

Table S1. The list of differentially expressed mRNAs.

GeneName	padj	pvalue	log2FC	baseMean	lfcSE	stat	regulation
CA2	1.85E-14	9.31E-19	-0.79	837.25	0.09	-8.84	down
SRGN	2.60E-12	2.61E-16	1.33	326.13	0.16	8.19	up
LCE1A	1.34E-10	2.58E-14	1.29	372.80	0.17	7.62	up
THY1	1.34E-10	2.70E-14	0.70	348.68	0.09	7.61	up
C3	1.36E-10	3.41E-14	0.92	2015.74	0.12	7.58	up
ALDH1A3	1.43E-10	4.32E-14	0.76	461.40	0.10	7.55	up
MAP2K6	4.53E-10	1.59E-13	-0.55	379.35	0.08	-7.38	down
LCE1B	5.13E-10	2.06E-13	1.10	618.10	0.15	7.34	up
TIMP1	2.93E-09	1.32E-12	0.59	235.00	0.08	7.09	up
PFKP	4.60E-09	2.31E-12	0.73	1091.50	0.10	7.01	up
NNMT	5.66E-09	3.13E-12	1.24	468.90	0.18	6.97	up
OSMR	6.46E-09	3.90E-12	0.61	1799.86	0.09	6.94	up
LCE1C	7.05E-09	4.96E-12	1.07	860.91	0.16	6.91	up
SOX9	7.05E-09	4.83E-12	-0.50	6248.75	0.07	-6.91	down
MET	7.90E-09	5.96E-12	0.59	914.35	0.09	6.88	up
VEGFA	2.60E-08	2.22E-11	0.73	2880.15	0.11	6.69	up
LCE1E	2.67E-08	2.41E-11	1.29	181.80	0.19	6.68	up
BHLHE22	2.71E-08	2.58E-11	-1.22	148.30	0.18	-6.67	down
RASD1	2.87E-08	2.88E-11	-0.66	706.69	0.10	-6.65	down
ERO1A	3.52E-08	3.90E-11	0.61	2542.63	0.09	6.61	up
GFPT2	3.52E-08	3.78E-11	1.02	174.77	0.15	6.61	up
SFRP2	5.64E-08	6.65E-11	1.15	252.21	0.18	6.53	up
ARG1	6.16E-08	7.74E-11	0.75	997.63	0.12	6.51	up
FREM2	6.47E-08	8.46E-11	-0.63	1085.60	0.10	-6.49	down
HOXC10	8.12E-08	1.14E-10	-1.19	85.40	0.18	-6.45	down
NPNT	1.26E-07	1.96E-10	-0.86	700.56	0.13	-6.36	down
MEDAG	1.33E-07	2.13E-10	1.69	124.88	0.27	6.35	up
ADCYAP1	1.33E-07	2.21E-10	1.67	89.76	0.26	6.35	up
RNF223	1.41E-07	2.42E-10	0.79	157.30	0.12	6.33	up
HMOX1	1.42E-07	2.49E-10	0.72	1060.57	0.11	6.33	up
PTPRZ1	1.45E-07	2.70E-10	-0.55	1883.54	0.09	-6.32	down
SOX18	1.45E-07	2.65E-10	-1.11	84.39	0.18	-6.32	down
SOSTDC1	2.23E-07	4.38E-10	-0.90	1211.24	0.15	-6.24	down
HOXC11	3.14E-07	6.30E-10	-1.09	54.21	0.18	-6.18	down
DACH1	3.37E-07	6.94E-10	-0.83	1411.92	0.13	-6.17	down
PPFIA4	3.37E-07	7.12E-10	1.05	551.26	0.17	6.16	up
DENND3	3.44E-07	7.51E-10	0.70	817.22	0.11	6.15	up
PTX3	3.44E-07	7.60E-10	2.68	22.10	0.44	6.15	up
SAMD4A	4.03E-07	9.11E-10	0.87	1132.29	0.14	6.12	up
ECM1	5.24E-07	1.24E-09	0.71	561.10	0.12	6.08	up
TMEM144	5.24E-07	1.23E-09	-0.57	383.61	0.09	-6.08	down
MT1M	5.66E-07	1.36E-09	2.06	26.78	0.34	6.06	up

PTGDS	6.53E-07	1.61E-09	0.87	679.99	0.14	6.03	up
IL6R	6.61E-07	1.66E-09	0.60	772.67	0.10	6.03	up
PCDH11X	7.64E-07	1.96E-09	-0.78	214.82	0.13	-6.00	down
SDCBP2	8.61E-07	2.34E-09	0.61	997.69	0.10	5.97	up
ARG2	1.11E-06	3.07E-09	0.63	122.94	0.11	5.93	up
NAMPTP1	1.11E-06	3.12E-09	0.72	101.97	0.12	5.93	up
FAM107A	1.20E-06	3.43E-09	0.63	309.66	0.11	5.91	up
C1R	1.38E-06	4.10E-09	0.87	352.61	0.15	5.88	up
AOX1	1.42E-06	4.43E-09	0.79	270.20	0.13	5.87	up
FLG	1.53E-06	4.84E-09	0.65	121454.25	0.11	5.85	up
EPOP	1.65E-06	5.32E-09	1.19	138.05	0.20	5.84	up
CTNND2	2.00E-06	6.54E-09	-0.75	987.81	0.13	-5.80	down
PRSS8	2.63E-06	9.00E-09	0.50	2311.02	0.09	5.75	up
BACH2	2.75E-06	9.64E-09	0.80	945.53	0.14	5.74	up
DEPTOR	2.75E-06	9.67E-09	-0.61	360.09	0.11	-5.74	down
TP73	2.83E-06	1.01E-08	-0.73	518.28	0.13	-5.73	down
TGFB2	3.20E-06	1.16E-08	-0.99	632.21	0.17	-5.71	down
SLC26A7	3.35E-06	1.23E-08	-0.69	127.96	0.12	-5.70	down
IL1RL1	3.45E-06	1.30E-08	0.92	270.92	0.16	5.69	up
ARHGAP28	4.04E-06	1.54E-08	-0.54	1950.69	0.10	-5.66	down
LCE5A	4.21E-06	1.63E-08	1.40	89.52	0.25	5.65	up
LHX2	4.29E-06	1.70E-08	-0.85	735.16	0.15	-5.64	down
LCE2D	4.62E-06	1.86E-08	1.40	197.33	0.25	5.62	up
VSNL1	5.50E-06	2.27E-08	-0.51	1182.34	0.09	-5.59	down
HRH1	6.09E-06	2.54E-08	0.66	270.87	0.12	5.57	up
CELF2	6.13E-06	2.59E-08	0.54	749.19	0.10	5.57	up
PPP1R16B	6.29E-06	2.69E-08	0.60	159.19	0.11	5.56	up
TRIL	6.94E-06	3.14E-08	-0.51	853.41	0.09	-5.53	down
TEDC1	7.72E-06	3.53E-08	-0.91	281.57	0.16	-5.51	down
IRAK3	8.61E-06	4.16E-08	0.64	827.77	0.12	5.48	up
CLDN8	9.16E-06	4.51E-08	-0.86	279.97	0.16	-5.47	down
PDE4A	9.43E-06	4.81E-08	0.67	138.50	0.12	5.46	up
TRPM6	9.43E-06	4.81E-08	-0.63	1078.41	0.11	-5.46	down
PCDHGA7	1.01E-05	5.39E-08	-0.55	147.96	0.10	-5.44	down
RNASE7	1.25E-05	6.85E-08	1.07	411.60	0.20	5.40	up
BIRC3	1.29E-05	7.14E-08	0.93	818.54	0.17	5.39	up
CYP1B1	1.49E-05	8.31E-08	-0.73	2740.57	0.14	-5.36	down
ELMOD1	1.52E-05	8.69E-08	0.51	553.46	0.10	5.35	up
NAMPT	1.52E-05	8.62E-08	0.68	3654.94	0.13	5.35	up
STK10	1.52E-05	8.62E-08	0.52	1070.77	0.10	5.35	up
SGIP1	1.53E-05	8.84E-08	0.63	210.58	0.12	5.35	up
KRT17P2	1.88E-05	1.09E-07	-0.67	107.83	0.13	-5.31	down
DPP10	2.08E-05	1.23E-07	-0.68	134.82	0.13	-5.29	down
SAMD9	2.29E-05	1.38E-07	-0.69	784.73	0.13	-5.27	down

SLC25A48	2.37E-05	1.45E-07	-0.65	236.60	0.12	-5.26	down
ABCC3	2.66E-05	1.64E-07	0.79	1434.86	0.15	5.24	up
PRRX2	3.09E-05	1.96E-07	0.55	202.33	0.10	5.20	up
ART3	3.17E-05	2.07E-07	-0.69	103.19	0.13	-5.19	down
ZDHHC11B	3.20E-05	2.11E-07	0.59	274.32	0.11	5.19	up
CA12	3.47E-05	2.32E-07	0.53	3697.75	0.10	5.17	up
ENO2	3.51E-05	2.40E-07	0.54	246.18	0.11	5.17	up
SYTL3	3.64E-05	2.50E-07	0.80	176.05	0.16	5.16	up
TRIB3	3.70E-05	2.61E-07	0.72	156.38	0.14	5.15	up
TMEM40	3.71E-05	2.63E-07	0.53	1239.62	0.10	5.15	up
HDC	3.82E-05	2.75E-07	1.18	99.93	0.23	5.14	up
NCCRP1	3.88E-05	2.85E-07	0.64	2600.50	0.13	5.13	up
AC254813.1	4.10E-05	3.07E-07	0.65	136.21	0.13	5.12	up
C1orf68	4.42E-05	3.36E-07	0.92	508.58	0.18	5.10	up
KCNH1	4.44E-05	3.41E-07	-0.53	118.99	0.10	-5.10	down
KPRP	4.44E-05	3.48E-07	1.19	2249.51	0.23	5.10	up
SLA	4.45E-05	3.51E-07	0.83	322.46	0.16	5.09	up
COCH	4.53E-05	3.59E-07	-0.90	318.36	0.18	-5.09	down
IL18R1	4.75E-05	3.82E-07	0.76	230.73	0.15	5.08	up
BARX2	4.80E-05	3.89E-07	-0.54	2378.28	0.11	-5.07	down
LMX1B	4.98E-05	4.15E-07	-0.62	226.65	0.12	-5.06	down
NDRG1	4.98E-05	4.15E-07	0.62	12009.81	0.12	5.06	up
TACC1	4.98E-05	4.14E-07	0.53	2377.37	0.10	5.06	up
PFKFB3	5.13E-05	4.33E-07	0.64	2554.28	0.13	5.05	up
CRCT1	5.59E-05	4.83E-07	0.70	1105.91	0.14	5.03	up
LAPTM5	5.59E-05	4.83E-07	0.80	400.08	0.16	5.03	up
ATP10A	5.75E-05	5.00E-07	0.59	297.65	0.12	5.03	up
ST3GAL1	6.14E-05	5.37E-07	0.52	670.01	0.10	5.01	up
LCE1D	6.15E-05	5.41E-07	1.14	93.75	0.23	5.01	up
SHISA2	6.18E-05	5.46E-07	-0.88	850.34	0.18	-5.01	down
MT1A	6.30E-05	5.61E-07	3.15	25.51	0.63	5.00	up
CP	6.39E-05	5.75E-07	0.67	154.71	0.13	5.00	up
ASPHD2	6.43E-05	5.93E-07	0.75	156.92	0.15	4.99	up
LCE2A	6.43E-05	5.90E-07	1.27	193.82	0.25	4.99	up
PDZRN3	6.43E-05	5.93E-07	-0.71	5709.11	0.14	-4.99	down
AC129492.6	7.22E-05	6.75E-07	1.06	199.51	0.21	4.97	up
MAMDC2	7.26E-05	6.82E-07	-0.66	544.56	0.13	-4.97	down
C7	7.33E-05	6.93E-07	1.05	127.67	0.21	4.96	up
GPC5	7.36E-05	7.01E-07	-0.73	58.99	0.15	-4.96	down
LCE2B	7.36E-05	7.03E-07	1.32	506.78	0.27	4.96	up
CD53	7.55E-05	7.24E-07	0.85	141.94	0.17	4.95	up
HOXB3	7.95E-05	7.67E-07	-0.80	66.09	0.16	-4.94	down
PTPRT	8.07E-05	7.83E-07	-0.51	341.01	0.10	-4.94	down
GRIA4	8.28E-05	8.15E-07	-0.72	136.79	0.14	-4.93	down

PHYHIPL	8.43E-05	8.35E-07	-0.78	97.81	0.16	-4.93	down
RUBCNL	8.66E-05	8.71E-07	0.84	78.95	0.17	4.92	up
PPP1R1C	8.74E-05	8.83E-07	-0.95	166.77	0.19	-4.92	down
HSPA2	8.94E-05	9.07E-07	-0.70	2565.50	0.14	-4.91	down
ADIPOQ	9.62E-05	9.91E-07	-0.84	115.91	0.17	-4.89	down
CDH12	9.89E-05	1.04E-06	-0.79	127.63	0.16	-4.88	down
IL37	9.89E-05	1.04E-06	0.73	154.89	0.15	4.88	up
RPL9P16	1.01E-04	1.07E-06	-0.70	119.64	0.14	-4.88	down
MMP19	1.01E-04	1.08E-06	0.65	241.94	0.13	4.88	up
TSSK1B	1.01E-04	1.08E-06	-0.83	76.39	0.17	-4.88	down
ALOX5	1.05E-04	1.13E-06	0.59	167.45	0.12	4.87	up
SEZ6L	1.06E-04	1.15E-06	-0.63	252.75	0.13	-4.86	down
IGLV3-21	1.08E-04	1.17E-06	2.78	11.75	0.57	4.86	up
NPPC	1.11E-04	1.22E-06	-1.39	52.11	0.29	-4.85	down
TBX18	1.21E-04	1.37E-06	-0.74	310.16	0.15	-4.83	down
PFKFB4	1.28E-04	1.45E-06	0.71	685.07	0.15	4.82	up
PRKCB	1.29E-04	1.49E-06	0.94	184.77	0.20	4.81	up
EFNA5	1.29E-04	1.52E-06	-0.63	2568.60	0.13	-4.81	down
AL033519.2	1.30E-04	1.54E-06	1.27	33.44	0.27	4.81	up
TBC1D2	1.31E-04	1.56E-06	0.52	502.06	0.11	4.80	up
STXBP6	1.32E-04	1.58E-06	0.70	242.44	0.15	4.80	up
ATP8A2	1.35E-04	1.64E-06	-0.80	352.31	0.17	-4.79	down
SYTL5	1.43E-04	1.75E-06	-0.78	139.96	0.16	-4.78	down
TPSAB1	1.44E-04	1.77E-06	0.79	169.47	0.17	4.78	up
EGLN3	1.46E-04	1.80E-06	0.57	2053.98	0.12	4.77	up
GAS1	1.57E-04	2.01E-06	-0.63	1280.41	0.13	-4.75	down
FUT3	1.58E-04	2.03E-06	0.71	162.09	0.15	4.75	up
AZGP1P1	1.80E-04	2.37E-06	0.64	265.15	0.14	4.72	up
GASK1B	1.88E-04	2.49E-06	-0.55	1124.77	0.12	-4.71	down
CA9	2.30E-04	3.14E-06	0.94	88.86	0.20	4.66	up
OXGR1	2.30E-04	3.16E-06	-0.93	113.90	0.20	-4.66	down
LCE2C	2.38E-04	3.29E-06	1.40	375.52	0.30	4.65	up
ZFP36L1	2.40E-04	3.32E-06	-0.53	8596.55	0.11	-4.65	down
LCE6A	2.40E-04	3.34E-06	0.56	635.67	0.12	4.65	up
IKZF1	2.66E-04	3.81E-06	0.96	145.37	0.21	4.62	up
RBBP8NL	2.66E-04	3.83E-06	-0.72	163.64	0.16	-4.62	down
COL17A1	2.75E-04	4.00E-06	0.52	1462.46	0.11	4.61	up
C1QTNF3	2.82E-04	4.14E-06	-0.50	156.16	0.11	-4.60	down
RUNX1T1	2.82E-04	4.15E-06	-0.53	319.28	0.11	-4.60	down
CBLN2	3.15E-04	4.66E-06	-1.14	927.11	0.25	-4.58	down
PARM1	3.32E-04	4.94E-06	-0.61	4080.73	0.13	-4.57	down
CRISPLD2	3.43E-04	5.14E-06	0.61	1508.14	0.13	4.56	up
HBB	3.43E-04	5.18E-06	2.31	397.39	0.51	4.56	up
TNS4	3.43E-04	5.15E-06	0.54	7235.50	0.12	4.56	up

PLIN1	3.58E-04	5.47E-06	-0.56	107.89	0.12	-4.55	down
NPY1R	3.81E-04	5.98E-06	-0.65	251.79	0.14	-4.53	down
LOX	3.85E-04	6.10E-06	0.66	487.84	0.15	4.52	up
LCE1F	3.94E-04	6.28E-06	1.06	100.27	0.23	4.52	up
ARPP21	4.01E-04	6.41E-06	-1.32	53.72	0.29	-4.51	down
HOXC9	4.04E-04	6.50E-06	-1.15	60.91	0.25	-4.51	down
HSPA12B	4.22E-04	6.92E-06	-0.60	93.56	0.13	-4.50	down
ATF3	4.30E-04	7.06E-06	-1.72	876.12	0.38	-4.49	down
HBA2	4.32E-04	7.20E-06	2.34	396.18	0.52	4.49	up
PIK3R5	4.32E-04	7.21E-06	0.77	101.27	0.17	4.49	up
BTBD8	4.44E-04	7.43E-06	-0.60	152.92	0.13	-4.48	down
AKAP12	4.56E-04	7.67E-06	0.60	486.06	0.13	4.47	up
BTC	4.71E-04	8.01E-06	-0.67	598.10	0.15	-4.47	down
SLC26A5	4.78E-04	8.17E-06	-0.72	121.66	0.16	-4.46	down
APLNR	4.90E-04	8.42E-06	-0.95	113.39	0.21	-4.45	down
FCGR2A	4.94E-04	8.56E-06	0.59	260.18	0.13	4.45	up
STMN2	4.94E-04	8.62E-06	1.04	46.07	0.23	4.45	up
ERRFI1	5.01E-04	8.78E-06	0.70	1481.01	0.16	4.45	up
KLF9	5.07E-04	8.95E-06	0.75	960.62	0.17	4.44	up
MT1E	5.26E-04	9.35E-06	0.91	289.04	0.21	4.43	up
CCR7	5.26E-04	9.38E-06	1.11	42.48	0.25	4.43	up
CD163	5.42E-04	9.81E-06	0.71	345.56	0.16	4.42	up
KCNH5	5.49E-04	1.00E-05	-0.54	96.62	0.12	-4.42	down
KCNH8	5.71E-04	1.05E-05	-0.57	166.69	0.13	-4.41	down
PDK4	5.73E-04	1.07E-05	0.74	1345.20	0.17	4.40	up
RIMS2	5.73E-04	1.06E-05	-0.59	735.89	0.13	-4.40	down
ODF3L1	6.05E-04	1.16E-05	-1.16	25.17	0.27	-4.38	down
PTGS2	6.05E-04	1.15E-05	-0.92	283.09	0.21	-4.39	down
RFLNA	6.05E-04	1.16E-05	-0.87	37.45	0.20	-4.39	down
ICAM1	6.16E-04	1.19E-05	0.50	231.99	0.11	4.38	up
SLC35F3	6.19E-04	1.20E-05	-0.65	139.57	0.15	-4.38	down
MT1X	6.24E-04	1.22E-05	1.06	2105.38	0.24	4.37	up
TCAF2P1	6.24E-04	1.22E-05	0.91	34.43	0.21	4.37	up
CHST2	7.16E-04	1.43E-05	-0.67	2178.93	0.16	-4.34	down
HOXC4	7.57E-04	1.54E-05	-0.86	64.05	0.20	-4.32	down
HILPDA	7.70E-04	1.57E-05	0.65	896.51	0.15	4.32	up
ADPRHL1	7.76E-04	1.58E-05	0.85	127.34	0.20	4.32	up
ADM	7.90E-04	1.62E-05	0.67	443.79	0.16	4.31	up
UNC5A	8.53E-04	1.77E-05	-1.06	88.67	0.25	-4.29	down
SAMSN1	8.56E-04	1.78E-05	0.86	76.41	0.20	4.29	up
NMNAT1P1	8.64E-04	1.80E-05	-1.42	15.59	0.33	-4.29	down
HPGD	9.01E-04	1.89E-05	0.65	822.12	0.15	4.28	up
FOS	9.09E-04	1.92E-05	-2.17	5195.93	0.51	-4.27	down
IGHA1	9.13E-04	1.94E-05	1.54	75.67	0.36	4.27	up

MEOX2	9.68E-04	2.08E-05	-0.87	101.22	0.20	-4.26	down
CCN4	9.98E-04	2.15E-05	0.70	122.59	0.16	4.25	up
AL928654.3	1.02E-03	2.22E-05	-1.25	45.33	0.30	-4.24	down
ANKRD33B	1.09E-03	2.40E-05	0.51	1045.04	0.12	4.22	up
ZNF727	1.14E-03	2.55E-05	-0.83	51.21	0.20	-4.21	down
NRXN1	1.22E-03	2.76E-05	-0.55	289.27	0.13	-4.19	down
VTCN1	1.22E-03	2.77E-05	-0.56	449.44	0.13	-4.19	down
TNFSF8	1.24E-03	2.82E-05	1.05	28.58	0.25	4.19	up
DDIT3	1.27E-03	2.93E-05	0.57	153.44	0.14	4.18	up
TBX2	1.27E-03	2.93E-05	-0.61	111.63	0.14	-4.18	down
FAM153B	1.33E-03	3.10E-05	0.69	102.19	0.16	4.17	up
COL6A4P2	1.34E-03	3.14E-05	-0.73	118.60	0.17	-4.16	down
S100A1	1.41E-03	3.33E-05	-0.58	275.65	0.14	-4.15	down
AC027644.4	1.43E-03	3.41E-05	0.68	60.21	0.16	4.14	up
HOXC6	1.43E-03	3.42E-05	-0.83	110.16	0.20	-4.14	down
COL5A3	1.44E-03	3.45E-05	-0.57	1439.51	0.14	-4.14	down
WFDC5	1.46E-03	3.53E-05	0.56	574.01	0.14	4.14	up
HCLS1	1.50E-03	3.67E-05	0.70	212.67	0.17	4.13	up
RPL21P109	1.50E-03	3.70E-05	-1.30	26.99	0.31	-4.13	down
GYPC	1.52E-03	3.78E-05	0.64	106.58	0.16	4.12	up
NDNF	1.54E-03	3.90E-05	-0.57	62.20	0.14	-4.11	down
DNAH17	1.55E-03	3.94E-05	0.59	2384.30	0.14	4.11	up
ARHGAP9	1.57E-03	4.03E-05	0.58	87.32	0.14	4.11	up
FOSB	1.59E-03	4.13E-05	-2.37	3650.39	0.58	-4.10	down
CPA3	1.60E-03	4.18E-05	0.64	204.48	0.16	4.10	up
FOLH1	1.62E-03	4.23E-05	-0.63	125.28	0.15	-4.09	down
SMIM3	1.66E-03	4.38E-05	0.96	56.61	0.23	4.09	up
FAM89A	1.69E-03	4.48E-05	0.62	215.47	0.15	4.08	up
GPAT3	1.77E-03	4.72E-05	0.59	100.00	0.15	4.07	up
TUBB1	1.80E-03	4.86E-05	0.61	45.83	0.15	4.06	up
CRHR1	1.85E-03	5.04E-05	-0.93	46.82	0.23	-4.05	down
SDC4P	1.89E-03	5.18E-05	1.25	21.64	0.31	4.05	up
HAL	1.90E-03	5.22E-05	0.85	1386.46	0.21	4.05	up
CCR1	1.90E-03	5.23E-05	0.80	32.04	0.20	4.05	up
IL18RAP	2.02E-03	5.59E-05	1.57	13.03	0.39	4.03	up
AL441963.1	2.07E-03	5.79E-05	-0.58	59.13	0.14	-4.02	down
IGKV1D-39	2.10E-03	5.93E-05	1.75	22.63	0.44	4.02	up
ALKAL2	2.14E-03	6.03E-05	0.88	50.36	0.22	4.01	up
IFI30	2.27E-03	6.47E-05	0.56	254.97	0.14	4.00	up
IQCEN	2.27E-03	6.49E-05	-0.52	491.97	0.13	-3.99	down
ATP5MC1P6	2.28E-03	6.52E-05	-0.69	95.20	0.17	-3.99	down
PAX1	2.28E-03	6.52E-05	0.79	55.10	0.20	3.99	up
USP2	2.28E-03	6.55E-05	0.54	1031.24	0.14	3.99	up
ATRNL1	2.34E-03	6.77E-05	0.71	199.92	0.18	3.98	up

LOR	2.43E-03	7.05E-05	0.53	1454.07	0.13	3.97	up
AL136982.5	2.44E-03	7.11E-05	0.76	45.87	0.19	3.97	up
HOXC5	2.44E-03	7.10E-05	-1.14	31.71	0.29	-3.97	down
GADD45B	2.51E-03	7.41E-05	0.64	479.67	0.16	3.96	up
NR2F2	2.52E-03	7.46E-05	-0.51	314.08	0.13	-3.96	down
BNC2	2.65E-03	7.90E-05	-0.61	2993.63	0.15	-3.95	down
ADAMTS9	2.69E-03	8.02E-05	0.52	887.76	0.13	3.94	up
DUSP1	2.73E-03	8.20E-05	-1.26	5144.64	0.32	-3.94	down
TMEM132A	2.74E-03	8.27E-05	-0.56	809.08	0.14	-3.94	down
LGR5	2.78E-03	8.42E-05	-0.84	1840.49	0.21	-3.93	down
IL7R	2.92E-03	8.98E-05	1.04	455.40	0.27	3.92	up
HSPA6	2.93E-03	9.05E-05	0.63	73.01	0.16	3.91	up
RIPOR3	3.00E-03	9.30E-05	0.51	386.54	0.13	3.91	up
IGHG4	3.07E-03	9.57E-05	1.94	38.04	0.50	3.90	up
TUBB2BP1	3.15E-03	9.89E-05	-1.50	26.47	0.38	-3.89	down
ZBTB16	3.19E-03	1.00E-04	0.89	1704.41	0.23	3.89	up
TRPM5	3.19E-03	1.01E-04	-0.84	72.37	0.21	-3.89	down
AC011473.4	3.21E-03	1.02E-04	1.31	262.38	0.34	3.89	up
SLITRK5	3.22E-03	1.02E-04	-0.59	208.11	0.15	-3.89	down
SEMA3A	3.22E-03	1.02E-04	0.61	98.63	0.16	3.88	up
HBA1	3.26E-03	1.04E-04	2.14	301.42	0.55	3.88	up
LCP2	3.26E-03	1.04E-04	0.80	154.40	0.21	3.88	up
SOX17	3.28E-03	1.05E-04	-0.81	40.25	0.21	-3.88	down
BATF	3.41E-03	1.11E-04	1.57	21.67	0.41	3.87	up
COL9A2	3.41E-03	1.11E-04	-0.57	462.90	0.15	-3.87	down
TNFRSF6B	3.45E-03	1.12E-04	1.43	33.75	0.37	3.86	up
RIBC2	3.51E-03	1.16E-04	-0.70	32.34	0.18	-3.86	down
FRG2HP	3.66E-03	1.21E-04	-0.58	404.58	0.15	-3.84	down
CSRNP3	3.67E-03	1.22E-04	-0.52	376.80	0.14	-3.84	down
SLAMF1	3.71E-03	1.24E-04	1.31	41.65	0.34	3.84	up
SLC39A14	3.89E-03	1.31E-04	0.57	998.86	0.15	3.82	up
BTLA	3.96E-03	1.35E-04	0.67	40.80	0.17	3.82	up
CTSH	4.04E-03	1.38E-04	0.52	1407.89	0.14	3.81	up
SCN2B	4.07E-03	1.40E-04	-0.54	84.59	0.14	-3.81	down
MRC2	4.28E-03	1.51E-04	-0.54	5706.42	0.14	-3.79	down
WFDC21P	4.46E-03	1.58E-04	0.58	204.19	0.15	3.78	up
PCSK1	4.53E-03	1.62E-04	-0.52	262.23	0.14	-3.77	down
ZKSCAN7	4.58E-03	1.64E-04	-0.56	105.13	0.15	-3.77	down
SH3RF3	4.71E-03	1.70E-04	0.50	243.86	0.13	3.76	up
SLC46A2	4.71E-03	1.70E-04	0.54	233.00	0.14	3.76	up
SHQ1P1	4.77E-03	1.73E-04	-0.56	82.13	0.15	-3.76	down
SERPINB12	4.80E-03	1.74E-04	0.60	667.07	0.16	3.75	up
CST7	4.80E-03	1.75E-04	0.71	60.11	0.19	3.75	up
PSG7	4.89E-03	1.79E-04	0.64	139.72	0.17	3.75	up

FKBP5	4.91E-03	1.80E-04	0.91	3992.41	0.24	3.75	up
EGR2	5.04E-03	1.87E-04	-0.53	1611.17	0.14	-3.74	down
P3H2	5.04E-03	1.88E-04	0.54	548.53	0.15	3.74	up
CD164L2	5.05E-03	1.88E-04	0.62	80.12	0.17	3.73	up
ADRB2	5.09E-03	1.91E-04	0.61	297.16	0.16	3.73	up
GAS2	5.09E-03	1.91E-04	-0.65	85.93	0.17	-3.73	down
L1TD1	5.17E-03	1.95E-04	-0.69	46.51	0.19	-3.73	down
PGLYRP2	5.17E-03	1.95E-04	1.01	16.52	0.27	3.73	up
FGR	5.22E-03	1.98E-04	0.54	117.34	0.14	3.72	up
HINT2P1	5.28E-03	2.01E-04	-1.09	19.41	0.29	-3.72	down
IGKC	5.80E-03	2.29E-04	1.47	370.70	0.40	3.68	up
KCNJ18	6.11E-03	2.45E-04	0.67	85.43	0.18	3.67	up
YOD1	6.12E-03	2.45E-04	0.53	2428.71	0.14	3.67	up
SASH3	6.15E-03	2.47E-04	0.75	63.21	0.21	3.67	up
SLC41A1	6.17E-03	2.48E-04	0.52	1184.11	0.14	3.66	up
CYTIP	6.29E-03	2.57E-04	0.70	133.20	0.19	3.66	up
STC1	6.30E-03	2.57E-04	0.84	177.81	0.23	3.65	up
LCT	6.35E-03	2.60E-04	0.99	20.31	0.27	3.65	up
PHF2P2	6.35E-03	2.61E-04	0.89	36.94	0.24	3.65	up
OLFM4	6.39E-03	2.62E-04	-1.55	24.71	0.43	-3.65	down
ADAMTS15	6.49E-03	2.67E-04	-0.50	2198.27	0.14	-3.65	down
SIK1	6.52E-03	2.70E-04	-0.98	701.73	0.27	-3.64	down
DAB1	6.62E-03	2.75E-04	-0.57	90.43	0.16	-3.64	down
TMEM163	6.93E-03	2.94E-04	-0.58	88.15	0.16	-3.62	down
JUN	6.94E-03	2.95E-04	-0.71	3433.62	0.20	-3.62	down
IGHG3	6.94E-03	2.96E-04	1.69	22.47	0.47	3.62	up
CHRNA9	7.01E-03	3.00E-04	0.63	127.86	0.17	3.62	up
TENT5C	7.02E-03	3.01E-04	0.50	392.32	0.14	3.61	up
SLC7A4	7.19E-03	3.10E-04	-0.63	161.24	0.17	-3.61	down
IGKV4-1	7.24E-03	3.14E-04	1.62	17.92	0.45	3.60	up
WIF1	7.42E-03	3.24E-04	-0.79	75.56	0.22	-3.59	down
TGM4	7.66E-03	3.39E-04	0.86	27.74	0.24	3.58	up
SPOCK2	7.70E-03	3.43E-04	0.69	167.61	0.19	3.58	up
PSPC1P1	7.72E-03	3.45E-04	-1.21	12.05	0.34	-3.58	down
KITLG	7.80E-03	3.49E-04	-0.52	512.32	0.14	-3.58	down
SIX1	8.12E-03	3.69E-04	1.68	11.12	0.47	3.56	up
TMEM107	8.12E-03	3.70E-04	-0.52	257.29	0.15	-3.56	down
JAK3	8.25E-03	3.77E-04	0.62	185.28	0.17	3.56	up
CHRNA3	8.28E-03	3.79E-04	0.50	68.80	0.14	3.55	up
C2orf72	8.45E-03	3.90E-04	-0.79	38.51	0.22	-3.55	down
AL355922.2	8.48E-03	3.93E-04	-0.68	36.76	0.19	-3.54	down
CXCR4	8.48E-03	3.93E-04	0.66	187.36	0.19	3.54	up
SERPINE1	8.60E-03	3.99E-04	0.67	329.37	0.19	3.54	up
IGHG1	8.93E-03	4.23E-04	1.63	357.12	0.46	3.53	up

THEMIS2	8.93E-03	4.23E-04	0.53	171.38	0.15	3.53	up
TMC5	8.95E-03	4.27E-04	0.55	340.92	0.16	3.52	up
FAM218A	9.00E-03	4.30E-04	-0.59	82.91	0.17	-3.52	down
ROPN1	9.28E-03	4.47E-04	-0.57	89.23	0.16	-3.51	down
SLAMF8	9.31E-03	4.50E-04	0.88	46.60	0.25	3.51	up
RPSAP75	9.35E-03	4.53E-04	-1.07	18.16	0.31	-3.51	down
UCN2	9.52E-03	4.65E-04	-0.50	117.09	0.14	-3.50	down
AL049757.1	9.52E-03	4.66E-04	0.85	17.66	0.24	3.50	up
SLC16A9	9.53E-03	4.67E-04	-0.58	256.75	0.17	-3.50	down
LCE3D	9.73E-03	4.81E-04	0.62	712.51	0.18	3.49	up
AMN	9.77E-03	4.83E-04	0.57	89.92	0.16	3.49	up
AC012254.2	9.93E-03	4.94E-04	2.15	18.81	0.62	3.48	up
MPZ	1.01E-02	5.04E-04	-0.55	67.19	0.16	-3.48	down
KRT16P3	1.03E-02	5.21E-04	-0.83	59.90	0.24	-3.47	down
AC007376.1	1.06E-02	5.42E-04	-0.89	16.63	0.26	-3.46	down
EGR1	1.09E-02	5.61E-04	-0.85	3568.68	0.25	-3.45	down
COL9A3	1.09E-02	5.66E-04	-0.66	114.82	0.19	-3.45	down
IGLC1	1.10E-02	5.67E-04	1.94	22.14	0.56	3.45	up
RBMY2AP	1.12E-02	5.82E-04	1.11	23.40	0.32	3.44	up
C1QB	1.17E-02	6.22E-04	0.59	85.75	0.17	3.42	up
GRIA2	1.21E-02	6.56E-04	-0.55	100.29	0.16	-3.41	down
RBMY2CP	1.23E-02	6.70E-04	1.00	24.69	0.30	3.40	up
RBMY2DP	1.23E-02	6.70E-04	1.00	24.69	0.30	3.40	up
AC063952.1	1.23E-02	6.72E-04	0.66	41.36	0.19	3.40	up
SPRR5	1.23E-02	6.71E-04	0.75	294.07	0.22	3.40	up
PNLDC1	1.24E-02	6.76E-04	0.62	487.37	0.18	3.40	up
MOGAT1	1.25E-02	6.89E-04	0.61	348.60	0.18	3.39	up
TNFRSF12A	1.26E-02	6.96E-04	0.59	374.19	0.17	3.39	up
CTAGE6	1.30E-02	7.23E-04	1.00	30.91	0.30	3.38	up
PTCH2	1.34E-02	7.58E-04	-0.60	624.61	0.18	-3.37	down
MT2A	1.36E-02	7.69E-04	1.12	1386.97	0.33	3.36	up
SERPINA9	1.38E-02	7.88E-04	0.61	181.05	0.18	3.36	up
SYNPO2	1.39E-02	7.92E-04	0.54	1701.17	0.16	3.36	up
NLRP10	1.42E-02	8.12E-04	0.54	175.27	0.16	3.35	up
ABCG4	1.45E-02	8.40E-04	0.90	49.51	0.27	3.34	up
RASSF9	1.46E-02	8.50E-04	-0.51	817.44	0.15	-3.34	down
CD163L1	1.47E-02	8.54E-04	0.63	84.49	0.19	3.33	up
NRARP	1.47E-02	8.59E-04	-0.53	581.83	0.16	-3.33	down
RHCE	1.49E-02	8.67E-04	0.69	25.81	0.21	3.33	up
TSPAN8	1.50E-02	8.88E-04	-0.58	120.75	0.17	-3.32	down
GADD45A	1.50E-02	8.90E-04	0.57	261.73	0.17	3.32	up
ADGRB1	1.52E-02	9.00E-04	-0.68	2719.64	0.21	-3.32	down
PPP1R3C	1.52E-02	9.01E-04	-0.63	403.76	0.19	-3.32	down
MMP23B	1.53E-02	9.10E-04	0.57	48.88	0.17	3.32	up

KBTBD11	1.58E-02	9.47E-04	0.54	99.64	0.16	3.31	up
CCN5	1.58E-02	9.50E-04	0.56	108.28	0.17	3.31	up
RPSAP58	1.63E-02	1.00E-03	0.52	113.31	0.16	3.29	up
NAP1L2	1.68E-02	1.04E-03	-0.74	57.67	0.23	-3.28	down
KLF2	1.73E-02	1.09E-03	-0.72	334.71	0.22	-3.27	down
CNFN	1.73E-02	1.09E-03	0.51	1260.06	0.16	3.27	up
IGHV1-69D	1.76E-02	1.12E-03	1.34	12.53	0.41	3.26	up
SEC14L4	1.76E-02	1.11E-03	0.52	388.42	0.16	3.26	up
C1QC	1.79E-02	1.14E-03	0.51	112.49	0.16	3.25	up
HOXB4	1.81E-02	1.17E-03	-0.88	21.46	0.27	-3.25	down
CAMK4	1.82E-02	1.17E-03	0.52	117.16	0.16	3.24	up
IGHEP1	1.82E-02	1.18E-03	1.42	15.52	0.44	3.24	up
FMO6P	1.83E-02	1.18E-03	-0.70	28.41	0.21	-3.24	down
ELOVL5	1.83E-02	1.18E-03	0.52	6439.46	0.16	3.24	up
STON1-GTF2A1L	1.84E-02	1.19E-03	-1.01	43.37	0.31	-3.24	down
AGAP7P	1.85E-02	1.20E-03	1.01	16.05	0.31	3.24	up
RTL1	1.87E-02	1.22E-03	1.02	43.27	0.32	3.23	up
ELFN1	1.89E-02	1.24E-03	-0.54	140.70	0.17	-3.23	down
CCL19	1.92E-02	1.27E-03	0.86	159.14	0.27	3.22	up
MS4A1	1.92E-02	1.28E-03	2.52	32.75	0.78	3.22	up
SERPINF2	1.92E-02	1.27E-03	0.68	86.21	0.21	3.22	up
HCST	1.94E-02	1.29E-03	1.01	16.62	0.31	3.22	up
KLK8	1.98E-02	1.33E-03	0.52	425.20	0.16	3.21	up
DKK1	2.01E-02	1.36E-03	1.26	22.56	0.39	3.20	up
RHBDL1	2.03E-02	1.40E-03	-0.51	49.26	0.16	-3.20	down
PWWP3B	2.07E-02	1.45E-03	-0.64	116.40	0.20	-3.19	down
POMC	2.08E-02	1.45E-03	-0.57	134.60	0.18	-3.18	down
RPL35AP31	2.09E-02	1.47E-03	-0.73	57.51	0.23	-3.18	down
IGFBP3	2.17E-02	1.55E-03	0.51	1441.27	0.16	3.17	up
NOTCH1	2.18E-02	1.56E-03	-0.54	417.45	0.17	-3.16	down
ZNF177	2.19E-02	1.57E-03	-0.83	54.30	0.26	-3.16	down
IGLC2	2.19E-02	1.57E-03	1.84	98.34	0.58	3.16	up
MTCYBP44	2.26E-02	1.63E-03	-0.55	84.33	0.17	-3.15	down
AC025030.1	2.27E-02	1.65E-03	-0.67	26.73	0.21	-3.15	down
SLC22A13	2.33E-02	1.71E-03	0.76	20.94	0.24	3.14	up
CD7	2.33E-02	1.71E-03	1.11	16.79	0.36	3.14	up
MTATP6P11	2.34E-02	1.73E-03	1.05	21.04	0.33	3.13	up
CLDN17	2.38E-02	1.77E-03	-1.11	23.72	0.35	-3.13	down
C11orf42	2.41E-02	1.80E-03	0.70	24.64	0.22	3.12	up
AC010724.1	2.43E-02	1.81E-03	0.99	13.19	0.32	3.12	up
CCN2	2.50E-02	1.89E-03	0.81	1728.26	0.26	3.11	up
ASIP	2.51E-02	1.90E-03	0.78	21.29	0.25	3.10	up
PIRT	2.53E-02	1.93E-03	-0.70	176.02	0.23	-3.10	down
AP002373.2	2.54E-02	1.94E-03	0.88	29.17	0.29	3.10	up

PGF	2.54E-02	1.94E-03	0.59	210.32	0.19	3.10	up
PKD1L3	2.64E-02	2.05E-03	0.57	33.74	0.18	3.08	up
IRF8	2.65E-02	2.07E-03	0.58	92.55	0.19	3.08	up
AC137800.2	2.69E-02	2.10E-03	0.96	19.31	0.31	3.08	up
ERFE	2.72E-02	2.14E-03	1.06	15.05	0.35	3.07	up
CYP4F2	2.75E-02	2.19E-03	0.59	580.10	0.19	3.06	up
FAM90A1	2.75E-02	2.20E-03	-0.62	24.00	0.20	-3.06	down
CD48	2.76E-02	2.21E-03	0.93	48.35	0.30	3.06	up
MALRD1	2.77E-02	2.22E-03	-0.56	96.12	0.18	-3.06	down
SLITRK6	2.77E-02	2.23E-03	-0.76	209.76	0.25	-3.06	down
KRT16	2.85E-02	2.31E-03	-0.69	38646.90	0.23	-3.05	down
KRT6C	2.87E-02	2.34E-03	-0.82	3503.59	0.27	-3.04	down
IGLL5	3.01E-02	2.49E-03	1.89	14.53	0.63	3.02	up
CCDC105	3.03E-02	2.52E-03	-0.98	15.20	0.32	-3.02	down
NKAIN3	3.06E-02	2.57E-03	-0.63	41.89	0.21	-3.02	down
RRAD	3.06E-02	2.56E-03	0.76	59.37	0.25	3.02	up
ST13P15	3.10E-02	2.62E-03	-0.81	18.81	0.27	-3.01	down
IGLC3	3.12E-02	2.64E-03	1.73	24.64	0.58	3.01	up
NPBWR1	3.16E-02	2.68E-03	-0.68	104.28	0.23	-3.00	down
CCM2L	3.16E-02	2.69E-03	-0.52	36.66	0.17	-3.00	down
CES1	3.19E-02	2.72E-03	0.60	43.13	0.20	3.00	up
RBMS1P1	3.22E-02	2.76E-03	0.64	36.38	0.21	2.99	up
KDELC1P1	3.22E-02	2.77E-03	-0.64	52.85	0.21	-2.99	down
NANOGP2	3.28E-02	2.84E-03	0.74	16.67	0.25	2.98	up
STS	3.33E-02	2.89E-03	0.54	253.13	0.18	2.98	up
IGLV2-14	3.33E-02	2.89E-03	2.40	13.89	0.81	2.98	up
CD72	3.35E-02	2.92E-03	0.52	58.08	0.17	2.98	up
SERPINB3	3.37E-02	2.94E-03	0.82	2681.72	0.28	2.97	up
WDFY4	3.38E-02	2.95E-03	0.64	283.73	0.22	2.97	up
COL4A4	3.42E-02	3.01E-03	0.56	88.35	0.19	2.97	up
CDHR5	3.43E-02	3.02E-03	-0.61	151.30	0.21	-2.97	down
FCGR3B	3.49E-02	3.09E-03	0.95	31.26	0.32	2.96	up
AC098582.1	3.58E-02	3.21E-03	0.52	83.34	0.18	2.95	up
HEATR9	3.59E-02	3.23E-03	0.91	19.02	0.31	2.94	up
AP000295.1	3.69E-02	3.35E-03	1.30	36.06	0.44	2.93	up
CRLF2	3.73E-02	3.42E-03	0.89	16.63	0.30	2.93	up
KRT8P31	3.84E-02	3.55E-03	0.53	38.15	0.18	2.92	up
ALPK2	3.94E-02	3.70E-03	0.74	60.11	0.26	2.90	up
UNC5D	4.00E-02	3.77E-03	-0.65	69.59	0.23	-2.90	down
SLC27A2	4.00E-02	3.78E-03	0.51	184.44	0.17	2.90	up
MYO3A	4.06E-02	3.86E-03	-0.94	42.27	0.32	-2.89	down
GDA	4.06E-02	3.87E-03	0.51	454.55	0.18	2.89	up
STC2	4.07E-02	3.89E-03	0.75	33.92	0.26	2.89	up
REC114	4.08E-02	3.91E-03	0.51	49.12	0.18	2.89	up

IGHM	4.21E-02	4.07E-03	1.39	12.67	0.48	2.87	up
FPR1	4.23E-02	4.10E-03	0.54	56.05	0.19	2.87	up
BMP5	4.23E-02	4.11E-03	-0.67	29.86	0.23	-2.87	down
CARMIL2	4.23E-02	4.12E-03	0.77	35.37	0.27	2.87	up
PCDHB2	4.25E-02	4.14E-03	-0.51	91.87	0.18	-2.87	down
PEG3	4.25E-02	4.14E-03	-0.53	471.83	0.18	-2.87	down
VWCE	4.39E-02	4.33E-03	0.56	29.20	0.20	2.85	up
GPR151	4.39E-02	4.34E-03	0.76	15.31	0.27	2.85	up
RALYL	4.44E-02	4.41E-03	-0.79	22.15	0.28	-2.85	down
IGKV3-15	4.53E-02	4.55E-03	1.44	12.18	0.51	2.84	up
SNURF	4.55E-02	4.57E-03	-0.57	44.53	0.20	-2.84	down
IL4I1	4.68E-02	4.75E-03	0.84	25.42	0.30	2.82	up
GPR171	4.69E-02	4.78E-03	0.71	24.53	0.25	2.82	up
THEMIS	4.72E-02	4.82E-03	0.84	40.16	0.30	2.82	up
CDA	4.80E-02	4.93E-03	0.51	247.71	0.18	2.81	up
AC093270.1	4.81E-02	4.95E-03	-0.86	23.72	0.30	-2.81	down
FGF18	4.81E-02	4.96E-03	-0.84	347.15	0.30	-2.81	down
RPS19P3	4.81E-02	4.97E-03	0.76	15.62	0.27	2.81	up
PADI4	4.84E-02	5.00E-03	0.67	103.76	0.24	2.81	up
RPS4XP14	4.89E-02	5.08E-03	0.58	30.00	0.21	2.80	up
KCNU1	4.91E-02	5.12E-03	-0.56	121.91	0.20	-2.80	down
NAGS	4.92E-02	5.15E-03	0.56	47.44	0.20	2.80	up
SLURP1	4.93E-02	5.16E-03	0.55	403.62	0.20	2.80	up
C8orf74	4.98E-02	5.21E-03	0.51	99.71	0.18	2.79	up

Ps.The occipital group was used as the reference group