Supplementary Table 1. Identification of CRYAB-interacted proteins in BMSCs using IP-MS technology.

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | Gene | Intensity BMSC-IgG | Intensity BMSC-IP |
| 1 | CRYAB | 264330000  | 89267000000  |
| 2 | DSP | 1372200000  | 26166000000  |
| 3 | SNC73 | 31356000  | 10908000000  |
| 4 | ACTB | 847240000  | 10421000000  |
| 5 | LYZ | 35012000  | 7224900000  |
| 6 | LTF | 0  | 5731900000  |
| 7 | HSPB1 | 0  | 5174600000  |
| 8 | HP | 0  | 3256300000  |
| 9 | PIGR | 0  | 3068900000  |
| 10 | GAPDH | 197850000  | 2809700000  |
| 11 | LCN1 | 22084000  | 2412400000  |
| 12 | PKM | 115280000  | 2025500000  |
| 13 | TBC1D10C | 0  | 1874700000  |
| 14 | AZGP1 | 0  | 1683000000  |
| 15 | PRDX1 | 94696000  | 1596400000  |
| 16 | CASP14 | 34289000  | 1582800000  |
| 17 | S100A9 | 75959000  | 1527900000  |
| 18 | JCHAIN | 27898000  | 1426300000  |
| 19 | SERPINB3 | 31777000  | 1374600000  |
| 20 | BLMH | 39722000  | 1345100000  |
| 21 | DKFZp686M08189 | 0  | 1100200000  |
| 22 | CALML5 | 9122300  | 1007700000  |
| 23 | ENO1 | 36448000  | 1007100000  |
| 24 | ACTA2 | 0  | 961110000  |
| 25 | HAL | 8352900  | 866320000  |
| 26 | FABP5 | 42996000  | 852390000  |
| 27 | TPI1 | 20344000  | 791340000  |
| 28 | SOD2  | 52149000  | 791230000  |
| 29 | P4HB | 7650500  | 776710000  |
| 30 | TUBB | 0  | 757200000  |
| 31 | ARG1 | 15629000  | 719460000  |
| 32 | LOR | 44838000  | 711060000  |
| 33 | EEF2 | 7300900  | 704670000  |
| 34 | CTSD | 14160000  | 689240000  |
| 35 | SBSN | 5390100  | 636800000  |
| 36 | TRIM21 | 0  | 633920000  |
| 37 | PFN1 | 4784900  | 629100000  |
| 38 | LDHA | 39762000  | 616200000  |
| 39 | TXN | 0  | 598540000  |
| 40 | HSPA8 | 8255400  | 598030000  |
| 41 | HSPA9 | 0  | 587830000  |
| 42 | ALDOA | 0  | 585420000  |
| 43 | PPIB | 35448000  | 550760000  |
| 44 | GSTP1 | 0  | 535530000  |
| 45 | YWHAZ | 0  | 502550000  |
| 46 | HBB | 25334000  | 501700000  |
| 47 | LGALS1 | 0  | 489830000  |
| 48 | GGCT | 6196300  | 488450000  |
| 49 | LMNA | 0  | 485030000  |
| 50 | PRICKLE2 | 0  | 437680000  |
| 51 | ASPRV1 | 0  | 423390000  |
| 52 | GSDMA | 19276000  | 423350000  |
| 53 | CALR | 0  | 417740000  |
| 54 | TGM3 | 14207000  | 398930000  |
| 55 | TPM4 | 8559800  | 389590000  |
| 56 | PIP  | 0  | 362340000  |
| 57 | DEFA3 | 0  | 342310000  |
| 58 | PDIA3 | 6029000  | 334800000  |
| 59 | HSP90B1 | 0  | 329910000  |
| 60 | POF1B  | 28570000  | 295940000  |
| 61 | KRT6B | 0  | 294210000  |
| 62 | ACTN4 | 0  | 273460000  |
| 63 | WDR11 | 0  | 269690000  |
| 64 | S100A7 | 0  | 258480000  |
| 65 | RPS3 | 0  | 241710000  |
| 66 | LGALS7B | 11150000  | 231350000  |
| 67 | S100A16 | 7781600  | 230850000  |
| 68 | RAB1B | 13902000  | 226550000  |
| 69 | MYL6 | 0  | 218290000  |
| 70 | CTSB | 0  | 209820000  |
| 71 | SERPINB12 | 12322000  | 203830000  |
| 72 | HBB  | 0  | 203300000  |
| 73 | RTN4 | 14057000  | 202830000  |
| 74 | IDE | 0  | 199060000  |
| 75 | QPRT | 0  | 196770000  |
| 76 | B2M | 0  | 189690000  |
| 77 | ATP5F1B | 13395000  | 186700000  |
| 78 | S100A11 | 10992000  | 185530000  |
| 79 | AKR1B1 | 10827000  | 170590000  |
| 80 | ANXA5 | 11609000  | 168450000  |
| 81 | HSPD1 | 11859000  | 162020000  |
| 82 | CALM3 | 0  | 159540000  |
| 83 | ALOX12B | 0  | 152470000  |
| 84 | RAB6B | 0  | 150490000  |
| 85 | NME1 | 0  | 147600000  |
| 86 | CAT | 8462500  | 140630000  |
| 87 | S100A14 | 11360000  | 138300000  |
| 88 | TF | 0  | 132490000  |
| 89 | EPFP1 | 0  | 127800000  |
| 90 | SCGB2A1 | 0  | 125580000  |
| 91 | HNRPH3 | 0  | 125180000  |
| 92 | CCDC159 | 0  | 123110000  |
| 93 | MSN | 4617200  | 120950000  |
| 94 | EWSR1 | 7809500  | 117530000  |
| 95 | PON1 | 0  | 114950000  |
| 96 | EPPK1 | 0  | 108930000  |
| 97 | PGK1 | 0  | 108900000  |
| 98 | IFITM2 | 0  | 107910000  |
| 99 | EIF4A2 | 8609400  | 107010000  |
| 100 | ISG15 | 0  | 105710000  |
| 101 | RPS13 | 0  | 102710000  |
| 102 | TALDO1 | 0  | 97993000  |
| 103 | MDH2 | 0  | 92452000  |
| 104 | CANX | 0  | 89865000  |
| 105 | ANXA1 | 2207700  | 89708000  |
| 106 | LACRT | 0  | 89165000  |
| 107 | ACTG1 | 5401300  | 85732000  |
| 108 | C4B | 0  | 82511000  |
| 109 | IDH1 | 5708800  | 81395000  |
| 110 | RPS4X | 0  | 79931000  |
| 111 | VDAC2 | 0  | 78608000  |
| 112 | PSMA8 | 0  | 76812000  |
| 113 | GLRX | 0  | 74776000  |
| 114 | VCP | 0  | 71066000  |
| 115 | RPS19 | 0  | 65098000  |
| 116 | ARPC4 | 0  | 64479000  |
| 117 | ORM2 | 0  | 64323000  |
| 118 | TUBB2C | 0  | 61960000  |
| 119 | LTF | 0  | 60603000  |
| 120 | VDAC1 | 0  | 59624000  |
| 121 | RAB11A | 0  | 59402000  |
| 122 | DNCL1 | 0  | 59320000  |
| 123 | PRDX4 | 0  | 58458000  |
| 124 | CLIC1 | 0  | 58217000  |
| 125 | SLC25A3 | 0  | 57756000  |
| 126 | NFE2L2 | 0  | 56994000  |
| 127 | RAB5A | 0  | 56567000  |
| 128 | TAGLN2 | 0  | 55665000  |
| 129 | ATP5PO | 0  | 55428000  |
| 130 | APOA1 | 0  | 55428000  |
| 131 | PRDX6 | 0  | 54730000  |
| 132 | GDI2 | 0  | 53682000  |
| 133 | CD44 | 0  | 52240000  |
| 134 | RPLP0 | 0  | 52145000  |
| 135 | KLK7 | 0  | 52093000  |
| 136 | PRR4 | 0  | 51835000  |
| 137 | PDIA6 | 0  | 49731000  |
| 138 | ECM1 | 0  | 47807000  |
| 139 | SOD1 | 0  | 45344000  |
| 140 | ZG16B | 0  | 45050000  |
| 141 | VAT1 | 0  | 44231000  |
| 142 | PLS3 | 0  | 43284000  |
| 143 | RACK1 | 0  | 42966000  |
| 144 | RCN1 | 0  | 42702000  |
| 145 | MARCKS | 0  | 42339000  |
| 146 | RPS5 | 3950700  | 41302000  |
| 147 | PSMA2 | 0  | 41284000  |
| 148 | FTH1 | 3320000  | 41219000  |
| 149 | RPL11 | 0  | 41168000  |
| 150 | RAN | 0  | 39776000  |
| 151 | ERH | 0  | 39369000  |
| 152 | PSMA3 | 0  | 39195000  |
| 153 | PSMB6 | 0  | 37915000  |
| 154 | CPA4 | 0  | 37634000  |
| 155 | RPLP1 | 0  | 37518000  |
| 156 | TAF15 | 0  | 36197000  |
| 157 | TIMM13 | 0  | 34050000  |
| 158 | ITGB1 | 0  | 33859000  |
| 159 | ARPC5 | 0  | 33660000  |
| 160 | HEL2 | 0  | 32563000  |
| 161 | GOT2 | 0  | 29643000  |
| 162 | FGF7  | 0  | 29456000  |
| 163 | SLC25A11 | 0  | 27797000  |
| 164 | IQGAP1 | 0  | 27264000  |
| 165 | PSAPL1 | 0  | 26957000  |
| 166 | PRKCSH | 0  | 26809000  |
| 167 | LEPR | 0  | 26041000  |
| 168 | YWHAB | 0  | 25528000  |
| 169 | ARPC1B | 0  | 23112000  |
| 170 | ATP5MG | 0  | 22758000  |
| 171 | CS | 0  | 22611000  |
| 172 | ASAH1 | 0  | 22294000  |
| 173 | GSTO1 | 0  | 21077000  |
| 174 | TUBAL3 | 0  | 20455000  |
| 175 | SSR4  | 0  | 19942000  |
| 176 | SLPI | 0  | 19213000  |
| 177 | HMGB1 | 0  | 19043000  |
| 178 | IVL | 0  | 18848000  |
| 179 | RPN1 | 0  | 18579000  |
| 180 | TAGLN | 0  | 18434000  |
| 181 | CLTC | 0  | 18286000  |
| 182 | TLN1 | 0  | 17530000  |
| 183 | HSD17B4 | 0  | 17217000  |
| 184 | ATP5PB | 0  | 16785000  |
| 185 | GPI | 0  | 16568000  |
| 186 | TUBB3 | 0  | 15862000  |
| 187 | DKFZp779L2418 | 0  | 15315000  |
| 188 | CRCT1 | 0  | 15105000  |
| 189 | FHIP1B | 0  | 12380000  |
| 190 | CPNE4 | 0  | 11788000  |
| 191 | ANXA6 | 0  | 9881600  |
| 192 | UTS2R | 0  | 8798400  |
| 193 | MX1 | 0  | 7116800  |
| 194 | TYMP | 0  | 3969800  |