 | 1920 | tags=18%, list=11%, signal=16% | C5AR1/C1QC/ITGAX/C1QB/ITGB2/ITGAM/C3/COLEC10/CRB1/C8B/CFB/FCN1/PLSCR1/PARD6B/COLEC12/C3AR1/MFGE8/C2/CFD |
| SENESE\_HDAC1\_TARGETS\_UP | SENESE\_HDAC1\_TARGETS\_UP | 420 | 0.297751 | 1.549783 | 1.81E-05 | 0.000237 | 0.000168 | 2894 | tags=24%, list=16%, signal=20% | CXCL8/CCL2/FOSL1/NAMPT/DUSP5/MMP9/ZC3H12A/PLAU/TNFAIP3/SOD2/SQSTM1/CEBPD/TNFRSF12A/C3/CCL3/RAC2/MMP1/G0S2/PLIN2/ARHGDIA/GEM/CCL20/NLRP3/MYC/TNFRSF11B/ITPRIP/TRIB1/VEGFA/LMAN1/PNP/GPAT3/NFKB2/GSK3B/PXN/LPXN/SLCO4A1/SRPRA/PPFIBP1/NRIP3/LCP1/RASSF8/AP1S3/ERRFI1/HMGA1/IL24/TFRC/SLAMF7/CXCL5/TNFRSF10B/PPIF/MOB1A/KDM1B/DUSP7/PTHLH/KLHL21/IGF2BP2/ARHGAP5/SPRED1/PARD6B/GALC/CSF2/BCL2A1/PSAT1/MCL1/MYH16/CHST11/RGS4/LY96/CYB5R2/CA2/SERPINB8/GM2A/MTMR1/SLC43A3/MET/SLC16A1/BIRC3/BCLAF1/IL1A/CPEB4/IL13RA2/TRIML2/IL7R/KYNU/SERPINB2/EZR/LINC00520/YWHAZ/DLG1/IRAK2/DOCK10/ELK3/IQGAP1/YRDC/PPTC7/LAMC2/TPP1/ROBO4/TGM2/MLKL |
| BENPORATH\_MYC\_TARGETS\_WITH\_EBOX | BENPORATH\_MYC\_TARGETS\_WITH\_EBOX | 220 | 0.316729 | 1.549115 | 0.000636 | 0.004837 | 0.003437 | 2531 | tags=20%, list=14%, signal=17% | ICAM1/FOSL1/CSTB/SQSTM1/JUNB/EGR3/BCL3/ZFP36L2/RGS2/HBB/PIM2/HBA2/BBC3/GSK3B/RHOG/ENO1/PER1/SERPINE1/LMNA/RPS19/CD2/TCIRG1/TFRC/GLA/EEF1A2/SMAD7/NCL/MTHFR/HIF1A/ACTB/IRF2/CEACAM5/MNX1/CCKBR/HNRNPA2B1/IRF3/PPID/MET/FOXM1/AVP/PDCD1/BAX/AMD1/GALNS |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_UP | DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_UP | 72 | 0.375749 | 1.547099 | 0.009962 | 0.044946 | 0.031941 | 2956 | tags=25%, list=16%, signal=21% | HLA-F/HLA-E/CEBPD/RGS2/NXF1/PIM2/TUBB4B/ATF3/RHOB/GABARAPL1/GLUL/KCNJ4/TNFSF9/TUBA4A/CNP/TOB1/TREX1/NEU1 |
| FOROUTAN\_PRODRANK\_TGFB\_EMT\_DN | FOROUTAN\_PRODRANK\_TGFB\_EMT\_DN | 77 | 0.368794 | 1.546479 | 0.010094 | 0.045261 | 0.032165 | 2338 | tags=22%, list=13%, signal=19% | MMP7/CEBPD/S100P/TNFAIP2/SERPINB1/SLCO4A1/RAB38/SMPDL3B/GDF15/CD9/NUP210/LY6E/BIRC3/ESRP1/DST/ELF3/AREG |
| REACTOME\_PLATELET\_ACTIVATION\_SIGNALING\_AND\_AGGREGATION | REACTOME\_PLATELET\_ACTIVATION\_SIGNALING\_AND\_AGGREGATION | 252 | 0.30896 | 1.544528 | 0.000869 | 0.006343 | 0.004507 | 2632 | tags=23%, list=15%, signal=20% | TIMP3/FLNA/GNA15/ECM1/RAC2/ISLR/LYN/STXBP2/PLEK/PSAP/LGALS3BP/PTPN6/TOR4A/ARRB2/FERMT3/VEGFA/VAV1/VEGFB/FCER1G/APLP2/FYN/AAMP/RHOG/COL1A2/LCP2/GNG13/SERPINE1/RHOB/DAGLA/GNG8/ADRA2A/SERPINA1/PLG/TMSB4X/COL1A1/GNAI2/GP9/HRG/PPBP/ABHD12/CD9/CHID1/FGB/F13A1/VAV2/CFD/TIMP1/DGKD/TUBA4A/PIK3R6/GNG7/ORM1/GP5/ALDOA/PDPN/ANXA5/YWHAZ/PDGFA |
| HELLER\_HDAC\_TARGETS\_DN | HELLER\_HDAC\_TARGETS\_DN | 280 | 0.306792 | 1.541413 | 0.000863 | 0.006309 | 0.004484 | 3110 | tags=24%, list=17%, signal=20% | HMOX1/SIK1/HBG1/HLA-DRA/SLC7A5/OLR1/LAPTM5/MAPK13/CTSH/HBB/DDX17/HBD/MYC/CNIH3/CEBPB/ITGB7/IL2RG/POU2AF1/SULF1/IQGAP2/ATF3/NMU/DUSP6/PPFIBP1/EHD3/RPS19/RHOH/ADCY7/LY9/INHBE/PPIF/ST6GAL1/EYA2/TMEM255A/TNFRSF10D/KLHL21/ZMIZ1/PSAT1/EIF5/XBP1/IRAK1/LY96/NUP210/KIAA1549L/CBX4/CD48/TNS3/HSPA6/HOMER3/TCF4/SLC16A6/MAP4K1/SLC3A2/BLNK/DOCK10/PPRC1/ADCYAP1/SFPQ/FMNL1/TPP1/DDIT3/LIMD2/SUMO3/GAS2/FABP5/GJA1/NFIC/SNTB1 |
| REACTOME\_TCR\_SIGNALING | REACTOME\_TCR\_SIGNALING | 114 | 0.340411 | 1.538192 | 0.007195 | 0.034915 | 0.024813 | 1235 | tags=13%, list=7%, signal=12% | HLA-DRB1/HLA-DQB1/HLA-DRB4/CD4/HLA-DRA/HLA-DRB3/HLA-DPA1/HLA-DPB1/WAS/HLA-DRB5/LCP2/ITK/PSMB11/CD3E/UBE2D1 |
| BURTON\_ADIPOGENESIS\_9 | BURTON\_ADIPOGENESIS\_9 | 82 | 0.363865 | 1.537332 | 0.010868 | 0.047991 | 0.034106 | 3040 | tags=28%, list=17%, signal=23% | SPP1/CCL2/PHLDA1/IFI30/CEBPD/CXCL2/GEM/GRN/SFRP2/KLF4/LGALS9/FOS/DDAH2/CSF1/VCAM1/DPP7/THBS2/DOK1/EPHX1/LATS2/MFSD1/GAS2/CLIC1 |
| MEISSNER\_NPC\_HCP\_WITH\_H3K4ME2\_AND\_H3K27ME3 | MEISSNER\_NPC\_HCP\_WITH\_H3K4ME2\_AND\_H3K27ME3 | 330 | 0.298906 | 1.536258 | 0.000326 | 0.002791 | 0.001983 | 4221 | tags=30%, list=24%, signal=24% | CRTAC1/SERINC2/ALK/STXBP2/IRF5/ZNF296/FBLL1/PROKR2/GJB2/SYT12/CLCF1/SIM2/ABCG1/PRPH/LEMD1/HCRTR1/HMX1/CDK5R2/IGSF21/EVA1A/HRK/SYT2/CPLX1/ADAMTS2/SEMA7A/PRMT8/PARD6B/CRABP1/FOXE1/SOWAHB/PROK2/CXCL14/GALNT13/COLEC12/SYT14/OAF/ARID3C/STXBP5L/DMBX1/KCNH1/ALDH1A2/TLX2/PTF1A/WNT6/PHLDA2/MSC/AGPAT2/RTN4R/IHH/A4GALT/BNC1/GABRA5/MAST1/FAM78A/DPP10/FEV/AMIGO2/NOG/HS3ST6/KCNK3/PAQR9/SORCS3/GJA3/SLC6A17/RET/STUM/WNT1/HMX3/B3GNT7/C1QL2/DOCK8/IGFBPL1/SIM1/NPR3/MSX2/C12orf56/NKX2-4/LBX1/MMP24/ONECUT3/VAX1/AMER3/TMEM150C/ZNF536/ATP6V1C2/LRRC26/CPEB1/SPTBN2/ATP2B2/FGF3/FIBCD1/OVOL2/UTF1/EMX1/C1QL1/EGFLAM/NEFH/SLC30A10/POU4F3/OPRD1 |
| GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_E\_UP | GAUSSMANN\_MLL\_AF4\_FUSION\_TARGETS\_E\_UP | 97 | 0.354111 | 1.529612 | 0.006794 | 0.033266 | 0.023641 | 1669 | tags=20%, list=9%, signal=18% | CEMIP/POSTN/RGCC/EGR3/ISLR/ADM/CDH3/MEDAG/TGFBI/SULF1/NUDT7/HAS2/SFRP2/NIPAL4/GAL3ST4/FOS/COLEC12/S100A10/PROCR |
| JIANG\_HYPOXIA\_NORMAL | JIANG\_HYPOXIA\_NORMAL | 194 | 0.316812 | 1.527051 | 0.001293 | 0.008807 | 0.006259 | 1904 | tags=19%, list=11%, signal=17% | GADD45B/HMOX1/SOD2/SCD/BLVRB/LRP1/NDRG1/CORO1A/PLIN2/STXBP2/CTSL/PIM2/RAB20/HLA-A/GPRC5A/SESN2/MYOD1/SYT13/NDRG2/ANGPTL4/SERPINE1/IL9R/OBSL1/VAPB/NCL/MLF1/ATF7IP/HIF1A/SDCBP/RALGDS/CD9/PTPRU/MCL1/DUSP1/MSANTD3/GM2A/AGPAT2 |
| RICKMAN\_HEAD\_AND\_NECK\_CANCER\_C | RICKMAN\_HEAD\_AND\_NECK\_CANCER\_C | 104 | 0.346896 | 1.525304 | 0.01047 | 0.046652 | 0.033154 | 4465 | tags=33%, list=25%, signal=25% | HLA-DRB4/SOD2/OLR1/GAL/MMP13/TNC/NEFL/CALB2/FABP4/GPR39/NOS1/IL24/RRAD/PTHLH/IGFL1/PAQR5/CCNA1/SDR9C7/HCG4/S100A12/DKK1/LCE3D/CXCL11/CYP27B1/HORMAD1/DSC2/CDSN/IL36G/IL36RN/DSC1/STEAP4/TCHH/MGST1/RGS20 |
| MEBARKI\_HCC\_PROGENITOR\_FZD8CRD\_DN | MEBARKI\_HCC\_PROGENITOR\_FZD8CRD\_DN | 385 | 0.293557 | 1.518192 | 0.000145 | 0.0014 | 0.000995 | 4428 | tags=31%, list=25%, signal=24% | MMP7/SPP1/APOE/C5AR1/APOC1/NAMPT/NR1H3/CXCL1/CTSH/PNPLA7/ARHGAP4/MATK/VEGFA/SLC2A14/GOLT1A/INSIG1/SGK1/SPSB1/NUDT7/OXER1/NGEF/MMP19/DCDC1/SCARF1/CYP2B6/HGD/ST3GAL1/TDRG1/SERPINA1/FABP1/ST6GAL1/CREB3L3/ABCG8/TMEM176A/ACSF2/OAF/CHIA/FGB/ARID5A/LIPC/MYO7A/CISH/GRM3/NTN5/SULT2A1/NAT8/TMEM198B/PACSIN1/CIDEC/PLIN5/MCF2L/ORM1/COL28A1/S100A12/TMEM238/SLC17A4/CYP3A7/SEC31B/HSD17B3/SLC22A9/REEP6/SLC22A18/MUC15/CHRD/BLNK/PDZD3/SLC2A2/HAO1/CDH16/GAS2/GTF2IRD2/PTK2B/GCHFR/SMPDL3A/BAIAP3/A1CF/ASGR1/HLF/VEPH1/IGLL1/WNT11/COL3A1/PCSK4/TMEM176B/NLRP1/GFI1B/SP100/CRYM/CYP3A5/DHRS3/ETV1/A1BG/ONECUT1/GLRX/GPD1/PLA1A/GJB1/PGLYRP2/ATP2B2/BATF2/TRIM36/HAPLN3/PLCXD1/RNF180/NEB/RORC/FSIP2/DPP4/SULT1C2/MOGAT1/ALB/NR1H4/DPT/HP/SEC14L4/CLMN/BAAT/C4A/CYP4F3 |
| KEGG\_NEUROACTIVE\_LIGAND\_RECEPTOR\_INTERACTION | KEGG\_NEUROACTIVE\_LIGAND\_RECEPTOR\_INTERACTION | 267 | 0.302395 | 1.517639 | 0.000632 | 0.004827 | 0.00343 | 5100 | tags=39%, list=28%, signal=28% | C5AR1/AVPR2/TACR3/PTAFR/GABBR1/BDKRB1/CGA/HTR1B/PRSS3/FPR3/TAAR6/OPRK1/P2RY8/ADRA2A/HCRTR1/PLG/FPR2/TACR2/DRD5/FPR1/CHRNE/ADORA1/GABRG2/VIPR2/GLRA1/P2RY11/CTSG/C3AR1/MC5R/BRS3/LPAR2/PTGER4/CHRM4/CCKBR/GPR35/GRM3/GRIA2/GRIN3B/ADRB1/TAAR2/GABRQ/GABRA5/GRM4/NPFFR2/F2RL1/CHRNA10/UTS2R/ADRB3/P2RX4/GRIK5/GABRA3/GRM5/GZMA/CYSLTR2/GLP2R/MTNR1A/CHRM3/RXFP2/NTSR1/GNRHR/CHRNA3/HTR1A/S1PR2/TRHR/TAAR5/RXFP1/GABRP/P2RX7/CHRNA2/GPR83/PRSS1/MTNR1B/HRH1/CRHR2/DRD2/CHRM5/CNR2/NPY4R/OPRD1/GRM6/GPR50/ADRA2B/GPR156/NPY1R/SSTR4/CHRNA1/CCKAR/HTR2C/GABRG1/GLRA2/LEP/GIPR/OPRL1/CHRM1/GABRB3/MLNR/GRIN3A/GABRG3/GALR2/GRIN2D/GHSR/GH1/MC2R |
| CHYLA\_CBFA2T3\_TARGETS\_UP | CHYLA\_CBFA2T3\_TARGETS\_UP | 368 | 0.293911 | 1.51626 | 0.000196 | 0.001815 | 0.00129 | 2166 | tags=19%, list=12%, signal=17% | NCF2/GADD45B/SPI1/DUSP2/TREM1/OLR1/FBP1/NR1H3/LAPTM5/CSRNP1/TNFRSF12A/CYTH4/CST7/CLEC5A/EMP1/HK3/CTSL/CEBPB/HDC/SGMS2/SERPINB1/GPRC5A/PRG2/TGFBI/NRG4/GAS7/NCF4/SLCO4A1/OR2A14/SLPI/PLEK2/CFAP57/ABCG1/ATRNL1/EHD3/SLC24A5/RHOB/LCP1/IGSF6/RASSF8/TCIRG1/PLD4/PRSS57/TMEM150B/SLC28A2/GMPR/FCGR2B/STARD8/CLEC4D/PPBP/CCDC125/CTSG/VAT1/HIVEP3/F13A1/ARID5A/HPSE/EBI3/SPTBN1/MYO7A/SLAMF1/MSANTD3/ARL11/PIK3IP1/CD48/HOMER3/MCUB/CD300LG/B4GALNT4/PTGS1 |
| LI\_AMPLIFIED\_IN\_LUNG\_CANCER | LI\_AMPLIFIED\_IN\_LUNG\_CANCER | 176 | 0.317474 | 1.515037 | 0.003296 | 0.018602 | 0.01322 | 2601 | tags=24%, list=14%, signal=21% | SPP1/MMP12/CSTB/POSTN/SLC7A5/PLAU/PKM/S100P/PGD/LGALS3BP/VEGFA/CRABP2/MSLN/TKT/IGFBP2/COL1A2/RPS16/ENO1/SYN1/TRIM28/EEF1A2/BGN/COL1A1/CEACAM5/CDK2AP2/MCL1/FGB/ADGRG1/XBP1/GPI/PHLDA2/APRT/TIMP1/DPP7/THBS2/ALDOA/RPS27/GALNS/SLC22A18/KRT6C/YWHAZ/LDHA |
| MEBARKI\_HCC\_PROGENITOR\_WNT\_UP | MEBARKI\_HCC\_PROGENITOR\_WNT\_UP | 177 | 0.316948 | 1.514201 | 0.002303 | 0.013934 | 0.009902 | 2413 | tags=20%, list=13%, signal=18% | MMP7/PLAUR/SLC7A5/RGCC/FLNA/SLC12A8/MMP13/TEX15/SPOCD1/TGFBI/COL1A2/ITGA5/SERPINE1/CSF1R/LCP1/FAP/CLDN2/CSPG5/GBP1/EYA2/DNM3/IGFL1/EXT1/COL1A1/SPOCK1/HAPLN1/RDH10/MAGED4B/CDCP1/IHH/LCE1A/TPM4/THBS2/NOG/KLF7/SLC1A3 |
| SENGUPTA\_EBNA1\_ANTICORRELATED | SENGUPTA\_EBNA1\_ANTICORRELATED | 130 | 0.329251 | 1.513058 | 0.005537 | 0.028374 | 0.020164 | 3099 | tags=28%, list=17%, signal=23% | GADD45B/HLA-F/COTL1/PLK3/ARHGAP4/HLA-A/PTPRE/ARHGEF1/HPX/MAP2K3/PPARD/SIGLEC7/CTLA4/KCTD17/SFXN3/FAM107A/TECPR1/VAV2/CISH/KCNAB2/PPP1R9B/KIAA0513/PACSIN1/STK10/EFTUD2/RUBCN/STARD3/MCF2L/CD247/GALNS/CCDC74A/FMNL1/SREBF1/FITM1/SYT9/RAPGEF1 |
| RODRIGUES\_NTN1\_TARGETS\_DN | RODRIGUES\_NTN1\_TARGETS\_DN | 153 | 0.322635 | 1.512884 | 0.002746 | 0.016125 | 0.011459 | 2358 | tags=20%, list=13%, signal=17% | HLA-DRB1/TIMP3/TNFRSF1B/LIMK1/ARRB2/VEGFA/SHB/PXN/MSLN/PRSS3/STK17B/DUSP6/EPOR/TNFRSF21/IER3/CLDN2/SFXN3/ADORA1/IRF9/SLC6A20/VDR/KLF2/NECTIN2/IRF8/MET/SEZ6L2/DGKD/PRSS8/AREG/SOX9 |
| PID\_CXCR4\_PATHWAY | PID\_CXCR4\_PATHWAY | 100 | 0.348184 | 1.512047 | 0.005587 | 0.028573 | 0.020306 | 1126 | tags=16%, list=6%, signal=15% | MMP9/CD4/HLA-DRA/RGS1/LIMK1/LYN/PLCB2/PTPN6/ARRB2/VAV1/PXN/FYN/ITGA5/RHOB/HCK/CD3E |
| LIN\_SILENCED\_BY\_TUMOR\_MICROENVIRONMENT | LIN\_SILENCED\_BY\_TUMOR\_MICROENVIRONMENT | 101 | 0.345044 | 1.504826 | 0.007523 | 0.036082 | 0.025642 | 3858 | tags=32%, list=21%, signal=25% | SIK1/DUSP5/EGR3/S100P/SLC20A1/IL1RN/EMP1/C15orf48/MXD1/GPRC5A/SLC4A11/IGFL1/TLR1/VGLL1/EPB41L1/KRT78/KRT4/ELF3/SOX9/SCEL/SLC12A6/MUC15/DKK1/CYP4B1/DAPK1/A2ML1/GABRP/DSC2/PDK4/SPRR1A/MYH14/VSIG10 |
| OKUMURA\_INFLAMMATORY\_RESPONSE\_LPS | OKUMURA\_INFLAMMATORY\_RESPONSE\_LPS | 172 | 0.315985 | 1.503649 | 0.005214 | 0.027077 | 0.019243 | 2635 | tags=22%, list=15%, signal=19% | CXCL8/CCL8/TNFAIP3/OLR1/CEBPD/HAMP/SPHK1/IL18RAP/FOXO4/SOX17/CCR7/RELB/CCL1/RAB38/PELP1/ZNF639/FKBP1A/PPIF/DNAJC6/TLR1/VDR/SIK2/TNIP1/PTGER4/ATF5/CA1/MSH4/BIRC3/TNS3/PKMYT1/GALNT12/ACSL1/CCHCR1/UBE2NL/ORAI2/ORC6/DSE/DOCK10 |
| COULOUARN\_TEMPORAL\_TGFB1\_SIGNATURE\_UP | COULOUARN\_TEMPORAL\_TGFB1\_SIGNATURE\_UP | 105 | 0.339147 | 1.500259 | 0.009098 | 0.041995 | 0.029844 | 3523 | tags=30%, list=20%, signal=24% | BHLHE40/TNFRSF1B/CXCL1/BCL3/SLC20A1/FOSL2/VIM/SGK1/GNG13/SERPINE1/RASSF8/IER3/NBEAL1/GGA3/SMAD7/TMSB4X/SLC29A1/IMPACT/UAP1L1/SOX9/PALMD/AMD1/PDGFA/DUSP4/IQGAP1/DDR1/TGIF1/IFNGR1/CLDN4/IDI1/CSNK1E |
| CAIRO\_LIVER\_DEVELOPMENT\_DN | CAIRO\_LIVER\_DEVELOPMENT\_DN | 215 | 0.307769 | 1.499552 | 0.002139 | 0.0131 | 0.00931 | 2540 | tags=20%, list=14%, signal=18% | APOE/HMOX1/LYZ/HLA-E/CYP27A1/LRP1/NDRG1/C3/IL1RN/CTSH/PSAP/PGLYRP1/PRG2/SERPINA10/CD68/LGALS9/LCP1/UPK1B/SERPINA1/PLG/HAAO/ST6GAL1/GSN/TFR2/SERPIND1/TAPBP/TNFRSF11A/FGB/PROC/AQP9/NRN1/LIPC/RAD52/GM2A/BHMT/CYP2F1/HERC1/TMPRSS2/ACSL1/TTPA/GC/GRIK5/ITIH2/CA5A |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_WITH\_LMP1\_DN | SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_WITH\_LMP1\_DN | 164 | 0.317258 | 1.498454 | 0.004296 | 0.023132 | 0.016439 | 3829 | tags=31%, list=21%, signal=25% | MMP7/KRT14/ANPEP/S100P/ACSS3/SPRR1B/CRABP2/GJB2/MSLN/CCDC113/CFB/PROM1/UPK1B/SERPINA1/CXCL5/RRAD/MAGEA4/MCOLN3/DNAJC6/MAP2/RDH10/KRT24/TFCP2L1/DNER/SULT1E1/ART3/KRT4/IL13RA2/S100A12/GC/SCEL/PDPN/DMKN/PLP1/S100A7/UGT2B4/C20orf85/FAM83C/PIGR/CAPNS2/ICAM4/C19orf33/CLIC6/NQO1/FAM81B/GABRP/PDK4/TMPRSS3/TCL1A/SPRR1A/CNTNAP3 |
| DARWICHE\_SQUAMOUS\_CELL\_CARCINOMA\_UP | DARWICHE\_SQUAMOUS\_CELL\_CARCINOMA\_UP | 141 | 0.322635 | 1.49765 | 0.009323 | 0.04285 | 0.030452 | 3760 | tags=33%, list=21%, signal=26% | SPP1/IL1B/ICAM1/LYZ/FTL/LIF/GSK3B/PLEKHA4/CXCL16/CACNA1E/SLPI/SOD3/ENO1/FABP4/RHOH/CHI3L1/DRD5/MT1A/NCL/LYPD2/GCLM/ENG/RPTN/LY6E/CMPK2/SDR9C7/RUBCN/LTBP4/NEK4/ARAP1/BAIAP2/SARAF/LDHA/SFPQ/CCDC38/SUN1/TGFA/CDC42EP2/FES/PFKL/HBE1/LCE3B/PRSS1/KLK9/CHP1/ACOT9 |
| BORCZUK\_MALIGNANT\_MESOTHELIOMA\_DN | BORCZUK\_MALIGNANT\_MESOTHELIOMA\_DN | 98 | 0.345345 | 1.494782 | 0.005977 | 0.030031 | 0.021342 | 3654 | tags=35%, list=20%, signal=28% | CCL2/APOD/SAT1/CD79A/RGS16/TPSAB1/DENND3/ACAP1/HAS2/KIR3DL2/CD19/TCIRG1/MYL3/NBEAL2/VIPR2/CCL21/PPT2/PRB1/ACSM1/AGFG2/TRAF1/ARAP1/IL7R/CHRD/NCR1/SFPQ/CD6/CLCN1/LBX1/CPT1B/CFP/ZBTB7A/CDKN2A/CYP3A5 |
| AFFAR\_YY1\_TARGETS\_DN | AFFAR\_YY1\_TARGETS\_DN | 253 | 0.298322 | 1.49035 | 0.002078 | 0.012812 | 0.009105 | 2775 | tags=20%, list=15%, signal=17% | SPP1/APOC1/CCL2/LYZ/TNFRSF1B/HLA-E/SCD/GPR84/TUBB2A/CTSL/MMP13/HLA-B/SCARB1/TACC3/TGFBI/VAV1/JMJD6/MNDA/CHTF18/LMNB1/PCDHB11/HAS2/SOD3/SERPINA1/RAD18/SOX7/BCAT1/FCGR2B/COL6A3/SLC29A1/CRABP1/SPTBN4/PRELP/PCOLCE2/FBXW12/TAC1/IL1RAPL2/PTGS1/PLA2G1B/FOXM1/THBS2/UTS2R/HMGB2/SHCBP1/SLC22A18/GZMA/GJB3/PLSCR2/MTNR1A/SUV39H2/PRKG2 |
| HUANG\_GATA2\_TARGETS\_UP | HUANG\_GATA2\_TARGETS\_UP | 144 | 0.319539 | 1.490239 | 0.008744 | 0.040537 | 0.028808 | 1381 | tags=18%, list=8%, signal=17% | SPI1/LYZ/SQSTM1/RNF130/HLA-E/NDRG1/PLIN2/FAM107B/SAT1/SH3BGRL3/SAMSN1/CDKN1A/TYROBP/LPXN/MNDA/IQGAP2/KCNN4/RHOG/RAB38/SLC8B1/MYO1F/GABARAPL1/SATB1/FCGR2B/GSN/CLEC4D |
| WP\_GPCRS\_CLASS\_A\_RHODOPSINLIKE | WP\_GPCRS\_CLASS\_A\_RHODOPSINLIKE | 252 | 0.297871 | 1.489089 | 0.001782 | 0.011327 | 0.00805 | 5208 | tags=39%, list=29%, signal=28% | AVPR2/CCR8/PTAFR/OR5F1/BDKRB1/HTR1B/CCR7/FPR3/OPRK1/OR2S2/OR2D2/GPR39/OR10H3/ADRA2A/HCRTR1/OR2J3/OR11A1/OR1C1/FPR2/OR1Q1/DRD5/FPR1/OR3A1/ADORA1/OR2F2/P2RY11/GPR31/CCR10/CXCR1/C3AR1/MC5R/OR7A10/BRS3/OR2B2/GPR87/PTGER4/OPN4/CHRM4/CCKBR/GPR35/OR2T1/OR1E1/RGL4/ADRB1/FFAR3/NPFFR2/F2RL1/ADRB3/OPN1MW/CXCR2/CYSLTR2/MTNR1A/CHRM3/NTSR1/GPR15/OR10H1/OR5V1/GPR17/HTR1A/OR2B6/TRHR/CXCR3/GPR174/OR2H1/GPR37/GPR83/GPR75/MTNR1B/HRH1/DRD2/CHRM5/CNR2/NPY4R/OPRD1/GPR171/GPR50/ADRA2B/NPY1R/SSTR4/CCKAR/GPR68/HTR2C/OR12D3/OR1A1/CXCR5/OPRL1/CHRM1/MLNR/FFAR2/OR7A17/OR3A3/GPR6/GALR2/C5AR2/GHSR/MC2R/OR3A2/CMKLR1/HTR5A |
| LEIN\_CHOROID\_PLEXUS\_MARKERS | LEIN\_CHOROID\_PLEXUS\_MARKERS | 98 | 0.343837 | 1.488256 | 0.006602 | 0.032535 | 0.023121 | 2584 | tags=24%, list=14%, signal=21% | VWA3A/PLTP/LGALS3BP/STRA6/CDH3/RNASET2/SGMS2/TGFBI/SULF1/PBXIP1/LRP10/SLC24A5/KIF9/CLDN2/PCOLCE/TTR/SLC6A20/PCOLCE2/F13A1/MYO7A/GC/EZR/EPHX1/SLCO1C1 |
| MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_UP | MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_UP | 348 | 0.290137 | 1.487795 | 0.00082 | 0.006025 | 0.004282 | 2935 | tags=23%, list=16%, signal=19% | HS3ST2/PLAUR/CAMK1G/GNA15/HAMP/CXCL1/RNASE1/SPATA2L/STRA6/TOR4A/RNASET2/BPIFA1/GABBR1/HORMAD2/SLC6A5/NPPA/SYT12/KMT5C/CALB2/BIRC7/ADAM11/LMNA/MAP2K3/OASL/MLPH/FURIN/HLA-DMB/IMPDH1/NOS1/PTCRA/SIGLEC7/PI16/TRIM48/DDAH2/DRD5/RPL18/EEF1A2/SGSM3/RBM38/AMN/HRK/BTN1A1/SLC22A14/ACTB/NRP2/NOXA1/VDR/CEACAM5/SNCA/CD80/C3AR1/EPB41L1/TNF/KLF2/KCNB1/NUP210/MSC/NECTIN2/ADCY10/NOCT/CIDEC/HSPA6/TAAR2/AAK1/SMIM10L2A/S100A12/DOK1/FXYD2/HOXA6/GJB3/ALDH3B1/CDKN2B-AS1/ULBP1/NCR1/KHSRP/SPACA4/ROBO4/DDIT3/MXRA8 |
| CAIRO\_HEPATOBLASTOMA\_DN | CAIRO\_HEPATOBLASTOMA\_DN | 258 | 0.295929 | 1.482613 | 0.003437 | 0.019339 | 0.013743 | 3178 | tags=25%, list=18%, signal=21% | MARCO/SDS/NAMPT/ZC3H12A/FBP1/ECM1/SLC20A1/ADM/VSIG4/TRIB1/INSIG1/PPP1R1A/OGDHL/C8B/SLPI/NDRG2/HPX/STARD5/ANGPTL4/SERPINE1/EHD3/CYP2B6/HGD/MAP2K3/CD14/PLG/HAAO/NQO2/EPHA2/LIME1/FCGR2B/XDH/EXT1/TFR2/HRG/CXCL14/ARHGEF26/SARDH/CYP2C18/MCL1/IL4R/CA2/SERPINB8/AGPAT2/INHBB/SLC43A3/ABCB11/DHODH/PCK1/TMPRSS2/ACSL1/IL13RA2/KMO/NFIL3/F11/AKR1D1/GNMT/MAT1A/CYP2C19/SLC10A1/RND3/STAB1/F9/IGFALS/CYP2D7 |
| LEE\_NEURAL\_CREST\_STEM\_CELL\_UP | LEE\_NEURAL\_CREST\_STEM\_CELL\_UP | 145 | 0.317054 | 1.478927 | 0.005816 | 0.029384 | 0.020882 | 2191 | tags=23%, list=12%, signal=21% | SPP1/GAP43/POSTN/CEBPD/SST/ARHGDIA/ST18/SH3BGRL3/STRA6/CRABP2/NEFL/GRN/TGFBI/SERPINB9/CELF3/COL1A2/RHOB/FAP/HMGA1/IGFBP7/STMN2/EEF1A2/BGN/GSN/CRABP1/NRP2/STMN4/CDH19/S100A10/HAPLN1/CHGA/C3orf52/SLIT1/PCDH8 |
| ACEVEDO\_LIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_DN | ACEVEDO\_LIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_DN | 256 | 0.295779 | 1.478435 | 0.001774 | 0.011327 | 0.00805 | 2510 | tags=22%, list=14%, signal=19% | ANKRD33/DUSP5/BHLHE40/FOSB/SLC7A5/MT1G/FBP1/CSRNP1/SERTAD1/ANPEP/HAMP/C3/ACP2/AVPI1/RGS2/MXRA5/PLIN2/CTSD/PNPLA7/NR4A2/MT2A/TRIB1/PVR/OGDHL/CD68/GSDMB/NDRG2/TNFRSF21/PNMA6A/FOS/CHPF/IER3/PMPCA/PLG/EPHA2/INHBE/MT1A/BGN/ATP6V1B2/CXXC1/PROC/MAN2B2/VPS37B/MYO7A/ATF5/NOCT/IRF8/LY6E/ACADVL/PGGHG/LTBP4/EGR1/TERF2IP/EZR/SARAF/CYP3A7/RAP1GAP |
| WP\_MALE\_INFERTILITY | WP\_MALE\_INFERTILITY | 137 | 0.318236 | 1.472765 | 0.010644 | 0.047156 | 0.033512 | 3609 | tags=24%, list=20%, signal=19% | MMP9/HLA-DRA/SOD2/TEX15/REC8/HORMAD2/TSSK6/DDX4/SOD3/NOS1/FOLH1B/HMGA1/SLC46A1/MTHFR/PSAT1/CXXC1/TNF/CCNA1/DAZ2/BHMT/MSH4/YBX2/EPSTI1/PRM1/MDM2/SIRPA/MMP2/SPATA17/PEX10/NQO1/SOX5/HORMAD1/TCN2 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_DN | RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_DN | 360 | 0.285509 | 1.470782 | 0.000525 | 0.004138 | 0.002941 | 2641 | tags=21%, list=15%, signal=18% | PLAUR/KRT17/CEMIP/KRT14/SLC7A5/METRNL/TREM1/HBEGF/SERINC2/GNA15/MMP1/ADM/SH3BGRL3/SLC31A2/ITPRIP/SPRR1B/SGMS2/MXD1/PNP/STON2/CDKN1A/GJB2/PXN/IGFL2/LRFN4/CERS3/NGEF/RAB38/NIPAL4/STARD5/MAFB/PPARD/ADCY7/IMPDH1/GDPD2/SLAMF9/DUOXA1/RIC1/HES2/CARD6/KLK8/EPPK1/DUSP7/PTHLH/SPRR4/IGFL1/HIF1A/TOM1/TNFAIP1/LRRC8C/TANGO6/HPSE/ELL2/GPR157/KRT6A/CISH/GM2A/GOLGA7B/CDCP1/SDR9C7/BNC1/HOMER3/TUBA4A/SLC38A7/MCUB/PTGS1/IL1A/CPEB4/TPM4/KLF7/LINC00520/PDPN/ANKRD9/LDHA/KLF10/LCE3D |
| NABA\_ECM\_GLYCOPROTEINS | NABA\_ECM\_GLYCOPROTEINS | 179 | 0.307577 | 1.470653 | 0.006427 | 0.031815 | 0.02261 | 3175 | tags=30%, list=18%, signal=25% | SPP1/POSTN/VWA3A/ECM1/MXRA5/TNC/TGFBI/MATN1/COMP/IGFBP2/IGFBP7/TINAGL1/PCOLCE/ELN/TNR/EMILIN2/FBLN1/VWA5B1/BGLAP/FGB/PAPLN/TSPEAR/PCOLCE2/TNN/NDNF/MFGE8/NTN5/EFEMP1/USH2A/SLIT1/LTBP4/THBS2/IGFBP4/VWA5B2/LGI4/CILP/LAMC3/VWA7/VWA5A/LRG1/LAMA3/TINAG/LGI3/ZPLD1/LAMC2/FBLN2/ADIPOQ/MEPE/IGFBPL1/THBS3/IBSP/IGFALS/CRISPLD2 |
| PEREZ\_TP63\_TARGETS | PEREZ\_TP63\_TARGETS | 323 | 0.287113 | 1.470089 | 0.001799 | 0.011406 | 0.008106 | 3997 | tags=31%, list=22%, signal=24% | CEMIP/METRNL/RGCC/CSRNP1/NDRG1/CYGB/IL1RN/MXRA5/NXF1/ZNF385A/TEX15/NFATC1/MXD1/SOCS3/NEFL/CYTH1/CELF3/ACAP1/WHRN/LGALS2/FOLR2/KMT5C/VASN/CFB/ST8SIA2/RHOB/THEMIS2/MAFB/SLC9A3/ST3GAL1/LAMP3/GFPT2/RUNX3/C7orf57/RBM38/SMAD7/EPPK1/SLC4A11/EPB41L3/TNFRSF10D/KLHL21/HIC2/SPATA13/COL1A1/SLC35E4/CXCL14/VDR/TP53INP2/EFNA3/PROC/IRX5/MROH6/TAF3/ZIC2/PAK6/INHBB/RTN4R/SEMA4D/IHH/NPTX1/HSPA6/DEDD2/FGF18/EGR1/ACSL1/KCNK3/PALMD/MICALL2/ZFYVE1/SLC6A2/GRTP1/ULBP1/RET/SEMA6D/STK40/RBP7/DOC2B/ARID1B/SLC39A8/CXCR3/PLCXD2/CRISPLD2/ELFN1/PSD/ELMOD1/GPR37/NLRP1/NPIPB3/CITED1/DHRS3/RCAN1/NGFR/ACVR1C/DPYSL4/WNT7B/HS6ST3/TMEM63A/ZNRF3/PTX3 |
| MIKKELSEN\_NPC\_HCP\_WITH\_H3K27ME3 | MIKKELSEN\_NPC\_HCP\_WITH\_H3K27ME3 | 325 | 0.287012 | 1.468266 | 0.001367 | 0.009196 | 0.006535 | 4221 | tags=31%, list=24%, signal=24% | CRTAC1/TNFRSF1B/SERINC2/ALK/IRF5/FBLL1/SLC6A5/PROKR2/GJB2/HOXD10/SYT12/SIM2/ABCG1/PRPH/LEMD1/CYP2S1/HCK/HCRTR1/STMN2/HES2/IGSF21/EVA1A/IKZF1/SYT2/CPLX1/SOWAHB/PROK2/CXCL14/GALNT13/COLEC12/SLC6A20/VDR/TNFRSF11A/DMBX1/HECW1/KCNH1/ALDH1A2/FEZF2/PTF1A/OTP/PHLDA2/MSC/CCKBR/LHX5/RTN4R/DMRT1/IHH/BNC1/TMEM130/GABRA5/MAST1/DPP10/FEV/FSTL4/AMIGO2/HS3ST6/KCNK3/PPM1N/EPHA8/SORCS3/ALX1/SLC6A17/POU2F3/WNT1/B3GNT7/C1QL2/DOCK8/IGFBPL1/HTR1A/SIM1/LRAT/SLC17A6/NPR3/C12orf56/PITPNM3/HOXC13/LBX1/GPR37/SLC7A14/ONECUT3/VAX1/TMEM150C/TFAP2C/ZNF536/B4GALNT2/LRRC26/MPPED1/SPTBN2/CA10/ATP2B2/FGF3/FIBCD1/OVOL2/UTF1/EMX1/DRD2/C1QL1/NEFH/POU4F3/OPRD1 |
| QI\_HYPOXIA | QI\_HYPOXIA | 131 | 0.319644 | 1.467932 | 0.0089 | 0.041152 | 0.029245 | 2494 | tags=23%, list=14%, signal=20% | HMOX1/BHLHE40/HK2/STC1/SCD/SERTAD1/NDRG1/ADM/VEGFA/CDKN1A/INSIG1/JMJD6/ACAP1/NDRG2/CYP2S1/IER3/ACER2/DUSP1/NRN1/HPSE/GPI/KCNB1/GPR35/TNFSF9/MAP3K1/ITPK1/SLC19A2/EGLN1/SOX9/ALDOA |
| TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_UP | TAKEDA\_TARGETS\_OF\_NUP98\_HOXA9\_FUSION\_8D\_UP | 149 | 0.314191 | 1.465817 | 0.007473 | 0.035938 | 0.02554 | 2723 | tags=25%, list=15%, signal=21% | APOC1/TUBB2A/IRF7/SLC12A8/HBB/HBD/NR4A2/LGALS3BP/TPSAB1/CCR7/JCHAIN/METTL7B/NMU/SLC9A3/SMIM24/MX2/GDF15/PLD4/ALDH1A1/GBP1/OAS1/IRX3/DNAJC6/SPOCK1/CTSG/OAS3/GAD1/LY6E/HIC1/ADRB1/FGF18/IGFBP4/NOG/EPSTI1/DENND6B/RBM11/ADCYAP1 |
| WANG\_MLL\_TARGETS | WANG\_MLL\_TARGETS | 285 | 0.290142 | 1.463499 | 0.002393 | 0.014315 | 0.010173 | 4116 | tags=29%, list=23%, signal=23% | DUSP2/POSTN/TREM2/RNF130/EGR3/ISLR/IL6/MAPK13/IL1RN/G0S2/FAM20A/ADM/TMEM51/NR4A2/PLEK/RGS16/LGALS3BP/MMP13/TGFBI/LPXN/CYBA/PLEK2/SFRP2/COL6A2/SMPDL3B/FABP4/THBD/GNG8/MAFB/CD14/KCNA4/CACNA1A/CYP2S1/CHI3L1/DEF6/EVA1A/PTHLH/DMBX1/NDNF/ZIC2/CISH/C2/DAB2/CYP2F1/WNK4/BNC1/GALNT12/B4GALNT4/AMIGO2/THBS2/RTN4RL1/ITIH2/NFATC4/SCEL/ALX1/FOXS1/DGKA/DLL1/FES/MMP2/ABCA9/HLF/HOXC13/SCP2/PITX2/SOX5/PTGES/CDHR1/PDK4/DHRS3/ETV1/VAX2/SPRR1A/HSD11B1/HNF1B/ASPA/GATA3/KCTD12/RNF144B/CNNM2/SLC27A3/STEAP4/SLC7A2 |
| MULLIGHAN\_MLL\_SIGNATURE\_2\_UP | MULLIGHAN\_MLL\_SIGNATURE\_2\_UP | 404 | 0.281869 | 1.463202 | 0.000669 | 0.005059 | 0.003595 | 3250 | tags=24%, list=18%, signal=20% | CAPG/APOC2/PLAUR/SPI1/ITGAX/SLC16A3/ITGB2/PKM/FBP1/LAPTM5/FLNA/CYTH4/RAC2/MAPK13/M6PR/IL1RN/TNFAIP2/APOBR/NLRP3/CTSL/RNF19B/FOSL2/RFX2/KHNYN/ITGB7/SCPEP1/PTAFR/ARHGAP45/EFHD2/PILRA/GSK3B/GRN/GAS7/CYBA/LRFN4/LRP10/SLC8B1/ENO1/LCP1/ADCY7/HCK/MYO1F/IGFBP7/CD300C/TNFRSF10B/PPIF/SEL1L3/IKZF1/DUSP7/HIC2/FCGR1A/LST1/LAIR1/NRGN/PPT1/SLC25A44/RNPEPL1/HCLS1/BATF/TRPM4/IRAK1/NUP210/IL17RA/TNS3/CAMKK2/IKBKB/ELF3/FUT7/RSPH6A/KYNU/OAZ1/SLC22A18/HOXA6/GAA/ALDH3B1/CXCR2/ZNF592/TREX1/MFSD1/IQGAP1/TPP1/SLC36A1/GRB2/SIRPA/ABCA8/CNPY3/TRABD/ELF4/TGFA/PTK2B/PLD3/DPEP2/FES/RAB4B/C15orf39/GPS2/RMND5B/SRRT |
| MIKKELSEN\_NPC\_HCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | MIKKELSEN\_NPC\_HCP\_WITH\_H3K4ME3\_AND\_H3K27ME3 | 204 | 0.299849 | 1.457864 | 0.004265 | 0.02299 | 0.016338 | 3787 | tags=28%, list=21%, signal=22% | NDRG1/PLTP/NEUROG2/ZNF296/RAB20/GPAT3/CDKN1A/NEFL/ST8SIA2/GNG8/HMX1/CDK5R2/AP3B2/SATB1/HRK/ADORA1/ADAMTS2/SEMA7A/IGF2BP2/PRMT8/OAF/PTPRU/MNX1/NEUROG1/KCNJ4/WNT6/PTGER4/KIAA1549L/GAD1/A4GALT/TUBA4A/FAM78A/PCDH8/HS3ST3A1/NOG/XKR5/ADRB3/PAQR9/GJA3/RET/STK32C/PLXNA4/KNDC1/GCHFR/SNTB1/SOX1/MSX2/WNT11/ELFN1/MMP24/WNK2/CDHR1/AMER3/RGS9BP/CLDN23/NGFR/CPEB1 |
| ONDER\_CDH1\_TARGETS\_1\_DN | ONDER\_CDH1\_TARGETS\_1\_DN | 162 | 0.308082 | 1.456881 | 0.00992 | 0.044831 | 0.03186 | 3840 | tags=30%, list=21%, signal=24% | IL1B/CXCL8/HS3ST2/FOSL1/HBEGF/CXCL1/CXCL2/KRT8/SERPINB1/GPRC5A/DUSP6/PTHLH/CSF2/CSF3/VGLL1/EIF5/CYB5R2/SERPINB8/SYNCRIP/SLC43A3/UMPS/TMPRSS11E/SLC16A1/BCLAF1/SOX9/IL7R/SERPINB2/SCEL/KLF10/DKK1/S100A7/PAFAH1B1/SFPQ/RBM12/BRIP1/KRT34/TGFA/KLK11/TP63/SRSF2/EPN3/PRRC2C/MEST/PPP2R1B/SP100/DSC2/ATP13A3/IL36G/MAP4 |
| JAEGER\_METASTASIS\_DN | JAEGER\_METASTASIS\_DN | 250 | 0.291866 | 1.455267 | 0.002811 | 0.016381 | 0.011641 | 3617 | tags=26%, list=20%, signal=21% | KRT17/KRT14/GNA15/S100P/MAPK13/ST14/TPSAB1/CDH3/SPRR1B/CCL27/PRSS3/CD207/SLPI/KLF4/NMU/THBD/SPINK5/FZD10/DSG3/KLK8/EPPK1/DUSP7/MCOLN3/CXCL14/PRELP/CTSG/FCGBP/KRT6A/GPR87/CA2/PAK6/FGFBP1/SCGB2A2/AP1G2/LGALS7/DST/TUBA4A/PTGS1/PRSS8/F2RL1/NRCAM/AREG/DUOX1/PALMD/SCEL/LAMA3/NTRK2/GJB3/S100A7/DGKA/POU2F3/LAMC2/ZNF185/KLK11/GJA1/IMPA2/TP63/HLF/CDHR1/FLG/KRT16/TFAP2C/DSC2/FAT2 |
| PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_UP | PICCALUGA\_ANGIOIMMUNOBLASTIC\_LYMPHOMA\_UP | 196 | 0.301263 | 1.452852 | 0.005169 | 0.026895 | 0.019113 | 1625 | tags=19%, list=9%, signal=18% | APOE/APOC1/CCL2/C1QC/C1QB/MMP9/NR1H3/CYP27A1/C3/MXRA5/FAM20A/CTSL/RAB13/GABBR1/TNC/COL4A2/SULF1/GPNMB/TRIM47/COL1A2/ADAMDEC1/CFB/KCNJ10/ADRA2A/ITPRIPL2/IGFBP7/CHI3L1/PCOLCE/TMEM176A/SPRED1/COL1A1/ENG/SLAMF8/SLCO2B1/FAM107A/CCL21/VCAM1/ACTA2 |
| CHUNG\_BLISTER\_CYTOTOXICITY\_UP | CHUNG\_BLISTER\_CYTOTOXICITY\_UP | 131 | 0.316018 | 1.45128 | 0.009783 | 0.044434 | 0.031577 | 2696 | tags=24%, list=15%, signal=20% | ACP5/C1QC/C1QB/TNFAIP3/HCST/GNA15/PLIN2/PDE4A/CTSL/RAB13/CDKN1A/TUBB4B/CD81/GPR137B/GNLY/CNDP2/SLAMF8/CHID1/FLVCR2/IRAK1/HNRNPA3P1/MYO7A/ATF5/SLC43A3/RALA/ZNF410/CLTA/CTSB/TIGIT/CBLB/MT1E |
| DELACROIX\_RARG\_BOUND\_MEF | DELACROIX\_RARG\_BOUND\_MEF | 351 | 0.282218 | 1.450171 | 0.000541 | 0.004256 | 0.003025 | 3162 | tags=25%, list=18%, signal=21% | TIMP3/BHLHE40/PKM/SQSTM1/FTL/ABCB8/JUNB/LSP1/TNFRSF12A/LRP1/SLC25A24/MAPK13/AVPI1/IL1RN/FAM20A/CTSD/ITGBL1/EMP1/FAM107B/SAT1/TNFRSF11B/CEBPB/VEGFA/GPRC5A/CRABP2/DDX24/SGK1/SULF1/MSLN/CLCF1/CNTD1/DUSP6/FTH1/FURIN/HMGA1/SH3BP1/TCIRG1/GDF15/TPST2/GABARAPL1/F11R/PCOLCE/BTN1A1/COQ10B/COL1A1/EPS8L2/OTUD5/ARSA/DUSP1/NRN1/SPTBN1/CDKN2D/CAPNS1/OLFML2A/UBC/WNK4/DST/FGF18/PRSS8/G6PD/GRIK5/PALMD/ITIH2/RAB30/CFL2/CTSB/AQP5/TRAF3IP2/PLEKHB1/BLNK/SIRT6/THRSP/PLSCR2/PMM2/DUSP4/RILPL2/WNT1/FBLN2/DDIT3/GAS2/RND3/IDO2/RPL19/ZNF574/MMP2/NUPR1/ALS2CL |
| CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_BASAL\_DN | CHARAFE\_BREAST\_CANCER\_LUMINAL\_VS\_BASAL\_DN | 426 | 0.276902 | 1.445451 | 0.000474 | 0.003798 | 0.002699 | 2815 | tags=22%, list=16%, signal=19% | ICAM1/FOSL1/KRT17/NAMPT/KRT14/PLAU/TNFAIP3/RGCC/MT1G/HLA-E/CEBPD/GNA15/COTL1/C3/CXCL1/CXCL2/RAC2/RGS2/LYN/ADM/EMP1/IRX1/MT2A/CDH3/SCPEP1/CHMP1B/COL4A2/TGFBI/SGK1/TRIP10/FXYD5/TKT/SLPI/ATP1A1/CFB/CD14/FAP/YBX1/IGFBP7/RUNX3/FKBP1A/DSG3/EPHA2/CARD6/GBP1/SEL1L3/EVA1A/SOX7/PLSCR1/TNFRSF10D/IGF2BP2/ARHGAP5/EXT1/HIF1A/PSAT1/EVA1C/LY6K/ELL2/B2M/SPTBN1/HOTAIRM1/KRT6A/CCNA1/MFGE8/GM2A/FGFBP1/MET/CDCP1/SLC16A1/BIRC3/RETSAT/DST/BNC1/TUBA4A/IL1A/F2RL1/SPRY2/IL18/IL7R/SLC1A3/SERPINB2/DUOX1/AMD1/CFL2/LAMA3/DSE/GJB3/ANXA2/ELK3/DGKA/LAMC2/TLR2 |
| WP\_CIRCADIAN\_RHYTHM\_GENES | WP\_CIRCADIAN\_RHYTHM\_GENES | 195 | 0.298435 | 1.442882 | 0.006958 | 0.033855 | 0.024059 | 4873 | tags=33%, list=27%, signal=25% | HS3ST2/SIK1/NAMPT/BHLHE40/NR1H3/EGR3/IL6/GSK3B/PROKR2/RELB/PER1/SERPINE1/SLC9A3/NR1D2/HCRTR1/USP2/ATOH7/ADORA1/PROK2/CSNK1D/TNFRSF11A/PASD1/OPN4/ATF5/NOCT/UBC/CST3/CRY2/EGR1/AVP/UTS2R/NFIL3/SETX/TP53/KLF10/MTNR1A/SUV39H2/SFPQ/PRKG2/SREBF1/ADIPOQ/TOP1/PRF1/CLDN4/PTGDS/CSNK1E/NGFR/MTNR1B/UBA52/HNF1B/DRD2/RORC/ADA/NTRK1/JUND/PRKAA2/PSPC1/LEP/OPRL1/PER2/CHRM1/JUN/F7/SFTPC/DDC |
| MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_UP | MCBRYAN\_PUBERTAL\_TGFB1\_TARGETS\_UP | 164 | 0.305439 | 1.442629 | 0.007183 | 0.034888 | 0.024794 | 3152 | tags=27%, list=18%, signal=22% | CAPG/BHLHE40/COTL1/ECM1/G0S2/ST14/TPSAB1/EGR2/VEGFA/CDKN1A/TNC/APLP2/CYTH1/ATP1A1/HAS2/VASN/LPL/IER5/CD14/IER3/PCOLCE/UBE2D1/GSN/GALC/BASP1/ACTA2/MFGE8/TIMP2/ACADVL/TUBA4A/EGLN1/SOX9/TJP2/SFPQ/TGM2/SIRPA/COMT/FABP5/PTK2B/CLIC1/GJA1/NFIC/MMP2/TGIF1 |
| THUM\_SYSTOLIC\_HEART\_FAILURE\_UP | THUM\_SYSTOLIC\_HEART\_FAILURE\_UP | 394 | 0.27749 | 1.437705 | 0.001227 | 0.008454 | 0.006008 | 2059 | tags=19%, list=11%, signal=17% | HLA-DRB1/HLA-DQB1/CD74/GADD45B/C1QC/NAMPT/C1QB/CCL8/LYZ/HLA-DRA/ITGB2/LAPTM5/CXCL2/RAC2/SLC11A1/RNASE1/ZFP36L2/HLA-DPA1/M6PR/ARHGDIA/LYN/ADM/ITGBL1/TNFRSF11B/VSIG4/VEGFA/LMAN1/EIF1/TYROBP/IL2RG/FCER1G/MNDA/HTATSF1/FPR3/NPPA/YWHAE/PLXDC2/FOLR2/ENO1/PPFIBP1/CFB/ATP6AP2/OASL/LCP1/CD14/GNLY/ST6GAL1/BCAT1/FCGR2B/GSN/RAB5A/ACTB/ENG/LST1/FCGR3A/LAIR1/CDH19/VCAM1/F13A1/AIF1/C3AR1/LAP3/RGS4/NPPB/CD53/HPGDS/LY96/MFGE8/INHBB/IRF8/PIK3IP1/GAS5/INPP5A/SLC16A1/PRMT2 |
| TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_UP | TONKS\_TARGETS\_OF\_RUNX1\_RUNX1T1\_FUSION\_MONOCYTE\_UP | 193 | 0.297801 | 1.437123 | 0.006124 | 0.030624 | 0.021763 | 1418 | tags=16%, list=8%, signal=15% | APOE/CCL8/TREM1/RGCC/OLR1/PLTP/TUBB2A/MMP1/SLC20A1/G0S2/PLIN2/MT2A/RAB13/DDX24/SLC5A3/SLCO4A1/APLP2/KCNN4/LGALS9/COL1A2/LPL/DUSP6/PPFIBP1/GDF15/GBP1/ST6GAL1/CSF1/OAS1/EXT1/CH25H/BCL2A1 |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_UP | DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_UP | 300 | 0.281083 | 1.43103 | 0.00218 | 0.013293 | 0.009447 | 1434 | tags=16%, list=8%, signal=15% | IFI30/SQSTM1/HLA-F/HLA-E/JUNB/FLNA/CEBPD/ATP6V1F/PLTP/TUBB2A/BTG2/CCDC85B/RGS2/NXF1/SAT1/PIM2/PLEKHO2/ARRB2/SCO2/HLA-A/PNP/PVR/HLA-G/IRF1/GRINA/MBOAT7/ATF3/AAMP/EPOR/RHOB/TCIRG1/ERGIC3/FKBP1A/MGAT1/NFKBIE/GABARAPL1/PPIF/TMBIM6/RBM38/ZKSCAN1/PLXNA3/TRIM21/TNFRSF10D/GLUL/CREG1/SLC1A5/DAXX |
| WP\_CHEMOKINE\_SIGNALING\_PATHWAY | WP\_CHEMOKINE\_SIGNALING\_PATHWAY | 163 | 0.302476 | 1.429468 | 0.009794 | 0.044449 | 0.031588 | 3397 | tags=28%, list=19%, signal=23% | CCL3/RAC2/LYN/CCL20/CCR8/PLCB2/WAS/ARRB2/GSK3B/CCL11/CCL27/VAV1/PXN/CXCL16/CCR7/CCL1/GNG13/CCL26/GNG8/ADCY7/HCK/ITK/CXCL5/TIAM2/GNAI2/PPBP/CXCL14/CCL21/CCR10/VAV2/CCL17/IKBKB/GNG7/CXCL9/CXCR2/PF4/CCL25/GRB2/CCL4/PTK2B/CXCR3/TIAM1/STAT3/CXCL11/ADCY5 |
| PEDRIOLI\_MIR31\_TARGETS\_DN | PEDRIOLI\_MIR31\_TARGETS\_DN | 388 | 0.275653 | 1.427797 | 0.000617 | 0.004736 | 0.003366 | 3004 | tags=21%, list=17%, signal=18% | MMP7/SPP1/CXCL8/ICAM1/NCF2/TIMP3/RASD1/STC1/SLC16A3/TNFAIP3/SOD2/CXCL2/CA4/RNASE1/EMP1/CCL20/PNPLA7/NR4A2/MMP11/IL32/NOD2/PLXND1/ITGB7/FERMT3/NFKB2/SELE/CORO7/HOXD10/RELB/HTRA3/DCLK3/RAB38/SMPDL3B/SIAE/HLA-DOA/TRIM14/STMN2/RRAD/DEF6/CACTIN/CHRNE/EMILIN2/SPOCK2/TMSB4X/PSG3/AKR1C2/CD276/NOXA1/PLXNB3/VCAM1/EVA1C/VAT1/DEFA5/GPR157/SOCS6/CSF3R/CMTM3/ETV2/BIRC3/GBP2/DAPK2/NRCAM/P2RX4/ZNF846/INHBC/PLEKHB1/LRG1/IRAK2/PDZD7/ZNF343/LATS2/SLC44A5/FMNL1/STUM/TLR2/MAT1A/MTMR12/GGTLC2/LTB/GTF2IRD2 |
| BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_DN | BLANCO\_MELO\_BETA\_INTERFERON\_TREATED\_BRONCHIAL\_EPITHELIAL\_CELLS\_DN | 181 | 0.297712 | 1.425379 | 0.00787 | 0.037351 | 0.026544 | 4083 | tags=31%, list=23%, signal=25% | CSTB/ANPEP/PLBD1/ECM1/ZNF862/RFX2/SPRR1B/ITGB7/CRABP2/CES3/CHTF18/SLPI/NGEF/CYSRT1/KMT5C/SPINK5/CCDC88B/KLK8/NBEAL2/EPB41L3/IGFL1/SBSN/RBBP8NL/NOXA1/PLXNB3/CEACAM5/VGLL1/EFNA3/CLCA4/RPTN/KRT78/EME1/KRT24/S100A12/PALMD/RAP1GAP/SLC43A2/LCE3D/S100A7/ADAMTSL4/RASAL1/KLK11/UNC13D/DHRS9/EPN3/A2ML1/KRT16/SYT8/LYNX1/SPRR1A/SYTL1/THAP8/DDX11/CARD14/ANKRD22/ARHGAP33/RHOBTB1 |
| PASINI\_SUZ12\_TARGETS\_DN | PASINI\_SUZ12\_TARGETS\_DN | 304 | 0.280655 | 1.423968 | 0.003877 | 0.021259 | 0.015108 | 1969 | tags=20%, list=11%, signal=18% | GAP43/PHLDA1/BHLHE40/METRNL/HBEGF/TTYH3/SCD/FLNA/TNFRSF12A/TMBIM1/SLC25A24/AMOTL2/BTG2/SAMD4A/PLIN2/FAM107B/MYC/KRT8/FOSL2/TRIB1/GPRC5A/VIM/CDKN1A/NEFL/SHB/SERPINB9/SULF1/AMOTL1/SPSB1/NR6A1/COL1A2/ABRACL/DUSP6/IER5/RHOB/ELOVL1/PROM1/ABTB2/ERRFI1/COL5A1/STMN2/IER3/CSF1/GSN/COL1A1/PPBP/CD276/COLEC12/ZYX/S100A10/VAT1/CSN3/ACTA2/DUSP1/B2M/RDH10/PPP1R18/SOCS6/EFEMP1/CMTM3 |
| BHAT\_ESR1\_TARGETS\_VIA\_AKT1\_UP | BHAT\_ESR1\_TARGETS\_VIA\_AKT1\_UP | 270 | 0.282752 | 1.421302 | 0.003238 | 0.018332 | 0.013028 | 3721 | tags=25%, list=21%, signal=20% | HLA-DRB1/GADD45B/DUSP2/BHLHE40/HK2/SLC7A5/CTSD/TMEM51/RGS16/NOD2/SH2D2A/RIMS4/EFHD2/SCARB1/SHB/SLC25A25/LRFN4/SYT12/ATF3/TRIM47/MLPH/AP1B1/SBNO2/HCK/FOS/MTFP1/IER3/GDF15/GLA/PPIF/FCHO1/NT5DC3/SLC29A1/CELSR2/MED24/XBP1/A4GALT/HOMER3/LONRF2/IGFBP4/RARA/LRG1/ALDH3B1/PMM2/LMO1/PPRC1/MAT2A/RET/RECQL4/ZNF185/TGM2/UBALD1/MAG/ZNF703/TIAM1/SH2B2/AMZ1/CLUH/STX1A/PTGES/MANEAL/ALPL/CERS1/RRP12/SLC7A6/TRMT61A/DHRS3/ATP6V1C2 |
| TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_DN | TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_DUCTAL\_NORMAL\_DN | 181 | 0.295325 | 1.413947 | 0.0089 | 0.041152 | 0.029245 | 2426 | tags=22%, list=14%, signal=19% | MMP7/KRT17/APOD/KRT14/FOSB/SOD2/ANPEP/CDH3/OPRPN/TNC/PLEKHS1/USP31/ATF3/NDRG2/JCHAIN/PER1/NCOA7/FOS/SERPINA1/RRAD/CHI3L1/DSG3/TNFRSF10B/GABARAPL1/SCGB1D2/SPRED1/PAPLN/MAP2/DUSP1/HOTAIRM1/CYB5R2/TAC1/CFD/SCGB2A2/MET/DST/EGR1/ELF3/SOX9/PALMD |
| RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_UP | RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_UP | 205 | 0.289962 | 1.412904 | 0.007748 | 0.036932 | 0.026246 | 2196 | tags=19%, list=12%, signal=16% | MMP7/CCL2/C1QC/C1QB/RGS1/MYDGF/C3/CXCL2/ISLR/MMP11/TNFRSF11B/TPSAB1/GABBR1/SOCS3/TNC/LACC1/USP31/GPNMB/TRIM47/COL1A2/CFB/TMEM200A/PROM1/ADRA2A/COL5A1/LIX1/COL6A3/COL1A1/MRAS/CXCL14/VCAM1/ADGRG1/PRB1/MFGE8/TIMP1/TIMP2/HOMER3/PGGHG |
| REACTOME\_G\_ALPHA\_Q\_SIGNALLING\_EVENTS | REACTOME\_G\_ALPHA\_Q\_SIGNALLING\_EVENTS | 211 | 0.288994 | 1.404733 | 0.009158 | 0.042237 | 0.030016 | 3104 | tags=25%, list=17%, signal=21% | RGS1/HBEGF/GNA15/RGS2/QRFPR/GPR132/RGS16/PLCB2/TACR3/PTAFR/BDKRB1/PROKR2/NMU/GNG13/DAGLA/GPR39/GNG8/XCL2/HCRTR1/FPR2/TACR2/P2RY11/PROK2/ABHD12/RGS4/BRS3/LPAR2/TAC1/OPN4/OXT/CCKBR/DGKD/CASR/FFAR3/NPFFR2/GNG7/F2RL1/AVP/UTS2R/GRM5/CYSLTR2/CHRM3/DGKA/NTSR1/GNRHR/EDN2/GRP/GRB2/NMB/BTK/GPR17/TRHR |
| SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_DN | SENGUPTA\_NASOPHARYNGEAL\_CARCINOMA\_DN | 309 | 0.275533 | 1.401611 | 0.003756 | 0.0207 | 0.014711 | 3744 | tags=27%, list=21%, signal=22% | CSTB/KRT14/S100P/CXCL1/TUBB2A/DNAAF1/TUBB4B/ADIRF/STOML3/HYDIN/POU2AF1/CFAP161/SLPI/NMU/CCDC113/CFB/TNFRSF21/PROM1/CD19/UPK1B/ANKRD37/RRAD/ATP10B/C7orf57/C1orf87/EPPK1/GCLM/MDH1B/C5orf49/C6orf118/SCGB1A1/BASP1/EVA1C/C11orf97/VPS37B/PCP4L1/DNER/BPIFB1/TEKT1/DRC3/KATNB1/TMEM190/ODF3B/KRT4/ELF3/DUOX1/EZR/ST6GALNAC1/MUC4/DRC1/DMKN/VWA5A/LRG1/CCDC74A/ALDH3B1/LRRC10B/MT1E/C20orf85/TTC29/PIGR/B3GNT7/CYP4B1/IMPA2/DNAH10/C19orf33/TUBA4B/TFF3/SPATA17/CLIC6/ROPN1L/C11orf52/IQCD/CCDC181/NQO1/POR/FAM81B/MORN3/DNAH2/SPAG6/EML6/FUT2/CLDN23/TCL1A/SLC22A4 |
| MILI\_PSEUDOPODIA\_CHEMOTAXIS\_DN | MILI\_PSEUDOPODIA\_CHEMOTAXIS\_DN | 412 | 0.269239 | 1.398345 | 0.001106 | 0.00777 | 0.005522 | 3642 | tags=27%, list=20%, signal=22% | TIMP3/FOSB/HLA-E/ATP13A1/SCD/LRP1/ECM1/SLC20A1/PLA2G7/PNPLA7/MMP11/PSAP/KDM6B/ITPRIP/SCPEP1/EIF1/SOCS3/GSK3B/GRN/PVR/MSLN/APLP2/CLCF1/KCNN4/ATP1A1/VASN/SLC8B1/SOD3/ITGA5/SERPINE1/ELOVL1/EDEM2/HLA-DMB/SBNO2/MAPK8IP3/COL5A1/FOS/CHPF/PI16/GLA/LIME1/PLXNA3/MAN2B1/SLC29A1/NRP2/ZMIZ1/TAPBP/ABHD12/PPT1/CD9/USP7/LRRC8C/DUSP1/GPI/DIAPH1/IGSF8/RACK1/NOC2L/LY6E/PIK3IP1/GAS5/TNFSF9/SLC16A1/CPSF7/AGFG2/NPC1/TIMP2/CLCN4/BCLAF1/SLC19A2/PTGS1/LTBP4/SLC38A10/BAIAP2/RARA/CYP4F8/SCAMP2/P2RX4/ZFYVE27/RNF10/SNORD30/CTSB/GANAB/GAA/ADAMTSL4/SFPQ/AQP1/SUN1/TLR2/FBLN2/MFSD9/NEU1/DDR1/CLIC1/PLD3/THBS3/TGIF1/PDIA6/PPIL2/PFKL/IGSF3/SEMA4C/POR/SPNS1/KLF6/ZZEF1/SLC7A6/SLC39A14/RRBP1/SGMS1 |
| ROZANOV\_MMP14\_TARGETS\_UP | ROZANOV\_MMP14\_TARGETS\_UP | 252 | 0.279145 | 1.395479 | 0.006691 | 0.032822 | 0.023325 | 1990 | tags=19%, list=11%, signal=17% | NCF2/CD83/TIMP3/NR1H3/CST7/IL4I1/BTG2/HLA-DPB1/CCL20/PNPLA7/TNFRSF11B/IL32/LGALS3BP/PLXND1/HLA-B/MIA/RAB20/COL4A2/GJB2/LPXN/HAS2/IGFBP2/HTRA3/COL6A2/SOD3/HLA-DMB/ERRFI1/COL5A1/APMAP/IGFBP7/SLAMF7/TPST2/FKBP1A/TPM3/PCOLCE/ST6GAL1/EMILIN2/OAS1/HIF1A/COLEC12/HCLS1/CEND1/RGS4/MAGED4B/HEG1/EFEMP1/PIK3IP1/CDCP1 |
| CHEN\_HOXA5\_TARGETS\_9HR\_UP | CHEN\_HOXA5\_TARGETS\_9HR\_UP | 209 | 0.285593 | 1.389524 | 0.010998 | 0.048524 | 0.034484 | 1139 | tags=13%, list=6%, signal=12% | CXCL8/GADD45B/DUSP5/FOSB/TNFAIP3/JUNB/LIF/IRF7/GEM/SAT1/FOSL2/CEBPB/VEGFA/BDKRB1/RELB/ATF3/ZNF331/PELI1/DUSP6/FOS/ZNF136/ZNF131/PLG/NFKBIE/TNFRSF10B/GABARAPL1/RLF |
| HELLER\_HDAC\_TARGETS\_UP | HELLER\_HDAC\_TARGETS\_UP | 279 | 0.275959 | 1.386506 | 0.007309 | 0.035338 | 0.025113 | 2228 | tags=18%, list=12%, signal=16% | HLA-DRB1/HLA-DRB4/TIMP3/SLC16A3/FTL/JUNB/BLVRB/COTL1/TUBB2A/HLA-DPA1/MFSD12/HLA-DPB1/SAT1/NR4A2/MT2A/HBA2/CDKN1A/NEFL/GRN/APLP2/GSDMB/PRPH/PPARD/LAMP3/TCAF1/DDAH2/SFXN3/MLF1/PLXNA3/DNM3/GMPR/GSN/PMEL/NRGN/CD9/TAOK3/SNRNP70/HPSE/PCSK1N/PTGER4/KLF2/CDKN2D/GM2A/SEZ6L2/KATNB1/BIRC3/STARD3/HERC1/G6PD |
| RIGGI\_EWING\_SARCOMA\_PROGENITOR\_UP | RIGGI\_EWING\_SARCOMA\_PROGENITOR\_UP | 402 | 0.266932 | 1.385494 | 0.003995 | 0.021772 | 0.015473 | 1717 | tags=15%, list=10%, signal=14% | SPP1/ICAM1/KRT17/DUSP5/MMP9/ITGB2/ITGAM/HBEGF/HLA-E/LAPTM5/FCGRT/ALK/BTG2/MMP1/RGS2/CTSH/G0S2/FAM107B/MMP13/SH2B3/C15orf48/RNASET2/EFHD2/TNC/PVR/RRAGD/SERPINB9/FAT4/PLXDC2/ATP1A1/IGFBP2/NKX2-2/LPL/DUSP6/FABP4/TM4SF20/MAFB/CD14/GPR137B/NOS1/FOS/GDF15/CSPG5/NPTX2/SEL1L3/ST6GAL1/CD274/DUSP7/SPATA13/CALCA/UGT3A1/STMN4/TMEM132B/PRELP/EVA1C/PAQR5/HIVEP3/C3AR1/TMEFF2/LINC00839/TRPM4 |
| HORIUCHI\_WTAP\_TARGETS\_UP | HORIUCHI\_WTAP\_TARGETS\_UP | 281 | 0.272404 | 1.371683 | 0.006683 | 0.032822 | 0.023325 | 1648 | tags=15%, list=9%, signal=14% | ICAM1/CCL2/ACP5/HMOX1/DUSP5/SLC2A3/TNFAIP3/SOD2/CEBPD/CXCL1/CXCL2/RGS2/F8A1/LGALS3BP/CEBPB/KHNYN/GABBR1/SELE/LACC1/CXCL16/PLEK2/ATF3/PELI1/KLF4/CFB/TMEM200A/MAFB/APOLD1/NR1D2/COL5A1/LAMP3/CXCL5/CSF1/CNPPD1/KLHL21/CREG1/TAPBP/COLEC12/VCAM1/TNFRSF11A/ACTA2/CLPB |
| FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_UP | FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_UP | 347 | 0.261865 | 1.344728 | 0.008397 | 0.039229 | 0.027878 | 3300 | tags=24%, list=18%, signal=20% | LYZ/STC1/SELL/ITGBL1/CCR8/ITGB7/SELE/TEX38/POU2AF1/IRF1/CRB1/TM4SF19/OPRK1/SLC9A4/PDE6A/NIPAL1/APOLD1/RHOH/PIF1/UPK1B/SULT1B1/KRTAP15-1/HES2/ADAMTS4/ACOT11/OR3A1/HRK/AHSP/SLC28A2/TRIM58/OR10J3/MCOLN3/CRABP1/SAPCD2/LAIR1/OPHN1/NEUROD4/MYPN/S100Z/KRTAP24-1/BRS3/OR5H6/FAM9C/GPR157/HTR3B/CNBD2/SCGB2A2/SULT2A1/CDCP1/GLYATL1/INSM1/SAMD7/DDO/ESRP1/BNC1/COL28A1/MAB21L3/SLC17A4/CENPI/CCDC150/CXCL9/CYSLTR2/AKR1D1/LRRC38/XKR9/ZIM3/LAMC2/SLC10A1/PLXNA4/GRK7/SYT9/GAB3/ABCA9/OR4D5/STAT4/MACC1/FCRL4/SLC17A6/AGMO/TLR3/SP140L/CPA4 |
| SENESE\_HDAC3\_TARGETS\_UP | SENESE\_HDAC3\_TARGETS\_UP | 457 | 0.251776 | 1.326519 | 0.006076 | 0.03044 | 0.021632 | 2448 | tags=17%, list=14%, signal=15% | SPP1/CXCL8/CCL2/TIMP3/NAMPT/SLC2A3/MMP9/PLAU/TNFAIP3/SOD2/SQSTM1/SCD/BTG2/MMP1/SLC12A8/ARHGDIA/GEM/EMP1/CCL20/SAT1/NR4A2/TNFRSF11B/RGS16/IL32/TRIB1/LMAN1/EFHD2/NFKB2/GSK3B/NEFL/LPXN/C6orf15/IQGAP2/ATF3/NR6A1/HAS2/PPFIBP1/RHOB/OASL/AP1S3/ERRFI1/HMGA1/IL24/STMN2/TFRC/GFPT2/CXCL5/TNFRSF10B/KDM1B/ARHGAP5/SPRED1/GALC/CLCN5/PDE4B/MCL1/HAPLN1/RGS4/MAP2/TRPM4/SPTBN1/CYB5R2/C16orf46/GM2A/PIK3IP1/MET/INPP5A/SLC16A1/BIRC3/STK10/DST/GALNT12/F2RL1/CPEB4/TRAF1/IL7R/KYNU/EZR/LINC00520 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_DN | LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_DN | 362 | 0.255228 | 1.316187 | 0.00988 | 0.044689 | 0.031759 | 3069 | tags=21%, list=17%, signal=18% | CAPG/HMOX1/MT1G/BLVRB/SELL/AMOTL2/CXCL1/GEM/RGS16/IL32/SH2D2A/ARRB2/ITGB7/FERMT3/TACC3/NFKB2/TNC/PRG2/COL4A2/ARHGAP30/INSIG1/IL2RG/NFE2/FYN/LGALS2/PELI1/HTRA3/VASN/NDRG2/THBD/AP1B1/SBNO2/SLC46A1/TFRC/MGAT1/ORC1/ACSF2/SPATA13/NRP2/HSD3B7/TNFAIP1/FLVCR2/TNFRSF11A/HCLS1/MNX1/DQX1/CD80/XBP1/CCNE1/CA2/CISH/NECTIN2/SMURF1/SLC43A3/DAB2/BIRC3/TIMP2/RUBCN/PRSS8/ACSL1/KIFC1/SLC1A3/HMGB2/SLC26A6/EPHX1/IER2/NTRK2/PMM2/FBLN2/ZNF703/MAP1A/NEU1/PSRC1/ZDHHC18/RHBG/PIK3AP1 |
| REN\_ALVEOLAR\_RHABDOMYOSARCOMA\_DN | REN\_ALVEOLAR\_RHABDOMYOSARCOMA\_DN | 398 | 0.249136 | 1.291614 | 0.011353 | 0.049726 | 0.035339 | 2818 | tags=21%, list=16%, signal=18% | CAPG/PLAUR/CEMIP/CSTB/PLAU/TNFRSF12A/LRP1/SPHK1/ECM1/AVPI1/ARHGDIA/ITGBL1/EMP1/SH3BGRL3/TNFRSF11B/LGALS3BP/SCPEP1/LMAN1/GRN/TGFBI/APLP2/FXYD5/CD81/COL6A2/ITGA5/ATP6AP2/ELOVL1/FAP/COL5A1/IGFBP7/TPST2/NQO2/GABARAPL1/PCOLCE/SFXN3/SMAD7/CMTM6/ADAMTS2/COQ10B/GSN/EXT1/COL1A1/ENG/GNAI2/TAPBP/ZYX/VDR/VOPP1/S100A10/VAT1/MAN2B2/DUSP1/ELL2/IRAK1/KLF2/MFGE8/TIMP1/LY6E/EFEMP1/DAB2/ATP6AP1/CST3/TIMP2/ACADVL/MCUB/TPM4/THBS2/ELF3/TMEM184B/DOK1/CLTA/EPHX1/ARPC5/CTSB/ANXA5/GPR176/ANXA2/ELK3/MFSD1/NECAP2/IQGAP1/LRRC59/TPP1 |
| IVANOVA\_HEMATOPOIESIS\_LATE\_PROGENITOR | IVANOVA\_HEMATOPOIESIS\_LATE\_PROGENITOR | 474 | -0.24544 | -1.29863 | 0.008181 | 0.038541 | 0.027389 | 4331 | tags=31%, list=24%, signal=24% | FASTKD2/CPTP/FUT4/CDC42/TMEM33/GDF3/LY6H/ATP6V1C1/EXOC6/NPTN/UBXN2A/PLEKHF2/POT1/PPP2CB/SLC45A3/PRADC1/RFWD3/LYRM9/F10/MRPL16/CASP1/C18orf32/USP14/ZNF101/SYNRG/WDR7/RNF115/ZEB2/MAGOH/REEP1/RPAIN/CCR2/CKAP2L/TASP1/RARB/MINPP1/IPMK/TMED3/SMAP1/PTGR1/UBTD1/MAP2K4/SRSF1/TRAPPC2L/RAP1A/UGGT1/C12orf4/AP5M1/CETN3/LTA4H/WAPL/NEURL1/ESCO2/GATC/BTLA/LIN9/TACC1/TMEM167A/CABLES2/MRPS6/DERA/RBM44/SAP30/UFC1/TVP23B/DUSP11/TMEM165/OAT/TLK1/RAB32/SLC35E1/GPR160/LYST/CERS6/SPTLC2/IDH1/CLEC12A/HAX1/GIN1/CEP350/GMCL1/UBE2V2/MTX2/PPP4R3B/TMEM248/CCDC127/EMC6/CISD1/TTC13/UBE2Q1/NUP205/SLC35A3/MYCBP/PPIL1/ESPL1/TMEM14C/TRMT12/AP3S1/MYO5C/ALDH3A2/GPN2/DFFB/CDC123/TMEM216/CISD2/OSTM1/CHAC1/PTCD3/KATNBL1/MRPS36/NFU1/APP/RAB7A/PRDX3/SLC15A4/XPO5/SAV1/EXOC5/CCDC102A/PIN1/TMEM50B/SPOPL/GGA2/COA5/COMMD5/TMED2/PITPNB/DNA2/PHF10/MRPL50/MTFR1/CSNK1G3/USF1/USP24/GGNBP2/NFIB/NIN/ANKRD46/MT1X/CCL23/ACP1/VMA21/HPF1/PACSIN2/INSIG2/ITGA1/BTNL9/PHF5A |
| IBRAHIM\_NRF2\_UP | IBRAHIM\_NRF2\_UP | 493 | -0.24484 | -1.30136 | 0.005678 | 0.028988 | 0.0206 | 4334 | tags=33%, list=24%, signal=26% | B4GALNT1/NCKAP1/TMEM33/TTC17/STK24/TLK2/EARS2/ARFGEF1/RPAP3/RNF8/SHC1/FXR1/ZZZ3/TSR1/PGGT1B/CLIP1/ZPR1/PPP2CB/PRDX1/CCT6A/C22orf23/FBXO28/CLCC1/HSPA13/VPS35/HSPB8/MFAP3/CTNNBL1/GTF3C3/SRP54/CCT5/ASF1A/MANF/NUP43/NIPA2/STAU2/ISY1/YME1L1/ZBTB41/MTHFD2/OPA1/PRKAR1A/NCOA3/TRIB3/ATP11B/GFPT1/CEP290/ZNF148/STIP1/RPS6KC1/CLIC4/EIF3D/SLC30A5/PREPL/TWSG1/YIPF6/ARMT1/GALNT1/AVEN/STRN3/AHCYL1/PRPF18/NBN/ABCD3/TOR1B/GFM1/VPS54/SCFD1/YWHAB/PHC1/DYNC1LI1/CMAS/ARL5A/TIMM17A/CCT7/RAB10/PHAX/IDE/OSBPL11/DNAJB9/RCN1/AHSA1/CTBS/IKBKG/CORO1C/AK4/TMED7/NAA30/ATP10D/FBXO30/CMPK1/ARCN1/ATMIN/SLC41A2/FKBP14/PPP4R3B/ENOX2/TAF5/KIAA1191/KPNA4/RAB18/SSB/MTIF2/DNAJB4/E2F6/DNAJC10/MRPS30/HTATIP2/SUPV3L1/SUCO/RABEP1/GTF2E2/ANXA7/BRD7/EIF2A/WWP1/ZEB1/ZBTB20/EXOSC3/CDC123/TMEM168/BAG3/SPCS2/RWDD2B/CALU/TYW3/RB1CC1/OXCT1/ZNF426/AKR1C3/EIF2S2/ETFDH/DNAJB11/KIAA0232/CEP85/FUBP3/FNDC3A/TMED2/PAPOLA/PITPNB/PEX19/RPL7L1/RRAS2/CSNK1G3/PPP3R1/BTBD10/GNAI3/CSNK2A2/USP38/GGNBP2/TMEM39A/TMED10/DNAJC7/DENR/ZNF189/USO1/TRIM44/TICAM2/SUZ12/FERMT2/PRDX6/SLU7 |
| BAELDE\_DIABETIC\_NEPHROPATHY\_DN | BAELDE\_DIABETIC\_NEPHROPATHY\_DN | 422 | -0.24924 | -1.30477 | 0.006893 | 0.03366 | 0.023921 | 4348 | tags=31%, list=24%, signal=24% | PAWR/ITGA3/MYO1B/GHR/CTBP1/GADD45A/CYP51A1/IRS1/AP3B1/GYG1/NPTN/AASS/COL4A4/PPP2CB/IFITM1/SKP1/PSMA3/PHYHIP/CASP1/ARID5B/SEC61G/CDC14A/GTF2A2/FAM98A/HNRNPDL/GULP1/NAB1/HSPA2/RBBP4/TMEM123/TRAM2/EIF3M/YBX3/CORO2B/MORC3/MTHFD2/PRKAR1A/LUC7L3/TLE4/ARHGEF18/PREPL/HOXA9/CLEC16A/FBXO21/RBMS1/NBN/EID1/KANK1/LETMD1/AASDHPPT/ACADM/CDC42EP3/B4GAT1/HMCES/NFATC3/GSTA4/DLG5/DNAJB9/TRIB2/TLK1/ZC3HAV1/PAM/CERS6/MTX2/UGP2/FGFR2/KBTBD11/TGFBR3/RAD23B/CAMSAP2/UBR2/SDC4/GLOD4/N4BP2L1/GMDS/GLUD2/CLIP3/DNM1L/CTDSPL/GNE/EIF4A2/SUB1/GDE1/ABI1/DCTD/WWP1/SNX19/PSMA2/ZBTB20/DPYSL3/CALU/CCDC6/USP9X/PTPN14/LANCL1/HSPB11/MED21/CDV3/KIAA0232/ARMCX2/TSPAN3/CAND2/ARL1/SMARCC1/CALM2/TAX1BP1/NFE2L1/PNMA2/EPS15/PCMT1/TMED10/FNBP1L/PLS3/PTH1R/CALD1/TRIM44/FLRT2/SCRN1/PALLD/RDX/FERMT2/GAS1/PTPN11/RSBN1/PRDX6/SACM1L/MYLK/NMI/OPTN/XPO1/KLHL9/NDN |
| REACTOME\_CLASS\_I\_MHC\_MEDIATED\_ANTIGEN\_PROCESSING\_PRESENTATION | REACTOME\_CLASS\_I\_MHC\_MEDIATED\_ANTIGEN\_PROCESSING\_PRESENTATION | 362 | -0.25555 | -1.32514 | 0.010326 | 0.046086 | 0.032752 | 5447 | tags=42%, list=30%, signal=30% | NEDD4/SEC61B/SEC24D/CUL7/FBXL5/ANAPC1/UBE2A/STUB1/FBXL20/FBXL8/FBXW11/RCHY1/SKP2/LRSAM1/UBE2G1/PSMD11/UBE2G2/KBTBD6/CUL2/ITCH/TRIM4/UBE2W/UBE2K/FBXW5/CTSV/ANAPC7/PSMA6/TRIM37/HECTD2/UFL1/TPP2/BTRC/KLHL3/TRIM39/BCAP31/S100A8/PSMD9/UBA5/RNF14/LRR1/UBE2J2/PSMD6/FBXO15/ASB2/PJA1/UBAC1/SEC24A/SKP1/NCF1/PSMA3/ANAPC11/UBE2E3/WSB1/SEC61G/UBE3A/PSMD5/RNF7/RNF115/PSME1/MKRN1/RNF34/PSMA1/SEC23A/HECW2/RNF25/FBXW2/CHUK/KLHL22/SNAP23/SPSB4/ANAPC4/RBBP6/TRIM41/PSMC3/SH3RF1/FBXO21/GLMN/FBXO11/PSMB7/LMO7/UBE2F/CDC26/FBXW9/PSMC5/ASB9/PSMD10/VAMP8/IKBKG/UBE2C/LTN1/CDC34/PSMD14/CUL5/FBXO30/UBE3C/FGA/PSMD7/TRAIP/KCTD6/FBXO31/ASB8/UBE2V2/PSME3/PSMD2/UBR2/ERAP2/KBTBD7/BTBD6/UBE2Q1/ZNRF2/FBXO6/ANAPC5/KLHL2/BLMH/SEC61A1/ASB13/WWP1/PSMA2/BTBD1/KLHL20/RNF220/UBE2O/FZR1/HMGB1/ANAPC10/FBXL15/FBXW4/UBE2E2/FBXO32/ASB3/UBE2M/MYLIP/RNF138/PSMD1/SEC22B/UBE2D4/PSMC2/ARIH2/NEDD4L/UBA3/VHL/ANAPC13/UBE4A/PSMD8/HERC5/TRIM32/UBE2Q2/MEX3C/UBE2E1/CDC23/KLHL9/KLHL42 |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_3\_UP | LINDGREN\_BLADDER\_CANCER\_CLUSTER\_3\_UP | 306 | -0.26064 | -1.33129 | 0.011289 | 0.049486 | 0.035168 | 4676 | tags=33%, list=26%, signal=25% | MORC4/OSBP/COPB2/LIG3/OTULIN/IL17RB/ATAD2/LNPK/GOLT1B/VAMP7/KIF2C/TLK2/ATP6V1C1/CDK2/CENPA/RPA3/PRDX1/PEPD/DBI/CPD/USP14/GNB3/YWHAQ/PPA2/NETO2/RBBP4/ACSL4/IDH2/PLK1/CDC7/BUB1/ACOX1/RNFT2/ZNF286A/MTHFD2/POC1A/COX7B/POLDIP2/SAC3D1/ZNF148/VRK1/TWSG1/TAF11/PIGC/PRC1/PDXP/METTL2A/ACADM/MNS1/PPAT/CMSS1/MKRN2/MCM4/UBE2C/KIFAP3/CSTF3/FAM136A/SNTA1/RFC4/POP4/DYNLT3/PRPS2/TRAIP/GNPAT/GMCL1/DLGAP5/KAT14/ZYG11B/KPNA4/SKA2/RMI2/OSGIN2/MRPL48/BRIX1/STMN1/HACD2/MDC1/HLTF/FABP3/TFG/TEAD2/NCOA6/AKR7A2/GMNN/SNX4/FAF1/NXT2/CENPQ/CTPS1/CEP85/TMEM106C/ATG5/GCA/CRIPT/SAE1/RAD51C/RASL11B/CKS1B/SEC62/TEX30 |
| MARTORIATI\_MDM4\_TARGETS\_FETAL\_LIVER\_DN | MARTORIATI\_MDM4\_TARGETS\_FETAL\_LIVER\_DN | 488 | -0.25155 | -1.33402 | 0.004437 | 0.023752 | 0.016879 | 3825 | tags=28%, list=21%, signal=23% | PIK3R1/SH3GLB1/UBL7/IGFBP1/NAB1/STAMBP/TNPO3/TLL1/NFYC/SEC23A/MED16/BUB1/WNT5A/BRD8/ATP11C/SSBP4/CCSER2/ZNF106/CDH2/ZFX/ZNF148/GNG2/TWSG1/EIF4G1/PRKAR2A/LYPLA1/LEMD3/SLC39A10/SRSF1/PRC1/TBX2/MBNL2/PGM5/CTTNBP2NL/SPIN1/FUBP1/NR2F1/PBX3/MAGT1/UTP3/CEPT1/LPAR1/NFATC3/RCBTB1/HACD3/RAB10/LIN7C/ARF3/RBBP9/SLC25A46/POLR3C/TIA1/NCK2/PPP4R1/NONO/MDM4/CSTF3/FGA/SMC6/PLN/RBM25/RWDD4/SNX2/FGFR2/TMEM248/LIX1L/ABCF2/GNA12/MECOM/WBP1L/LRRC58/SERPINF2/NUP205/EIF5B/CLIP3/ANGPT1/PRRX1/SH3D19/ZNF260/ANAPC5/CNOT7/CBX2/ATXN2/MLLT10/PPHLN1/RNF220/OLFM1/HNRNPH3/CAND1/METTL16/DPYSL3/ZCCHC14/PRPF19/HSD11B2/NEMF/CKAP4/SP4/RAB22A/KPNA3/NUCKS1/RAB7A/XIAP/ZNF146/SREK1/FAF1/RELN/ENSA/EXOC5/LMO4/KANK2/PAPOLA/PITPNB/PTEN/CSNK1G3/EPM2AIP1/SLC44A1/SSR3/GNAI3/AK3/RCOR3/DNAJC7/UBQLN4/EPHA4/CNOT11/LPP/TGOLN2/ACP1/SUZ12/FERMT2/PNISR/FAM172A/SEC62/NRAS/TBL1X/DACT3/MTMR4/STK3/TRAK2/RNF20 |
| GRYDER\_PAX3FOXO1\_ENHANCERS\_KO\_DOWN | GRYDER\_PAX3FOXO1\_ENHANCERS\_KO\_DOWN | 419 | -0.25438 | -1.33444 | 0.003216 | 0.01825 | 0.01297 | 5201 | tags=39%, list=29%, signal=28% | DICER1/SKP2/SUMF1/CTDSP2/BCL2/SATB2/UBE2G1/RBPJ/DAAM1/VANGL2/GART/SMARCA2/NAV2/TSHZ3/ADAM10/PDHB/FGGY/ERLIN2/NFYA/CDK14/AGPAT5/C1GALT1/CCNC/NELL1/MTPAP/GNB5/FAM151B/DHX32/NR3C1/CEBPG/SEMA6A/PODXL/ACVR1/PID1/FAM81A/CABLES1/GADD45A/STK24/PCCB/CASK/JAKMIP2/MAPK8/RRP15/ARHGAP26/SHC1/XRN1/KHDRBS3/GOLGA7/KRCC1/BABAM1/EXT2/NLGN1/POLR1D/UBL7/MEIS1/WDR11/STX8/COPS8/MIF/TRAM2/PLCG1/SF3A3/PRKAR1A/RBBP8/TEX10/RNGTT/GLRX5/RUNX1/VRK1/CA11/HNRNPK/MSH3/GTF3A/PIGC/FBXO21/CDON/PPCDC/BTD/PON2/EID1/PEG3/DYRK2/MIPEP/ZNF77/COX11/USP1/DLG5/RCN1/MAN1C1/NHP2/ENC1/SLC38A9/TMEM165/OAT/RPL23A/SETBP1/HACL1/ANKRD13A/RRP1B/ARID1A/TCF20/ATP8B4/FGFR2/REPIN1/PRKG1/ZW10/EXTL3/LRIG3/SULF2/PSIP1/DNAJC10/ZDHHC6/HSBP1/NUP205/THAP1/BFAR/DCTD/PARP4/PBX1/CDC123/ALDH1A3/CAND1/FAM199X/DPYSL3/PRMT3/PTCD2/RGMA/CGRRF1/TCF7L1/RRAGA/APP/ZNF217/METTL13/BCHE/UBE2E2/TPST1/SF3B5/COX16/LMO4/TMEM177/GNAZ/NAV1/PRDM12/NPM3/HS1BP3/LIMCH1/ARHGEF3/PGRMC2/ERGIC1/NR2F2/AUTS2/MN1/ZNF644/GAS1/C3orf70/SLC38A1/DIS3L/GNG12/MSH6/TSPAN9/FAM217B/PARM1/PRUNE2 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_6HR\_DN | SCHAEFFER\_PROSTATE\_DEVELOPMENT\_6HR\_DN | 431 | -0.25619 | -1.34517 | 0.005442 | 0.028047 | 0.019932 | 3223 | tags=23%, list=18%, signal=20% | CLIC4/PTGR1/VPS36/ZHX1/DAZAP1/POLDIP3/DNAJC2/STRN3/SLC39A10/PABPN1/PTGFRN/PUM1/VPS54/TAOK1/METTL3/GSG1L/HNRNPA0/SMOC2/SRSF9/CABLES2/CLDND1/NLGN3/UBAP2L/CNPY2/HSD17B7/ARF3/CUTA/ELAVL1/EMC1/SAP30/WASF2/ORAI3/NAA30/TLK1/KANSL1/CD2BP2/GLMP/TCF20/TBC1D10A/TFDP1/RWDD4/ABHD17C/PSMD2/MGST3/CHPT1/ING4/UBR2/ANKHD1-EIF4EBP3/FRYL/GIGYF2/BCL9/PRRX1/PPIL1/HOXD13/TRIM8/FLNC/PPHLN1/PCDH18/NCOA6/LLPH/AKR7A2/PPP2R5E/DHX36/PPP1CA/UQCC2/NUCKS1/APP/TNRC6B/OXCT1/DYNLL1/PDIA4/AFF3/DNAJB11/LDB2/NREP/MBOAT2/TMED2/NAV1/TAX1BP1/CCNI/RSRC1/NFIA/MPRIP/PEX5/ZBTB14/ERGIC1/CNOT11/DERL1/CALD1/LPP/NDUFA4/AUTS2/ZNF644/PALLD/C3orf70/PTPN11/SNRPF/OARD1/PARVA/ZNF462 |
| FARMER\_BREAST\_CANCER\_APOCRINE\_VS\_BASAL | FARMER\_BREAST\_CANCER\_APOCRINE\_VS\_BASAL | 313 | -0.26468 | -1.35197 | 0.005327 | 0.027588 | 0.019606 | 2321 | tags=34%, list=13%, signal=30% | S100A2/P2RY2/SLC26A3/CLN3/RNF141/LONP2/GHR/KCNMA1/RND1/CYP51A1/CADPS2/SIDT1/DCAF6/DBI/DMD/NCK1/UBE2E3/FEM1C/HMGCS2/CCNDBP1/QSOX1/TAF1A/PIK3R1/STIL/FAM216A/IDH2/ETFB/RBBP8/ATP11B/CERS4/INPP4B/PON2/KANK1/DCXR/NR2F1/DAP/CDC42EP3/RBM47/CLDND1/HACD3/BBS1/CTBS/TRMT11/UBE2C/AK4/PAM/CERS6/SPTLC2/IDH1/PHKB/CROT/FCN2/PUM3/TAF5/CES1/PPIC/MFAP2/S100A4/CNTNAP2/TTC13/S100A6/PSIP1/ABCA12/FBL/UPF3B/SLC35A3/ECHDC1/FDFT1/TMEM135/ATP6V1G1/FAM174B/KRT7/ACACA/PRR15L/SNRPD1/KIT/PREP/TRIL/LMO4/TSPAN3/BTBD3/RNF138/GLS/STK26/LIMCH1/GPD1L/HMGN4/CRIPT/MAOA/PRKAA1/PGRMC2/SLC9A3R1/HERC5/REEP5/E2F3/ACOX2/MYL6B/PNISR/HOXB2/SLC38A1/TTLL12/NRAS/GSPT2/PFDN4/OPTN/TRAK2 |
| MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_DN | MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_DN | 355 | -0.26122 | -1.35468 | 0.006499 | 0.032135 | 0.022837 | 3011 | tags=24%, list=17%, signal=20% | WNT9A/HJURP/C6orf120/FZD2/HIKESHI/PRNP/CDC42EP3/RBM43/CRYZL1/ZNF91/ABHD8/MUS81/HIGD1A/CHML/CDK13/CEP70/SPIDR/STEAP2/CCDC90B/HSCB/TSPAN17/RAPGEF3/AK4/IPP/NCK2/LRRC8A/FAR1/MZT1/HACL1/SIL1/IDH1/DYNLT3/RRAS/APIP/UGP2/PPIC/THOC7/MGST3/TTC13/SULF2/HTATIP2/COQ3/PLEKHF1/FBXO6/PLAC9/MOSPD2/CCNG2/HLTF/DENND5B/COX6A1/NDUFA13/PDIA4/HSPB11/BNIP3/ZC2HC1A/CLN5/SPOPL/PCGF5/PLD1/ANP32A/C2orf76/TMEM230/AK3/RCOR3/HOXA5/NAE1/AMOT/CRYZ/PURA/C12orf57/NDFIP2/SPIN4/SCRN1/CTSO/NSMCE1/PRKRA/IMMP2L/VMA21/TMEM263/HPF1/SEC62/PPP3CB/LPIN1/ACAT1 |
| RAO\_BOUND\_BY\_SALL4\_ISOFORM\_B | RAO\_BOUND\_BY\_SALL4\_ISOFORM\_B | 490 | -0.25583 | -1.3573 | 0.002358 | 0.014183 | 0.010079 | 4507 | tags=32%, list=25%, signal=25% | HABP4/OSTF1/IFT57/RMND5A/DMRT3/IST1/SPAG11B/VANGL1/VCPKMT/ITGA3/FASTKD2/FEM1B/RBMXL1/GADD45A/CSRNP3/LIPT1/ZFAND6/EDC4/PCCB/PRR13/CASK/WSB2/MRPL11/SNX16/NPTN/L3MBTL3/DCTN6/IBTK/ARHGAP28/SEPSECS/TRMT10A/NCK1/KRCC1/CASP3/UBE2E3/FBXO28/ARID5B/PRRC2A/WSB1/ZNF101/LEFTY2/EIF1AY/PCYT1B/MEIS1/MPZL1/STK35/GNRH1/ZNF428/ATF2/CDC7/FAM204A/BTN2A2/ASF1A/ZBTB41/CLCN3/ZBTB2/CCT6B/LYPLA1/MAP7/FABP2/RNF146/SPIN1/WAPL/ZNF706/ARL6IP5/MAT2B/CMAS/RCBTB1/CCP110/UTP14C/MBTD1/RCN1/TRA2A/STEAP2/CNOT8/CHMP4C/NAA30/DRAM2/ZFP37/G2E3/LYRM2/RMND1/PSMD7/ZRANB1/UPF3A/ATG10/ANKRD6/CBX1/ZW10/TCEAL8/SAMM50/RAB18/AKAP1/RPS20/COPG2/GOLGA1/C21orf62/LUZP1/CBX7/ANAPC5/GDE1/ZSWIM1/ANKRD10/MLLT10/ALDH3A2/SP3/SFRP1/ITGB3BP/SPARCL1/BBS4/ATCAY/TCF7L1/RB1CC1/NOSTRIN/IPO5/ZFAND1/DYNLL1/C2CD5/ZCRB1/C9orf40/FBXO32/KIT/PEF1/HOXA4/LMO4/PCNP/FUBP3/PLPP1/CIPC/RIF1/RIC8B/PPP3CC/FAM162A/MCTS1/EFNB2/NFE2L1/ARHGEF3/TMEM230/YAP1/VDAC3/TBC1D13/TMEM39A/TOP3B/EPHA4/PURA/BARD1/ZNF189/PNRC2/COQ9/RERG/DIS3L/MCEE/HOXB8/PACSIN2/SALL3/YARS2/BMPR2/TSPAN9 |
| SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_UP | SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_UP | 455 | -0.2606 | -1.36764 | 0.00172 | 0.01109 | 0.007881 | 4957 | tags=36%, list=28%, signal=26% | DPF2/TM6SF1/NUTF2/PTMA/RAD21/HMGB3/CHMP1A/LDB1/G3BP1/GTF2H2/HAGH/PPAN/NDUFB1/GTF2H3/TPP2/SACS/RALY/SRP19/MACF1/LUC7L/CR2/POLRMT/SCAND1/ARHGAP1/TESK1/CDC42/ZNF544/HNRNPU/CYP51A1/VPS11/POLG/CLIP1/NDUFS6/DBI/CUL4A/TRMT1L/PRRC2A/DMXL1/PAIP1/HNRNPDL/ACTL6A/PPA2/RBBP4/LTA/TEX264/RPL23/PGAP2/SNRNP200/PKD2/VAMP2/ACOX1/YBX3/CHUK/BRD8/FBN1/NDUFB7/PQBP1/NDUFA3/VRK1/ENOPH1/DAZAP1/RPL36/ERCC1/ACOT7/DCXR/SEC22A/APAF1/PHYH/LMO2/NDUFB8/ALDH6A1/SRF/CEPT1/IFI16/SCLY/TUSC2/MTA1/GATB/NCAPG/RPL37A/GOLGA2/ICMT/TRA2A/CSK/PPIB/RPL37/PIAS4/RXRA/UBE2C/ACOT8/FKBP3/NONO/SNRNP40/CD2BP2/DUS1L/MAPK12/TARBP1/SMARCA4/HMGCS1/ARHGDIB/DNASE1L3/NDUFA1/RAB5B/APBA3/TRIM33/TAF5/MYO9A/B4GALT7/DDT/NENF/DPM3/STT3A/ERH/PEX6/DNAJC8/ANXA7/PHKA2/ZBED5/RPS27L/RRM1/WRAP73/ARPC4/UBL5/RPS23/HMGB1/ATXN3/COX6A1/NDC80/SNRPD1/ENSA/WWP2/PIN1/ACYP1/TSPAN3/NDUFS8/NDUFA7/FAU/PARK7/PGLS/CFDP1/ZNF212/NDUFB11/NFE2L1/EPS15/VDAC3/CACYBP/POLA2/STOML1/STAT2/CALM1/UQCRQ/MYL6B/GTF2F2/COX6C/MRPL23/COX5B/STK3/NDUFS5/RPL39/YARS2/COX6B1/HNRNPL |
| FORTSCHEGGER\_PHF8\_TARGETS\_UP | FORTSCHEGGER\_PHF8\_TARGETS\_UP | 248 | -0.27764 | -1.36915 | 0.010535 | 0.046787 | 0.03325 | 3073 | tags=26%, list=17%, signal=22% | RPIA/GPT2/MAP7/PABPN1/CERK/FUBP1/SERF1B/NR2F1/TUSC2/LIN9/MAT2B/CDC26/CHML/RAB10/MBTD1/RASSF9/C6orf62/PUDP/KLHL7/TMEM116/EFNA1/LCOR/GID8/TMEM79/ZNF721/BBOF1/IQCK/PDE1A/DNAJB4/LYRM7/DPY19L4/SORBS2/DPCD/WWP1/ALDH1A3/CHAC1/CENPV/CALU/CCDC6/XIAP/MRPL42/SETD4/LMO4/TSPAN3/NFYB/RIDA/CCDC77/FNBP1L/RCOR3/HOXA5/PDHX/FAM171A1/XYLT2/ANKRD46/NSRP1/TXNIP/RERG/BET1/SUZ12/STOX2/MAN1A1/SEC62/LZTFL1/FAM217B |
| PLASARI\_TGFB1\_TARGETS\_10HR\_DN | PLASARI\_TGFB1\_TARGETS\_10HR\_DN | 245 | -0.27929 | -1.37515 | 0.007799 | 0.037143 | 0.026396 | 3551 | tags=27%, list=20%, signal=22% | SLC12A2/BUB1/IGFBP5/KCND2/TSPY26P/RARB/CDH2/PLEKHG1/TCEA3/TCEAL1/PEG3/MEF2C/ACADM/OSR1/LMO7/SLC24A3/PLEKHH2/CDKN3/LAMA4/ARHGAP20/PRICKLE2/RNASEL/KLHL24/SESN1/IFIT2/RUNX1T1/RFC4/ZFP28/IDH1/KITLG/ZFHX4/CD24/FGFR2/TGFBR3/PDE1A/ADGRG6/PRRX1/ANGPT2/SORBS2/STMN1/ARNT2/PBX1/TRIM2/ITGB3BP/IGF1/ZFAND1/ZNF521/LDB2/CAND2/PRSS35/PTEN/ZNF608/NFIA/TLE6/NFIB/SYT11/EBF3/MRGPRF/AUTS2/CCL23/GAS1/CBX6/MAN1A1/PPP1R3C/MSH6/NMI/DCLK1 |
| MIKKELSEN\_NPC\_ICP\_WITH\_H3K4ME3 | MIKKELSEN\_NPC\_ICP\_WITH\_H3K4ME3 | 420 | -0.26338 | -1.38155 | 0.001386 | 0.009302 | 0.00661 | 3615 | tags=27%, list=20%, signal=22% | CWF19L2/MT3/RBM4/ZNF670/HDAC6/NIF3L1/ATG4A/KCND2/NOL8/TCTN2/GNG2/DYNLRB2/BPGM/DNAJC12/MMACHC/RDH11/VGLL4/FLAD1/MBNL2/WDR12/PPP2R5C/SLITRK6/DCLRE1A/C12orf4/CPT1C/RIOK2/MOSPD1/PCDHB2/ZNF239/FAM222B/CBLN3/TMEM242/USP49/VPS50/POLR2K/NME7/INTS9/CCDC28B/PRPF31/LAMB2/BBS1/RBBP9/TMEM256/RAPGEF3/MRPL35/CAMK1/SUPT7L/AKAP7/IFIT2/CC2D2A/DYNLT3/SMUG1/ZNF721/BIVM/PAFAH2/FKBP14/ZNF112/TCEAL8/AK1/ZFP82/PDE1A/DLG4/RFTN2/NOP10/WBP1L/SSPN/ECH1/SPSB3/ETFBKMT/PCDHB4/DYNC2LI1/ANGPT1/SMARCAL1/ANGPT2/ZNF260/CD99L2/TIMM21/PBX1/SPARCL1/ZNF585A/CNTNAP1/PLPP7/WDCP/ZNF416/BCHE/CHM/ALDOC/EHBP1/PTN/GOLPH3L/RTTN/PLD1/GEMIN6/MCTS1/FASTKD1/CCDC77/ZNF608/ALKBH8/BCL2L2/PUS3/SPARC/STOML1/TMEM14A/CALD1/NICN1/CTSO/ZC3HC1/CAPN1/TGFB3/NOSIP/ACTR6/SCRG1 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_UP | WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_UP | 258 | -0.28008 | -1.38944 | 0.00995 | 0.04493 | 0.03193 | 4850 | tags=37%, list=27%, signal=28% | FMO5/CHMP1A/ZMYND8/C1GALT1/FLNB/FA2H/PSD4/ABCC3/OXLD1/RALY/GNA11/ARRDC2/GSTP1/ACBD5/EDF1/TMEM125/ICA1/STARD10/GALNT3/GALNT4/ARPC5L/EPHB4/AURKAIP1/DBI/MCRIP2/CCNDBP1/QSOX1/TMC5/IL20RA/PLEKHH1/RAB2A/TEX264/POP7/EHF/MED16/SYTL2/ETFB/CANT1/ACAA1/GFPT1/INF2/EIF4G1/MRPL14/BAIAP2L1/AACS/ABCD3/DYRK2/LBHD1/MANSC1/BPHL/GOLGA2/MRPL41/MRPL52/CHMP4C/GPR160/SLC35D2/SMARCA4/MGLL/ABHD17C/CD24/CHPT1/COX7A2/MECOM/S100A6/TMEM30B/GMDS/CCDC107/EIF5B/SLC35A3/RPS27L/FDFT1/CXXC5/CENPV/FAM174B/HMGB1/COX6A1/BAG1/SURF6/AKR1C3/FAAP100/PREP/SRPK1/BTBD3/NDUFAF2/ELL3/DHTKD1/SH3BGRL2/TC2N/UQCRQ/ZNF564/TTLL12/PACSIN2/EIF2B5/LSM7/IFI27/NOSIP |
| FOSTER\_KDM1A\_TARGETS\_DN | FOSTER\_KDM1A\_TARGETS\_DN | 189 | -0.29371 | -1.40284 | 0.011008 | 0.04853 | 0.034488 | 4585 | tags=37%, list=26%, signal=27% | GNA11/RPS6KA4/NAPRT/DGKQ/DRG2/RCCD1/ELMO3/ITGA3/ATP2A3/RARS2/SHC1/SNAI3/MRPL10/TRMT1L/DDX25/DIRAS1/GCAT/FKBP6/SGCB/WIPI2/ANKMY2/MTHFD2/KDM1A/ATP11B/MZT2B/POLDIP2/BDH2/TCEA3/VRK1/ANKRA2/GLI2/SDHAF1/DCXR/B4GAT1/SCLY/ECHS1/BLCAP/NISCH/CCDC28B/IRF2BP1/SAP30/TIA1/DUSP11/RAPGEF3/MRPL35/ACOT8/ANKRD13A/CC2D2A/TFDP1/DLGAP5/ABCB6/PIK3R2/TAF5/ETFBKMT/SUB1/BTBD1/KRT7/LZTR1/PGLS/NDUFB11/POLA2/DNAJC7/NT5C3B/UBE2E1/PBX2/NME3/DIS3L/LRFN3/VPS45 |
| REACTOME\_UB\_SPECIFIC\_PROCESSING\_PROTEASES | REACTOME\_UB\_SPECIFIC\_PROCESSING\_PROTEASES | 158 | -0.30353 | -1.41191 | 0.011422 | 0.049905 | 0.035465 | 3960 | tags=32%, list=22%, signal=25% | PTRH2/PSMA3/CYLD/STAM2/USP14/PSMD5/PSME1/PSMA1/KAT2A/USP21/PSMC3/TNKS2/PSMB7/RNF146/USP20/WDR20/MAT2B/USP49/CCP110/PSMC5/IDE/PSMD10/RUVBL1/IKBKG/USP25/PSMD14/MDM4/USP15/PSMD7/TRAF2/PSME3/PSMD2/USP47/PSMA2/TOMM70/TAF9B/USP9X/CLSPN/POLB/MAP3K7/PSMD1/PSMC2/IL33/PTEN/USP13/USP24/VDAC3/USP33/PSMD8/SNX3/AXIN2 |
| LINSLEY\_MIR16\_TARGETS | LINSLEY\_MIR16\_TARGETS | 196 | -0.29394 | -1.41671 | 0.006503 | 0.032135 | 0.022837 | 4735 | tags=37%, list=26%, signal=27% | OSCP1/GNB5/NAPEPLD/BTRC/ST6GALNAC6/HIF1AN/MACF1/TNFSF12/COMMD6/SPAG7/MFN2/ATG16L1/NACC2/SFR1/CDK6/AKTIP/TSR1/RAB11FIP5/UBAC1/TMEM245/EXT2/MKRN1/GFPT1/UBTD1/GNPDA2/PON2/SPRYD3/MIEF1/LMO7/TUSC2/PLEKHA3/TACC1/SETD3/THUMPD1/PUDP/TVP23B/TPRG1L/TLK1/LCOR/USP15/ANKS1A/SLC16A9/MGLL/CARD10/TMEM109/WEE1/ASNSD1/IPPK/UBE2Q1/GOLGA1/WWP1/CYB561A3/RGMA/RAB22A/SLC15A4/C9orf40/CDC42SE2/RNF138/ANAPC13/FYCO1/PCMT1/COX10/TMEM268/EPHA4/RAB11FIP2/PURA/DCP2/NKIRAS1/MED28/CBX6/CLASP1/DYNC1LI2 |
| LIU\_SOX4\_TARGETS\_DN | LIU\_SOX4\_TARGETS\_DN | 300 | -0.2793 | -1.41779 | 0.001902 | 0.011905 | 0.00846 | 5062 | tags=37%, list=28%, signal=27% | ATF6/MRPS12/HSPA1A/MGAT4B/GART/SMARCA2/UBE2G2/EIF3A/TUSC3/MVK/SYPL1/UFL1/GSE1/CCPG1/USP5/RASSF7/DLAT/PDCD4/FEM1B/HNRNPU/DEXI/EP400/BICD2/CDK2/PLEKHF2/NFIX/PNPLA4/PGGT1B/SMC3/DBI/SPATA5L1/HMGCS2/WSB1/MAGOH/STIL/PDK1/EHF/UROS/ENPP4/YDJC/DECR1/ITGB1BP1/STAG2/LRP5/OPA1/COX7B/LONP1/GMPR2/INF2/STIP1/ARFGEF3/RBBP6/USP21/PCGF6/SRSF1/FUBP1/PUM1/WBP2/SRF/PPAT/MUS81/MTA1/GNL3L/PRPF8/CUL4B/TBCE/KCNE1/PUDP/DUS1L/UBE3C/SMARCA4/KCTD15/PSME3/MAP3K4/DDT/CAMSAP2/SMARCD3/SIVA1/SNX19/RBM10/CCNG2/PBX1/MED6/TMEM135/PSMG1/FZR1/NCOA6/CHAC1/AKR7A2/SRRM1/TNRC6B/SURF6/GEMIN2/PRDX3/PPOX/FAF1/BNIP3/UBE2M/PRMT1/NDUFS7/DIMT1/TMED2/PPP2R2A/ARIH2/CCND3/WDR55/SLC44A1/VDAC3/BCL2L2/NOL7/NME3/MSH6 |
| LU\_AGING\_BRAIN\_UP | LU\_AGING\_BRAIN\_UP | 254 | -0.28645 | -1.41799 | 0.002346 | 0.014157 | 0.010061 | 3824 | tags=29%, list=21%, signal=23% | SH3GLB1/ZEB2/HSPA2/ACTL6A/PECAM1/GATM/TMEM123/CAV1/PEX1/SNAP23/TLE4/CLIC4/NIPBL/CFH/MYOF/AHCYL1/CAV2/PON2/ABCD3/KANK1/CETN3/IFI16/KLC1/ADGRA3/PIK3C2A/PHF3/CLIC2/HSD17B6/TOR1AIP1/MTRR/ANP32B/FGFR2/ELOVL2/IQCK/SSPN/FRYL/ZNF652/GNE/ZBTB20/SERPINH1/HNRNPH3/SFRP1/DPYSL3/OFD1/TST/PDLIM3/NXT2/RAMP1/CRYAB/PLPP1/IL33/WFS1/MAOA/CBS/ZCCHC24/TMED10/GNG11/SPTSSA/AMOT/SPON1/CALD1/LPP/TXNIP/CLDN5/PALLD/RDX/FERMT2/PRDX6/GNG12/LPIN1/STK3/PARVA/RHOBTB3/TMEM47 |
| FOURNIER\_ACINAR\_DEVELOPMENT\_LATE\_2 | FOURNIER\_ACINAR\_DEVELOPMENT\_LATE\_2 | 276 | -0.28286 | -1.42394 | 0.002656 | 0.015695 | 0.011154 | 4525 | tags=35%, list=25%, signal=27% | TIPIN/MCM3/ME2/POLRMT/CKAP5/KIF2C/MRPL3/LARP4/PARP2/PREB/RANBP1/CYP51A1/PMS1/COLGALT1/CDK2/CENPA/MCM7/RPA3/PRDX1/NUP85/TIMELESS/RFWD3/WSB1/POP7/PLK1/CDC7/NIF3L1/MANF/SNRPA1/GFPT1/LDLR/VRK1/LYPLA1/PRC1/HJURP/METTL3/TPRKB/SMC4/MUS81/CDKN3/HACD3/BCS1L/USP1/EXOSC8/SF3B3/EMC1/MCM4/CSE1L/PRMT5/AQR/MRPL35/STK39/NUP107/SRSF11/SMARCA4/RBM25/EEF1E1/DNAJC9/SSB/CAMSAP2/NOP10/DNAJC10/FANCI/NUP205/MBNL1/EIF5B/DNM1L/ANAPC5/CNOT7/CCT2/P3H4/YWHAH/DUT/SRRM1/TFB1M/C11orf24/PRDX3/ACACA/NDC80/SRPK1/GEMIN6/RNF138/PPP2R2A/CALM2/FASTKD1/IMPA1/SAE1/BARD1/MT1X/CALM1/PALLD/CUTC/CKS1B/TTLL12/MSH6/SNRPF/NUP37 |
| TOYOTA\_TARGETS\_OF\_MIR34B\_AND\_MIR34C | TOYOTA\_TARGETS\_OF\_MIR34B\_AND\_MIR34C | 425 | -0.27222 | -1.42632 | 0.000706 | 0.00531 | 0.003774 | 5447 | tags=39%, list=30%, signal=28% | NEDD4/KIF11/PCBD2/MCU/MPHOSPH8/DDX39B/TMEM97/ARHGAP32/HNRNPAB/ZNF254/C4orf46/SKP2/MPHOSPH9/FIP1L1/BUB1B/ENAH/FIGNL1/CENPE/API5/C2CD2/CCNA2/C20orf27/ZMYND8/CHST12/ANAPC7/MKI67/PPP6R2/PPAN/ZNF473/HECTD2/ZNF202/TUBE1/SACS/USP5/POM121/CCT6P1/MCM3/TUBGCP3/ZNF700/ERLIN1/SNRNP48/CENPJ/LUC7L/NFKBIB/KIF2C/FASTKD2/FAM81A/ZNF544/FOXRED1/COLGALT1/CENPA/C18orf54/COQ2/COPS7B/GPSM2/WDR36/USP14/SUV39H1/CALML4/STAG1/ZNF493/PTPN3/STIL/TNPO3/ITFG2/FUS/HOOK1/MED22/RBBP4/ZMYND19/BCCIP/RPL23/PLK1/HDAC6/CANT1/CKAP2L/KPNB1/TEF/PHGDH/MZT2B/POLD3/STRBP/SLC16A14/NOP56/TEX261/RPIA/MIS18BP1/CDON/SNU13/CPSF6/MIEF1/RBM17/SLC35B4/MNS1/VPS54/ZNF91/SYNE2/CDCA2/NFATC3/TSPAN18/UTP23/SUN2/TRA2A/DCTN5/KRIT1/AGAP4/RNASEH1/PPP4R1/B4GALT3/FAR1/LMAN2L/MDM4/TMED4/SMIM7/PAN2/ANP32B/ARID1A/PIGX/ZBTB8A/TFDP1/TRIM33/TMEM109/PSME3/WEE1/HYLS1/PSIP1/DNM1L/BFAR/PDRG1/HNRNPUL1/ZBTB20/FAM72D/L2HGDH/RAVER2/RAN/PRPF19/ZNF273/TMEM18/DENND5B/GINS3/CLSPN/LPCAT1/OXCT1/ADCK2/PRR15L/XPO5/EIF2S2/WWP2/MBOAT2/CEP85/RIF1/DNA2/NAV1/RIC8B/HMGN4/DENR/FAM171A1/UPF2/BARD1/MED28/STK38L/UGGT2/ERP29/SACM1L/VPS45/DLST/PARM1 |
| LEE\_RECENT\_THYMIC\_EMIGRANT | LEE\_RECENT\_THYMIC\_EMIGRANT | 205 | -0.29614 | -1.42933 | 0.006413 | 0.031776 | 0.022582 | 2748 | tags=24%, list=15%, signal=20% | IFI16/CCR9/SMC4/RSAD2/CHML/ARL5A/MBTD1/CMTR2/CEP57/TOX2/OTUD6B/KLHL8/EEF1E1/RAB18/N4BP2L1/GNB4/DPY19L4/ANKRD10/GEMIN8/CCNG2/HTR2B/ZC3H8/PRPF19/NAPSB/RBM7/XIAP/ZNF776/EIF3H/CTPS1/NREP/LYPLAL1/PCGF5/PRMT1/BTBD3/RNF138/CSTF2T/NDUFA7/PAPOLA/RPS26/PM20D2/USP38/ZNF827/TPRG1/LPP/AUTS2/ZCCHC9/FUT8/LZTFL1/RHOBTB3 |
| WANG\_TUMOR\_INVASIVENESS\_UP | WANG\_TUMOR\_INVASIVENESS\_UP | 366 | -0.27514 | -1.42956 | 0.00104 | 0.007402 | 0.00526 | 3535 | tags=30%, list=20%, signal=24% | NDUFS6/IFITM1/DBI/USP14/ABCF3/POLR1D/MAP1LC3B/RPS5/MKRN1/RALBP1/NUDCD2/CCT5/LAMC1/KPNB1/PRKAR1A/TEX10/DPY30/NDUFB7/UBFD1/STIP1/GTF3A/EIF4G1/DAZAP1/RPL35/RPL8/ABCD3/EID1/FNBP4/RFC1/MRPL57/RPS6/WDR3/CPSF2/NDUFB8/ABHD8/HIGD1A/FZD8/PSMC5/ELAVL1/NHP2/TXNDC9/FKBP3/KIFAP3/SPOUT1/ASH2L/WDR75/HMGCS1/EVL/RPL13A/COX7A2/SSB/S100A6/USP47/UBE2Q1/EIF5B/RPS20/PIGF/ENY2/SUB1/ANXA7/BRD7/CRELD2/PSMA2/RBM10/NEDD8/CCT2/RPL7/PSMG1/RPL34/CAMK2G/NUCKS1/IPO5/RAB7A/BAG1/PNN/COMMD3/FAF1/PRDX5/EIF2S2/WWP2/EIF3H/CYCS/AP3M1/CTSZ/RPA2/FAU/PSMC2/SAP18/ARHGEF12/RRAS2/SLC34A1/PROS1/SSR3/VDAC3/BRD3/CALD1/MDP1/PAQR7/RDX/RPS21/CKS1B/HSPE1/SEC62/STRAP/NDUFS4/TPM1/COX7C/RPL21 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX1 | REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX1 | 174 | -0.30197 | -1.43254 | 0.009699 | 0.044167 | 0.031388 | 5080 | tags=41%, list=28%, signal=30% | PSMD11/AGO1/SMARCA2/SMARCD1/ITCH/LDB1/CTSV/PSMA6/ACTL6B/RSPO3/ELF2/PSMD9/PSMD6/CDK6/AGO3/PRKCQ/CREBBP/SCMH1/PSMA3/PSMD5/PSME1/ACTL6A/TAL1/PSMA1/GPAM/CDK7/DPY30/RUNX1/PSMC3/ITGA2B/PSMB7/SOCS4/LMO2/PAX5/PHC1/KMT2A/SETD1B/PRMT6/PSMC5/PSMD10/TCF12/PSMD14/PRKCB/ASH2L/BMI1/ARID1A/SMARCA4/PSMD7/KCTD6/PSME3/PSMD2/SMARCD3/CBX2/PSMA2/MNAT1/TNRC6B/PCGF5/PRMT1/PSMD1/PSMC2/SMARCC1/SMARCE1/CCND3/YAP1/CSNK2A2/PSMD8/RBBP5/AUTS2/CLDN5/CBX6/PTPN11 |
| WP\_CILIARY\_LANDSCAPE | WP\_CILIARY\_LANDSCAPE | 208 | -0.29529 | -1.43263 | 0.008566 | 0.03987 | 0.028334 | 4911 | tags=36%, list=27%, signal=27% | MKLN1/COPS3/IQCB1/NUDC/LRPPRC/TTC8/MAPRE2/POM121/MCM3/TIPRL/IFT57/RMND5A/CLUAP1/CNOT9/RAB3IL1/EXOC7/EXOC6/MCM7/CREBBP/COPS7B/LCA5/IFT43/RAB2A/COPS8/ZMYND19/IQGAP3/DYNLRB1/RNGTT/CEP290/DYNLRB2/COPS7A/NUP133/ARMC8/ERF/SMC4/DYNC1LI1/ECHS1/COPS5/BBS1/MCM4/CD2BP2/GID8/COPS4/DYNLT3/DOCK5/PSMD7/SNRPB2/WEE1/ZYG11B/IFT52/MFAP1/EIF5B/TTC30A/IFT46/EXOSC4/BBS4/CDR2/TFAP2A/RBM14/DYNLL1/HSPB11/EHBP1/EXOC5/BBS2/CALM2/IFT74/CBS/YAP1/PGRMC2/PSMD8/CALM1/DYNC1I2/MYL6B/COX6C/LZTFL1 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_DN | ZHOU\_INFLAMMATORY\_RESPONSE\_FIMA\_DN | 256 | -0.28914 | -1.43402 | 0.002112 | 0.012964 | 0.009213 | 3775 | tags=27%, list=21%, signal=22% | LDAH/CSMD2/REEP1/GPAM/GLT8D1/FRAT2/NIF3L1/ANKMY2/NVL/NAA16/CCDC148/VGLL4/MBLAC2/MIS18BP1/INTS10/SERAC1/LBHD1/CPS1/NFATC3/PRICKLE1/MRPS27/ATG4B/GFOD1/ORAI3/CNOT8/ATP23/SLF2/XKR6/AP4B1/CRBN/RAB40B/ZFP3/KAT14/THYN1/TLR10/MRPS25/SLC5A8/MCHR1/DTWD1/STEAP1/ZNF366/TIMM21/ZBED5/FANCE/MLYCD/ABHD10/ZNF605/RPUSD3/DNTTIP1/GEMIN2/C9orf40/AFF3/FBXO32/SCN8A/NR2F6/CEP85/ZC3H14/GEMIN6/TMEM177/TNFAIP8L1/FASTKD1/BRAT1/ARHGEF3/ZBTB14/ZNF362/TRIM32/C7orf25/CHCHD4/HHEX/FAM217B |
| REACTOME\_SIGNALING\_BY\_WNT | REACTOME\_SIGNALING\_BY\_WNT | 266 | -0.28763 | -1.43755 | 0.005117 | 0.026679 | 0.01896 | 4020 | tags=33%, list=22%, signal=26% | CREBBP/PPP2CB/RSPO1/KRAS/SKP1/PSMA3/PSMD5/PSME1/FZD4/GNB3/VPS35/SRY/PSMA1/CAV1/AP2B1/VPS29/FRAT2/WNT5A/TLE1/LRP5/WLS/TLE4/GNG2/LRP6/WNT9B/PSMC3/WNT5B/FZD6/WNT9A/PPP2R5C/FZD2/TNKS2/PSMB7/RNF146/ROR2/DKK4/GNG4/AMER1/FZD8/PRICKLE1/PSMC5/RYK/PSMD10/NLK/RUVBL1/PSMD14/PRKCB/ASH2L/SMARCA4/PSMD7/ZRANB1/DVL2/PRKG1/PSME3/PRKCA/PSMD2/LEO1/AKT2/GNB4/BCL9/FZD3/PPP2R5A/PSMA2/TLE2/SFRP1/PPP2R5E/TCF7L1/TNRC6B/XIAP/WNT16/CHD8/MAP3K7/PSMD1/PSMC2/SOX3/PPP3R1/CSNK2A2/PSMD8/SNX3/GNG11/RBBP5/PPP3CA/CALM1/AXIN2/GNG12/PPP3CB/XPO1 |
| ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_DN | ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_DN | 336 | -0.28007 | -1.43966 | 0.001254 | 0.008573 | 0.006092 | 3943 | tags=34%, list=22%, signal=27% | PRADC1/F10/PSMA3/ROMO1/ALG9/ARHGAP10/ATP6V0E2/MAGOH/STK35/SLC35B1/ZNHIT1/CACNA1H/FST/EEF2K/PAM16/PGM2/NFYC/SDHB/MANF/SHMT2/TEF/LRP5/PHGDH/LONP1/LDLR/GTF3A/GPT2/NPRL2/SLC25A15/MIEF1/PSMB7/BPHL/PBX3/WBP2/NDUFB8/SRF/GALM/CMAS/NMT1/MRPL22/CSK/TTC39C/VPS26B/CLPP/RXRA/TPRG1L/OAT/CAMK1/PPM1F/CERS6/HMGCS1/EVL/MOCOS/RAB5B/MXD4/PAFAH2/POLR2F/RNPEP/NR1H2/SDC4/DBH/MRPS26/ENDOG/MYOM1/CBX7/CD99L2/HPS6/TRIM8/TSHZ2/CCL16/CYB561A3/ZCCHC14/ABHD10/KCTD5/ZNF689/CENPV/MRPS11/SNRNP25/TST/FAM20B/EIF2AK1/FEM1A/PRDX5/DNAJB11/RDH5/MEPCE/ZNF672/ZFAND2A/TGDS/SAP18/SLC20A2/MAOA/AAMDC/RPL36AL/CBS/FN3KRP/MRPL53/AK3/SMG5/PGRMC2/SH3BGRL2/HADH/SPTSSA/MRPS31/NDFIP2/NUDT2/ZNF281/NSFL1C/MYL6B/TMEM160/TBL1X/COX5B/NAA38/SNRPF |
| VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP | VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP | 160 | -0.31036 | -1.44164 | 0.005419 | 0.027991 | 0.019892 | 3556 | tags=30%, list=20%, signal=24% | CDC7/BUB1/CKAP2L/RAE1/POLD3/CEP290/STRBP/GLMN/HJURP/SIPA1L3/FUBP1/ZNF397/NCAPG/CEP135/CCDC28B/METTL8/RRP1B/WDR75/ANP32B/CASP2/RFX3/DLGAP5/TAF5/MAP3K4/RAB34/UPF3B/FANCI/DNM1L/STMN1/ZBED5/P3H4/RRM1/NCOA6/ZNF605/ZNF354A/SERGEF/NDC80/C2CD5/EPC1/BTBD3/DNA2/RIC8B/TUG1/NUAK1/BARD1/MEX3C/ZNF532/KLHL42 |
| REACTOME\_METABOLISM\_OF\_AMINO\_ACIDS\_AND\_DERIVATIVES | REACTOME\_METABOLISM\_OF\_AMINO\_ACIDS\_AND\_DERIVATIVES | 354 | -0.27818 | -1.44304 | 0.001684 | 0.010909 | 0.007753 | 4821 | tags=35%, list=27%, signal=26% | GADL1/RPL31/RPL27/AANAT/GOT2/PSMA6/GPT/AMT/ARG1/ALDH7A1/HOGA1/SECISBP2/DLAT/HSD17B10/SLC25A13/PSMD9/AZIN1/LIPT1/PSMD6/AASS/PRODH/SEPSECS/ETHE1/PSMA3/GRHPR/PSMD5/PSME1/RPS5/GATM/PSMA1/SRR/RPL23/HNMT/GCAT/PDHA1/KYAT1/PHGDH/RPSA/HIBCH/MCCC1/ENOPH1/PSMC3/RPL36/GPT2/RPL35/RPL8/RPLP1/SLC25A15/PSMB7/RPS6/RPL22/DMGDH/ALDH6A1/SCLY/CPS1/SLC25A12/AIMP2/ECHS1/PSMC5/RPL37A/MTAP/AMDHD1/PSMD10/RPL37/IYD/OAT/RPL23A/PSMD14/MTRR/CKMT2/PSMD7/APIP/EEF1E1/RPL17/PSME3/PSMD2/RPL13A/SLC36A4/FTCD/NDUFAB1/DBH/GLUD2/RPS20/NAALAD2/HIBADH/ADO/PSMA2/RPS27L/RPL7/RPS23/TST/RPL34/LIAS/RPS18/RPL38/GLS/PSMD1/FAU/INMT/PSMC2/MTR/RIDA/RPS26/RPL26L1/SLC44A1/MRI1/RPL36AL/CBS/QDPR/DHTKD1/PSMD8/RPL35A/RPL24/RPS4X/PDHX/DLD/ALDH18A1/RPS21/ACAT1/RPL26/RPL39/DLST/RPL21 |
| REACTOME\_TCF\_DEPENDENT\_SIGNALING\_IN\_RESPONSE\_TO\_WNT | REACTOME\_TCF\_DEPENDENT\_SIGNALING\_IN\_RESPONSE\_TO\_WNT | 170 | -0.30637 | -1.44426 | 0.009439 | 0.043236 | 0.030726 | 4399 | tags=36%, list=25%, signal=28% | PSMD9/CBY1/CTBP1/KLHL12/PSMD6/CREBBP/PPP2CB/RSPO1/PSMA3/PSMD5/PSME1/FZD4/SRY/PSMA1/CAV1/FRAT2/WNT5A/TLE1/LRP5/TLE4/LRP6/PSMC3/FZD6/WNT9A/PPP2R5C/FZD2/TNKS2/PSMB7/RNF146/DKK4/AMER1/FZD8/PSMC5/RYK/PSMD10/RUVBL1/PSMD14/ASH2L/SMARCA4/PSMD7/DVL2/PSME3/PSMD2/LEO1/AKT2/BCL9/PPP2R5A/PSMA2/TLE2/SFRP1/PPP2R5E/TCF7L1/XIAP/CHD8/PSMD1/PSMC2/SOX3/CSNK2A2/PSMD8/RBBP5/AXIN2/XPO1 |
| RAY\_TUMORIGENESIS\_BY\_ERBB2\_CDC25A\_DN | RAY\_TUMORIGENESIS\_BY\_ERBB2\_CDC25A\_DN | 245 | -0.29366 | -1.44588 | 0.003001 | 0.017282 | 0.012282 | 3419 | tags=28%, list=19%, signal=23% | SGCB/PPP1R8/NCOA3/EIF4E3/SNCG/RRAGC/MMACHC/DPH2/CPT2/TMTC2/ASIC1/USP20/GPC4/PUM1/PHYH/RPL22/CDC42EP3/UBE4B/MADD/SMOC2/RSAD2/LIN7C/GOLGA2/CCDC28B/PRPF38A/EMC1/SAP30/RXRA/PRICKLE2/TCF12/INPP5B/C11orf54/SLC7A10/CES1/CHMP4B/ZNF770/TSPAN7/EPC2/PLEKHF1/DNAJC8/FAM76A/CBX7/SMIM12/LY6D/AFAP1L1/CXCL12/THBS4/PEF1/BACH2/PELI2/RPA2/KPNA6/ZBTB40/ARHGEF3/ZMPSTE24/AOC3/CDC40/RIMS3/UPF2/REEP5/PAQR7/ACAD9/TXNIP/PRDX6/UQCRH/NDUFS5/PPCS/SCRG1 |
| VANOEVELEN\_MYOGENESIS\_SIN3A\_TARGETS | VANOEVELEN\_MYOGENESIS\_SIN3A\_TARGETS | 212 | -0.29703 | -1.4467 | 0.004891 | 0.025772 | 0.018315 | 3790 | tags=30%, list=21%, signal=24% | CEP68/VPS35/PPP2R3C/POP7/CCT5/ETFB/RAE1/HS2ST1/CREB1/CLCN3/RPSA/LDLR/ENOPH1/ERF/APPL2/BTD/MRPL57/SERF1B/SURF2/CMAS/HACD3/C17orf80/MBTD1/RCN1/NOA1/MZT1/HAX1/TMCO3/PHKB/KIAA1191/FAM114A2/EIF2B1/NAP1L4/E2F6/BTBD6/RNF181/LIN28A/DCTD/ZNF248/MLYCD/MRPS36/TFB1M/C1orf131/MRPS33/CCDC71/UCHL3/WWP2/CEP85/COA5/KANK2/MRPS16/PPP2R2A/PGLS/GON7/ZCCHC24/ERGIC1/SUCLG2/ZNF189/CKS1B/CHCHD4/PPP3CB/HOXC8/PHF5A/MSANTD4 |
| MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_UP | MONNIER\_POSTRADIATION\_TUMOR\_ESCAPE\_UP | 378 | -0.28002 | -1.45826 | 0.000552 | 0.004319 | 0.003069 | 4285 | tags=33%, list=24%, signal=26% | RND1/DDX46/GREM1/ACTR1B/ATP2B1/PROSER1/PDE12/CDK6/NPLOC4/CENPA/TSR1/URB2/CREBBP/RSRC2/CDK8/PDZRN3/NAA25/SHROOM4/FAM167B/PIK3R1/CREBZF/FAM98A/AHRR/ZMYND19/ZNF670/SLC12A2/UACA/HSPA4L/GTF3C6/KPNB1/KAT2A/MRPS15/NOL8/LUC7L3/DHX33/ZNF106/POLDIP2/LONP1/SPIRE2/NOP56/NAA16/CSNK1G1/NIPBL/HNRNPK/OXR1/EIF4G1/TEX261/AVEN/ZDHHC3/PABPN1/GRWD1/LBHD1/AEBP1/USP20/LETMD1/SLC35B4/DAP/TAOK1/PPAT/ELAC2/TTPAL/NMT2/SNTB2/PRMT6/ARGLU1/TTC39C/NOA1/PPM1F/UBXN8/ANKRD13A/GATAD2A/ASH2L/SMARCA4/TRAF2/RBM25/RWDD4/GTF2H1/WDR46/GOSR2/PRKCA/AK1/INTS2/BNC2/RAD23B/RUNDC1/SUPV3L1/ZKSCAN3/AKAP1/PRRX1/CCNB1IP1/ESPL1/SH3PXD2A/CLEC1A/TRIM2/NEMF/PNN/SREK1/XPO5/DDX54/G3BP2/DEPTOR/GLS/MAP3K7/SMARCC1/MTR/GPD1L/FASTKD1/BOP1/RAB5C/ZMPSTE24/YAP1/SMG5/ERGIC1/BBX/MRGPRF/SLMAP/PTPN11/MAN1A1/GNG12/STRAP/MRPL15/MTMR9/CGNL1/TPM1/DYNC1LI2 |
| BONOME\_OVARIAN\_CANCER\_SURVIVAL\_SUBOPTIMAL\_DEBULKING | BONOME\_OVARIAN\_CANCER\_SURVIVAL\_SUBOPTIMAL\_DEBULKING | 474 | -0.27664 | -1.46374 | 0.000227 | 0.002079 | 0.001478 | 4848 | tags=35%, list=27%, signal=27% | YIPF2/RHOT1/HMGB3/RPS6KA2/CDK14/KDELR3/PSD4/RARRES2/CREB3L2/PPAN/CCPG1/TNPO1/MAU2/CDYL/OXLD1/DLAT/NKX2-8/SEC23IP/KCNK12/RAD17/FUT4/WDR77/TNPO2/RND1/HNRNPU/IRS1/ATP6V1C1/SMAGP/EXOC7/COLGALT1/CDK2/IBTK/HEPH/CREBBP/PDZRN3/ECE1/LEFTY2/PIK3R1/GULP1/PDS5B/HDAC4/GATM/CDHR5/RAB2A/COPS8/CAV1/TMEM223/WNT5A/DNASE2/ZNF696/IGFBP5/MORC3/RARB/PRKAR1A/CCSER2/TLE4/SLC30A5/ANKRA2/STAT5B/YIPF6/ARMC8/RASA1/MYOF/ACOT7/CAV2/CERK/EID1/LMOD1/PEG3/MEF2C/PRKD3/NR2F1/RNASE4/ESRRA/METTL3/SLC24A3/LPAR1/NMT2/MTAP/ICMT/DNAJB9/MRPS27/THAP10/TMED7/EPS8/STK39/PDGFD/SNCAIP/DUS1L/AKAP7/PAM/SESN1/RUNX1T1/SRSF11/LEPR/JRKL/MAST3/MEOX2/SNX2/ATP8B4/TRMT1/GOSR2/ADRA1A/PIK3R2/FKBP14/REV3L/CALCOCO2/PDE1A/DNAJB4/TSPAN7/GNE/SPOP/ESPL1/IGFBP3/ADCY9/ZFPL1/ADO/ZEB1/TMEM168/DDX52/FZR1/SPARCL1/JAM2/CDR2/RB1CC1/CNGB1/REXO4/ZNF518A/G3BP2/FAAP100/ANXA6/KRT10/FUBP3/FNDC3A/JAM3/DIMT1/GLS/COL13A1/TAX1BP1/LIMCH1/WFS1/ANAPC13/CDK19/BOP1/MAOA/PACSIN3/CDC40/EDNRA/SNX3/ZCCHC24/NR2F2/C7/PPP3CA/STAT2/REEP5/AZI2/UBL3/PNISR/CBX6/FAM172A/PPP3CB/PDSS2/TRPC1/PHACTR2/RPAP2/NDN/RHOBTB3/TMEM47 |
| MCBRYAN\_PUBERTAL\_BREAST\_5\_6WK\_DN | MCBRYAN\_PUBERTAL\_BREAST\_5\_6WK\_DN | 123 | -0.32838 | -1.46926 | 0.010117 | 0.045292 | 0.032187 | 5007 | tags=42%, list=28%, signal=31% | SRPK2/EIF4EBP2/C20orf27/CHD4/CUX1/HSD17B11/PURB/ATXN7L3B/ZBTB7B/MAPK8/NFIX/CPD/ZEB2/FZD4/HEMK1/FUS/RBBP4/OGT/RUNX1/STAT5B/EIF4G1/SPPL2A/CNOT3/MEF2C/FUBP1/TAOK1/SNTB2/NFATC3/RPL37A/IP6K1/SMC6/TMEM79/SMARCA4/AKT2/SDC4/PRRX1/SEC61A1/ZBTB20/DPYSL3/PRPF19/ACLY/DHX36/FTO/SREK1/ACACA/PTEN/RAB5C/NFIB/CALD1/EBF3/TBL1X/WASL |
| JISON\_SICKLE\_CELL\_DISEASE\_DN | JISON\_SICKLE\_CELL\_DISEASE\_DN | 176 | -0.31105 | -1.47613 | 0.004368 | 0.023476 | 0.016684 | 3852 | tags=31%, list=21%, signal=24% | CDX2/ATP6V0E2/CEP68/HNRNPDL/SNRNP200/TOMM7/OGT/CCSER2/LINC01278/EIF3D/ARHGEF18/SRSF8/RBBP6/JAK1/FNBP4/EEF1B2/RPLP1/DYRK2/RPS6/RPL22/PMM1/B4GAT1/COX11/ASB9/TRAF5/RPL37/RPL23A/NONO/RFC4/ANP32B/RPL17/RPL13A/FBL/MICA/ZNF211/RPS20/EIF4A2/RPL7/COBLL1/ZNF354A/USP9X/EIF3H/AMY1A/GLS/POLR2H/TMED10/MID2/RPL24/TRIM32/TXNIP/COX6C/VPS13A/SPECC1L/RPL21 |
| PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_DN | PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_DN | 156 | -0.31741 | -1.48054 | 0.004077 | 0.022177 | 0.01576 | 3996 | tags=31%, list=22%, signal=24% | MSTO1/RTKN/PANX3/AMZ2/MPZL1/SF3A1/P3H2/MED16/PLCG1/NOL8/PON3/RAP1A/SERAC1/PDCD2/CDC42EP3/GATC/ALDH1B1/AIMP2/HACD1/ACOT8/SNRNP40/UBXN8/NDUFC1/FAM120AOS/HAX1/MGLL/GCSAM/WDR46/HYAL2/SUPT4H1/MLLT10/SWT1/CCDC62/ATCAY/ENSA/EDC3/SIX5/GLS/ZMPSTE24/FN3KRP/LSM3/RSU1/ALDH18A1/MRPL1/PNPO/CBX6/PHF5A/HNRNPL |
| LASTOWSKA\_NEUROBLASTOMA\_COPY\_NUMBER\_UP | LASTOWSKA\_NEUROBLASTOMA\_COPY\_NUMBER\_UP | 166 | -0.31578 | -1.48687 | 0.005742 | 0.029146 | 0.020713 | 4028 | tags=37%, list=22%, signal=29% | MRPL58/NUP85/PTRH2/MRPL10/ANAPC11/WSB1/SYNRG/STX8/ANKFN1/SRR/RPL23/PHF23/KPNB1/LUC7L3/DHX40/NOL11/MAP2K4/BIRC6/SRSF1/TBX2/DPH1/ZNF18/MCRIP1/MRPS7/MED9/KSR1/NAT9/RAB10/PSMC5/VTN/RNASEH1/DUS1L/SMC6/SLC35F6/SRP68/GOSR2/UTP18/DHRS7B/INTS2/ZBTB4/AKAP1/SUPT4H1/CBX2/CHRNB1/MRPL12/ALDH3A2/UBE2O/ATPAF2/TUBD1/LBH/MYO1C/ALDOC/ARMC7/P4HB/RPL38/MRPS23/TACO1/RAD51C/TIMM22/CEP95/AXIN2/UTP6 |
| ZWANG\_DOWN\_BY\_2ND\_EGF\_PULSE | ZWANG\_DOWN\_BY\_2ND\_EGF\_PULSE | 227 | -0.30273 | -1.4907 | 0.001741 | 0.011182 | 0.007946 | 4887 | tags=39%, list=27%, signal=29% | CSAD/EAF2/PPIL3/SMG9/ZNF658/PER3/ZNF302/ZNF431/STAG3/CENPL/ZNF646/POLH/VAMP1/ZBTB7B/ZNF33A/ZNF138/PLEKHF2/ZNF283/LYRM9/HINFP/ANKRD20A1/TCEANC2/LRRC37B/ZNF714/SYNRG/ZNF79/SUV39H1/FZD4/ZNF493/ARMCX6/SLX4/GPAM/ZNF526/BRD8/GAS2L3/POC5/REV1/HILPDA/DCLRE1A/LBHD1/PUM1/RBM4B/CDCA2/NDUFAF5/MTMR11/ZNF630/FAM219B/CDKN1B/HSD17B7/C17orf80/AGAP4/SESN1/FNDC8/CYP2R1/ZNF721/C11orf54/PIK3C2B/ZNF792/HYLS1/NAP1L4/PLEKHF1/MTX3/ZNF684/NAPB/ZC3H8/DISP1/ZNF805/TUBD1/RBM14/RSRP1/ZNF181/MKKS/MEPCE/CEP85/ZNF510/FAM43A/PDIK1L/DPH5/CCDC85C/EPM2AIP1/SPIN3/CPEB3/RCOR3/ZNF30/RASL11B/ZNF564/ZBTB3/FAM217B |
| BROWNE\_HCMV\_INFECTION\_6HR\_DN | BROWNE\_HCMV\_INFECTION\_6HR\_DN | 153 | -0.32206 | -1.49249 | 0.002772 | 0.016239 | 0.01154 | 5510 | tags=48%, list=31%, signal=33% | ITGA6/AGGF1/S1PR1/FBXL5/TBC1D31/BACH1/RPE/AJAP1/DSP/FRY/MTM1/IL7/GTF2H2/FBXL2/CASP6/S100A3/HMGA2/PEX11B/NR3C1/ELF2/ICA1/FPGT/TSPYL5/NCK1/ARID5B/ZNF230/PIK3R1/CEP68/MEIS1/PCMTD2/STAU2/ACOX1/TLE4/GLI2/HOXA9/HOXC6/KANK1/ZNF44/FAM168A/DMTF1/CDKN3/MTAP/CDKN1B/PEX7/PHF3/CEP112/GOSR2/WEE1/GLOD4/BCL9/FADD/ZBTB24/PARP4/ARNT2/MDC1/TRIM2/ATPAF2/OFD1/MED21/RNF113A/CSTF2T/ORC2/CDC40/ZNF175/STON1/MN1/TXNIP/ITGAE/GAS1/PNISR/COIL/CDC23/PHF20 |
| KEGG\_OOCYTE\_MEIOSIS | KEGG\_OOCYTE\_MEIOSIS | 111 | -0.34051 | -1.49553 | 0.005695 | 0.029045 | 0.020641 | 4899 | tags=39%, list=27%, signal=28% | ITPR2/RPS6KA2/RPS6KA6/PPP1CB/ANAPC7/BTRC/STAG3/CDK2/PPP2CB/SMC3/SKP1/ANAPC11/YWHAQ/PLK1/BUB1/ANAPC4/PPP2R5C/PRKACG/YWHAB/PLCZ1/CDC26/MAPK12/ESPL1/ANAPC5/ADCY9/PPP2R5A/PPP1CC/YWHAH/IGF1/PPP2R5E/CAMK2G/PPP1CA/ANAPC10/PTTG2/ADCY4/CALM2/PPP3CC/ANAPC13/PPP3R1/PPP3CA/CALM1/CDC23/PPP3CB |
| BASSO\_B\_LYMPHOCYTE\_NETWORK | BASSO\_B\_LYMPHOCYTE\_NETWORK | 137 | -0.32898 | -1.49626 | 0.005499 | 0.028234 | 0.020065 | 2750 | tags=31%, list=15%, signal=27% | ARVCF/ZNF593/SLC4A3/UCHL1/TIMM17A/AIMP2/SUN2/NISCH/SSBP1/AHSA1/CSE1L/PSMD14/EMG1/PRKCB/RFC4/N4BP2L2/EEF1E1/PSMD2/POLR2F/S100A4/N4BP2L1/NDUFAB1/BLMH/ZBTB20/MRPL12/GABARAP/PRDX3/CTPS1/ANXA6/CYCS/PSMD1/SPG11/RPS26/POLR2H/SLC25A4/LSM3/SAR1A/CYC1/TGOLN2/HSPE1/HHEX/HDDC2/SNRPF |
| GARCIA\_TARGETS\_OF\_FLI1\_AND\_DAX1\_DN | GARCIA\_TARGETS\_OF\_FLI1\_AND\_DAX1\_DN | 150 | -0.32361 | -1.49976 | 0.003651 | 0.020207 | 0.014361 | 5399 | tags=45%, list=30%, signal=32% | RASSF1/DNAJA4/TYMS/AMDHD2/UCK1/MYO10/BLOC1S6/SKP2/TELO2/RIMBP3/CENPM/PTMA/CCNC/MRPL24/FNBP1/TNPO1/TIPIN/TIMM10/MRPL11/SFR1/BICD2/RRP15/CDK2/TRMT10A/INIP/HDAC6/GDNF/DHX33/STRBP/INF2/NOP56/TOE1/RSL1D1/RPIA/PPCDC/ESCO2/SCFD1/TPRKB/SCLY/UTP23/CKMT2/RMI1/CASP2/ELP5/FXN/CHCHD3/MRPL48/PPIL1/CNOT7/CBX2/HOXD13/ZNF93/BRD7/FANCE/IGF1/DUT/PPP2R5E/GINS3/SRRM1/GMNN/BAG1/ALG14/PCGF5/UBE2D4/EED/DENR/ITGAE/NDN |
| OSMAN\_BLADDER\_CANCER\_UP | OSMAN\_BLADDER\_CANCER\_UP | 377 | -0.28897 | -1.50263 | 0.000258 | 0.002296 | 0.001632 | 4620 | tags=37%, list=26%, signal=28% | TNPO1/USP42/SECISBP2/YEATS4/CDC5L/SRP19/ACTR1A/TIPRL/LNPK/SNRNP48/CPNE3/SLC25A13/ACBD5/RAB27A/GZMH/SESTD1/TMEM33/TTC17/CCZ1/SNX16/FPGT/BICD2/FXR1/AGO3/ZC3H7A/COQ2/SMC3/SEC24A/PIK3R1/HSPA13/UBQLN2/TNPO3/SAMHD1/ENPP4/DPYD/ZNF562/CAPZA2/MRPS10/LRRC57/ABCB10/TMED8/KPNB1/CCSER2/ATP11B/ZNF148/RPS6KC1/KHDRBS1/GALNT1/OXR1/EIF4G1/LYPLA1/KLHDC3/STRN3/THAP6/PABPN1/SPPL2A/SARNP/RBMS1/NBN/TNKS2/PRNP/MAGT1/SNTB2/SUGT1/RAB10/LIN7C/USP1/PHAX/KLHL7/SAP30/TMED7/CEP57/FAR1/OTUD6B/LYST/G2E3/KLHL24/SRSF11/FCRL2/DCUN1D1/ASB8/ZYG11B/RAD23B/USP47/MBNL1/CHURC1/FAM133B/AASDH/BRD7/PARP4/TMEM106B/DIAPH2/SNHG5/MBD4/ARPC4/NEMF/PTCD3/DHX36/KPNA3/NUCKS1/NNT/TNRC6B/NXT2/PREP/TTC33/ZNF319/VTA1/P4HB/LACTB2/RIF1/CCND3/ATG5/KPNA6/CRIPT/SLC44A1/SAE1/ERGIC2/FAM120A/ERGIC1/ZFAND3/JAZF1/THUMPD3/BBX/TGOLN2/SPIN4/AZI2/ZNF641/MEX3C/ATP6V1D/SUZ12/PNISR/CBX6/FAM172A/RSBN1/PHACTR2/TRAK2/KLHL9/HNRNPL |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_QTL\_CIS | BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_QTL\_CIS | 124 | -0.33586 | -1.50482 | 0.005201 | 0.027038 | 0.019215 | 3492 | tags=35%, list=19%, signal=28% | TUBGCP4/CCR2/NVL/TBCB/SPAST/RUNX1/CLEC16A/HJURP/PON2/CPSF2/MRPS7/ST6GALNAC4/IFI16/NUB1/UBAP2L/RCN1/THUMPD1/MRPL35/GATAD2A/PIGX/GCSAM/SNRPB2/ATAD1/MTIF2/TTC7B/NOP10/GNB4/MYOM1/TRAPPC12/TM2D3/COA3/PTPRF/MPC2/CNIH1/USP38/GGNBP2/MED1/CRYZ/CCL23/CNN3/MTMR9/RPL26/SCOC |
| CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_1 | CREIGHTON\_ENDOCRINE\_THERAPY\_RESISTANCE\_1 | 484 | -0.28446 | -1.50531 | 8.39E-05 | 0.000872 | 0.00062 | 3520 | tags=28%, list=20%, signal=23% | SYTL2/EIF3M/YDJC/SHMT2/IQGAP3/ECI2/OGT/WDR4/RBBP8/TEX10/DHX33/TBCB/BDH2/ZBTB2/ARMT1/DNAJC12/LMBR1/GTF3A/DAZAP1/KLHDC3/MYOF/INPP4B/MIS18BP1/PABPN1/TCEAL1/HOXC6/JAK1/SPIN1/NUDT21/DUSP23/METTL3/RTN2/HNRNPA0/UTP14A/SLC24A3/HDAC11/CMSS1/CDKN3/ELP2/BCS1L/HACD1/NR2C2AP/UTP14C/SFXN2/NHP2/MCM4/PRMT5/UBE2C/MRPL52/FKBP3/HIRIP3/TOP1MT/RRP1B/FAM120AOS/GPRASP2/LARGE1/ANP32B/RMND1/DYNLT3/EVL/KCTD15/SLC35F6/SYTL4/FGFR2/TTL/ELOVL2/FRMD6/RMI2/THYN1/CHMP4A/E2F6/ABCA12/FBL/ATP8B2/MRPS25/ADGRG6/MSRB2/CCNB1IP1/ARMCX1/PCP4/WWP1/BMP8B/PBX1/OLFM1/ARMC10/TRPC6/RWDD2B/RAB29/DUT/RPS23/PPP2R5E/GINS3/FTO/CXCL12/HMCN1/IPO5/LPCAT1/ELP6/ADSL/UBE2E2/AFF3/ANXA6/TPD52L1/ESYT1/CAP2/RIDA/DPH5/SOX3/PTEN/HMGN4/NUAK1/RSRC1/DHTKD1/ZCCHC24/MRPL51/UBQLN4/NR2F2/RSU1/RPS4X/BARD1/MDP1/MEX3C/PALLD/RERG/ESD/LDOC1/MRPS21/TCEAL4/SLC38A1/FUT8/TTLL12/PRDX6/TBL1X/HDDC2/RHOBTB3 |
| DE\_YY1\_TARGETS\_DN | DE\_YY1\_TARGETS\_DN | 92 | -0.3521 | -1.51215 | 0.006957 | 0.033855 | 0.024059 | 3899 | tags=43%, list=22%, signal=34% | ECT2/PKN2/RB1/AGGF1/IL13/MPHOSPH9/OSMR/HSP90B1/TUSC3/MACF1/IFT57/CYLD/CCNG1/STAG1/WDR1/CAPZA2/SMNDC1/PDHA1/RBBP8/CLIC4/RBBP6/RASA1/PRKD3/TACC1/LPAR1/SRSF9/RASSF3/ENC1/EPS8/CUL5/ANGPT1/EPAS1/USP9X/PNN/PTEN/CSNK1G3/PRKAA1/SNX3/BARD1/CALD1 |
| MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_DN | MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_DN | 109 | -0.34544 | -1.51226 | 0.005764 | 0.029202 | 0.020753 | 5329 | tags=41%, list=30%, signal=29% | TYMS/HNRNPAB/ALYREF/BUB1B/CENPE/CCNA2/CENPM/HMGB3/MKI67/RANBP1/MICU1/KNTC1/RPA3/KIAA0586/CAV1/NCAPD3/POLD3/PRC1/DCLRE1A/RFC5/SMC4/CDKN3/EXOSC8/CSE1L/UBE2C/SNRNP40/RFC4/ANP32B/DLGAP5/MECOM/PSIP1/FBL/ESPL1/STMN1/RRM1/MDC1/DUT/GMNN/HMGB1/LANCL1/NDUFS3/ZNF175/FUT8/MSH6/HNRNPL |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_DN | GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BLUE\_DN | 59 | -0.38084 | -1.51329 | 0.00927 | 0.042679 | 0.03033 | 3094 | tags=36%, list=17%, signal=30% | MBLAC2/FZD2/HILPDA/RBM43/ZNF397/PRMT6/RUNX1T1/MECOM/C2orf68/PTCD2/FBXL15/PINX1/TMEM50B/NREP/MYLIP/SIX5/CSTF2T/DNAAF2/THUMPD3/GSPT2/ZNF462 |
| CHANDRAN\_METASTASIS\_DN | CHANDRAN\_METASTASIS\_DN | 296 | -0.29779 | -1.51357 | 0.000452 | 0.003687 | 0.00262 | 2040 | tags=20%, list=11%, signal=18% | SFT2D3/RRAS/RAB40B/BBOF1/FGFR2/KIAA1191/RAB34/ZBTB4/DNAJC10/SSPN/MICA/ZCCHC3/RAB4A/PRRX1/ARMCX1/SORBS2/PI15/RNF150/MLLT10/ECHDC1/PCDH18/TMEM106B/RPS27L/LINC00339/SFRP1/SWT1/RWDD2B/MRPL45/THBS4/AHI1/PTN/JAM3/TIGD2/COL13A1/SLC20A2/ALKBH3/NFIA/EFEMP2/LIMS2/NDFIP2/STAT2/PNRC2/ZNF641/MRGPRF/SLMAP/MN1/DYNC1I2/CTSO/RASL12/ZNF532/PPP1R14A/AXIN2/WFDC1/PPP3CB/MYLK/CNST/DACT3/NEXN/PARM1 |
| HORIUCHI\_WTAP\_TARGETS\_DN | HORIUCHI\_WTAP\_TARGETS\_DN | 295 | -0.29918 | -1.51846 | 0.000261 | 0.002315 | 0.001645 | 5732 | tags=42%, list=32%, signal=29% | SNRPA/ATL3/EBPL/NAP1L1/UHMK1/SPATS2L/UHRF1/NEGR1/LEPROTL1/SC5D/ZNF618/KIF11/DDX39B/TMEM97/TYMS/STUB1/BUB3/BUB1B/ENAH/TFB2M/CCNA2/CENPM/TSNAX/TMEM64/CCNC/MKI67/SRPRB/CNN2/HMGA2/DLAT/TDP2/DRG2/PURB/PPM1A/KIF2C/C1D/PAWR/TMEM33/TIMM50/IMPDH2/CENPA/UBXN2A/MCM7/MSTO1/ARHGAP18/TMEM245/CCDC86/PECAM1/STYX/TMEM123/PLK1/ASF1A/BUB1/CKAP2L/KPNB1/ATP11C/ZNF106/COX7B/CDH2/RPRD2/VRK1/PRC1/HJURP/SNRNP27/ABCD3/EEF1B2/DCXR/C11orf58/RFC5/SEPHS1/NCAPG/NMT2/CDCA2/CDKN3/CCT7/NCAPD2/LIN7C/CSK/CYTL1/UBE2C/HACL1/CMPK1/KLHL8/DLGAP5/RPL13A/DNAJC10/FBL/ATP8B2/BTBD6/COQ3/MRPL48/MBNL1/IPO11/ANGPT2/ESPL1/ENY2/TMEM106B/FDFT1/MPP4/RRM1/WDFY1/UQCC2/ST8SIA4/GMNN/CENPW/NUCKS1/NDC80/FBXO32/MBTPS2/CEP85/GLS/NDUFA7/PAPOLA/PHF10/USP38/MPRIP/PGRMC2/C12orf57/IFNAR1/ANKRD46/PNRC2/STON1/CKS1B |
| KIM\_MYC\_AMPLIFICATION\_TARGETS\_UP | KIM\_MYC\_AMPLIFICATION\_TARGETS\_UP | 187 | -0.31817 | -1.5194 | 0.002054 | 0.012738 | 0.009052 | 3672 | tags=31%, list=20%, signal=25% | GATM/FAM216A/EEF2K/PGM2/PDHA1/DHX33/COX7B/RPSA/NOP56/VRK1/LYPLA1/NIFK/SLC39A10/AP5M1/WDR3/PPAT/ARL6IP5/PRMT6/NHLH1/SSBP1/NAA30/RRP1B/GALK2/PRRG1/ALOX5AP/EEF1E1/LEO1/SGCD/SSB/TTC7B/FBL/AGL/BLMH/RPS27L/ALDH3A2/PSMG1/ACLY/RPS23/MRPL36/PDLIM3/DLEU1/MRPS33/EIF2S2/CYCS/PARK7/NDUFAF2/POLR3K/MCTS1/MRPL50/MRPS23/FASTKD1/RABEPK/PGRMC1/RPS4X/NUDT11/PRDX6/LYRM1/COX6B1 |
| DAVICIONI\_MOLECULAR\_ARMS\_VS\_ERMS\_UP | DAVICIONI\_MOLECULAR\_ARMS\_VS\_ERMS\_UP | 315 | -0.29733 | -1.52078 | 0.000248 | 0.002221 | 0.001578 | 5583 | tags=43%, list=31%, signal=30% | SPATS2L/COBL/PCNT/RBM8A/TBCD/ARHGEF4/ENO3/TOX3/S1PR1/PKP4/ZNF330/FBXL5/WSCD1/NET1/FAN1/SATB2/NCOA1/RBPJ/RAP1GAP2/MXRA7/SEMA5A/FRY/ADAM10/RAB28/CDK14/NTRK3/GOT2/MAMLD1/NELL1/TRIM37/MORC4/MEOX1/CDYL/TRPV1/PIGN/PODXL/DIXDC1/GADD45A/GREM1/TLK2/GOSR1/JAKMIP2/NOTCH1/ARHGAP26/AKTIP/CLIP1/PDZRN3/CPD/SH3GLB1/CEP68/AMZ2/PAIP1/PSME1/MAP1LC3B/COG2/EMC9/RNGTT/CRMP1/CLCN3/ASTN2/ACOT7/KANK1/PEG3/AP5M1/CHRNB3/CDC42EP3/PAX5/TTC19/ZNF91/SYNE2/SLC24A3/ECHS1/CCP110/FRMPD1/ISCA1/NMRK1/NHLH1/SUN2/BLCAP/THUMPD1/MAN1C1/EIF1AX/HSF2/OAT/ANKS1A/SESN1/FGFR2/MED13L/ELOVL2/UBR2/CNR1/NLGN4X/FRYL/HSBP1/TEFM/DTWD1/ENDOG/GNE/MNAT1/ZNF248/SLC9A6/MDC1/ZCCHC14/FTO/RRAGA/CAMSAP1/MSRB1/NNT/TFAP2A/PTPRF/PTBP2/MYLIP/ACYP1/LMO4/TEX2/TSPAN3/PLPP1/SLC30A9/GCA/HMGN4/DLGAP2/CAAP1/PCMT1/QDPR/GGNBP2/BRD3/PPP3CA/NUDT11/COQ9/TXNIP/SLC38A1/RYR3/COX7A1/FOXO1/MTMR4/TMEM47 |
| RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_DN | RODWELL\_AGING\_KIDNEY\_NO\_BLOOD\_DN | 134 | -0.33699 | -1.524 | 0.003928 | 0.021475 | 0.015261 | 5919 | tags=49%, list=33%, signal=33% | TBC1D24/ZNF711/CLDN8/C3orf14/ITPR1/NDUFS1/RALGPS1/IGF1R/PCBP2/TOX3/PPM1K/PTGER3/MPPED2/MPC1/ABCA5/ERLIN2/FMO5/GOT2/FA2H/AMT/LRPPRC/KLHL3/DLAT/SRP9/MTO1/GHR/ATXN7L3B/AASS/ARHGAP18/TCTN3/ISOC1/PAIP1/SRR/ECI2/COX7B/ARFGEF3/FBXO21/AHCYL1/PEG3/PHYH/ALDH6A1/GATB/ISCA1/GSTA4/CEP70/OAT/KLHL24/C2orf68/TSPAN7/CCNB1IP1/USP9X/GMNN/NNT/OXCT1/RBM14/PRDX3/CYCS/NEDD4L/MTR/DHTKD1/CPEB3/FAM171A1/AUTS2/COX6C/COX7C/RHOBTB3 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_1HR\_DN | PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_1HR\_DN | 102 | -0.34951 | -1.52701 | 0.007585 | 0.036286 | 0.025787 | 5343 | tags=39%, list=30%, signal=28% | ENDOD1/NET1/MPPED2/FOXA1/CENPE/SRPK2/TUBB2B/GPC6/COL2A1/HSD17B11/HMGA2/PC/TNPO2/CREBBP/CPD/PIK3R1/CACNA1H/SLC12A2/WNT5A/PLEKHG1/SNCG/PEG3/ARGLU1/CUL5/FGFR2/LUZP1/ATXN2/PCSK5/SELENBP1/CHODL/NFIA/ZCCHC24/NFIB/RCOR3/MYH11/PTH1R/PPP1R3C/TPM1/PARM1/HNRNPL |
| HOLLMANN\_APOPTOSIS\_VIA\_CD40\_DN | HOLLMANN\_APOPTOSIS\_VIA\_CD40\_DN | 243 | -0.31053 | -1.52722 | 0.000573 | 0.004458 | 0.003168 | 4803 | tags=42%, list=27%, signal=31% | GMFG/CTNNA1/ZNF302/GSE1/CASP6/HOXA10/HOXB6/FADS1/SETMAR/IFT57/SEC23IP/VPS72/GSTO1/THUMPD2/PKIG/MTMR2/ZNF544/AP3B1/GOSR1/SIDT1/HCP5/IFITM1/CASP1/PSME1/LDAH/ZSCAN9/NXN/MPZL1/STAMBP/AKIP1/ARMCX6/PPA2/GATM/UROS/GTF3C3/TLE1/YBX3/DECR1/ANKMY2/BDH2/HOXA9/C8orf33/RPL8/PON2/MIPEP/MRPL57/AEBP1/PHYH/ZNF239/OXSR1/CRYZL1/NDUFB8/MTRF1/TDRD7/RCN2/CDKN1B/RYK/GSDMD/TOR1AIP1/PPM1F/ZKSCAN4/ZC3HAV1/CERS6/NIT2/THYN1/E2F6/HSBP1/MSRB2/LAMB4/CCNB1IP1/SUB1/ANKRD10/CRELD2/SERPINH1/BAG3/TFG/ABHD10/RWDD2B/FAM174B/COA3/PPP1CA/MSRB1/SAV1/BACH2/ZNF45/RNF138/ACOT13/MGST2/SMARCE1/TIMM9/RPL36AL/BRD3/SUCLG2/TIMM22/PPP3CA/TRIM44/MT1X/HOXB7/GTF2H5/KLHL9/NOSIP |
| REACTOME\_RESOLUTION\_OF\_SISTER\_CHROMATID\_COHESION | REACTOME\_RESOLUTION\_OF\_SISTER\_CHROMATID\_COHESION | 122 | -0.34259 | -1.52748 | 0.004906 | 0.025802 | 0.018337 | 5398 | tags=45%, list=30%, signal=32% | KIF2A/CENPC/PPP2R5B/BUB3/AHCTF1/TUBA1B/BUB1B/CENPE/CENPM/TUBB2B/RAD21/NUDC/CENPL/TUBB6/NSL1/CKAP5/KIF2C/CENPA/KNTC1/CLIP1/PPP2CB/SMC3/NUP85/STAG1/TUBB8/PDS5B/PLK1/BUB1/NUP43/STAG2/NUP133/PPP2R5C/WAPL/TAOK1/DYNC1LI1/NUP107/ZW10/SKA2/SPDL1/PPP2R5A/PPP1CC/ITGB3BP/DSN1/PPP2R5E/DYNLL1/NDC80/DYNC1I1/CENPQ/DYNC1I2/NUP160/MIS12/CLASP1/XPO1/NUP37/DYNC1LI2 |
| WONG\_ENDMETRIUM\_CANCER\_DN | WONG\_ENDMETRIUM\_CANCER\_DN | 75 | -0.36822 | -1.52768 | 0.009598 | 0.043779 | 0.031112 | 3506 | tags=31%, list=20%, signal=25% | EMILIN1/HAND2-AS1/FBN1/LMOD1/PEG3/SLC24A3/PLEKHH2/PAPPA/CNRIP1/RUNX1T1/TRO/OLFM1/GLT8D2/FBXO32/LDB2/RAMP1/SRPX/FLRT2/VGLL3/COX7A1/TRPC1/NDN/PARM1 |
| BIDUS\_METASTASIS\_UP | BIDUS\_METASTASIS\_UP | 207 | -0.31519 | -1.52909 | 0.001253 | 0.008573 | 0.006092 | 5092 | tags=41%, list=28%, signal=30% | MPHOSPH9/RABGAP1L/DSP/SRSF12/CCNA2/TARDBP/PTGES3/RAB28/HMGB3/G3BP1/WAC/CDYL/MEAF6/RMND5A/CEBPG/CKAP5/AZIN1/LARP4/TMEM33/STK24/HNRNPU/TLK2/CENPA/TSR1/EFHC1/PAIP1/HNRNPDL/UBQLN2/RBBP4/COPS8/SEC23A/ATF2/NDRG3/BUB1/TUBGCP4/RAE1/GAS2L3/PREPL/HNRNPK/KHDRBS1/STRN3/SRSF1/SLC35B4/MNS1/RFC5/SMC4/KLC1/SRSF9/ELAVL1/PSMD10/CSE1L/HSF2/YTHDF1/UBE2C/CEP57/NONO/GID8/RFC4/KCTD6/TFDP1/DLGAP5/FANCI/MLLT10/HNRNPH3/CAND1/RRM1/USP9X/RAB22A/GMNN/RAB7A/FEM1A/MRPL42/SNRPD1/RNF138/ATP6V0A2/VBP1/PHF10/DNAAF2/CRKL/USP13/IFT74/NFIB/AZI2/CDC23/NRAS |
| AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_UP | AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_UP | 279 | -0.3034 | -1.53069 | 0.000582 | 0.004528 | 0.003218 | 2995 | tags=26%, list=17%, signal=22% | PON3/STAT5B/SNAPC1/CNOT3/GRWD1/PON2/AP5M1/BRF2/WDR3/SCFD1/COX11/CMAS/NMT1/OSBPL2/MTAP/GSDMD/YTHDF1/ZNF419/ACTR10/ASH2L/GID8/SNX11/RSAD1/UPF3A/DLGAP5/MPP3/TMEM248/CBX1/PSME3/UTP18/RPL13A/DDT/OSBPL1A/NPR2/NR1H2/ZNF652/ZNF211/SPOP/SNF8/PARP4/MTMR6/EXOSC4/GSTT1/ACLY/INTS1/COA3/TAF4/LPCAT1/ZNF146/EXOC5/PPP1R3D/KRT10/PRMT1/TCFL5/NUBPL/GYS1/SMARCE1/LSM1/TUG1/RAB5C/PSMD8/XYLT2/DERL1/SDHAF3/CYC1/DLD/BET1/PNPO/RPS21/NOSIP/ZNF573/HNRNPL |
| DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA\_E2 | DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA\_E2 | 111 | -0.34873 | -1.53163 | 0.003565 | 0.019891 | 0.014136 | 3672 | tags=30%, list=20%, signal=24% | GATM/EBNA1BP2/PKIA/KPNB1/EIF4G1/POLR2C/RPL36/RPS6/RFC5/HDAC11/PDPK1/FMO1/ANP32B/S100A4/FBL/AP3S1/SEC61A1/CTPS1/HSPB2/NDUFS3/PPP2R2A/VBP1/POLR2H/EPS15/EIF2S3/BARD1/PRDX6/NPNT/UQCRH/EIF2B5/DCLK1/TPM1/PARM1 |
| THUM\_SYSTOLIC\_HEART\_FAILURE\_DN | THUM\_SYSTOLIC\_HEART\_FAILURE\_DN | 192 | -0.31999 | -1.53347 | 0.002354 | 0.014183 | 0.010079 | 3799 | tags=31%, list=21%, signal=24% | FAM98A/RNF115/ZNF493/STK35/GNRH1/ZNF207/AIG1/CAPZA2/ETNPPL/STRBP/ZNF148/RBBP6/KANK1/KLF12/LMO7/ZBTB48/TACC1/PAAF1/CCDC28B/SMIM8/TMEM116/TMEM165/PPP1R9A/USP15/PLEKHA5/UBE3C/HOPX/N4BP2L2/DOCK5/CEP350/PLEKHA2/MPP3/CALCOCO2/RAB18/NEK1/SORBS2/MLLT10/ZBTB20/TANC1/RPL7/MBD4/GGCX/AHI1/KY/KCNJ8/CYCS/AKAP8L/PITPNB/RIF1/CFDP1/ANAPC16/MAST4/ZNF189/BBX/PRKRA/STOX2/SLC38A1/WASL/RPAP2 |
| REACTOME\_G2\_M\_CHECKPOINTS | REACTOME\_G2\_M\_CHECKPOINTS | 127 | -0.34371 | -1.54111 | 0.002519 | 0.014972 | 0.01064 | 5080 | tags=42%, list=28%, signal=30% | PSMD11/RHNO1/ORC3/ORC5/PSMA6/MCM3/PSMD9/RAD17/PSMD6/RNF8/CDK2/MCM7/RPA3/PSMA3/BABAM1/TP53BP1/PSMD5/PSME1/YWHAQ/PSMA1/CDC7/ATRIP/RBBP8/PSMC3/NBN/PSMB7/RFC5/YWHAB/PSMC5/PSMD10/MCM4/PIAS4/PSMD14/RMI1/RFC4/PSMD7/UBE2V2/PSME3/PSMD2/WEE1/RMI2/PSMA2/MDC1/YWHAH/CLSPN/UIMC1/PSMD1/RPA2/PSMC2/DNA2/ORC2/PSMD8/BARD1 |
| GLASS\_IGF2BP1\_CLIP\_TARGETS\_KNOCKDOWN\_DN | GLASS\_IGF2BP1\_CLIP\_TARGETS\_KNOCKDOWN\_DN | 109 | -0.35212 | -1.54153 | 0.003645 | 0.020191 | 0.014349 | 5154 | tags=47%, list=29%, signal=34% | TUBA1B/CTDSP2/RBPJ/AGO1/PTGES3/MKI67/DLAT/IST1/PODXL/MIB1/TMEM33/NPLOC4/PIP4K2C/RFWD3/PTPN9/RALBP1/PLK1/NUP43/SHMT2/MRPS10/NIPA2/CANT1/IQGAP3/CLIC4/PRC1/HJURP/TMEM41A/TNKS2/SLC35B4/CPSF2/SRF/DCTN5/PSMD10/CEP57/AKIRIN1/UBE3C/DNAJC9/ERH/FANCI/GTF2E2/BLMH/HNRNPUL1/SH3PXD2A/PLEKHA8/G3BP2/MBTPS2/NSUN4/SRPK1/KPNA6/SSR3/MED1 |
| RIZ\_ERYTHROID\_DIFFERENTIATION | RIZ\_ERYTHROID\_DIFFERENTIATION | 79 | -0.37142 | -1.54373 | 0.005717 | 0.029076 | 0.020663 | 5554 | tags=46%, list=31%, signal=32% | FEN1/UHRF1/CLOCK/CENPC/ANKFY1/ZBTB17/PER3/CCNC/SMAD6/MCM3/C1D/CENPA/NFIX/MCM7/FOXH1/HNRNPDL/RAB2A/NFYC/TRIM27/YBX3/STAT5B/CBX3/HSF1/MCM4/RXRA/TFDP1/SUPT4H1/CENPB/SP3/MBD4/HMGB1/RAB7A/SMARCE1/NFYB/ANKRD49/PBX2 |
| REACTOME\_CYTOPROTECTION\_BY\_HMOX1 | REACTOME\_CYTOPROTECTION\_BY\_HMOX1 | 115 | -0.35163 | -1.55212 | 0.004564 | 0.024314 | 0.017279 | 4020 | tags=36%, list=22%, signal=28% | CREBBP/SKP1/PSMA3/PSMD5/PSME1/PSMA1/COX20/COX7B/COX19/PSMC3/COX14/PSMB7/COX11/CARM1/PSMC5/PSMD10/RXRA/PSMD14/PSMD7/PSME3/PSMD2/SMARCD3/PSMA2/NCOA6/COX6A1/SURF1/COX16/CYCS/PSMD1/PSMC2/TACO1/CSNK2A2/PSMD8/MED1/NDUFA4/TXNIP/COX6C/TBL1X/COX5B/COX7C/COX6B1 |
| DURCHDEWALD\_SKIN\_CARCINOGENESIS\_UP | DURCHDEWALD\_SKIN\_CARCINOGENESIS\_UP | 79 | -0.37357 | -1.55267 | 0.00507 | 0.026509 | 0.018839 | 4651 | tags=39%, list=26%, signal=29% | S100A3/CENPL/HSD17B10/ARRDC2/LGALS4/CASZ1/PECR/SLC45A3/HSPB8/RPAIN/IGFBP5/RPP40/CERS4/BPHL/NUDT21/PLEKHH2/PRKCB/ADH1B/NOP10/STMN1/MMRN1/RGMA/NDUFS7/MAOA/AAMDC/PTS/STOML1/PTH1R/C7orf25/MT1X/ACAT1 |
| STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_UP | STEARMAN\_LUNG\_CANCER\_EARLY\_VS\_LATE\_UP | 120 | -0.34876 | -1.55283 | 0.003005 | 0.017287 | 0.012286 | 4609 | tags=42%, list=26%, signal=31% | ANTXR2/CGGBP1/EPHB6/C22orf39/TNPO2/PAIP2/STXBP3/C1QTNF3/SMO/THRA/PJA1/ZNF101/EIF3M/PKD2/RASA1/SRSF1/C6orf120/KMT2A/OSBPL11/RCN1/MED23/EIF1AX/VPS26B/IREB2/TIA1/TPRG1L/MDM4/RRP1B/FXN/SLC35A1/UBE2V2/DNAJC10/YTHDC1/UPF3B/GTF2E2/ATXN2/JKAMP/GLG1/PNN/TPST1/ACTN4/PLD1/PRMT1/CHD8/TUG1/NFIB/DPM1/PGRMC1/NME3/NRAS |
| REACTOME\_CILIUM\_ASSEMBLY | REACTOME\_CILIUM\_ASSEMBLY | 188 | -0.32785 | -1.56295 | 0.000882 | 0.006419 | 0.004562 | 5001 | tags=45%, list=28%, signal=33% | CCT3/IFT88/BBS12/PCNT/EXOC8/WDR19/IFT27/NPHP1/TMEM67/TUBA1B/NPHP3/PKD1/CDK5RAP2/TUBB2B/PCM1/RP2/IQCB1/TTC8/TNPO1/TUBB6/ACTR1A/IFT57/CENPJ/CKAP5/CLUAP1/RPGRIP1L/EXOC7/EXOC6/SMO/TCTN3/TUBB8/IFT43/HAUS1/PLK1/CCT5/HDAC6/PKD2/GBF1/DYNLRB1/CEP290/TCTN2/DYNLRB2/CCT4/ARL6/CEP83/B9D1/CEP63/CEP135/CCP110/DCTN3/CEP70/BBS1/CEP57/KIFAP3/DCTN1/CC2D2A/IFT52/MCHR1/DYNC2LI1/TTC30A/IFT46/CCT2/TMEM216/BBS4/OFD1/CNGB1/BBS10/DYNLL1/AHI1/HSPB11/CEP164/HAUS7/EXOC5/BBS2/MKKS/RAB11FIP3/DCTN2/IFT74/TRIP11/DYNC1I2/CETN2/CLASP1/RAB11A/LZTFL1 |
| WEI\_MIR34A\_TARGETS | WEI\_MIR34A\_TARGETS | 140 | -0.34112 | -1.5641 | 0.001613 | 0.010538 | 0.007489 | 3651 | tags=31%, list=20%, signal=25% | ZNF207/SNX12/ACSL4/MGAT5B/DPYD/PKIA/ALDH5A1/GLCE/MBLAC2/CPSF6/CALB1/ARGLU1/MTAP/DNAJC24/DCTN5/METAP1/MDM4/PAM/FAM120AOS/CASP2/HMGCS1/PAQR3/ZYG11B/ATPAF1/FAM76A/ZFPL1/METTL16/RAB29/GINS3/KIT/TTC33/GOLPH3L/KANK2/SMARCC1/HMGN4/SLC44A1/ZCCHC24/SAR1A/RBBP5/PALLD/SLC38A1/FUT8/MTMR9/TSEN15 |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION | REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION | 150 | -0.33752 | -1.56423 | 0.001723 | 0.011092 | 0.007882 | 3871 | tags=35%, list=22%, signal=27% | ATP6V1B1/ATP6V0E2/ATP6V1H/RPS5/ITFG2/RPL23/ATF2/TRIB3/RPSA/RRAGC/ATP6V1E1/RPL36/NPRL2/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/SLC38A9/RPL37/RRAGB/RPL23A/SESN1/LAMTOR5/LAMTOR1/RPL17/RPL13A/RPS20/RPS27L/RPL7/ATP6V1G1/RPS23/LAMTOR2/RPL34/RRAGA/EIF2S2/RPS18/RPL38/FAU/RPS26/RPL26L1/RPL36AL/RPL35A/RPL24/EIF2S3/RPS4X/ATP6V1D/RPS21/RPL26/RPL39/RPL21 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_TP53 | REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_TP53 | 345 | -0.30246 | -1.56456 | 0.000192 | 0.001785 | 0.001268 | 4307 | tags=33%, list=24%, signal=25% | SETD9/GADD45A/POLR2D/CNOT9/TTC5/TRIAP1/CDK2/AGO3/CCNT2/PIP4K2C/RPA3/CREBBP/PPP2CB/PRDX1/CASP1/CCNG1/YWHAQ/RNF34/L3MBTL1/RBBP4/ATF2/CDK7/ATRIP/TAF12/COX20/RBBP8/COX7B/RRAGC/TAF11/COX19/POLR2C/NELFB/COX14/CNOT3/PPP2R5C/NBN/DYRK2/TBP/APAF1/RFC5/YWHAB/COX11/CARM1/CRADD/PDPK1/CDK13/POLR2K/CDKN1B/SLC38A9/PRMT5/CNOT8/RRAGB/MDM4/GATAD2A/SESN1/RMI1/RFC4/LAMTOR5/CASP2/TAF1L/LAMTOR1/TFDP1/GTF2H1/TAF5/POLR2F/RMI2/AKT2/MTA2/FANCI/SUPT4H1/CNOT7/IGFBP3/BRD7/MNAT1/MDC1/YWHAH/TAF9B/LAMTOR2/TAF4/RRAGA/COX6A1/TNRC6B/SURF1/CHM/PRDX5/PIN1/COX16/PRMT1/CYCS/GLS/RPA2/DNA2/PTEN/POLR2H/TACO1/NUAK1/PRKAB2/CSNK2A2/PRKAA1/CNOT11/BARD1/NDUFA4/KAT6A/PRKAB1/GTF2F2/TP53RK/COX6C/COX5B/PPP1R13B/GTF2H5/PHF20/COX7C/COX6B1 |
| WANG\_CLIM2\_TARGETS\_DN | WANG\_CLIM2\_TARGETS\_DN | 170 | -0.33216 | -1.56584 | 0.001597 | 0.010486 | 0.007452 | 4352 | tags=40%, list=24%, signal=31% | RNF14/MTMR2/STXBP3/RRP15/SAMD9/DUSP3/CLIP1/CCT6A/CCDC86/GULP1/KPNA5/GABRR2/PAM16/SEC23A/SF3A1/ATG12/ASF1A/PEX1/CAPZA2/MPLKIP/PHF11/MRPL9/HNRNPK/RBBP6/RDH11/STRN3/TNKS2/NDUFB8/ZNF91/RFC5/COPS5/NT5C/PPP1R9A/CHMP5/DUS1L/PAM/HMGCS1/RRAS/JRKL/TATDN1/CD24/MED13L/IFI6/RAD23B/MPZL2/MBNL1/PFDN1/TMEM11/AP1S1/TRIM2/COBLL1/KCTD5/MRPS11/DHX36/SRRM1/DNTTIP1/ASB3/NSUN4/UBA3/GCA/BTBD10/JAG1/DPM1/MEX3C/ZNF281/PBX2/COIL/PFDN4 |
| PELLICCIOTTA\_HDAC\_IN\_ANTIGEN\_PRESENTATION\_UP | PELLICCIOTTA\_HDAC\_IN\_ANTIGEN\_PRESENTATION\_UP | 62 | -0.39173 | -1.56749 | 0.009322 | 0.04285 | 0.030452 | 4689 | tags=44%, list=26%, signal=32% | TRAPPC6B/PRSS16/COPB2/BCAP31/PSMD9/CBY1/PSMD6/TBCB/SEC22A/PSMB7/PSMD10/TMED7/SIL1/TRAPPC3/GOSR2/PSMD2/COPG2/PDIA4/GOPC/GOLPH3L/POMP/PSMD1/SEC22B/WFS1/TMED10/ERGIC1/SAR1A |
| SASAKI\_ADULT\_T\_CELL\_LEUKEMIA | SASAKI\_ADULT\_T\_CELL\_LEUKEMIA | 157 | -0.33703 | -1.56921 | 0.001465 | 0.009784 | 0.006953 | 3641 | tags=33%, list=20%, signal=27% | RBBP4/CAV1/PLK1/MYO1D/TMED3/RASA1/NDUFAF1/SGCE/FZD6/CETN3/IFI16/ARL6IP5/CDKN3/CCP110/SSTR2/CDK13/ICMT/SLC25A46/SAP30/PPIB/TRIB2/UBE2C/ACOT8/IDH1/GALK2/TFDP1/DLGAP5/MTX2/MYCBP/AP3S1/PDCD10/ARNT2/TRAPPC12/PPP1CC/EXTL2/PPP1CA/TFAP2A/DYNLL1/TFCP2/CEP164/ANXA6/ACYP1/PLD1/ACOT13/VBP1/POLR2H/HMGN4/BARD1/SYT11/MYL6B/NMI/PARM1 |
| KAAB\_FAILED\_HEART\_ATRIUM\_DN | KAAB\_FAILED\_HEART\_ATRIUM\_DN | 142 | -0.34271 | -1.57124 | 0.003592 | 0.020025 | 0.014231 | 3223 | tags=44%, list=18%, signal=36% | DAAM1/LAPTM4A/OSMR/NUTF2/CTNNA1/LAGE3/GSE1/EIF3I/MCM3/TGFBR2/GSTP1/PODXL/PSMD9/PPM1A/CCZ1/NPTN/PRDX1/IFITM1/PSMA3/ACVR1B/CLIC4/GTF3A/LYPLA1/PIGH/LRRC32/SNU13/NPRL2/PTPRB/PLEKHB2/GPC4/MAD2L1BP/UBE2I/UBE3C/ABCB6/DGUOK/SMARCA1/TGFBR3/GDE1/SLC9A6/PPP1CC/RAN/SPARCL1/RRAGA/RBP1/COX6A1/APP/EI24/G3BP2/ACOT13/PAPOLA/UBA3/KPNA6/CNIH1/TMED10/SPTSSA/SERPINA3/ACP1/ACOX2/CNN3/OPTN/LSM7/HNRNPL |
| WP\_AUTOPHAGY | WP\_AUTOPHAGY | 30 | -0.46627 | -1.5792 | 0.010485 | 0.046681 | 0.033174 | 4279 | tags=47%, list=24%, signal=36% | ATG16L1/PIK3R4/ATG3/ULK1/MAP1LC3B/ATG12/WIPI2/RB1CC1/DEPTOR/ATG14/ATG5/PRKAB2/PRKAA1/PRKAB1 |
| POMEROY\_MEDULLOBLASTOMA\_DESMOPLASIC\_VS\_CLASSIC\_DN | POMEROY\_MEDULLOBLASTOMA\_DESMOPLASIC\_VS\_CLASSIC\_DN | 59 | -0.39764 | -1.58002 | 0.004889 | 0.025772 | 0.018315 | 3454 | tags=37%, list=19%, signal=30% | LAMC1/IGFBP5/CFH/EEF1B2/PBX3/NFATC3/UCHL1/NHLH1/PTCH1/TCF12/CNR1/ALDH1A3/RPL7/RPS23/RPL34/RPS18/LMO4/CCND3/RPL35A/RPL24/RPL39/RPL21 |
| MOOTHA\_PGC | MOOTHA\_PGC | 395 | -0.30214 | -1.58015 | 2.03E-05 | 0.00026 | 0.000185 | 3624 | tags=32%, list=20%, signal=26% | IDH2/NFYC/GRSF1/CDR2L/SDHB/MANF/HSPA4L/ETFB/PDHA1/LRP5/MTHFD2/LMBRD1/DHX16/COX7B/POLDIP2/LONP1/MTX1/SAC3D1/CRMP1/GLRX5/TUFM/NDUFAF1/ACOT7/EIF3L/MRPL39/PSMB7/CRLF3/ACADM/PHYH/PMM1/ST6GALNAC4/ARVCF/IFI16/ESRRA/UQCRB/MAT2B/TIMM17A/ISCA1/NME7/DNAJB9/MRPS18B/EMC2/SUCLA2/VAMP8/TVP23B/CLPP/CHMP7/CDC34/ZNF33B/NDUFC1/SPTLC2/CKMT2/CIAO1/TARBP1/PLEKHO1/APBA3/PIGQ/MTX2/PSME3/CISD1/AK1/POLR2F/COX7A2/DDT/OSBPL1A/NOP10/TIMM44/SUPV3L1/MRPL40/LSM8/NDUFAB1/AKAP1/EIF4A2/TMX2/CNOT7/TTC1/MRPL18/UQCR10/RRM1/DPYSL3/FABP3/PTCD3/PTCD2/MRPL46/MSRB1/COX6A1/EIF2AK1/NDUFA8/OXCT1/PRDX3/ADSL/TMEM45A/FARS2/ACYP1/NDUFS3/MPC2/MRPL20/CYCS/ACOT13/TNNI3/GYS1/PGLS/FAM162A/LSM1/RAB40C/VDAC3/NDUFB6/EDNRA/SLC25A4/MYH11/CYC1/MRPS17/ATP6V1D/DLD/FH/HSPE1/LPIN1/SACM1L/NFS1/MRPL15/TBL1X/COX7A1/COX5B/PFKM/TRAK2/COX7C/NDUFS5/ARMC1 |
| VANTVEER\_BREAST\_CANCER\_BRCA1\_DN | VANTVEER\_BREAST\_CANCER\_BRCA1\_DN | 37 | -0.44281 | -1.58036 | 0.010163 | 0.045435 | 0.032289 | 2254 | tags=32%, list=13%, signal=28% | RPL23A/ANKRD50/PRKG1/PRRX2/KLHL2/TPPP3/HSD11B2/PRKD1/SYNJ2BP/VEZF1/UBE2Q2/BMPR2 |
| BILD\_CTNNB1\_ONCOGENIC\_SIGNATURE | BILD\_CTNNB1\_ONCOGENIC\_SIGNATURE | 73 | -0.38161 | -1.58231 | 0.003545 | 0.019803 | 0.014073 | 1646 | tags=25%, list=9%, signal=22% | RBM25/NEK1/FRYL/LUZP1/DDX52/NEMF/KATNBL1/DHX36/PLEKHA1/SREK1/COL13A1/FAM120A/ZNF532/AXIN2/PNISR/GNG12/PHACTR2/SBSPON |
| SENESE\_HDAC3\_TARGETS\_DN | SENESE\_HDAC3\_TARGETS\_DN | 485 | -0.29921 | -1.58443 | 3.48E-06 | 5.63E-05 | 4.00E-05 | 3477 | tags=27%, list=19%, signal=23% | TMEM39B/GCAT/ALDH5A1/TMED8/KPNB1/DYNLRB1/AEBP2/COX20/PHGDH/PLRG1/GFPT1/SLC24A1/GAS2L3/CLIC4/DYRK4/SNAPC1/GUCD1/BAIAP2L1/PTGFRN/EID1/UGGT1/FZD2/RAB24/MNS1/ESCO2/NUDT21/SEPHS1/SCLY/NFATC3/CARM1/UBE2I/DERA/NISCH/IREB2/VAMP8/ORAI3/ZMYM4/TMEM256/CHMP4C/PPM1F/MCAM/COMMD8/DRAM2/TRMT5/WDR6/DOCK5/ARHGDIB/NDFIP1/TRO/ATMIN/TFDP1/ARAP2/PLEKHA2/GOSR2/PRKCA/CASC3/MED30/CHMP4A/FANCG/ATPAF1/MICALL1/C2orf68/MIF4GD/UPF3B/SLC35A3/GNE/CTIF/CD99L2/BRD7/CHRNB1/MCM3AP/MOB3B/CXXC5/GSTT1/ITGB3BP/DPY19L2/TAF9B/KATNBL1/ZNF404/DIABLO/LBH/C2CD5/C9orf40/PEX2/ZNF559/TMEM45A/LRRC47/TEX2/TMEM243/ANP32A/PRKD1/ARIH2/NPM3/TAX1BP1/LIMCH1/WFS1/KPNA6/CDK19/HMGN5/GCA/CCDC85C/PNMA2/MAOA/TUG1/MED20/CBS/YAP1/CSNK2A2/NFIA/CDC40/PGRMC2/ZCCHC24/TMED10/VEZF1/AIF1L/SPARC/HADH/BARD1/MDP1/BBX/TGOLN2/FLRT2/MN1/BET1/DIS3L/SEC62/GNG12/VGLL3/C14orf28/SLC25A23/CGNL1/TPM1/TSEN15 |
| REACTOME\_DOWNSTREAM\_SIGNALING\_EVENTS\_OF\_B\_CELL\_RECEPTOR\_BCR | REACTOME\_DOWNSTREAM\_SIGNALING\_EVENTS\_OF\_B\_CELL\_RECEPTOR\_BCR | 79 | -0.38212 | -1.58822 | 0.003775 | 0.020788 | 0.014773 | 4716 | tags=43%, list=26%, signal=32% | PSMA6/BTRC/PSMD9/NFKBIB/MALT1/PSMD6/KRAS/SKP1/PSMA3/PSMD5/PSME1/PSMA1/CHUK/PSMC3/PSMB7/NFATC3/PSMC5/PSMD10/IKBKG/PSMD14/PRKCB/PSMD7/PSME3/PSMD2/PSMA2/MAP3K7/PSMD1/PSMC2/PPP3R1/PSMD8/PPP3CA/CALM1/NRAS/PPP3CB |
| HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S2 | HOSHIDA\_LIVER\_CANCER\_SUBCLASS\_S2 | 111 | -0.36201 | -1.58996 | 0.001883 | 0.011828 | 0.008406 | 5369 | tags=46%, list=30%, signal=32% | AHCY/NET1/GTF3C2/CHKA/NCOA4/PLXNB1/COL2A1/RPL31/UBE2K/RPL27/FLNB/EIF4B/TTC3/DDX1/HNRNPU/ATP2B1/CDK6/CUL4A/CPD/RPS5/ATF2/GBF1/NR2C1/ABCB10/PIGC/ABCD3/PEG3/SEPHS1/TBCE/CSE1L/TIA1/PHF3/RRP1B/TARBP1/SMARCA1/CASC3/SSB/FBL/HELZ/RAB4A/EIF4A2/PHKA2/PNN/PRDX3/NREP/SMARCC1/CSNK2A2/BRD3/RPL24/ACP1/SUZ12 |
| PETRETTO\_HEART\_MASS\_QTL\_CIS\_UP | PETRETTO\_HEART\_MASS\_QTL\_CIS\_UP | 31 | -0.46807 | -1.59462 | 0.010584 | 0.046926 | 0.033349 | 1155 | tags=23%, list=6%, signal=21% | TST/TLE6/SPARC/AUTS2/MAN1A1/ADRA1B/TRAK2 |
| REACTOME\_MITOTIC\_PROMETAPHASE | REACTOME\_MITOTIC\_PROMETAPHASE | 196 | -0.33099 | -1.59531 | 0.000308 | 0.002663 | 0.001893 | 5261 | tags=41%, list=29%, signal=30% | PPP2R5B/BUB3/AHCTF1/TUBA1B/BUB1B/CENPE/CDK5RAP2/CENPM/TUBB2B/PCM1/RAD21/NUDC/CENPL/TUBB6/TUBGCP3/ACTR1A/NSL1/CENPJ/CKAP5/KIF2C/CENPA/KNTC1/CLIP1/PPP2CB/SMC3/NUP85/STAG1/TUBB8/PDS5B/HAUS1/PLK1/BUB1/NUP43/TUBGCP4/STAG2/MZT2B/CEP290/NUP133/PPP2R5C/WAPL/TAOK1/CEP63/SMC4/NCAPG/DYNC1LI1/CEP135/CCP110/NCAPD2/NME7/NEK9/DCTN3/CEP70/CEP57/MZT1/NUP107/DCTN1/ZW10/SKA2/SPDL1/PPP2R5A/PPP1CC/ITGB3BP/DSN1/PPP2R5E/OFD1/DYNLL1/NDC80/CEP164/HAUS7/DYNC1I1/CENPQ/DCTN2/CSNK2A2/DYNC1I2/NUP160/MIS12/CETN2/CLASP1/XPO1/NUP37/DYNC1LI2 |
| LEE\_LIVER\_CANCER\_SURVIVAL\_DN | LEE\_LIVER\_CANCER\_SURVIVAL\_DN | 167 | -0.33874 | -1.59669 | 0.000401 | 0.003347 | 0.002378 | 4218 | tags=35%, list=23%, signal=27% | DBNDD2/ATP2B1/ZNF138/PTBP3/KNTC1/MCM7/ARHGAP18/CCT6A/YWHAQ/RPS5/ACTL6A/CCT5/YBX3/ITGB1BP1/MTHFD2/RPSA/NOP56/KHDRBS1/CBX3/RPL35/DYRK2/RBM17/RPS6/YWHAB/TPRKB/USP1/RAB32/SNRPB2/DLGAP5/EEF1E1/RPL17/RMI2/S100A6/FBL/LSM8/SERPINH1/PBX1/RAN/YWHAH/CCDC6/MRPL42/DYNLL1/RWDD1/VCP/ZC2HC1A/KRT10/RPS18/PRMT1/TSPAN3/RPL38/CALM2/SLC34A1/SLC44A1/METTL5/SUZ12/ZNF532/MSH6/PFDN4/HDDC2 |
| REACTOME\_REGULATION\_OF\_MRNA\_STABILITY\_BY\_PROTEINS\_THAT\_BIND\_AU\_RICH\_ELEMENTS | REACTOME\_REGULATION\_OF\_MRNA\_STABILITY\_BY\_PROTEINS\_THAT\_BIND\_AU\_RICH\_ELEMENTS | 85 | -0.37517 | -1.59709 | 0.003738 | 0.020648 | 0.014674 | 5080 | tags=41%, list=28%, signal=30% | PSMD11/EXOSC1/HSPA1A/PSMA6/TNPO1/PSMD9/PSMD6/XRN1/PSMA3/PSMD5/PSME1/PSMA1/EIF4G1/PSMC3/PSMB7/YWHAB/PSMC5/EXOSC8/ELAVL1/PSMD10/PSMD14/PSMD7/PSME3/PRKCA/PSMD2/EXOSC5/PSMA2/EXOSC3/EXOSC4/ANP32A/PSMD1/PSMC2/PSMD8/DCP2/XPO1 |
| MARKEY\_RB1\_ACUTE\_LOF\_UP | MARKEY\_RB1\_ACUTE\_LOF\_UP | 223 | -0.32712 | -1.59981 | 0.00022 | 0.00202 | 0.001435 | 4986 | tags=39%, list=28%, signal=28% | NAV2/CCNA2/TARDBP/NASP/PTGES3/PTMA/RAD21/HMGB3/MKI67/TRIM37/WAC/LAGE3/S100A3/HMGA2/DCTPP1/TIPIN/SMAD6/MCM3/UBE2T/KIF2C/VAMP5/RANBP1/CDK2/CENPA/MCM7/NSMCE4A/SMC3/PRADC1/RCL1/ANAPC11/RBBP4/IDH2/CAV1/PLK1/SLC12A2/BUB1/ETFB/IQGAP3/OGT/LUC7L3/CDH2/NIPBL/MIS18BP1/PRC1/HJURP/RFC1/FUBP1/LMO7/CPSF2/RFC5/CDKN3/MCM4/CSE1L/ARCN1/RFC4/ANP32B/KITLG/TFDP1/DLGAP5/DNAJC9/PRRX2/PSIP1/SPDL1/ANAPC5/STMN1/GSK3A/BTBD1/SNHG5/PRPF19/GMNN/NUCKS1/IPO5/EI24/ADSL/TMEM106C/TGDS/FAM13B/SAE1/LSM3/MYH11/CBX6/CKS1B/HPF1/XPO1/IFI27/SCOC |
| LIU\_PROSTATE\_CANCER\_DN | LIU\_PROSTATE\_CANCER\_DN | 456 | -0.30454 | -1.60035 | 3.23E-06 | 5.26E-05 | 3.74E-05 | 3832 | tags=30%, list=21%, signal=25% | WDR33/PIK3R1/SH3GLB1/SCUBE2/GNB3/MEIS1/ZNF75D/HSPB8/INPP1/GATM/EEF2K/SERPINA5/ZNF398/EHF/CAV1/ZNF204P/PKD2/LAPTM4B/FBN1/ICA1L/NHS/SLC16A14/BDH2/CLIC4/MYOF/SGCE/RBMS1/CAV2/RAP1A/PGM5/CERK/LMOD1/AEBP1/CDC42EP3/KSR1/SLC24A3/TACC1/PLEKHH2/LPAR1/SLC25A12/TMEM237/PPP1R12A/TSPAN18/LAMA4/ANGPTL1/LAMB2/HSPG2/TRAF5/BEND5/KRT5/CORO1C/PRICKLE2/SNX7/CNRIP1/MCAM/PDGFD/LYST/SRSF11/KITLG/TRO/KCNJ3/SOSTDC1/PLEKHA2/FCHSD2/FGFR2/PPIC/FRMD6/TGFBR3/S100A4/MECOM/RAB34/S100A6/NPR2/MPZL2/C2orf68/SSPN/BTN2A1/FXYD6/PRRX1/HOXD13/ADCY9/SH3PXD2A/FLNC/ECHDC1/TLE2/ALDH3A2/RAVER2/DPYSL3/EPAS1/ZCCHC14/RBP1/NNT/KRT7/TPST1/KIT/ASB3/CRYAB/KCNJ8/ADCY4/SRPX/AMY1A/KANK2/COL13A1/IL33/PPP3CC/WFS1/GPD1L/DES/MSRB3/EFEMP2/AOC3/ZNF827/SPARC/ATP1A2/MYH11/JAZF1/SPON1/CALD1/SCRN1/MRGPRF/SLMAP/ACTG2/ACOX2/PALLD/FERMT2/RASL12/STOX2/WFDC1/TGFB3/MYLK/ANKDD1A/SALL3/C14orf28/OPTN/ITGA1/SBSPON/TPM1/NEXN/SCRG1 |
| BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_DN | BERTUCCI\_MEDULLARY\_VS\_DUCTAL\_BREAST\_CANCER\_DN | 159 | -0.34371 | -1.60137 | 0.000498 | 0.003962 | 0.002816 | 1713 | tags=25%, list=10%, signal=23% | SLC4A3/COPZ2/PRICKLE1/NME7/HSPG2/SNRPN/PDGFD/NPR2/KATNAL1/LIN28A/SH3PXD2A/FLNC/ZNF385D/PCDH18/EXTL2/PLSCR3/NOSTRIN/PTPN14/THBS4/TMEM61/ZNF426/FAM210B/FBXO32/SAV1/MBOAT2/KANK2/VPS37D/MSRB3/AOC3/MPRIP/EDNRA/ZCCHC24/RABGAP1/LIMS2/CALD1/ACTG2/FERMT2/MYLK/DACT3/PARVA |
| REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION | REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION | 89 | -0.37445 | -1.60263 | 0.003048 | 0.017515 | 0.012447 | 3435 | tags=29%, list=19%, signal=24% | ATRIP/TAF12/RBBP8/TAF11/NBN/DYRK2/TBP/RFC5/MDM4/RMI1/RFC4/TAF1L/TAF5/RMI2/TAF9B/TAF4/PIN1/RPA2/DNA2/NUAK1/PRKAB2/CSNK2A2/PRKAA1/BARD1/PRKAB1/TP53RK |
| WP\_NONALCOHOLIC\_FATTY\_LIVER\_DISEASE | WP\_NONALCOHOLIC\_FATTY\_LIVER\_DISEASE | 146 | -0.34852 | -1.60392 | 0.001186 | 0.008228 | 0.005847 | 2125 | tags=26%, list=12%, signal=23% | NDUFC1/LEPR/NDUFA1/TRAF2/PIK3R2/COX7A2/AKT2/NDUFAB1/GSK3A/UQCR10/NDUFA12/COX6A1/NDUFA13/NDUFA8/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/NDUFA11/NDUFB11/PRKAB2/PRKAA1/NDUFB6/UQCRHL/CYC1/NDUFA4/PRKAB1/ADIPOR2/UQCRQ/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| REACTOME\_SWITCHING\_OF\_ORIGINS\_TO\_A\_POST\_REPLICATIVE\_STATE | REACTOME\_SWITCHING\_OF\_ORIGINS\_TO\_A\_POST\_REPLICATIVE\_STATE | 89 | -0.37511 | -1.60543 | 0.002909 | 0.016822 | 0.011954 | 5196 | tags=47%, list=29%, signal=34% | SKP2/PSMD11/ORC3/CCNA2/ORC5/ANAPC7/PSMA6/MCM3/PSMD9/PSMD6/CDK2/MCM7/SKP1/PSMA3/ANAPC11/PSMD5/PSME1/PSMA1/ANAPC4/PSMC3/PSMB7/CDC26/PSMC5/PSMD10/MCM4/UBE2C/PSMD14/PSMD7/PSME3/PSMD2/ANAPC5/PSMA2/FZR1/ANAPC10/ANAPC15/PSMD1/PSMC2/ORC2/ANAPC16/PSMD8/UBE2E1/CDC23 |
| REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIPTION\_TERMINATION | REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIPTION\_TERMINATION | 66 | -0.39329 | -1.60636 | 0.004586 | 0.024406 | 0.017344 | 3105 | tags=33%, list=17%, signal=28% | THOC1/WDR33/MAGOH/POLDIP3/PABPN1/SRSF1/SARNP/CPSF2/NUDT21/SRSF9/CSTF3/SRSF11/THOC7/CASC3/UPF3B/SRRM1/CPSF3/CSTF2T/PAPOLA/CDC40/SNRPF/SLU7 |
| ZHAN\_MULTIPLE\_MYELOMA\_UP | ZHAN\_MULTIPLE\_MYELOMA\_UP | 54 | -0.41575 | -1.60929 | 0.010523 | 0.046787 | 0.03325 | 4028 | tags=41%, list=22%, signal=32% | MRPL58/HCP5/CASP1/QSOX1/LAMC1/KAT2A/MTA1/UCHL1/PTPRK/CDC34/NKRF/PUM3/NAP1L4/ECH1/RBM10/EXTL2/PURA/CTSO/CAPN1/COX17/PFKM/COX6B1 |
| REACTOME\_MTOR\_SIGNALLING | REACTOME\_MTOR\_SIGNALLING | 41 | -0.44167 | -1.61131 | 0.006904 | 0.033685 | 0.023939 | 3158 | tags=37%, list=18%, signal=30% | RRAGC/EIF4G1/RPS6/YWHAB/SLC38A9/RRAGB/LAMTOR5/LAMTOR1/AKT2/LAMTOR2/RRAGA/STRADB/PRKAB2/PRKAA1/PRKAB1 |
| LU\_EZH2\_TARGETS\_UP | LU\_EZH2\_TARGETS\_UP | 265 | -0.3224 | -1.6117 | 5.96E-05 | 0.00065 | 0.000462 | 4733 | tags=39%, list=26%, signal=29% | RARRES2/APOBEC3F/FNBP1/ALKBH2/OXLD1/GNA11/NUDCD3/HABP4/S100A2/SCAND1/CBY1/TESK1/LY6H/GALT/TLK2/RPL13AP6/MCRIP2/CLIC3/PPP1R14B/UNC45A/ZNHIT1/IFT43/SIGIRR/RPAIN/ETFB/MGMT/ZDHHC16/TRIB3/PHGDH/BCAS4/LONP1/MTX1/SNCG/TLCD1/POLR2C/PSMC3/KLHDC3/RPL36/GUCD1/COX14/PDXP/PSMB7/KRTCAP2/BEND4/SURF2/PRMT6/FAM219B/CSK/CUTA/AHSA1/HSCB/RUVBL1/TSPAN17/PEX16/ZNF133/FGA/TCF20/ZW10/TYSND1/EMC6/WDR54/S100A4/SKA2/CHST14/NENF/S100A6/HYAL2/DPM3/SDC4/ZCCHC3/CCDC107/C1orf50/ENDOG/MIEN1/OSBPL5/UQCR10/TRAPPC12/AP1S1/PPIL6/TMEM216/CENPV/LPCAT1/NDUFA8/ENSA/G3BP2/PPP2R2A/RPS19BP1/MAFA/PPP3R1/MSRB3/TMEM30A/ZCCHC24/REEP5/PAQR7/MYL6B/PITX1/HSDL2/NME3/ZNF616/WDR74/LSM7/NAA38/IFI27/PHF5A |
| BRACHAT\_RESPONSE\_TO\_CAMPTOTHECIN\_DN | BRACHAT\_RESPONSE\_TO\_CAMPTOTHECIN\_DN | 41 | -0.44255 | -1.61453 | 0.006763 | 0.033144 | 0.023554 | 2808 | tags=39%, list=16%, signal=33% | HIKESHI/BAD/HIGD1A/RCN1/EMC2/AK4/FKBP3/HMGCS1/SSB/PDK3/ADPRM/SWI5/ESYT1/SLC44A2/TAX1BP1/RSU1 |
| KAAB\_HEART\_ATRIUM\_VS\_VENTRICLE\_DN | KAAB\_HEART\_ATRIUM\_VS\_VENTRICLE\_DN | 243 | -0.32829 | -1.61459 | 0.000117 | 0.001168 | 0.00083 | 4031 | tags=32%, list=22%, signal=25% | UBAC1/CHN1/NDUFS6/PDZRN3/FEM1C/UBE3A/NLGN1/PTPN3/TSFM/IDH2/SDHB/SDHD/PKIA/GCAT/ALDH5A1/DECR1/ACAA1/OPA1/CDH2/NDUFAF1/PYGB/PPP2R5C/DLK1/PHYH/LMO7/ELAC2/AIMP2/ECHS1/CRADD/CCT7/RASSF9/MRPS18B/SLC22A5/VTN/AK4/STK39/ACTN2/METAP1/CKMT2/PLN/POLR2F/SGCD/OXA1L/COX7A2/ECH1/GLUD2/SORBS2/WWP1/FABP3/PTPN14/PRDX3/SETD4/ALDOC/BNIP3/CYB5R1/MMP23B/KCNJ8/NDUFS3/NDUFS7/TNNI3/ARIH2/GYS1/CAP2/UBA3/MRPL33/NUAK1/HADH/PDHX/CYC1/COQ9/DLD/UQCRQ/FH/COX17/ACAT1/PFKM/LYRM1/IFI27 |
| REACTOME\_REGULATION\_OF\_HSF1\_MEDIATED\_HEAT\_SHOCK\_RESPONSE | REACTOME\_REGULATION\_OF\_HSF1\_MEDIATED\_HEAT\_SHOCK\_RESPONSE | 78 | -0.38843 | -1.61518 | 0.004183 | 0.022683 | 0.01612 | 4037 | tags=36%, list=22%, signal=28% | NUP62/RPA3/NUP85/HSPA1L/HSPA13/HSPA2/NUP43/HSPA4L/NUP54/RAE1/NUP133/DNAJC2/HSF1/HIKESHI/BAG5/NUP107/NUP205/MRPL18/SERPINH1/BAG3/BAG1/HSPB2/RPA2/RPS19BP1/HSPA12B/DNAJC7/NUP160/NUP37 |
| HEIDENBLAD\_AMPLIFIED\_IN\_PANCREATIC\_CANCER | HEIDENBLAD\_AMPLIFIED\_IN\_PANCREATIC\_CANCER | 54 | -0.41743 | -1.61578 | 0.010099 | 0.045261 | 0.032165 | 1696 | tags=31%, list=9%, signal=29% | DSCC1/PON2/METTL2A/CMAS/AKT2/FBL/SSPN/ECH1/REP15/C2CD5/MED21/COMMD5/ERGIC2/CYC1/DLD/BET1/KLHL42 |
| REACTOME\_ION\_HOMEOSTASIS | REACTOME\_ION\_HOMEOSTASIS | 54 | -0.41752 | -1.61613 | 0.010099 | 0.045261 | 0.032165 | 2223 | tags=26%, list=12%, signal=23% | CLIC2/PLN/ATP1B2/FXYD6/ATP1A4/RYR2/CAMK2G/SLN/TNNI3/ATP1A2/CALM1/RYR3/TRPC1/CASQ2 |
| REACTOME\_SUMOYLATION\_OF\_SUMOYLATION\_PROTEINS | REACTOME\_SUMOYLATION\_OF\_SUMOYLATION\_PROTEINS | 32 | -0.47048 | -1.61745 | 0.010004 | 0.045056 | 0.032019 | 4604 | tags=41%, list=26%, signal=30% | POM121/NUP62/NUP85/NUP43/NUP54/RAE1/NUP133/UBE2I/PIAS4/NUP107/NUP205/NUP160/NUP37 |
| SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX5\_UP | SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX5\_UP | 11 | -0.63604 | -1.62174 | 0.011446 | 0.04997 | 0.035512 | 1287 | tags=45%, list=7%, signal=42% | SFRP1/EHBP1/NREP/PELI2/EMCN |
| PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_DN | PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_DN | 141 | -0.35426 | -1.62257 | 0.001046 | 0.00743 | 0.00528 | 4385 | tags=40%, list=24%, signal=30% | VAMP7/ZNHIT6/FUT4/NACC2/RBM34/PLEKHF2/POT1/DCTN6/THOC1/SH3GLB1/STAG1/HNRNPDL/ATG12/CDK7/C1orf115/GTPBP8/KLHL22/LDLR/NOL11/PRPF18/C6orf120/MOSPD1/CDC42EP3/UQCRB/PTPRK/DNAJC24/EXOSC8/TXNDC9/ZMYM4/WDR13/EEF1E1/UBE2V2/PPIC/TGFBR3/MECOM/MTIF2/LSM8/ZBED5/ECHDC1/BTBD1/PDCD10/MTMR6/CGRRF1/BAG1/PNN/NOC3L/ATG5/RRAS2/NAE1/RAB11FIP2/CALD1/TCEAL4/CETN2/TEX30/TRAK2/ACTR6 |
| GRYDER\_PAX3FOXO1\_TOP\_ENHANCERS | GRYDER\_PAX3FOXO1\_TOP\_ENHANCERS | 418 | -0.31069 | -1.6276 | 2.60E-06 | 4.35E-05 | 3.09E-05 | 5156 | tags=41%, list=29%, signal=30% | MPHOSPH9/FIP1L1/BCL2/ENAH/NCOA1/UBE2G1/RBPJ/ATF6/LAPTM4A/VANGL2/GART/TSHZ3/UBE2G2/ADAM10/PDHB/FGGY/ERLIN2/COPS3/MLH1/CDK14/AGPAT5/PKNOX2/SLC38A2/HECTD2/GSE1/SACS/TNPO1/CDC5L/SRP9/MCM3/DDX1/NR3C1/ITGB1/SEMA6A/PODXL/FASTKD2/CABLES1/POLR2D/STK24/TANK/ARHGAP26/COA6/XRN1/CREBBP/PDZRN3/BABAM1/FAM174A/UBL7/ZEB2/EEF2K/HAUS1/MIF/TRAM2/CTNNBL1/TLE1/GBF1/ECI2/WIPI2/SF3A3/OPA1/RBBP8/SPSB4/RPS6KC1/CA11/HNRNPK/RRAGC/RSL1D1/ATP6V1E1/TEX261/FBXO21/INPP4B/CDON/RBMS1/BTD/PON2/KANK1/PEG3/TNKS2/CDC42EP3/SASH1/SLC24A3/GNL3L/PREX1/UCHL1/UBAC2/OSBPL2/USP1/RCN1/MAN1C1/HSPG2/SLC38A9/OAT/RERE/RPL23A/TCF12/HACL1/ANKRD13A/RRP1B/USP15/FAM136A/MCFD2/RMI1/CEP128/N4BP2L2/ALOX5AP/MED13L/PRKG1/EXTL3/CHCHD3/SKA2/RAD23B/C18orf25/SULF2/ZDHHC6/TSPAN7/NDUFAB1/THAP1/RNF181/BFAR/COMMD10/ADCY9/ASB13/UQCR10/MNAT1/MRS2/CDC123/ALDH1A3/CAND1/ESYT2/NDUFA12/PTCD2/CGRRF1/TCF7L1/RRAGA/APP/ZNF217/PINX1/MYLIP/ACYP1/NDUFS3/GGA2/MRPL20/TMEM177/CSTF2T/PARK7/PRDM12/HS1BP3/LIMCH1/DPH5/ARHGEF3/VDAC3/PSMD8/RAD51C/GNG11/NFIB/SLIRP/STOML1/DCP2/TGOLN2/VPS4B/AUTS2/MN1/NSMCE1/GAS1/NUP160/SLC38A1/MSH6/CLASP1/MRPL23/PFDN4/CGNL1/NOSIP |
| REACTOME\_SYNTHESIS\_OF\_DNA | REACTOME\_SYNTHESIS\_OF\_DNA | 117 | -0.36782 | -1.62794 | 0.00111 | 0.007778 | 0.005528 | 5212 | tags=44%, list=29%, signal=32% | PCNA/SKP2/PSMD11/ORC3/CCNA2/ORC5/ANAPC7/PSMA6/MCM3/PSMD9/PSMD6/CDK2/MCM7/RPA3/SKP1/PSMA3/ANAPC11/PSMD5/PSME1/PSMA1/POLD3/ANAPC4/PSMC3/RFC1/PSMB7/RFC5/CDC26/PSMC5/PSMD10/MCM4/UBE2C/PSMD14/RFC4/PSMD7/PSME3/PSMD2/ANAPC5/PSMA2/FZR1/GINS3/ANAPC10/ANAPC15/PSMD1/RPA2/PSMC2/DNA2/ORC2/ANAPC16/PSMD8/POLA2/UBE2E1/CDC23 |
| ZHONG\_RESPONSE\_TO\_AZACITIDINE\_AND\_TSA\_DN | ZHONG\_RESPONSE\_TO\_AZACITIDINE\_AND\_TSA\_DN | 66 | -0.39891 | -1.62934 | 0.003105 | 0.01777 | 0.012628 | 4981 | tags=45%, list=28%, signal=33% | CCNA2/PPIE/C14orf93/SH3BGRL/PMS1/GOSR1/PGGT1B/MRPL58/HDAC4/FAM216A/KPNB1/PPP2R5C/REV1/PDCD2/RPL22/GATB/PAAF1/SUPT3H/CTBS/TRMT5/NDUFC1/ANP32B/RPL13A/DIAPH2/ITGB3BP/NUCKS1/GOLPH3L/NFIB/SUCLG2/LSM7 |
| REACTOME\_ACTIVATION\_OF\_THE\_MRNA\_UPON\_BINDING\_OF\_THE\_CAP\_BINDING\_COMPLEX\_AND\_EIFS\_AND\_SUBSEQUENT\_BINDING\_TO\_43S | REACTOME\_ACTIVATION\_OF\_THE\_MRNA\_UPON\_BINDING\_OF\_THE\_CAP\_BINDING\_COMPLEX\_AND\_EIFS\_AND\_SUBSEQUENT\_BINDING\_TO\_43S | 59 | -0.41046 | -1.63097 | 0.002709 | 0.015922 | 0.011315 | 3715 | tags=34%, list=21%, signal=27% | RPS5/EIF3M/RPSA/EIF3D/EIF4G1/EIF3L/RPS6/EIF1AX/RPS20/EIF4A2/RPS27L/RPS23/EIF2S2/EIF3H/RPS18/FAU/RPS26/EIF2S3/RPS4X/RPS21 |
| STEIN\_ESRRA\_TARGETS\_UP | STEIN\_ESRRA\_TARGETS\_UP | 364 | -0.31491 | -1.63122 | 1.63E-05 | 0.000216 | 0.000154 | 3540 | tags=30%, list=20%, signal=25% | SDHB/SDHD/MANF/GTPBP8/PDHA1/DECR1/ECI2/ACAA1/OPA1/COX7B/BDH2/MMACHC/CLEC16A/AHCYL1/TBX2/ARL2BP/PLEKHB2/MIEF1/MIPEP/AP5M1/LETMD1/ZNF44/ACADM/ST6GALNAC4/ESRRA/THAP4/MED9/MTRF1/UQCRB/SLC25A12/HIGD1A/TIMM17A/ISCA1/CEP70/SUCLA2/SMIM8/MRPL35/SPTLC2/CKMT2/ELP5/CRNKL1/GMCL1/MTX2/UGP2/PAFAH2/PPIC/CHCHD3/SAMM50/CISD1/AK1/DUSP22/MGST3/OXA1L/OSBPL1A/MRPS30/HTATIP2/SUPV3L1/COQ3/AKAP1/ENDOG/ALDH3A2/TOMM70/PDCD10/MLYCD/EPAS1/TRIM2/FAM50B/MRPS11/CALU/RBM7/NFU1/NNT/FBXL15/NDUFA8/CIAPIN1/FAHD2A/ALDOC/ETFDH/ANXA6/ACYP1/NDUFS3/MPC2/SIRT5/TEX2/CYCS/NDUFS7/MRPS22/MGST2/NDUFS8/NPM3/FAM162A/FASTKD1/ORC2/IMPA1/TACO1/CAAP1/COX10/VDAC3/SLC25A4/PDHX/COQ9/DLD/FH/ACAT1/MRPL15/NDUFS4/COX5B/PFKM/TRPC1/TRAK2/DLST |
| VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP | VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP | 69 | -0.39929 | -1.63267 | 0.003289 | 0.018585 | 0.013208 | 4498 | tags=38%, list=25%, signal=28% | ATAD2/RAB27A/FAM111A/MCM7/FST/HAUS1/POLD3/VRK1/PBX3/ESCO2/SNTB2/HACD3/MCM4/EPS8/RMI1/RFC4/NPAT/TFDP1/RRM1/CLSPN/KANK2/EED/BARD1/SPIN4/SUZ12/KLHL42 |
| REACTOME\_INTRA\_GOLGI\_AND\_RETROGRADE\_GOLGI\_TO\_ER\_TRAFFIC | REACTOME\_INTRA\_GOLGI\_AND\_RETROGRADE\_GOLGI\_TO\_ER\_TRAFFIC | 197 | -0.33922 | -1.63353 | 0.000166 | 0.00158 | 0.001123 | 3487 | tags=28%, list=19%, signal=23% | CAPZA2/GBF1/SYS1/COG2/TMED3/GALNT1/BNIP1/CAPZA1/COG3/VPS54/KLC1/DYNC1LI1/COPZ2/ARF3/DCTN5/MAN1C1/DCTN3/USP6NL/KIF16B/TMED7/KIFAP3/NAA30/ACTR10/ARCN1/DCTN1/GOSR2/ZW10/RAB18/COPG2/GOLGA1/ALPP/NAPB/DYNLL1/DYNC1I1/RAB9B/ARL1/TMED2/SEC22B/RAB6B/RAB33B/RABEPK/DCTN2/TMED10/COG6/GOLGA5/TGOLN2/TRIP11/RAB3GAP1/VPS51/DYNC1I2/MAN1A1/NAA38/VPS45/DYNC1LI2/SCOC/RHOBTB3 |
| REACTOME\_REGULATION\_OF\_GLUCOKINASE\_BY\_GLUCOKINASE\_REGULATORY\_PROTEIN | REACTOME\_REGULATION\_OF\_GLUCOKINASE\_BY\_GLUCOKINASE\_REGULATORY\_PROTEIN | 29 | -0.48752 | -1.63367 | 0.011285 | 0.049486 | 0.035168 | 4604 | tags=41%, list=26%, signal=31% | POM121/NUP62/NUP85/GCK/NUP43/NUP54/RAE1/NUP133/NUP107/NUP205/NUP160/NUP37 |
| LU\_EZH2\_TARGETS\_DN | LU\_EZH2\_TARGETS\_DN | 371 | -0.31451 | -1.63432 | 8.14E-06 | 0.000116 | 8.25E-05 | 4315 | tags=34%, list=24%, signal=27% | RUFY1/ITPK1-AS1/ANTXR1/KLHL12/HNRNPU/ATP2B1/PSMD6/CMTM4/CCDC91/PPP2CB/SEPSECS/SHROOM4/SEC24A/EIF1AD/UBE2E3/ACVR1B/CCNG1/EXT2/PAIP1/TMEM183A/IGFBP1/ZNF493/STIL/TSEN2/P3H2/INIP/NIPA2/NR2C1/LAMC1/LRRC57/SGCB/TERF1/ATP11C/SLC39A11/PIGM/GFPT1/GLCE/CREB1/RPIA/C6orf120/CPSF6/DYRK2/CCR6/GPC4/APAF1/TMEM267/MAGT1/ALDH6A1/UTP3/AMER1/TACC1/JADE3/USP49/ZNF614/HSD17B7/MIGA1/RNASEL/SLC35E1/TRAPPC11/RRP1B/MTRR/SLC16A9/CASP2/DYNLT3/TFDP1/TRIM33/CYFIP2/FKBP14/TAF5/CHCHD3/ZNF514/HYLS1/RUNDC1/ADGRG6/BCL9/SLC35A3/SH3D19/ENTPD4/ALPP/ARMCX1/IGFBP3/POGLUT1/HNRNPUL1/ASB13/SERPINH1/PPP1CC/DDX52/MBD4/PSMG1/ALPK2/CNTNAP1/RTCA/KPNA3/PHACTR4/SLC15A4/CENPQ/PCNP/SRPX/RPA2/MSANTD2/LIMCH1/PM20D2/SSR3/CSNK2A2/TMED10/FAM120A/DENR/RAB11FIP2/PURA/DCP2/PPP3CA/NUDT11/CALD1/ANKRD46/CBLN2/PALLD/PLSCR4/ZCCHC9/SLC38A1/PRDX6/SACM1L/MYLK/MTMR9/CLDN11/WASL/BMPR2/DYNC1LI2 |
| REACTOME\_NUCLEAR\_IMPORT\_OF\_REV\_PROTEIN | REACTOME\_NUCLEAR\_IMPORT\_OF\_REV\_PROTEIN | 31 | -0.47985 | -1.63475 | 0.008201 | 0.038579 | 0.027417 | 4604 | tags=42%, list=26%, signal=31% | POM121/NUP62/NUP85/NUP43/NUP54/KPNB1/RAE1/NUP133/NUP107/NUP205/RAN/NUP160/NUP37 |
| OSMAN\_BLADDER\_CANCER\_DN | OSMAN\_BLADDER\_CANCER\_DN | 368 | -0.31567 | -1.63715 | 1.07E-05 | 0.000148 | 0.000105 | 3986 | tags=33%, list=22%, signal=27% | EFHC1/RHBDD1/CUL4A/LYRM9/ASXL2/ZNF230/WDR33/FAM174A/ZNF493/MPZL1/RPS5/ZNF398/SF3A1/RBM4/SNRNP200/UACA/SYS1/WIPI2/PRKAR1A/OGT/STRBP/RPSA/SRSF8/RPL36/GLMN/PABPN1/AHCYL1/RPL35/PPP2R5C/EEF1B2/TBP/RPS6/WDR20/PUM1/RPL22/ZNF763/NMT2/OSBPL2/MRPS6/NISCH/GSDMD/TRAF5/IREB2/SPATA2/RPL37/PHF3/RERE/CEP57/RPL23A/PEX16/MDM4/GATAD2A/ZNF133/CSTF3/FAM120AOS/CIAO1/ARID1A/RPL13A/AKT2/MRPS30/FBL/ATP8B2/C2orf68/RPS6KA5/BROX/MRPS25/TEFM/EIF5B/RPS20/EIF4A2/ADPRM/OCIAD2/PPHLN1/CDC123/TM2D3/SIK3/KATNBL1/OFD1/RPL34/ST8SIA4/TUBD1/DIABLO/LBH/SURF1/PRDX3/EPC1/GPR18/RPS18/ZFAND2A/BACH2/GGA2/TSPAN3/RPL38/TMEM243/CSTF2T/FAU/ARIH2/SMARCC1/DPH5/PM20D2/ELL3/HMGN4/EPM2AIP1/TUG1/TMEM268/ZNF275/ZC3H6/MPRIP/DNAJC7/RPL35A/ERGIC1/RPL24/EIF2S3/RPS4X/C12orf57/SNIP1/ZSCAN16/MAP3K7CL/RPS21/PHF20/ZNF791/NOSIP/ACTR6 |
| REACTOME\_DISEASES\_OF\_DNA\_REPAIR | REACTOME\_DISEASES\_OF\_DNA\_REPAIR | 33 | -0.47125 | -1.63797 | 0.008589 | 0.039918 | 0.028369 | 3332 | tags=27%, list=19%, signal=22% | RBBP8/MSH3/NBN/RMI1/RMI2/DNA2/RAD51C/BARD1/MSH6 |
| WP\_G\_PROTEIN\_SIGNALING\_PATHWAYS | WP\_G\_PROTEIN\_SIGNALING\_PATHWAYS | 91 | -0.38183 | -1.63923 | 0.001609 | 0.010538 | 0.007489 | 2820 | tags=30%, list=16%, signal=25% | PRKD3/PRKACG/GNG4/AKAP3/PRKCB/AKAP7/RRAS/KCNJ3/PRKCA/GNA12/PDE1A/AKAP1/ADCY9/ADCY4/PRKCE/GNAZ/PRKD1/CALM2/PPP3CC/GNAI3/GNG11/PPP3CA/CALM1/GNG12/NRAS/AKAP8/PDE7B |
| MAYBURD\_RESPONSE\_TO\_L663536\_DN | MAYBURD\_RESPONSE\_TO\_L663536\_DN | 53 | -0.42617 | -1.64052 | 0.007316 | 0.035341 | 0.025116 | 5350 | tags=51%, list=30%, signal=36% | S1PR5/BUB3/SRSF7/DLX5/CCNC/CNOT9/CCZ1/YWHAQ/PPA2/ZNF207/LAPTM4B/SLC30A5/GNPDA2/CSTF3/USP15/ALDOB/PSME3/CCNG2/ZNF585A/SRRM1/HMGB1/MRPL42/MED21/TMEM50B/CYCS/IFNAR1/HSDL2 |
| REACTOME\_INTERCONVERSION\_OF\_NUCLEOTIDE\_DI\_AND\_TRIPHOSPHATES | REACTOME\_INTERCONVERSION\_OF\_NUCLEOTIDE\_DI\_AND\_TRIPHOSPHATES | 29 | -0.48965 | -1.64084 | 0.009743 | 0.044289 | 0.031475 | 2273 | tags=28%, list=13%, signal=24% | AK4/CMPK1/AK1/DCTD/RRM1/DUT/CTPS1/NME3 |
| REACTOME\_S\_PHASE | REACTOME\_S\_PHASE | 158 | -0.3534 | -1.64388 | 0.000476 | 0.003807 | 0.002705 | 5212 | tags=45%, list=29%, signal=32% | PCNA/SKP2/PSMD11/ORC3/CCNA2/RAD21/ORC5/ANAPC7/PSMA6/MCM3/PSMD9/CABLES1/PSMD6/CDK2/MCM7/RPA3/SMC3/ESCO1/SKP1/PSMA3/ANAPC11/PSMD5/PSME1/STAG1/PDS5B/PSMA1/RBBP4/CDK7/STAG2/POLD3/ANAPC4/PSMC3/RFC1/PSMB7/WAPL/ESCO2/RFC5/LIN9/CDC26/PSMC5/CDKN1B/LIN54/PSMD10/MCM4/UBE2C/PSMD14/RFC4/PSMD7/TFDP1/PSME3/PSMD2/WEE1/AKT2/ANAPC5/PSMA2/MNAT1/FZR1/GINS3/ANAPC10/ANAPC15/PSMD1/RPA2/PSMC2/DNA2/ORC2/ANAPC16/PSMD8/POLA2/UBE2E1/CKS1B/CDC23 |
| REACTOME\_REGULATION\_OF\_CHOLESTEROL\_BIOSYNTHESIS\_BY\_SREBP\_SREBF | REACTOME\_REGULATION\_OF\_CHOLESTEROL\_BIOSYNTHESIS\_BY\_SREBP\_SREBF | 55 | -0.4239 | -1.64399 | 0.003933 | 0.021482 | 0.015266 | 5635 | tags=58%, list=31%, signal=40% | SP1/TGS1/SC5D/SEC24D/TBL1XR1/NCOA1/HELZ2/NFYA/MVK/CYP51A1/ACACB/CREBBP/SEC24A/NFYC/SEC23A/GPAM/KPNB1/MTF1/GGPS1/CARM1/RXRA/HMGCS1/SMARCD3/FDFT1/RAN/NCOA6/ACACA/MBTPS2/NFYB/MED1/INSIG2/TBL1X |
| VANTVEER\_BREAST\_CANCER\_ESR1\_UP | VANTVEER\_BREAST\_CANCER\_ESR1\_UP | 138 | -0.35951 | -1.64541 | 0.000462 | 0.003741 | 0.002659 | 2713 | tags=30%, list=15%, signal=25% | DNAJC12/TCEAL1/APPL2/TUSC2/HDAC11/PREX1/RBM47/NEK9/LAMB2/MRPS27/KIF16B/AQR/WDR6/CERS6/EVL/MED13L/HMGCL/PPP1R26/MYO5C/CCNG2/PBX1/CXXC5/FAM174B/BAG1/MEIS3P1/KCTD3/KIAA0232/CAMLG/CYB5R1/MYLIP/NEDD4L/PEX19/GPD1L/RAB11FIP3/ZBTB40/QDPR/SLC9A3R1/MAST4/FUT8/COX6C/LZTFL1 |
| WONG\_PROTEASOME\_GENE\_MODULE | WONG\_PROTEASOME\_GENE\_MODULE | 47 | -0.43513 | -1.64601 | 0.004954 | 0.026006 | 0.018481 | 3867 | tags=45%, list=22%, signal=35% | USP14/UBE3A/PSME1/PSMA1/USP39/PSMC3/FBXO21/PSMC5/USP1/PSMD10/UBE2C/CDC34/USP25/PSMD14/PSME3/UCHL3/PSMD1/UBA3/USP13/PSMD8/UBE2Q2 |
| REACTOME\_HIV\_INFECTION | REACTOME\_HIV\_INFECTION | 218 | -0.33717 | -1.64773 | 0.000235 | 0.002143 | 0.001523 | 4797 | tags=38%, list=27%, signal=28% | TAF7/GTF2H2/PSMA6/GTF2H3/BTRC/POM121/GTF2H4/PSMD9/POLR2D/NUP62/RANBP1/PSMD6/GTF2E1/CCNT2/NUP85/SKP1/PSMA3/GTF2A2/PSMD5/PSME1/ATP6V1H/PSMA1/AP2B1/AP1M1/CDK7/NUP43/NUP54/KPNB1/TAF12/RAE1/RNGTT/TAF11/NUP133/POLR2C/PSMC3/TSG101/NELFB/PSMB7/TBP/NMT1/NMT2/PSMC5/POLR2K/PSMD10/CHMP7/CHMP4C/PSMD14/CHMP5/CUL5/NUP107/TAF1L/PSMD7/GTF2H1/TAF5/PSME3/PSMD2/POLR2F/CHMP4A/CHMP4B/PSIP1/NUP205/SUPT4H1/GTF2E2/PSMA2/MNAT1/AP1S1/RAN/TAF9B/TAF4/VTA1/PSMD1/PSMC2/NEDD4L/VPS37D/POLR2H/PSMD8/SLC25A4/VPS4B/GTF2F2/NUP160/GTF2H5/XPO1/NUP37 |
| RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_5 | RASHI\_RESPONSE\_TO\_IONIZING\_RADIATION\_5 | 126 | -0.36807 | -1.6492 | 0.000853 | 0.006254 | 0.004444 | 2000 | tags=21%, list=11%, signal=18% | TCF20/ACBD6/MAP3K4/HMGCL/DNAJB4/ETFBKMT/TAF1B/PCSK5/TFAP2A/SURF6/KCNJ8/P4HB/ANP32A/MAP3K7/COL13A1/SMARCC1/VHL/EMCN/NFIA/PEX5/ZBTB14/EPHA4/SLMAP/HSDL2/LARP7/PPP1R3C |
| STEIN\_ESRRA\_TARGETS | STEIN\_ESRRA\_TARGETS | 498 | -0.30997 | -1.65019 | 3.24E-07 | 7.14E-06 | 5.07E-06 | 3694 | tags=31%, list=21%, signal=25% | RNF34/HSPB8/INPP1/HOOK1/TRAM2/SIGMAR1/SDHB/SDHD/MANF/GTPBP8/PDHA1/DECR1/ECI2/ACAA1/TERF1/OPA1/ATG2B/GFPT1/COX7B/DHX40/BDH2/MMACHC/CLEC16A/AHCYL1/TBX2/ARL2BP/CAV2/PLEKHB2/FZD2/MIEF1/MIPEP/AP5M1/LETMD1/ZNF44/ACADM/PMM1/ST6GALNAC4/ESRRA/B4GAT1/THAP4/MED9/MTRF1/TACC1/UQCRB/SLC25A12/HIGD1A/TIMM17A/ISCA1/CEP70/SUCLA2/SMIM8/MCM4/MRPL35/SPTLC2/CKMT2/ELP5/PRPS2/CRNKL1/GMCL1/DGUOK/MXD4/MTX2/UGP2/PAFAH2/PPIC/CHCHD3/SAMM50/ZNF514/CISD1/AK1/DUSP22/MGST3/OXA1L/SSB/OSBPL1A/MRPS30/HTATIP2/SUPV3L1/COQ3/AKAP1/ENDOG/ZNF7/TRIM8/DCTD/ZHX3/ALDH3A2/GATAD1/TOMM70/PDCD10/CCNG2/PLPPR2/MLYCD/MBD4/EPAS1/TRIM2/FAM50B/FAM174B/MRPS11/CALU/RBM7/MORC2/TUBD1/CXCL12/NFU1/NNT/FBXL15/NDUFA8/CIAPIN1/FAHD2A/ALDOC/ETFDH/TTC33/ANXA6/ACYP1/NDUFS3/MPC2/SIRT5/TEX2/ZNF45/CYCS/NDUFS7/MRPS22/KANK2/MGST2/NDUFS8/SMARCC1/STK26/NPM3/FAM162A/FASTKD1/ORC2/IMPA1/TACO1/BOP1/CAAP1/COX10/VDAC3/SLC25A4/BRD3/NR2F2/PDHX/COQ9/DLD/FH/CDC23/HPF1/MSH6/ACAT1/MRPL15/NDUFS4/COX5B/PFKM/TRPC1/TRAK2/DLST |
| MANALO\_HYPOXIA\_DN | MANALO\_HYPOXIA\_DN | 274 | -0.32873 | -1.65022 | 2.13E-05 | 0.000271 | 0.000193 | 5196 | tags=45%, list=29%, signal=32% | SKP2/TELO2/VWA8/MPHOSPH9/RRS1/PSMD11/MRPS12/METTL2B/GART/CCNA2/C20orf27/NASP/SACS/DLAT/TIPIN/MCM3/HEATR1/SEC23IP/PRMT7/MFN2/PARP2/WDR77/RANBP1/HNRNPU/RRP15/MAZ/TSR1/URB2/COQ2/NUP85/PAIP1/HNRNPDL/RITA1/STIL/FUS/TSFM/POP7/TSEN2/EBNA1BP2/CDC7/NIF3L1/NUP43/TUBGCP4/NCAPD3/NVL/WDR4/SNRPA1/RPP40/NOP56/VRK1/USP39/NOL11/TOE1/PRC1/HJURP/WDR12/GRWD1/CEP83/SNAPC5/SLC25A15/LBHD1/AASDHPPT/MNS1/PDCD2/PPAT/RFC5/SCLY/UTP14A/GATB/MTERF3/AIMP2/HACD3/BCS1L/USP1/IDE/C17orf80/EXOSC8/MCM4/CSE1L/RUVBL1/PRMT5/EMG1/RRP1B/FAM136A/MCFD2/ELK1/CIAO1/RSAD1/FXN/EEF1E1/DNAJC9/PUM3/PSME3/CISD1/ABCF2/POP5/DDX23/FANCG/SPDL1/MRPL40/FANCI/NUP205/AKAP1/MLLT10/RRM1/PSMG1/GINS3/MRPL46/GMNN/GEMIN2/SNRPD1/CTPS1/GEMIN6/DNA2/POLR3K/GPD1L/BOP1/POLA2/BARD1/NUP160/CUTC/WDR74 |
| REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS | REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS | 86 | -0.38665 | -1.65137 | 0.003641 | 0.020191 | 0.014349 | 5339 | tags=49%, list=30%, signal=34% | ANAPC1/BUB3/SKP2/BUB1B/PSMD11/CCNA2/ANAPC7/PSMA6/BTRC/PSMD9/PSMD6/CDK2/SKP1/PSMA3/ANAPC11/CDC14A/PSMD5/PSME1/PSMA1/PLK1/ANAPC4/PSMC3/PSMB7/CDC26/PSMC5/PSMD10/UBE2C/PSMD14/PSMD7/PSME3/PSMD2/ANAPC5/PSMA2/FZR1/ANAPC10/ANAPC15/PSMD1/PSMC2/ANAPC16/PSMD8/UBE2E1/CDC23 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_10 | YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_10 | 67 | -0.40431 | -1.65144 | 0.002928 | 0.016918 | 0.012023 | 3399 | tags=34%, list=19%, signal=28% | SF3A3/SLC30A5/SARNP/GRWD1/EIF1B/CHCHD7/CCT7/ARCN1/POLR2F/SSB/MRPL40/SEC61A1/TMEM11/DYNLL1/PEX2/MPC2/AP3M1/TMED2/MRPL53/CACYBP/USO1/COX17/HSPE1 |
| WANG\_LMO4\_TARGETS\_UP | WANG\_LMO4\_TARGETS\_UP | 331 | -0.32206 | -1.65331 | 7.97E-06 | 0.000115 | 8.15E-05 | 3968 | tags=32%, list=22%, signal=26% | RIN2/AURKAIP1/NAA25/DBI/MRPL10/ACVR1B/PAQR8/NT5DC1/FAM174A/PISD/SCUBE2/PDS5B/RALBP1/NDRG3/DNAL1/INIP/HNMT/PRKAR1A/OGT/PIGM/FAM104B/CREB1/VGLL4/CBX3/FUBP1/GFM1/CRYZL1/NUDT21/FBXO46/DMTF1/MTA1/UQCRB/CDCA2/ARL5A/HACD3/RAB10/MRPL30/NOA1/NLK/USP6NL/TLK1/MDM4/PCYOX1/SMIM7/N4BP2L2/CROT/SLC35A1/APIP/ATG10/BBOF1/ABHD17C/WEE1/RMI2/ASNSD1/RGMB/LYRM7/MRPS25/DPY19L4/SUB1/PDRG1/C19orf53/HNRNPUL1/PPHLN1/TMEM106B/CDC123/TMEM135/CRLS1/CDC42SE1/AKR7A2/CD151/HMGB1/NUCKS1/NNT/LPCAT1/DCAF16/SREK1/HSPB11/CDV3/WWP2/TMEM50B/CCDC14/SELENBP1/RSBN1L/EED/ARHGEF12/PM20D2/MRPL33/CRIPT/PPP3R1/EPM2AIP1/TUG1/PCMT1/NFIA/AK3/ERGIC1/PGRMC1/AZI2/VPS4B/UBL3/E2F3/LSM5/MT1X/TXNIP/CDC23/PHACTR2/SUSD2/LLGL1 |
| WP\_ENERGY\_METABOLISM | WP\_ENERGY\_METABOLISM | 46 | -0.4386 | -1.655 | 0.008185 | 0.038541 | 0.027389 | 1143 | tags=26%, list=6%, signal=24% | CAMK2G/TFB1M/PRMT1/PPP3CC/PPP3R1/PRKAB2/PRKAA1/MED1/PPP3CA/PRKAB1/PPP3CB/FOXO1 |
| IVANOVA\_HEMATOPOIESIS\_EARLY\_PROGENITOR | IVANOVA\_HEMATOPOIESIS\_EARLY\_PROGENITOR | 407 | -0.31667 | -1.6571 | 1.47E-06 | 2.72E-05 | 1.94E-05 | 5131 | tags=41%, list=29%, signal=30% | LRRC34/BCL2/TMEM161A/GGCT/MRPS12/KYAT3/HSPA1A/MGAT2/TFB2M/GART/KCTD18/CUL2/CENPM/TOX/C14orf93/UBASH3A/SLC35B2/G3BP1/PSD4/TMEM98/IRX2/CUX1/IP6K2/ALDH7A1/DDX59/HIF1AN/DLAT/MCM3/SEC23IP/PRPSAP1/LUC7L/LCLAT1/KCNK12/RIPK3/GSTO1/PDIA5/NUP62/CDK6/VPS11/RBM34/ZZZ3/L3MBTL3/ZNF213/URM1/PRDX1/ALS2/ANAPC11/PPP1R14B/SPATA5L1/WDR36/ZNF101/UBE3A/CCDC86/STYX/IDH2/MRPL44/CTNNBL1/MANF/EMILIN1/CCDC8/DYNLRB1/TSPY26P/SPAST/SNAPC1/MIS18BP1/SPPL2A/WDR12/SNAPC5/SLC25A15/RPL22/BFSP2/CRYZL1/MTRF1/GATB/SLC22A3/COMMD7/CHML/PRMT6/SFXN2/CMTR2/DCUN1D4/SUGCT/SLC22A17/MRPS27/SUCLA2/PEX7/RAPGEF3/AK4/RNASEH1/PPM1F/TMED4/PPA1/ARCN1/SMUG1/ZNF721/GTF2A1L/GALK2/SLC35A1/SNRPB2/SOSTDC1/SRP68/ATG10/BBOF1/ABHD17C/TMEM248/WEE1/ATPAF1/MRPS30/RPS6KA5/SUPV3L1/TCHHL1/UBE2Q1/ZNRF2/GNB4/GMDS/RPS20/MRPS26/B3GALT6/HIBADH/BFAR/POGLUT1/SEC61A1/DCTD/CRELD2/CAND1/METTL16/EXTL2/ELP3/MRPL45/BBS4/CENPV/B4GALT4/C1orf131/CPSF3/EXOG/OXCT1/COMMD1/ELP6/GOPC/PINX1/PREP/HDHD2/LYPLAL1/DEPTOR/DIMT1/FASTKD1/DPH5/RSRC1/SAE1/QDPR/TMED10/DCP2/UBE2Q2/PAQR7/ESD/PRKRA/VMA21/DIS3L/STAM/MCEE/UTP6/CLASP1/PFDN4/PPP1R13B/MTMR4 |
| REACTOME\_MITOTIC\_PROPHASE | REACTOME\_MITOTIC\_PROPHASE | 78 | -0.39866 | -1.65772 | 0.002401 | 0.014342 | 0.010192 | 4893 | tags=41%, list=27%, signal=30% | CNEP1R1/VRK2/POM121/MASTL/LPIN2/NUP62/PPP2CB/NUP85/RAB2A/PLK1/NUP43/NUP54/RAE1/NCAPD3/VRK1/NUP133/LEMD3/MCPH1/SMC4/GOLGA2/NEK9/PRKCB/NUP107/PRKCA/LEMD2/NUP205/ENSA/GORASP1/USO1/NUP160/LPIN1/NUP37 |
| PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_10HR\_UP | PLASARI\_TGFB1\_SIGNALING\_VIA\_NFIC\_10HR\_UP | 55 | -0.42754 | -1.65812 | 0.003516 | 0.019679 | 0.013985 | 1707 | tags=29%, list=10%, signal=26% | MPZL2/ADGRG6/SPARCL1/PCSK5/GVINP1/NREP/CHODL/STK26/NFIB/AIF1L/EPHA4/MYH11/SERPINA3/SLMAP/ITGA1/PARM1 |
| WP\_GENES\_RELATED\_TO\_PRIMARY\_CILIUM\_DEVELOPMENT\_BASED\_ON\_CRISPR | WP\_GENES\_RELATED\_TO\_PRIMARY\_CILIUM\_DEVELOPMENT\_BASED\_ON\_CRISPR | 88 | -0.38803 | -1.65992 | 0.001909 | 0.011938 | 0.008484 | 4663 | tags=57%, list=26%, signal=42% | TCTN1/BBS7/ARL3/WDPCP/TTBK2/DYNLT1/IFT88/BBS12/WDR19/IFT27/TMEM67/CEP120/TTC8/TUBE1/RAB23/IFT57/MIB1/CBY1/CLUAP1/RPGRIP1L/EFCAB7/TCTN3/TXNDC15/IFT43/KIAA0753/TCTN2/ARL6/CEP83/B9D1/EVC2/BBS1/KIFAP3/TRAPPC11/CC2D2A/RABL2A/CEP44/IFT52/DYNC2LI1/IFT46/TMEM216/BBS4/OFD1/TUBD1/BBS10/DYNLL1/HSPB11/BBS2/MKKS/IFT74/LZTFL1 |
| UDAYAKUMAR\_MED1\_TARGETS\_UP | UDAYAKUMAR\_MED1\_TARGETS\_UP | 124 | -0.37102 | -1.6624 | 0.000777 | 0.005751 | 0.004087 | 4964 | tags=39%, list=28%, signal=28% | TSPAN12/EIF3A/PTER/PTMA/LIG3/ME2/RMND5A/EDF1/PAWR/LARP4/FEM1B/MALT1/TSFM/GRSF1/LONP1/CREB1/BPGM/RDH11/CAV2/RPL22/HIGD1A/RBM47/AIMP2/CEP70/RYK/TMED7/DUS1L/FKBP14/PUM3/NIT2/CHPT1/CAMSAP2/ECEL1/MBNL1/ANAPC5/SUB1/MRPL12/MRPL42/PTPRF/FAAP100/PHF10/BOP1/CBS/TLE6/MED1/DCP2/PITX1/PPP3CB |
| JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_UP | JAATINEN\_HEMATOPOIETIC\_STEM\_CELL\_UP | 290 | -0.32827 | -1.66254 | 1.47E-05 | 0.000199 | 0.000141 | 3124 | tags=28%, list=17%, signal=23% | HOXA9/SH3RF1/MBLAC2/CFH/FAM171B/MAP7/SLC39A10/PON2/BEND4/JADE3/CYYR1/HACD1/ADGRA3/RCN1/MRPS27/CYTL1/SCN3A/PRMT5/PAM/PLEKHA5/C11orf54/KCTD15/ZBTB8A/TRO/SMARCA1/BIVM/SV2A/ANKRD6/FRMD6/PDE1A/RAB34/MAP9/ADGRG6/ANGPT1/IPO11/DPY19L4/CCNB1IP1/ARMCX1/CBX2/STMN1/MYO5C/RBM10/RAVER2/TANC1/DPYSL3/PSMG1/DPY19L2/KDM5B/CCDC6/ADAM28/LRCH2/CPSF3/KCTD3/ACACA/AKR1C3/ZNF521/KIT/NREP/ARMCX2/DEPTOR/BTBD3/ATP6V0A2/LIMCH1/PM20D2/TUG1/TIMM9/MSRB3/HOXA5/HADH/PLS3/MAST4/SPIN4/SCRN1/RDX/SLITRK4/TCEAL4/LPIN1/HHEX/STK3/NDN |
| REACTOME\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1 | REACTOME\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1 | 72 | -0.40309 | -1.66438 | 0.003151 | 0.017976 | 0.012775 | 3912 | tags=44%, list=22%, signal=35% | ANAPC7/PSMA6/PSMD9/PSMD6/PSMA3/ANAPC11/PSMD5/PSME1/PSMA1/PLK1/ANAPC4/PSMC3/PSMB7/CDC26/PSMC5/PSMD10/UBE2C/PSMD14/PSMD7/PSME3/PSMD2/ANAPC5/PSMA2/FZR1/ANAPC10/ANAPC15/PSMD1/PSMC2/ANAPC16/PSMD8/UBE2E1/CDC23 |
| CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_HD\_MTX\_DN | CHEOK\_RESPONSE\_TO\_MERCAPTOPURINE\_AND\_HD\_MTX\_DN | 25 | -0.51569 | -1.6647 | 0.008116 | 0.03835 | 0.027254 | 5369 | tags=56%, list=30%, signal=39% | SERPINE2/AHCY/CENPC/MPHOSPH9/UBE2G1/PFDN6/SACS/TGFBR2/FAM216A/AATF/CGRRF1/UCHL3/TGDS/SAP18 |
| REACTOME\_DNA\_REPAIR | REACTOME\_DNA\_REPAIR | 270 | -0.33288 | -1.66809 | 1.75E-05 | 0.000231 | 0.000164 | 6268 | tags=49%, list=35%, signal=32% | ASCC3/PARP1/PNKP/INO80D/SLX1B/RFC2/POLR2A/POLE4/PAXIP1/TERF2/POLR2L/PARG/NEIL2/UBXN1/UBE2B/NEIL1/INO80E/TCEA1/PIAS1/POLM/ERCC3/RNF111/POLK/FEN1/POLI/COPS6/PPP4R2/NTHL1/COPS2/POLR2I/ABL1/PCNA/NFRKB/RCHY1/FAN1/FANCL/XRCC4/RHNO1/CCNA2/PPIE/COPS3/MLH1/GTF2H2/GTF2H3/ALKBH2/LIG3/TIPIN/FAAP20/GTF2H4/TDP2/POLH/UBE2T/RAD17/PARP2/POLR2D/MCRS1/FANCB/MAPK8/NPLOC4/RNF8/CDK2/POT1/RPA3/COPS7B/TIMELESS/CUL4A/BABAM1/TP53BP1/ACTL6A/COPS8/SLX4/CDK7/ATRIP/ISY1/TERF1/MGMT/RBBP8/POLD3/COPS7A/MSH3/POLR2C/ERCC1/NBN/REV1/RFC1/DCLRE1A/RFC5/MUS81/CUL4B/COPS5/USP1/UBE2I/POLR2K/SPIDR/PIAS4/RUVBL1/AQR/RMI1/COPS4/RFC4/SMUG1/FANCM/GTF2H1/UBE2V2/REV3L/POLR2F/RMI2/RAD23B/FANCG/FANCI/MNAT1/FANCE/MBD4/MDC1/PRPF19/FTO/CLSPN/POLB/VCP/FAAP100/UIMC1/RPA2/RIF1/DNA2/POLR2H/ALKBH3/RAD51C/BARD1/ACTR5/MSH6/CETN2/GTF2H5 |
| REACTOME\_HDACS\_DEACETYLATE\_HISTONES | REACTOME\_HDACS\_DEACETYLATE\_HISTONES | 31 | -0.4901 | -1.66965 | 0.005754 | 0.029181 | 0.020738 | 6015 | tags=52%, list=34%, signal=34% | SAP30L/CHD3/HDAC8/RBBP7/TBL1XR1/CHD4/RBBP4/KDM1A/MTA1/SAP30/GATAD2A/MTA3/MTA2/PHF21A/SAP18/TBL1X |
| REACTOME\_NS1\_MEDIATED\_EFFECTS\_ON\_HOST\_PATHWAYS | REACTOME\_NS1\_MEDIATED\_EFFECTS\_ON\_HOST\_PATHWAYS | 38 | -0.46752 | -1.66984 | 0.008153 | 0.038454 | 0.027328 | 4604 | tags=42%, list=26%, signal=31% | POM121/NUP62/NUP85/KPNA5/NUP43/NUP54/KPNB1/RAE1/NUP133/PABPN1/NUP107/KPNA4/NUP205/KPNA3/NUP160/NUP37 |
| STEIN\_ESRRA\_TARGETS\_DN | STEIN\_ESRRA\_TARGETS\_DN | 97 | -0.38376 | -1.67312 | 0.001808 | 0.011448 | 0.008136 | 3601 | tags=36%, list=20%, signal=29% | TRAM2/SIGMAR1/TERF1/ATG2B/GFPT1/DHX40/CAV2/FZD2/PMM1/B4GAT1/TACC1/PRPS2/DGUOK/MXD4/ZNF514/SSB/ZNF7/TRIM8/DCTD/ZHX3/GATAD1/CCNG2/MBD4/FAM174B/MORC2/TUBD1/ZNF45/KANK2/SMARCC1/BOP1/BRD3/NR2F2/CDC23/HPF1/MSH6 |
| MITSIADES\_RESPONSE\_TO\_APLIDIN\_DN | MITSIADES\_RESPONSE\_TO\_APLIDIN\_DN | 236 | -0.34012 | -1.6752 | 2.74E-05 | 0.000335 | 0.000238 | 5369 | tags=42%, list=30%, signal=30% | AHCY/TMEM97/TYMS/HNRNPAB/AP3D1/CNOT1/SKP2/CLTC/BUB1B/DSP/CCNA2/UBE2G2/EIF3A/TARDBP/HCFC1/CHD4/AGPAT5/CTNNA1/EIF4B/AGBL5/MKI67/SLC38A2/CASP6/TTC3/TIPIN/MAGED1/HEATR1/MACF1/CPNE3/PODXL/DDX46/WSB2/BICD2/CENPA/CDC42BPA/SMC3/PLEC/SPEN/PDS5B/TRAM2/CDC7/BUB1/ALDH5A1/RNGTT/POLD3/RBBP6/EIF4G1/PRKAR2A/LYPLA1/CBX3/HJURP/CERK/PPAT/AVL9/NCAPG/PRPF8/MFHAS1/NCAPD2/ELAVL1/MCM4/CSE1L/ZC3HAV1/CMPK1/RFC4/TFDP1/DLGAP5/PRKCA/PSMD2/WEE1/FANCG/FANCI/NUP205/MBNL1/RAB4A/ANKRD10/RRM1/DUT/ACLY/CAMSAP1/FAM20B/NUCKS1/IPO5/LPCAT1/CTPS1/TEX2/DEPTOR/TMEM106C/RSRC1/FAM120A/HADH/DERL1/DCP2/PTPN11/SLC38A1/FUT8/MSH6/TBL1X/RAB11A/MTMR4 |
| REACTOME\_SUMOYLATION\_OF\_UBIQUITINYLATION\_PROTEINS | REACTOME\_SUMOYLATION\_OF\_UBIQUITINYLATION\_PROTEINS | 36 | -0.4717 | -1.67574 | 0.008918 | 0.041201 | 0.02928 | 4604 | tags=42%, list=26%, signal=31% | POM121/NUP62/NUP85/NUP43/TRIM27/NUP54/RAE1/NUP133/UBE2I/PIAS4/NUP107/NUP205/VHL/NUP160/NUP37 |
| REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK | REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK | 29 | -0.50063 | -1.6776 | 0.006591 | 0.032509 | 0.023103 | 2354 | tags=34%, list=13%, signal=30% | SLC38A9/RRAGB/LAMTOR5/LAMTOR1/LAMTOR2/RRAGA/STRADB/PRKAB2/PRKAA1/PRKAB1 |
| REACTOME\_CELL\_CYCLE\_MITOTIC | REACTOME\_CELL\_CYCLE\_MITOTIC | 486 | -0.31656 | -1.67845 | 1.37E-07 | 3.25E-06 | 2.31E-06 | 5261 | tags=41%, list=29%, signal=30% | PPP2R5B/ABL1/BUB3/PCNA/FBXW11/SKP2/AHCTF1/TUBA1B/BUB1B/CENPE/PSMD11/ORC3/PPP1R12B/CCNA2/CDK5RAP2/CENPM/TUBB2B/CNEP1R1/PCM1/RAD21/ORC5/VRK2/PPP1CB/NUDC/ANAPC7/PSMA6/JAK2/BTRC/TNPO1/MAU2/POM121/CENPL/TUBB6/MCM3/TUBGCP3/ACTR1A/NSL1/IST1/MASTL/CENPJ/PSMD9/CKAP5/KIF2C/LPIN2/CABLES1/NUP62/PSMD6/CDK6/CDK2/CENPA/KNTC1/MCM7/CLIP1/RPA3/PPP2CB/SMC3/NUP85/ESCO1/SKP1/PSMA3/ANAPC11/CDC14A/PSMD5/PSME1/STAG1/TUBB8/PDS5B/PSMA1/RAB2A/HAUS1/RBBP4/PLK1/CDC7/CDK7/BUB1/NUP43/TUBGCP4/NUP54/KPNB1/STAG2/RAE1/NCAPD3/MZT2B/POLD3/CEP290/SPAST/ANAPC4/VRK1/NIPBL/LCMT1/NUP133/PSMC3/LEMD3/PPP2R5C/RFC1/PSMB7/WAPL/ESCO2/MCPH1/TAOK1/RFC5/CEP63/SMC4/LIN9/NCAPG/DYNC1LI1/CDC26/PPP1R12A/CEP135/CCP110/NCAPD2/PSMC5/UBE2I/NME7/GOLGA2/CDKN1B/NEK9/LIN54/DCTN3/CEP70/PSMD10/MCM4/CHMP7/UBE2C/CEP57/CHMP4C/PSMD14/MZT1/PRKCB/NUP107/RFC4/DCTN1/PSMD7/TFDP1/ZW10/PSME3/PRKCA/PSMD2/WEE1/SKA2/LEMD2/CHMP4A/CHMP4B/E2F6/AKT2/SPDL1/NUP205/ESPL1/ANAPC5/PPP2R5A/PSMA2/MNAT1/PPP1CC/RAN/ITGB3BP/DSN1/FZR1/PPP2R5E/OFD1/GINS3/GMNN/ANAPC10/DYNLL1/NDC80/CEP164/HAUS7/ENSA/DYNC1I1/ANAPC15/CENPQ/GORASP1/PSMD1/RPA2/PPP2R2A/PSMC2/DNA2/CCND3/ORC2/ANAPC16/DCTN2/CSNK2A2/PSMD8/POLA2/USO1/E2F3/UBE2E1/DYNC1I2/NUP160/CKS1B/CDC23/MIS12/LPIN1/CETN2/CLASP1/OPTN/XPO1/NUP37/DYNC1LI2 |
| KEGG\_UBIQUITIN\_MEDIATED\_PROTEOLYSIS | KEGG\_UBIQUITIN\_MEDIATED\_PROTEOLYSIS | 128 | -0.37358 | -1.67911 | 0.00032 | 0.002745 | 0.001951 | 5447 | tags=48%, list=30%, signal=33% | NEDD4/CUL7/ANAPC1/UBE2A/STUB1/FBXW11/RCHY1/SKP2/FANCL/UBE2G1/UBE2G2/CUL2/ITCH/UBE2W/UBE2K/ANAPC7/TRIM37/BTRC/UBE2J2/CUL4A/SKP1/ANAPC11/UBE2E3/UBE3A/RNF7/ANAPC4/BIRC6/UBE4B/UBE2F/CDC26/CUL4B/SYVN1/UBE2I/PIAS4/UBE2C/CDC34/CUL5/UBE3C/UBE2Q1/ANAPC5/WWP1/UBE2O/FZR1/PRPF19/ANAPC10/XIAP/UBE2E2/WWP2/UBE2M/UBE2D4/NEDD4L/UBA3/VHL/ANAPC13/SAE1/UBE4A/TRIM32/UBE2Q2/UBE2E1/CDC23/KLHL9 |
| VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_DN | VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_DN | 36 | -0.47323 | -1.68117 | 0.008357 | 0.039142 | 0.027817 | 3487 | tags=44%, list=19%, signal=36% | CAPZA2/WIPI2/CLIC4/CAV2/IFI16/SASH1/ALDH1B1/LYST/PRRG1/GAPVD1/B4GALT7/ING4/OSBPL1A/RPL34/CLN5/ARIH2 |
| BARRIER\_COLON\_CANCER\_RECURRENCE\_UP | BARRIER\_COLON\_CANCER\_RECURRENCE\_UP | 41 | -0.46117 | -1.68246 | 0.003541 | 0.019799 | 0.014071 | 3830 | tags=49%, list=21%, signal=38% | EXT2/COPS8/POLD3/YIPF6/DNAJC12/CFH/SNU13/UGGT1/TIMM17A/CNPY2/NME7/CIAO1/TRIM2/AHI1/ARL1/PSMC2/ERGIC2/SAR1A/SEC62/FOXO1 |
| KEGG\_RNA\_POLYMERASE | KEGG\_RNA\_POLYMERASE | 26 | -0.51366 | -1.68409 | 0.009681 | 0.044121 | 0.031355 | 4293 | tags=50%, list=24%, signal=38% | POLR2D/POLR1D/POLR2J3/POLR2C/POLR3A/POLR2K/POLR3C/POLR3B/POLR2F/POLR3H/POLR3K/POLR2H/POLR3GL |
| REACTOME\_DNA\_REPLICATION | REACTOME\_DNA\_REPLICATION | 128 | -0.3747 | -1.68414 | 0.000293 | 0.002536 | 0.001802 | 5212 | tags=45%, list=29%, signal=32% | PCNA/SKP2/PSMD11/ORC3/CCNA2/ORC5/ANAPC7/PSMA6/MCM3/PSMD9/PSMD6/CDK2/MCM7/RPA3/SKP1/PSMA3/ANAPC11/PSMD5/PSME1/PSMA1/CDC7/KPNB1/POLD3/ANAPC4/PSMC3/RFC1/PSMB7/RFC5/CDC26/PSMC5/PSMD10/MCM4/UBE2C/PSMD14/RFC4/PSMD7/PSME3/PSMD2/ANAPC5/PSMA2/FZR1/GINS3/GMNN/ANAPC10/ANAPC15/PSMD1/RPA2/PSMC2/DNA2/KPNA6/ORC2/ANAPC16/PSMD8/POLA2/E2F3/UBE2E1/CDC23 |
| REACTOME\_TIE2\_SIGNALING | REACTOME\_TIE2\_SIGNALING | 18 | -0.56556 | -1.68593 | 0.010092 | 0.045261 | 0.032165 | 4122 | tags=44%, list=23%, signal=34% | SHC1/KRAS/PIK3R1/PIK3R2/ANGPT1/ANGPT2/PTPN11/NRAS |
| BIOCARTA\_GPCR\_PATHWAY | BIOCARTA\_GPCR\_PATHWAY | 30 | -0.49793 | -1.68642 | 0.003973 | 0.021677 | 0.015405 | 3513 | tags=47%, list=20%, signal=38% | PLCG1/PRKAR1A/CREB1/PRKAR2A/PRKACG/NFATC3/PRKCB/ELK1/PRKCA/CALM2/PPP3CC/PPP3CA/CALM1/PPP3CB |
| REACTOME\_RNA\_POLYMERASE\_I\_PROMOTER\_ESCAPE | REACTOME\_RNA\_POLYMERASE\_I\_PROMOTER\_ESCAPE | 27 | -0.50991 | -1.68723 | 0.006173 | 0.03084 | 0.021917 | 4793 | tags=56%, list=27%, signal=41% | GTF2H2/GTF2H3/GTF2H4/TAF1A/POLR1D/CDK7/CBX3/TBP/POLR2K/GTF2H1/POLR2F/MNAT1/TAF1B/POLR2H/GTF2H5 |
| BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_AND\_BRAIN\_QTL\_CIS | BYSTRYKH\_HEMATOPOIESIS\_STEM\_CELL\_AND\_BRAIN\_QTL\_CIS | 62 | -0.42173 | -1.68754 | 0.002446 | 0.014571 | 0.010355 | 3561 | tags=39%, list=20%, signal=31% | MRPL44/TUBGCP4/ACAA1/CLEC16A/HJURP/CPSF2/MRPS7/KLC1/THUMPD1/MRPL35/GATAD2A/SNRPB2/TRMT1/FAM114A2/MTIF2/NOP10/EEF1AKMT1/PTPRF/PRKCE/NDUFA7/USP38/MED1/RPL26/SCOC |
| REACTOME\_SYNTHESIS\_OF\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI | REACTOME\_SYNTHESIS\_OF\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI | 18 | -0.56656 | -1.68891 | 0.009806 | 0.044463 | 0.031598 | 3294 | tags=50%, list=18%, signal=41% | PIGM/PIGC/PIGH/PIGX/PIGQ/PIGV/PIGF/PIGP/PIGY |
| REACTOME\_RMTS\_METHYLATE\_HISTONE\_ARGININES | REACTOME\_RMTS\_METHYLATE\_HISTONE\_ARGININES | 28 | -0.5041 | -1.68967 | 0.008278 | 0.038814 | 0.027584 | 5533 | tags=71%, list=31%, signal=49% | RBBP7/ARID2/SMARCA2/SMARCD1/ACTL6B/JAK2/PRMT7/WDR77/ACTL6A/COPRS/PRMT6/CARM1/PRMT5/ARID1A/SMARCA4/SMARCD3/PRMT3/PRMT1/SMARCC1/SMARCE1 |
| ZHAN\_MULTIPLE\_MYELOMA\_CD1\_AND\_CD2\_UP | ZHAN\_MULTIPLE\_MYELOMA\_CD1\_AND\_CD2\_UP | 86 | -0.39642 | -1.69311 | 0.002226 | 0.013525 | 0.009611 | 4235 | tags=42%, list=24%, signal=32% | CASK/ATP2B1/PMS1/ARHGAP18/STAM2/CLCC1/C1orf52/EDRF1/AHCYL1/RFC1/MCPH1/ALDH6A1/NUDT21/RASSF3/PRMT6/ZFP90/IP6K1/MAN1C1/PAN2/KCNJ3/ALOX5AP/CHPT1/MED30/B3GALT6/SIVA1/CNOT7/MED6/AKR7A2/KLHL28/ATG14/ANAPC16/CPEB3/FERMT2/BANK1/METTL25/TBL1X |
| REACTOME\_HIV\_TRANSCRIPTION\_ELONGATION | REACTOME\_HIV\_TRANSCRIPTION\_ELONGATION | 38 | -0.47413 | -1.69343 | 0.006948 | 0.033855 | 0.024059 | 6189 | tags=55%, list=34%, signal=36% | NELFA/POLR2A/POLR2L/TCEA1/ERCC3/POLR2I/GTF2H2/GTF2H3/GTF2H4/POLR2D/CDK7/POLR2C/NELFB/POLR2K/GTF2H1/POLR2F/SUPT4H1/MNAT1/POLR2H/GTF2F2/GTF2H5 |
| ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_DN | ZHOU\_INFLAMMATORY\_RESPONSE\_LIVE\_DN | 343 | -0.32824 | -1.69558 | 5.68E-06 | 8.49E-05 | 6.04E-05 | 4183 | tags=35%, list=23%, signal=28% | TSPY2/C1QTNF3/TRIAP1/GYG1/FAM220A/ASB2/MRPL58/OLFM3/SNAI3/PIK3R1/RNF7/CEP68/ARMCX6/POP7/GLT8D1/PHF23/FRAT2/NIF3L1/BLOC1S5/ECI2/ANKMY2/NVL/GLRX5/FAM135A/NAA16/VGLL4/MBLAC2/KLHDC3/MIS18BP1/INTS10/TMEM41A/SNAPC5/MIEF1/LBHD1/CHAMP1/HSF1/AASDHPPT/KLF12/PRKD3/ST6GALNAC4/ZBTB48/CALB1/NFATC3/POLR3A/MRPS18B/GFOD1/NOA1/ORAI3/CNOT8/MRPL35/ARV1/KCND1/MCFD2/INTS8/GPRASP2/RMND1/CIAO1/MAST3/RAB40B/ZFP3/CEP44/PAFAH2/KAT14/SAMM50/THYN1/TLR10/ZBTB4/POMGNT2/COQ3/CCDC107/COQ5/MRPS26/FADD/STEAP1/AASDH/MRPL18/MLLT10/FANCE/CXXC5/EXOSC4/MLYCD/MBD4/ABHD10/EFNA4/ELOF1/RPUSD3/DNTTIP1/SURF6/METTL13/LIAS/COMMD3/FBXO32/NR2F6/CEP85/TRMT61B/ZC3H14/RNF113A/TMEM138/GEMIN6/TMEM177/ANP32A/TIGD2/CIPC/POLR3K/DPH5/BRAT1/IMP3/TBC1D13/RCOR3/ZBTB14/ATP1A2/THUMPD3/ZNF362/MALSU1/TRIM32/C7orf25/COQ9/RASL12/VGLL3/MCEE/HHEX |
| GENTILE\_UV\_RESPONSE\_CLUSTER\_D6 | GENTILE\_UV\_RESPONSE\_CLUSTER\_D6 | 33 | -0.48792 | -1.69589 | 0.004899 | 0.025788 | 0.018327 | 4888 | tags=55%, list=27%, signal=40% | NFYA/ZMYND8/PUM2/IFNGR2/NCK1/CDK7/TLE4/STRN3/FZD2/LPAR1/TRIB2/EPS8/CSTF3/MFAP1/PRRX1/CXCL12/ZNF146/NFYB |
| REACTOME\_PTEN\_REGULATION | REACTOME\_PTEN\_REGULATION | 136 | -0.37274 | -1.69614 | 0.000162 | 0.001546 | 0.001098 | 4177 | tags=38%, list=23%, signal=29% | PSMD6/AGO3/SCMH1/PSMA3/PSMD5/PSME1/MKRN1/PSMA1/RBBP4/ATF2/TRIM27/KDM1A/RRAGC/PSMC3/TNKS2/PSMB7/RNF146/PHC1/MTA1/PSMC5/PSMD10/SLC38A9/RRAGB/PSMD14/GATAD2A/BMI1/LAMTOR5/PSMD7/LAMTOR1/PSME3/PSMD2/MTA3/MECOM/AKT2/MTA2/CBX2/PSMA2/LAMTOR2/RRAGA/TNRC6B/XIAP/WWP2/PSMD1/PSMC2/EED/PTEN/USP13/CSNK2A2/PSMD8/SUZ12/CBX6 |
| MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_UP | MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_UP | 14 | -0.61259 | -1.6972 | 0.010334 | 0.046086 | 0.032752 | 6794 | tags=93%, list=38%, signal=58% | HDLBP/YY1AP1/NOMO2/NARF/GORASP2/KDELR1/TYMS/CPD/CDKN3/UBE2C/CD24/NDUFS8/PGLS |
| MORI\_PLASMA\_CELL\_UP | MORI\_PLASMA\_CELL\_UP | 48 | -0.44651 | -1.69727 | 0.003446 | 0.019371 | 0.013766 | 3755 | tags=44%, list=21%, signal=35% | HSPA13/LARP1B/TRAM2/MANF/BPGM/SLC30A7/MAGT1/SEC11C/DNAJB9/IP6K1/GPR160/PRRC1/TMEM248/HTATIP2/STT3A/CRELD2/TMED2/SLC44A1/TMEM39A/DERL1/BET1 |
| REACTOME\_REGULATION\_OF\_PTEN\_STABILITY\_AND\_ACTIVITY | REACTOME\_REGULATION\_OF\_PTEN\_STABILITY\_AND\_ACTIVITY | 67 | -0.41589 | -1.69873 | 0.001764 | 0.011304 | 0.008033 | 3912 | tags=42%, list=22%, signal=33% | PSMD9/PSMD6/PSMA3/PSMD5/PSME1/MKRN1/PSMA1/TRIM27/PSMC3/TNKS2/PSMB7/RNF146/PSMC5/PSMD10/PSMD14/PSMD7/PSME3/PSMD2/AKT2/PSMA2/XIAP/WWP2/PSMD1/PSMC2/PTEN/USP13/CSNK2A2/PSMD8 |
| PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_DN | PAPASPYRIDONOS\_UNSTABLE\_ATEROSCLEROTIC\_PLAQUE\_DN | 39 | -0.47076 | -1.70174 | 0.003199 | 0.018191 | 0.012928 | 3498 | tags=38%, list=19%, signal=31% | PKD2/DSEL/EID1/LMOD1/CPED1/PAM/ADCY9/TPD52L1/MYLIP/JAM3/MYH11/RABGAP1/RASL12/MYLK/PFKM |
| LOCKWOOD\_AMPLIFIED\_IN\_LUNG\_CANCER | LOCKWOOD\_AMPLIFIED\_IN\_LUNG\_CANCER | 202 | -0.35345 | -1.70184 | 4.04E-05 | 0.000459 | 0.000326 | 4206 | tags=35%, list=23%, signal=27% | MRPL11/ATP6V1C1/SHC1/MCM7/NDUFS6/CCT6A/SEC61G/NAXE/MBIP/PPP2R3C/TSFM/SEC23A/RBM4/SRP54/CCT5/CAPZA2/GPAA1/OPA1/ZNF74/MRPL9/EIF4G1/USP21/ZNF277/STRN3/CAV2/DAP/KLC1/BLCAP/ADAR/B4GALT3/MTRR/LANCL2/HAX1/LAMTOR1/TFDP1/APIP/CCDC127/ABCF2/RMI2/S100A6/LSM8/MANBAL/CCDC107/FADD/ZSCAN21/SIVA1/SMIM12/PBX1/PPP1CA/MRPL36/LPCAT1/PNN/GEMIN2/SLC39A1/ANAPC15/PPP1R3D/AIP/PLD1/DDX10/POLR2H/CCDC85C/CRKL/USP13/CCS/TRIM44/MRPS17/NRDE2/CALM1/CKS1B/SEC62/MRPL23 |
| GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_DN | GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_DN | 71 | -0.41324 | -1.70251 | 0.001706 | 0.01103 | 0.007839 | 2876 | tags=31%, list=16%, signal=26% | RPS6/LMO2/DUSP23/FZD8/ZNF503/RPRD1A/RUNX1T1/GRAP/CROT/MECOM/SORBS2/MGARP/EXOSC4/TFAP2A/IFIT5/KANK2/PGRMC2/HOXA5/STK38L/FLRT2/PPP1R3C/RHOBTB3 |
| AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_DN | AGUIRRE\_PANCREATIC\_CANCER\_COPY\_NUMBER\_DN | 224 | -0.34711 | -1.70334 | 4.99E-05 | 0.000555 | 0.000394 | 4328 | tags=36%, list=24%, signal=28% | CBY1/MCRS1/ATP2B1/SMAGP/DCTN6/ZPR1/PPP2CB/ACVR1B/YTHDF2/ISOC1/PISD/IL20RA/VLDLR/SF3A1/ASF1A/GCAT/GGA1/TAF12/KDM1A/CEP290/CLIC4/EIF3D/UFSP2/LEMD3/C6orf120/DYRK2/MIEF1/RPS6/HOXC11/PFDN5/ZNF593/GATB/PPP1R12A/PDPK1/MTAP/INTS9/SUN2/ARF3/PRPF31/UBXN8/KITLG/SMUG1/CARD10/GOSR2/REV3L/PUM3/EXTL3/POLR2F/DDX23/HMGCL/PSIP1/PIGV/GTF2E2/STMN1/DCTD/ZBTB24/CCT2/GSTT1/CAND1/PPIL6/YWHAH/TST/RRAGA/SRRM1/TFCP2/AHI1/CACNB3/RSRP1/C12orf29/PHF10/ATG5/CDK19/CDC40/SNX3/NFIB/LSM3/HECA/MN1/PDSS2/SLC35E3/KLHL9 |
| REACTOME\_GLOBAL\_GENOME\_NUCLEOTIDE\_EXCISION\_REPAIR\_GG\_NER | REACTOME\_GLOBAL\_GENOME\_NUCLEOTIDE\_EXCISION\_REPAIR\_GG\_NER | 83 | -0.40223 | -1.70466 | 0.001033 | 0.007378 | 0.005243 | 6248 | tags=54%, list=35%, signal=36% | PARP1/INO80D/RFC2/POLE4/INO80E/PIAS1/ERCC3/RNF111/POLK/COPS6/COPS2/PCNA/NFRKB/COPS3/GTF2H2/GTF2H3/LIG3/GTF2H4/PARP2/MCRS1/RPA3/COPS7B/CUL4A/ACTL6A/COPS8/CDK7/POLD3/COPS7A/ERCC1/RFC1/RFC5/CUL4B/COPS5/UBE2I/RUVBL1/COPS4/RFC4/GTF2H1/UBE2V2/RAD23B/MNAT1/RPA2/ACTR5/CETN2/GTF2H5 |
| KEGG\_RNA\_DEGRADATION | KEGG\_RNA\_DEGRADATION | 51 | -0.44356 | -1.70689 | 0.002754 | 0.01615 | 0.011478 | 2412 | tags=41%, list=13%, signal=36% | C1D/CNOT9/EDC4/XRN1/EXOSC10/CNOT3/EXOSC8/CNOT8/EXOSC5/LSM8/CNOT7/EXOSC3/EXOSC4/EDC3/PAPOLA/LSM1/ZCCHC7/LSM3/DCP2/LSM5/LSM7 |
| KEGG\_PROTEIN\_EXPORT | KEGG\_PROTEIN\_EXPORT | 22 | -0.54414 | -1.70833 | 0.006113 | 0.030599 | 0.021745 | 5668 | tags=68%, list=32%, signal=47% | SRP72/SEC61B/SPCS3/SRPRB/SRP9/SRP19/SEC61G/SRP54/SEC11C/SRP68/OXA1L/SEC61A1/SPCS2/IMMP2L/SEC62 |
| BRUINS\_UVC\_RESPONSE\_EARLY\_LATE | BRUINS\_UVC\_RESPONSE\_EARLY\_LATE | 297 | -0.33662 | -1.71121 | 2.45E-06 | 4.17E-05 | 2.96E-05 | 4054 | tags=34%, list=23%, signal=27% | URM1/SORBS1/SNX24/SMC3/PDZRN3/CAMKK1/TCEANC2/ATG3/EIF1AY/RNF115/STIL/AHRR/PGM2/TMEM223/SHMT2/NR2C1/STAG2/SNAP23/KDM1A/EMC9/LMBRD1/DHX33/SMAP1/RPSA/ARHGEF18/NIPBL/PCGF6/TXNDC16/LNX2/ABCD3/B9D1/DYRK2/C12orf4/SEC22A/FUBP1/PUM1/WDSUB1/MAT2B/SLC4A1AP/CLPP/PRICKLE2/PHF3/PPM1F/CSTF3/CTRC/SMC6/SPTLC2/RMND1/ARID1A/TRAF2/TMEM248/MTA3/SKA2/SSB/MTIF2/NENF/ZBTB4/E2F6/RPP21/MSRB2/DTWD1/RPS20/CTDSPL/SIVA1/UBLCP1/AUNIP/ZCCHC14/NCOA6/CCDC6/PTCD2/KPNA3/GMNN/TUBD1/LPCAT1/ZFAND1/EPC1/PINX1/ANAPC15/UBL4A/UIMC1/SIX3/C12orf29/TGDS/RILPL1/LSM1/DNAAF2/RRAS2/ALKBH8/ZC3H6/CDC40/EPHA4/NDFIP2/CALD1/E2F3/ZNF281/ZC3HC1/INTS3/INSIG2/MITD1/NUP37/NOSIP |
| BIOCARTA\_MEF2D\_PATHWAY | BIOCARTA\_MEF2D\_PATHWAY | 18 | -0.57435 | -1.71212 | 0.008374 | 0.039191 | 0.027851 | 2138 | tags=39%, list=12%, signal=34% | PRKCB/PRKCA/CALM2/PPP3CC/PPP3CA/CALM1/PPP3CB |
| KEGG\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI\_ANCHOR\_BIOSYNTHESIS | KEGG\_GLYCOSYLPHOSPHATIDYLINOSITOL\_GPI\_ANCHOR\_BIOSYNTHESIS | 25 | -0.53072 | -1.71321 | 0.005493 | 0.028231 | 0.020063 | 3368 | tags=64%, list=19%, signal=52% | PGAP1/PIGU/PIGG/PIGT/PIGN/GPAA1/PIGM/PIGC/PIGH/PIGK/PIGX/PIGQ/PIGV/PIGF/PIGP/PIGY |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_UP | RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_MODERATELY\_UP | 101 | -0.39251 | -1.71337 | 0.000272 | 0.002392 | 0.0017 | 3878 | tags=37%, list=22%, signal=29% | PIK3R3/ASXL2/GATM/ZNF207/ZNF704/ENPP4/ALDH5A1/IGFBP5/RARB/ACSS1/USP21/NPRL2/TMTC2/COMMD7/TRAF5/WDR6/TARBP1/SFT2D3/CHPT1/MECOM/PBX1/TRIM2/SP4/LBH/C2CD5/WBP1/SMDT1/ASB3/TSPAN6/MYLIP/LMO4/GGA2/GPD1L/MRPL33/FAM171A1/UBL3/LPIN1 |
| KIM\_GERMINAL\_CENTER\_T\_HELPER\_UP | KIM\_GERMINAL\_CENTER\_T\_HELPER\_UP | 59 | -0.43127 | -1.71369 | 0.001107 | 0.00777 | 0.005522 | 4901 | tags=47%, list=27%, signal=35% | TOX/TMEM64/CXCL13/PAWR/RUFY1/NCKAP1/WDR11/STAMBP/STAU2/PON2/CPSF2/UTP3/SLC25A46/PUDP/STK39/MDM4/TEFM/PPP1CC/OSTM1/PTPN14/ST8SIA4/GIMAP4/ZNF518A/LPP/MAN1A1/PPP3CB/PHACTR2/LZTFL1 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP | BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP | 44 | -0.46288 | -1.71635 | 0.003393 | 0.019114 | 0.013583 | 5247 | tags=52%, list=29%, signal=37% | NT5DC2/ENAH/TUFT1/DUSP12/ATAD2/SHC1/CPD/MRPL9/SAC3D1/SGCE/PON2/CPSF6/SMC4/UBAP2L/RFC4/CD24/CBX1/SUCO/ACLY/CKAP4/SNRPD1/CACYBP/BARD1 |
| REACTOME\_SIGNALING\_BY\_FGFR2\_IIIA\_TM | REACTOME\_SIGNALING\_BY\_FGFR2\_IIIA\_TM | 18 | -0.57712 | -1.72038 | 0.008088 | 0.038249 | 0.027182 | 6159 | tags=67%, list=34%, signal=44% | GTF2F1/POLR2A/POLR2L/FGF2/POLR2I/POLR2D/POLR2C/POLR2K/FGFR2/POLR2F/POLR2H/GTF2F2 |
| WP\_CILIOPATHIES | WP\_CILIOPATHIES | 159 | -0.36935 | -1.72081 | 6.72E-05 | 0.00072 | 0.000512 | 5614 | tags=45%, list=31%, signal=31% | BBS12/DNAAF3/TULP1/WDR19/TBC1D32/IFT27/NME9/NPHP1/TMEM67/NPHP3/PKD1/CEP120/RAB28/RP2/IQCB1/PKHD1/TTC8/DDX59/RAB23/DNAAF5/IFT57/CLUAP1/RPGRIP1L/TTLL5/SMO/CNGA1/PIK3R4/EFHC1/KIAA0586/DCDC2/TCTN3/LCA5/IFT43/KIAA0753/DNAL1/PKD2/POC1A/CEP290/TCTN2/GLI2/ARL6/ARL2BP/CEP83/B9D1/EVC2/CCDC103/TMEM237/NME7/CCDC28B/NEK9/BBS1/CC2D2A/HYLS1/IFT52/DNAJB13/NEK1/DYNC2LI1/TMEM216/BBS4/USP9X/OFD1/CNGB1/BBS10/AHI1/CEP164/BBS2/MKKS/TMEM138/DNAAF2/TRIM32/TAPT1/LZTFL1 |
| TAYLOR\_METHYLATED\_IN\_ACUTE\_LYMPHOBLASTIC\_LEUKEMIA | TAYLOR\_METHYLATED\_IN\_ACUTE\_LYMPHOBLASTIC\_LEUKEMIA | 72 | -0.41754 | -1.72406 | 0.001602 | 0.010505 | 0.007466 | 3590 | tags=42%, list=20%, signal=33% | ZNHIT6/AZIN1/KHDRBS3/ARID5B/CAV1/HSPA4L/RUNDC3B/DPY30/NKX6-1/NUDT9/FAM184B/HSF2/PPP4R3B/PSMA2/TOMM70/CDC42SE1/SMARCAD1/GMNN/NFU1/WDCP/FOXD2/IFT74/ZMPSTE24/NFIA/ZNF827/RBBP5/NDUFA4/STAM/COX5B/KLHL9 |
| REACTOME\_ENDOSOMAL\_SORTING\_COMPLEX\_REQUIRED\_FOR\_TRANSPORT\_ESCRT | REACTOME\_ENDOSOMAL\_SORTING\_COMPLEX\_REQUIRED\_FOR\_TRANSPORT\_ESCRT | 31 | -0.50638 | -1.72514 | 0.003871 | 0.021249 | 0.015101 | 3216 | tags=42%, list=18%, signal=34% | VPS36/TSG101/CHMP7/CHMP4C/CHMP5/VPS25/CHMP4A/CHMP4B/SNF8/VTA1/VPS37D/VPS4B/STAM |
| KEGG\_PROPANOATE\_METABOLISM | KEGG\_PROPANOATE\_METABOLISM | 31 | -0.50694 | -1.72703 | 0.003871 | 0.021249 | 0.015101 | 3285 | tags=55%, list=18%, signal=45% | ALDH7A1/PCCB/ACACB/ACSS1/HIBCH/PCCA/ACADM/ALDH6A1/ALDH1B1/ECHS1/SUCLA2/ALDH3A2/MLYCD/ACACA/SUCLG2/ACAT1/MCEE |
| REACTOME\_CHROMATIN\_MODIFYING\_ENZYMES | REACTOME\_CHROMATIN\_MODIFYING\_ENZYMES | 192 | -0.36084 | -1.72923 | 4.25E-05 | 0.000479 | 0.000341 | 5023 | tags=41%, list=28%, signal=30% | SETDB2/SMARCA2/SMARCD1/HCFC1/CHD4/ACTL6B/JAK2/YEATS4/MEAF6/VPS72/PRMT7/WDR77/MCRS1/EP400/ZZZ3/CREBBP/ARID5B/SUV39H1/MBIP/ACTL6A/RBBP4/ATF2/KAT2A/TAF12/BRD8/AEBP2/OGT/KDM1A/COPRS/DPY30/TADA1/MTA1/JADE3/KMT2A/SETD1B/PRMT6/CARM1/ELP2/SETD3/SAP30/SUPT3H/RUVBL1/PRMT5/ELP4/KANSL1/GATAD2A/SUPT7L/ASH2L/ELP5/ARID1A/SMARCA4/DMAP1/KAT14/MTA3/MECOM/ING4/MTA2/SMARCD3/ENY2/ELP3/PHF21A/PRMT3/DR1/KDM5B/MRGBP/ELP6/EPC1/PRMT1/TAF6L/SAP18/SMARCC1/SMARCE1/EED/RBBP5/KAT6A/SUZ12/TBL1X/PHF20 |
| REACTOME\_METABOLISM\_OF\_COFACTORS | REACTOME\_METABOLISM\_OF\_COFACTORS | 19 | -0.57558 | -1.72991 | 0.006364 | 0.031593 | 0.022452 | 2078 | tags=37%, list=12%, signal=33% | IDH1/COQ3/COQ5/PTS/COQ9/CALM1/PDSS2 |
| KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR | KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR | 43 | -0.46987 | -1.73002 | 0.003065 | 0.017596 | 0.012505 | 6173 | tags=53%, list=34%, signal=35% | RFC2/POLE4/RPA4/ERCC3/PCNA/GTF2H2/GTF2H3/GTF2H4/RPA3/CUL4A/CDK7/POLD3/ERCC1/RFC1/RFC5/CUL4B/RFC4/GTF2H1/RAD23B/MNAT1/RPA2/CETN2/GTF2H5 |
| SEIDEN\_ONCOGENESIS\_BY\_MET | SEIDEN\_ONCOGENESIS\_BY\_MET | 84 | -0.40692 | -1.73041 | 0.000776 | 0.005751 | 0.004087 | 3969 | tags=40%, list=22%, signal=32% | CCT6A/IFITM1/MBIP/TMEM123/SEC23A/GRSF1/YME1L1/CLIC4/LYPLA1/CAPZA1/AASDHPPT/HIGD1A/C6orf62/EPS8/COMMD8/CERS6/MMADHC/MBNL1/SUB1/ZBED5/RRM1/RTCA/COMMD3/GLS/PAPOLA/STK26/ARHGEF12/PTEN/PCMT1/GNAI3/DPM1/PLS3/NSA2/PNRC2 |
| REACTOME\_APOPTOTIC\_FACTOR\_MEDIATED\_RESPONSE | REACTOME\_APOPTOTIC\_FACTOR\_MEDIATED\_RESPONSE | 18 | -0.58246 | -1.7363 | 0.007515 | 0.036079 | 0.02564 | 3908 | tags=56%, list=22%, signal=44% | CASP3/UACA/AVEN/APAF1/GSDMD/APIP/DIABLO/XIAP/CYCS/CARD8 |
| REACTOME\_DUAL\_INCISION\_IN\_TC\_NER | REACTOME\_DUAL\_INCISION\_IN\_TC\_NER | 63 | -0.43203 | -1.73742 | 0.001075 | 0.007583 | 0.005389 | 6173 | tags=54%, list=34%, signal=36% | RFC2/POLR2A/POLE4/POLR2L/TCEA1/ERCC3/POLK/POLR2I/PCNA/PPIE/GTF2H2/GTF2H3/GTF2H4/POLR2D/RPA3/CUL4A/CDK7/ISY1/POLD3/POLR2C/ERCC1/RFC1/RFC5/CUL4B/POLR2K/AQR/RFC4/GTF2H1/POLR2F/MNAT1/PRPF19/RPA2/POLR2H/GTF2H5 |
| REACTOME\_EXPORT\_OF\_VIRAL\_RIBONUCLEOPROTEINS\_FROM\_NUCLEUS | REACTOME\_EXPORT\_OF\_VIRAL\_RIBONUCLEOPROTEINS\_FROM\_NUCLEUS | 30 | -0.51322 | -1.73824 | 0.002527 | 0.014983 | 0.010648 | 4604 | tags=47%, list=26%, signal=35% | HSPA1A/POM121/NUP62/NUP85/NUP43/NUP54/RAE1/NUP133/NUP107/NUP205/RAN/NUP160/XPO1/NUP37 |
| LI\_DCP2\_BOUND\_MRNA | LI\_DCP2\_BOUND\_MRNA | 86 | -0.40751 | -1.74047 | 0.001039 | 0.007402 | 0.00526 | 4005 | tags=43%, list=22%, signal=34% | SMC3/SPEN/RPS5/PI4KAP1/ETFB/UBXN6/TRIB3/PHGDH/NDUFB7/MTX1/RPSA/NOP56/PSMC3/TRAPPC2L/DCXR/LBHD1/ZNF593/PSMC5/UFC1/PPIB/DUS1L/MRPL12/GATAD1/EXOSC4/MRPS11/TST/NDUFA13/PPP1R7/FAHD2A/NDUFS7/NDUFS8/TACO1/LSM3/NOL7/CYC1/WDR74/MRPL23 |
| BURTON\_ADIPOGENESIS\_12 | BURTON\_ADIPOGENESIS\_12 | 28 | -0.51981 | -1.74232 | 0.005711 | 0.029072 | 0.020661 | 5398 | tags=64%, list=30%, signal=45% | KIF2A/PHF12/SRPK2/MKI67/PTBP3/ZNF101/TMEM68/BUB1/NIPBL/ARGLU1/EMC2/IREB2/ARID1A/KITLG/UBE2V2/FAM76B/SP3/RSRP1 |
| REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY | REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY | 101 | -0.39915 | -1.74235 | 0.000144 | 0.001399 | 0.000994 | 3715 | tags=36%, list=21%, signal=28% | RPS5/RPL23/ATF2/TRIB3/RPSA/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/RPL37/RPL23A/RPL17/RPL13A/RPS20/RPS27L/RPL7/RPS23/RPL34/EIF2S2/RPS18/RPL38/FAU/RPS26/RPL26L1/RPL36AL/RPL35A/RPL24/EIF2S3/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| GALE\_APL\_WITH\_FLT3\_MUTATED\_UP | GALE\_APL\_WITH\_FLT3\_MUTATED\_UP | 56 | -0.44727 | -1.74467 | 0.001719 | 0.01109 | 0.007881 | 5191 | tags=54%, list=29%, signal=38% | TELO2/RNF144A/ATF6/RFTN1/HEATR1/NSL1/SLC25A13/MYO1B/RITA1/LARS2/KPNB1/PHF11/LUC7L3/LYPLA1/CFH/VPS54/AVL9/ZNF529/C6orf62/TRMT11/TCF12/SRSF11/UPF3A/HTATIP2/FANCI/LANCL1/AHI1/TRMT61B/RRAS2/MIS12 |
| WIKMAN\_ASBESTOS\_LUNG\_CANCER\_UP | WIKMAN\_ASBESTOS\_LUNG\_CANCER\_UP | 16 | -0.60518 | -1.74584 | 0.006409 | 0.031776 | 0.022582 | 3184 | tags=44%, list=18%, signal=36% | PREPL/SLC6A14/YWHAB/ASB9/ADGRG6/SORBS2/IFT74 |
| GOLDRATH\_HOMEOSTATIC\_PROLIFERATION | GOLDRATH\_HOMEOSTATIC\_PROLIFERATION | 140 | -0.38084 | -1.7462 | 8.32E-05 | 0.000867 | 0.000616 | 3789 | tags=37%, list=21%, signal=30% | AMZ2/UBQLN2/MAGOH/NUDCD2/YME1L1/ITGB1BP1/MRPL9/CREB1/NIFK/RPIA/EID1/CETN3/FUBP1/PDCD2/CPSF2/PSMC5/LIN7C/NHP2/EOMES/IPP/TRNT1/NDUFC1/PPA1/PRPS2/ZRSR2/PRKCA/RAB18/RAD23B/STT3A/MRPS25/NDUFAB1/ETFBKMT/TMX2/UBL5/APP/MRPS33/MPC2/CYCS/CMBL/PARK7/NPM3/FAM162A/ARL14EP/RAB5C/QDPR/CACYBP/TIMM22/TGOLN2/EBF3/UBE2E1/HSPE1/SEC62 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_14 | YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_14 | 138 | -0.38175 | -1.74723 | 8.57E-05 | 0.000888 | 0.000631 | 3486 | tags=38%, list=19%, signal=31% | EBNA1BP2/MRPS10/GGA1/YBX3/SNRPA1/TBCB/UBFD1/EIF4G1/DNAJC2/SRSF1/LBHD1/SLAIN1/GALM/TMEM167A/CARM1/RCN1/MRPS18B/NHP2/METAP1/GATAD2A/PPA1/SMARCA4/PRRC1/PIGQ/CISD1/RAB34/FBL/TMEM14C/SEC61A1/MRPL12/SERPINH1/TOMM70/P3H4/RAN/UQCC2/IPO5/PDLIM3/PDIA4/RWDD1/PREP/UBE2M/PRMT1/MRPL20/PKDCC/PSMD1/HMGN5/SSR3/ERGIC1/PTH1R/GOLGA5/WDR74/EIF2B5 |
| REACTOME\_ESTABLISHMENT\_OF\_SISTER\_CHROMATID\_COHESION | REACTOME\_ESTABLISHMENT\_OF\_SISTER\_CHROMATID\_COHESION | 10 | -0.70396 | -1.74764 | 0.007862 | 0.037345 | 0.026539 | 4849 | tags=80%, list=27%, signal=58% | RAD21/SMC3/ESCO1/STAG1/PDS5B/STAG2/WAPL/ESCO2 |
| REACTOME\_MITOCHONDRIAL\_BIOGENESIS | REACTOME\_MITOCHONDRIAL\_BIOGENESIS | 71 | -0.42431 | -1.74811 | 0.000993 | 0.007136 | 0.005071 | 3624 | tags=37%, list=20%, signal=29% | IDH2/ATF2/MTX1/CREB1/MEF2C/ESRRA/CARM1/SSBP1/RXRA/MAPK12/MTX2/CHCHD3/SAMM50/GLUD2/SMARCD3/SIRT4/TMEM11/NCOA6/TFB1M/SIRT5/CYCS/PRKAB2/MED1/CALM1/PRKAB1/TBL1X |
| REACTOME\_FORMATION\_OF\_TC\_NER\_PRE\_INCISION\_COMPLEX | REACTOME\_FORMATION\_OF\_TC\_NER\_PRE\_INCISION\_COMPLEX | 52 | -0.45471 | -1.74851 | 0.001638 | 0.010647 | 0.007567 | 5921 | tags=58%, list=33%, signal=39% | POLR2L/TCEA1/ERCC3/COPS6/COPS2/POLR2I/PPIE/COPS3/GTF2H2/GTF2H3/GTF2H4/POLR2D/COPS7B/CUL4A/COPS8/CDK7/ISY1/COPS7A/POLR2C/CUL4B/COPS5/POLR2K/AQR/COPS4/GTF2H1/POLR2F/MNAT1/PRPF19/POLR2H/GTF2H5 |
| REACTOME\_ORGANELLE\_BIOGENESIS\_AND\_MAINTENANCE | REACTOME\_ORGANELLE\_BIOGENESIS\_AND\_MAINTENANCE | 259 | -0.35229 | -1.74855 | 1.50E-06 | 2.77E-05 | 1.97E-05 | 5154 | tags=42%, list=29%, signal=30% | TUBA1B/NCOA1/NPHP3/HELZ2/TFB2M/PKD1/CDK5RAP2/TUBB2B/GABPA/HCFC1/PCM1/RP2/IQCB1/TTC8/TNPO1/TUBB6/ACTR1A/IFT57/CENPJ/POLRMT/CKAP5/CLUAP1/RPGRIP1L/EXOC7/EXOC6/SMO/CREBBP/TCTN3/TUBB8/IFT43/HAUS1/IDH2/ATF2/PLK1/CCT5/HDAC6/PKD2/GBF1/DYNLRB1/CEP290/TCTN2/MTX1/CREB1/DYNLRB2/CCT4/ARL6/CEP83/B9D1/MEF2C/ESRRA/CEP63/CEP135/CARM1/CCP110/SSBP1/DCTN3/CEP70/BBS1/RXRA/CEP57/KIFAP3/DCTN1/CC2D2A/MAPK12/MTX2/CHCHD3/SAMM50/IFT52/MCHR1/GLUD2/DYNC2LI1/SMARCD3/TTC30A/SIRT4/IFT46/CCT2/TMEM11/TMEM216/NCOA6/BBS4/OFD1/CNGB1/TFB1M/BBS10/DYNLL1/AHI1/HSPB11/CEP164/HAUS7/EXOC5/BBS2/MKKS/SIRT5/CYCS/RAB11FIP3/DCTN2/IFT74/PRKAB2/MED1/TRIP11/CALM1/PRKAB1/DYNC1I2/CETN2/CLASP1/TBL1X/RAB11A/LZTFL1 |
| REACTOME\_NUCLEOTIDE\_EXCISION\_REPAIR | REACTOME\_NUCLEOTIDE\_EXCISION\_REPAIR | 108 | -0.39991 | -1.75088 | 0.000259 | 0.002306 | 0.001639 | 6248 | tags=54%, list=35%, signal=35% | PARP1/INO80D/RFC2/POLR2A/POLE4/POLR2L/INO80E/TCEA1/PIAS1/ERCC3/RNF111/POLK/COPS6/COPS2/POLR2I/PCNA/NFRKB/PPIE/COPS3/GTF2H2/GTF2H3/LIG3/GTF2H4/PARP2/POLR2D/MCRS1/RPA3/COPS7B/CUL4A/ACTL6A/COPS8/CDK7/ISY1/POLD3/COPS7A/POLR2C/ERCC1/RFC1/RFC5/CUL4B/COPS5/UBE2I/POLR2K/RUVBL1/AQR/COPS4/RFC4/GTF2H1/UBE2V2/POLR2F/RAD23B/MNAT1/PRPF19/RPA2/POLR2H/ACTR5/CETN2/GTF2H5 |
| WP\_NUCLEOTIDE\_EXCISION\_REPAIR | WP\_NUCLEOTIDE\_EXCISION\_REPAIR | 42 | -0.48157 | -1.75467 | 0.002246 | 0.013632 | 0.009688 | 4793 | tags=43%, list=27%, signal=31% | GTF2H2/GTF2H3/GTF2H4/RPA3/CUL4A/CDK7/POLD3/ERCC1/RFC1/RFC5/CUL4B/RFC4/GTF2H1/RAD23B/MNAT1/RPA2/CETN2/GTF2H5 |
| WHITFIELD\_CELL\_CYCLE\_S | WHITFIELD\_CELL\_CYCLE\_S | 128 | -0.39042 | -1.75478 | 7.36E-05 | 0.00078 | 0.000554 | 5028 | tags=44%, list=28%, signal=32% | ORC3/EIF4EBP2/ABCA5/CENPM/DDIAS/SLC38A2/PHIP/ATAD2/MASTL/UBE2T/SHC1/TTLL7/RSRC2/EFHC1/NT5DC1/CREBZF/NAB1/HSPB8/REEP1/CDC7/OGT/RBBP8/DSCC1/ESCO2/SLC22A3/USP1/SLF2/CERS6/RFC4/BMI1/CASP2/BIVM/TTC31/OSGIN2/DNAJB4/LYRM7/ADGRG6/ZBED5/LINC00339/RRM1/MBD4/ABHD10/ZNF217/DCAF16/CENPQ/CCDC14/BBS2/RPA2/DNA2/NRDC/CALD1/UBL3/COQ9/NUP160/INSIG2/RHOBTB3 |
| REACTOME\_ANTIGEN\_PROCESSING\_UBIQUITINATION\_PROTEASOME\_DEGRADATION | REACTOME\_ANTIGEN\_PROCESSING\_UBIQUITINATION\_PROTEASOME\_DEGRADATION | 296 | -0.34558 | -1.75647 | 2.40E-06 | 4.11E-05 | 2.92E-05 | 5353 | tags=45%, list=30%, signal=32% | FBXL5/ANAPC1/UBE2A/STUB1/FBXL20/FBXL8/FBXW11/RCHY1/SKP2/LRSAM1/UBE2G1/PSMD11/UBE2G2/KBTBD6/CUL2/ITCH/TRIM4/UBE2W/UBE2K/FBXW5/ANAPC7/PSMA6/TRIM37/HECTD2/UFL1/TPP2/BTRC/KLHL3/TRIM39/PSMD9/UBA5/RNF14/LRR1/UBE2J2/PSMD6/FBXO15/ASB2/PJA1/UBAC1/SKP1/PSMA3/ANAPC11/UBE2E3/WSB1/UBE3A/PSMD5/RNF7/RNF115/PSME1/MKRN1/RNF34/PSMA1/HECW2/RNF25/FBXW2/KLHL22/SPSB4/ANAPC4/RBBP6/TRIM41/PSMC3/SH3RF1/FBXO21/GLMN/FBXO11/PSMB7/LMO7/UBE2F/CDC26/FBXW9/PSMC5/ASB9/PSMD10/UBE2C/LTN1/CDC34/PSMD14/CUL5/FBXO30/UBE3C/PSMD7/TRAIP/KCTD6/FBXO31/ASB8/UBE2V2/PSME3/PSMD2/UBR2/KBTBD7/BTBD6/UBE2Q1/ZNRF2/FBXO6/ANAPC5/KLHL2/BLMH/ASB13/WWP1/PSMA2/BTBD1/KLHL20/RNF220/UBE2O/FZR1/ANAPC10/FBXL15/FBXW4/UBE2E2/FBXO32/ASB3/UBE2M/MYLIP/RNF138/PSMD1/UBE2D4/PSMC2/ARIH2/NEDD4L/UBA3/VHL/ANAPC13/UBE4A/PSMD8/HERC5/TRIM32/UBE2Q2/MEX3C/UBE2E1/CDC23/KLHL9/KLHL42 |
| REACTOME\_CLASS\_I\_PEROXISOMAL\_MEMBRANE\_PROTEIN\_IMPORT | REACTOME\_CLASS\_I\_PEROXISOMAL\_MEMBRANE\_PROTEIN\_IMPORT | 20 | -0.57971 | -1.75821 | 0.004135 | 0.022455 | 0.015958 | 6133 | tags=70%, list=34%, signal=46% | PEX13/FIS1/PEX3/PXMP2/PEX11B/ACBD5/ABCD3/ABCD1/PEX16/SLC25A17/ATAD1/ALDH3A2/PEX2/PEX19 |
| CAIRO\_LIVER\_DEVELOPMENT\_UP | CAIRO\_LIVER\_DEVELOPMENT\_UP | 161 | -0.37634 | -1.75877 | 3.96E-05 | 0.000452 | 0.000321 | 3426 | tags=31%, list=19%, signal=25% | IGFBP5/KLHL22/RARB/WLS/TBCB/GRWD1/FZD2/NR2F1/UTP3/SYNE2/SLC22A3/RCN2/RCN1/FKBP3/KIFAP3/FAM136A/LARGE1/EVL/KCTD15/TRO/FKBP10/SMARCA1/PPIC/PRRX2/MFAP2/SMARCD3/ARMCX1/SERPINH1/FAM174B/RWDD1/EHBP1/UCHL3/TSPAN6/LDB2/CTPS1/TMEM50B/PTN/ARMCX2/PTBP2/RNF138/NPAS2/RAB11FIP3/EMCN/EFNB2/SLC25A4/PLS3/GAS1/PFDN4/NDN/TMEM47 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_UP | HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_UP | 170 | -0.37376 | -1.76196 | 5.62E-05 | 0.000619 | 0.00044 | 5070 | tags=48%, list=28%, signal=35% | RTN3/MGAT2/SEMA5A/EAPP/EIF3A/TOX/ORC5/GMFG/CREB3L2/IP6K2/TNPO1/TNFRSF1A/PDCD4/RCBTB2/NSL1/CTBP1/LIPT1/HNRNPU/CASK/FXR1/ETHE1/CASP1/ARMCX6/MFAP3/RBBP4/RPL23/ATG12/RBM15/C1orf115/CAPZA2/ITGB1BP1/CFH/FBXO11/CCL19/SRSF9/NME7/ELAVL1/C6orf62/PPIB/YTHDF1/DPP8/PDGFD/PPIH/GID8/RBM25/CRBN/TMEM248/THYN1/ERH/CCNB1IP1/IGFBP3/SP3/TRIM2/ITGB3BP/JAM2/SRRM1/ZNHIT3/LBH/NDUFA8/PDIA4/SREK1/LDB2/GEMIN6/KANK2/DPH5/GCA/NUAK1/MPRIP/NFIB/UPF2/CD52/BARD1/TMEM14A/CALM1/TXNIP/CLDN5/SUZ12/RPS21/CUTC/NME3/CNN3/TRAK2 |
| LEE\_METASTASIS\_AND\_RNA\_PROCESSING\_UP | LEE\_METASTASIS\_AND\_RNA\_PROCESSING\_UP | 16 | -0.61087 | -1.76226 | 0.0057 | 0.029046 | 0.020642 | 3598 | tags=50%, list=20%, signal=40% | GRSF1/RAE1/RNGTT/DHX16/EXOSC8/FBL/BOP1/COIL |
| REACTOME\_SEPARATION\_OF\_SISTER\_CHROMATIDS | REACTOME\_SEPARATION\_OF\_SISTER\_CHROMATIDS | 185 | -0.36826 | -1.76544 | 4.41E-05 | 0.000496 | 0.000353 | 5398 | tags=48%, list=30%, signal=34% | KIF2A/CENPC/ANAPC1/PPP2R5B/BUB3/AHCTF1/TUBA1B/BUB1B/CENPE/PSMD11/CENPM/TUBB2B/RAD21/NUDC/ANAPC7/PSMA6/CENPL/TUBB6/NSL1/PSMD9/CKAP5/KIF2C/PSMD6/CENPA/KNTC1/CLIP1/PPP2CB/SMC3/NUP85/PSMA3/ANAPC11/PSMD5/PSME1/STAG1/TUBB8/PDS5B/PSMA1/PLK1/BUB1/NUP43/STAG2/ANAPC4/NUP133/PSMC3/PPP2R5C/PSMB7/WAPL/TAOK1/DYNC1LI1/CDC26/PSMC5/PSMD10/UBE2C/PSMD14/NUP107/PSMD7/ZW10/PSME3/PSMD2/SKA2/SPDL1/ESPL1/ANAPC5/PPP2R5A/PSMA2/PPP1CC/ITGB3BP/DSN1/PPP2R5E/ANAPC10/DYNLL1/NDC80/DYNC1I1/ANAPC15/CENPQ/PSMD1/PSMC2/ANAPC16/PSMD8/UBE2E1/DYNC1I2/NUP160/CDC23/MIS12/CLASP1/XPO1/NUP37/DYNC1LI2 |
| WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS | WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS | 87 | -0.4128 | -1.76565 | 0.00066 | 0.004991 | 0.003547 | 3217 | tags=31%, list=18%, signal=26% | RPSA/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/RPL37/RPL23A/RPL17/RPL13A/RPS20/RPL7/RPS23/RPL34/RPS18/RPL38/FAU/RPS26/RPL35A/RPL24/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| BOUDOUKHA\_BOUND\_BY\_IGF2BP2 | BOUDOUKHA\_BOUND\_BY\_IGF2BP2 | 100 | -0.40409 | -1.76726 | 0.000179 | 0.001685 | 0.001197 | 3891 | tags=38%, list=22%, signal=30% | ROMO1/CCNG1/MAP1LC3B/HIGD2A/VPS29/TNNI1/RPL36/TNKS2/VPS54/RPL22/ZDHHC8/VAMP8/UNC50/EPS8/GID8/NDUFA1/ABCB6/EMC6/CISD1/AK1/S100A6/PSIP1/SPOP/DYNLL1/CRYAB/AP3M1/ISCA2/FAU/VBP1/CCND3/RPS4X/LIMS2/LSM5/CHCHD4/GNG12/INSIG2/XPO1/COX7C |
| REACTOME\_CELLULAR\_RESPONSE\_TO\_HEAT\_STRESS | REACTOME\_CELLULAR\_RESPONSE\_TO\_HEAT\_STRESS | 97 | -0.40538 | -1.76735 | 0.000552 | 0.004319 | 0.003069 | 4037 | tags=35%, list=22%, signal=27% | RPA3/CREBBP/NUP85/HSPA1L/HSPA13/HSPA2/HSPB8/HDAC6/NUP43/HSPA4L/NUP54/RAE1/NUP133/DNAJC2/HSF1/HIKESHI/BAG5/NUP107/HSBP1/NUP205/MRPL18/SERPINH1/BAG3/CAMK2G/BAG1/VCP/HSPB2/CRYAB/RPA2/RPS19BP1/HSPA12B/DNAJC7/NUP160/NUP37 |
| REACTOME\_MRNA\_DECAY\_BY\_5\_TO\_3\_EXORIBONUCLEASE | REACTOME\_MRNA\_DECAY\_BY\_5\_TO\_3\_EXORIBONUCLEASE | 15 | -0.62665 | -1.76762 | 0.005793 | 0.029298 | 0.020821 | 878 | tags=40%, list=5%, signal=38% | EDC3/LSM1/LSM3/DCP2/LSM5/LSM7 |
| REACTOME\_INTERACTIONS\_OF\_REV\_WITH\_HOST\_CELLULAR\_PROTEINS | REACTOME\_INTERACTIONS\_OF\_REV\_WITH\_HOST\_CELLULAR\_PROTEINS | 34 | -0.50725 | -1.76943 | 0.003915 | 0.021426 | 0.015227 | 4604 | tags=44%, list=26%, signal=33% | POM121/NUP62/RANBP1/NUP85/NUP43/NUP54/KPNB1/RAE1/NUP133/NUP107/NUP205/RAN/NUP160/XPO1/NUP37 |
| REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION | REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION | 45 | -0.47362 | -1.77261 | 0.001987 | 0.012366 | 0.008788 | 4834 | tags=58%, list=27%, signal=42% | POLR2L/ERCC3/CHD3/RBBP7/CHD4/GTF2H2/GTF2H3/GTF2H4/TAF1A/POLR1D/RBBP4/CDK7/KAT2A/CBX3/TBP/MTA1/POLR2K/GATAD2A/GTF2H1/POLR2F/MTA3/MTA2/MNAT1/TAF1B/POLR2H/GTF2H5 |
| FARMER\_BREAST\_CANCER\_CLUSTER\_2 | FARMER\_BREAST\_CANCER\_CLUSTER\_2 | 33 | -0.51106 | -1.77632 | 0.002403 | 0.014342 | 0.010192 | 5429 | tags=55%, list=30%, signal=38% | KIF11/BUB1B/CENPE/RRS1/CCNA2/RAD54B/ATAD2/CENPA/BUB1/PRC1/NCAPG/MTERF3/MCM4/RB1CC1/NDC80/MTFR1/MRPL15/ARMC1 |
| MARTINEZ\_RESPONSE\_TO\_TRABECTEDIN\_DN | MARTINEZ\_RESPONSE\_TO\_TRABECTEDIN\_DN | 259 | -0.35792 | -1.7765 | 6.35E-07 | 1.34E-05 | 9.50E-06 | 5298 | tags=45%, list=30%, signal=32% | NET1/C8orf76/FNTA/BUB3/TBL1XR1/PCNA/LRRC42/SRPK2/USP8/CCNA2/TBK1/EIF3A/TARDBP/PTGES3/GTF2H2/RAD54B/ZMYND8/EIF4B/OSBP/SACS/PAMR1/CDC5L/MEAF6/MCM3/USP3/UBE2T/RNF14/EP400/CDC42BPA/RSPRY1/RSRC2/DNAJA2/ARPC5L/HSPA1L/RAB2A/TSFM/PLK1/CDK7/BUB1/PEX1/ZDHHC16/OGT/KDM1A/POLD3/BIRC6/WNT5B/CCT4/NBN/RBM17/CRLF3/SPIN1/PRKD3/SRSF9/GGPS1/PTPRK/DLG5/SLC4A1AP/CORO1C/UBE2C/EPS8/PSMD14/CMPK1/TARBP1/RBM25/GTF2H1/SLC25A17/PAFAH2/TMEM248/PSME3/MAP3K4/WEE1/GAPVD1/MTIF2/RAD23B/SUPV3L1/MFAP1/FRYL/LSM14A/FADD/MED17/LUZP1/TIMM21/TRIP4/RNF220/CXXC5/PPP1CC/NCOA6/PPP2R5E/ZNHIT3/METTL13/RBM14/ADSL/GOPC/FAF1/MRPS35/TMEM138/FNDC3A/MAP3K7/PSMC2/NOC3L/ATG5/MCTS1/NPAS2/DNAAF2/EPS15/JAG1/RABGAP1/SNIP1/ZNF281/IMMP2L/MRPL1/CDC23/HSPE1/MRPL15/NMI/MTMR4 |
| REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER | REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER | 76 | -0.42811 | -1.77702 | 0.000521 | 0.004114 | 0.002923 | 6173 | tags=57%, list=34%, signal=37% | RFC2/POLR2A/POLE4/POLR2L/TCEA1/ERCC3/POLK/COPS6/COPS2/POLR2I/PCNA/PPIE/COPS3/GTF2H2/GTF2H3/LIG3/GTF2H4/POLR2D/RPA3/COPS7B/CUL4A/COPS8/CDK7/ISY1/POLD3/COPS7A/POLR2C/ERCC1/RFC1/RFC5/CUL4B/COPS5/POLR2K/AQR/COPS4/RFC4/GTF2H1/POLR2F/MNAT1/PRPF19/RPA2/POLR2H/GTF2H5 |
| WHITFIELD\_CELL\_CYCLE\_G1\_S | WHITFIELD\_CELL\_CYCLE\_G1\_S | 122 | -0.39877 | -1.77792 | 8.67E-05 | 0.000895 | 0.000636 | 3804 | tags=37%, list=21%, signal=29% | CREBZF/AP3M2/USP53/HSPB8/ZMYND19/NUP43/ORMDL1/POLD3/DHFR2/RUNX1/DSCC1/FLAD1/PDXP/ARGLU1/TRA2A/MCM4/HSF2/INTS8/CASP2/AP4B1/NPAT/RMI2/FANCG/BRD7/EIF2A/ANKRD10/GINS3/CLSPN/GMNN/PNN/ADCK2/RSRP1/ACYP1/RNF113A/TMEM243/KANK2/SSR3/MRI1/SPIN3/GON7/BARD1/SPIN4/ESD/TTC14/SEC62 |
| REACTOME\_HIV\_LIFE\_CYCLE | REACTOME\_HIV\_LIFE\_CYCLE | 139 | -0.38927 | -1.78108 | 6.32E-05 | 0.000685 | 0.000487 | 4797 | tags=40%, list=27%, signal=29% | TAF7/GTF2H2/GTF2H3/POM121/GTF2H4/POLR2D/NUP62/RANBP1/GTF2E1/CCNT2/NUP85/GTF2A2/CDK7/NUP43/NUP54/TAF12/RAE1/RNGTT/TAF11/NUP133/POLR2C/TSG101/NELFB/TBP/NMT1/NMT2/POLR2K/CHMP7/CHMP4C/CHMP5/NUP107/TAF1L/GTF2H1/TAF5/POLR2F/CHMP4A/CHMP4B/PSIP1/NUP205/SUPT4H1/GTF2E2/MNAT1/RAN/TAF9B/TAF4/VTA1/NEDD4L/VPS37D/POLR2H/VPS4B/GTF2F2/NUP160/GTF2H5/XPO1/NUP37 |
| BORCZUK\_MALIGNANT\_MESOTHELIOMA\_UP | BORCZUK\_MALIGNANT\_MESOTHELIOMA\_UP | 289 | -0.35251 | -1.78271 | 1.53E-06 | 2.80E-05 | 1.99E-05 | 6337 | tags=55%, list=35%, signal=36% | TK1/SRSF10/TAF5L/RAC1/CKS2/HSPA4/PARP1/RAF1/RFC2/SSR1/ZMYND11/MAD2L1/MCM6/ZNF318/ACAP2/HDGF/PAK2/KIF5B/MAPK9/SLC25A1/PDCD6/COPA/CCT3/NAP1L1/SCAMP3/SS18/ADNP/MAP2K1/SEC24D/KIF11/KIF2A/AHCY/TMEM97/THAP11/UBE2A/YKT6/FNTA/BUB3/PCNA/BUB1B/COA1/UBE2G1/SMAD4/OSMR/SRPK2/PTGES3/RAD21/RP2/TUSC3/VRK2/G3BP1/TNPO1/EIF3I/FADS1/MAGED1/S100A2/SEC23IP/VAMP7/AZIN1/MRPL3/CCZ1/WSB2/AP3B1/BICD2/TRIAP1/CDC42BPA/CREBBP/DBI/SKP1/NCK1/UBE2E3/SEC61G/QSOX1/CCNG1/GTF2A2/TMEM183A/UBQLN2/YWHAQ/MPZL1/MRPL28/ACTL6A/RBBP4/UROS/SDHB/CDK7/CCT5/SMNDC1/LAMC1/TAF12/TERF1/KDM1A/STIP1/TAF11/PIGC/LYPLA1/RASA1/IARS2/CBX3/SRSF1/FZD6/RAP1A/PSMB7/BPHL/SMC4/COPS5/RCN2/UBAP2L/SSBP1/NHP2/PSMD10/SAP30/KRIT1/CNOT8/UBE2C/TMED7/KIFAP3/RAB32/EMG1/RFC4/LAMTOR5/DYNLT3/PRPS2/TFDP1/PRKCA/PSMD2/WEE1/FBL/RAB4A/BLMH/PSMA2/CCT2/HACD2/RAN/ARPC4/CALU/KDM5B/USP9X/CGRRF1/MED21/EIF3H/KRT10/SRPK1/MPC2/ARL1/PAPOLA/RIF1/VBP1/PARK7/SMARCC1/PCMT1/PSMD8/ZBTB14/PGRMC1/CALD1/LDOC1/BET1/CKS1B/MSH6/SNRPF/RHOBTB3 |
| REACTOME\_MRNA\_SPLICING\_MINOR\_PATHWAY | REACTOME\_MRNA\_SPLICING\_MINOR\_PATHWAY | 51 | -0.46341 | -1.7833 | 0.001232 | 0.008459 | 0.006012 | 3111 | tags=35%, list=17%, signal=29% | POLR2C/SRSF1/SNU13/PRPF8/POLR2K/SF3B3/SNRNP40/ZRSR2/POLR2F/DDX23/SNRNP25/SNRPD1/ZCRB1/SF3B6/SF3B5/POLR2H/GTF2F2/SNRPF |
| REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION\_INITIATION | REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION\_INITIATION | 42 | -0.48969 | -1.78424 | 0.001786 | 0.011339 | 0.008058 | 4834 | tags=60%, list=27%, signal=44% | POLR2L/ERCC3/CHD3/RBBP7/CHD4/GTF2H2/GTF2H3/GTF2H4/TAF1A/POLR1D/RBBP4/CDK7/KAT2A/TBP/MTA1/POLR2K/GATAD2A/GTF2H1/POLR2F/MTA3/MTA2/MNAT1/TAF1B/POLR2H/GTF2H5 |
| REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_SMALL\_RNAS | REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_SMALL\_RNAS | 43 | -0.48541 | -1.78724 | 0.002049 | 0.012725 | 0.009043 | 4604 | tags=47%, list=26%, signal=35% | POLR2I/AGO1/POM121/POLR2D/NUP62/NUP85/NUP43/NUP54/RAE1/NUP133/POLR2C/IPO8/POLR2K/NUP107/POLR2F/NUP205/RAN/POLR2H/NUP160/NUP37 |
| KEGG\_VALINE\_LEUCINE\_AND\_ISOLEUCINE\_DEGRADATION | KEGG\_VALINE\_LEUCINE\_AND\_ISOLEUCINE\_DEGRADATION | 43 | -0.48801 | -1.79678 | 0.001874 | 0.011787 | 0.008377 | 4648 | tags=51%, list=26%, signal=38% | ALDH7A1/HSD17B10/AOX1/PCCB/HMGCS2/ACAA1/HIBCH/MCCC1/PCCA/ACADM/ALDH6A1/ALDH1B1/ECHS1/HMGCS1/HMGCL/HIBADH/ALDH3A2/OXCT1/HADH/DLD/ACAT1/MCEE |
| RODRIGUES\_THYROID\_CARCINOMA\_ANAPLASTIC\_DN | RODRIGUES\_THYROID\_CARCINOMA\_ANAPLASTIC\_DN | 496 | -0.3385 | -1.79717 | 1.69E-09 | 5.85E-08 | 4.16E-08 | 3412 | tags=29%, list=19%, signal=24% | SMCO4/TEF/FAM110B/ACAA1/PRKAR1A/COX20/ICA1L/SNRPA1/EIF4E3/COX7B/STRBP/BDH2/STAT5B/SH3RF1/VGLL4/CCDC92/CFH/FBXO21/CDON/CAV2/BTD/CERK/PTPRB/B9D1/SLC25A15/MEF2C/PHYH/ZNF706/SASH1/SYNE2/HDAC11/HIGD1A/SNTB2/NFATC3/MRPS6/GSTA4/NME7/ADGRA3/NISCH/GPR27/RASSF9/BBS1/EIF1AX/NLK/TMEM116/RXRA/SNRPN/RERE/MCAM/PDGFD/TMED4/ANKRD13A/SLC35D2/SESN1/GPRASP2/N4BP2L2/NDFIP1/GALK2/STX12/CROT/SNRK/CYFIP2/ANKRD6/MED13L/PRKG1/LRIG3/IQCK/LOXL4/CHPT1/RAB18/MPZL2/CCDC80/AKT2/KBTBD7/SLC6A13/MSRB2/AKAP1/CBX7/ENY2/MTURN/PCDH18/ZBTB20/ALDH3A2/PBX1/SNHG5/GLT8D2/OFD1/ST8SIA4/LBH/MEIS3P1/ZSCAN18/ZNF518A/SMDT1/ZC2HC1A/TMEM50B/CYB5R1/NSUN4/ARMCX2/CLN5/HDHD2/MYLIP/NIPSNAP3B/TEX2/DEPTOR/AMY1A/PLPP1/EED/FAM162A/WFS1/GPD1L/RILPL1/FYCO1/EPM2AIP1/SLC44A1/ZC3H6/ZCCHC24/SLC25A4/SH3BGRL2/PURA/ANKRD46/WASF3/CALM1/NT5C3B/SMIM19/CSGALNACT1/PLSCR4/BANK1/AXIN2/PTPN11/CBR4/MAN1A1/PPP3CB/PDSS2/FOXO1/SLC25A23/PPP1R13B/HHEX/CLDN11/ITGA1/PHACTR2/SBSPON/RNF170/LZTFL1/ZNF573/PARM1 |
| ALONSO\_METASTASIS\_UP | ALONSO\_METASTASIS\_UP | 185 | -0.37544 | -1.79986 | 2.05E-05 | 0.000262 | 0.000187 | 3919 | tags=42%, list=22%, signal=33% | DUSP12/CDYL/CDC5L/RCBTB2/NDUFB3/TIMM10/TGFBR2/GOLT1B/STK24/PPP2CB/SKP1/ARID5B/IGFBP1/YWHAQ/RBM4/BCCIP/CAV1/SDHD/CCT5/PPP1R8/PRKAR1A/CDH2/CLIC4/MRPL37/PPP2R5C/ACADM/RNASE4/PMM1/EIF1B/IDE/GSTA4/CHCHD2/NHP2/ENC1/SLC38A9/AK4/ASH2L/LAMTOR5/SLC25A17/MMADHC/SMARCA1/TMEM248/PRKCA/WEE1/FAM114A1/MFAP1/NDUFAB1/HIBADH/SMIM12/RAN/UBL5/AKR7A2/GABARAP/RRAGA/ZNHIT3/CXCL12/METTL13/ADSL/SMDT1/PRDX5/EIF3H/TMEM50B/MRPS22/VBP1/POLR3K/CHCHD1/NDUFB11/GON7/RPL35A/SPARC/CYC1/SERPINA3/CKS1B/GNG12/PPP1R3C/MRPL15/PFKM/COX6B1 |
| PUJANA\_XPRSS\_INT\_NETWORK | PUJANA\_XPRSS\_INT\_NETWORK | 161 | -0.38622 | -1.80495 | 1.68E-05 | 0.000222 | 0.000158 | 5406 | tags=45%, list=30%, signal=32% | ABCB7/TTF2/DDX39B/CENPC/ZNF330/BUB3/PCNA/SKP2/MPHOSPH9/CCNA2/NASP/COPS3/RAD21/MKI67/CNOT9/DDX46/CENPA/KNTC1/SMC3/TIMELESS/NCK1/RBBP4/CDC7/ASF1A/RBBP8/SNRPA1/ATP11B/TAF11/CBX3/RPIA/CNOT3/PPP2R5C/FUBP1/SMC4/USP49/NCAPD2/USP1/EXOSC8/MCM4/UBE2C/CEP57/METAP1/RFC4/SRSF11/CASP2/TFDP1/DNAJC9/PSIP1/FANCI/ESPL1/BLMH/STMN1/PPP1CC/RRM1/AATF/DUT/KATNA1/ZNHIT3/PNN/NDC80/EIF3H/ACYP1/RIF1/DNA2/NFYB/HMGN4/RAD51C/NAE1/DCP2/SUZ12/LARP7/XPO1 |
| BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G3\_UP | BOYAULT\_LIVER\_CANCER\_SUBCLASS\_G3\_UP | 182 | -0.3784 | -1.80723 | 1.53E-05 | 0.000205 | 0.000146 | 4115 | tags=40%, list=23%, signal=31% | FXR1/PLEKHF2/DUSP3/USP14/SEC61G/CCDC86/PPP2R3C/ACTL6A/RBBP4/EBNA1BP2/TSN/GTF3C3/CCT5/BUB1/CANT1/KPNB1/ITGB1BP1/PRKAR1A/SNRPA1/ENOPH1/NOL11/CBX3/CCT4/HJURP/WDR12/RPL8/AGA/PDCD2/TPRKB/NCAPG/KLC1/COPS5/NCAPD2/POLR2K/EMC1/PRMT5/SNX7/PSMD14/RPRD1A/NUP107/UBE2V2/PSME3/UTP18/CASC3/MPZL2/DNAJC10/FANCI/PIGF/SUB1/STMN1/BRD7/CCT2/PPP1CC/ARPC4/DR1/IPO5/LPCAT1/LANCL1/MRPL42/ACACA/ADSL/NDC80/EIF3H/PTBP2/PAPOLA/BOP1/FNBP1L/MED1/COIL/NRAS/XPO1/NUP37 |
| PUJANA\_BRCA\_CENTERED\_NETWORK | PUJANA\_BRCA\_CENTERED\_NETWORK | 114 | -0.41068 | -1.80762 | 3.87E-05 | 0.000446 | 0.000317 | 5406 | tags=46%, list=30%, signal=32% | ABCB7/TTF2/DDX39B/ZNF330/BUB3/PCNA/SKP2/CCNA2/NASP/COPS3/RAD21/CNOT9/DDX46/SMC3/TIMELESS/NCK1/RBBP4/CDC7/ASF1A/RBBP8/SNRPA1/TAF11/RPIA/CNOT3/PPP2R5C/SMC4/NCAPD2/MCM4/UBE2C/METAP1/RFC4/SRSF11/TFDP1/PSIP1/FANCI/ESPL1/PPP1CC/RRM1/AATF/DUT/KATNA1/ZNHIT3/NDC80/EIF3H/DNA2/NFYB/MED20/RAD51C/NAE1/DCP2/SUZ12/XPO1 |
| WP\_TCA\_CYCLE\_AND\_DEFICIENCY\_OF\_PYRUVATE\_DEHYDROGENASE\_COMPLEX\_PDHC | WP\_TCA\_CYCLE\_AND\_DEFICIENCY\_OF\_PYRUVATE\_DEHYDROGENASE\_COMPLEX\_PDHC | 16 | -0.62673 | -1.80802 | 0.003118 | 0.017823 | 0.012666 | 2078 | tags=56%, list=12%, signal=50% | DLAT/PC/PDHA1/IDH1/ACLY/SUCLG2/DLD/FH/DLST |
| PUJANA\_BRCA2\_PCC\_NETWORK | PUJANA\_BRCA2\_PCC\_NETWORK | 402 | -0.34571 | -1.80811 | 3.11E-08 | 8.64E-07 | 6.14E-07 | 5521 | tags=43%, list=31%, signal=31% | KIF20B/AGPS/TBCD/LEF1/KIF11/ITM2A/ABCB7/TTF2/DDX39B/CENPC/ZNF330/TYMS/TBC1D31/GFRA1/BUB3/PCNA/SKP2/MPHOSPH9/BUB1B/CENPE/CCNA2/NASP/TOX/NFYA/HCFC1/DCBLD2/COPS3/RAD21/MLH1/GTF2H2/MKI67/CASP6/LIG3/RALY/SRP9/RCBTB2/FADS1/MCM3/TUBGCP3/EPHB6/CKAP5/KIF2C/FASTKD2/WDR77/CTBP1/CNOT9/DDX46/PCCB/TLK2/CENPA/KNTC1/PRKCQ/MAZ/MCM7/SMC3/TIMELESS/NCK1/ZNF101/STIL/HDAC4/RBBP4/SNRNP200/CDC7/ASF1A/BUB1/PEX1/STAU2/NR2C1/STAG2/RAE1/OGT/KDM1A/RBBP8/SNRPA1/ATP11B/POLD3/MRPL9/CEP290/SAC3D1/RUNX1/TAF11/CBX3/RPIA/GLMN/CNOT3/PPP2R5C/FNBP4/CPSF6/FZD2/FUBP1/NUDT21/RFC5/CCR9/SEPHS1/SMC4/COX11/MFHAS1/NFATC3/CDKN3/NCAPD2/USP1/UBE2I/EXOSC8/SLC25A46/MCM4/HSF2/UBE2C/CEP57/METAP1/HIRIP3/LCOR/RFC4/SRSF11/CASP2/SMARCA4/HMGCS1/ARHGDIB/TFDP1/GNPAT/DLGAP5/DNAJC9/CBX1/PRKCA/PAQR3/DDX23/PSIP1/FANCG/FANCI/NUP205/SIVA1/ESPL1/BLMH/HNRNPUL1/STMN1/FDFT1/PPP1CC/RRM1/HLTF/AATF/ITGB3BP/ZNF273/DPY19L2/DUT/ZNF354A/KATNA1/TAF4/RTCA/ZNHIT3/PNN/NDC80/EIF3H/CTPS1/SRPK1/ACYP1/TMEM106C/RIF1/DNA2/CCND3/NFYB/ORC2/HMGN4/MED20/RAD51C/NAE1/BARD1/RBBP5/DCP2/SUZ12/LARP7/CDC23/VPS13A/PFDN4/PHF20/XPO1 |
| REACTOME\_TRANSCRIPTION\_OF\_THE\_HIV\_GENOME | REACTOME\_TRANSCRIPTION\_OF\_THE\_HIV\_GENOME | 63 | -0.45052 | -1.81177 | 0.000458 | 0.003713 | 0.002639 | 4797 | tags=44%, list=27%, signal=33% | TAF7/GTF2H2/GTF2H3/GTF2H4/POLR2D/GTF2E1/CCNT2/GTF2A2/CDK7/TAF12/RNGTT/TAF11/POLR2C/NELFB/TBP/POLR2K/TAF1L/GTF2H1/TAF5/POLR2F/SUPT4H1/GTF2E2/MNAT1/TAF9B/TAF4/POLR2H/GTF2F2/GTF2H5 |
| REACTOME\_CELL\_CYCLE\_CHECKPOINTS | REACTOME\_CELL\_CYCLE\_CHECKPOINTS | 248 | -0.36785 | -1.81404 | 1.61E-06 | 2.92E-05 | 2.07E-05 | 5261 | tags=46%, list=29%, signal=33% | KIF2A/CENPC/ANAPC1/PPP2R5B/BUB3/AHCTF1/BUB1B/CENPE/PSMD11/RHNO1/ORC3/CCNA2/CENPM/ORC5/NUDC/ANAPC7/PSMA6/CENPL/MCM3/NSL1/PSMD9/RAD17/CKAP5/KIF2C/PSMD6/RNF8/CDK2/CENPA/KNTC1/MCM7/CLIP1/RPA3/PPP2CB/NUP85/PSMA3/ANAPC11/BABAM1/TP53BP1/PSMD5/PSME1/YWHAQ/PSMA1/PLK1/CDC7/BUB1/NUP43/ATRIP/RBBP8/ANAPC4/NUP133/PSMC3/PPP2R5C/NBN/PSMB7/TAOK1/RFC5/YWHAB/DYNC1LI1/CDC26/PSMC5/CDKN1B/PSMD10/MCM4/PIAS4/UBE2C/PSMD14/MDM4/NUP107/RMI1/RFC4/PSMD7/UBE2V2/ZW10/PSME3/PSMD2/WEE1/SKA2/RMI2/SPDL1/ANAPC5/PPP2R5A/PSMA2/PPP1CC/MDC1/ITGB3BP/YWHAH/DSN1/PPP2R5E/CLSPN/ANAPC10/DYNLL1/NDC80/DYNC1I1/ANAPC15/CENPQ/UIMC1/PSMD1/RPA2/PSMC2/DNA2/ORC2/ANAPC16/PSMD8/BARD1/UBE2E1/DYNC1I2/NUP160/CDC23/MIS12/CLASP1/PHF20/XPO1/NUP37/DYNC1LI2 |
| HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_DN | HAHTOLA\_MYCOSIS\_FUNGOIDES\_CD4\_DN | 106 | -0.41487 | -1.81565 | 9.20E-05 | 0.000944 | 0.000671 | 5747 | tags=58%, list=32%, signal=40% | DDHD2/NAP1L1/SRP72/GORASP2/RBM8A/NUCB2/LEPROTL1/FAM8A1/KIF2A/EBAG9/MPHOSPH9/SNX1/UBP1/TARDBP/RAD21/RPL31/RBM26/TTC3/MRPL3/CDC42/VAMP1/MALT1/IMPDH2/CCNG1/UBQLN2/TMEM123/ATG12/ITGB1BP1/LUC7L3/MRPL9/ARHGEF18/STAT5B/SNAPC5/CPSF6/FUBP1/METTL3/AVL9/COX11/RCN2/NMRK1/EIF1AX/NCK2/ZC3HAV1/EVL/TRIM33/EIF5B/WWP1/ZBED5/DUT/NUCKS1/ZFAND1/DIMT1/PITPNB/PPP3CC/FAM162A/TUG1/MPRIP/CACYBP/PGRMC2/CALM1/CDC23/TRAK2 |
| REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE | REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE | 112 | -0.41336 | -1.81673 | 6.91E-05 | 0.000738 | 0.000525 | 3217 | tags=31%, list=18%, signal=26% | RPSA/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/SEC11C/RPL37A/RPL37/RPL23A/SRP68/RPL17/RPL13A/RPS20/SEC61A1/RPS27L/RPL7/SPCS2/RPS23/RPL34/RPS18/RPL38/FAU/RPS26/RPL26L1/SSR3/RPL36AL/RPL35A/RPL24/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| WINNEPENNINCKX\_MELANOMA\_METASTASIS\_UP | WINNEPENNINCKX\_MELANOMA\_METASTASIS\_UP | 152 | -0.39132 | -1.81765 | 2.89E-05 | 0.000348 | 0.000247 | 4560 | tags=36%, list=25%, signal=27% | SRP19/ATAD2/UBE2T/KIF2C/RANBP1/CENPA/KNTC1/RPA3/TIMELESS/TAF1A/FAM98A/FAM216A/CCT5/TRUB2/BUB1/MRPS10/NUDCD1/UBFD1/DSCC1/CDON/CCT4/PRC1/C8orf33/UGGT1/RFC5/NCAPG/CMSS1/MTERF3/CDKN3/CCT7/MCM4/SUPT7L/RFC4/DLGAP5/SKA2/MRPS5/ENY2/GMNN/NDC80/C9orf40/PTTG2/GEMIN6/MRPS16/SSR3/RSRC1/CACYBP/MRPS17/FERMT2/VMA21/CKS1B/MSH6/CNN3/CLASP1/XPO1 |
| CHICAS\_RB1\_TARGETS\_LOW\_SERUM | CHICAS\_RB1\_TARGETS\_LOW\_SERUM | 79 | -0.43781 | -1.81968 | 0.000236 | 0.002145 | 0.001525 | 1128 | tags=22%, list=6%, signal=20% | UQCC2/GDF5/CENPW/PTN/RPL38/RIF1/RPL36AL/ZNF827/NFIB/MT1X/PITX1/RPS21/SEC62/COX5B/LSM7/COX7C/COX6B1 |
| WANG\_RECURRENT\_LIVER\_CANCER\_UP | WANG\_RECURRENT\_LIVER\_CANCER\_UP | 19 | -0.60741 | -1.82558 | 0.002522 | 0.014974 | 0.010641 | 2576 | tags=37%, list=14%, signal=32% | CUL4B/SKA2/DNAJC10/ZNF652/SSR3/PTPN11/CETN2 |
| KEGG\_VASCULAR\_SMOOTH\_MUSCLE\_CONTRACTION | KEGG\_VASCULAR\_SMOOTH\_MUSCLE\_CONTRACTION | 108 | -0.41785 | -1.82941 | 5.75E-05 | 0.000631 | 0.000448 | 2138 | tags=26%, list=12%, signal=23% | PRKACG/PPP1R12A/ADRA1D/PRKCB/ADRA1A/PRKG1/PRKCA/GNA12/NPR2/ADCY9/PPP1CC/CALCRL/PPP1CA/RAMP1/ADCY4/PRKCE/CALM2/ARHGEF12/EDNRA/MYH11/CALD1/CALM1/ACTG2/PPP1R14A/MYL6B/MYLK/ADRA1B/PLA2G2A |
| WP\_OXIDATIVE\_PHOSPHORYLATION | WP\_OXIDATIVE\_PHOSPHORYLATION | 34 | -0.52453 | -1.82971 | 0.002474 | 0.014721 | 0.010462 | 3286 | tags=47%, list=18%, signal=39% | NDUFB7/NDUFA3/NDUFB8/NDUFC1/NDUFAB1/NDUFA8/NDUFS3/NDUFS7/NDUFS8/NDUFA7/GZMB/NDUFA11/NDUFB6/NDUFA4/NDUFS4/NDUFS5 |
| REACTOME\_VIRAL\_MESSENGER\_RNA\_SYNTHESIS | REACTOME\_VIRAL\_MESSENGER\_RNA\_SYNTHESIS | 40 | -0.50457 | -1.83728 | 0.001611 | 0.010538 | 0.007489 | 4604 | tags=42%, list=26%, signal=32% | POM121/POLR2D/NUP62/NUP85/NUP43/NUP54/RAE1/NUP133/POLR2C/POLR2K/NUP107/POLR2F/NUP205/POLR2H/GTF2F2/NUP160/NUP37 |
| LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_1\_DN | LI\_WILMS\_TUMOR\_VS\_FETAL\_KIDNEY\_1\_DN | 154 | -0.39752 | -1.83815 | 5.07E-06 | 7.72E-05 | 5.49E-05 | 5695 | tags=46%, list=32%, signal=32% | CCT3/NAP1L1/FEN1/SS18/PCBP2/KIF11/FZD7/GTF3C2/BUB3/PCNA/MPHOSPH9/BUB1B/NASP/COL2A1/MKI67/MEOX1/LIG3/SACS/HMGA2/FADS1/DDX1/SALL2/CKAP5/KIF2C/CDK2/RSRC2/CHN1/TIMELESS/HINFP/FAM216A/SHMT2/NR2C1/MTHFD2/SNRPA1/CDH2/HOXA9/ROR2/PBX3/RFC5/SMC4/CDKN3/DLG5/TIA1/DLGAP5/SV2A/DNAJC9/ELOVL2/TAF5/DDX23/FANCI/NUP205/ESPL1/STMN1/DDX52/RRM1/CACNB3/SRPK1/ESYT1/PPP2R2A/COL13A1/BOP1/WASF3/SCRN1/ACP1/MN1/ADIPOR2/MYL6B/CKS1B/STRAP/MSH6/SNRPF |
| REACTOME\_RNA\_POLYMERASE\_III\_CHAIN\_ELONGATION | REACTOME\_RNA\_POLYMERASE\_III\_CHAIN\_ELONGATION | 16 | -0.63844 | -1.84179 | 0.002061 | 0.012748 | 0.009059 | 2524 | tags=56%, list=14%, signal=48% | POLR3A/POLR2K/POLR3C/POLR3B/POLR2F/POLR3H/POLR3K/POLR2H/POLR3GL |
| KEGG\_ALZHEIMERS\_DISEASE | KEGG\_ALZHEIMERS\_DISEASE | 141 | -0.40227 | -1.84249 | 1.40E-05 | 0.000192 | 0.000137 | 1094 | tags=23%, list=6%, signal=22% | NDUFAB1/FADD/UQCR10/COX6A1/APP/NDUFA8/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/CALM2/PPP3CC/PPP3R1/NDUFB6/NAE1/UQCRHL/PPP3CA/CYC1/NDUFA4/CALM1/CAPN1/UQCRQ/PPP3CB/NDUFS4/UQCRH/RYR3/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| REACTOME\_GENE\_SILENCING\_BY\_RNA | REACTOME\_GENE\_SILENCING\_BY\_RNA | 73 | -0.44462 | -1.84357 | 0.00014 | 0.001359 | 0.000966 | 5324 | tags=52%, list=30%, signal=37% | TARBP2/POLR2A/MAEL/DGCR8/ANG/POLR2L/POLR2I/DICER1/TDRD6/AGO1/TSNAX/POM121/POLR2D/NUP62/AGO3/NUP85/TSN/NUP43/NUP54/FKBP6/RAE1/PIWIL1/NUP133/POLR2C/IPO8/ELAC2/POLR2K/NUP107/POLR2F/NUP205/RAN/TNRC6B/XPO5/POLR2H/PRKRA/BCDIN3D/NUP160/NUP37 |
| REACTOME\_MITOCHONDRIAL\_IRON\_SULFUR\_CLUSTER\_BIOGENESIS | REACTOME\_MITOCHONDRIAL\_IRON\_SULFUR\_CLUSTER\_BIOGENESIS | 12 | -0.69515 | -1.8436 | 0.006291 | 0.031287 | 0.022234 | 3220 | tags=50%, list=18%, signal=41% | GLRX5/ISCA1/HSCB/FXN/ISCA2/NFS1 |
| KRIEG\_KDM3A\_TARGETS\_NOT\_HYPOXIA | KRIEG\_KDM3A\_TARGETS\_NOT\_HYPOXIA | 184 | -0.38591 | -1.84422 | 5.31E-06 | 8.03E-05 | 5.70E-05 | 3365 | tags=35%, list=19%, signal=29% | PHF11/WDR4/NOL8/CARD16/HIBCH/GALNT1/GLMN/ACOT7/CAPZA1/SPRYD3/AASDHPPT/METTL3/MAT2B/SLC25A12/TMEM126A/SEC11C/ZNF451/CCDC28B/PRPF38A/VAMP8/HACL1/EMG1/POP4/N4BP2L2/PAQR3/CHMP4A/MRPS18C/ATPAF1/COQ3/MIEN1/MTX3/EIF2A/CRELD2/TMEM106B/ALDH1A3/AP1S1/TMEM216/NDUFA12/BBS4/GABARAP/RTCA/RPUSD3/LRRC47/HDHD2/LYPLAL1/SIRT5/PKDCC/THNSL1/VBP1/APTX/RABEPK/BTBD10/USP13/HSDL1/RPL36AL/PRKAB2/PGRMC1/STOML1/C7orf25/CLNS1A/POLR3GL/NFS1/PHACTR2/COX7C/ACTR6 |
| KEGG\_HUNTINGTONS\_DISEASE | KEGG\_HUNTINGTONS\_DISEASE | 152 | -0.39752 | -1.84648 | 1.66E-05 | 0.000221 | 0.000157 | 3577 | tags=32%, list=20%, signal=26% | AP2B1/SDHB/SDHD/DNAL1/POLR2J3/NDUFB7/COX7B/CREB1/NDUFA3/POLR2C/TBP/APAF1/NDUFB8/UQCRB/POLR2K/NDUFC1/DCTN1/NDUFA1/POLR2F/COX7A2/DLG4/NDUFAB1/UQCR10/TAF4/COX6A1/NDUFA8/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/POLR2H/DCTN2/VDAC3/NDUFB6/SLC25A4/UQCRHL/CYC1/NDUFA4/UQCRQ/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION | REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION | 93 | -0.42774 | -1.84669 | 0.000129 | 0.001272 | 0.000904 | 3217 | tags=33%, list=18%, signal=28% | RPSA/RPL36/RPL35/RPL8/EEF1B2/RPLP1/RPS6/RPL22/RPL37A/RPL37/RPL23A/RPL17/RPL13A/RPS20/RPS27L/RPL7/RPS23/RPL34/RPS18/RPL38/FAU/RPS26/RPL26L1/RPL36AL/RPL35A/RPL24/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_UP | RICKMAN\_TUMOR\_DIFFERENTIATED\_WELL\_VS\_POORLY\_UP | 226 | -0.37689 | -1.84991 | 8.23E-07 | 1.66E-05 | 1.18E-05 | 5393 | tags=44%, list=30%, signal=31% | PKP4/TMEM97/STARD7/PPM1B/FLVCR1/FZD7/RABL2B/SRSF7/ERO1B/AHCTF1/TRAF4/CABYR/MYNN/NASP/NFYA/AGBL5/TSPOAP1/PDCD4/MCM3/HOXC9/SEMA6A/UBE2T/LIPT1/KLHL12/HNRNPU/ACACB/EARS2/EFHC1/ATP6V0E2/ZNF704/RPL23/SNRNP200/BTN2A2/EMID1/TERF1/OGT/LUC7L3/ACSS1/GFPT1/LRP6/GTF3A/USP21/IARS2/RPIA/SRSF1/EIF3L/FUBP1/NR2F1/CCL19/SEPHS1/SMC4/PHC1/COMMD7/CCT7/PTCH1/CCDC28B/SFXN2/CEP70/TRAF5/NONO/MDM4/SNCAIP/C5/TARBP1/SFT2D3/GMCL1/RPL17/CHPT1/RMI2/MECOM/E2F6/FBL/C2orf68/ZCCHC3/PHKA2/ZBED5/ATF7IP2/TOMM70/PBX1/CENPV/NUCKS1/WBP1/ASB3/LMO4/ANP32A/PKDCC/FAM13B/CACYBP/RPL35A/FRZB/FAM171A1/ANKRD46/PNISR/MSH6/LPIN1/CGNL1/CLDN11/OARD1/XPO1 |
| REACTOME\_MITOTIC\_METAPHASE\_AND\_ANAPHASE | REACTOME\_MITOTIC\_METAPHASE\_AND\_ANAPHASE | 229 | -0.37664 | -1.85161 | 7.32E-07 | 1.50E-05 | 1.07E-05 | 5435 | tags=48%, list=30%, signal=34% | CHMP2B/KIF2A/CHMP2A/CENPC/ANAPC1/PPP2R5B/BUB3/AHCTF1/TUBA1B/BUB1B/CENPE/PSMD11/CENPM/TUBB2B/RAD21/VRK2/NUDC/ANAPC7/PSMA6/TNPO1/POM121/CENPL/TUBB6/NSL1/IST1/PSMD9/CKAP5/KIF2C/NUP62/PSMD6/CENPA/KNTC1/CLIP1/PPP2CB/SMC3/NUP85/PSMA3/ANAPC11/PSMD5/PSME1/STAG1/TUBB8/PDS5B/PSMA1/PLK1/BUB1/NUP43/NUP54/KPNB1/STAG2/SPAST/ANAPC4/VRK1/NUP133/PSMC3/LEMD3/PPP2R5C/PSMB7/WAPL/TAOK1/DYNC1LI1/CDC26/PSMC5/UBE2I/PSMD10/CHMP7/UBE2C/CHMP4C/PSMD14/NUP107/PSMD7/ZW10/PSME3/PSMD2/SKA2/LEMD2/CHMP4A/CHMP4B/SPDL1/NUP205/ESPL1/ANAPC5/PPP2R5A/PSMA2/PPP1CC/RAN/ITGB3BP/DSN1/PPP2R5E/ANAPC10/DYNLL1/NDC80/DYNC1I1/ANAPC15/CENPQ/PSMD1/PPP2R2A/PSMC2/ANAPC16/PSMD8/UBE2E1/DYNC1I2/NUP160/CDC23/MIS12/CLASP1/XPO1/NUP37/DYNC1LI2 |
| BIOCARTA\_LEPTIN\_PATHWAY | BIOCARTA\_LEPTIN\_PATHWAY | 11 | -0.72707 | -1.85386 | 0.000937 | 0.006794 | 0.004829 | 2063 | tags=45%, list=11%, signal=40% | LEPR/ACACA/PRKAB2/PRKAA1/PRKAB1 |
| REACTOME\_SMOOTH\_MUSCLE\_CONTRACTION | REACTOME\_SMOOTH\_MUSCLE\_CONTRACTION | 35 | -0.52669 | -1.85448 | 0.002092 | 0.012888 | 0.009159 | 877 | tags=26%, list=5%, signal=25% | ANXA6/MYH11/CALD1/CALM1/ACTG2/MYL6B/MYLK/ITGA1/TPM1 |
| SAKAI\_TUMOR\_INFILTRATING\_MONOCYTES\_DN | SAKAI\_TUMOR\_INFILTRATING\_MONOCYTES\_DN | 77 | -0.44718 | -1.85529 | 0.000138 | 0.001348 | 0.000958 | 5019 | tags=48%, list=28%, signal=35% | NCOA4/AK6/PTGES3/CCNC/GTF2H3/MACF1/SCAND1/CDC42/TBPL1/PRDX1/UBE2E3/CDK7/KAT2A/PRKAR1A/CCT4/SRSF1/CPSF6/TBP/CDKN3/COPS5/PPIB/FKBP3/NUP107/SNRPB2/PPIC/IFI6/NEK1/SUB1/CCNG2/RAN/PRDX3/TAF6L/MGST2/RAD51C/PRDX6/SNRPF/XPO1 |
| REACTOME\_MRNA\_CAPPING | REACTOME\_MRNA\_CAPPING | 28 | -0.55402 | -1.85699 | 0.001619 | 0.010566 | 0.007509 | 6159 | tags=64%, list=34%, signal=42% | POLR2A/POLR2L/ERCC3/POLR2I/GTF2H2/GTF2H3/GTF2H4/POLR2D/CDK7/RNGTT/POLR2C/POLR2K/GTF2H1/POLR2F/MNAT1/POLR2H/GTF2F2/GTF2H5 |
| REACTOME\_FORMATION\_OF\_THE\_EARLY\_ELONGATION\_COMPLEX | REACTOME\_FORMATION\_OF\_THE\_EARLY\_ELONGATION\_COMPLEX | 32 | -0.54075 | -1.85903 | 0.001577 | 0.010376 | 0.007374 | 6189 | tags=62%, list=34%, signal=41% | NELFA/POLR2A/POLR2L/ERCC3/POLR2I/GTF2H2/GTF2H3/GTF2H4/POLR2D/CDK7/POLR2C/NELFB/POLR2K/GTF2H1/POLR2F/SUPT4H1/MNAT1/POLR2H/GTF2F2/GTF2H5 |
| REACTOME\_SELENOAMINO\_ACID\_METABOLISM | REACTOME\_SELENOAMINO\_ACID\_METABOLISM | 108 | -0.42538 | -1.86236 | 2.92E-05 | 0.000351 | 0.000249 | 3217 | tags=32%, list=18%, signal=27% | RPSA/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/SCLY/AIMP2/RPL37A/RPL37/RPL23A/EEF1E1/RPL17/RPL13A/RPS20/RPS27L/RPL7/RPS23/RPL34/RPS18/RPL38/FAU/INMT/RPS26/RPL26L1/RPL36AL/CBS/RPL35A/RPL24/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| REACTOME\_NEDDYLATION | REACTOME\_NEDDYLATION | 224 | -0.37981 | -1.86381 | 1.18E-06 | 2.27E-05 | 1.61E-05 | 5418 | tags=48%, list=30%, signal=34% | CUL7/COPS6/FBXL5/COPS2/FBXL20/FBXL8/FBXW11/SKP2/WDTC1/PSMD11/KBTBD6/CUL2/COPS3/FBXW5/PSMA6/BTRC/KLHL3/PUM2/PSMD9/COMMD6/FEM1B/LRR1/DCUN1D5/WSB2/PSMD6/FBXO15/DCAF6/ASB2/COPS7B/CUL4A/SKP1/PSMA3/FEM1C/WSB1/PSMD5/RNF7/PSME1/PSMA1/COPS8/FBXW2/CCDC8/KLHL22/SPSB4/COPS7A/PSMC3/FBXO21/FBXO11/PSMB7/LMO7/UBE2F/COMMD7/NUB1/CUL4B/COPS5/FBXW9/PSMC5/ASB9/DCUN1D4/PSMD10/PSMD14/COMMD8/CUL5/FBXO30/COPS4/PSMD7/KCTD6/FBXO31/DCUN1D1/ASB8/PSME3/PSMD2/KBTBD7/BTBD6/SPSB3/FBXO6/COMMD9/KLHL2/COMMD10/ASB13/PSMA2/BTBD1/KLHL20/NEDD8/CAND1/EPAS1/COMMD2/FEM1A/FBXL15/DCAF16/COMMD1/FBXW4/COMMD3/FBXO32/UCHL3/ASB3/UBE2M/DCAF5/COMMD5/PSMD1/PSMC2/UBA3/VHL/PSMD8/NAE1/RBBP5/KLHL9/KLHL42 |
| BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_DN | BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_DN | 156 | -0.39976 | -1.86466 | 4.92E-06 | 7.53E-05 | 5.35E-05 | 3651 | tags=37%, list=20%, signal=29% | ZNF207/UROS/CDK7/CCT5/PDHA1/OPA1/MAP2K4/CCT4/SNU13/NDUFB8/CEPT1/COPS5/ARF3/AHSA1/SCN3A/CLIC2/USP15/SUPT7L/PPA1/ARCN1/MGLL/TRO/TFDP1/ALOX5AP/ZW10/UTP18/EIF2B1/ECH1/CLIP3/DNAJC8/MED17/AP3S1/PCP4/NEDD8/CCT2/LAMTOR2/RB1CC1/MKKS/RPL38/PSMC2/DLGAP2/CSNK1G3/PPP3R1/MAOA/CACYBP/RAD51C/HADH/RSU1/PDHX/PPP3CA/ZFR/REEP5/NSFL1C/WFDC1/MRPL15/TMOD1/COX7C |
| BARIS\_THYROID\_CANCER\_UP | BARIS\_THYROID\_CANCER\_UP | 23 | -0.59114 | -1.86686 | 0.000941 | 0.006816 | 0.004844 | 3562 | tags=52%, list=20%, signal=42% | SNRNP200/COX7B/STIP1/ACTN2/CRNKL1/COX7A2/COX6A1/EIF2S2/CYCS/RBBP5/CYC1/ATP6V1D |
| REACTOME\_BBSOME\_MEDIATED\_CARGO\_TARGETING\_TO\_CILIUM | REACTOME\_BBSOME\_MEDIATED\_CARGO\_TARGETING\_TO\_CILIUM | 22 | -0.59549 | -1.86955 | 0.001336 | 0.009069 | 0.006445 | 6161 | tags=77%, list=34%, signal=51% | BBS7/SSTR3/CCT3/BBS12/TTC8/SMO/CCT5/CCT4/ARL6/BBS1/MCHR1/CCT2/BBS4/BBS10/BBS2/MKKS/LZTFL1 |
| REACTOME\_M\_PHASE | REACTOME\_M\_PHASE | 343 | -0.36208 | -1.87039 | 2.54E-08 | 7.26E-07 | 5.16E-07 | 4932 | tags=41%, list=27%, signal=30% | CENPM/TUBB2B/CNEP1R1/PCM1/RAD21/VRK2/NUDC/ANAPC7/PSMA6/TNPO1/MAU2/POM121/CENPL/TUBB6/TUBGCP3/ACTR1A/NSL1/IST1/MASTL/CENPJ/PSMD9/CKAP5/KIF2C/LPIN2/NUP62/PSMD6/CENPA/KNTC1/CLIP1/PPP2CB/SMC3/NUP85/PSMA3/ANAPC11/PSMD5/PSME1/STAG1/TUBB8/PDS5B/PSMA1/RAB2A/HAUS1/PLK1/BUB1/NUP43/TUBGCP4/NUP54/KPNB1/STAG2/RAE1/NCAPD3/MZT2B/CEP290/SPAST/ANAPC4/VRK1/NIPBL/NUP133/PSMC3/LEMD3/PPP2R5C/PSMB7/WAPL/MCPH1/TAOK1/CEP63/SMC4/NCAPG/DYNC1LI1/CDC26/CEP135/CCP110/NCAPD2/PSMC5/UBE2I/NME7/GOLGA2/NEK9/DCTN3/CEP70/PSMD10/CHMP7/UBE2C/CEP57/CHMP4C/PSMD14/MZT1/PRKCB/NUP107/DCTN1/PSMD7/ZW10/PSME3/PRKCA/PSMD2/SKA2/LEMD2/CHMP4A/CHMP4B/SPDL1/NUP205/ESPL1/ANAPC5/PPP2R5A/PSMA2/PPP1CC/RAN/ITGB3BP/DSN1/PPP2R5E/OFD1/ANAPC10/DYNLL1/NDC80/CEP164/HAUS7/ENSA/DYNC1I1/ANAPC15/CENPQ/GORASP1/PSMD1/PPP2R2A/PSMC2/ANAPC16/DCTN2/CSNK2A2/PSMD8/USO1/UBE2E1/DYNC1I2/NUP160/CDC23/MIS12/LPIN1/CETN2/CLASP1/XPO1/NUP37/DYNC1LI2 |
| REACTOME\_TRNA\_PROCESSING\_IN\_THE\_NUCLEUS | REACTOME\_TRNA\_PROCESSING\_IN\_THE\_NUCLEUS | 55 | -0.48244 | -1.87103 | 0.000318 | 0.002735 | 0.001944 | 4604 | tags=44%, list=26%, signal=33% | POM121/DDX1/NUP62/NUP85/POP7/TSEN2/NUP43/NUP54/RAE1/RPP40/NUP133/ELAC2/RTCB/C2orf49/TRNT1/NUP107/POP4/POP5/NUP205/RPP21/RAN/NUP160/NUP37/TSEN15 |
| WATANABE\_ULCERATIVE\_COLITIS\_WITH\_CANCER\_UP | WATANABE\_ULCERATIVE\_COLITIS\_WITH\_CANCER\_UP | 16 | -0.6499 | -1.87485 | 0.001516 | 0.010101 | 0.007179 | 4913 | tags=69%, list=27%, signal=50% | PLXNB1/ICA1/LCA5/FBN1/LRP5/HS2ST1/LRP6/STK39/PCSK5/LIMCH1/MN1 |
| DAZARD\_RESPONSE\_TO\_UV\_NHEK\_DN | DAZARD\_RESPONSE\_TO\_UV\_NHEK\_DN | 284 | -0.37258 | -1.87735 | 3.75E-08 | 1.03E-06 | 7.30E-07 | 5491 | tags=46%, list=31%, signal=33% | FOXO3/ADNP/KIF11/KIF2A/GCLC/CENPC/BACH1/PHC2/STRN/AJAP1/BAZ2B/ABL1/RCHY1/BUB1B/UBE2G1/RABGAP1L/RBPJ/RRS1/MTM1/NFYA/ZMYND8/MKI67/CREB3L2/GSE1/SACS/HMGA2/CDYL/PHIP/PUM2/TUBGCP3/ELF2/AFF1/FEM1B/IRS1/ATP2B1/PMS1/TLK2/CENPA/ZZZ3/APPBP2/PIK3R4/CREBBP/NCK1/ARID5B/SPEN/VLDLR/MEIS1/PTPN3/ATF2/BRD8/EDRF1/MORC3/NCOA3/POLD3/TLE4/ZNF148/TAF11/KANK1/DYRK2/WAPL/ZNF44/PUM1/DMTF1/SMC4/PPP1R12A/USP1/ZNF451/CDKN1B/PUDP/USP6NL/PHF3/TLK1/ZC3H4/RRP1B/CERS6/NPAT/CEP350/FGFR2/REV3L/MED13L/WEE1/GAPVD1/MTIF2/HELZ/FRYL/LSM14A/SUCO/GNE/SPOP/ADCY9/ZBTB24/SLC9A6/MTMR6/SP3/MDC1/ZCCHC14/LPCAT1/ZNF217/ZNF146/ADSL/AKR1C3/KIAA0232/BTBD3/FNDC3A/RIF1/NPAS2/ORC2/EFNB2/USP24/CPEB3/FNBP1L/NR2F2/MAST4/LPP/BBX/UBL3/E2F3/AUTS2/KAT6A/MN1/FERMT2/PNISR/LARP7/RSBN1/PPP1R3C/INSIG2/CLASP1/VPS13A/FOXO1/XPO1/KLHL9 |
| REACTOME\_RETROGRADE\_TRANSPORT\_AT\_THE\_TRANS\_GOLGI\_NETWORK | REACTOME\_RETROGRADE\_TRANSPORT\_AT\_THE\_TRANS\_GOLGI\_NETWORK | 49 | -0.49345 | -1.87917 | 0.000423 | 0.003497 | 0.002485 | 3417 | tags=37%, list=19%, signal=30% | SYS1/COG2/COG3/VPS54/USP6NL/NAA30/GOLGA1/NAPB/RAB9B/ARL1/RAB6B/RABEPK/COG6/TGOLN2/VPS51/NAA38/SCOC/RHOBTB3 |
| WP\_AIRWAY\_SMOOTH\_MUSCLE\_CELL\_CONTRACTION | WP\_AIRWAY\_SMOOTH\_MUSCLE\_CELL\_CONTRACTION | 17 | -0.64058 | -1.87977 | 0.002776 | 0.016249 | 0.011547 | 659 | tags=24%, list=4%, signal=23% | CALM2/CALM1/PPP1R14A/MYLK |
| REACTOME\_DEADENYLATION\_DEPENDENT\_MRNA\_DECAY | REACTOME\_DEADENYLATION\_DEPENDENT\_MRNA\_DECAY | 50 | -0.49209 | -1.8802 | 0.000421 | 0.003491 | 0.002481 | 2412 | tags=46%, list=13%, signal=40% | CNOT9/EDC4/XRN1/PAIP1/EIF4G1/CNOT3/EXOSC8/CNOT8/PAN2/EXOSC5/EIF4A2/CNOT7/EXOSC3/EXOSC4/EDC3/LSM1/PAN3/LSM3/CNOT11/DCP2/LSM5/NT5C3B/LSM7 |
| RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_DN | RHEIN\_ALL\_GLUCOCORTICOID\_THERAPY\_DN | 351 | -0.36255 | -1.88204 | 7.14E-09 | 2.23E-07 | 1.58E-07 | 3641 | tags=34%, list=20%, signal=27% | RBBP4/IDH2/MIF/BCCIP/RPL23/PKD2/SHMT2/ALDH5A1/LAPTM4B/ECI2/CREB1/RPP40/VRK1/TUFM/STK32B/RSL1D1/PCCA/IARS2/AHCYL1/PRC1/EID1/DYRK2/MEF2C/LTA4H/PTGDR/ACADM/PHYH/PDCD2/RPL22/ALDH6A1/HNRNPA0/COX11/NCAPG/JADE3/CCT7/HACD1/CNPY2/ADGRA3/ELAVL1/SSBP1/NHP2/PSMD10/CCDC90B/CYTL1/MCM4/CEP57/TCF12/PSMD14/TRMT5/PPA1/INTS8/RFC4/ANP32B/PRPS2/UGP2/CHCHD3/THOC7/PSIP1/FBL/ARMCX1/BLMH/STMN1/DCTD/MYO5C/TMEM135/RRM1/SPCS2/ITGB3BP/PSMG1/DUT/RTCA/GMNN/PIGP/ZFAND1/NDUFA8/OXCT1/DYNLL1/KCTD3/PRDX3/ADSL/MRPS33/EHBP1/NREP/MRPS35/PRMT1/DIMT1/ANP32A/TCFL5/SAP18/PARK7/CCND3/MCTS1/CFDP1/DPH5/HMGN4/PCMT1/CACYBP/METTL5/SPARC/HADH/SPTSSA/RSU1/BARD1/TMEM14A/LSM5/CALM1/ESD/CLNS1A/C1orf54/TCEAL4/CKS1B/PRDX6/ACAT1/CETN2/PFKM/HDDC2/SLC35E3/NUP37 |
| REACTOME\_PROTEIN\_METHYLATION | REACTOME\_PROTEIN\_METHYLATION | 16 | -0.65326 | -1.88456 | 0.001359 | 0.009152 | 0.006504 | 4379 | tags=62%, list=24%, signal=47% | VCPKMT/EEF2/CAMKMT/ETFB/METTL22/ETFBKMT/PRMT3/EEF1AKMT1/VCP/CALM1 |
| WENDT\_COHESIN\_TARGETS\_UP | WENDT\_COHESIN\_TARGETS\_UP | 30 | -0.55671 | -1.88551 | 0.000464 | 0.003747 | 0.002663 | 4911 | tags=60%, list=27%, signal=44% | MKLN1/TNPO1/ELF2/TLK2/EXOC6/PIK3R3/OXR1/TRMT11/USP25/PLEKHA5/CAMSAP2/YOD1/SREK1/VTA1/ATG5/FUT8/PFDN4/STK3 |
| REACTOME\_SIGNALING\_BY\_ROBO\_RECEPTORS | REACTOME\_SIGNALING\_BY\_ROBO\_RECEPTORS | 213 | -0.38809 | -1.88964 | 5.46E-07 | 1.17E-05 | 8.32E-06 | 3217 | tags=28%, list=18%, signal=23% | RPSA/EIF4G1/PRKAR2A/PSMC3/RPL36/RPL35/RPL8/RPLP1/PSMB7/RPS6/RPL22/PRKACG/PSMC5/RPL37A/PSMD10/RPL37/NCK2/RPL23A/PSMD14/EVL/PSMD7/UPF3A/RPL17/PSME3/PRKCA/PSMD2/RPL13A/CASC3/UPF3B/ARHGAP39/RPS20/PSMA2/RPS27L/RPL7/RPS23/RPL34/CXCL12/RPS18/RPL38/PSMD1/FAU/PSMC2/CAP2/RPS26/ZSWIM8/RPL26L1/RPL36AL/USP33/PSMD8/RPL35A/RPL24/RPS4X/UPF2/RPS21/PPP3CB/GSPT2/CLASP1/RPL26/RPL39/RPL21 |
| KEGG\_BASAL\_TRANSCRIPTION\_FACTORS | KEGG\_BASAL\_TRANSCRIPTION\_FACTORS | 34 | -0.54183 | -1.89005 | 0.000934 | 0.006785 | 0.004822 | 4797 | tags=59%, list=27%, signal=43% | TAF7/GTF2H2/GTF2H3/GTF2H4/TBPL1/GTF2E1/GTF2A2/TAF12/TAF11/TBP/TAF1L/GTF2A1L/GTF2H1/TAF5/GTF2E2/TAF9B/TAF4/TAF6L/STON1/GTF2F2 |
| TOMLINS\_PROSTATE\_CANCER\_DN | TOMLINS\_PROSTATE\_CANCER\_DN | 37 | -0.53009 | -1.89183 | 0.000374 | 0.003163 | 0.002248 | 3899 | tags=46%, list=22%, signal=36% | CYLD/MEIS1/GATM/SEC23A/MYOF/SGCE/TACC1/CNN1/LAMA4/PCP4/HMGN4/C7/SCRN1/CALM1/GAS1/LPIN1/MYLK |
| REACTOME\_HIV\_TRANSCRIPTION\_INITIATION | REACTOME\_HIV\_TRANSCRIPTION\_INITIATION | 45 | -0.50584 | -1.8932 | 0.000622 | 0.004771 | 0.00339 | 4797 | tags=53%, list=27%, signal=39% | TAF7/GTF2H2/GTF2H3/GTF2H4/POLR2D/GTF2E1/GTF2A2/CDK7/TAF12/TAF11/POLR2C/TBP/POLR2K/TAF1L/GTF2H1/TAF5/POLR2F/GTF2E2/MNAT1/TAF9B/TAF4/POLR2H/GTF2F2/GTF2H5 |
| WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_DN | WAMUNYOKOLI\_OVARIAN\_CANCER\_LMP\_DN | 190 | -0.39717 | -1.89724 | 1.13E-06 | 2.20E-05 | 1.56E-05 | 3741 | tags=41%, list=21%, signal=33% | PLEKHM3/KPNA5/HDAC4/COL8A1/REEP1/CAV1/EIF3M/WNT5A/DPYD/PKD2/EPB41L5/ZNF286A/ATP11C/PRKAR1A/PREPL/UFSP2/FBXO21/CDON/SLC39A10/TCEAL1/RBMS1/CERK/RNF146/AASDHPPT/NR2F1/PRNP/TAOK1/IFI16/TMEM237/LAMA4/PDGFD/GPRASP2/RUNX1T1/UGP2/LIX1L/BTF3L4/ZYG11B/BNC2/PSIP1/IFT52/CCDC80/EPC2/ZNF512/ARMCX1/FLNC/ZBTB20/CRLS1/EXTL2/DPYSL3/OSTM1/PLSCR3/NUCKS1/UBE2E2/RSRP1/TMEM45A/TCEAL3/PLPP1/CAP2/STK26/CALM2/RAB11FIP3/GCA/FAM13B/PROS1/RAB11FIP2/CALD1/WASF3/FLRT2/ZNF641/RERG/FERMT2/PLSCR4/ZNF532/GAS1/CBR4/SBSPON/XPO1/NDN |
| BIOCARTA\_NOS1\_PATHWAY | BIOCARTA\_NOS1\_PATHWAY | 21 | -0.6166 | -1.89897 | 0.000769 | 0.005715 | 0.004061 | 3582 | tags=57%, list=20%, signal=46% | GRIN2C/PRKAR1A/PRKAR2A/PRKACG/PRKCB/PRKCA/DLG4/CALM2/PPP3CC/PPP3CA/CALM1/PPP3CB |
| LINDGREN\_BLADDER\_CANCER\_WITH\_LOH\_IN\_CHR9Q | LINDGREN\_BLADDER\_CANCER\_WITH\_LOH\_IN\_CHR9Q | 111 | -0.43412 | -1.90669 | 1.50E-05 | 0.000202 | 0.000144 | 4120 | tags=41%, list=23%, signal=32% | SLC9B2/PRKCQ/RBM18/ARPC5L/TMEM245/PSMD5/ZNF79/PTPN3/INIP/FBXW2/PTGR1/ASTN2/RPL35/GRAMD1A/TOR1B/PSMB7/ISCA1/NMRK1/MTAP/RXRA/LRRC8A/SPOUT1/C9orf78/CUL5/SLC35D2/FAM120AOS/ANP32B/DUSP22/RAD23B/IPPK/ENDOG/GOLGA1/PSMA2/ATP6V1G1/CAMSAP1/FUBP3/MRPL50/APTX/TMEM268/RABGAP1/TRIM32/PNPO/MIS12/VPS13A/TMOD1/KLHL9 |
| REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS | REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS | 167 | -0.40469 | -1.90757 | 9.65E-07 | 1.90E-05 | 1.35E-05 | 3801 | tags=34%, list=21%, signal=27% | PSMD5/PSME1/MAGOH/RPS5/PSMA1/RPL23/RPSA/EIF4G1/PSMC3/RPL36/RPL35/RPL8/RPLP1/PSMB7/RPS6/RPL22/PSMC5/RPL37A/PSMD10/RPL37/RPL23A/PSMD14/PSMD7/UPF3A/RPL17/PSME3/PSMD2/RPL13A/CASC3/UPF3B/RPS20/PSMA2/RPS27L/RPL7/RPS23/RPL34/RPS18/RPL38/PSMD1/FAU/PSMC2/RPS26/ZSWIM8/RPL26L1/RPL36AL/USP33/PSMD8/RPL35A/RPL24/RPS4X/UPF2/RPS21/GSPT2/RPL26/RPL39/RPL21 |
| WP\_MRNA\_PROCESSING | WP\_MRNA\_PROCESSING | 124 | -0.42654 | -1.91113 | 1.28E-05 | 0.000175 | 0.000124 | 3669 | tags=35%, list=20%, signal=28% | FUS/SF3A1/SRP54/SF3A3/SNRPA1/RNGTT/DHX16/HNRNPK/PABPN1/SRSF1/PRPF18/SNU13/RBM17/CPSF2/NUDT21/METTL3/PRPF8/SRSF9/SF3B3/SNRPN/NONO/SNRNP40/CSTF3/CD2BP2/SNRPB2/DNAJC8/SPOP/SRRM1/CPSF3/SREK1/SNRPD1/PTBP2/SRPK1/SF3B5/PRMT1/CSTF2T/PAPOLA/CDC40/TMED10/CLK4/LSM7/SNRPF/PHF5A/HNRNPL |
| KEGG\_RIBOSOME | KEGG\_RIBOSOME | 86 | -0.44758 | -1.91163 | 0.000107 | 0.001073 | 0.000763 | 3217 | tags=35%, list=18%, signal=29% | RPSA/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/RPL37/RPL23A/RPL17/RPL13A/RPS20/RPS27L/RPL7/RPS23/RPL34/RPS18/RPL38/FAU/RPS26/RPL26L1/RPL36AL/RPL35A/RPL24/RPS4X/RPS21/RPL26/RPL39/RPL21 |
| REACTOME\_CITRIC\_ACID\_CYCLE\_TCA\_CYCLE | REACTOME\_CITRIC\_ACID\_CYCLE\_TCA\_CYCLE | 22 | -0.60992 | -1.91484 | 0.00085 | 0.006239 | 0.004434 | 3624 | tags=41%, list=20%, signal=33% | IDH2/SDHB/SDHD/SUCLA2/NNT/SUCLG2/DLD/FH/DLST |
| REACTOME\_FORMATION\_OF\_APOPTOSOME | REACTOME\_FORMATION\_OF\_APOPTOSOME | 11 | -0.75195 | -1.91729 | 0.000394 | 0.003296 | 0.002343 | 3545 | tags=73%, list=20%, signal=58% | UACA/AVEN/APAF1/APIP/DIABLO/XIAP/CYCS/CARD8 |
| WP\_EUKARYOTIC\_TRANSCRIPTION\_INITIATION | WP\_EUKARYOTIC\_TRANSCRIPTION\_INITIATION | 38 | -0.53701 | -1.91802 | 0.000639 | 0.004853 | 0.003449 | 4797 | tags=58%, list=27%, signal=43% | TAF7/GTF2H2/GTF2H3/GTF2H4/GTF2E1/GTF2A2/POLR1D/CDK7/TAF12/POLR2C/TBP/POLR2K/GTF2H1/POLR3B/TAF5/POLR2F/GTF2E2/MNAT1/POLR3H/POLR3K/POLR2H/GTF2F2 |
| REACTOME\_CYTOCHROME\_C\_MEDIATED\_APOPTOTIC\_RESPONSE | REACTOME\_CYTOCHROME\_C\_MEDIATED\_APOPTOTIC\_RESPONSE | 13 | -0.71075 | -1.91878 | 0.001621 | 0.010567 | 0.00751 | 3908 | tags=69%, list=22%, signal=54% | CASP3/UACA/AVEN/APAF1/APIP/DIABLO/XIAP/CYCS/CARD8 |
| WP\_TCA\_CYCLE\_AKA\_KREBS\_OR\_CITRIC\_ACID\_CYCLE | WP\_TCA\_CYCLE\_AKA\_KREBS\_OR\_CITRIC\_ACID\_CYCLE | 18 | -0.64382 | -1.91921 | 0.001067 | 0.007534 | 0.005354 | 3624 | tags=44%, list=20%, signal=36% | IDH2/SDHB/SDHD/SUCLA2/SUCLG2/DLD/FH/DLST |
| REACTOME\_MICRORNA\_MIRNA\_BIOGENESIS | REACTOME\_MICRORNA\_MIRNA\_BIOGENESIS | 23 | -0.60837 | -1.92128 | 0.000591 | 0.004569 | 0.003247 | 6213 | tags=74%, list=35%, signal=48% | TARBP2/POLR2A/DGCR8/POLR2L/POLR2I/DICER1/AGO1/POLR2D/AGO3/POLR2C/POLR2K/POLR2F/RAN/XPO5/POLR2H/PRKRA/BCDIN3D |
| WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK | WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK | 114 | -0.43707 | -1.92381 | 6.36E-06 | 9.36E-05 | 6.65E-05 | 6777 | tags=59%, list=38%, signal=37% | RPA1/XRCC1/WRN/FANCD2/FANCF/MUTYH/RAD51/RAD23A/UNG/PARP1/PNKP/RFC2/POLE4/TERF2/NEIL2/POLM/ERCC3/POLK/FEN1/POLI/NTHL1/PCNA/FAN1/FANCL/XRCC4/MLH1/GTF2H2/RAD54B/GTF2H3/LIG3/GTF2H4/POLH/PARP2/FANCB/RPA3/CUL4A/CDK7/MGMT/POLD3/MSH3/ERCC1/RAP1A/NBN/REV1/RFC1/RFC5/CUL4B/USP1/RFC4/SMUG1/FANCM/GTF2H1/REV3L/RAD23B/FANCG/FANCI/MNAT1/FANCE/MBD4/HMGB1/POLB/FAAP100/RPA2/RAD51C/MSH6/CETN2/GTF2H5 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION | REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION | 39 | -0.53308 | -1.92702 | 0.000282 | 0.002459 | 0.001747 | 4447 | tags=62%, list=25%, signal=46% | GTF3C5/ZNF143/NFIX/POLR1D/GTF3C3/GTF3C6/SNAPC1/GTF3A/SNAPC5/BRF2/TBP/POLR3A/POLR2K/POLR3C/POLR3B/POLR2F/SSB/POLR3H/POLR3K/POLR2H/NFIA/SNAPC4/NFIB/POLR3GL |
| REACTOME\_RRNA\_PROCESSING | REACTOME\_RRNA\_PROCESSING | 195 | -0.40212 | -1.9304 | 2.35E-07 | 5.30E-06 | 3.77E-06 | 3924 | tags=38%, list=22%, signal=30% | RCL1/GAR1/WDR36/RPS5/EBNA1BP2/RPL23/KRR1/TEX10/EXOSC10/RPP40/RPSA/NOP56/NOL11/MRM1/RPL36/SNU13/RPL35/WDR12/RPL8/RPLP1/RPS6/RIOK2/WDR3/RPL22/LAS1L/UTP3/ELAC2/UTP14A/RPL37A/UTP14C/THUMPD1/EXOSC8/NHP2/RPL37/RPL23A/EMG1/WDR75/WDR46/RPL17/RRP36/UTP18/RPL13A/NOP10/EXOSC5/FBL/UTP11/RPP21/RPS20/RPS27L/EXOSC3/EXOSC4/DDX52/RPL7/RPS23/RPL34/TFB1M/NSUN4/RPS18/RPL38/DIMT1/FAU/RPS26/BOP1/RPL26L1/IMP3/RPL36AL/RPL35A/RPL24/RPS4X/RPS21/UTP6/RPL26/RPL39/RPL21 |
| KIM\_WT1\_TARGETS\_DN | KIM\_WT1\_TARGETS\_DN | 444 | -0.36808 | -1.93267 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 5437 | tags=49%, list=30%, signal=35% | SEC24D/KIF11/TTF2/PKP4/TPTE/CENPC/THAP11/PPM1B/TBC1D31/NET1/BAZ2B/NUDT6/CRYGS/HBP1/BUB3/SKP2/ACTR2/MPHOSPH9/BUB1B/PRR16/UBE2G1/CENPE/DAAM1/HSPA1A/MGAT2/ARL4A/TBRG4/CCNA2/DPF2/TUFT1/RAD21/ORC5/PER3/ZMYND8/SLC38A2/ZNF302/LAGE3/HSD17B11/HOXB6/DERL2/TUBGCP3/ITGB1/PCGF1/PPM1A/EDF1/KIF2C/FAM111A/LARP4/PRMT7/PARP2/POLR2D/LIPT1/TBPL1/IRS1/PMS1/CENPA/FXR1/ZZZ3/APPBP2/CDK8/SMC3/EFHC1/RIN2/GPSM2/CUL4A/TRMT1L/PIK3R3/WSB1/CDC14A/HEMK1/HSPA13/MAGOH/ZNHIT1/ARMCX6/TRAM2/GRSF1/ATF2/GLT8D1/CDC7/NIF3L1/ASF1A/MANF/BUB1/SHMT2/TRIM27/BRD8/SNRPA1/MZT2B/SAC3D1/STIP1/SNAPC1/HOXA9/RDH11/PSMC3/RPL36/MIS18BP1/MBNL2/HJURP/ST6GALNAC5/PPP2R5C/NBN/ABCD3/EID1/FNBP4/REV1/FZD2/CETN3/FUBP1/AASDHPPT/ZBED8/APAF1/MNS1/HIKESHI/TMEM267/CDC42EP3/MAGT1/BAD/IFI16/METTL3/MOCS1/NCAPG/NMT2/SNTB2/NFATC3/COPS5/MTAP/DERA/CDKN1B/PRPF31/MRPS18B/SLC25A46/TIA1/TMEM165/PHF3/CEP57/SLF2/ATP10D/CHMP5/SRSF11/LAMTOR5/TRMU/RSAD1/WDR13/RBM25/CEP350/UPF3A/DLGAP5/REV3L/REPIN1/TAF5/THOC7/POP5/OXA1L/ZNF34/DNAJB4/HTATIP2/AKAP1/PIGF/ESPL1/ARMCX1/RWDD3/KLHL2/ZBED5/ZBTB20/CCNG2/TM2D3/RAB29/PTCD3/TST/GMNN/DLEU1/GEMIN2/NDC80/C2CD5/LIAS/MED21/RSRP1/GOLPH3L/ARMCX2/KRT10/MEPCE/ACYP1/LMO4/FUBP3/GLS/PAPOLA/SEC22B/NFYB/HMGN5/FASTKD1/DNAAF2/CRKL/IFT74/NUAK1/IMP3/USP33/CDC40/RAD51C/RCOR3/HADH/NR2F2/SPTSSA/BARD1/SDHAF3/FLRT2/C7orf25/NDUFA4/LSM5/ZMYM1/TMEM160/RSBN1/STAM/GTF2H5/OARD1/ARMC1/ACTR6 |
| PAL\_PRMT5\_TARGETS\_UP | PAL\_PRMT5\_TARGETS\_UP | 195 | -0.40262 | -1.93279 | 2.30E-07 | 5.22E-06 | 3.71E-06 | 3498 | tags=36%, list=19%, signal=29% | PKD2/GCAT/SF3A3/WLS/LUC7L3/TUFM/PSMC3/RASA1/SRSF1/ARL2BP/B9D1/CETN3/NR2F1/NDUFB8/RFC5/YWHAB/PTPRK/CARM1/RCBTB1/ECHS1/ARGLU1/RCN2/EIF1AX/MCM4/TIA1/NONO/CSTF3/INTS8/ANP32B/EVL/SLC35A1/EMC6/PSIP1/ECH1/ERH/MRPL48/ANAPC5/STMN1/MRPL18/RRM1/SPCS2/ELOF1/GMNN/CXCL12/NNT/NDUFA13/PPP1R7/RSRP1/UBE2M/PTN/MRPL20/RPA2/SMARCE1/CFDP1/PROS1/NFIB/LSM3/SLIRP/NR2F2/SPTSSA/TOMM5/GAS1/MRPS21/CKS1B/LARP7/STRAP/CETN2/NAA38/NDN/HNRNPL |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_INITIATION\_FROM\_TYPE\_3\_PROMOTER | REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_INITIATION\_FROM\_TYPE\_3\_PROMOTER | 26 | -0.59037 | -1.93559 | 0.000708 | 0.005317 | 0.003779 | 3177 | tags=58%, list=18%, signal=48% | POLR1D/SNAPC1/SNAPC5/BRF2/TBP/POLR3A/POLR2K/POLR3C/POLR3B/POLR2F/POLR3H/POLR3K/POLR2H/SNAPC4/POLR3GL |
| ONKEN\_UVEAL\_MELANOMA\_DN | ONKEN\_UVEAL\_MELANOMA\_DN | 496 | -0.36507 | -1.93823 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3825 | tags=35%, list=21%, signal=29% | PIK3R1/POLR1D/RNF7/HEMK1/HNRNPDL/HSPA2/HSD17B8/RPS5/LARS2/WDR1/NFYC/RPL23/CAV1/HNMT/GTPBP8/NDUFAF3/ACAA1/SNAP23/RARB/PRKAR1A/PIWIL1/ATP11B/MZT2B/GMPR2/GLCE/ZNF148/RPSA/PREPL/ARMT1/RSL1D1/EIF4G1/ZDHHC3/KLHDC3/FZD6/TBX2/MBNL2/CAV2/EIF3L/LTA4H/MANSC1/SPIN1/LETMD1/RPL22/RNASE4/ZNF91/PMM1/ALDH6A1/NUDT21/EIF1B/ZNF593/CPS1/HMCES/DEGS1/NMT2/HACD3/OSBPL2/LAMA4/BAG5/IP6K1/CUTA/LAMB2/MRPS18B/EIF1AX/VAMP8/SNRPN/CEP57/NONO/MCAM/PDGFD/SLC35D2/KLHL24/BMI1/CRBN/SNRK/SMARCA1/SAMM50/MFAP2/KPNA4/DUSP22/HYAL2/SYNM/FBL/SDC4/GMDS/MBNL1/PEX6/SLC35A3/RAB4A/EIF4A2/CCNB1IP1/CBX7/ANAPC5/BFAR/ZBTB20/FDFT1/TOMM70/PDCD10/CCNG2/PBX1/HACD2/MBD4/ARPC4/HLTF/COBLL1/NIPSNAP1/KDM5B/AKR7A2/IPO5/TFAP2A/RAB7A/ZNF217/ZSCAN18/FAHD2A/MED21/CDV3/TSPAN6/WWP2/GORASP1/ARMCX2/FARS2/AIP/PCNP/CAND2/ARL1/JAM3/KANK2/CCDC51/RAB6B/SMARCC1/ZNF415/PARL/GPD1L/PTEN/EMCN/FYCO1/GCA/NFE2L1/RPL36AL/CSNK2A2/NFIA/EFEMP2/OSBPL10/GNG11/NFIB/PEX5/MID2/RPL35A/RPL24/LSM3/SLC9A3R1/NOL7/SDHAF3/BBX/TGOLN2/VPS51/UBL3/LSM5/TXNIP/PALLD/ERP29/CSGALNACT1/PLSCR4/ZNF532/GAS1/SEC62/PPP1R3C/LPIN1/CNN3/CETN2/EIF2B5/OARD1/LZTFL1/NDN/RHOBTB3/TMEM47 |
| ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_DN | ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_DN | 99 | -0.44507 | -1.94505 | 3.10E-05 | 0.00037 | 0.000263 | 3124 | tags=34%, list=17%, signal=29% | HOXA9/ERF/KANK1/SLITRK6/DCLRE1A/PDXP/USP1/ZNF451/RFC4/ARID1A/KCTD15/CEP44/NADK2/ABHD10/ANAPC10/DLEU1/KCTD3/RTN4IP1/CEP85/GGA2/CSTF2T/CCDC51/NFIA/NR2F2/RAB11FIP2/THUMPD3/ZNF362/RASL11B/TPRG1/EBF3/AUTS2/MN1/HOXB7/MSH6 |
| REACTOME\_SNRNP\_ASSEMBLY | REACTOME\_SNRNP\_ASSEMBLY | 51 | -0.50569 | -1.946 | 0.000152 | 0.00146 | 0.001038 | 4858 | tags=43%, list=27%, signal=32% | SNRPD2/POM121/WDR77/NUP62/NUP85/NUP43/NUP54/RAE1/NUP133/PHAX/PRMT5/NUP107/NUP205/SNUPN/GEMIN8/GEMIN2/SNRPD1/GEMIN6/CLNS1A/NUP160/SNRPF/NUP37 |
| REACTOME\_MITOTIC\_SPINDLE\_CHECKPOINT | REACTOME\_MITOTIC\_SPINDLE\_CHECKPOINT | 109 | -0.44459 | -1.94633 | 6.12E-06 | 9.07E-05 | 6.45E-05 | 5398 | tags=52%, list=30%, signal=37% | KIF2A/CENPC/ANAPC1/PPP2R5B/BUB3/AHCTF1/BUB1B/CENPE/CENPM/NUDC/ANAPC7/CENPL/NSL1/CKAP5/KIF2C/CENPA/KNTC1/CLIP1/PPP2CB/NUP85/ANAPC11/PLK1/BUB1/NUP43/ANAPC4/NUP133/PPP2R5C/TAOK1/DYNC1LI1/CDC26/UBE2C/NUP107/ZW10/SKA2/SPDL1/ANAPC5/PPP2R5A/PPP1CC/ITGB3BP/DSN1/PPP2R5E/ANAPC10/DYNLL1/NDC80/DYNC1I1/ANAPC15/CENPQ/ANAPC16/UBE2E1/DYNC1I2/NUP160/CDC23/MIS12/CLASP1/XPO1/NUP37/DYNC1LI2 |
| ENK\_UV\_RESPONSE\_KERATINOCYTE\_DN | ENK\_UV\_RESPONSE\_KERATINOCYTE\_DN | 456 | -0.37042 | -1.94656 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4839 | tags=41%, list=27%, signal=30% | RP2/CDK14/G3BP1/ITSN1/ZMYND8/CTNNA1/SYPL1/CUX1/TM9SF2/TNFRSF1A/PEX11B/PUM2/RCBTB2/MACF1/ME2/TGFBR2/CPNE3/AFF1/AZIN1/C1D/PAWR/MRPL3/CTBP1/CYP51A1/MALT1/IRS1/STXBP3/TLK2/GOSR1/FPGT/IFNGR2/ARFGEF1/CDK2/NPTN/CLIP1/RPA3/KRAS/CPD/PIK3R3/TP53BP1/USP14/PSMD5/HNRNPDL/MKRN1/ACTL6A/SEC23A/GRSF1/SNRNP200/CDC7/SDHD/WNT5A/HSPA4L/PKD2/GCAT/BRD8/YME1L1/TERF1/PRKAR1A/OGT/NCOA3/RBBP8/LUC7L3/HPS5/ZNF148/CREB1/VRK1/HOXA9/RASA1/CBX3/ZDHHC3/STRN3/TCEAL1/SRSF1/FZD6/NBN/EID1/TMEM187/DYRK2/CETN3/AASDHPPT/ACADM/SCFD1/UTP3/SRF/TUSC2/ARL6IP5/HNRNPA0/ELAC2/TACC1/NMT2/SNTB2/CRADD/USP1/CDKN1B/DLG5/CSE1L/RUVBL1/UBE2C/SNX7/KIFAP3/ZNF133/LYST/ASH2L/SRSF11/BMI1/TARBP1/PRRG1/SLC35A1/GNPAT/UPF3A/EEF1E1/SMARCA1/CBX1/EXTL3/SSB/AGL/YTHDC1/STT3A/ERH/MBNL1/PEX6/GNE/STEAP1/ENTPD4/ANXA7/BLMH/ADCY9/ATXN2/GSK3A/MCM3AP/FDFT1/SLC9A6/CCNG2/CDC123/RRM1/MBD4/SFRP1/PSMG1/DUT/CCDC6/PPP2R5E/RTCA/IPO5/SNX4/ZNF146/DLEU1/HSPB11/G3BP2/ACYP1/ANP32A/TCFL5/TGDS/CAP2/IMPA1/RABEPK/MAOA/EPS15/PCMT1/UBE4A/PGRMC2/NAE1/PURA/RABGAP1/ZFR/NOL7/TRIM44/FLRT2/KAT6A/DLD/BET1/RDX/GTF2F2/FH/CDC23/HSPE1/PPP1R3C/FNTB/CNN3/PFDN4/PFKM/NMI/MTMR4/STK3/SNRPF/XPO1 |
| REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL | REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL | 56 | -0.50106 | -1.95447 | 0.000117 | 0.001168 | 0.00083 | 3924 | tags=46%, list=22%, signal=36% | RCL1/GAR1/WDR36/KRR1/NOP56/NOL11/SNU13/RPS6/WDR3/UTP3/UTP14A/UTP14C/THUMPD1/NHP2/EMG1/WDR75/WDR46/RRP36/UTP18/NOP10/FBL/UTP11/DDX52/DIMT1/IMP3/UTP6 |
| REACTOME\_POSTMITOTIC\_NUCLEAR\_PORE\_COMPLEX\_NPC\_REFORMATION | REACTOME\_POSTMITOTIC\_NUCLEAR\_PORE\_COMPLEX\_NPC\_REFORMATION | 26 | -0.59658 | -1.95594 | 0.000549 | 0.004308 | 0.003062 | 4620 | tags=58%, list=26%, signal=43% | AHCTF1/TNPO1/POM121/NUP62/NUP85/NUP43/NUP54/KPNB1/NUP133/UBE2I/NUP107/NUP205/RAN/NUP160/NUP37 |
| REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_TERMINATION | REACTOME\_RNA\_POLYMERASE\_III\_TRANSCRIPTION\_TERMINATION | 21 | -0.63524 | -1.95637 | 0.000378 | 0.003191 | 0.002268 | 2524 | tags=57%, list=14%, signal=49% | POLR3A/POLR2K/POLR3C/POLR3B/POLR2F/SSB/POLR3H/POLR3K/POLR2H/NFIA/NFIB/POLR3GL |
| REACTOME\_TP53\_REGULATES\_METABOLIC\_GENES | REACTOME\_TP53\_REGULATES\_METABOLIC\_GENES | 82 | -0.46378 | -1.95701 | 2.34E-05 | 0.000294 | 0.000209 | 3337 | tags=40%, list=19%, signal=33% | COX20/COX7B/RRAGC/COX19/COX14/YWHAB/COX11/SLC38A9/RRAGB/SESN1/LAMTOR5/LAMTOR1/AKT2/YWHAH/LAMTOR2/RRAGA/COX6A1/TNRC6B/SURF1/PRDX5/COX16/CYCS/GLS/PTEN/TACO1/PRKAB2/PRKAA1/NDUFA4/PRKAB1/COX6C/COX5B/COX7C/COX6B1 |
| KEGG\_CARDIAC\_MUSCLE\_CONTRACTION | KEGG\_CARDIAC\_MUSCLE\_CONTRACTION | 72 | -0.4749 | -1.96088 | 4.68E-05 | 0.000524 | 0.000372 | 1778 | tags=28%, list=10%, signal=25% | COX7A2/ATP1B2/ATP1A4/RYR2/UQCR10/SLC9A6/COX6A1/CACNB3/TNNI3/ATP1A2/UQCRHL/CYC1/UQCRQ/UQCRH/COX6C/COX7A1/COX5B/TPM1/COX7C/COX6B1 |
| KEGG\_SPLICEOSOME | KEGG\_SPLICEOSOME | 126 | -0.4418 | -1.97956 | 2.24E-06 | 3.87E-05 | 2.75E-05 | 5732 | tags=55%, list=32%, signal=38% | SNRPA/U2AF1/LSM6/LSM2/RBM8A/PCBP1/DDX39B/SRSF7/ALYREF/PRPF38B/U2SURP/HSPA1A/PPIE/SNRPD2/CDC5L/CWC15/DDX46/HNRNPU/THOC1/HSPA1L/HSPA2/MAGOH/SF3A1/SNRNP200/CTNNBL1/SMNDC1/ISY1/SF3A3/ZMAT2/SNRPA1/DHX16/PLRG1/PQBP1/SRSF8/USP39/HNRNPK/SRSF1/PRPF18/SNU13/SNRNP27/RBM17/PRPF8/SRSF9/PRPF31/TRA2A/PRPF38A/SF3B3/AQR/SNRNP40/PPIH/CRNKL1/RBM25/SNRPB2/DDX23/LSM8/PPIL1/CCDC12/PRPF19/SNRPD1/SYF2/SF3B6/SF3B5/CDC40/LSM3/LSM5/LSM7/SNRPF/SLU7/PHF5A |
| IVANOVA\_HEMATOPOIESIS\_INTERMEDIATE\_PROGENITOR | IVANOVA\_HEMATOPOIESIS\_INTERMEDIATE\_PROGENITOR | 120 | -0.44512 | -1.98185 | 2.12E-06 | 3.71E-05 | 2.64E-05 | 5369 | tags=51%, list=30%, signal=36% | AHCY/TMEM97/SSR2/C7orf50/SPCS3/AP3S2/TBRG4/THOC5/SLC35B2/ERMARD/G3BP1/AGPAT5/MAPRE2/ERLIN1/LUC7L/CLUAP1/WDR77/WDR73/DBI/PSMA3/TXNDC15/SFXN4/YDJC/GTPBP8/UBFD1/ARMT1/ENOPH1/GTF3A/PCCA/GPT2/EEF1B2/NIPSNAP3A/GFM1/ZNF706/CBLN3/ELP2/POLR3C/CUL5/FANCM/APIP/CISD1/CHST14/MRPS25/COMMD10/SNUPN/MRPL12/GCNT3/DDX52/NOSTRIN/SURF6/MRPS35/TEX2/CTSZ/NOC3L/PARL/RABEPK/MAOA/RSU1/BET1/CHCHD4/TAMM41 |
| CHIANG\_LIVER\_CANCER\_SUBCLASS\_UNANNOTATED\_DN | CHIANG\_LIVER\_CANCER\_SUBCLASS\_UNANNOTATED\_DN | 180 | -0.41657 | -1.98528 | 1.38E-07 | 3.25E-06 | 2.31E-06 | 3948 | tags=41%, list=22%, signal=32% | DBI/WDR83OS/UBE2E3/CCNDBP1/ATG3/HSPA13/PPP2R3C/HAUS1/NFYC/MRPL44/MANF/CAPZA2/ABCB10/RAE1/STIP1/PSMC3/CCT4/MRPL39/HIKESHI/NUDT21/WDSUB1/RFC5/TPRKB/HNRNPA0/CMAS/PRMT6/CDKN3/RCN2/DNAJB9/CHCHD2/DCTN3/PSMD10/SNX7/NONO/GPR160/RFC4/LAMTOR5/SNX2/STT3A/NUP205/GLUD2/PPIL1/PIGF/DPCD/SEC61A1/PSMA2/CCT2/RAN/PSMG1/GMNN/ZNHIT3/METTL13/MRPL42/SNRPD1/MED21/G3BP2/TSPAN6/TPD52L1/SPOPL/VBP1/MCTS1/MRPS23/YAP1/VDAC3/PSMD8/DPM1/NDUFA4/PRKAB1/CLNS1A/TP53RK/CNN3/NUP37/ACTR6 |
| REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION | REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION | 118 | -0.44802 | -1.98991 | 1.24E-06 | 2.35E-05 | 1.67E-05 | 3217 | tags=36%, list=18%, signal=29% | RPSA/EIF3D/EIF4G1/RPL36/RPL35/RPL8/EIF3L/RPLP1/RPS6/EIF2B2/RPL22/RPL37A/EIF1AX/RPL37/RPL23A/RPL17/RPL13A/EIF2B1/EIF5B/RPS20/EIF4A2/RPS27L/RPL7/RPS23/RPL34/EIF2S2/EIF3H/RPS18/RPL38/FAU/RPS26/RPL26L1/RPL36AL/RPL35A/RPL24/EIF2S3/RPS4X/RPS21/EIF2B5/RPL26/RPL39/RPL21 |
| PECE\_MAMMARY\_STEM\_CELL\_DN | PECE\_MAMMARY\_STEM\_CELL\_DN | 128 | -0.44406 | -1.99586 | 5.47E-07 | 1.17E-05 | 8.32E-06 | 3219 | tags=38%, list=18%, signal=31% | GNG2/EBF1/RASA1/CBX3/SLC30A7/JAK1/RNF146/KLF12/DEGS1/TIA1/CNOT8/KIFAP3/KITLG/SLC41A2/STX2/BTF3L4/ZDHHC6/RABEP1/DCTD/PCDH18/NEMF/APP/RAB2B/NREP/KLHL28/REXO2/P4HB/CTSZ/SEC22B/RUSC1/TUG1/EPS15/TMEM230/JAG1/COG6/DERL1/SPON1/CALD1/TICAM2/WASF3/UBL3/CALM1/TXNIP/CTSO/PNISR/ZCCHC9/IGDCC4/TRPC1 |
| GARY\_CD5\_TARGETS\_DN | GARY\_CD5\_TARGETS\_DN | 416 | -0.38057 | -1.99725 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 5103 | tags=48%, list=28%, signal=35% | PRPF38B/FIGNL1/DAAM1/API5/QRSL1/MRPS12/HSPA1A/MGAT2/NAV2/KBTBD6/CUL2/TARDBP/HSP90B1/NASP/UBE2K/CCAR1/XPO4/GTF2H2/CHORDC1/RDH13/NUDC/ANAPC7/SENP6/TNPO1/LCMT2/DCTPP1/TIPIN/DDX1/HEATR1/SEC23IP/AZIN1/LARP4/FASTKD2/WDR77/TNPO2/TMEM33/DDX46/ATP2B1/ATP6V1C1/TANK/DRG1/FPGT/RRP15/SAMD9/PLEKHF2/CCT6A/TRMT10A/CUL4A/RCL1/CASP1/FBXO28/GAR1/WDR36/FAM98A/STAG1/LARS2/ZNF207/TSFM/PGM2/EBNA1BP2/RBM4/BCCIP/GRSF1/TSN/MANF/KPNB1/CHUK/CDK5RAP1/ZDHHC16/NDUFB7/PQBP1/SRFBP1/STIP1/RPP40/SLC30A5/NOP56/SRSF8/NOL11/NUP133/PSMC3/GLMN/SLC30A7/FLAD1/SRSF1/DYRK2/FUBP1/GFM1/WDR3/MAGT1/UTP3/SEPHS1/CHCHD7/UBE2F/GNL3L/KLC1/DYNC1LI1/AIMP2/PSMC5/ISCA1/UBAP2L/PHAX/CNPY2/IDE/ZNF451/BAG5/MRPL30/EIF1AX/TXNDC9/PPIB/TIA1/USP6NL/MRPL35/AK4/FAR1/EMG1/OTUD6B/TRMT5/RRP1B/USP15/PAN2/RUNX1T1/SRSF11/LANCL2/AP4B1/RBM25/GTF2H1/PPP4R3B/DNAJC9/PUM3/SAMM50/EIF2B1/ABCF2/ASNSD1/INTS2/TLR10/DNAJB4/DNAJC10/IPO11/PPIL1/CNOT7/WWP1/ZBTB24/PFDN1/RAN/IKZF5/RAB29/MRPS11/TAF9B/CLSPN/GMNN/IPO5/MRPL36/PNN/METTL13/RBM14/DLEU1/ADSL/ENSA/AFF3/DNAJB11/RPF1/SLC35B3/KRT10/MRPL20/FUBP3/GEMIN6/RNF138/ANP32A/COMMD5/MAP3K7/PSMD1/CSTF2T/PAPOLA/MRPS16/PSMC2/SAP18/MRPL50/MRPS23/APTX/RABEPK/SLC44A1/PGRMC2/POLA2/DNAJC7/CRYZ/MRPS17/PNRC2/MT1X/TXNIP/PALLD/SBDS/MRPL1/NUP160/GSPT2/MRPL15/FOXO1/MTMR4/RNF20/MSANTD4 |
| WP\_INTRAFLAGELLAR\_TRANSPORT\_PROTEINS\_BINDING\_TO\_DYNEIN | WP\_INTRAFLAGELLAR\_TRANSPORT\_PROTEINS\_BINDING\_TO\_DYNEIN | 24 | -0.62669 | -1.99771 | 0.000274 | 0.002403 | 0.001707 | 3680 | tags=50%, list=21%, signal=40% | IFT43/DYNLRB1/DYNLRB2/DYNC1LI1/DYNLT3/DYNC2LI1/IFT46/DYNLL1/HSPB11/DYNC1I1/DYNC1I2/DYNC1LI2 |
| VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_UP | VANHARANTA\_UTERINE\_FIBROID\_WITH\_7Q\_DELETION\_UP | 63 | -0.49703 | -1.99883 | 3.23E-05 | 0.000383 | 0.000272 | 3426 | tags=44%, list=19%, signal=36% | IGFBP5/PHGDH/NAA16/RBBP6/FBXO21/FBXO11/NPRL2/BCS1L/EIF1AX/CSE1L/YTHDF1/EMG1/SMARCA4/GOSR2/EMC6/RAD23B/ZDHHC6/EIF5B/TRMT61B/RNF138/PAPOLA/DDX10/TIMM9/PCMT1/RAD51C/VEZF1/TTC27/PRUNE2 |
| CAIRO\_HEPATOBLASTOMA\_UP | CAIRO\_HEPATOBLASTOMA\_UP | 202 | -0.41544 | -2.00032 | 3.01E-08 | 8.41E-07 | 5.98E-07 | 4617 | tags=44%, list=26%, signal=33% | HMGA2/PLXNC1/MCM3/MAGED1/HEATR1/PODXL/COQ8A/PLVAP/CYP51A1/PMS1/IMPDH2/FXR1/RBM34/CPD/POLR1D/CEP68/HSPA2/MPZL1/TSN/LAMC1/NCOA3/MINPP1/SAC3D1/RPS6KC1/NUP133/UGGT1/PEG3/DLK1/PDCD2/SEPHS1/AVL9/TACC1/ANGEL2/TBCE/UBAP2L/GSTA4/DLG5/MRPS27/PSMD10/TRIB2/TIA1/SLF2/MCAM/RRP1B/TARBP1/SMARCA4/HMGCS1/GNPAT/CD24/CBX1/PRKCA/MAP3K4/CAMSAP2/SUCO/RAB4A/FDFT1/SP3/PPP1CC/KDM5B/ACLY/CKAP4/GMNN/ACACA/PRR15L/RELN/AKR1C3/TMEM243/PRKD1/SMARCC1/CAP2/MTR/WFS1/EMCN/HMGN4/FNBP1L/RCOR3/BRD3/DENR/DCP2/ZNF189/ITGAE/PALLD/CBX6/CDC23/CETN2/PFKM/VPS45/NUP37/NDN |
| GINESTIER\_BREAST\_CANCER\_ZNF217\_AMPLIFIED\_UP | GINESTIER\_BREAST\_CANCER\_ZNF217\_AMPLIFIED\_UP | 65 | -0.49868 | -2.01938 | 3.51E-05 | 0.000411 | 0.000292 | 6682 | tags=68%, list=37%, signal=43% | ADD1/DNAJB14/SIAH1/HEATR3/STX16/SRSF10/YIPF5/ESR1/ANG/SMIM14/SP1/POLK/CYP20A1/APBB2/F8/BLOC1S6/PWWP2A/DNAJC21/GNB5/UFL1/C22orf39/WSB1/ATG12/DNAL1/INIP/STAG2/CREB1/SPPL2A/BTD/AGAP4/FKBP14/FAM114A1/GNB4/SLC35A3/CHURC1/ANAPC5/KLHL20/RSBN1L/LPP/BBX/TRIP11/TRAK2/SLU7/BMPR2 |
| REACTOME\_INFLUENZA\_INFECTION | REACTOME\_INFLUENZA\_INFECTION | 151 | -0.43818 | -2.03071 | 1.70E-07 | 3.95E-06 | 2.81E-06 | 3728 | tags=36%, list=21%, signal=29% | KPNA5/RPS5/GRSF1/RPL23/NUP43/NUP54/KPNB1/RAE1/RPSA/NUP133/POLR2C/RPL36/PABPN1/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/POLR2K/RPL37/RPL23A/NUP107/RPL17/POLR2F/RPL13A/KPNA4/NUP205/RPS20/RPS27L/RAN/RPL7/RPS23/RPL34/KPNA3/IPO5/RPS18/RPL38/FAU/RPS26/POLR2H/RPL26L1/RPL36AL/RPL35A/RPL24/RPS4X/GTF2F2/RPS21/NUP160/XPO1/RPL26/RPL39/NUP37/RPL21 |
| WONG\_EMBRYONIC\_STEM\_CELL\_CORE | WONG\_EMBRYONIC\_STEM\_CELL\_CORE | 322 | -0.39668 | -2.03408 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3655 | tags=34%, list=20%, signal=27% | HAUS1/POP7/EBNA1BP2/PLK1/CDC7/SDHD/NUDCD2/CCT5/BUB1/PDHA1/TERF1/MTHFD2/SNRPA1/NDUFB7/STIP1/RPP40/RPSA/VRK1/HNRNPK/MRPL37/LYPLA1/CBX3/NIFK/EIF3L/MRPL39/LBHD1/PDCD2/RPL22/NDUFB8/SMC4/PHC1/CDKN3/ECHS1/NCAPD2/RCN2/MRPS18B/NHP2/MCM4/CLPP/CSE1L/RUVBL1/AK4/CDC34/NONO/SNRNP40/PSMD14/FAM136A/NUP107/DLGAP5/EEF1E1/UBE2V2/PSME3/WEE1/CISD1/UTP18/POLR2F/SSB/RAD23B/RAB34/NOP10/TIMM44/MRPS30/FBL/COQ3/NDUFAB1/BRIX1/MRPL12/SERPINH1/RRM1/PRMT3/NIPSNAP1/TEAD2/RPS23/MRPS36/TCF7L1/GMNN/PDIA4/GEMIN2/ADSL/NDC80/SNRPD1/ALDOC/EIF2S2/PRMT1/CYCS/GEMIN6/RPA2/VBP1/POLR3K/KPNA6/HMGN5/NDUFA11/YAP1/HADH/EIF2S3/MRPS17/E2F3/LSM5/ERP29/CKS1B/FH/HSPE1/GSPT2/MRPL15/UQCRH/COX5B/XPO1/PHF5A/HNRNPL |
| REACTOME\_NONSENSE\_MEDIATED\_DECAY\_NMD | REACTOME\_NONSENSE\_MEDIATED\_DECAY\_NMD | 115 | -0.46084 | -2.03418 | 1.24E-06 | 2.35E-05 | 1.67E-05 | 3217 | tags=35%, list=18%, signal=29% | RPSA/EIF4G1/RPL36/RPL35/RPL8/RPLP1/RPS6/RPL22/RPL37A/RPL37/RPL23A/UPF3A/RPL17/RPL13A/CASC3/UPF3B/RPS20/RPS27L/RPL7/RPS23/RPL34/RPS18/RPL38/SMG7/FAU/PPP2R2A/RPS26/RPL26L1/RPL36AL/SMG5/RPL35A/RPL24/RPS4X/UPF2/PNRC2/RPS21/GSPT2/RPL26/RPL39/RPL21 |
| GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_DN | GAZDA\_DIAMOND\_BLACKFAN\_ANEMIA\_PROGENITOR\_DN | 61 | -0.50888 | -2.0352 | 3.91E-05 | 0.000449 | 0.000319 | 4077 | tags=54%, list=23%, signal=42% | ITPR2/AGBL5/CASP6/OXLD1/IBTK/PNPLA4/CCT6A/NUP54/PHGDH/CDH2/EXOSC10/ZFX/SPAST/NOP56/LYPLA1/RPL36/CPSF6/MAGT1/CNOT8/SMARCA4/THOC7/RAB4A/SEC61A1/ADCK2/ARL1/NFYB/TAX1BP1/IFT74/NUDT2/LSM5/NUP160/HSDL2/PFDN4 |
| SCHLOSSER\_MYC\_TARGETS\_REPRESSED\_BY\_SERUM | SCHLOSSER\_MYC\_TARGETS\_REPRESSED\_BY\_SERUM | 147 | -0.44168 | -2.03671 | 1.50E-07 | 3.53E-06 | 2.51E-06 | 5359 | tags=51%, list=30%, signal=36% | ZNF330/COPS2/AUH/BUB3/PWP1/HIRA/UBE2G1/API5/EIF3A/PTGES3/UBE2K/DDX1/RMND5A/PMPCB/MRPL3/FASTKD2/RANBP1/TRIAP1/ZZZ3/ACVR1B/ACTL6A/CCT5/YBX3/MTHFD2/SRSF8/LYPLA1/IARS2/CBX3/DNAJC2/FBXO21/SRSF1/AASDHPPT/ZC3H15/COX11/ISCA1/DCUN1D4/EXOSC8/SSBP1/EMC2/OAT/PSMD14/ANP32B/EEF1E1/SLC25A17/PUM3/SSB/GLOD4/BLMH/DCTD/TOMM70/CCT2/RAN/PRMT3/PSMG1/IPO5/APP/EI24/G3BP2/ZC3H14/CYCS/DIMT1/C12orf29/TGDS/SMARCC1/DDX10/ZMPSTE24/NDUFB6/FAM120A/NR2F2/NAE1/ACP1/FH/HSPE1/PFDN4/SNRPF |
| REACTOME\_CARGO\_TRAFFICKING\_TO\_THE\_PERICILIARY\_MEMBRANE | REACTOME\_CARGO\_TRAFFICKING\_TO\_THE\_PERICILIARY\_MEMBRANE | 49 | -0.53758 | -2.04719 | 3.57E-05 | 0.000415 | 0.000295 | 6161 | tags=61%, list=34%, signal=40% | BBS7/ARL3/SSTR3/CCT3/BBS12/EXOC8/NPHP3/PKD1/RP2/TTC8/EXOC7/EXOC6/SMO/CCT5/PKD2/GBF1/CCT4/ARL6/BBS1/MCHR1/CCT2/BBS4/CNGB1/BBS10/EXOC5/BBS2/MKKS/RAB11FIP3/RAB11A/LZTFL1 |
| RAMALHO\_STEMNESS\_UP | RAMALHO\_STEMNESS\_UP | 185 | -0.4273 | -2.04848 | 2.30E-08 | 6.70E-07 | 4.76E-07 | 5404 | tags=48%, list=30%, signal=34% | NDUFAF4/KIF2A/CENPC/BACH1/FBXO8/DICER1/PSMD11/MRPS2/LAPTM4A/CPXM1/TBRG4/SLC38A2/ALDH7A1/LIG3/DCTPP1/RPUSD4/SEC23IP/ITGB1/PRPSAP1/UBE2T/GHR/GAB1/KCNAB3/TBC1D15/STXBP3/RARS2/ZZZ3/ZNF213/RSRC2/KRAS/RCL1/ZNF101/TMEM183A/SNX12/SEC23A/PKD2/MRPS10/GCAT/LAPTM4B/COPRS/ZFX/COPS7A/RSL1D1/RASA1/IARS2/NIFK/GRWD1/ACADM/PDCD2/RPL22/LAS1L/YWHAB/MTERF3/ELP2/RCN1/MED23/RYK/TXNDC9/ZMYM4/PEX7/PPA1/ARCN1/COPS4/PIGX/PAFAH2/PPIC/MTMR10/RAB18/RAD23B/LRRC58/SH3D19/SMARCAD1/YWHAH/TEAD2/MRPL45/USP9X/ZC3H14/RNF138/RIDA/DPH5/WDR55/YAP1/SUCLG2/PLS3/MRPS31/ZNF281/ZNF644/STAM/XPO1 |
| REACTOME\_TRNA\_PROCESSING | REACTOME\_TRNA\_PROCESSING | 101 | -0.46949 | -2.04942 | 6.78E-07 | 1.41E-05 | 1.00E-05 | 4674 | tags=47%, list=26%, signal=35% | LAGE3/POM121/LCMT2/DDX1/HSD17B10/MTO1/NUP62/ADAT1/URM1/NUP85/TRMT10A/POP7/TSEN2/NUP43/NUP54/RAE1/WDR4/RPP40/NUP133/TPRKB/ELAC2/THG1L/RTCB/C2orf49/DUS2/TRMT11/TRNT1/TRMT5/NUP107/POP4/TRMU/TRMT1/POP5/NUP205/RPP21/TRMT12/RAN/TYW3/TRMT13/TRMT61B/TRIT1/ALKBH8/PUS3/NUP160/TP53RK/NUP37/TSEN15 |
| FAELT\_B\_CLL\_WITH\_VH3\_21\_DN | FAELT\_B\_CLL\_WITH\_VH3\_21\_DN | 48 | -0.5453 | -2.07276 | 2.42E-05 | 0.000302 | 0.000215 | 2844 | tags=58%, list=16%, signal=49% | CTDSP2/RABGAP1L/TSPO/ASMTL/CTNNA1/DDX1/SPEN/MKRN1/PUM1/PBX3/YWHAB/CDKN1B/PSMD10/NDUFC1/POP4/TBCC/CALCOCO2/IFI6/COX7A2/N4BP2L1/CBX7/CCNG2/LMO4/SAP18/HMGN4/PSMD8/SCRN1/TBL1X |
| DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_DN | DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_DN | 440 | -0.39504 | -2.0759 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 5521 | tags=49%, list=31%, signal=35% | KIF20B/CLOCK/FOXO3/DNAJC13/SWAP70/NEDD4/MAP2K1/KIF11/KIF2A/PKP4/PDE8A/PPM1B/AUH/MYO10/BAZ2B/SRSF7/FBXW11/HIRA/SATB2/BUB1B/NCOA1/XRCC4/UBE2G1/RBPJ/CENPE/PIP4K2A/U2SURP/C2CD2/SRPK2/SMARCA2/SEMA5A/RFTN1/ADAM10/MKLN1/ORC5/ITSN1/ZMYND8/FLNB/MAMLD1/CREB3L2/TRIM37/CUX1/LRPPRC/CDYL/IL1RAP/PHIP/PUM2/TUBGCP3/NR3C1/AFF1/SLC25A13/CKAP5/ACVR1/PAWR/LARP4/MYO1B/STK24/CASK/IRS1/ATP2B1/PMS1/TLK2/ARFGEF1/CENPA/FXR1/ZZZ3/IBTK/CDC42BPA/APPBP2/CLIP1/CREBBP/CDK8/SEC24A/NCK1/ARID5B/SPEN/UBE3A/WDR7/PAIP1/STAG1/HNRNPDL/STIL/LARS2/NFYC/TRAM2/ATF2/WNT5A/TLE1/DPYD/PKD2/STAU2/ANKMY2/OPA1/NVL/OGT/NCOA3/RNGTT/CCSER2/ATP11B/TLE4/ZNF148/CREB1/RUNX1/MAP2K4/RASA1/CLEC16A/STRN3/RBMS1/PPP2R5C/RGS7/NBN/FUBP1/WAPL/PUM1/PBX3/OXSR1/TDRD7/NMT2/PPP1R12A/CEP135/PTPRK/CRADD/CDK13/DCUN1D4/SSBP1/RYK/ENC1/ZMYM4/KRIT1/PHF3/EPS8/TCF12/STK39/TLK1/ZC3H4/ANKS1A/CERS6/MGLL/CEP350/TRIM33/FCHSD2/MTX2/REV3L/MED13L/PUM3/PRKCA/GAPVD1/UTP18/RAD23B/CAMSAP2/UBR2/HELZ/FRYL/GIGYF2/ADGRG6/MBNL1/SPOP/ABI1/ATXN2/ZDHHC17/ZHX3/MNAT1/PHF21A/PRMT3/TRIM2/PPP2R5E/USP9X/FTO/TAF4/KPNA3/CXCL12/ADSL/NDC80/C2CD5/EHBP1/NREP/FARS2/FNDC3A/PPP2R2A/CAP2/LIMCH1/ORC2/RRAS2/USP13/EPS15/NUAK1/USP24/PCMT1/YAP1/NFIB/FNBP1L/NR2F2/FAM171A1/EPHA4/UPF2/RABGAP1/BARD1/BBX/WASF3/RAB3GAP1/UBL3/E2F3/KAT6A/SUZ12/FERMT2/GTF2F2/PNISR/FUT8/PPP3CB/STAM/CLASP1/TBL1X/VPS13A/STK3/XPO1/SPECC1L |
| NOUZOVA\_TRETINOIN\_AND\_H4\_ACETYLATION | NOUZOVA\_TRETINOIN\_AND\_H4\_ACETYLATION | 128 | -0.46189 | -2.076 | 9.04E-08 | 2.24E-06 | 1.59E-06 | 4716 | tags=46%, list=26%, signal=34% | PSMA6/IP6K2/RALY/MARK2/GOLT1B/SPAG7/USP48/AP3B1/GOSR1/KNTC1/ADAT1/RSRC2/THOC1/RIN2/EIF1AD/PSMA3/WSB1/ZSCAN9/PPP2R3C/GOLGB1/KRR1/RARB/MYOF/ERCC1/LETMD1/OXNAD1/COPS5/NME7/ZNF615/MRPS18B/ZGRF1/ZC3H4/POP4/GOSR2/CHMP4B/CAMTA2/SUPV3L1/YTHDC1/ZFPL1/PDCD10/CDC123/ARPC4/BBS4/ASTE1/ZNF600/ZNF518A/ENSA/EIF3H/MCTS1/ARL14EP/ZMPSTE24/MRPS31/THUMPD3/NUDT2/NSRP1/PNISR/LARP7/ZBTB3/RNF20 |
| WANG\_LMO4\_TARGETS\_DN | WANG\_LMO4\_TARGETS\_DN | 334 | -0.40556 | -2.08321 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4335 | tags=41%, list=24%, signal=32% | RUFY2/CDC42/GADD45A/TTC17/MTMR2/DDX46/CASK/AP3B1/ATP6V1C1/FUNDC1/EXOC6/FXR1/SAMD9/ZC3H7A/DUSP3/SIPA1L2/TRMT10A/DMD/FBXO28/DDX60/SH3GLB1/PSMD5/RNF7/GULP1/ATP6V1H/AHRR/HSPB8/RPL23/SAMHD1/GTF3C3/RBM15/MGAT5B/SYTL2/CAPZA2/MRPS15/PHF11/ATP11C/ICA1L/SNRPA1/TMEM192/PLRG1/SRFBP1/EIF3D/RDH11/PCGF6/INPP4B/PLEKHB2/MRPL57/TMTC2/WAPL/FEZ2/CPSF2/SCFD1/DUSP23/MAD2L1BP/KRTCAP2/KMT2A/PTPRK/SUGT1/AIMP2/CCT7/ELP2/PSMC5/LURAP1L/SLC4A1AP/PRMT5/RNASEL/SLF2/HACL1/WDR6/PAM/LYRM2/ARCN1/HMGCS1/EVL/STX12/RBM25/SRP68/CCDC127/KAT14/ATAD1/ABCF2/MGST3/RAB18/CASC3/MTIF2/CHMP4A/USP47/PDK3/RNF181/TEFM/EIF5B/CHURC1/MED6/BAG3/AATF/COBLL1/OSTM1/PSG6/KATNBL1/CDR2/RB1CC1/TUBD1/SNX4/DIABLO/POLB/PLEKHA1/XIAP/EPC1/CYP2U1/RPF1/NSUN4/MYLIP/ZFAND2A/NDUFAF2/RPL7L1/GGNBP2/DNAJC7/RPL35A/SAR1A/COG6/MRPS31/THUMPD3/PTS/ZFR/NOL7/BBX/NRDE2/RERG/RDX/MRPS21/FUT8/OPTN/WASL/CWC27/GSTCD/DLST/DYNC1LI2 |
| REACTOME\_HATS\_ACETYLATE\_HISTONES | REACTOME\_HATS\_ACETYLATE\_HISTONES | 74 | -0.50151 | -2.08351 | 4.70E-06 | 7.25E-05 | 5.15E-05 | 4589 | tags=47%, list=26%, signal=35% | YEATS4/MEAF6/VPS72/MCRS1/EP400/ZZZ3/CREBBP/MBIP/ACTL6A/ATF2/KAT2A/TAF12/BRD8/OGT/TADA1/JADE3/ELP2/SUPT3H/RUVBL1/ELP4/KANSL1/SUPT7L/ELP5/DMAP1/KAT14/ING4/ENY2/ELP3/DR1/MRGBP/ELP6/EPC1/TAF6L/KAT6A/PHF20 |
| BIOCARTA\_NDKDYNAMIN\_PATHWAY | BIOCARTA\_NDKDYNAMIN\_PATHWAY | 17 | -0.7103 | -2.08437 | 0.000237 | 0.002149 | 0.001528 | 659 | tags=35%, list=4%, signal=34% | CALM2/PPP3CC/EPS15/PPP3CA/CALM1/PPP3CB |
| FAELT\_B\_CLL\_WITH\_VH\_REARRANGEMENTS\_DN | FAELT\_B\_CLL\_WITH\_VH\_REARRANGEMENTS\_DN | 48 | -0.54851 | -2.08497 | 1.97E-05 | 0.000255 | 0.000181 | 3131 | tags=38%, list=17%, signal=31% | GTF3A/EID1/PBX3/DCTN3/SLC35D2/NDUFC1/MRPL40/CBX7/PARP4/ATP6V1G1/KRT10/PSMD8/TMED10/TGOLN2/LDOC1/MYLK/LYRM1/XPO1 |
| REACTOME\_PROTEIN\_LOCALIZATION | REACTOME\_PROTEIN\_LOCALIZATION | 155 | -0.44762 | -2.08538 | 5.46E-08 | 1.44E-06 | 1.03E-06 | 4554 | tags=50%, list=25%, signal=38% | PEX11B/TIMM10/PMPCB/SLC25A13/ACBD5/LONP2/UBE2J2/ZFAND6/TIMM50/PECR/COA6/COQ2/DHRS4/SEC61G/PAM16/PEX1/OTOF/VAMP2/TOMM7/ACOX1/ECI2/ACAA1/MTX1/COX19/ABCD3/PHYH/PRNP/NDUFB8/CHCHD7/SLC25A12/CHCHD5/TIMM17A/BCS1L/IDE/ABCD1/CHCHD2/HSCB/PEX7/ACOT4/ACOT8/PEX16/HACL1/IDH1/FXN/CROT/GNPAT/SLC25A17/MTX2/TYSND1/CHCHD3/SAMM50/ATAD1/HMGCL/TIMM44/ECH1/PEX6/EPHX2/TIMM21/ALDH3A2/TOMM70/MLYCD/USP9X/APP/PEX2/CAMLG/DNAJC19/UBL4A/PEX19/TIMM9/GRPEL2/PEX5/SLC25A4/TIMM22/CYC1/ACOX2/TOMM5/CHCHD4/COX17 |
| WP\_MITOCHONDRIAL\_COMPLEX\_I\_ASSEMBLY\_MODEL\_OXPHOS\_SYSTEM | WP\_MITOCHONDRIAL\_COMPLEX\_I\_ASSEMBLY\_MODEL\_OXPHOS\_SYSTEM | 45 | -0.55727 | -2.08569 | 3.49E-05 | 0.00041 | 0.000291 | 5647 | tags=71%, list=31%, signal=49% | NDUFB5/NDUFS1/NDUFAF4/NDUFB2/COA1/NDUFB1/NDUFB10/NDUFB3/FOXRED1/NDUFS6/NDUFAF3/NDUFB7/NDUFAF6/NDUFA3/NDUFAF1/NDUFB8/NDUFC1/NDUFA1/TMEM126B/NDUFAB1/NDUFA12/NDUFA13/NDUFA8/NDUFS3/NDUFA7/NUBPL/NDUFAF2/NDUFB11/NDUFB6/ACAD9/NDUFS4/NDUFS5 |
| LIN\_MELANOMA\_COPY\_NUMBER\_DN | LIN\_MELANOMA\_COPY\_NUMBER\_DN | 38 | -0.58534 | -2.09065 | 6.69E-05 | 0.000719 | 0.000511 | 2574 | tags=37%, list=14%, signal=32% | RCBTB1/BAG5/SUCLA2/ATAD1/MFAP1/MTMR6/KPNA3/CLN5/FNDC3A/SAP18/PTEN/ELL3/ESD/RPL21 |
| DAZARD\_UV\_RESPONSE\_CLUSTER\_G6 | DAZARD\_UV\_RESPONSE\_CLUSTER\_G6 | 139 | -0.45875 | -2.09894 | 4.43E-08 | 1.19E-06 | 8.44E-07 | 5491 | tags=50%, list=31%, signal=35% | FOXO3/KIF11/KIF2A/CENPC/STRN/AJAP1/ABL1/BUB1B/RABGAP1L/RBPJ/RRS1/ZMYND8/MKI67/CREB3L2/HMGA2/CDYL/PHIP/TUBGCP3/IRS1/ATP2B1/PMS1/TLK2/CENPA/ZZZ3/APPBP2/VLDLR/MEIS1/ATF2/EDRF1/POLD3/TLE4/WAPL/SMC4/PPP1R12A/ZNF451/PUDP/PHF3/TLK1/RRP1B/FGFR2/REV3L/FRYL/LSM14A/SUCO/GNE/SPOP/ADCY9/SLC9A6/SP3/LPCAT1/ZNF146/ADSL/FNDC3A/NPAS2/ORC2/USP24/FNBP1L/MAST4/BBX/UBL3/AUTS2/KAT6A/MN1/FERMT2/LARP7/INSIG2/CLASP1/FOXO1/XPO1/KLHL9 |
| REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIBES\_SNRNA\_GENES | REACTOME\_RNA\_POLYMERASE\_II\_TRANSCRIBES\_SNRNA\_GENES | 70 | -0.51329 | -2.10216 | 4.36E-06 | 6.86E-05 | 4.87E-05 | 4356 | tags=47%, list=24%, signal=36% | ZNF143/POLR2D/GTF2E1/CCNT2/GTF2A2/CDK7/RPRD2/SNAPC1/TAF11/POLR2C/INTS10/SNAPC5/TBP/PHAX/POLR2K/INTS9/NABP2/RPRD1A/INTS8/TAF5/POLR2F/INTS2/SUPT4H1/GTF2E2/ZC3H8/INTS1/POLR2H/ELL3/RNU11/SNAPC4/INTS3/GTF2F2/RPAP2 |
| REACTOME\_PROCESSING\_OF\_CAPPED\_INTRON\_CONTAINING\_PRE\_MRNA | REACTOME\_PROCESSING\_OF\_CAPPED\_INTRON\_CONTAINING\_PRE\_MRNA | 236 | -0.42767 | -2.10638 | 1.17E-10 | 4.94E-09 | 3.51E-09 | 3731 | tags=36%, list=21%, signal=29% | MAGOH/FUS/SF3A1/SNRNP200/CTNNBL1/NUP43/SMNDC1/NUP54/ISY1/ELAVL2/SF3A3/RAE1/SNRPA1/DHX16/PLRG1/PQBP1/USP39/HNRNPK/NUP133/POLR2C/POLDIP3/PABPN1/SRSF1/SNU13/SARNP/SNRNP27/RBM17/CPSF2/NUDT21/METTL3/HNRNPA0/PRPF8/SRSF9/POLR2K/PRPF31/ELAVL1/PRPF38A/SF3B3/AQR/SNRPN/SNRNP40/CSTF3/CD2BP2/NUP107/PPIH/SRSF11/CRNKL1/SNRPB2/ZRSR2/THOC7/POLR2F/DDX23/CASC3/LSM8/UPF3B/NUP205/DNAJC8/PPIL1/HNRNPUL1/PPIL6/PRPF19/SNRNP25/SRRM1/CPSF3/SNRPD1/ZCRB1/SYF2/SF3B6/SF3B5/CSTF2T/PAPOLA/POLR2H/CDC40/LSM3/LSM5/GTF2F2/NUP160/LSM7/CWC27/SNRPF/SLU7/NUP37/PHF5A/HNRNPL |
| LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP | LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP | 107 | -0.48347 | -2.11237 | 8.07E-08 | 2.03E-06 | 1.44E-06 | 4098 | tags=44%, list=23%, signal=34% | PRKCQ/RBM18/TMEM245/CASP1/PIK3R1/NT5DC1/PSMD5/INIP/FBXW2/BDH2/SNAPC1/GALNT1/GNPDA2/ASTN2/TCEAL1/INTS10/RPL35/EIF3L/PBX3/IFI16/MAT2B/NMRK1/GSTA4/BBS1/RXRA/PHF3/ANP32B/ATAD1/NLGN4X/ATP6V1G1/MEIS3P1/FAHD2A/TPD52L1/PLD1/FUBP3/MAP3K7/MRPL50/APTX/TMEM268/BRD3/BBX/ESD/CBR4/VPS13A/FOXO1/TMOD1/ZNF462 |
| MOOTHA\_MITOCHONDRIA | MOOTHA\_MITOCHONDRIA | 421 | -0.40797 | -2.13817 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3707 | tags=38%, list=21%, signal=31% | MRPL28/PDK1/LARS2/GATM/PAM16/TSFM/IDH2/MRPL44/RPAIN/SDHB/SDHD/DNASE2/ETFB/SHMT2/MRPS10/PDHA1/DECR1/MRPS15/ECI2/YME1L1/SMCP/ACAA1/MTHFD2/TBCB/NDUFB7/COX7B/MRPL9/LONP1/MTX1/NDUFA3/TUFM/PCCA/PYGB/NBN/MRPL39/SLC25A15/MIPEP/MRPL57/GFM1/APAF1/SLC1A1/ACADM/MRPS7/NDUFB8/MTRF1/COX11/GATB/CPS1/UQCRB/SLC25A12/TIMM17A/ECHS1/BCS1L/MRPL22/SSBP1/MRPS18B/MRPS27/MRPL35/OAT/AK4/SLF2/ZNF33B/NDUFC1/PPA1/CKMT2/CASP2/HAX1/NDUFA1/FXN/CROT/SLC25A17/DGUOK/MTX2/POLR3B/ABCF2/OXA1L/COX7A2/HMGCL/MTIF2/MRPS18C/TIMM44/MRPS30/SUPV3L1/PDK3/MRPL48/NDUFAB1/DNM1L/ENDOG/MYCBP/SIRT4/CNOT7/ANXA7/MRPL18/MRPL12/SLC9A6/TOMM70/MLYCD/RAN/ATPAF2/MRPS11/DUT/TST/MRPL46/COX6A1/TFB1M/APP/NNT/DIABLO/NDUFA8/MRPL42/SURF1/ADCK2/PRDX3/MRPS33/PPOX/ETFDH/MRPS35/FARS2/NDUFS3/MRPL20/CYCS/MRPS22/NDUFS8/NDUFA7/SLC30A9/MRPS16/MRPL33/MAOA/TIMM9/COX10/IMP3/VDAC3/NDUFB6/SLC25A4/HADH/PDHX/TIMM22/MRPS31/CYC1/MRPS17/NDUFA4/DLD/FH/COX17/NME3/HSPE1/NFS1/ACAT1/MRPL15/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/SLC25A23/PLA2G2A/COX7C/NDUFS5/YARS2/COX6B1 |
| WP\_MITOCHONDRIAL\_COMPLEX\_III\_ASSEMBLY | WP\_MITOCHONDRIAL\_COMPLEX\_III\_ASSEMBLY | 14 | -0.772 | -2.13886 | 4.48E-05 | 0.000502 | 0.000357 | 2777 | tags=64%, list=15%, signal=54% | TTC19/UQCRB/BCS1L/LYRM7/UQCR10/UQCC2/CYC1/UQCRQ/UQCRH |
| MOOTHA\_HUMAN\_MITODB\_6\_2002 | MOOTHA\_HUMAN\_MITODB\_6\_2002 | 405 | -0.41086 | -2.1451 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3696 | tags=38%, list=21%, signal=31% | PDK1/LARS2/GATM/TSFM/ACSL4/IDH2/UROS/MRPL44/SDHB/SDHD/DNASE2/ETFB/SHMT2/MRPS10/GCAT/PDHA1/DECR1/MRPS15/SMCP/MTHFD2/OPA1/TBCB/NDUFB7/COX7B/MRPL9/LONP1/NDUFA3/MCCC1/TUFM/PCCA/NBN/MRPL39/CPT2/SLC25A15/MIPEP/MRPL57/GFM1/APAF1/SLC1A1/ACADM/MRPS7/NDUFB8/BAD/MTRF1/COX11/GATB/CPS1/UQCRB/SLC25A12/TIMM17A/ECHS1/BCS1L/MRPL22/SSBP1/MRPS18B/MRPS27/SUCLA2/CLPP/MRPL35/OAT/AK4/SLF2/ZNF33B/NDUFC1/CKMT2/HAX1/NDUFA1/FXN/SLC25A17/ABCB6/DGUOK/ABCF2/OXA1L/COX7A2/HMGCL/MTIF2/MRPS18C/TIMM44/MRPS30/SUPV3L1/PDK3/MRPL48/NDUFAB1/AKAP1/DNM1L/ENDOG/CNOT7/MRPL18/MRPL12/SLC9A6/TOMM70/MLYCD/MRPS11/DUT/TST/MRPL46/COX6A1/TFB1M/NNT/DIABLO/NDUFA8/MRPL42/OXCT1/SURF1/PRDX3/MRPS33/PPOX/BNIP3/ETFDH/MRPS35/FARS2/NDUFS3/REXO2/MRPL20/CYCS/NDUFS7/MRPS22/GLS/NDUFS8/NDUFA7/MRPS16/MRPL33/MAOA/TIMM9/COX10/VDAC3/NDUFB6/SLC25A4/HADH/PDHX/TIMM22/MRPS31/CYC1/MRPS17/NDUFA4/DLD/ALDH18A1/FH/COX17/NME3/HSPE1/NFS1/ACAT1/MRPL15/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/DLST/COX6B1 |
| DING\_LUNG\_CANCER\_EXPRESSION\_BY\_COPY\_NUMBER | DING\_LUNG\_CANCER\_EXPRESSION\_BY\_COPY\_NUMBER | 96 | -0.49313 | -2.14634 | 7.26E-07 | 1.49E-05 | 1.06E-05 | 5927 | tags=61%, list=33%, signal=41% | BRWD1/METTL4/PAK2/C19orf12/PDCD6/NDUFB5/FBXO33/NEK3/PPP4R2/FBXW11/MYNN/GABPA/ZNF302/SEC23IP/CEBPG/PPM1A/MAPK8/FXR1/GOLGA7/CDK8/PEPD/THOC1/RAE1/TERF1/ATP11B/NIPBL/GTF3A/ARMC8/RASA1/DNAJC2/MIPEP/COG3/IPO8/CMAS/PPP1R12A/THUMPD1/RYK/KRIT1/ASH2L/RFC4/KBTBD11/KPNA4/ANKRD10/DCTD/GATAD1/TOMM70/DBR1/MTMR6/MRPS11/RB1CC1/GEMIN2/EIF3H/CDC42SE2/MRPL47/LSM1/PAN3/ANKRD46/E2F3/ARMC1 |
| KEGG\_OXIDATIVE\_PHOSPHORYLATION | KEGG\_OXIDATIVE\_PHOSPHORYLATION | 95 | -0.49577 | -2.14781 | 7.88E-07 | 1.61E-05 | 1.14E-05 | 3985 | tags=47%, list=22%, signal=37% | NDUFS6/ATP6V1B1/ATP6V0E2/ATP6V1H/PPA2/SDHB/SDHD/NDUFB7/COX7B/NDUFA3/ATP6V1E1/NDUFB8/COX11/UQCRB/NDUFC1/PPA1/NDUFA1/COX7A2/NDUFAB1/UQCR10/ATP6V1G1/COX6A1/NDUFA8/NDUFS3/NDUFS7/ATP6V0A2/NDUFS8/NDUFA7/NDUFA11/COX10/NDUFB6/UQCRHL/CYC1/NDUFA4/ATP6V1D/UQCRQ/COX17/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_DN | MOREAUX\_B\_LYMPHOCYTE\_MATURATION\_BY\_TACI\_DN | 71 | -0.52393 | -2.15851 | 1.55E-06 | 2.84E-05 | 2.02E-05 | 5054 | tags=61%, list=28%, signal=44% | MRPS12/MRPL43/NASP/G3BP1/IP6K2/DDX1/TDP2/TIMM50/RNF7/HAUS1/EBNA1BP2/NUDCD2/CCT5/ASF1A/EDRF1/NCAPD3/TBCB/AASDHPPT/TMEM126A/NMT1/PPP1R12A/PAAF1/AIMP2/SSBP1/IREB2/TMEM165/CYP2R1/THYN1/CHMP4A/TEFM/CCT2/RAN/NDUFA13/C1orf131/CHCHD1/RPL26L1/PSMD8/BARD1/MALSU1/LSM5/IK/SLC38A1/CDC23 |
| REACTOME\_MRNA\_SPLICING | REACTOME\_MRNA\_SPLICING | 185 | -0.45408 | -2.17682 | 5.03E-10 | 1.91E-08 | 1.36E-08 | 3731 | tags=39%, list=21%, signal=31% | MAGOH/FUS/SF3A1/SNRNP200/CTNNBL1/SMNDC1/ISY1/ELAVL2/SF3A3/SNRPA1/DHX16/PLRG1/PQBP1/USP39/HNRNPK/POLR2C/PABPN1/SRSF1/SNU13/SNRNP27/RBM17/CPSF2/NUDT21/HNRNPA0/PRPF8/SRSF9/POLR2K/PRPF31/ELAVL1/PRPF38A/SF3B3/AQR/SNRPN/SNRNP40/CSTF3/CD2BP2/PPIH/SRSF11/CRNKL1/SNRPB2/ZRSR2/POLR2F/DDX23/CASC3/LSM8/UPF3B/DNAJC8/PPIL1/HNRNPUL1/PPIL6/PRPF19/SNRNP25/SRRM1/CPSF3/SNRPD1/ZCRB1/SYF2/SF3B6/SF3B5/CSTF2T/PAPOLA/POLR2H/CDC40/LSM3/LSM5/GTF2F2/LSM7/CWC27/SNRPF/SLU7/PHF5A/HNRNPL |
| OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_UP | OISHI\_CHOLANGIOMA\_STEM\_CELL\_LIKE\_UP | 328 | -0.42511 | -2.18201 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4583 | tags=42%, list=26%, signal=32% | ZNF507/LCMT2/DLAT/SRP9/NUDCD3/HEATR1/IL17RB/NRSN2/VPS72/RNF14/KLHL12/HNRNPU/ZNF134/AQP4/RRP15/RBM34/DUSP3/ARMCX5/TRMT1L/FBXO28/NAXE/ZSCAN9/TMEM183A/HOOK1/TBC1D19/SAYSD1/SDHD/ZNF562/ZNF224/COG2/KLHL22/NVL/PHGDH/RPS6KC1/PREPL/MCCC1/BPGM/PCCA/PIGC/NUP133/IARS2/NDUFAF1/WDR12/CAV2/KANK1/MIEF1/BPHL/AASDHPPT/WDR3/PBX3/PMM1/ZC3H7B/GGPS1/ALDH1B1/EIF4ENIF1/NDUFAF5/CHML/TIMM17A/ANGEL2/BCS1L/NECTIN3/UBAP2L/ZNF451/C6orf62/UFC1/SLC22A5/MRPL35/SNRPN/KIFAP3/OGFOD1/TOR1AIP1/YPEL1/PDGFD/MDM4/CUL5/SMIM7/SCYL3/ZNF432/POLR2F/CAMSAP2/TIMM44/MRPS30/SUPV3L1/THAP1/SUCO/RAB4A/MED17/ZHX3/ZBTB20/KLHL20/MRS2/ALDH3A2/AATF/ZNF177/RBM7/MRPL46/MORC2/GMNN/NNT/LANCL1/ZNF146/KCTD3/PPOX/PTPRF/CTPS1/CRYAB/MKKS/ZNF480/ZNF672/APCS/MPC2/ZNF45/SMG7/SLC30A9/MRPS16/MTR/DDX10/PEX19/APTX/VCPIP1/ZNF212/MED20/COX10/SMG5/TOP3B/PUS3/RCOR3/SPTSSA/CRYZ/TIMM22/PTS/RBBP5/ZSCAN16/TRIM32/FH/SLC38A1/NFS1/CLASP1/SLC25A23 |
| GABRIELY\_MIR21\_TARGETS | GABRIELY\_MIR21\_TARGETS | 274 | -0.43524 | -2.1849 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 5539 | tags=53%, list=31%, signal=37% | RECK/TRIM38/CLOCK/EXOC8/BTBD7/ADNP/B3GALNT1/ADGRG2/FBXL5/TBL1XR1/GPD2/SKP2/ACTR2/ENAH/NBEA/ZNF667/SRPK2/EIF4EBP2/KBTBD6/DDR2/TSNAX/RP2/RTF1/PER3/FNBP1/TNPO1/KLHL3/PDCD4/PHIP/CCT6P1/HERPUD2/TRAPPC2/RMND5A/LNPK/TGFBR2/PURB/ACBD5/DDX46/ARFGEF1/PTBP3/RSPRY1/ALS2/DMD/CCNG1/PIK3R1/MPDZ/LDAH/MEIS1/PTPN3/GPAM/ATF2/WNT5A/PKD2/YME1L1/ZNF286A/ATP11B/VPS36/NIPBL/RRAGC/LMBR1/HOXA9/FBXO11/UGGT1/SERAC1/SPIN1/APAF1/OSR1/VPS54/SASH1/SYNE2/TACC1/LIN7C/PIK3C2A/IREB2/PAG1/TPRG1L/PRICKLE2/IPP/NAA30/ZBTB44/UBR3/KLHL24/SESN1/CERS6/SRSF11/PRRC1/ZRANB1/KLHL8/TRIM33/REV3L/POLR3B/MYO9A/GAPVD1/ZYG11B/LYRM7/USP47/KBTBD7/NEK1/FANCI/GNE/ZBTB20/SLC9A6/PBX1/ESYT2/TRIM2/COBLL1/YOD1/RAB22A/TNRC6B/SREK1/EXOC5/TTC33/CCDC14/PLD1/BTBD3/AP3M1/PLPP1/SPG11/ARHGEF12/LIMCH1/PM20D2/PAN3/PRKAB2/CPEB3/NFIB/EPHA4/RAB11FIP2/PURA/RABGAP1/CALD1/SCRN1/PALLD/SUZ12/FERMT2/ZNF532/LPIN1/SACM1L/VPS13A/PHACTR2/TPM1/BMPR2/FAM217B/DYNC1LI2/RHOBTB3 |
| JOHNSTONE\_PARVB\_TARGETS\_2\_DN | JOHNSTONE\_PARVB\_TARGETS\_2\_DN | 316 | -0.42761 | -2.1851 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4799 | tags=46%, list=27%, signal=34% | BTC/C1GALT1/RDH13/MCUR1/UFL1/CDYL/RBM26/CDC5L/RBMS3/MCM3/NR3C1/TDP2/POLH/LNPK/SNRNP48/PPM1A/SESTD1/TMEM33/NUP62/IRS1/CDK6/COLGALT1/FXR1/XRN1/SMIM13/SMC3/RIN2/CASP3/CASP1/UBE3A/ISOC1/STAG1/GULP1/AHRR/PPA2/RBBP4/TRAM2/ENPP4/DPYD/MRPS10/BLOC1S5/ECI2/OPA1/DSEL/PGBD1/RUNDC3B/ATP11B/GLCE/CLIC4/SLC30A5/LRP6/TAF11/OXR1/GXYLT1/MRPL14/LEMD3/MIS18BP1/SRSF1/C8orf33/PPP2R5C/FUBP1/MAGT1/NUDT21/SEPHS1/CHML/ARL5A/RCN2/NECTIN3/LIN7C/CDK13/DERA/PRPF31/CUTA/TTC39C/DCUN1D4/C6orf62/MRPS18B/TRIB2/TMEM165/CUL5/PLEKHA5/NFX1/AKIRIN1/LEPR/SLC35A1/DCUN1D1/RRP36/PRKCA/FRMD6/WEE1/UBR2/UTP11/CCDC126/GMDS/MBNL1/ANGPT1/PPIL1/TMEM14C/ADO/MRS2/NADK2/MDC1/PPP2R5E/SRRM1/IPO5/ZNF83/TPST1/FAF1/EHBP1/EXOC5/CENPQ/SLC35B3/SRPK1/PCNP/GLS/COMMD5/SEC22B/CAP2/LIMCH1/KPNA6/PDIK1L/CNIH1/SYNJ2BP/EPM2AIP1/SLC44A1/MSRB3/ZMPSTE24/HADH/CRYZ/TMEM14A/DCP2/PPP3CA/NOL7/CYC1/PNRC2/E2F3/ZMYM1/ESD/TMEM14B/ZNF532/AXIN2/MYLK/VPS13A/OARD1/PARVA |
| REACTOME\_THE\_CITRIC\_ACID\_TCA\_CYCLE\_AND\_RESPIRATORY\_ELECTRON\_TRANSPORT | REACTOME\_THE\_CITRIC\_ACID\_TCA\_CYCLE\_AND\_RESPIRATORY\_ELECTRON\_TRANSPORT | 145 | -0.48195 | -2.21136 | 1.63E-09 | 5.68E-08 | 4.04E-08 | 3696 | tags=44%, list=21%, signal=35% | PDK1/IDH2/SDHB/SDHD/ETFB/NDUFAF3/PDHA1/COX20/NDUFB7/COX7B/NDUFAF6/NDUFA3/COX19/NDUFAF1/COX14/NDUFB8/COX11/UQCRB/NDUFAF5/SUCLA2/RXRA/NDUFC1/NDUFA1/PDK3/TMEM126B/NDUFAB1/UQCR10/L2HGDH/NDUFA12/COX6A1/NNT/NDUFA13/NDUFA8/SURF1/ETFDH/COX16/NDUFS3/MPC2/CYCS/NDUFS7/NDUFS8/NDUFA7/NUBPL/NDUFAF2/NDUFA11/TACO1/NDUFB11/NDUFB6/SUCLG2/PDHX/CYC1/NDUFA4/ACAD9/DLD/UQCRQ/FH/NDUFS4/UQCRH/COX6C/COX5B/COX7C/NDUFS5/DLST/COX6B1 |
| KEGG\_PARKINSONS\_DISEASE | KEGG\_PARKINSONS\_DISEASE | 93 | -0.51353 | -2.21707 | 8.57E-08 | 2.13E-06 | 1.51E-06 | 3540 | tags=41%, list=20%, signal=33% | SDHB/SDHD/NDUFB7/COX7B/NDUFA3/APAF1/NDUFB8/UQCRB/UCHL1/SNCAIP/NDUFC1/NDUFA1/COX7A2/NDUFAB1/UQCR10/COX6A1/NDUFA8/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/PARK7/VDAC3/NDUFB6/SLC25A4/UQCRHL/CYC1/NDUFA4/UQCRQ/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| ZHANG\_BREAST\_CANCER\_PROGENITORS\_UP | ZHANG\_BREAST\_CANCER\_PROGENITORS\_UP | 413 | -0.42424 | -2.22393 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4354 | tags=40%, list=24%, signal=31% | KIF2C/AZIN1/C1D/TMEM33/ZFAND6/HNRNPU/PAIP2/MOXD1/TSPAN2/POT1/APPBP2/RPA3/NUP85/EFCAB7/GPSM2/TP53BP1/ZNF101/RNF7/WDR11/HNRNPDL/YWHAQ/TRAPPC10/MPZL1/PCMTD2/ACTL6A/PDS5B/PDK1/HOOK1/BUB1/CAPZA2/SMNDC1/EMID1/NUDCD1/NCAPD3/TASP1/NVL/AEBP2/RBBP8/DPY30/POLD3/STRBP/SMIM15/RPRD2/ZNF148/MIS18BP1/SLC39A10/CAV2/EID1/CPSF6/RFC1/CETN3/SPIN1/WDR3/VPS54/IPO8/ZNF239/ESCO2/PPAT/YWHAB/SMC4/NCAPG/TIMM17A/NCAPD2/USP1/NME7/SSBP1/SUCLA2/CCDC90B/VPS26B/SAP30/PEX7/KIF16B/TRMT11/DUSP11/PAXBP1/EPS8/CLDN12/RBM45/ZBTB44/PCYOX1/NDUFC1/WDR75/NUP107/LAMTOR5/KITLG/C11orf54/PRPS2/KCTD15/RFX3/ARAP2/SNRPB2/CD24/PPP4R3B/DNAJC9/ATAD1/WEE1/SKA2/INTS2/SSB/MRPS18C/ZNF770/NEK1/PIGF/STMN1/TIMM21/BRD7/UBLCP1/POLR3H/PCDH18/FAM76B/TOMM70/ARNT2/MED6/CRLS1/FAM199X/ARMC10/PTPN14/GMNN/NFU1/C1orf131/OXCT1/MRPS33/CEP164/G3BP2/PIN1/ACYP1/GEMIN6/ZNF160/RIF1/VBP1/PARK7/POLR3K/NFYB/STK26/UBA3/CALM2/TAX1BP1/SLC20A2/RIDA/FAM13B/TMEM230/NFIA/VDAC3/CDC40/NAE1/CRYZ/MRPS31/ZNF362/RBBP5/NDUFA4/LSM5/AUTS2/BET1/ZNF532/IK/FH/SLC38A1/CHCHD4/NRAS/STRAP/PACSIN2/NDUFS4/LSM7/XPO1/ACTR6 |
| WP\_MITOCHONDRIAL\_COMPLEX\_IV\_ASSEMBLY | WP\_MITOCHONDRIAL\_COMPLEX\_IV\_ASSEMBLY | 29 | -0.6695 | -2.24351 | 5.41E-06 | 8.16E-05 | 5.80E-05 | 3337 | tags=69%, list=19%, signal=56% | COX20/COX7B/COX19/COX14/COX11/HIGD1A/COX7A2/COA3/COX6A1/SURF1/COX16/TMEM177/TACO1/COX10/NDUFA4/COX17/COX6C/COX5B/COX7C/COX6B1 |
| REACTOME\_COMPLEX\_I\_BIOGENESIS | REACTOME\_COMPLEX\_I\_BIOGENESIS | 48 | -0.59175 | -2.24934 | 1.18E-06 | 2.27E-05 | 1.61E-05 | 3457 | tags=54%, list=19%, signal=44% | NDUFAF3/NDUFB7/NDUFAF6/NDUFA3/NDUFAF1/NDUFB8/NDUFAF5/NDUFC1/NDUFA1/TMEM126B/NDUFAB1/NDUFA12/NDUFA13/NDUFA8/NDUFS3/NDUFS7/NDUFS8/NDUFA7/NUBPL/NDUFAF2/NDUFA11/NDUFB11/NDUFB6/ACAD9/NDUFS4/NDUFS5 |
| REACTOME\_MITOCHONDRIAL\_PROTEIN\_IMPORT | REACTOME\_MITOCHONDRIAL\_PROTEIN\_IMPORT | 58 | -0.57145 | -2.26517 | 7.15E-07 | 1.48E-05 | 1.05E-05 | 4477 | tags=59%, list=25%, signal=44% | TIMM10/PMPCB/SLC25A13/TIMM50/COA6/COQ2/PAM16/TOMM7/MTX1/COX19/NDUFB8/CHCHD7/SLC25A12/CHCHD5/TIMM17A/BCS1L/CHCHD2/HSCB/FXN/MTX2/CHCHD3/SAMM50/TIMM44/TIMM21/TOMM70/DNAJC19/TIMM9/GRPEL2/SLC25A4/TIMM22/CYC1/TOMM5/CHCHD4/COX17 |
| RICKMAN\_METASTASIS\_UP | RICKMAN\_METASTASIS\_UP | 316 | -0.44493 | -2.2736 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4411 | tags=47%, list=25%, signal=36% | LCLAT1/RAD17/CKAP5/FASTKD2/TTC17/NKAP/TTC5/EP400/ACACB/TTLL5/ZNF26/APPBP2/RBMX2/ALS2/ACVR1B/TCTN3/TP53BP1/MPDZ/AMZ2/ZNF621/TXNDC15/ARMCX6/IFT43/ZNF704/COPS8/FGF19/MRPL44/RBM15/RNF25/DNAL1/GCAT/MTHFSD/NUP54/TMED8/STAG2/DPY30/UBFD1/BDH2/CREB1/GLRX5/DYRK4/LRP6/YIPF6/HNRNPUL2/FAM229B/RBBP6/SHE/PABPN1/HJURP/WDR12/EEF1B2/DYRK2/IPO8/RPL22/GATC/ALDH6A1/ZNF397/B4GAT1/PHC1/NAT9/COX11/NMT1/CCP110/ELP2/ZFP90/CNPY2/NUDT9/C18orf21/C17orf80/ACVR2A/NEK9/CCDC43/SLC22A17/PSMD10/EMC1/HIRIP3/LMAN2L/ZNF133/SUPT7L/PLEKHA5/NUP107/GPRASP2/IDH1/RBM25/ZNF789/DCUN1D1/BBOF1/SMARCA1/ABCD4/KAT14/TCEAL8/MTA3/ZNF606/IFT52/E2F6/YTHDC1/GIGYF2/UPF3B/EPC2/ILKAP/AKAP1/FAM133B/CCNB1IP1/ARMCX1/PDRG1/SNF8/CAND1/TMEM18/TAF9B/ATXN3/WDCP/PNN/PDIA4/AHI1/C2CD5/TPST1/ASB3/TSPAN6/DNAJB11/TIGD7/MRPS35/CAND2/JAM3/PSMD1/BEX5/ISCA2/PRKD1/PAPOLA/VBP1/VHL/PARL/FAM13B/EPM2AIP1/USP13/ZBTB14/SH3BGRL2/PGRMC1/FRZB/ACP1/MRPL1/RASL12/TCEAL4/SEC62/CETN2/PFKM/VPS45/YARS2 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_17 | YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_17 | 178 | -0.48541 | -2.29975 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3286 | tags=42%, list=18%, signal=35% | NDUFB7/SMAP1/BPGM/LYPLA1/ARL2BP/PSMB7/PDCD2/MRPS7/MRPL21/KRTCAP2/SRSF9/HACD3/COPS5/USP1/EIF1AX/UFC1/RUVBL1/CORO1C/PSMD14/CMPK1/HMGCS1/EVL/C11orf54/LAMTOR1/TMEM109/GOSR2/SAMM50/DDT/MTIF2/ERH/NDUFAB1/MRPL18/CENPB/TOMM70/CCDC12/PSMG1/MRPS11/MRPL36/EI24/BAG1/EEF1AKMT1/ADSL/LIAS/FAF1/DDX54/SMDT1/CYB5R1/KRT10/DNAJC19/NR2F6/NDUFS3/UBL4A/MRPS22/PLPP1/CMBL/MAP3K7/POLR3K/PARL/FAM162A/NDUFA11/CNIH1/DCTN2/SAE1/VDAC3/NDUFB6/PSMD8/TMED10/MRPL51/SLIRP/CALM1/ERP29/UQCRQ/TMEM160/CKS1B/LSM7 |
| WP\_ELECTRON\_TRANSPORT\_CHAIN\_OXPHOS\_SYSTEM\_IN\_MITOCHONDRIA | WP\_ELECTRON\_TRANSPORT\_CHAIN\_OXPHOS\_SYSTEM\_IN\_MITOCHONDRIA | 67 | -0.56654 | -2.31406 | 4.27E-08 | 1.15E-06 | 8.20E-07 | 3540 | tags=51%, list=20%, signal=41% | SDHB/SDHD/NDUFB7/COX7B/NDUFA3/NDUFB8/COX11/UQCRB/NDUFC1/NDUFA1/COX7A2/NDUFAB1/UQCR10/NDUFA12/COX6A1/NDUFA8/SURF1/NDUFS3/NDUFS7/NDUFS8/NDUFA7/NDUFB6/SLC25A4/NDUFA4/UQCRQ/COX17/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_DN | MOREAUX\_MULTIPLE\_MYELOMA\_BY\_TACI\_DN | 159 | -0.49818 | -2.32104 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3912 | tags=49%, list=22%, signal=39% | PSMA3/STAM2/SPATA5L1/RNF7/PAIP1/ACTL6A/HAUS1/EBNA1BP2/GLT8D1/NUDCD2/CCT5/ASF1A/EIF3M/PEX1/EDRF1/TERF1/NCAPD3/MINPP1/NOL8/TBCB/TLE4/SPAST/ZNF277/LEMD3/ERCC1/PPP2R5C/AASDHPPT/HIKESHI/TMEM267/AVL9/TMEM126A/NMT1/PPP1R12A/PAAF1/AIMP2/SSBP1/IREB2/KRIT1/TMEM165/CEP57/OTUD6B/SMARCA4/CYP2R1/C11orf54/TATDN1/UPF3A/THYN1/CHMP4A/TEFM/MCM3AP/SNX19/BTBD1/ZBTB20/CCT2/TMEM135/RAN/MBD4/NNT/NDUFA13/ANAPC10/C1orf131/SNRPD1/MYLIP/PAPOLA/CHCHD1/MRPL50/ANKRD49/IFT74/RPL26L1/PSMD8/BARD1/MALSU1/LSM5/IK/SLC38A1/CDC23/PFDN4/ACTR6 |
| WONG\_MITOCHONDRIA\_GENE\_MODULE | WONG\_MITOCHONDRIA\_GENE\_MODULE | 199 | -0.48335 | -2.32259 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3632 | tags=45%, list=20%, signal=36% | TSFM/IDH2/SDHB/GCAT/TOMM7/PDHA1/DECR1/MRPS15/MTHFD2/COX7B/LONP1/NDUFA3/TUFM/ATP6V1E1/NDUFAF1/MIPEP/CRYZL1/NDUFB8/ALDH6A1/COX11/UQCRB/ECHS1/SFXN2/MRPS18B/SUCLA2/HSCB/CLPP/NDUFC1/MTRR/HAX1/NDUFA1/SLC25A17/ABCB6/MTX2/COX7A2/MRPS18C/MRPS30/PDK3/COQ3/MRPL40/NDUFAB1/MRPL18/UQCR10/MRPL12/TOMM70/NIPSNAP1/NDUFA12/MRPL45/ATP6V1G1/DUT/MRPS36/MRPL36/COX6A1/DIABLO/NDUFA8/MRPL42/OXCT1/SURF1/MRPS33/PRDX5/NDUFS3/NDUFS8/NDUFA7/MRPS16/BOP1/MAOA/GRPEL2/VDAC3/NDUFB6/CRYZ/PDHX/CYC1/MRPS17/NDUFA4/ATP6V1D/DLD/UQCRQ/FH/COX17/NFS1/ACAT1/MCEE/NDUFS4/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT\_ATP\_SYNTHESIS\_BY\_CHEMIOSMOTIC\_COUPLING\_AND\_HEAT\_PRODUCTION\_BY\_UNCOUPLING\_PROTEINS | REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT\_ATP\_SYNTHESIS\_BY\_CHEMIOSMOTIC\_COUPLING\_AND\_HEAT\_PRODUCTION\_BY\_UNCOUPLING\_PROTEINS | 94 | -0.55784 | -2.416 | 2.38E-10 | 9.52E-09 | 6.76E-09 | 3540 | tags=53%, list=20%, signal=43% | SDHB/SDHD/ETFB/NDUFAF3/COX20/NDUFB7/COX7B/NDUFAF6/NDUFA3/COX19/NDUFAF1/COX14/NDUFB8/COX11/UQCRB/NDUFAF5/NDUFC1/NDUFA1/TMEM126B/NDUFAB1/UQCR10/NDUFA12/COX6A1/NDUFA13/NDUFA8/SURF1/ETFDH/COX16/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/NUBPL/NDUFAF2/NDUFA11/TACO1/NDUFB11/NDUFB6/CYC1/NDUFA4/ACAD9/UQCRQ/NDUFS4/UQCRH/COX6C/COX5B/COX7C/NDUFS5/COX6B1 |
| EHLERS\_ANEUPLOIDY\_UP | EHLERS\_ANEUPLOIDY\_UP | 35 | -0.69439 | -2.44493 | 9.42E-08 | 2.32E-06 | 1.65E-06 | 2561 | tags=51%, list=14%, signal=44% | CCP110/FKBP3/PDGFD/ALOX5AP/NEK1/MRPS25/MBNL1/ALDH3A2/EXTL2/RWDD2B/CGRRF1/FNDC3A/PTEN/BCL2L2/FERMT2/CLK4/CWC27/TMEM47 |
| YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_13 | YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_13 | 156 | -0.528 | -2.46286 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4430 | tags=55%, list=25%, signal=42% | PMPCB/PC/CKAP5/C1D/PCCB/CCZ1/LY6H/MRPL11/NACC2/IFNGR2/COA6/DBI/ROMO1/SEC61G/GTF2A2/NAB1/MRPL28/TMEM205/VPS29/ETFB/TXNDC17/DYNLRB1/TMED3/COX7B/POLD3/PQBP1/NDUFA3/SNRNP27/PPP2R5C/B9D1/CETN3/DAP/NDUFB8/UQCRB/NMT1/CALB1/CUTA/PPIB/PEX7/MRPL35/MRPL52/FKBP3/C9orf78/NDUFC1/LYRM2/PPIH/LAMTOR5/PIGX/CES1/EMC6/S100A6/DPM3/LSM8/ECH1/MIEN1/PLAC9/MRPL18/UQCR10/CD320/NEDD8/MRPL45/UBL5/COA3/ELOF1/COX6A1/NDUFA13/PPP1R7/COMMD1/MRPS33/ARMCX2/SF3B5/COX16/PARK7/POLR3K/ANAPC13/NDUFB11/LSM3/REEP5/ESD/TOMM5/MRPL23/COX5B/MTMR9/HDDC2/NAA38/HNRNPL |
| STARK\_PREFRONTAL\_CORTEX\_22Q11\_DELETION\_DN | STARK\_PREFRONTAL\_CORTEX\_22Q11\_DELETION\_DN | 468 | -0.46898 | -2.47481 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4378 | tags=46%, list=24%, signal=35% | SCAND1/SLC25A20/C22orf39/MRPL3/TESK1/RANBP1/SNX32/RNF165/MRPL11/SNX16/IFNGR2/TTLL7/NFIX/DCTN6/PRODH/UBAC1/PRDX1/ARPC5L/NDUFS6/PSMA3/ROMO1/NAXE/POLR1D/VPS35/MRPL28/ZNHIT1/RNF34/HIGD2A/POP7/SRR/BCCIP/ZNF670/CCT5/INIP/HSPA4L/NDUFAF3/DDRGK1/TXNDC17/SLC27A4/DYNLRB1/ZDHHC16/KDM1A/COPRS/MZT2B/STRBP/TLE4/SAC3D1/STIP1/USP39/HIBCH/ENOPH1/GTF3A/ATP6V1E1/PSMC3/MBLAC2/CBX3/UFSP2/NIFK/BNIP1/C19orf25/NPRL2/COX14/TRAPPC2L/SNRNP27/PPP2R5C/RPL8/EIF3L/MRPL57/CRYZL1/NUDT21/ARVCF/PFDN5/B4GAT1/KRTCAP2/TMEM126A/NMT2/SEC11C/ZDHHC8/TIMM17A/CARM1/USP1/CNPY2/GOLGA2/HSD17B7/ARHGAP20/MRPL41/EMC2/AHSA1/SLC25A46/UFC1/TMEM256/TMEM165/OAT/FKBP3/SNX7/B4GALT3/NONO/PSMD14/METTL8/PPP1R9A/COMMD8/SMIM7/ACTR10/FAM136A/TMEM42/IDH1/ELP5/PRPS2/LAMTOR1/ARAP2/PLEKHO1/UGP2/CCDC127/TCEAL8/THOC7/CISD1/MGST3/COX7A2/OSBPL1A/RAD23B/NOP10/CHMP4B/NENF/S100A6/NR1H2/MRPL40/SPSB3/HIBADH/TMX2/GDE1/OCIAD2/UQCR10/PSMA2/CCT2/CYB561A3/DDX56/JKAMP/FABP3/NIPSNAP1/SIK3/NDUFA12/MRPS11/COA3/DENND5B/SDHAF4/LAMTOR2/TST/RPL34/PPP1CA/UQCC2/ELOF1/NFU1/GLG1/CPSF3/NDUFA8/MRPL42/DYNLL1/PRDX3/GABRD/EIF3H/TTC33/POMP/TPD52L1/MKKS/NDUFS3/MPC2/UBL4A/ARHGAP15/CYCS/NDUFS7/MRPS22/ACOT13/NDUFS8/NDUFA7/SEC22B/SAP18/CHCHD1/FAM162A/MCTS1/CFDP1/MRPS23/NDUFA11/NDUFB11/EPM2AIP1/VDAC3/CACYBP/PGRMC2/MRPL51/DENR/SLIRP/PURA/MED28/SDHAF3/CYC1/MRPS17/ATP6V1D/CLDN5/SBDS/CLNS1A/SLITRK4/FH/HSPE1/HPF1/SEC62/MRPL15/MRPL55/NDUFS4/VPS13A/TMA7/COX5B/NAA38/COX7C/RPL26 |
| REACTOME\_TRANSLATION | REACTOME\_TRANSLATION | 272 | -0.51046 | -2.56369 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3715 | tags=45%, list=21%, signal=36% | RPS5/MRPL28/LARS2/ERAL1/PPA2/TSFM/RPL23/MRPL44/SRP54/EIF3M/MRPS10/MRPS15/MRPL9/RPSA/EIF3D/TUFM/MRPL37/EIF4G1/IARS2/MRPL14/RPL36/RPL35/RPL8/EIF3L/MRPL39/EEF1B2/RPLP1/MRPL57/RPS6/GFM1/EIF2B2/RPL22/MRPS7/MRPL21/SEC11C/AIMP2/MRPS6/RPL37A/MRPL22/MRPL41/MRPS18B/MRPL30/MRPS27/EIF1AX/RPL37/MRPL35/MRPL52/RPL23A/PPA1/SRP68/EEF1E1/RPL17/RPL13A/EIF2B1/OXA1L/MTIF2/MRPS18C/MRPS30/MRPL40/MRPS25/MRPL48/EIF5B/RPS20/MRPS26/EIF4A2/MRPS5/SEC61A1/MRPL18/RPS27L/MRPL12/RPL7/SPCS2/MRPL45/PTCD3/MRPS11/RPS23/MRPS36/RPL34/MRPL46/MRPL36/MRPL42/MRPS33/EIF2S2/EIF3H/MRPS35/RPS18/FARS2/MRPL20/RPL38/MRPS22/FAU/MRPS16/MRPL47/CHCHD1/MRPL50/MRPS23/RPS26/MRPL33/RPL26L1/SSR3/RPL36AL/MRPL53/HARS2/MRPL51/RPL35A/RPL24/EIF2S3/RPS4X/MRPS31/MRPS17/MRPL1/RPS21/MRPS21/MRPS9/GSPT2/MRPL15/MRPL55/EIF2B5/MRPL23/RPL26/RPL39/YARS2/RPL21 |
| MILI\_PSEUDOPODIA\_HAPTOTAXIS\_UP | MILI\_PSEUDOPODIA\_HAPTOTAXIS\_UP | 479 | -0.48864 | -2.58883 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4201 | tags=48%, list=23%, signal=38% | TLK2/STARD10/PSMD6/SNX16/TANK/MAPK8/FXR1/RBM34/DCAF6/TSR1/RSPRY1/SMIM13/SMC3/THOC1/KRAS/ESCO1/SKP1/YTHDF2/CCNG1/SH3GLB1/EIF1AY/DMXL1/RNF115/PAIP1/PCYT1B/MBIP/STAG1/GULP1/VPS35/MKRN1/PDK1/INPP1/STYX/ACSL4/ATF2/SRP54/NUDCD2/FBXW2/BUB1/KRR1/TUBGCP4/CAPZA2/GTF3C6/NUP54/SMCO4/YME1L1/STAG2/MAPKBP1/SNAP23/OPA1/ZMAT2/RBBP8/RPF2/STRBP/SMAP1/SMIM15/ANAPC4/NIPBL/HIBCH/HNRNPK/FAM229B/OXR1/RASA1/UFSP2/NIFK/ZNF277/SRSF1/ARL6/MBNL2/SARNP/RAP1A/XAF1/CAPZA1/CEP83/CTTNBP2NL/CPSF6/TNKS2/MRPL57/CETN3/AASDHPPT/SERF1B/VPS54/CRYZL1/IFI16/YWHAB/UTP14A/PPP1R12A/TMEM167A/ARL5A/CUL4B/MTAP/PIK3C2A/SSBP1/EMC2/SLC4A1AP/SLC25A46/SUCLA2/CCDC90B/TXNDC9/TRMT11/FKBP3/LTN1/DPP8/NAA30/TCF12/FAR1/COMMD8/UBR3/WDR75/IFIT2/INTS8/SRSF11/DYNLT3/HMGCS1/RBM25/CRBN/ZRSR2/DCUN1D1/UBE2V2/UGP2/PPP4R3B/PUM3/THOC7/CISD1/BTF3L4/CHPT1/ASNSD1/SSB/CAMSAP2/DNAJB4/MRPS18C/PSIP1/YTHDC1/MFAP1/ZNRF2/LSM14A/CCDC34/MBNL1/EIF5B/DNM1L/RPS20/RABEP1/MYCBP/FAM133B/CNOT7/EIF2A/UBLCP1/TTC1/WWP1/CENPB/PPHLN1/PLEKHA8/TRIP4/BTBD1/PARP4/ZEB1/TOMM70/PDCD10/MTMR6/HNRNPH3/CISD2/ITGB3BP/NEMF/RBM7/KPNA3/PPP1R7/RWDD1/FBXO32/EIF2S2/CDV3/NXT2/TTC33/CENPQ/DCAF5/PCNP/FNDC3A/RNF138/AP3M1/MRPS22/COA5/KANK2/BEND6/TIGD2/VBP1/UBA3/MRPL47/TAX1BP1/CFDP1/DDX10/ORC2/VCPIP1/SYNJ2BP/CRIPT/CSNK1G3/FAM13B/IFT74/USP24/NFIA/CACYBP/FNBP1L/ERGIC2/MID2/SLIRP/NAE1/THUMPD3/PPP3CA/ZFR/NUDT2/SDHAF3/TRIM44/VPS4B/ATP6V1D/PALLD/LARP7/TMEM263/STRAP/SACM1L/RAB11A/VPS13A/KCTD10/DCLK1/RPAP2/XPO1/SLU7/LZTFL1/ARMC1/MSANTD4/RPL21/DYNC1LI2/ACTR6 |
| REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT | REACTOME\_RESPIRATORY\_ELECTRON\_TRANSPORT | 89 | -0.60941 | -2.60822 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3540 | tags=56%, list=20%, signal=45% | SDHB/SDHD/ETFB/NDUFAF3/COX20/NDUFB7/COX7B/NDUFAF6/NDUFA3/COX19/NDUFAF1/COX14/NDUFB8/COX11/UQCRB/NDUFAF5/NDUFC1/NDUFA1/TMEM126B/NDUFAB1/UQCR10/NDUFA12/COX6A1/NDUFA13/NDUFA8/SURF1/ETFDH/COX16/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/NUBPL/NDUFAF2/NDUFA11/TACO1/NDUFB11/NDUFB6/CYC1/NDUFA4/ACAD9/UQCRQ/NDUFS4/UQCRH/COX6C/COX5B/COX7C/NDUFS5/COX6B1 |
| MOOTHA\_VOXPHOS | MOOTHA\_VOXPHOS | 69 | -0.64098 | -2.6209 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 3540 | tags=58%, list=20%, signal=47% | SDHB/SDHD/TBCB/NDUFB7/COX7B/NDUFA3/NDUFB8/SURF2/COX11/GATB/UQCRB/BCS1L/NDUFC1/NDUFA1/COX7A2/NDUFAB1/CNOT7/UQCR10/COX6A1/NDUFA13/NDUFA8/SURF1/NDUFS3/CYCS/NDUFS7/NDUFS8/NDUFA7/COX10/NDUFB6/CYC1/NDUFA4/UQCRQ/NDUFS4/UQCRH/COX6C/COX7A1/COX5B/COX7C/NDUFS5/COX6B1 |
| SHEN\_SMARCA2\_TARGETS\_UP | SHEN\_SMARCA2\_TARGETS\_UP | 409 | -0.53021 | -2.7758 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 5363 | tags=61%, list=30%, signal=44% | CENPC/FBXL5/COPS2/SRI/UBE2A/VPS26A/BAZ2B/MED4/BUB3/FBXW11/NCOA1/PRPF38B/UBE2G1/RBPJ/U2SURP/RALGAPB/SMAD4/LAPTM4A/MOB4/SMARCA2/DPF2/EAPP/CUL2/PDHB/TSNAX/RAB28/RHOT1/MLH1/TAF7/CTNNA1/ZNF302/SENP6/TNPO1/SRP9/PEX11B/PUM2/TUBGCP3/DDX1/TDP2/MACF1/RAB23/RMND5A/SEC23IP/PDCL3/MTO1/ACVR1/RNF14/FEM1B/NCKAP1/ZFAND6/DDX46/STXBP3/TANK/GYG1/RBM34/NPTN/DCAF6/AKTIP/ZC3H7A/ARFIP1/APPBP2/RSRC2/NSMCE4A/SMC3/CUL4A/SKP1/KRCC1/TRMT1L/STAM2/FEM1C/FBXO28/WSB1/ATG3/CREBZF/AMZ2/PAIP1/WDR11/STAG1/NAB1/UBQLN2/PCMTD2/RAB2A/COPS8/NFYC/TSN/GTF3C3/SDHD/FBXW2/HNMT/CAPZA2/ANKMY2/PRKAR1A/LMBRD1/LUC7L3/GMPR2/SMAP1/SLC30A5/PREPL/TWSG1/HIBCH/ARMT1/NUP133/ARMC8/RASA1/UFSP2/FBXO11/PPP2R5C/PON2/C6orf120/EID1/KANK1/REV1/AP5M1/RNF146/CETN3/C11orf58/AASDHPPT/ZC3H15/ZBED8/PRKD3/CRYZL1/SCFD1/FAM168A/NUDT21/SEPHS1/SLC25A12/CUL4B/ANGEL2/USP1/ISCA1/IDE/DERA/CDKN1B/UTP14C/RYK/SLC25A46/SUCLA2/CCDC90B/KRIT1/CSE1L/TRMT11/UNC50/PHF3/TMED7/CEP57/KIFAP3/TLK1/TOR1AIP1/RPRD1A/CHMP5/TRAPPC11/CUL5/ACTR10/COPS4/GIN1/PHKB/NDFIP1/ATMIN/SNX2/CEP350/UPF3A/RAB40B/CBX1/CALCOCO2/SSB/OSBPL1A/UBR2/YTHDC1/ZDHHC6/GLOD4/UPF3B/LSM14A/TMEM126B/RAB4A/RWDD3/ANXA7/COMMD10/ABI1/ZDHHC17/TRIP4/MRS2/HNRNPH3/TMEM135/SP3/CAND1/MBD4/HLTF/MRFAP1L1/OSTM1/NCOA6/NEMF/TAF9B/USP9X/FTO/RAB22A/CAMSAP1/NFU1/NNT/RAB7A/LANCL1/TFCP2/MED21/TTC33/PPP1R3D/MKKS/PCNP/BTBD3/ANP32A/PRKD1/VBP1/EED/ZNF415/NFYB/UBA3/LIMCH1/PEX19/HMGN4/PCMT1/TMEM230/NDUFB6/TMED10/RCOR3/METTL5/DPM1/SUCLG2/UPF2/PURA/RABGAP1/TMEM14A/DCP2/NOL7/TGOLN2/UBL3/STON1/NSFL1C/PRKRA/RDH14/TMEM14B/RDX/HSDL2/PTPN11/LARP7/CDC23/SEC62/RSBN1/INSIG2/GTF2H5/VPS45/TRAK2/XPO1 |
| REACTOME\_MITOCHONDRIAL\_TRANSLATION | REACTOME\_MITOCHONDRIAL\_TRANSLATION | 93 | -0.66029 | -2.85069 | 1.00E-10 | 4.32E-09 | 3.07E-09 | 4028 | tags=70%, list=22%, signal=54% | MRPL58/AURKAIP1/MRPL10/MRPL16/MRPL28/ERAL1/TSFM/MRPL44/MRPS10/MRPS15/MRPL9/TUFM/MRPL37/MRPL14/MRPL39/MRPL57/GFM1/MRPS7/MRPL21/MRPS6/MRPL22/MRPL41/MRPS18B/MRPL30/MRPS27/MRPL35/MRPL52/OXA1L/MTIF2/MRPS18C/MRPS30/MRPL40/MRPS25/MRPL48/MRPS26/MRPS5/MRPL18/MRPL12/MRPL45/PTCD3/MRPS11/MRPS36/MRPL46/MRPL36/MRPL42/MRPS33/MRPS35/MRPL20/MRPS22/MRPS16/MRPL47/CHCHD1/MRPL50/MRPS23/MRPL33/MRPL53/MRPL51/MRPS31/MRPS17/MRPL1/MRPS21/MRPS9/MRPL15/MRPL55/MRPL23 |

**Supplementary Table 6. The results of immune cells infiltration by CIBERSORx in from the high and low PRGs group patients.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mixture** | **B cells naive** | **B cells memory** | **Plasma cells** | **T cells CD8** | **T cells CD4 naive** | **T cells CD4 memory resting** | **T cells CD4 memory activated** | **T cells follicular helper** | **T cells regulatory (Tregs)** | **T cells gamma delta** | **NK cells resting** | **NK cells activated** | **Monocytes** | **Macrophages M0** | **Macrophages M1** | **Macrophages M2** | **Dendritic cells resting** | **Dendritic cells activated** | **Mast cells resting** | **Mast cells activated** | **Eosinophils** | **Neutrophils** | **P-value** | **Correlation** | **RMSE** |
| GSM1386783 | 0 | 0 | 0.011094 | 0.087126 | 0.178543 | 0 | 0 | 0 | 0 | 0.156546 | 0 | 0 | 0 | 0 | 0 | 0.272303 | 0 | 0 | 0.099809 | 0 | 0 | 0.194578 | 0.06 | 0.144997 | 1.047834 |
| GSM1386784 | 0 | 0.300286 | 0.020675 | 0 | 0 | 0.084435 | 0.005701 | 0.028885 | 0.020996 | 0.047627 | 0 | 0.056083 | 0.016166 | 0.039627 | 0.058841 | 0.152147 | 0.070429 | 0 | 0.098101 | 0 | 0 | 0 | 0 | 0.453845 | 0.892357 |
| GSM1386785 | 0.234619 | 0.053097 | 0.138203 | 0.048531 | 0.200858 | 0 | 0.131435 | 0.032068 | 0.025868 | 0.022375 | 0.044764 | 0 | 0 | 0 | 0.020765 | 0 | 0 | 0.012214 | 0.035203 | 0 | 0 | 0 | 0 | 0.42901 | 0.903381 |
| GSM1386786 | 0.029342 | 0.135591 | 0.136188 | 0.042883 | 0.022419 | 0.078341 | 0.098679 | 0.024311 | 0 | 0.170288 | 0 | 0 | 0 | 0 | 0.030459 | 0.085075 | 0.000218 | 0.014102 | 0.077159 | 0 | 0 | 0.054945 | 0 | 0.457306 | 0.891767 |
| GSM1386787 | 0.030231 | 0.046624 | 0.249319 | 0.022858 | 0.017454 | 0.069903 | 0.152164 | 0.030776 | 0 | 0.079826 | 0.001896 | 0 | 0.003329 | 0 | 0.018136 | 0.117315 | 0 | 0.005849 | 0.083196 | 0 | 0.001337 | 0.069786 | 0 | 0.411222 | 0.914894 |
| GSM1386788 | 0.077391 | 0.020169 | 0.197506 | 0.090077 | 0.118608 | 0 | 0 | 0.039669 | 0.091444 | 0 | 0.018132 | 0.015139 | 0 | 0.208949 | 0.005978 | 0 | 0.032657 | 0.040224 | 0 | 0.039388 | 0.00202 | 0.002649 | 0 | 0.333578 | 0.944682 |
| GSM1386789 | 0.011363 | 0 | 0 | 0.066664 | 0.050588 | 0 | 0 | 0.013449 | 0.103095 | 0 | 0 | 0.16284 | 0.126887 | 0.190329 | 0.074584 | 0.064502 | 0 | 0 | 0.135697 | 0 | 0 | 0 | 0.512 | 0.045821 | 1.087189 |
| GSM1386790 | 0 | 0.168835 | 0 | 0.303467 | 0 | 0 | 0 | 0 | 0.12356 | 0 | 0.075672 | 0.050083 | 0 | 0.03024 | 0 | 0 | 0.150579 | 0 | 0.093044 | 0 | 0.004519 | 0 | 0.999 | -0.07796 | 1.142968 |
| GSM1386791 | 0.079348 | 0 | 0 | 0 | 0.311553 | 0.000732 | 0 | 0.152842 | 0 | 0 | 0.084429 | 0 | 0.136746 | 0.012048 | 0 | 0 | 0.016288 | 0 | 0 | 0.096538 | 0.075571 | 0.033905 | 0.164 | 0.102104 | 1.056811 |
| GSM1386792 | 0 | 0.005897 | 0 | 0.00367 | 0 | 0 | 0 | 0.08524 | 0.076257 | 0.100352 | 0.018969 | 0 | 0.139952 | 0.342764 | 0 | 0.060117 | 0.089753 | 0.059416 | 0.009384 | 0 | 0.008229 | 0 | 0 | 0.56578 | 0.826302 |
| GSM1386793 | 0.152329 | 0 | 0.078332 | 0.191507 | 0 | 0 | 0.090907 | 0.173112 | 0 | 0.184521 | 0 | 0 | 0 | 0 | 0.039078 | 0.022056 | 0 | 0.03208 | 0.033977 | 0 | 0 | 0.002101 | 0 | 0.612142 | 0.799263 |
| GSM1386794 | 0.002248 | 0.01492 | 0.03784 | 0.008705 | 0 | 0.189078 | 0.070352 | 0.03992 | 0 | 0 | 0 | 0.001644 | 0.079276 | 0.105787 | 0.011733 | 0.092697 | 0 | 0.032189 | 0.210929 | 0 | 0 | 0.102682 | 0 | 0.529935 | 0.855721 |
| GSM1386795 | 0 | 0.100804 | 0 | 0.241489 | 0.048057 | 0 | 0 | 0 | 0.070384 | 0 | 0.110893 | 0 | 0.139887 | 0.010252 | 0 | 0 | 0 | 0 | 0 | 0.143952 | 0.011859 | 0.122422 | 0.006 | 0.236354 | 1.007039 |
| GSM1386796 | 0.179284 | 0.063483 | 0.054629 | 0 | 0.264841 | 0 | 0 | 0.276265 | 0.021199 | 0.000654 | 0.043576 | 0 | 0.005752 | 0 | 0 | 0 | 0.042578 | 0.02107 | 0 | 0 | 0.017658 | 0.009013 | 0 | 0.568354 | 0.82502 |
| GSM1386797 | 0 | 0.101168 | 0 | 0.049501 | 0.067269 | 0 | 0.003329 | 0.027851 | 0.075039 | 0 | 0.130217 | 0 | 0.087936 | 0.064226 | 0 | 0.120822 | 0.09153 | 0.049314 | 0 | 0.115923 | 0.015875 | 0 | 0.007 | 0.216907 | 0.994294 |
| GSM1386798 | 0 | 0 | 0 | 0.082031 | 0 | 0.097564 | 0.026707 | 0 | 0.047296 | 0 | 0.062542 | 0 | 0.303171 | 0 | 0 | 0 | 0 | 0.052495 | 0 | 0.203518 | 0.124676 | 0 | 0.989 | -0.04449 | 1.133405 |
| GSM1386799 | 0.108119 | 0.034389 | 0.131423 | 0.007617 | 0.135417 | 0 | 0 | 0 | 0.195746 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00703 | 0 | 0.268043 | 0.112217 | 0 | 0.999 | -0.13477 | 1.16774 |
| GSM1386800 | 0.196297 | 0 | 0.150399 | 0.060053 | 0.060225 | 0 | 0.124634 | 0.16556 | 0.018994 | 0.050307 | 0.047454 | 0 | 0 | 0.032251 | 0 | 0 | 0 | 0.017116 | 0 | 0.016182 | 0 | 0.060528 | 0 | 0.404653 | 0.913995 |
| GSM1386801 | 0 | 0.115125 | 0 | 0 | 0.272159 | 0 | 0.030447 | 0.185483 | 0 | 0.078732 | 0 | 0 | 0.151196 | 0 | 0 | 0 | 0.006769 | 0 | 0 | 0.1227 | 0.037388 | 0 | 0.999 | -0.12185 | 1.153631 |
| GSM1386802 | 0 | 0.173127 | 0.351524 | 0 | 0.06434 | 0.031248 | 0.075378 | 0.116658 | 0.024206 | 0 | 0.039638 | 0 | 0.058121 | 0 | 0 | 0 | 0 | 0.004753 | 0.006227 | 0 | 0.020273 | 0.034506 | 0 | 0.388676 | 0.92293 |
| GSM1386803 | 0 | 0.051035 | 0.233687 | 0.116048 | 0.123038 | 0 | 0.03448 | 0.057661 | 0 | 0.217714 | 0 | 0 | 0 | 0 | 0.087452 | 0.027399 | 0.020156 | 0 | 0.027778 | 0 | 0 | 0.003552 | 0 | 0.388226 | 0.923226 |
| GSM1386804 | 0.321069 | 0 | 0.077174 | 0.021463 | 0.012234 | 0.166167 | 0.072032 | 0.021091 | 0.008984 | 0 | 0.0426 | 0 | 0.020371 | 0 | 0.010992 | 0.087183 | 0.023314 | 0.006231 | 0.103587 | 0 | 0 | 0.005512 | 0 | 0.350339 | 0.93808 |
| GSM1386805 | 0 | 0.573972 | 0 | 0.016592 | 0.180204 | 0 | 0 | 0 | 0.032806 | 0.079633 | 0 | 0 | 0 | 0 | 0 | 0 | 0.018874 | 0 | 0 | 0.097918 | 0 | 0 | 0.008 | 0.205688 | 1.029639 |
| GSM1386806 | 0.212108 | 0 | 0.048497 | 0 | 0.039844 | 0.171844 | 0.130244 | 0 | 0 | 0 | 0.015968 | 0 | 0.026746 | 0.00183 | 0.027156 | 0.050518 | 0.016619 | 0.013101 | 0.220919 | 0 | 0.024607 | 0 | 0 | 0.382801 | 0.923835 |
| GSM1386807 | 0.308702 | 0 | 0.176322 | 0.091313 | 0.026624 | 0.013456 | 0.069423 | 0.081759 | 0 | 0.054011 | 0 | 0.005923 | 0 | 0 | 0.023324 | 0.06228 | 0 | 0.013561 | 0.073303 | 0 | 0 | 0 | 0 | 0.504605 | 0.868386 |
| GSM1386808 | 0.109183 | 0 | 0.175466 | 0.027912 | 0 | 0.047696 | 0.161665 | 0.066671 | 0 | 0.175244 | 0 | 0.004975 | 0.004791 | 0 | 0.037633 | 0.100879 | 0.011272 | 0.011188 | 0.065424 | 0 | 0 | 0 | 0 | 0.489627 | 0.878538 |
| GSM1386809 | 0 | 0.040077 | 0.376338 | 0.022634 | 0.013238 | 0.018252 | 0.063863 | 0 | 0 | 0.006579 | 0.048343 | 0 | 0.06194 | 0.013514 | 0.000563 | 0.147463 | 0 | 0 | 0.109332 | 0 | 0 | 0.077864 | 0 | 0.481228 | 0.887696 |
| GSM1386810 | 0 | 0.08415 | 0.004088 | 0 | 0.023261 | 0.131073 | 0.008329 | 0.071364 | 0 | 0.187127 | 0 | 0.003911 | 0.105684 | 0 | 0.047989 | 0.147096 | 0 | 0.001353 | 0.133001 | 0 | 0 | 0.051575 | 0 | 0.468338 | 0.883774 |
| GSM1386811 | 0.009219 | 0.140197 | 0.10784 | 0.041216 | 0.020145 | 0.156072 | 0.139321 | 0.031137 | 0 | 0.152697 | 0 | 0 | 0 | 0 | 0.033257 | 0 | 0 | 0.045844 | 0.03669 | 0 | 0.008394 | 0.077972 | 0 | 0.378616 | 0.92565 |
| GSM1386812 | 0 | 0 | 0.105617 | 0 | 0.538105 | 0 | 0 | 0 | 0 | 0.20518 | 0 | 0.072172 | 0 | 0 | 0 | 0 | 0 | 0.061467 | 0 | 0.017459 | 0 | 0 | 0.999 | -0.07877 | 1.194841 |
| GSM1386813 | 0 | 0.09609 | 0 | 0 | 0.138447 | 0 | 0 | 0.133295 | 0 | 0 | 0.100873 | 0 | 0.168513 | 0 | 0 | 0.078426 | 0.056178 | 0.001994 | 0 | 0.223134 | 0 | 0.003051 | 0.756 | 0.016791 | 1.09174 |
| GSM1386814 | 0.031614 | 0 | 0.037157 | 0.015131 | 0 | 0.079819 | 0.031747 | 0.049893 | 0 | 0.060949 | 0 | 0.014904 | 0.132784 | 0 | 0.024603 | 0.20706 | 0.13985 | 0 | 0.141919 | 0 | 0 | 0.032569 | 0.001 | 0.268543 | 0.970561 |
| GSM1386815 | 0.009171 | 0 | 0.070009 | 0.052688 | 0 | 0.052898 | 0 | 0.115994 | 0 | 0.18987 | 0 | 0.048269 | 0 | 0 | 0.078764 | 0.130726 | 0 | 0 | 0.150582 | 0 | 0.034874 | 0.066154 | 0 | 0.377158 | 0.928104 |
| GSM1386816 | 0.039063 | 0.25401 | 0.03114 | 0.076982 | 0.169477 | 0 | 0 | 0.148043 | 0.072953 | 0 | 0 | 0.05043 | 0 | 0.052201 | 0 | 0.002991 | 0.036532 | 0.028074 | 0.038103 | 0 | 0 | 0 | 0 | 0.529122 | 0.850783 |
| GSM1386817 | 0 | 0 | 0 | 0.221731 | 0 | 0 | 0 | 0.085307 | 0.098187 | 0 | 0 | 0.130465 | 0.26286 | 0 | 0 | 0 | 0 | 0.086595 | 0.055665 | 0 | 0.05919 | 0 | 0.988 | -0.04078 | 1.132561 |
| GSM1386818 | 0.187346 | 0.130883 | 0.090724 | 0.030139 | 0.157457 | 0 | 0.050832 | 0.256297 | 0.03928 | 0 | 0 | 0.01805 | 0 | 0 | 0 | 0 | 0 | 0.034048 | 0 | 0 | 0.004944 | 0 | 0 | 0.543901 | 0.840423 |
| GSM1386819 | 0 | 0 | 0 | 0 | 0.121157 | 0 | 0.111944 | 0 | 0.181156 | 0 | 0.176978 | 0 | 0.041744 | 0.061817 | 0.014446 | 0 | 0.032769 | 0 | 0 | 0.247411 | 0 | 0.010576 | 0.007 | 0.213138 | 1.026482 |
| GSM1386820 | 0.089178 | 0 | 0 | 0 | 0.321348 | 0 | 0.034366 | 0.112416 | 0.089465 | 0.154543 | 0 | 0 | 0 | 0 | 0 | 0 | 0.054775 | 0 | 0 | 0.048463 | 0.06691 | 0.028536 | 0.999 | -0.09096 | 1.158457 |
| GSM1386821 | 0 | 0 | 0.10761 | 0 | 0 | 0 | 0 | 0.15042 | 0.058049 | 0 | 0 | 0.068257 | 0 | 0.349921 | 0 | 0 | 0.075579 | 0 | 0 | 0.100105 | 0.040446 | 0.049613 | 0.099 | 0.125059 | 1.059139 |
| GSM1386822 | 0 | 0.078727 | 0.156489 | 0.021971 | 0.045899 | 0 | 0 | 0.050205 | 0.042844 | 0 | 0.061223 | 0 | 0.178105 | 0.10362 | 0 | 0 | 0.020048 | 0 | 0 | 0.093077 | 0 | 0.147792 | 0 | 0.290235 | 0.966908 |
| GSM1386823 | 0 | 0 | 0 | 0 | 0.040088 | 0.023795 | 0 | 0 | 0 | 0 | 0 | 0.049293 | 0.113879 | 0 | 0 | 0.32319 | 0.011705 | 0.050538 | 0.180168 | 0 | 0.01287 | 0.194475 | 0 | 0.407146 | 0.919723 |
| GSM1386824 | 0 | 0 | 0.09878 | 0.098878 | 0 | 0 | 0.215239 | 0.044229 | 0.034339 | 0 | 0.118706 | 0 | 0.001352 | 0.094419 | 0.009147 | 0.074536 | 0.022297 | 0.004192 | 0.043901 | 0.080843 | 0 | 0.059142 | 0 | 0.31127 | 0.955448 |
| GSM1386825 | 0.075044 | 0 | 0.468254 | 0.029553 | 0.13581 | 0 | 0 | 0.080328 | 0.041654 | 0 | 0 | 0 | 0 | 0.001594 | 0.026366 | 0 | 0.06338 | 0.00807 | 0 | 0.064822 | 0.005125 | 0 | 0 | 0.353835 | 0.937351 |
| GSM1386826 | 0.238892 | 0.092061 | 0.170352 | 0.114036 | 0.014298 | 0 | 0.02958 | 0.135681 | 0.099188 | 0 | 0.056459 | 0 | 0 | 0 | 0 | 0 | 0 | 0.015508 | 0 | 0.017631 | 0.016314 | 0 | 0 | 0.46784 | 0.883487 |
| GSM1386827 | 0.09216 | 0.116927 | 0.273245 | 0.099212 | 0.020536 | 0 | 0.1239 | 0.085208 | 0.047329 | 0 | 0.077972 | 0 | 0 | 0 | 0 | 0 | 0 | 0.010211 | 0 | 0.043256 | 0.010043 | 0 | 0 | 0.38029 | 0.925476 |
| GSM1386828 | 0.030835 | 0 | 0 | 0.076958 | 0.062955 | 0 | 0.085006 | 0.056975 | 0 | 0 | 0.171776 | 0 | 0 | 0.27575 | 0 | 0 | 0.054547 | 0 | 0 | 0.113673 | 0.018043 | 0.053481 | 0.024 | 0.180464 | 1.033968 |
| GSM1386829 | 0.024018 | 0.036326 | 0.239726 | 0.152517 | 0.023537 | 0.034553 | 0.120843 | 0.007169 | 0.024556 | 0 | 0.032033 | 0 | 0.036708 | 0.019543 | 0.029063 | 0.0519 | 0 | 0 | 0.066865 | 0 | 0 | 0.100644 | 0 | 0.481376 | 0.884818 |
| GSM1386830 | 0 | 0.129972 | 0 | 0 | 0.341291 | 0 | 0 | 0 | 0 | 0.009043 | 0.124792 | 0.099882 | 0.255753 | 0 | 0 | 0 | 0 | 0 | 0 | 0.01528 | 0 | 0.023987 | 0.286 | 0.076785 | 1.090782 |
| GSM1386831 | 0 | 0.059505 | 0 | 0 | 0.367906 | 0 | 0 | 0.093319 | 0.107658 | 0 | 0 | 0.22084 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.080473 | 0.0703 | 0 | 0.999 | -0.09071 | 1.216788 |
| GSM1386841 | 0 | 0.005264 | 0.394512 | 0.10814 | 0.036072 | 0 | 0 | 0 | 0 | 0.099143 | 0 | 0.079651 | 0 | 0 | 0.008962 | 0.127188 | 0 | 0 | 0.139427 | 0 | 0 | 0.001641 | 0.158 | 0.104843 | 1.037548 |
| GSM1386842 | 0 | 0.043237 | 0 | 0 | 0.590396 | 0 | 0 | 0.07089 | 0 | 0 | 0.045267 | 0.067753 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.182457 | 0 | 0 | 0.999 | -0.19101 | 1.262191 |
| GSM1386843 | 0 | 0 | 0 | 0.048226 | 0.367441 | 0 | 0 | 0.146939 | 0 | 0 | 0 | 0.078531 | 0 | 0 | 0.25292 | 0 | 0 | 0 | 0 | 0.105943 | 0 | 0 | 0.916 | -0.01225 | 1.194497 |
| GSM1386844 | 0 | 0 | 0 | 0.047375 | 0 | 0.06387 | 0 | 0 | 0 | 0 | 0.063717 | 0 | 0 | 0.239827 | 0.184061 | 0.208091 | 0.096282 | 0 | 0 | 0 | 0.096777 | 0 | 0 | 0.405045 | 0.9262 |
| GSM1386845 | 0 | 0.172586 | 0.17145 | 0.082998 | 0.012339 | 0.116025 | 0.030525 | 0 | 0 | 0.079302 | 0 | 0 | 0.026609 | 0 | 0.03406 | 0.242511 | 0 | 0 | 0.031595 | 0 | 0 | 0 | 0 | 0.40421 | 0.915135 |
| GSM1386846 | 0 | 0.094884 | 0 | 0.086886 | 0 | 0.223489 | 0 | 0 | 0 | 0 | 0 | 1.78E-05 | 0 | 0.123182 | 0.051354 | 0.420186 | 0 | 0 | 0 | 0 | 0 | 0 | 0.107 | 0.121827 | 1.057617 |
| GSM1386847 | 0 | 0 | 0.057767 | 0.006564 | 0.057978 | 0.087928 | 0.031481 | 0 | 0 | 0.037404 | 0.113887 | 0 | 0 | 0.348751 | 0 | 0.241149 | 0 | 0.01391 | 0 | 0.003181 | 0 | 0 | 0 | 0.465303 | 0.887648 |
| GSM1386848 | 0 | 0.071148 | 0.068966 | 0 | 0 | 0.290413 | 0.029971 | 0 | 0 | 0 | 0.110208 | 0 | 0 | 0.007679 | 0.065567 | 0.194011 | 0.009728 | 0 | 0.152308 | 0 | 0 | 0 | 0.032 | 0.168966 | 1.011073 |
| GSM1386849 | 0 | 0.187084 | 0 | 0 | 0.223878 | 0.196824 | 0 | 0.025624 | 0 | 0 | 0.085796 | 0 | 0 | 0 | 0 | 0.088116 | 0 | 0 | 0 | 0.148838 | 0.04384 | 0 | 0.999 | -0.21618 | 1.19286 |
| GSM1386850 | 0.026993 | 0.048324 | 0.457431 | 0.101192 | 0 | 0.091789 | 0.150951 | 0 | 0 | 0.017986 | 0 | 0 | 0 | 0 | 0.036783 | 0.056781 | 0 | 0 | 0.011768 | 0 | 0 | 0 | 0 | 0.537494 | 0.861509 |
| GSM1150689 | 0.093994 | 0.06996 | 0.041065 | 0 | 0 | 0.405586 | 0 | 0.042151 | 0 | 0.11773 | 0 | 0 | 0 | 0 | 0 | 0.008533 | 0.067451 | 0 | 0 | 0.107394 | 0 | 0.046136 | 0.007 | 0.216895 | 1.008146 |
| GSM1150690 | 0.105017 | 0 | 0.239292 | 0.094154 | 0.216502 | 0 | 0.032007 | 0 | 0 | 0.072678 | 0 | 0.006452 | 0 | 0 | 0.006835 | 0.101801 | 0.056608 | 0 | 0.025947 | 0 | 0 | 0.042707 | 0 | 0.331464 | 0.944569 |
| GSM1150691 | 0 | 0.162336 | 0.109436 | 0.088411 | 0.119956 | 0.022862 | 0.038672 | 0.065832 | 0 | 0.104281 | 0 | 0 | 0 | 0 | 0.020843 | 0.080173 | 0.057359 | 0 | 0 | 0.05765 | 0.072189 | 0 | 0 | 0.309919 | 0.95346 |
| GSM1150692 | 0 | 0.039586 | 0.105461 | 0.218043 | 0.021557 | 0 | 0.121385 | 0.107232 | 0.1222 | 0 | 0.063393 | 0 | 0.025457 | 0.076236 | 0.062697 | 0 | 0 | 0.012645 | 0.008511 | 0 | 0 | 0.015598 | 0.34 | 0.069643 | 1.067284 |
| GSM1150693 | 0 | 0.160942 | 0.077504 | 0 | 0.187002 | 0 | 0.347376 | 0 | 0 | 0 | 0.075159 | 0 | 0 | 0.003942 | 0.01612 | 0.034994 | 0.045082 | 0 | 0.05188 | 0 | 0 | 0 | 0.031 | 0.169289 | 1.012473 |
| GSM1150694 | 0 | 0.156455 | 0 | 0.11987 | 0.088206 | 0 | 0.312165 | 0 | 0 | 0 | 0.164033 | 0 | 0 | 0 | 0.075736 | 0.039816 | 0 | 0 | 0.043719 | 0 | 0 | 0 | 0.018 | 0.187756 | 1.025782 |
| GSM1150695 | 0.023205 | 0.165962 | 0.102127 | 0.090786 | 0 | 0.19355 | 0.007127 | 0.046909 | 0 | 0.056841 | 0 | 0.04485 | 0 | 0 | 0.00197 | 0.086161 | 0.09009 | 0 | 0.031925 | 0.004201 | 0.010374 | 0.043921 | 0 | 0.325801 | 0.947986 |
| GSM1150696 | 0.076073 | 0 | 0 | 0.04103 | 0.032328 | 0 | 0.219492 | 0.207104 | 0 | 0 | 0.156015 | 0.03645 | 0 | 0 | 0.063176 | 0.006354 | 0 | 0 | 0.154459 | 0 | 0 | 0.007518 | 0.043 | 0.160039 | 1.042239 |
| GSM1150697 | 0.063604 | 0.11224 | 0.121979 | 0.096171 | 0 | 0.161729 | 0 | 0.082449 | 0 | 0.046207 | 0 | 0.042966 | 0 | 0 | 0.026345 | 0.042202 | 0.090078 | 0 | 0.040238 | 0.016983 | 0.056808 | 0 | 0 | 0.331972 | 0.944803 |
| GSM1150698 | 0 | 0.138844 | 0.019399 | 0.139465 | 0 | 0.36924 | 0.017635 | 0 | 0 | 0.063072 | 0 | 0 | 0.052169 | 0 | 0.023559 | 0 | 0.108393 | 0 | 0 | 0.024443 | 0.018689 | 0.025093 | 0 | 0.330891 | 0.953622 |
| GSM1150699 | 0 | 0.18949 | 0.076362 | 0.107272 | 0.110641 | 0 | 0.183359 | 0.051495 | 0 | 0 | 0.146116 | 0 | 0.036512 | 0 | 0.015164 | 0.053073 | 0 | 0.030517 | 0 | 0 | 0 | 0 | 0.253 | 0.08333 | 1.056639 |
| GSM1150700 | 0 | 0.12589 | 0.103988 | 0 | 0.14082 | 0 | 0.201957 | 0 | 0.050901 | 0 | 0.16763 | 0 | 0.015042 | 0.020998 | 0.04612 | 0 | 0 | 0 | 0.095542 | 0 | 0 | 0.031114 | 0.055 | 0.148996 | 1.022034 |
| GSM1150701 | 0.140066 | 0 | 0.060058 | 0.085682 | 0.153761 | 0 | 0.211631 | 0.020344 | 0.008453 | 0.012504 | 0.154133 | 0 | 0.033712 | 0 | 0.020364 | 0.042316 | 0 | 0.028169 | 0.028807 | 0 | 0 | 0 | 0.12 | 0.11667 | 1.046754 |
| GSM1150702 | 0.052234 | 0 | 0.025853 | 0.035808 | 0.145385 | 0 | 0.311812 | 0.056799 | 0 | 0.037844 | 0.030878 | 0 | 0 | 0.163555 | 0.045543 | 0 | 0 | 0 | 0.074872 | 0 | 0 | 0.019417 | 0.267 | 0.080549 | 1.051516 |
| GSM1150703 | 0.060628 | 0.043927 | 0.071629 | 0.306698 | 0 | 0 | 0 | 0.225456 | 0.011734 | 0 | 0.032252 | 0 | 0.059211 | 0 | 0 | 3.10E-05 | 0 | 0.110772 | 0 | 0.062962 | 0 | 0.014702 | 0.024 | 0.181309 | 1.02516 |
| GSM1150704 | 0.046522 | 0.143412 | 0.06299 | 0 | 0 | 0.272507 | 0 | 0.130151 | 0 | 0.108761 | 0 | 0 | 0.004643 | 0 | 0 | 0.091861 | 0 | 0.081823 | 0.019047 | 0.016721 | 0.013708 | 0.007853 | 0.008 | 0.203324 | 1.004237 |
| GSM1150705 | 0 | 0.23963 | 0.304869 | 0.054382 | 0 | 0 | 0.065727 | 0.094519 | 0 | 0.024222 | 0 | 0 | 0 | 0 | 0 | 0.03271 | 0.084879 | 0.047169 | 0 | 0.039724 | 0 | 0.012169 | 0.005 | 0.243141 | 0.976712 |
| GSM1150706 | 0 | 0.159073 | 0.157471 | 0.193984 | 0.041165 | 0 | 0.131413 | 0.013704 | 0 | 0 | 0.034573 | 0 | 0.053491 | 0 | 0 | 0.122391 | 0 | 0.043986 | 0 | 0.048748 | 0 | 0 | 0.675 | 0.027092 | 1.055412 |
| GSM1150707 | 0.159968 | 0 | 0.271259 | 0.008049 | 0.136279 | 0 | 0 | 0.086455 | 0 | 0.027277 | 0 | 0.04605 | 0.005505 | 0.084053 | 0 | 0.0667 | 0 | 0.055552 | 0.026509 | 0.026345 | 0 | 0 | 0.007 | 0.222028 | 0.985479 |
| GSM1150708 | 0 | 0.197835 | 0.239524 | 0.002516 | 0.132674 | 0 | 0.07963 | 0.020909 | 0 | 0.077551 | 0 | 0 | 0.041646 | 0 | 0 | 0.092816 | 0 | 0.067315 | 0 | 0 | 0.024332 | 0.023253 | 0.007 | 0.211151 | 0.987189 |
| GSM1150709 | 0.165537 | 0 | 0.032011 | 0.044072 | 0 | 0.285292 | 0 | 0.086533 | 0.003733 | 0 | 0 | 0.006569 | 0.05652 | 0 | 0 | 0.105285 | 0 | 0.127504 | 0 | 0.065097 | 0.010416 | 0.011428 | 0.292 | 0.076142 | 1.054332 |
| GSM1150710 | 0.163229 | 0 | 0.209076 | 0.005561 | 0 | 0.239897 | 0 | 0.174552 | 0 | 0.029469 | 0 | 0 | 0 | 0 | 0.023831 | 0 | 0.011838 | 0 | 0 | 0.073638 | 0 | 0.06891 | 0.001 | 0.269181 | 0.974005 |