

SUPPLEMENTARY MATERIAL

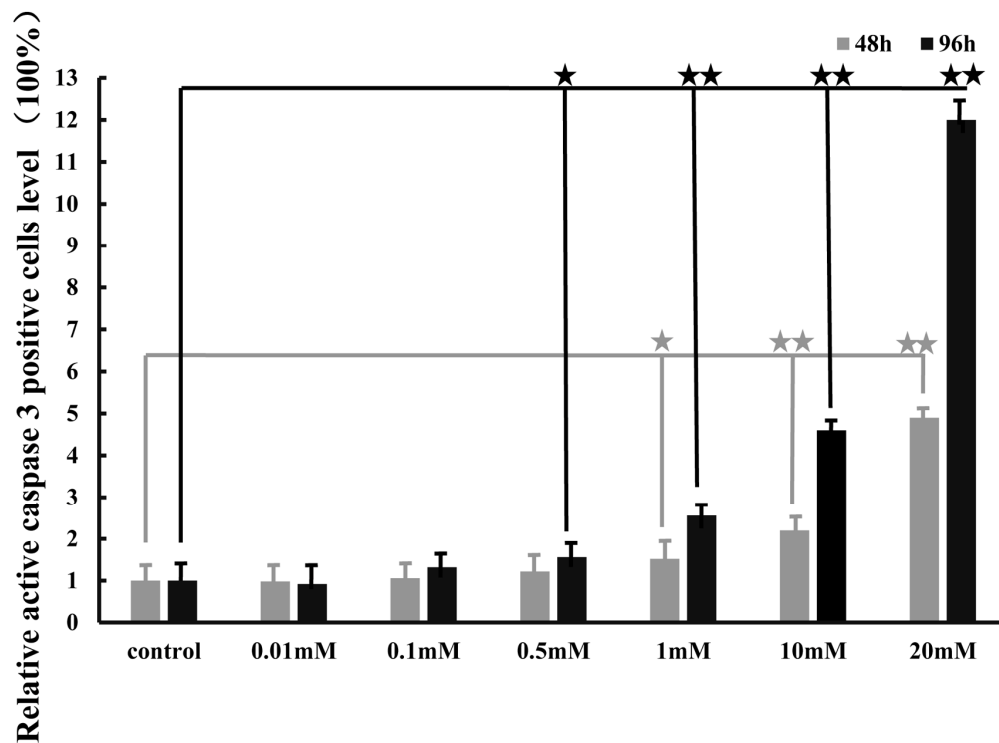
Supplementary Table S1. Fetal characteristics examined in this study.

Fetal characteristics (n=12)	Measurements
Age (weeks)	16.4±0.6
Weight (g)	126±8
Biparietal diameter (mm)	35.1±4.9
Femur length (mm)	22±4.2
Abdominal circumference (mm)	105.2±17.2
Fetal head circumference (mm)	123±9

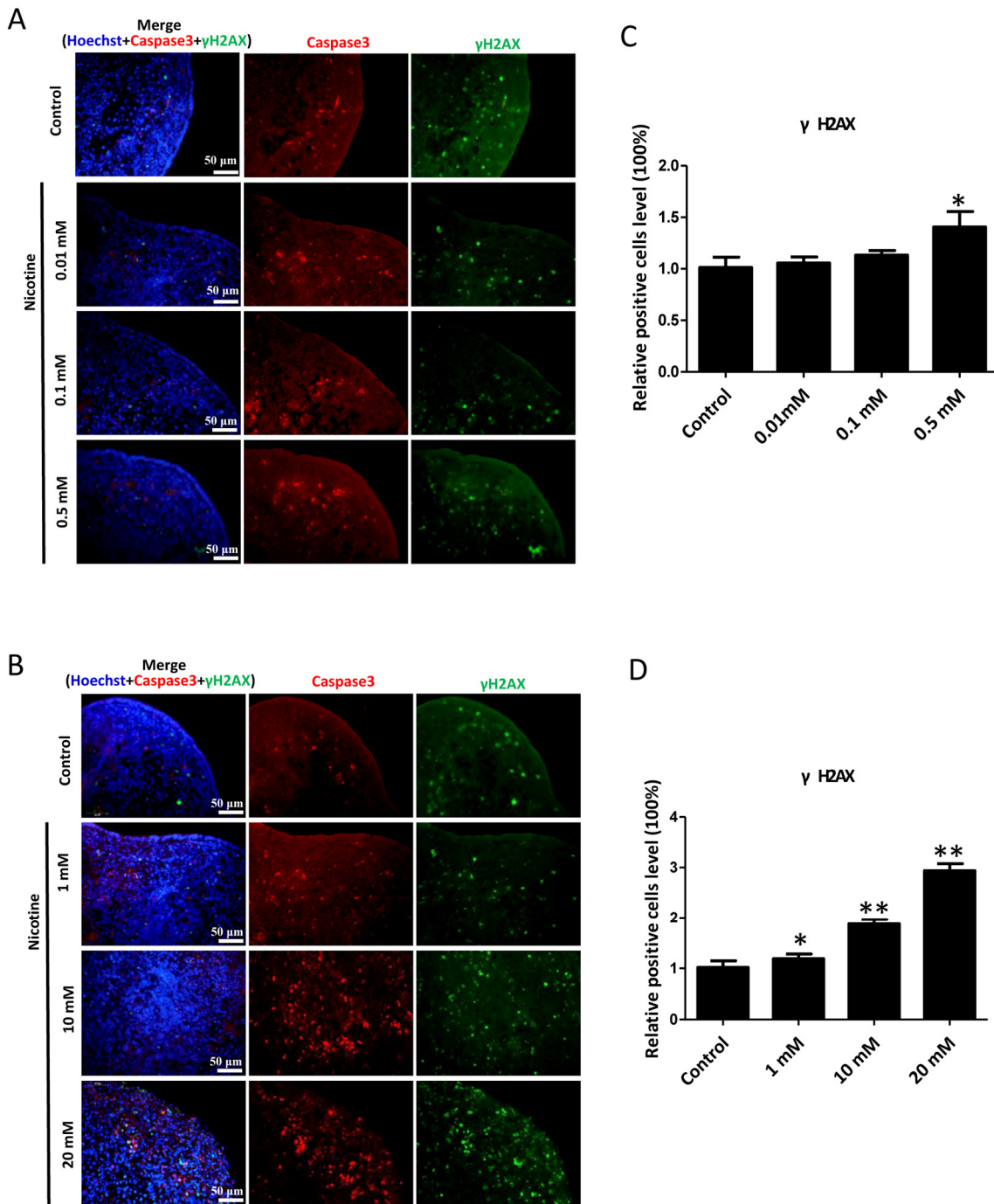
Supplementary Table S2. Primers Used for Quantitative Real-Time PCR.

Genes	Sequences of primers	Production (bp)	Genbank
<i>Sod1</i>	F:5'-GGGGAAGCATTAAGGACTGA-3' R:5'-CCACCGTGTTTCTGGATAGA-3'	124	NM_001005735.1
<i>Cat</i>	F:5'-GCTCCAAATTACTACCCCAACA-3' R: 5'-ATAGAATGCCCGCACCTGA-3'	141	NM_001752.3
<i>Gpx1</i>	F: 5'-AGTCGGTGTATGCCTTCTCG-3' R:5'-AGCTCGTTCATCTGGGTGTAGT-3'	145	NM_000581.2
<i>Atr</i>	F: 5'-GCTCTTTGGATGTGCTTGG-3' R:5'-TCCTCAGTCTGTTTTGGTGCT-3'	218	XM_011512927.1
<i>Brcal</i>	F: 5'-CACAGTCGGGAAACAAGCA-3' R: 5'-CTGACCAACCACAGGAAAGC-3'	288	NM_007294.3
<i>Rad51</i>	F: 5'-CCCATTTACGGTTAGAGCA-3' R:5'-TCTCAATTCCACCTGTAGTCCC-3'	289	NM_001164269.1
<i>Atm</i>	F: 5'-GACAATCATCACCAAGTTCGC-3' R:5'-TCGCAGATAGGGCTACAGGA-3'	269	XM_011542846.1
<i>Bax</i>	F: 5'-GTCGCCCTTTTCTACTTTGC-3' R: 5'-GGGACATCAGTCGCTTCAGT-3'	184	XM_006723314.2
<i>Bcl2</i>	F: 5'-TTGAGTTCGGTGGGGTCAT-3' R:5'-CAGCCAGGAGAAATCAAACAG-3'	194	NM_000633.2
<i>Mlh1</i>	F: 5'-GAGGAAGGGAACCTGATTGG-3' R: 5'-CGGATGGAATAGAACATAGCG-3'	167	XM_011533727.1
<i>Vasa</i>	F: 5'-AGCTGGGACATTCAATTCGAC-3' R:5'-GTTTGGCTGCGTTCCTTTGAT-3'	220	NM_001166534.1
<i>Scp3</i>	F: 5'-AAATCTGGGAAGCCGTCTGT-3' R:5'-AACTCCAACCTCCTCCAGCA-3'	207	NM_001177949.1
<i>Chk1</i>	F 5'-CCTTTGTGGAAGACTGGGACT-3' R:5'-ACAATCTTCACTGCGACTGCT-3'	109	NM_001244846.1
<i>Chk2</i>	F:5'-AAAGTGCTGGGATAAGAGGTGT-3' R:5'-TCCCTGAAAATCCGAAAGTG-3'	181	NM_001005735.1
<i>Dazl</i>	F:5'-GACTAATCCAAACTGAACTTAT-3' R:5'-TACAGTGGTAGTTAACAGCTGAATA-3'	221	NM_001190811.1
<i>nAChR-α1</i>	F:5'-GCTCTGTCGTGGCCATCAA-3' R:5'-CCGAAAGCGACCAGCCAGA-3'	40	NM_000079.3
<i>nAChR-α2</i>	F:5'-GTGGAGGAGGAGGACAGA-3' R:5'-CTTCTGCATGTGGGGTGATA-3'	156	NM_000742.3

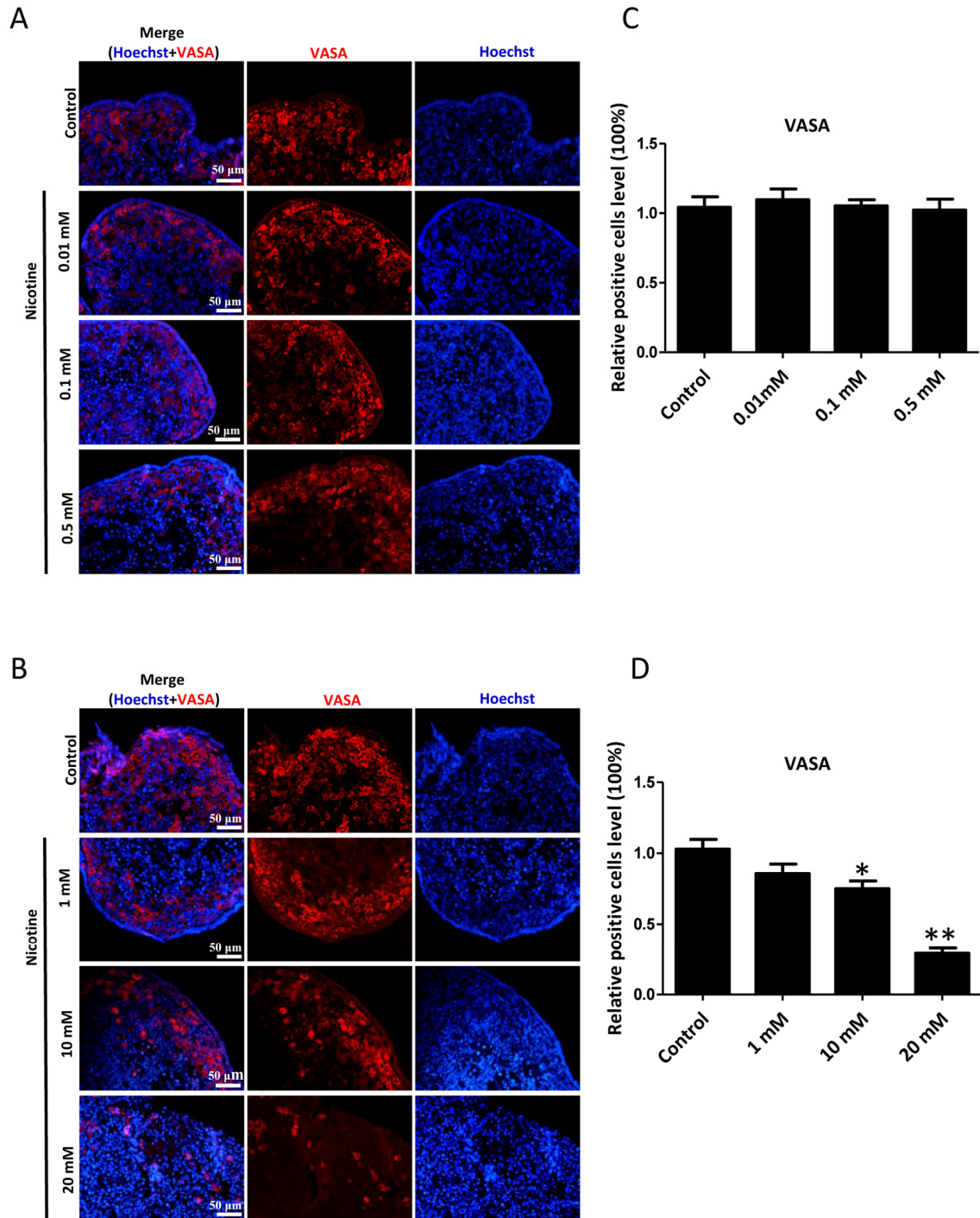
<i>nAChR-α3</i>	F:5'-CAGAGTCCAAAGGCTGCAAG-3' R:5'-AGAGAGGGACAGCACAGCAT-3'	149	NM_000743.4
<i>nAChR-α4</i>	F:5'-CTCACCGTCCTTCTGTGTC-3' R:5'-CTGGCTTTCTCAGTTCCAG-3'	110	NM_000744.5
<i>nAChR-α5</i>	F:5'-CTTACACGTTCCCAAAC-3' R:5'-CTTCAACAACCTCACGGACA-3'	187	NM_000745.3
<i>nAChR-α6</i>	F:5'-TCCATCGTGGTACTGTGT-3' R:5'-AGGCCACCTCATCAGCAG-3'	126	NM_001199279.1
<i>nAChR-α7</i>	F:5'-GTACGCTGGTTCCCTTGA-3' R:5'-CCACTAGGTCCCATTCTC-3'	139	NM_000746.4
<i>nAChR-α9</i>	F:5'-GAAAGCAGCCAGGAACAAAG-3' R:5'-GCACTGGCGATGTACTCAA-3'	157	NM_017581.2
<i>nAChR-α10</i>	F:5'-ACACAAGTGCCCTGAGACCT-3' R:5'-TCCCATCGTAGGTAGGCATC-3'	160	NM_020402.2
<i>nAChR-β1</i>	F:5'-CTACGACAGCTCGGAGGTCA-3' R:5'-GCAGGTTGAGAACCACGACA-3'	479	NM_000747.2
<i>nAChR-β2</i>	F:5'-GGCATGTACGAGGTGTCTT-3' R:5'-CACCTCACTTTCAGCACCA-3'	200	NM_000748.2
<i>nAChR-β3</i>	F:5'-AACAGTTCGGTTTGATTTCACGAT-3' R:5'-CCCTGATGACCAAGGTCATC-3'	41	NM_000749.3
<i>nAChR-β4</i>	F:5'-TCCCTGGTCCTTTTCTTCT-3' R:5'-TGCAGCTTGATGGAGATGAG-3'	160	NM_000750.3
<i>nAChR-γ</i>	F:5'-CGCCTGCTCTATCTCAGTCA-3' R:5'-GGAGACATTGAGCACAACCA-3'	547	NM_002046.3
<i>Gapdh</i>	F:5'-GAGTCAACGGATTTGGTCGT-3' R:5'-TTGATTTTGGAGGGATCTCG-3'	238	NM_002046.4



Supplementary Figure S1. Relativer ratio of Caspase3 positive cells in ovaries after 48 h or 96 h incubation in the presence of different concentrations of nicotine. Results are presented as the mean± SD. All experiments were repeated at least three times. (*) and (**) indicate significant ($P < 0.05$) and highly significant ($P < 0.01$) difference, respectively.



Supplementary Figure S2. Representative IF images of tissue sections for active Caspase 3 and γ H2AX of ovaries cultured for 4 days (A) and 2 days (B) in the presence of increasing nicotine concentrations. (C) Relative ratio of γ H2AX positive cells after 4 days of culture; (D). Relative ratio of γ H2AX positive cells after 2 days of culture. All experiments were repeated at least three times. (*) and (**) indicate significant ($P < 0.05$) and highly significant ($P < 0.01$) difference, respectively.



Supplementary Figure S3. Representative IF images of tissue sections for VASA positive cells (germ cells) in human fetal ovaries cultured for 4 days (A) and 2 days (B) in the presence of increasing nicotine concentrations. (C) Relative ratio of VASA positive cells after 4 days of culture; (D) Relative ratio of VASA positive cells after 2 days of culture. All experiments were repeated at least three times. (*) and (**) indicate significant ($P < 0.05$) and highly significant ($P < 0.01$) difference, respectively.