

**Supplementary file 1**

**Part 1:** The list of primers

**Part 2:** Relative mRNA changes for IQGAP3 and PIK3C2B in CRC cells transfected with the pcDNA3.1-IQGAP3 vector or IQGAP3 siRNA

**Part 3:** The coexpressed genes of IQGAP1

**Part 4:** The coexpressed genes of IQGAP2

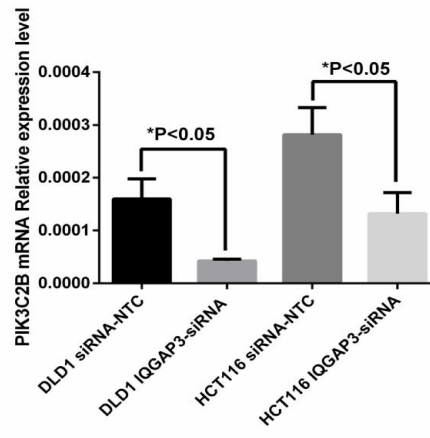
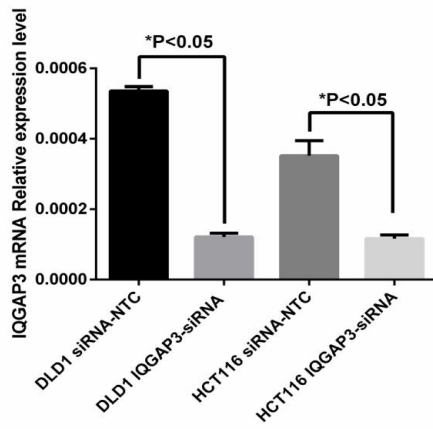
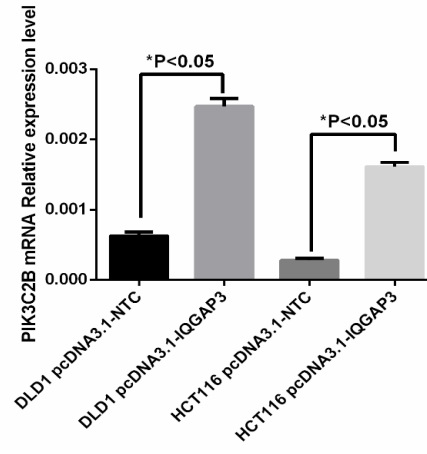
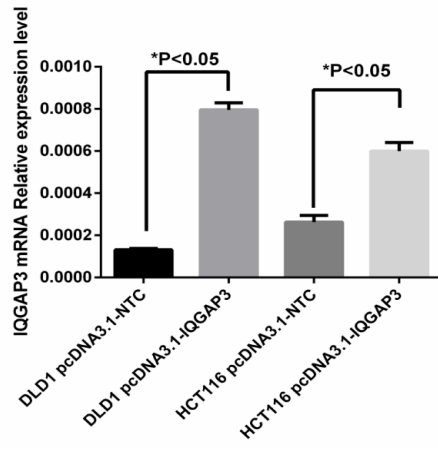
**Part 5:** The coexpressed genes of IQGAP3

**Part 1**

Primer list		
Primer Name	Sequence (5'-3')	Annealing Temperature (°C)
IQGAP1-F	AGCCGCATTACATGCTGCT	55
IQGAP1-R	TCAAAGCTGCAAATGTGTCCG	55
IQGAP2-F	TGTGCCACTTAGAGGAAGCC	58
IQGAP2-R	GCTCTTAACCACTGGACGGTAT	58
IQGAP3-F	TGACCACTACCTAACTCAGGC	55
IQGAP3-R	CAGGGCAGGGTCTTGAAGG	55
PIK3C2B-F	CGACCTCAAGCTGTTACGC	58
PIK3C3B-R	GAGCCCTCTATGTCCCCTGG	58
GAPDH-F	CTGGGCTACACTGAGCACC	50-60
GAPDH-R	AAGTGGTCGTTGAGGGCAATG	50-60

## Part 2

The relative mRNA changes of IQGAP3 and PIK3C2B in CRC cells which transfected with pcDNA3.1-IQGAP3 vector or IQGAP3 siRNA.



**Part 3****Coexpression genes of IQGAP1 in Colorectal Adenocarcinoma**

Correlated Gene	Cytoband	Spearman	p-Value	q-Value
DPP8	15q22.31	0.630908	8.46E-44	1.69E-39
TMOD3	15q21.2	0.621809	3.03E-42	3.03E-38
SECISBP2L	15q21.1	0.617585	1.53E-41	1.02E-37
AKAP13	15q25.3	0.605278	1.51E-39	7.54E-36
SPG11	15q21.1	0.595542	4.94E-38	1.98E-34
ACBD3	1q42.12	0.575284	4.86E-35	1.62E-31
RNF111	15q22.1-q22.2	0.573392	9.03E-35	2.58E-31
ADAM10	15q21.3	0.571651	1.59E-34	3.98E-31
UBR1	15q15.2	0.567052	6.99E-34	1.52E-30
USP8	15q21.2	0.566786	7.61E-34	1.52E-30
ZNF593	1p36.11	-0.55941	7.76E-33	1.41E-29
ROMO1	20q11.22	-0.55735	1.47E-32	2.46E-29
PEAK1	15q24.3	0.546508	3.95E-31	6.09E-28
PIAS1	15q23	0.533872	1.58E-29	2.24E-26
TRIP11	14q32.12	0.533441	1.78E-29	2.24E-26
MYO9A	15q23	0.533431	1.79E-29	2.24E-26
SPRED1	15q14	0.532598	2.27E-29	2.67E-26
CSNK1G1	15q22.31	0.531776	2.86E-29	3.18E-26
DRAP1	11q13.1	-0.52615	1.39E-28	1.46E-25
MEF2A	15q26.3	0.525968	1.46E-28	1.46E-25
PAM16	16p13.3	-0.5248	2.02E-28	1.93E-25
ZNF106	15q15.1	0.523896	2.60E-28	2.36E-25
AP4E1	15q21.2	0.521643	4.83E-28	4.20E-25
MINDY2	15q21.3-q22.1	0.521389	5.18E-28	4.32E-25
UQCC3	11q12.3	-0.52045	6.69E-28	5.36E-25
NUDT1	7p22.3	-0.51919	9.43E-28	7.26E-25
CCDC186	10q25.3	0.517874	1.35E-27	1.00E-24
RFNG	17q25.3	-0.51444	3.40E-27	2.43E-24
STXBP5	6q24.3	0.514063	3.76E-27	2.60E-24
DPM2	9q34.11	-0.51337	4.52E-27	3.02E-24
FMN1	15q13.3	0.512492	5.72E-27	3.69E-24
OXLD1	17q25.3	-0.51172	7.01E-27	4.38E-24
MALSU1	7p15.3	-0.51162	7.21E-27	4.38E-24
RNASEH2C	11q13.1	-0.51055	9.58E-27	5.64E-24
EFL1	15q25.2	0.510306	1.02E-26	5.84E-24
GNAQ	9q21.2	0.509567	1.24E-26	6.90E-24
EIF6	20q11.22	-0.50835	1.71E-26	9.24E-24
CHD9	16q12.2	0.507337	2.23E-26	1.17E-23
FAU	11q13.1	-0.50708	2.38E-26	1.22E-23
PFDN6	6p21.32	-0.50671	2.62E-26	1.31E-23
RPS21	20q13.33	-0.50578	3.34E-26	1.63E-23
HERC1	15q22.31	0.505331	3.76E-26	1.79E-23
MYO1E	15q22.2	0.504989	4.11E-26	1.91E-23
PEX16	11p11.2	-0.50457	4.57E-26	2.08E-23
BUD31	7q22.1	-0.5044	4.79E-26	2.11E-23
LAMTOR4	7q22.1	-0.50435	4.84E-26	2.11E-23
SELENOH	11q12.1	-0.50403	5.26E-26	2.24E-23
LPP	3q27.3-q28	0.502594	7.62E-26	3.18E-23
VPS13C	15q22.2	0.502026	8.82E-26	3.61E-23
BANF1	11q13.1	-0.50163	9.78E-26	3.92E-23
UHMK1	1q23.3	0.501378	1.04E-25	4.09E-23
SNHG15	7p13	-0.50049	1.31E-25	5.04E-23
SON	21q22.11	0.500063	1.46E-25	5.51E-23
WDR74	11q12.3	-0.49981	1.56E-25	5.69E-23
MIIP	1p36.22	-0.49979	1.56E-25	5.69E-23

GTF2A1	14q31.1	0.499366	1.74E-25	6.23E-23
IREB2	15q25.1	0.499068	1.88E-25	6.61E-23
FEM1B	15q23	0.4981	2.40E-25	8.30E-23
SEL1L	14q31.1	0.497877	2.54E-25	8.64E-23
PTDSS2	11p15.5	-0.49556	4.57E-25	1.53E-22
RPLP2	11p15.5	-0.4954	4.76E-25	1.56E-22
PTPN9	15q24.2	0.49529	4.89E-25	1.58E-22
UQCC2	6p21.31	-0.49475	5.60E-25	1.78E-22
PDRG1	20q11.21	-0.49443	6.06E-25	1.90E-22
FAM214A	15q21.2-q21.3	0.494035	6.70E-25	2.06E-22
CYFIP1	15q11.2	0.493277	8.10E-25	2.46E-22
PSMB3	17q12	-0.49298	8.72E-25	2.61E-22
ZNHIT1	7q22.1	-0.49256	9.67E-25	2.85E-22
PPP1R35	7q22.1	-0.49181	1.17E-24	3.38E-22
GET4	7p22.3	-0.4914	1.29E-24	3.69E-22
MRPS17	7p11.2	-0.49099	1.43E-24	4.03E-22
NBEAL1	2q33.2	0.490697	1.54E-24	4.23E-22
ARIH1	15q24.1	0.490686	1.54E-24	4.23E-22
NSUN5	7q11.23	-0.48977	1.93E-24	5.23E-22
HIPK1	1p13.2	0.489559	2.04E-24	5.44E-22
HEATR5A	14q12	0.489404	2.12E-24	5.58E-22
AQR	15q14	0.488549	2.61E-24	6.80E-22
ETV3	1q23.1	0.488102	2.92E-24	7.35E-22
ZNF609	15q22.31	0.488092	2.92E-24	7.35E-22
WRAP73	1p36.32	-0.48807	2.94E-24	7.35E-22
MRPS24	7p13	-0.48701	3.82E-24	9.43E-22
ARPIN	15q26.1	0.486804	4.01E-24	9.79E-22
PSMD13	11p15.5	-0.48651	4.30E-24	1.04E-21
NPTN	15q24.1	0.48591	4.98E-24	1.19E-21
SIN3A	15q24.2	0.485835	5.08E-24	1.20E-21
TJP1	15q13.1	0.485663	5.29E-24	1.23E-21
TSEN54	17q25.1	-0.48471	6.67E-24	1.54E-21
BTBD7	14q32.12	0.483622	8.69E-24	1.98E-21
POLR2G	11q12.3	-0.48241	1.16E-23	2.61E-21
PANK3	5q34	0.482374	1.17E-23	2.61E-21
POP7	7q22.1	-0.48102	1.62E-23	3.58E-21
MTMR10	15q13.3	0.480826	1.70E-23	3.71E-21
NDUFS8	11q13.2	-0.48072	1.75E-23	3.77E-21
NDUFA11	19p13.3	-0.48059	1.80E-23	3.84E-21
ATG4B	2q37.3	-0.47994	2.11E-23	4.44E-21
DIP2B	12q13.12	0.479035	2.61E-23	5.44E-21
BROX	1q41	0.478998	2.64E-23	5.44E-21
ARFGEF3	6q23.3-q24.1	0.477572	3.70E-23	7.56E-21
ZNF770	15q14	0.477372	3.88E-23	7.85E-21
TMEM161A	19p13.11	-0.47724	4.01E-23	8.02E-21
ARHGAP5	14q12	0.477134	4.11E-23	8.14E-21
ZNF592	15q25.3	0.476644	4.61E-23	8.96E-21
KLF13	15q13.3	0.476609	4.65E-23	8.96E-21
ARPP19	15q21.2	0.476606	4.65E-23	8.96E-21
CEP350	1q25.2	0.476363	4.93E-23	9.40E-21
SLK	10q24.33-q25.1	0.47589	5.51E-23	1.04E-20
KDM5B	1q32.1	0.475026	6.75E-23	1.26E-20
CCPG1	15q21.3	0.474915	6.93E-23	1.28E-20
C9ORF16	9q34.11	-0.47433	7.96E-23	1.46E-20
C7ORF50	7p22.3	-0.47409	8.41E-23	1.53E-20
SEC24A	5q31.1	0.473979	8.63E-23	1.56E-20
COPS9	2q37.3	-0.47381	8.97E-23	1.60E-20
CBX8	17q25.3	-0.47338	9.93E-23	1.76E-20

OTUB1	11q13.1	-0.47261	1.19E-22	2.09E-20
UBE3A	15q11.2	0.472221	1.30E-22	2.27E-20
KLHL20	1q25.1	0.472042	1.36E-22	2.34E-20
ATF6	1q23.3	0.471809	1.43E-22	2.45E-20
PSMG4	6p25.2	-0.47103	1.72E-22	2.92E-20
AUP1	2p13.1	-0.46995	2.20E-22	3.71E-20
DPH7	9q34.3	-0.46979	2.29E-22	3.82E-20
GPS1	17q25.3	-0.4693	2.56E-22	4.24E-20
CHCHD6	3q21.3	-0.46864	2.98E-22	4.90E-20
PSMG3	7p22.3	-0.4686	3.01E-22	4.91E-20
LAGE3	Xq28	-0.46842	3.14E-22	5.07E-20
NSUN5P1	7q11.23	-0.4682	3.30E-22	5.29E-20
RAD9A	11q13.2	-0.46765	3.74E-22	5.95E-20
MIA3	1q41	0.467259	4.10E-22	6.46E-20
LRCH3	3q29	0.466775	4.58E-22	7.16E-20
SAC3D1	11q13.1	-0.46627	5.14E-22	7.99E-20
HECTD1	14q12	0.466174	5.25E-22	8.09E-20
FNIP2	4q32.1	0.465819	5.70E-22	8.71E-20
NAA10	Xq28	-0.46511	6.70E-22	1.01E-19
TAOK1	17q11.2	0.465107	6.70E-22	1.01E-19
ABHD2	15q26.1	0.464288	8.07E-22	1.20E-19
MRTO4	1p36.13	-0.46429	8.07E-22	1.20E-19
MAN1A2	1p12	0.464214	8.21E-22	1.21E-19
CCDC167	6p21.2	-0.4638	9.02E-22	1.32E-19
EEF1D	8q24.3	-0.46374	9.14E-22	1.33E-19
CTU2	16q24.3	-0.4637	9.22E-22	1.33E-19
CRTC3	15q26.1	0.463201	1.03E-21	1.48E-19
CASC4	15q15.3	0.463043	1.07E-21	1.52E-19
BRMS1	11q13.2	-0.46288	1.11E-21	1.57E-19
YDJC	22q11.21	-0.46237	1.25E-21	1.74E-19
EDEM3	1q25.3	0.461356	1.57E-21	2.18E-19
THAP3	1p36.31	-0.46124	1.61E-21	2.22E-19
DENND1B	1q31.3	0.461044	1.68E-21	2.30E-19
ANKRD36BP1	1q24.2	0.460961	1.71E-21	2.33E-19
TRPM7	15q21.2	0.459669	2.28E-21	3.09E-19
LNPEP	5q15	0.458758	2.80E-21	3.76E-19
RPUSD1	16p13.3	-0.4586	2.90E-21	3.87E-19
DENND4A	15q22.31	0.458433	3.01E-21	3.99E-19
SCAF11	12q12	0.457863	3.42E-21	4.50E-19
DAAM1	14q23.1	0.457629	3.60E-21	4.71E-19
POLR2F	22q13.1	-0.45724	3.92E-21	5.10E-19
GADD45GIP1	19p13.13	-0.45716	3.99E-21	5.16E-19
TOR1AIP2	1q25.2	0.456422	4.70E-21	6.00E-19
LSM10	1p34.3	-0.45642	4.71E-21	6.00E-19
METTL26	16p13.3	-0.45617	4.98E-21	6.31E-19
HIPK3	11p13	0.456013	5.15E-21	6.49E-19
BTBD1	15q25.2	0.455707	5.51E-21	6.90E-19
PJA2	5q21.3	0.4555	5.77E-21	7.17E-19
NMRAL1	16p13.3	-0.45529	6.04E-21	7.47E-19
SCAPER	15q24.3	0.455247	6.10E-21	7.49E-19
SLC25A39	17q21.31	-0.45516	6.22E-21	7.60E-19
NUTF2	16q22.1	-0.45412	7.82E-21	9.49E-19
ASH1L	1q22	0.453476	9.00E-21	1.09E-18
TIMM17B	Xp11.23	-0.45336	9.23E-21	1.11E-18
EP300	22q13.2	0.45303	9.92E-21	1.18E-18
POLR2I	19q13.12	-0.45216	1.20E-20	1.42E-18
B3GAT3	11q12.3	-0.45202	1.24E-20	1.46E-18
CIAO2B	16q22.1	-0.45194	1.26E-20	1.47E-18

ZNF710	15q26.1	0.451661	1.34E-20	1.56E-18
MCTP2	15q26.2	0.451603	1.35E-20	1.57E-18
TAF10	11p15.4	-0.45142	1.41E-20	1.62E-18
KIAA1671	22q11.23	0.451362	1.43E-20	1.63E-18
TIMM10	11q12.1	-0.45126	1.46E-20	1.66E-18
DYRK2	12q15	0.450817	1.61E-20	1.82E-18
TMEM223	11q12.3	-0.45065	1.67E-20	1.88E-18
NSUN5P2	7q11.23	-0.45047	1.73E-20	1.94E-18
SEM1	7q21.3	-0.45036	1.77E-20	1.97E-18
RALY	20q11.22	-0.44976	2.02E-20	2.23E-18
TIMM44	19p13.2	-0.44962	2.08E-20	2.29E-18
ZNF774	15q26.1	0.44953	2.12E-20	2.32E-18
AFF4	5q31.1	0.449361	2.20E-20	2.40E-18
MRPL48	11q13.4	-0.44886	2.45E-20	2.66E-18
NDUFAB8	17q25.3	-0.44883	2.47E-20	2.66E-18
SCAND1	20q11.23	-0.44864	2.57E-20	2.75E-18
PRKAR1A	17q24.2	0.447938	2.99E-20	3.19E-18
MRPL36	5p15.33	-0.44741	3.35E-20	3.55E-18
PPAN	19p13.2	-0.44732	3.42E-20	3.61E-18
ANAPC11	17q25.3	-0.44708	3.60E-20	3.77E-18
SPATA33	16q24.3	-0.447	3.67E-20	3.82E-18
ANKRD19P	9q22.31	-0.44698	3.68E-20	3.82E-18
CPSF4	7q22.1	-0.44676	3.86E-20	3.98E-18
TET2	4q24	0.446622	3.97E-20	4.08E-18
MAP3K2	2q14.3	0.446056	4.48E-20	4.58E-18
CCDC84	11q23.3	-0.44575	4.79E-20	4.87E-18
MRPL57	13q12.11	-0.44532	5.24E-20	5.30E-18
REST	4q12	0.445158	5.43E-20	5.46E-18
EGLN1	1q42.2	0.445051	5.56E-20	5.56E-18
CUTA	6p21.32	-0.44483	5.82E-20	5.80E-18
NCOA4	10q11.22	0.4448	5.86E-20	5.81E-18
DNPEP	2q35	-0.44475	5.93E-20	5.85E-18
UBL5	19p13.2	-0.44466	6.03E-20	5.92E-18
CHCHD2	7p11.2	-0.44443	6.34E-20	6.19E-18
REX1BD	19p13.11	-0.44394	7.03E-20	6.84E-18
TOMM34	20q13.12	-0.44372	7.37E-20	7.13E-18
FAHD2A	2q11.1	-0.4425	9.55E-20	9.19E-18
ZNF654	3p11.1	0.442426	9.70E-20	9.29E-18
DXO	6p21.33	-0.44159	1.16E-19	1.10E-17
SNRPD2	19q13.32	-0.44157	1.16E-19	1.10E-17
SRM	1p36.22	-0.44141	1.20E-19	1.13E-17
FRMD4B	3p14.1	0.441409	1.20E-19	1.13E-17
YLPM1	14q24.3	0.441296	1.23E-19	1.15E-17
RPP21	6p22.1	-0.4411	1.28E-19	1.19E-17
NCOR1	17p12-p11.2	0.440812	1.36E-19	1.26E-17
EBPL	13q14.2	-0.4408	1.37E-19	1.26E-17
AHCY	20q11.22	-0.44077	1.37E-19	1.26E-17
NEDD9	6p24.2	0.440363	1.50E-19	1.37E-17
ZMYND19	9q34.3	-0.44003	1.60E-19	1.46E-17
AURKAIP1	1p36.33	-0.44002	1.61E-19	1.46E-17
FGD4	12p11.21	0.439964	1.63E-19	1.47E-17
SPTLC2	14q24.3	0.439901	1.65E-19	1.48E-17
LATS1	6q25.1	0.439584	1.76E-19	1.58E-17
NR2C2AP	19p13.11	-0.43953	1.78E-19	1.59E-17
CPNE7	16q24.3	-0.4386	2.17E-19	1.92E-17
ELOF1	19p13.2	-0.43828	2.31E-19	2.04E-17
BOLA2	16p11.2	-0.43823	2.34E-19	2.05E-17
GNB1L	22q11.21	-0.43802	2.45E-19	2.14E-17

SMCHD1	18p11.32	0.437351	2.81E-19	2.44E-17
MRPL11	11q13.2	-0.43697	3.04E-19	2.63E-17
RREB1	6p24.3	0.436747	3.18E-19	2.75E-17
NUBP2	16p13.3	-0.43667	3.23E-19	2.78E-17
ARNT	1q21.3	0.436621	3.27E-19	2.80E-17
SGMS2	4q25	0.436445	3.39E-19	2.89E-17
ATP5MG	11q23.3	-0.43636	3.45E-19	2.93E-17
CCDC124	19p13.11	-0.43628	3.51E-19	2.96E-17
RNASEL	1q25.3	0.436217	3.55E-19	2.99E-17
PDLIM5	4q22.3	0.436127	3.62E-19	3.03E-17
PAXX	9q34.3	-0.43601	3.71E-19	3.09E-17
AHNAK	11q12.3	0.435955	3.75E-19	3.12E-17
TMEM160	19q13.32	-0.43586	3.83E-19	3.17E-17
PPIH	1p34.2	-0.43566	3.99E-19	3.29E-17
NDUFB10	16p13.3	-0.43528	4.31E-19	3.54E-17
SHOC2	10q25.2	0.434458	5.11E-19	4.17E-17
MRPS15	1p34.3	-0.43445	5.12E-19	4.17E-17
GNPTAB	12q23.2	0.433367	6.39E-19	5.16E-17
LBHD1	11q12.3	-0.43336	6.39E-19	5.16E-17
PSMB7	9q33.3	-0.43311	6.74E-19	5.42E-17
UBE2Q2	15q24.2	0.432759	7.23E-19	5.80E-17
BRAT1	7p22.3	-0.43251	7.61E-19	6.07E-17
NDUFS6	5p15.33	-0.43244	7.72E-19	6.13E-17
SNHG17	20q11.23	-0.4324	7.78E-19	6.16E-17
ROCK1	18q11.1	0.432284	7.97E-19	6.29E-17
LRRK1	15q26.3	0.432259	8.01E-19	6.29E-17
HMBS	11q23.3	-0.43222	8.08E-19	6.32E-17
TALDO1	11p15.5	-0.43219	8.12E-19	6.33E-17
CAPN10	2q37.3	-0.43215	8.20E-19	6.36E-17
MRPS34	16p13.3	-0.43204	8.38E-19	6.48E-17
CCZ1P-OR7E38P	7q21.3	-0.43166	9.05E-19	6.97E-17
AFF1	4q21.3-q22.1	0.43158	9.21E-19	7.05E-17
NDUFB7	19p13.12	-0.43157	9.22E-19	7.05E-17
UBE2C	20q13.12	-0.43155	9.26E-19	7.05E-17
SNHG1	11q12.3	-0.43146	9.44E-19	7.16E-17
LSM4	19p13.11	-0.43141	9.54E-19	7.21E-17
DGUOK	2p13.1	-0.43134	9.67E-19	7.28E-17
NHLRC2	10q25.3	0.431312	9.72E-19	7.28E-17
MORC3	21q22.12	0.431304	9.74E-19	7.28E-17
CD2AP	6p12.3	0.431212	9.92E-19	7.39E-17
RTF1	15q15.1	0.43112	1.01E-18	7.50E-17
JAK1	1p31.3	0.430775	1.08E-18	8.01E-17
COMMD5	8q24.3	-0.43068	1.11E-18	8.14E-17
RRP9	3p21.2	-0.43059	1.12E-18	8.23E-17
EXOSC4	8q24.3	-0.43059	1.13E-18	8.23E-17
VCL	10q22.2	0.430525	1.14E-18	8.31E-17
ARID4B	1q42.3	0.430459	1.16E-18	8.39E-17
MYO5C	15q21.2	0.430418	1.17E-18	8.43E-17
SLC35C2	20q13.12	-0.43028	1.20E-18	8.64E-17
CENPX	17q25.3	-0.4301	1.24E-18	8.92E-17
SP1	12q13.13	0.430075	1.25E-18	8.94E-17
TRMT1	19p13.13	-0.43003	1.26E-18	8.98E-17
GSS	20q11.22	-0.42992	1.29E-18	9.17E-17
TIMM8B	11q23.1	-0.42986	1.31E-18	9.24E-17
POLR2J	7q22.1	-0.42961	1.37E-18	9.68E-17
MBNL3	Xq26.2	0.429585	1.38E-18	9.70E-17
TRMU	22q13.31	-0.42946	1.42E-18	9.91E-17
MCRIP2	16p13.3	-0.42932	1.46E-18	1.02E-16



PAFAH1B3	19q13.2	-0.42909	1.52E-18	1.06E-16
MIGA1	1p31.1	0.429048	1.54E-18	1.07E-16
FDX2	19p13.2	-0.42892	1.58E-18	1.09E-16
TMEM208	16q22.1	-0.42855	1.70E-18	1.17E-16
TMEM138	11q12.2	-0.42808	1.87E-18	1.28E-16
SPPL2A	15q21.2	0.428079	1.87E-18	1.28E-16
TOR1AIP1	1q25.2	0.427927	1.93E-18	1.31E-16
C19ORF53	19p13.13	-0.42777	1.99E-18	1.35E-16
POLR2A	17p13.1	0.427697	2.02E-18	1.37E-16
BCS1L	2q35	-0.42767	2.03E-18	1.37E-16
EMG1	12p13.31	-0.42741	2.14E-18	1.44E-16
COA4	11q13.4	-0.42722	2.22E-18	1.49E-16
LCOR	10q24.1	0.427186	2.24E-18	1.49E-16
BUD23	7q11.23	-0.42689	2.38E-18	1.58E-16
VPS4B	18q21.33	0.426799	2.42E-18	1.60E-16
MFSD6	2q32.2	0.426581	2.53E-18	1.67E-16
PEX14	1p36.22	-0.42625	2.70E-18	1.78E-16
MFAP3	5q33.2	0.426209	2.72E-18	1.79E-16
PRKRIP1	7q22.1	-0.42617	2.74E-18	1.80E-16
CDK5RAP1	20q11.21	-0.42612	2.77E-18	1.81E-16
ATP6V1F	7q32.1	-0.42588	2.91E-18	1.89E-16
RABGAP1L	1q25.1	0.425812	2.95E-18	1.91E-16
RABEPK	9q33.3	-0.42518	3.35E-18	2.16E-16
PIGU	20q11.22	-0.42504	3.44E-18	2.22E-16
CCDC86	11q12.2	-0.42471	3.67E-18	2.36E-16
CPEB3	10q23.32	0.424613	3.75E-18	2.40E-16
ARF5	7q32.1	-0.42438	3.92E-18	2.50E-16
SLC24A1	15q22.31	0.424349	3.95E-18	2.51E-16
NME1	17q21.33	-0.4243	3.99E-18	2.53E-16
IRF6	1q32.2	0.424205	4.06E-18	2.57E-16
TMUB1	7q36.1	-0.42408	4.16E-18	2.62E-16
PTGES2	9q34.11	-0.42406	4.18E-18	2.63E-16
MYOF	10q23.33	0.423991	4.24E-18	2.65E-16
COPS6	7q22.1	-0.42392	4.30E-18	2.68E-16
RAB27A	15q21.3	0.423857	4.35E-18	2.71E-16
COPRS	17q11.2	-0.42382	4.39E-18	2.72E-16
RPL13	16q24.3 17p11.2	-0.42348	4.69E-18	2.90E-16
PQBP1	Xp11.23	-0.42344	4.73E-18	2.91E-16
KAT6B	10q22.2	0.423431	4.74E-18	2.91E-16
ADRM1	20q13.33	-0.42317	4.99E-18	3.06E-16
DDX56	7p13	-0.42311	5.05E-18	3.08E-16
PPM1L	3q25.33-q26.1	0.423095	5.06E-18	3.08E-16
TRIP12	2q36.3	0.422905	5.26E-18	3.19E-16
SLC12A6	15q14	0.422881	5.28E-18	3.20E-16
ATP11B	3q26.33	0.422812	5.36E-18	3.23E-16
MPLKIP	7p14.1	-0.4227	5.48E-18	3.30E-16
TIMM50	19q13.2	-0.42264	5.55E-18	3.32E-16
INO80B	2p13.1	-0.42262	5.56E-18	3.33E-16
NUMB	14q24.2-q24.3	0.422444	5.76E-18	3.43E-16
IL6ST	5q11.2	0.422366	5.85E-18	3.48E-16
NDUFA13	19p13.11	-0.42227	5.97E-18	3.54E-16
ASAP2	2p25.1 2p24	0.42189	6.43E-18	3.80E-16
CLOCK	4q12	0.421837	6.49E-18	3.83E-16
DGKZ	11p11.2	-0.42175	6.61E-18	3.88E-16
POLR2H	3q27.1	-0.42169	6.69E-18	3.92E-16
ARL16	17q25.3	-0.4216	6.80E-18	3.97E-16
TRMT112	11q13.1	-0.42125	7.29E-18	4.24E-16
IFRD2	3p21.31	-0.42123	7.32E-18	4.25E-16

DTYMK	2q37.3	-0.42072	8.10E-18	4.69E-16
HAUS7	Xq28	-0.42064	8.23E-18	4.75E-16
STAG1	3q22.3	0.420336	8.73E-18	5.02E-16
SMIM4	3p21.1	-0.42008	9.18E-18	5.27E-16
SNRPC	6p21.31	-0.41987	9.55E-18	5.47E-16
SYNJ1	21q22.11	0.419834	9.63E-18	5.49E-16
PRRC1	5q23.2	0.419766	9.76E-18	5.55E-16
INO80E	16p11.2	-0.41962	1.00E-17	5.69E-16
PSMA7	20q13.33	-0.41951	1.03E-17	5.80E-16
MRPL12	17q25.3	-0.41947	1.03E-17	5.84E-16
PIK3C2B	1q32.1	0.419414	1.05E-17	5.87E-16
LAMC2	1q25.3	0.419408	1.05E-17	5.87E-16
ASB7	15q26.3	0.419322	1.06E-17	5.95E-16
PRDX1	1p34.1	-0.41929	1.07E-17	5.98E-16
MRPL53	2p13.1	-0.41911	1.11E-17	6.15E-16
PPP2R3B	Xp22.33 and Yp11.31	-0.41911	1.11E-17	6.15E-16
ATE1	10q26.13	0.418833	1.17E-17	6.48E-16
HM13	20q11.21	-0.41879	1.18E-17	6.52E-16
TAZ	Xq28	-0.41841	1.27E-17	7.00E-16
WDR7	18q21.31	0.418399	1.27E-17	7.00E-16
CTTNBP2NL	1p13.2	0.418285	1.30E-17	7.13E-16
MARF1	16p13.11	0.418159	1.34E-17	7.29E-16
PCGF1	2p13.1	-0.41759	1.49E-17	8.12E-16
TMEM87A	15q15.1	0.417572	1.50E-17	8.13E-16
GANC	15q15.1	0.417528	1.51E-17	8.18E-16
CYHR1	8q24.3	-0.41738	1.56E-17	8.40E-16
TMEM234	1p35.2	-0.41721	1.61E-17	8.65E-16
NAT9	17q25.1	-0.41714	1.63E-17	8.75E-16
ERGIC3	20q11.22	-0.41684	1.73E-17	9.25E-16
MICOS13	19p13.3	-0.41617	1.97E-17	1.05E-15
NDUFB9	8q24.13	-0.41608	2.00E-17	1.07E-15
RPL35	9q33.3	-0.41589	2.08E-17	1.10E-15
DDX49	19p13.11	-0.41575	2.13E-17	1.13E-15
ATP5F1E	20q13.32	-0.41566	2.17E-17	1.15E-15
SDHAF2	11q12.2	-0.41565	2.17E-17	1.15E-15
MPP5	14q23.3	0.415507	2.23E-17	1.17E-15
NECAB3	20q11.22	-0.41542	2.27E-17	1.19E-15
SLTM	15q22.1	0.415326	2.31E-17	1.21E-15
ENTR1	9q34.3	-0.41506	2.44E-17	1.27E-15
KRAS	12p12.1	0.414883	2.52E-17	1.31E-15
AIP	11q13.2	-0.41488	2.52E-17	1.31E-15
SS18L2	3p22.1	-0.41472	2.60E-17	1.35E-15
RASA1	5q14.3	0.414711	2.61E-17	1.35E-15
SOS2	14q21.3	0.414616	2.65E-17	1.37E-15
FCHO2	5q13.2	0.414593	2.67E-17	1.37E-15
TRAPPC2L	16q24.3	-0.41421	2.87E-17	1.47E-15
N4BP2	4p14	0.414052	2.96E-17	1.51E-15
TFAP4	16p13.3	-0.4137	3.17E-17	1.61E-15
KLHL28	14q21.2	0.413675	3.18E-17	1.62E-15
NABP2	12q13.3	-0.41337	3.37E-17	1.71E-15
C1ORF159	1p36.33	-0.41274	3.80E-17	1.92E-15
RPL27A	11p15.4	-0.41264	3.88E-17	1.96E-15
HIKESHI	11q14.2	-0.41252	3.97E-17	1.99E-15
RPS3	11q13.4	-0.41252	3.97E-17	1.99E-15
ACAP2	3q29	0.41159	4.74E-17	2.37E-15
ANAPC15	11q13.4	-0.41157	4.76E-17	2.38E-15
RNF168	3q29	0.411274	5.03E-17	2.51E-15
MON2	12q14.1	0.41125	5.06E-17	2.51E-15

NCOA2	8q13.3	0.411233	5.07E-17	2.51E-15
DMXL1	5q23.1	0.411194	5.11E-17	2.53E-15
SOS1	2p22.1	0.410931	5.37E-17	2.65E-15
ARID2	12q12	0.410911	5.39E-17	2.65E-15
ARHGAP21	10p12.1 10p12.3	0.410795	5.51E-17	2.71E-15
RPS6KB2	11q13.2	-0.4102	6.17E-17	3.02E-15
BORCS8	19p13.11	-0.41017	6.21E-17	3.03E-15
ELOB	16p13.3	-0.41012	6.27E-17	3.06E-15
ZNRD2	11q13.1	-0.4101	6.29E-17	3.06E-15
SCAMP2	15q24.1	0.410063	6.34E-17	3.07E-15
KIAA0754	1p34.3	0.409824	6.63E-17	3.21E-15
PMPCA	9q34.3	-0.4097	6.79E-17	3.28E-15
ANKRD39	2q11.2	-0.4096	6.92E-17	3.33E-15
E2F1	20q11.22	-0.40955	6.99E-17	3.36E-15
PPP2R5E	14q23.2	0.409492	7.06E-17	3.38E-15
BPTF	17q24.2	0.408964	7.80E-17	3.73E-15
TLN2	15q22.2	0.408952	7.82E-17	3.73E-15
INO80	15q15.1	0.408684	8.23E-17	3.91E-15
NDUFC2	11q14.1	-0.40867	8.25E-17	3.92E-15
ANKRD12	18p11.22	0.408567	8.41E-17	3.98E-15
SFXN4	10q26.11	-0.40856	8.42E-17	3.98E-15
RPL8	8q24.3	-0.40855	8.44E-17	3.98E-15
ZMIZ1	10q22.3	0.408515	8.49E-17	3.99E-15
CDC73	1q31.2	0.40847	8.57E-17	4.01E-15
ASCL2	11p15.5	-0.40846	8.57E-17	4.01E-15
MAFG-DT	17q25.3	-0.40837	8.72E-17	4.07E-15
RFX7	15q21.3	0.408246	8.94E-17	4.16E-15
BCL7C	16p11.2	-0.40811	9.17E-17	4.26E-15
CCDC85B	11q13.1	-0.40784	9.65E-17	4.47E-15
NOL12	22q13.1	-0.40782	9.69E-17	4.48E-15
NEK1	4q33	0.407675	9.95E-17	4.59E-15
ATAD3B	1p36.33	-0.40757	1.02E-16	4.68E-15
ARID4A	14q23.1	0.40751	1.03E-16	4.71E-15
FBXO44	1p36.22	-0.40749	1.03E-16	4.72E-15
CARS2	13q34	-0.40747	1.03E-16	4.73E-15
PDCD6IP	3p22.3	0.407458	1.04E-16	4.73E-15
HACD2	3q21.1	0.407335	1.06E-16	4.83E-15
MPV17	2p23.3	-0.4072	1.09E-16	4.94E-15
TPRA1	3q21.3	-0.40711	1.11E-16	5.02E-15
PYCR3	8q24.3	-0.40699	1.13E-16	5.12E-15
SH3PXD2A	10q24.33	0.406902	1.15E-16	5.19E-15
CYP2D7	22q13.2	-0.40688	1.15E-16	5.20E-15
SDHAF1	19q13.12	-0.4068	1.17E-16	5.27E-15
PURA	5q31.3	0.406755	1.18E-16	5.30E-15
IRF3	19q13.33	-0.40644	1.26E-16	5.61E-15
SPOUT1	9q34.11	-0.40606	1.35E-16	6.01E-15
ERI3	1p34.1	-0.40602	1.36E-16	6.04E-15
POU5F1B	8q24.21	-0.406	1.36E-16	6.05E-15
FYCO1	3p21.31	0.405903	1.39E-16	6.15E-15
NDUFS3	11p11.2	-0.4056	1.47E-16	6.49E-15
SUSD6	14q24.1	0.405559	1.48E-16	6.53E-15
SMYD5	2p13.2	-0.40538	1.53E-16	6.73E-15
LYRM4	6p25.1	-0.40536	1.54E-16	6.73E-15
MRPL2	6p21.1	-0.40536	1.54E-16	6.73E-15
NHP2	5q35.3	-0.40506	1.62E-16	7.10E-15
SCARNA12	12p13.31	-0.40487	1.68E-16	7.33E-15
RAB3GAP1	2q21.3	0.404795	1.71E-16	7.43E-15
SMPD2	6q21	-0.40473	1.73E-16	7.50E-15

GATD1	11p15.5	-0.40445	1.82E-16	7.89E-15
MAGI1	3p14.1	0.404297	1.87E-16	8.10E-15
TUSC2	3p21.31	-0.40398	1.99E-16	8.58E-15
CLMN	14q32.13	0.403961	1.99E-16	8.58E-15
GPRIN3	4q22.1	0.403916	2.01E-16	8.64E-15
TNKS2	10q23.32	0.40372	2.08E-16	8.94E-15
FLNB	3p14.3	0.403671	2.10E-16	8.98E-15
METTL1	12q14.1	-0.40367	2.10E-16	8.98E-15
EDEM2	20q11.22	-0.40336	2.23E-16	9.49E-15
SNHG6	8q13.1 8q13	-0.40329	2.26E-16	9.59E-15
MRPL23	11p15.5	-0.40305	2.36E-16	1.00E-14
LOC284441	19p12	0.402865	2.44E-16	1.03E-14
HRAS	11p15.5	-0.40283	2.46E-16	1.04E-14
ABT1	6p22.2	-0.40269	2.52E-16	1.06E-14
THSD4	15q23	0.402666	2.53E-16	1.07E-14
MED13L	12q24.21	0.40258	2.57E-16	1.08E-14
ZZEF1	17p13.2	0.402476	2.62E-16	1.10E-14
CCS	11q13.2	-0.40247	2.62E-16	1.10E-14
CAND1	12q14.3-q15	0.402377	2.67E-16	1.11E-14
ALG3	3q27.1	-0.40232	2.70E-16	1.12E-14
RPS7	2p25.3	-0.40232	2.70E-16	1.12E-14
PSMA2	7p14.1	-0.40215	2.79E-16	1.16E-14
ACOT8	20q13.12	-0.40193	2.90E-16	1.20E-14
THYN1	11q25	-0.40183	2.96E-16	1.22E-14
NUDT14	14q32.33	-0.40181	2.97E-16	1.22E-14
PRRC2C	1q24.3	0.401812	2.97E-16	1.22E-14
C12ORF73	12q23.3	-0.40151	3.14E-16	1.29E-14
RPS10	6p21.31	-0.4014	3.20E-16	1.31E-14
PPIE	1p34.2	-0.40137	3.22E-16	1.32E-14
KNL1	15q15.1	0.401358	3.23E-16	1.32E-14
CTDSP2	15q15.3-q21.1	0.40121	3.31E-16	1.35E-14
GCNT4	5q13.3	0.401104	3.38E-16	1.37E-14
FAM98B	15q14	0.40102	3.43E-16	1.39E-14
SNHG11	20q11.23	-0.401	3.45E-16	1.39E-14
SGTA	19p13.3	-0.40077	3.59E-16	1.45E-14
PSMB4	1q21.3	-0.40065	3.67E-16	1.48E-14
RNASEH2A	19p13.13	-0.40057	3.73E-16	1.50E-14
CHD2	15q26.1	0.400558	3.74E-16	1.50E-14
MRPL55	1q42.13	-0.4005	3.78E-16	1.51E-14
RANBP1	22q11.21	-0.40044	3.82E-16	1.53E-14
FBXO28	1q42.11	0.400277	3.93E-16	1.57E-14
PPP1R14B	11q13.1	-0.40025	3.95E-16	1.57E-14
STUB1	16p13.3	-0.40016	4.02E-16	1.60E-14
UCHL3	13q22.2	-0.39997	4.16E-16	1.65E-14
ATP5MF	7q22.1	-0.39988	4.23E-16	1.67E-14
TMEM30A	6q14.1	0.39948	4.55E-16	1.80E-14
MRPL28	16p13.3	-0.39944	4.59E-16	1.81E-14
GEMIN6	2p22.1	-0.3994	4.62E-16	1.82E-14
CCNQ	Xq28	-0.39936	4.66E-16	1.83E-14
PUS1	12q24.33	-0.39932	4.69E-16	1.84E-14
DYNLRB1	20q11.22	-0.39928	4.72E-16	1.85E-14
CEP97	3q12.3	0.399216	4.78E-16	1.87E-14
MIEN1	17q12	-0.39882	5.14E-16	2.00E-14
RPRD2	1q21.2	0.398693	5.26E-16	2.04E-14
ATF7	12q13.13	0.398624	5.32E-16	2.07E-14
LSM7	19p13.3	-0.3986	5.35E-16	2.07E-14
CCNDBP1	15q15.2	0.39825	5.70E-16	2.20E-14
RAB24	5q35.3	-0.39806	5.90E-16	2.28E-14

TMEM258	11q12.2	-0.39789	6.09E-16	2.34E-14
SSBP4	19p13.11	-0.39786	6.12E-16	2.35E-14
RPL38	17q25.1	-0.39782	6.16E-16	2.36E-14
TMEM203	9q34.3	-0.3978	6.19E-16	2.37E-14
DSC2	18q12.1	0.397763	6.23E-16	2.38E-14
WDR83	19p13.13	-0.39759	6.42E-16	2.45E-14
ABLIM1	10q25.3	0.397591	6.43E-16	2.45E-14
DOCK7	1p31.3	0.397409	6.64E-16	2.52E-14
SWAP70	11p15.4	0.397407	6.65E-16	2.52E-14
NDUFA2	5q31.3	-0.39731	6.77E-16	2.56E-14
ACTR5	20q11.23	-0.39731	6.77E-16	2.56E-14
LAMTOR1	11q13.4	-0.39699	7.17E-16	2.70E-14
SEMA4B	15q26.1	0.396789	7.44E-16	2.80E-14
TSSC4	11p15.5	-0.39633	8.09E-16	3.03E-14
ELMSAN1	14q24.3	0.396324	8.09E-16	3.03E-14
EXOC8	1q42.2	0.396292	8.14E-16	3.05E-14
SLC25A24	1p13.3	0.396203	8.27E-16	3.09E-14
RPL36A	Xq22.1	-0.39601	8.56E-16	3.19E-14
EXOC5	14q22.3	0.395829	8.85E-16	3.29E-14
TARSL2	15q26.3	0.395714	9.03E-16	3.36E-14
EXOSC5	19q13.2	-0.39556	9.28E-16	3.44E-14
HMBOX1	8p21.1-p12	0.39547	9.44E-16	3.50E-14
PIK3CA	3q26.32	0.395174	9.96E-16	3.68E-14
MRGBP	20q13.33	-0.39515	1.00E-15	3.69E-14
MAP3K5	6q23.3	0.394925	1.04E-15	3.83E-14
CPEB2	4p15.32	0.394879	1.05E-15	3.86E-14
ANO9	11p15.5	-0.39487	1.05E-15	3.86E-14
UBAC2	13q32.3	-0.39486	1.05E-15	3.86E-14
NDUFB11	Xp11.3	-0.39483	1.06E-15	3.87E-14
ZNRD1	6p22.1	-0.39443	1.14E-15	4.15E-14
KAT2B	3p24.3	0.394292	1.17E-15	4.25E-14
COP57B	2q37.1	-0.39427	1.17E-15	4.26E-14
DNAJC13	3q22.1	0.394099	1.21E-15	4.38E-14
ZCCHC2	18q21.33	0.393938	1.24E-15	4.51E-14
SNAP23	15q15.1-q15.2	0.393867	1.26E-15	4.55E-14
SEC31A	4q21.22	0.393735	1.29E-15	4.66E-14
CAST	5q15	0.393561	1.33E-15	4.79E-14
WDR26	1q42.11-q42.12	0.39344	1.36E-15	4.89E-14
NOSIP	19q13.33	-0.39333	1.39E-15	4.98E-14
MRPL20-AS1	1p36.33	-0.39322	1.42E-15	5.07E-14
ZNF281	1q32.1	0.393148	1.43E-15	5.13E-14
EPHA4	2q36.1	0.392829	1.52E-15	5.42E-14
CDC34	19p13.3	-0.39275	1.54E-15	5.48E-14
PSMB1	6q27	-0.39271	1.55E-15	5.51E-14
ALKBH4	7q22.1	-0.3927	1.55E-15	5.51E-14
RAPGEF6	5q31.1	0.392697	1.55E-15	5.51E-14
EBNA1BP2	1p34.2	-0.39267	1.56E-15	5.52E-14
MSRB1	16p13.3	-0.39259	1.59E-15	5.60E-14
ILKAP	2q37.3	-0.39237	1.65E-15	5.81E-14
CENPT	16q22.1	-0.3923	1.67E-15	5.87E-14
ADAM9	8p11.22	0.392295	1.67E-15	5.87E-14
KDM5A	12p13.33	0.392203	1.70E-15	5.95E-14
RPS13	11p15.1	-0.39188	1.80E-15	6.29E-14
MAN2A1	5q21.3	0.391842	1.81E-15	6.33E-14
PTPRK	6q22.33	0.391811	1.82E-15	6.35E-14
PSENN	19q13.12	-0.39171	1.85E-15	6.46E-14
UCKL1	20q13.33	-0.39165	1.87E-15	6.52E-14
MAML2	11q21	0.391564	1.90E-15	6.60E-14

CAMTA1	1p36.31-p36.23	-0.39154	1.91E-15	6.62E-14
PABPC1L	20q13.12	-0.39153	1.91E-15	6.62E-14
MXD3	5q35.3	-0.39114	2.05E-15	7.08E-14
HSD17B10	Xp11.22	-0.39108	2.07E-15	7.15E-14
EIPR1	2p25.3	-0.39104	2.09E-15	7.18E-14
PRMT7	16q22.1	-0.39103	2.09E-15	7.18E-14
CIAO3	16p13.3	-0.39094	2.13E-15	7.29E-14
ARMC6	19p13.11	-0.39085	2.16E-15	7.39E-14
PRKAA1	5p13.1	0.390775	2.19E-15	7.48E-14
MIB1	18q11.2	0.390713	2.21E-15	7.55E-14
CISD3	17q12	-0.39066	2.24E-15	7.61E-14
BMPR2	2q33.1-q33.2	0.390639	2.24E-15	7.63E-14
TRAIP	3p21.31	-0.39061	2.25E-15	7.65E-14
ATP8B1	18q21.31	0.390203	2.42E-15	8.21E-14
TMTC2	12q21.31	0.390161	2.44E-15	8.26E-14
FUT11	10q22.2	0.390078	2.48E-15	8.36E-14
USE1	19p13.11	-0.39007	2.48E-15	8.36E-14
NXT1	20p11.21	-0.39	2.51E-15	8.46E-14
STRN	2p22.2	0.389955	2.53E-15	8.51E-14
MFSD3	8q24.3	-0.38993	2.55E-15	8.54E-14
TMF1	3p14.1	0.389874	2.57E-15	8.60E-14
PPP1R12A	12q21.2-q21.31	0.389842	2.58E-15	8.64E-14
MORF4L1	15q25.1	0.389647	2.67E-15	8.93E-14
TRAPPC5	19p13.2	-0.38941	2.79E-15	9.29E-14
SMUG1	12q13.13	-0.38934	2.82E-15	9.39E-14
USF3	3q13.2	0.389267	2.86E-15	9.50E-14
CSNK2B	6p21.33	-0.38925	2.87E-15	9.52E-14
EXOSC8	13q13.3	-0.38915	2.92E-15	9.66E-14
PBRM1	3p21.1	0.388694	3.17E-15	1.05E-13
COL4A3BP	5q13.3	0.388675	3.18E-15	1.05E-13
LMBRD2	5p13.2	0.38866	3.18E-15	1.05E-13
MTLN	2q13	-0.38851	3.27E-15	1.08E-13
SEC23IP	10q26.11-q26.12	0.3885	3.28E-15	1.08E-13
UBA52	19p13.11	-0.38843	3.32E-15	1.09E-13
CDKL5	Xp22.13	0.387988	3.58E-15	1.17E-13
SNU13	22q13.2	-0.38768	3.78E-15	1.24E-13
ZPR1	11q23.3	-0.38759	3.85E-15	1.25E-13
PTPRG	3p14.2	0.387583	3.85E-15	1.25E-13
MRPL58	17q25.1	-0.38731	4.04E-15	1.31E-13
TRIP4	15q22.31	0.387188	4.13E-15	1.34E-13
ZC3HC1	7q32.2	-0.38717	4.14E-15	1.34E-13
PTPN21	14q31.3	0.387073	4.21E-15	1.36E-13
TAOK3	12q24.23	0.386969	4.29E-15	1.39E-13
DUS1L	17q25.3	-0.38696	4.30E-15	1.39E-13
RPL11	1p36.11	-0.3869	4.34E-15	1.40E-13
TTC23	15q26.3	0.386694	4.50E-15	1.45E-13
SCYL2	12q23.1	0.38662	4.56E-15	1.46E-13
SBNO1	12q24.31	0.386482	4.67E-15	1.50E-13
NIT2	3q12.2	-0.38642	4.72E-15	1.51E-13
JMJD1C	10q21.3	0.386351	4.78E-15	1.53E-13
PARK7	1p36.23	-0.3863	4.82E-15	1.54E-13
P2RY1	3q25.2	0.386169	4.93E-15	1.57E-13
REL	2p16.1	0.386015	5.07E-15	1.61E-13
FAM114A1	4p14	0.385994	5.09E-15	1.61E-13
RASSF6	4q13.3	0.385897	5.17E-15	1.64E-13
SOCS6	18q22.2	0.385791	5.27E-15	1.67E-13
GTF3C5	9q34.13	-0.38573	5.33E-15	1.68E-13
HMG20A	15q24.3	0.385649	5.40E-15	1.70E-13

UBXN11	1p36.11	-0.38552	5.53E-15	1.74E-13
FAM161B	14q24.3	0.385443	5.60E-15	1.76E-13
HGH1	8q24.3	-0.38544	5.60E-15	1.76E-13
PDE8A	15q25.3	0.385269	5.77E-15	1.81E-13
REV3L	6q21	0.38499	6.06E-15	1.89E-13
ZNF827	4q31.21-q31.22	0.384982	6.07E-15	1.89E-13
SLC25A10	17q25.3	-0.38498	6.07E-15	1.89E-13
STK25	2q37.3	-0.38493	6.13E-15	1.91E-13
SETX	9q34.13	0.384865	6.19E-15	1.93E-13
TENT5A	6q14.1	0.384827	6.23E-15	1.94E-13
TMEM222	1p36.11	-0.38476	6.31E-15	1.96E-13
TMEM101	17q21.31	-0.38457	6.52E-15	2.02E-13
RPL37A	2q35	-0.38452	6.58E-15	2.03E-13
NR2F2	15q26.2	0.384348	6.78E-15	2.09E-13
SLC25A26	3p14.1	-0.38433	6.80E-15	2.10E-13
EIF2S2	20q11.22	-0.38413	7.04E-15	2.17E-13
RBIS	8q21.2	-0.38395	7.27E-15	2.23E-13
RAB8B	15q22.2	0.38373	7.54E-15	2.31E-13
BAZ2B	2q24.2	0.3837	7.58E-15	2.32E-13
MAPK1	22q11.22	0.383619	7.69E-15	2.35E-13
MLXIPL	7q11.23	-0.38355	7.79E-15	2.38E-13
MRPS33	7q34	-0.38338	8.02E-15	2.44E-13
CLIP1	12q24.31	0.383362	8.04E-15	2.45E-13
E2F4	16q22.1	-0.38335	8.06E-15	2.45E-13
SMCR8	17p11.2	0.38305	8.49E-15	2.58E-13
SLAIN2	4p11	0.382864	8.77E-15	2.66E-13
PIN4	Xq13.1	-0.38283	8.82E-15	2.66E-13
SLC3A2	11q12.3	-0.38283	8.82E-15	2.66E-13
PRR7	5q35.3	-0.38281	8.85E-15	2.67E-13
SNHG9	16p13.3	-0.38274	8.96E-15	2.70E-13
ANKRD50	4q28.1	0.382646	9.10E-15	2.74E-13
MRPL14	6p21.1	-0.38263	9.12E-15	2.74E-13
OTUD7B	1q21.2	0.382546	9.26E-15	2.78E-13
BACH1	21q21.3	0.382476	9.37E-15	2.81E-13
G3BP2	4q21.1	0.382417	9.47E-15	2.83E-13
EPC1	10p11.22	0.382376	9.54E-15	2.85E-13
PRR5	22q13.31	-0.38229	9.69E-15	2.89E-13
SMAD2	18q21.1	0.382258	9.73E-15	2.90E-13
LOC100129034	9q33.3	0.382136	9.94E-15	2.95E-13
FBXW9	19p13.13	-0.38199	1.02E-14	3.03E-13
ZDHHC24	11q13.2	-0.38193	1.03E-14	3.05E-13
COA1	7p13	-0.38185	1.04E-14	3.09E-13
TAF6L	11q12.3	-0.38183	1.05E-14	3.10E-13
ZBTB37	1q25.1	0.381468	1.12E-14	3.29E-13
CRIM1	2p22.2	0.381347	1.14E-14	3.35E-13
NOP16	5q35.2	-0.38135	1.14E-14	3.35E-13
TLE4	9q21.31	0.381209	1.17E-14	3.42E-13
MAPRE2	18q12.1-q12.2	0.381202	1.17E-14	3.42E-13
UBXN1	11q12.3	-0.38117	1.17E-14	3.44E-13
NELFE	6p21.33	-0.38116	1.18E-14	3.44E-13
RPL27	17q21.31	-0.38115	1.18E-14	3.44E-13
MAP2K1	15q22.31	0.381048	1.20E-14	3.50E-13
DICER1	14q32.13	0.380992	1.21E-14	3.52E-13
FAAP20	1p36.33	-0.38088	1.23E-14	3.59E-13
RNF181	2p11.2	-0.3808	1.25E-14	3.63E-13
COX5B	2q11.2	-0.38061	1.29E-14	3.74E-13
ARRDC4	15q26.2	0.380608	1.29E-14	3.74E-13
MACROD1	11q13.1	-0.3806	1.29E-14	3.74E-13

LYPLA2	1p36.11	-0.38038	1.34E-14	3.88E-13
RNPS1	16p13.3	-0.38035	1.35E-14	3.90E-13
PCID2	13q34	-0.38025	1.37E-14	3.95E-13
ASPSCR1	17q25.3	-0.38022	1.38E-14	3.97E-13
SLC41A2	12q23.3	0.380192	1.39E-14	3.99E-13
CAMSAP2	1q32.1	0.380171	1.39E-14	3.99E-13
WHAMM	15q25.2	0.380067	1.42E-14	4.06E-13
SSNA1	9q34.3	-0.38001	1.43E-14	4.09E-13
CDK5	7q36.1	-0.37988	1.47E-14	4.18E-13
SIRT1	10q21.3	0.379872	1.47E-14	4.18E-13
PPTC7	12q24.11	0.379818	1.48E-14	4.21E-13
SLC2A13	12q12	0.379713	1.51E-14	4.28E-13
MECOM	3q26.2	0.379699	1.51E-14	4.29E-13
CBLB	3q13.11	0.379362	1.60E-14	4.53E-13
ZFP91	11q12.1	0.379058	1.69E-14	4.77E-13
PTPMT1	11p11.2	-0.37889	1.73E-14	4.90E-13
MLST8	16p13.3	-0.37882	1.76E-14	4.95E-13
PAFAH1B1	17p13.3	0.378738	1.78E-14	5.01E-13
QSOX1	1q25.2	0.378731	1.78E-14	5.01E-13
LRRFIP1	2q37.3	0.378689	1.80E-14	5.04E-13
EPG5	18q12.3-q21.1	0.378664	1.80E-14	5.06E-13
RFXANK	19p13.11	-0.37858	1.83E-14	5.13E-13
BMP2K	4q21.21	0.378564	1.83E-14	5.13E-13
RPS25	11q23.3	-0.37851	1.85E-14	5.17E-13
BIRC6	2p22.3	0.378431	1.88E-14	5.23E-13
LYST	1q42.3	0.378404	1.89E-14	5.25E-13
POLG	15q26.1	0.378353	1.90E-14	5.29E-13
EXOSC7	3p21.31	-0.37807	1.99E-14	5.54E-13
RNF208	9q34.3	-0.37805	2.00E-14	5.55E-13
RAD23A	19p13.13	-0.37797	2.03E-14	5.62E-13
SURF2	9q34.2	-0.3779	2.05E-14	5.67E-13
COMMD6	13q22.2	-0.3779	2.05E-14	5.67E-13
RPS16	19q13.2	-0.37789	2.06E-14	5.67E-13
CRK	17p13.3	0.377886	2.06E-14	5.67E-13
IKZF2	2q34	0.377876	2.06E-14	5.67E-13
ATP2A2	12q24.11	0.37783	2.08E-14	5.71E-13
RPS19	19q13.2	-0.37777	2.10E-14	5.76E-13
NDUFAF7	2p22.2	-0.37772	2.12E-14	5.80E-13
ZBTB41	1q31.3	0.377289	2.28E-14	6.23E-13
SNHG12	1p35.3	-0.37727	2.29E-14	6.25E-13
ACD	16q22.1	-0.37714	2.34E-14	6.38E-13
GCC2	2q12.3	0.377014	2.39E-14	6.51E-13
OGFOD2	12q24.31	-0.377	2.39E-14	6.51E-13
DYNC1H1	14q32.31	0.376951	2.41E-14	6.56E-13
DDX3X	Xp11.4	0.376943	2.42E-14	6.56E-13
RASEF	9q21.32	0.376826	2.46E-14	6.68E-13
TTBK2	15q15.2	0.376761	2.49E-14	6.74E-13
TBRG4	7p13	-0.37676	2.49E-14	6.74E-13
TSEN34	19q13.42	-0.37671	2.51E-14	6.78E-13
POMK	8p11.21	0.376689	2.52E-14	6.80E-13
MRPS12	19q13.2	-0.3766	2.56E-14	6.90E-13
POLR2E	19p13.3	-0.37642	2.64E-14	7.10E-13
KLF3	4p14	0.376396	2.65E-14	7.12E-13
TMEM147	19q13.12	-0.37638	2.66E-14	7.13E-13
GGCT	7p14.3	-0.37637	2.66E-14	7.13E-13
MAP1LC3A	20q11.22	-0.37634	2.67E-14	7.15E-13
SHROOM3	4q21.1	0.376334	2.68E-14	7.15E-13
AP2S1	19q13.32	-0.37631	2.69E-14	7.17E-13



CRYBG3	3q11.2	0.376216	2.73E-14	7.27E-13
COMMD7	20q11.21	-0.37621	2.73E-14	7.27E-13
MTERF3	8q22.1	-0.37596	2.85E-14	7.58E-13
SF3B5	6q24.2	-0.37592	2.87E-14	7.62E-13
NSD1	5q35.3	0.375892	2.89E-14	7.65E-13
GOLGA4	3p22.2	0.375779	2.94E-14	7.78E-13
C19ORF24	19p13.3	-0.37574	2.96E-14	7.82E-13
CCNT1	12q13.11-q13.12	0.375671	3.00E-14	7.91E-13
ZBTB4	17p13.1	0.375572	3.05E-14	8.03E-13
CDKN2AIPNL	5q31.1	-0.37523	3.23E-14	8.49E-13
COX4I1	16q24.1	-0.3752	3.25E-14	8.53E-13
FRS2	12q15	0.375186	3.25E-14	8.54E-13
TMEM150A	2p11.2	-0.37516	3.27E-14	8.57E-13
ZNHIT2	11q13.1	-0.37513	3.28E-14	8.59E-13
DMXL2	15q21.2	0.375053	3.33E-14	8.68E-13
CCNG2	4q21.1	0.37505	3.33E-14	8.68E-13
COA3	17q21.2	-0.37504	3.33E-14	8.68E-13
IBTK	6q14.1	0.374996	3.36E-14	8.74E-13
MAPK6	15q21.2	0.374903	3.41E-14	8.87E-13
KATNBL1P6	6q24.3	0.374851	3.44E-14	8.94E-13
DCXR	17q25.3	-0.37484	3.45E-14	8.95E-13
ASXL2	2p23.3	0.374734	3.51E-14	9.09E-13
EMD	Xq28	-0.37454	3.62E-14	9.38E-13
UQCR11	19p13.3	-0.3745	3.65E-14	9.43E-13
SPINDOC	11q13.1	-0.37419	3.85E-14	9.93E-13
RPL18	19q13.33	-0.37415	3.87E-14	9.98E-13
CHD8	14q11.2	0.374115	3.89E-14	1.00E-12
SLC30A1	1q32.3	0.374095	3.91E-14	1.00E-12
RALGAPA1	14q13.2	0.374083	3.92E-14	1.01E-12
NDUFA3	19q13.42	-0.37408	3.92E-14	1.01E-12
TRAPPC3	1p34.3	-0.37399	3.98E-14	1.02E-12
SNRPA	19q13.2	-0.37393	4.02E-14	1.03E-12
MRPL21	11q13.3	-0.3739	4.03E-14	1.03E-12
PPIA	7p13	-0.37389	4.04E-14	1.03E-12
SIGMAR1	9p13.3	-0.37389	4.05E-14	1.03E-12
ZNF678	1q42.13	0.373717	4.16E-14	1.06E-12
G6PC3	17q21.31	-0.3736	4.24E-14	1.08E-12
NDUFAF2	5q12.1	-0.37352	4.30E-14	1.09E-12
ITGA2	5q11.2	0.373442	4.36E-14	1.11E-12
SPTBN1	2p16.2	0.373384	4.40E-14	1.11E-12
STX10	19p13.13	-0.37273	4.91E-14	1.24E-12
HSPE1	2q33.1	-0.37244	5.15E-14	1.30E-12
TOMM6	6p21.1	-0.37238	5.20E-14	1.31E-12
RECQL4	8q24.3	-0.37236	5.22E-14	1.32E-12
TOMM7	7p15.3	-0.3722	5.37E-14	1.35E-12
ATOX1	5q33.1	-0.37219	5.37E-14	1.35E-12
ECE2	3q27.1	-0.37197	5.57E-14	1.40E-12
YIF1A	11q13.2	-0.37197	5.57E-14	1.40E-12
ANKRD17	4q13.3	0.371937	5.61E-14	1.40E-12
PDE4D	5q11.2-q12.1	0.371842	5.69E-14	1.42E-12
CDK10	16q24.3	-0.37184	5.70E-14	1.42E-12
AP1G1	16q22.2	0.37181	5.73E-14	1.43E-12
TRIR	19p13.13	-0.37178	5.76E-14	1.43E-12
FRK	6q22.1	0.371607	5.92E-14	1.47E-12
EXOSC2	9q34.12	-0.37159	5.94E-14	1.47E-12
ARFRP1	20q13.33	-0.37156	5.97E-14	1.48E-12
BAZ2A	12q13.3	0.371416	6.11E-14	1.52E-12
MAST4	5q12.3	0.371304	6.23E-14	1.54E-12

UBE2J2	1p36.33	-0.37122	6.32E-14	1.56E-12
ZNF462	9q31.2	0.371184	6.35E-14	1.57E-12
MRPL17	11p15.4	-0.37117	6.37E-14	1.57E-12
RNF25	2q35	-0.37113	6.41E-14	1.58E-12
NSMCE1	16p12.1	-0.37113	6.41E-14	1.58E-12
KDM3B	5q31.2	0.370993	6.56E-14	1.61E-12
LUZP1	1p36.12	0.370876	6.69E-14	1.64E-12
NME2	17q21.33	-0.37084	6.72E-14	1.65E-12
RPL23	17q12	-0.37081	6.77E-14	1.66E-12
PRDX2	19p13.13	-0.3708	6.77E-14	1.66E-12
FURIN	15q26.1	0.370685	6.90E-14	1.69E-12
REEP3	10q21.3	0.370603	7.00E-14	1.71E-12
NAP1L4	11p15.4	-0.37046	7.17E-14	1.75E-12
MED27	9q34.13	-0.37045	7.18E-14	1.75E-12
LNPK	2q31.1	0.370344	7.30E-14	1.77E-12
GPD2	2q24.1	0.37033	7.32E-14	1.77E-12
RYBP	3p13	0.37033	7.32E-14	1.77E-12
RTKN	2p13.1	-0.37026	7.41E-14	1.79E-12
PLCL2	3p24.3	0.370239	7.43E-14	1.80E-12
CLCN7	16p13.3	-0.37018	7.50E-14	1.81E-12
NDUFB2	7q34	-0.37008	7.63E-14	1.84E-12
TANC2	17q23.2-q23.3	0.370053	7.66E-14	1.85E-12
SNRPF	12q23.1	-0.36996	7.78E-14	1.87E-12
ETV2	19q13.12	-0.3698	8.00E-14	1.92E-12
RPUSD3	3p25.3	-0.36979	8.01E-14	1.92E-12
PRDM10	11q24.3	0.369727	8.09E-14	1.94E-12
RASA2	3q23	0.369478	8.43E-14	2.02E-12
ZNF148	3q21.2	0.369446	8.47E-14	2.03E-12
MYH9	22q12.3	0.36943	8.50E-14	2.03E-12
RPS20	8q12.1	-0.36941	8.52E-14	2.03E-12
CENPP	9q22.31	-0.3694	8.54E-14	2.04E-12
RAB27B	18q21.2	0.369319	8.65E-14	2.06E-12
LPGAT1	1q32.3	0.369272	8.72E-14	2.07E-12
UQCC1	20q11.22	-0.36924	8.77E-14	2.08E-12
CPEB4	5q35.2	0.36919	8.84E-14	2.10E-12
NTMT1	9q34.11	-0.369	9.11E-14	2.16E-12
HTRA2	2p13.1	-0.369	9.12E-14	2.16E-12
RASSF3	12q14.2	0.368978	9.15E-14	2.16E-12
PREB	2p23.3	-0.36889	9.29E-14	2.19E-12
RANBP2	2q13	0.368811	9.41E-14	2.22E-12
AKAP5	14q23.3	0.368768	9.48E-14	2.23E-12
RSPH3	6q25.3	0.368766	9.48E-14	2.23E-12
GOLPH3L	1q21.3	0.368694	9.59E-14	2.25E-12
DCUN1D2	13q34	-0.36869	9.60E-14	2.25E-12
TMA7	3p21.31	-0.36864	9.68E-14	2.27E-12
LSM2	6p21.33	-0.3686	9.75E-14	2.28E-12
MANBAL	20q11.23	-0.36843	1.00E-13	2.34E-12
PSMA1	11p15.2	-0.3683	1.02E-13	2.39E-12
PTGER2	14q22.1	0.368296	1.02E-13	2.39E-12
AP5Z1	7p22.1	-0.36827	1.03E-13	2.40E-12
NDUFAF3	3p21.31	-0.36821	1.04E-13	2.42E-12
PCSK6	15q26.3	0.367865	1.10E-13	2.55E-12
ACTR3B	7q36.1-q36.2	-0.36786	1.10E-13	2.55E-12
RPL24	3q12.3	-0.36783	1.11E-13	2.57E-12
NPRL2	3p21.31	-0.3678	1.11E-13	2.57E-12
MRPL20	1p36.33	-0.36772	1.13E-13	2.61E-12
GRINA	8q24.3	-0.36768	1.13E-13	2.62E-12
MVB12A	19p13.11	-0.36736	1.19E-13	2.76E-12

COPA	1q23.2	0.367265	1.21E-13	2.80E-12
MAD2L2	1p36.22	-0.36711	1.25E-13	2.87E-12
MEX3C	18q21.2	0.366943	1.28E-13	2.94E-12
ZNF407	18q22.3	0.366893	1.29E-13	2.97E-12
URM1	9q34.11	-0.36677	1.31E-13	3.02E-12
PTPRB	12q15	0.366756	1.32E-13	3.02E-12
EBP	Xp11.23	-0.36669	1.33E-13	3.05E-12
GNA13	17q24.1	0.366688	1.33E-13	3.05E-12
LRP10	14q11.2	0.366675	1.34E-13	3.05E-12
NAXE	1q22	-0.36652	1.37E-13	3.13E-12
PCBD1	10q22.1	-0.36649	1.38E-13	3.14E-12
NCBP2AS2	3q29	-0.36649	1.38E-13	3.14E-12
USP3	15q22.31	0.366384	1.40E-13	3.19E-12
TNIK	3q26.2-q26.31	0.366315	1.42E-13	3.22E-12
SWSAP1	19p13.2	-0.36627	1.43E-13	3.24E-12
TRPT1	11q13.1	-0.36602	1.49E-13	3.37E-12
LCN12	9q34.3	-0.36602	1.49E-13	3.37E-12
LIN7B	19q13.33	-0.36599	1.49E-13	3.38E-12
TMEM131	2q11.2	0.365781	1.55E-13	3.50E-12
TMEM201	1p36.22	-0.36571	1.56E-13	3.53E-12
MECR	1p35.3	-0.36561	1.59E-13	3.59E-12
FNDC3B	3q26.31	0.365549	1.61E-13	3.62E-12
PIK3CB	3q22.3	0.365541	1.61E-13	3.62E-12
COX6B1	19q13.12	-0.36544	1.64E-13	3.68E-12
DDX39A	19p13.12	-0.36541	1.64E-13	3.69E-12
CLPX	15q22.31	0.365362	1.66E-13	3.71E-12
SIPA1L1	14q24.2	0.364883	1.79E-13	4.01E-12
ARMC8	3q22.3	0.364812	1.81E-13	4.05E-12
SLC30A4	15q21.1 15q21.1	0.364751	1.83E-13	4.09E-12
EHF	11p13	0.364649	1.86E-13	4.15E-12
RCC1L	7q11.23	-0.36457	1.88E-13	4.20E-12
MBNL1	3q25.1-q25.2	0.364542	1.89E-13	4.21E-12
SLC25A33	1p36.22	-0.36449	1.91E-13	4.25E-12
COX6C	8q22.2	-0.36442	1.93E-13	4.29E-12
QPCTL	19q13.32	-0.36412	2.03E-13	4.50E-12
MRPS23	17q22	-0.36386	2.11E-13	4.69E-12
FAM50A	Xq28	-0.36385	2.12E-13	4.69E-12
MRPL4	19p13.2	-0.36375	2.15E-13	4.76E-12
NDUFA8	9q33.2	-0.36363	2.19E-13	4.85E-12
RCE1	11q13.2	-0.36352	2.23E-13	4.93E-12
TRMT61A	14q32.33	-0.36346	2.25E-13	4.97E-12
C16ORF91	16p13.3	-0.36336	2.29E-13	5.05E-12
SPOPL	2q22.1	0.363309	2.31E-13	5.08E-12
PFDN2	1q23.3	-0.36318	2.36E-13	5.19E-12
PPIP5K1	15q15.3	0.363074	2.40E-13	5.27E-12
ZFAND2B	2q35	-0.36305	2.41E-13	5.29E-12
EXOSC1	10q24.1	-0.363	2.43E-13	5.32E-12
ZNF24	18q12.2	0.362931	2.46E-13	5.37E-12
ALDH6A1	14q24.3	0.362924	2.46E-13	5.38E-12
HSF1	8q24.3	-0.36281	2.50E-13	5.47E-12
TIMM13	19p13.3	-0.36275	2.53E-13	5.51E-12
ERCC6	10q11.23	0.362706	2.55E-13	5.55E-12
ANKRD13D	11q13.2	-0.36243	2.66E-13	5.80E-12
TP53BP1	15q15.3	0.36239	2.68E-13	5.83E-12
CAB39	2q37.1	0.362371	2.69E-13	5.84E-12
SMIM29	6p21.31	-0.36234	2.70E-13	5.86E-12
GPX4	19p13.3	-0.36232	2.71E-13	5.87E-12
KIF1BP	10q22.1	0.362258	2.74E-13	5.93E-12

ABHD17C	15q25.1	0.362244	2.74E-13	5.93E-12
TRAK2	2q33.1	0.362212	2.76E-13	5.96E-12
PTGER4	5p13.1	0.362162	2.78E-13	6.00E-12
NAA80	3p21.31	-0.36201	2.85E-13	6.15E-12
UXT	Xp11.23	-0.36176	2.97E-13	6.39E-12
RPP25L	9p13.3	-0.36173	2.98E-13	6.41E-12
CMC2	16q23.2	-0.36171	2.99E-13	6.42E-12
CCT7	2p13.2	-0.36155	3.07E-13	6.58E-12
KIAA0586	14q23.1	0.361481	3.10E-13	6.65E-12
RAB3GAP2	1q41	0.361358	3.16E-13	6.78E-12
ITGAV	2q32.1	0.361308	3.19E-13	6.82E-12
ATP5ME	4p16.3	-0.36114	3.28E-13	7.00E-12
NFS1	20q11.22	-0.361	3.35E-13	7.15E-12
TMEM52	1p36.33	-0.36098	3.36E-13	7.17E-12
RIF1	2q23.3	0.36089	3.41E-13	7.27E-12
LXN	3q25.32	0.360814	3.45E-13	7.35E-12
CDK4	12q14.1	-0.36072	3.51E-13	7.45E-12
WDFY3	4q21.23	0.360711	3.51E-13	7.45E-12
MRPL38	17q25.1	-0.36046	3.65E-13	7.75E-12
SNHG10	14q32.13	-0.36023	3.79E-13	8.03E-12
RBBP5	1q32.1	0.360156	3.84E-13	8.12E-12
NUDC	1p36.11	-0.3601	3.87E-13	8.18E-12
ERAL1	17q11.2	-0.36009	3.88E-13	8.19E-12
NOTCH2	1p12	0.360015	3.92E-13	8.27E-12
MAF1	8q24.3	-0.36002	3.92E-13	8.27E-12
PSMC3	11p11.2	-0.35999	3.94E-13	8.30E-12
PRELID1	5q35.3	-0.35995	3.97E-13	8.34E-12
ARL6IP4	12q24.31	-0.35971	4.12E-13	8.66E-12
KATNB1	16q21	-0.35959	4.20E-13	8.82E-12
COX8A	11q13.1	-0.35957	4.21E-13	8.84E-12
ITSN2	2p23.3	0.359509	4.25E-13	8.91E-12
SEC23A	14q21.1	0.359452	4.29E-13	8.98E-12
TBL3	16p13.3	-0.35942	4.31E-13	9.02E-12
PLEKHJ1	19p13.3	-0.35941	4.32E-13	9.03E-12
RNF152	18q21.33	0.35936	4.36E-13	9.09E-12
SNRPG	2p13.3	-0.35933	4.37E-13	9.12E-12
HIF1A	14q23.2	0.359298	4.40E-13	9.16E-12
PRPF19	11q12.2	-0.35922	4.46E-13	9.27E-12
	8-Mar 10q11.21-q11.22	0.358877	4.70E-13	9.77E-12
CHEK2	22q12.1	-0.35883	4.74E-13	9.84E-12
TP53BP2	1q41	0.35877	4.79E-13	9.92E-12
LIPH	3q27.2	0.358765	4.79E-13	9.92E-12
BLOC1S6	15q21.1	0.358753	4.80E-13	9.93E-12
MRTFB	16p13.12	0.35871	4.83E-13	9.98E-12
ARL2	11q13.1	-0.35871	4.83E-13	9.98E-12
ANKRD44	2q33.1	0.358635	4.89E-13	1.01E-11
ZSCAN29	15q15.3	0.358494	5.00E-13	1.03E-11
NLE1	17q12	-0.35845	5.03E-13	1.04E-11
PEX10	1p36.32	-0.3584	5.08E-13	1.04E-11
ALKBH6	19q13.12	-0.35836	5.11E-13	1.05E-11
ADCK5	8q24.3	-0.35833	5.13E-13	1.05E-11
TBC1D2B	15q24.3-q25.1	0.358301	5.16E-13	1.06E-11
SYS1	20q13.12	-0.3582	5.24E-13	1.07E-11
DDT	22q11.23	-0.35819	5.25E-13	1.07E-11
SLC25A19	17q25.1	-0.35816	5.27E-13	1.08E-11
CTU1	19q13.41	-0.35806	5.36E-13	1.09E-11
ATG2B	14q32.2	0.358039	5.38E-13	1.10E-11
NDUFA7	19p13.2	-0.35799	5.42E-13	1.10E-11

CA12	15q22.2	0.357923	5.47E-13	1.11E-11
QTRT1	19p13.2	-0.3578	5.59E-13	1.14E-11
RPL19	17q12	-0.35779	5.59E-13	1.14E-11
MTG1	10q26.3	-0.35775	5.62E-13	1.14E-11
POLR2L	11p15.5	-0.35771	5.66E-13	1.15E-11
FAM126B	2q33.1	0.357668	5.70E-13	1.15E-11
CHTF18	16p13.3	-0.35766	5.71E-13	1.15E-11
TIGD5	8q24.3	-0.35745	5.90E-13	1.19E-11
EIF2B4	2p23.3	-0.35736	5.98E-13	1.21E-11
PIDD1	11p15.5	-0.35731	6.03E-13	1.22E-11
PLEKHM3	2q33.3	0.35728	6.06E-13	1.22E-11
PPP4C	16p11.2	-0.35726	6.08E-13	1.22E-11
ATP5IF1	1p35.3	-0.3572	6.14E-13	1.24E-11
BZW2	7p21.1	-0.3569	6.44E-13	1.29E-11
ESRRA	11q13.1	-0.35673	6.62E-13	1.33E-11
DYNC1LI2	16q22.1	0.356661	6.69E-13	1.34E-11
TANC1	2q24.2	0.356585	6.77E-13	1.35E-11
HSPB11	1p32.3	-0.35658	6.77E-13	1.35E-11
PLD1	3q26.31	0.356577	6.78E-13	1.35E-11
LRRC57	15q15.2	0.356522	6.83E-13	1.36E-11
SYNRG	17q12	0.356152	7.25E-13	1.45E-11
PUSL1	1p36.33	-0.35614	7.26E-13	1.45E-11
PIGL	17p11.2	-0.35596	7.46E-13	1.49E-11
SLC37A4	11q23.3	-0.35592	7.51E-13	1.49E-11
RPS9	19q13.42	-0.35581	7.65E-13	1.52E-11
TNFRSF11A	18q21.33	0.355777	7.69E-13	1.53E-11
EIF3A	10q26.11	0.355713	7.76E-13	1.54E-11
DGCR6L	22q11.21	-0.35565	7.84E-13	1.55E-11
SEC61B	9q22.33	-0.35563	7.86E-13	1.56E-11
PIK3R4	3q22.1	0.355599	7.90E-13	1.56E-11
GBF1	10q24.32	0.355593	7.91E-13	1.56E-11
WDR46	6p21.32	-0.35552	8.00E-13	1.58E-11
BCOR	Xp11.4	0.355483	8.05E-13	1.59E-11
UBE2M	19q13.43	-0.3553	8.28E-13	1.63E-11
CCDC12	3p21.31	-0.35517	8.46E-13	1.66E-11
CTNND1	11q12.1	0.354942	8.76E-13	1.72E-11
CDC42BPB	14q32.32	0.354926	8.79E-13	1.73E-11
LEO1	15q21.2	0.354864	8.87E-13	1.74E-11
MPV17L2	19p13.11	-0.3547	9.11E-13	1.79E-11
RPL36	19p13.3	-0.35458	9.27E-13	1.82E-11
SPTAN1	9q34.11	0.354569	9.29E-13	1.82E-11
NIPAL1	4p12	0.354507	9.38E-13	1.83E-11
BCLAF1	6q23.3	0.35423	9.80E-13	1.91E-11
NOS1AP	1q23.3	0.354175	9.88E-13	1.93E-11
RRP8	11p15.4	-0.35399	1.02E-12	1.98E-11
TEX30	13q33.1	-0.35399	1.02E-12	1.98E-11
WDR83OS	19p13.13	-0.35396	1.02E-12	1.99E-11
ARFGAP1	20q13.33	-0.35389	1.03E-12	2.01E-11
KIAA0040	1q25.1	0.353887	1.03E-12	2.01E-11
POLR1C	6p21.1	-0.35387	1.04E-12	2.01E-11
AFAP1	4p16.1	0.353813	1.05E-12	2.03E-11
CREB1	2q33.3	0.353675	1.07E-12	2.07E-11
PDCD5	19q13.11	-0.35364	1.07E-12	2.08E-11
LACTB	15q22.2	0.353577	1.09E-12	2.10E-11
TMEM205	19p13.2	-0.35357	1.09E-12	2.10E-11
SCRN2	17q21.32	-0.35353	1.09E-12	2.11E-11
EIF3B	7p22.3	-0.35344	1.11E-12	2.13E-11
PIN1	19p13.2	-0.35344	1.11E-12	2.13E-11

UBXN7	3q29	0.353283	1.14E-12	2.18E-11
COMTD1	10q22.2	-0.35323	1.15E-12	2.20E-11
GTF3A	13q12.2	-0.35319	1.15E-12	2.21E-11
SSBP1	7q34	-0.35301	1.19E-12	2.27E-11
LIMS1	2q12.3	0.353	1.19E-12	2.27E-11
UBE2V1	20q13.13	-0.35295	1.20E-12	2.29E-11
SGPL1	10q22.1	0.352939	1.20E-12	2.29E-11
FMC1	7q34	-0.35293	1.20E-12	2.29E-11
ELOC	8q21.11	-0.35289	1.21E-12	2.31E-11
ATP6V0B	1p34.1	-0.35279	1.23E-12	2.34E-11
SAPCD1	6p21.33	-0.35269	1.25E-12	2.37E-11
TMEM216	11q12.2	-0.35267	1.25E-12	2.38E-11
IGF1R	15q26.3	0.352646	1.26E-12	2.38E-11
WASH8P	12p13.33	-0.35264	1.26E-12	2.39E-11
TRUB2	9q34.11	-0.35259	1.27E-12	2.40E-11
PDAP1	7q22.1	-0.35255	1.27E-12	2.41E-11
DPP7	9q34.3	-0.35243	1.30E-12	2.46E-11
UBR3	2q31.1	0.352179	1.35E-12	2.55E-11
SIVA1	14q32.33	-0.35198	1.39E-12	2.63E-11
KIAA0513	16q24.1	0.351874	1.42E-12	2.67E-11
TMEM177	2q14.2	-0.35187	1.42E-12	2.67E-11
KAT2A	17q21.2	-0.35184	1.42E-12	2.68E-11
EXOC6B	2p13.2	0.351527	1.49E-12	2.81E-11
SGPP2	2q36.1	0.351512	1.50E-12	2.82E-11
POLR2M	15q21.3	0.351483	1.50E-12	2.83E-11
RP9P	7p14.3	-0.35135	1.53E-12	2.88E-11
SNORA50C	17q23.3	-0.35126	1.56E-12	2.92E-11
KMT5C	19q13.42	-0.35124	1.56E-12	2.92E-11
BYSL	6p21.1	-0.3512	1.57E-12	2.94E-11
EPB41L2	6q23.1-q23.2	0.351056	1.61E-12	3.00E-11
TAB2	6q25.1	0.351023	1.62E-12	3.02E-11
GLA	Xq22.1	-0.35083	1.66E-12	3.10E-11
SMIM11A	21q22.11-q22.12	-0.35083	1.66E-12	3.10E-11
SYT15	10q11.22	0.35079	1.67E-12	3.12E-11
TEP1	14q11.2	0.350777	1.68E-12	3.12E-11
EGFR	7p11.2	0.350772	1.68E-12	3.12E-11
ATP5MC1	17q21.32	-0.35071	1.70E-12	3.15E-11
THOP1	19p13.3	-0.35068	1.70E-12	3.16E-11
BOD1L1	4p15.33	0.35055	1.74E-12	3.22E-11
UFSP1	7q22.1	-0.35048	1.76E-12	3.25E-11
MFSD14C	9q22.33	-0.35047	1.76E-12	3.26E-11
PSMB2	1p34.3	-0.35045	1.77E-12	3.26E-11
ARID1B	6q25.3	0.350129	1.85E-12	3.43E-11
TIMM8A	Xq22.1	-0.35012	1.86E-12	3.43E-11
RCOR1	14q32.31-q32.32	0.349982	1.90E-12	3.50E-11
EIF3I	1p35.2	-0.3499	1.92E-12	3.54E-11
IDH3G	Xq28	-0.34988	1.93E-12	3.55E-11
OSER1	20q13.12	-0.3498	1.95E-12	3.59E-11
GOLGB1	3q13.33	0.349797	1.95E-12	3.59E-11
HDAC10	22q13.33	-0.34976	1.96E-12	3.61E-11
MYO1C	17p13.3	0.349729	1.97E-12	3.62E-11
NFKB1	4q24	0.34943	2.07E-12	3.78E-11
PPP1CA	11q13.2	-0.34934	2.09E-12	3.83E-11
EIF2AK3	2p11.2	0.34927	2.12E-12	3.87E-11
FIS1	7q22.1	-0.34918	2.15E-12	3.92E-11
KMT2C	7q36.1	0.349126	2.16E-12	3.95E-11
SLC25A14	Xq26.1	-0.34912	2.16E-12	3.95E-11
LIMA1	12q13.12	0.349113	2.17E-12	3.95E-11

RPL28	19q13.42	-0.34902	2.20E-12	4.01E-11
NT5C3B	17q21.2	-0.34879	2.28E-12	4.15E-11
SERTAD4	1q32.2	0.348703	2.31E-12	4.20E-11
ZSWIM1	20q13.12	-0.34869	2.31E-12	4.20E-11
TRMT2A	22q11.21	-0.34867	2.32E-12	4.21E-11
SNHG3	1p35.3	-0.34863	2.34E-12	4.23E-11
NPEPL1	20q13.32	-0.34852	2.38E-12	4.30E-11
SLC2A8	9q33.3	-0.34842	2.41E-12	4.37E-11
PVT1	8q24.21	-0.34839	2.42E-12	4.38E-11
ANKFY1	17p13.2	0.348358	2.44E-12	4.40E-11
MAML3	4q31.1	0.348352	2.44E-12	4.40E-11
HIVEP2	6q24.2	0.348287	2.46E-12	4.44E-11
FAM136A	2p13.3	-0.34824	2.48E-12	4.47E-11
RPL30	8q22.2	-0.34822	2.49E-12	4.47E-11
DSG2	18q12.1	0.348088	2.54E-12	4.56E-11
TPR	1q31.1	0.348035	2.56E-12	4.59E-11
SELENOO	22q13.33	-0.34803	2.56E-12	4.59E-11
TBCB	19q13.12	-0.34801	2.57E-12	4.61E-11
CHP1	15q15.1	0.347979	2.58E-12	4.62E-11
PPP1R12B	1q32.1	0.347971	2.58E-12	4.63E-11
PDF	16q22.1	-0.34778	2.66E-12	4.76E-11
KHK	2p23.3	-0.34762	2.73E-12	4.87E-11
CIAO1	2q11.2	-0.34762	2.73E-12	4.87E-11
C20ORF27	20p13	-0.34758	2.74E-12	4.89E-11
ZNF619	3p22.1	0.347404	2.82E-12	5.02E-11
PIN4P1	15q15.3	-0.34735	2.84E-12	5.06E-11
TLR5	1q41	0.347336	2.85E-12	5.07E-11
UACA	15q23	0.347272	2.88E-12	5.11E-11
KIAA1109	4q27	0.347261	2.88E-12	5.12E-11
CDC42BPA	1q42.13	0.34705	2.98E-12	5.28E-11
PFDN5	12q13.13	-0.34704	2.98E-12	5.28E-11
H2AFX	11q23.3	-0.347	3.00E-12	5.31E-11
IVNS1ABP	1q25.3	0.346966	3.01E-12	5.33E-11
C19ORF25	19p13.3	-0.34693	3.03E-12	5.36E-11
ZFPL1	11q13.1	-0.34674	3.12E-12	5.51E-11
TOP1MT	8q24.3	-0.34672	3.13E-12	5.52E-11
NOC4L	12q24.33	-0.34663	3.17E-12	5.59E-11
CNPY3	6p21.1	-0.34663	3.17E-12	5.59E-11
DOP1B	21q22.12	0.3466	3.19E-12	5.61E-11
METTL22	16p13.2	-0.34658	3.19E-12	5.62E-11
MFHAS1	8p23.1	0.34649	3.24E-12	5.69E-11
MINDY1	1q21.3	0.346455	3.26E-12	5.72E-11
CHKB-DT	22q13.33	-0.34631	3.33E-12	5.84E-11
DCUN1D5	11q22.3	-0.34627	3.35E-12	5.87E-11
RAE1	20q13.31	-0.34625	3.36E-12	5.88E-11
NDUFB8	10q24.31	-0.34616	3.41E-12	5.96E-11
DDX28	16q22.1	-0.34611	3.43E-12	6.00E-11
FAAP100	17q25.3	-0.34611	3.44E-12	6.00E-11
ANTXR2	4q21.21	0.346092	3.44E-12	6.01E-11
SNRK	3p22.1	0.346034	3.47E-12	6.05E-11
PPP4R3A	14q32.12	0.346019	3.48E-12	6.06E-11
NUP85	17q25.1	-0.34595	3.52E-12	6.12E-11
UTRN	6q24.2	0.345856	3.57E-12	6.20E-11
CLTC	17q23.1	0.345669	3.67E-12	6.38E-11
TPRKB	2p13.1	-0.34564	3.69E-12	6.40E-11
OSBPL8	12q21.2	0.345577	3.72E-12	6.46E-11
WDR44	Xq24	0.345467	3.79E-12	6.56E-11
CWC15	11q21	-0.34543	3.81E-12	6.59E-11

RP9	7p14.3	-0.34519	3.95E-12	6.83E-11
HK2	2p12	0.345072	4.02E-12	6.95E-11
FAM160A1	4q31.3	0.344963	4.09E-12	7.06E-11
GLIS3	9p24.2	0.344948	4.10E-12	7.07E-11
PHB	17q21.33	-0.34481	4.18E-12	7.21E-11
EDEM1	3p26.1	0.344756	4.22E-12	7.26E-11
TCF12	15q21.3	0.344687	4.26E-12	7.33E-11
SDE2	1q42.12	0.344653	4.28E-12	7.36E-11
NRIP1	21q11.2-q21.1	0.344527	4.37E-12	7.50E-11
ZNF641	12q13.11	0.344512	4.38E-12	7.51E-11
SNX1	15q22.31	0.344467	4.41E-12	7.55E-11
GAREM1	18q12.1	0.344403	4.45E-12	7.62E-11
TSR3	16p13.3	-0.3443	4.52E-12	7.74E-11
DNAJB14	4q23	0.344203	4.59E-12	7.84E-11
BAD	11q13.1	-0.34418	4.60E-12	7.87E-11
NIPA2	15q11.2	0.344147	4.62E-12	7.90E-11
WDR47	1p13.3	0.343971	4.75E-12	8.10E-11
ZFAS1	20q13.13	-0.34397	4.75E-12	8.10E-11
RGP1	9p13.3	0.343884	4.81E-12	8.19E-11
KMT2E-AS1	7q22.3	-0.34385	4.84E-12	8.23E-11
SLC66A1	1p36.13	-0.34375	4.91E-12	8.35E-11
ENKD1	16q22.1	-0.34374	4.92E-12	8.35E-11
SEC24B	4q25	0.343718	4.93E-12	8.37E-11
TMEM30B	14q23.1	0.343686	4.96E-12	8.41E-11
DIABLO	12q24.31	-0.34349	5.10E-12	8.65E-11
APAF1	12q23.1	0.343402	5.17E-12	8.76E-11
MAP4K5	14q22.1	0.343288	5.26E-12	8.90E-11
RBM42	19q13.12	-0.34328	5.27E-12	8.91E-11
CTCF	16q22.1	0.343242	5.30E-12	8.95E-11
SCARNA2	1p13.3	-0.34322	5.32E-12	8.97E-11
ZNF674-AS1	Xp11.3	-0.34315	5.37E-12	9.06E-11
TNFRSF25	1p36.31	-0.34311	5.40E-12	9.10E-11
FGD6	12q22	0.343106	5.41E-12	9.11E-11
RPL35A	3q29	-0.34309	5.42E-12	9.12E-11
ZNF236	18q23	0.343063	5.45E-12	9.15E-11
POLR3K	16p13.3	-0.34302	5.48E-12	9.20E-11
DAGLB	7p22.1	-0.34298	5.52E-12	9.25E-11
GLUL	1q25.3	0.342934	5.55E-12	9.31E-11
INTS11	1p36.33	-0.34288	5.59E-12	9.37E-11
NCKAP1	2q32.1	0.3428	5.67E-12	9.48E-11
PAK2	3q29	0.34271	5.74E-12	9.60E-11
MCRS1	12q13.12	-0.34261	5.83E-12	9.73E-11
ARHGEF12	11q23.3	0.342429	5.99E-12	1.00E-10
MITD1	2q11.2	-0.34242	6.00E-12	1.00E-10
PTRH1	9q34.11	-0.34232	6.09E-12	1.02E-10
TACC1	8p11.22	0.342307	6.10E-12	1.02E-10
RPS15	19p13.3	-0.34228	6.13E-12	1.02E-10
CMSS1	3q12.1	-0.34222	6.18E-12	1.03E-10
RPA3	7p21.3	-0.34221	6.19E-12	1.03E-10
BLZF1	1q24.2	0.342159	6.24E-12	1.04E-10
CREBBP	16p13.3	0.342137	6.26E-12	1.04E-10
C4ORF48	4p16.3	-0.34204	6.35E-12	1.05E-10
CRYGS	3q27.3	-0.34193	6.46E-12	1.07E-10
SSH2	17q11.2	0.34192	6.47E-12	1.07E-10
ZC3HAV1	7q34	0.341896	6.49E-12	1.07E-10
RNF145	5q33.3	0.341882	6.50E-12	1.07E-10
SNRNP70	19q13.33	-0.34183	6.55E-12	1.08E-10
AP1S1	7q22.1	-0.34182	6.56E-12	1.08E-10



SMAD1	4q31.21	0.341733	6.65E-12	1.10E-10
BCAP31	Xq28	-0.3417	6.69E-12	1.10E-10
ARRDC1	9q34.3	-0.34165	6.74E-12	1.11E-10
APC	5q22.2	0.341627	6.76E-12	1.11E-10
ATRAID	2p23.3	-0.34149	6.89E-12	1.13E-10
TNRC6B	22q13.1	0.341254	7.14E-12	1.17E-10
ATAD3A	1p36.33	-0.34112	7.29E-12	1.19E-10
ZGPAT	20q13.33	-0.34109	7.32E-12	1.20E-10
ZNF644	1p22.2	0.340973	7.45E-12	1.22E-10
RC3H2	9q33.2	0.340914	7.52E-12	1.23E-10
ICK	6p12.1	0.340796	7.65E-12	1.25E-10
LSM5	7p14.3	-0.34071	7.75E-12	1.27E-10
CPNE1	20q11.22	-0.3407	7.77E-12	1.27E-10
HELZ	17q24.2	0.340678	7.79E-12	1.27E-10
ARFIP2	11p15.4	-0.34064	7.83E-12	1.28E-10
NELFCD	20q13.32	-0.34063	7.85E-12	1.28E-10
MPG	16p13.3	-0.34049	8.01E-12	1.30E-10
UQCRCQ	5q31.1	-0.34044	8.07E-12	1.31E-10
CCNL2	1p36.33	-0.34041	8.10E-12	1.31E-10
IMMP2L	7q31.1	-0.3404	8.12E-12	1.32E-10
SF3B6	2p23.3	-0.34025	8.30E-12	1.34E-10
RAB11A	15q22.31	0.340182	8.38E-12	1.36E-10
TCAF1	7q35	0.340085	8.51E-12	1.38E-10
PLEKHG1	6q25.1	0.34005	8.55E-12	1.38E-10
PPP1R15B	1q32.1	0.339849	8.81E-12	1.42E-10
PTRH2	17q23.1	-0.33979	8.89E-12	1.43E-10
ZNF692	1q44	-0.33975	8.94E-12	1.44E-10
FAM86C1	11q13.4	-0.33969	9.03E-12	1.45E-10
FAM168A	11q13.4	0.339552	9.21E-12	1.48E-10
EOGT	3p14.1	0.339466	9.33E-12	1.50E-10
SASH1	6q24.3-q25.1	0.339196	9.71E-12	1.56E-10
MRPS5	2q11.1	-0.33916	9.76E-12	1.57E-10
PPM1A	14q23.1	0.339108	9.84E-12	1.58E-10
PAWR	12q21.2	0.339107	9.84E-12	1.58E-10
UNC119	17q11.2	-0.33909	9.86E-12	1.58E-10
MAPKAPK5-AS1	12q24.12	-0.33904	9.94E-12	1.59E-10
GPX1	3p21.31	-0.33895	1.01E-11	1.61E-10
RPL29	3p21.2	-0.33893	1.01E-11	1.61E-10
PIK3CG	7q22.3	0.33892	1.01E-11	1.62E-10
MCUR1	6p23	-0.3388	1.03E-11	1.64E-10
AGTRAP	1p36.22	-0.33873	1.04E-11	1.66E-10
PSD3	8p22	0.338694	1.05E-11	1.67E-10
DFFB	1p36.32	-0.33861	1.06E-11	1.69E-10
TCFL5	20q13.33	-0.33859	1.06E-11	1.69E-10
BABAM1	19p13.11	-0.33858	1.06E-11	1.69E-10
ALKBH7	19p13.3	-0.33851	1.07E-11	1.71E-10
GALNT10	5q33.2	0.338359	1.10E-11	1.74E-10
RPIA	2p11.2	-0.33835	1.10E-11	1.74E-10
RPUSD4	11q24.2	-0.33826	1.12E-11	1.77E-10
RAPH1	2q33.2	0.338233	1.12E-11	1.77E-10
EEF1G	11q12.3	-0.33822	1.12E-11	1.77E-10
CYC1	8q24.3	-0.33805	1.15E-11	1.82E-10
BAZ1A	14q13.1-q13.2	0.338041	1.15E-11	1.82E-10
FASTK	7q36.1	-0.33796	1.17E-11	1.84E-10
TNFSF15	9q32	0.337873	1.18E-11	1.86E-10
UNC5C	4q22.3	0.337842	1.19E-11	1.87E-10
PRPF8	17p13.3	0.337823	1.19E-11	1.87E-10
MACF1	1p34.3	0.337816	1.19E-11	1.87E-10

WASH7P	1p36.33	-0.33781	1.19E-11	1.87E-10
RNASEH2B	13q14.3	-0.33775	1.20E-11	1.89E-10
SLC52A2	8q24.3	-0.33769	1.21E-11	1.91E-10
TM9SF3	10q24.1	0.337319	1.28E-11	2.01E-10
SIPA1L2	1q42.2	0.337218	1.30E-11	2.04E-10
SVIL	10p11.23	0.337207	1.30E-11	2.04E-10
TSPYL1	6q22.1	0.337142	1.32E-11	2.06E-10
NME2P1	12q24.23	-0.33706	1.33E-11	2.08E-10
LAMC1	1q25.3	0.337018	1.34E-11	2.09E-10
C1ORF122	1p34.3	-0.33696	1.35E-11	2.11E-10
EIF3F	11p15.4	-0.33692	1.36E-11	2.12E-10
DUSP15	20q11.21	-0.33689	1.37E-11	2.13E-10
ITFG1	16q12.1	0.33688	1.37E-11	2.13E-10
NT5C	17q25.1	-0.33664	1.42E-11	2.21E-10
DUS3L	19p13.3	-0.33661	1.42E-11	2.21E-10
GNA14	9q21.2	0.336599	1.43E-11	2.21E-10
TOMM5	9p13.2	-0.33656	1.43E-11	2.22E-10
FOXP1	3p13	0.336426	1.46E-11	2.27E-10
VANGL1	1p13.1	0.336334	1.48E-11	2.30E-10
ZSWIM6	5q12.1	0.336278	1.49E-11	2.31E-10
KCND3	1p13.2	0.336273	1.50E-11	2.31E-10
MED23	6q23.2	0.336194	1.51E-11	2.34E-10
DNAJC8	1p35.3	-0.33618	1.52E-11	2.34E-10
TEPSIN	17q25.3	-0.33613	1.53E-11	2.36E-10
CREBRF	5q35.1	0.336019	1.55E-11	2.39E-10
HSPBP1	19q13.42	-0.33594	1.57E-11	2.42E-10
KXD1	19p13.11	-0.3359	1.58E-11	2.43E-10
SNHG8	4q26	-0.33577	1.61E-11	2.48E-10
ENTPD4	8p21.3	0.335571	1.66E-11	2.55E-10
EMC8	16q24.1	-0.33543	1.69E-11	2.60E-10
POLD2	7p13	-0.33535	1.71E-11	2.63E-10
MCL1	1q21.2	0.335331	1.72E-11	2.63E-10
PGM2L1	11q13.4	0.335324	1.72E-11	2.63E-10
AKAP9	7q21.2	0.335301	1.72E-11	2.64E-10
SLC35A3	1p21.2	0.335247	1.74E-11	2.66E-10
DTNBP1	6p22.3	-0.33515	1.76E-11	2.69E-10
KAT6A	8p11.21	0.335149	1.76E-11	2.70E-10
LSM8	7q31.31	-0.33514	1.77E-11	2.70E-10
AKIP1	11p15.4	-0.33507	1.78E-11	2.72E-10
NEMF	14q21.3	0.335052	1.79E-11	2.73E-10
EIF3G	19p13.2	-0.33505	1.79E-11	2.73E-10
ANK3	10q21.2	0.335033	1.79E-11	2.73E-10
MRPS26	20p13	-0.33501	1.80E-11	2.74E-10
KLHDC4	16q24.2	-0.33501	1.80E-11	2.74E-10
LHFPL2	5q14.1	0.334873	1.84E-11	2.79E-10
CTRL	16q22.1	-0.33487	1.84E-11	2.79E-10
MRPL41	9q34.3	-0.3348	1.85E-11	2.81E-10
NEO1	15q24.1	0.334674	1.89E-11	2.86E-10
MEGF9	9q33.2	0.33465	1.90E-11	2.87E-10
ABHD11	7q11.23	-0.33457	1.92E-11	2.90E-10
TEDC2	16p13.3	-0.33427	2.00E-11	3.03E-10
PKP2	12p11.21	0.334099	2.06E-11	3.11E-10
FUNDC2	Xq28	-0.33406	2.07E-11	3.12E-10
RFC2	7q11.23	-0.33405	2.07E-11	3.12E-10
MYO5B	18q21.1	0.334048	2.07E-11	3.12E-10
REEP6	19p13.3	-0.33405	2.07E-11	3.12E-10
C19ORF73	19q13.33	-0.33403	2.08E-11	3.13E-10
CDK17	12q23.1	0.333861	2.13E-11	3.20E-10

ARHGAP31	3q13.32-q13.33	0.333828	2.14E-11	3.21E-10
DGAT2	11q13.5	-0.33373	2.17E-11	3.26E-10
MRPL52	14q11.2	-0.33361	2.21E-11	3.31E-10
LYSMD3	5q14.3	0.333589	2.21E-11	3.32E-10
PPP4R2	3p13	0.333376	2.28E-11	3.42E-10
DOCK8	9p24.3	0.333162	2.36E-11	3.53E-10
ROR1	1p31.3	0.333099	2.38E-11	3.56E-10
DNAJA3	16p13.3	-0.3331	2.38E-11	3.56E-10
LEPROT	1p31.3	0.333036	2.40E-11	3.59E-10
RRP7A	22q13.2	-0.33299	2.41E-11	3.60E-10
NME3	16p13.3	-0.33299	2.42E-11	3.61E-10
MFAP1	15q15.3	0.332959	2.43E-11	3.62E-10
NOC2L	1p36.33	-0.33284	2.47E-11	3.68E-10
PDE4DIP	1q21.2	0.332836	2.47E-11	3.68E-10
COX7B	Xq21.1	-0.33273	2.51E-11	3.73E-10
PGP	16p13.3	-0.3327	2.52E-11	3.74E-10
CROCCP2	1p36.13	-0.33249	2.60E-11	3.86E-10
HK1	10q22.1	0.332482	2.60E-11	3.86E-10
SEPTIN11	4q21.1	0.332437	2.62E-11	3.88E-10
SSU72	1p36.33	-0.33242	2.62E-11	3.89E-10
MAP2K5	15q23	0.332399	2.63E-11	3.90E-10
MYBL2	20q13.12	-0.33226	2.68E-11	3.97E-10
RPL39	Xq24	-0.33219	2.71E-11	4.01E-10
ELK3	12q23.1	0.33216	2.72E-11	4.03E-10
PISD	22q12.2	-0.33196	2.81E-11	4.14E-10
CHSY1	15q26.3	0.331948	2.81E-11	4.14E-10
PRPF31	19q13.42	-0.33195	2.81E-11	4.14E-10
DNAJA4	15q25.1	0.3319	2.83E-11	4.17E-10
GSK3B	3q13.33	0.33189	2.83E-11	4.17E-10
FBXL6	8q24.3	-0.33188	2.84E-11	4.17E-10
TUFM	16p11.2	-0.33185	2.85E-11	4.19E-10
KYAT1	9q34.11	-0.33183	2.86E-11	4.20E-10
TMEM126A	11q14.1	-0.33179	2.87E-11	4.22E-10
WIPF2	17q21.2	0.331701	2.91E-11	4.27E-10
RHEBL1	12q13.12	-0.33165	2.93E-11	4.30E-10
ANKRD13B	17q11.2	-0.33162	2.94E-11	4.31E-10
ATP5F1D	19p13.3	-0.33158	2.96E-11	4.34E-10
NIPA1	15q11.2	0.331561	2.97E-11	4.35E-10
TBC1D7	6p24.1	-0.33152	2.99E-11	4.37E-10
CHCHD7	8q12.1	-0.33137	3.05E-11	4.46E-10
CNST	1q44	0.331273	3.10E-11	4.52E-10
GEMIN7	19q13.32	-0.33125	3.10E-11	4.53E-10
MEN1	11q13.1	-0.33107	3.19E-11	4.65E-10
MFSD2B	2p23.3	-0.33103	3.21E-11	4.67E-10
CCDC189	16p11.2	-0.3309	3.27E-11	4.75E-10
GPR143	Xp22.2	-0.33083	3.30E-11	4.80E-10
ATF4	22q13.1	-0.33075	3.34E-11	4.86E-10
SNHG20	17q25.2	-0.33069	3.37E-11	4.89E-10
FAM3A	Xq28	-0.33066	3.38E-11	4.91E-10
DHODH	16q22.2	-0.33046	3.48E-11	5.05E-10
WAPL	10q23.2	0.330324	3.55E-11	5.14E-10
OIP5-AS1	15q15.1	0.330225	3.60E-11	5.21E-10
LTO1	11q13.3	-0.33011	3.66E-11	5.30E-10
ADAR	1q21.3	0.330092	3.67E-11	5.31E-10
TELO2	16p13.3	-0.32994	3.75E-11	5.42E-10
EIF2AK4	15q15.1	0.329907	3.77E-11	5.44E-10
DHX34	19q13.32	-0.32985	3.80E-11	5.48E-10
DGCR6	22q11.21 22q11	-0.32984	3.80E-11	5.48E-10

MICOS10	1p36.13	-0.32984	3.80E-11	5.48E-10
FBXW11	5q35.1	0.329669	3.90E-11	5.61E-10
DOCK5	8p21.2	0.329638	3.92E-11	5.64E-10
ACTN1	14q24.1 14q22-q24	0.32963	3.92E-11	5.64E-10
CEBPB	20q13.13	-0.32958	3.95E-11	5.67E-10
BCL2L12	19q13.33	-0.32957	3.96E-11	5.68E-10
RPP40	6p25.1	-0.32954	3.97E-11	5.70E-10
RALGAPA2	20p11.23	0.329479	4.01E-11	5.75E-10
SF3A1	22q12.2	0.329442	4.03E-11	5.77E-10
B9D1	17p11.2	-0.32941	4.04E-11	5.79E-10
RPL26L1	5q35.1	-0.32936	4.08E-11	5.83E-10
ZNF280D	15q21.3	0.329134	4.21E-11	6.02E-10
SERINC1	6q22.31	0.329098	4.23E-11	6.05E-10
FUBP1	1p31.1	0.329039	4.27E-11	6.09E-10
ATXN7	3p14.1	0.32901	4.29E-11	6.11E-10
YIPF5	5q31.3	0.328995	4.30E-11	6.12E-10
TMEM186	16p13.2	-0.32899	4.30E-11	6.12E-10
SLMAP	3p14.3	0.328909	4.35E-11	6.19E-10
ZBTB1	14q23.3	0.328742	4.45E-11	6.33E-10
RFC4	3q27.3	-0.32871	4.47E-11	6.35E-10
MGA	15q15.1	0.328708	4.48E-11	6.35E-10
NEK7	1q31.3	0.328708	4.48E-11	6.35E-10
TNNC2	20q13.12	-0.32867	4.50E-11	6.38E-10
TUBE1	6q21	-0.32866	4.51E-11	6.39E-10
STS	Xp22.31	0.328582	4.56E-11	6.45E-10
PPP1R16A	8q24.3	-0.32855	4.58E-11	6.48E-10
RAB5IF	20q11.23	-0.32842	4.66E-11	6.59E-10
HINFP	11q23.3	-0.32834	4.72E-11	6.66E-10
SSR4	Xq28	-0.3283	4.74E-11	6.70E-10
TRAP1	16p13.3	-0.32828	4.76E-11	6.71E-10
TPM1	15q22.2	0.328259	4.77E-11	6.73E-10
FOXN3	14q31.3-q32.11	0.328232	4.79E-11	6.75E-10
CLCN3	4q33	0.327941	4.99E-11	7.03E-10
BAGE2	21p11.2	0.327886	5.03E-11	7.08E-10
GCSH	16q23.2	-0.32787	5.05E-11	7.10E-10
CKS2	9q22.2	-0.32785	5.06E-11	7.11E-10
MAGOH	1p32.3	-0.32784	5.07E-11	7.12E-10
DDI2	1p36.21	0.327722	5.15E-11	7.23E-10
ANKS3	16p13.3	-0.32766	5.20E-11	7.29E-10
AAMP	2q35	-0.3276	5.24E-11	7.35E-10
NDUFAB1	16p12.2	-0.3275	5.32E-11	7.45E-10
JMJD4	1q42.13	-0.32747	5.34E-11	7.48E-10
LAMA3	18q11.2	0.327454	5.35E-11	7.48E-10
PGLS	19p13.11	-0.32744	5.36E-11	7.49E-10
FAM120B	6q27	0.327419	5.38E-11	7.51E-10
CHID1	11p15.5	-0.32735	5.43E-11	7.58E-10
RRP1	21q22.3	-0.32735	5.43E-11	7.58E-10
RUVBL2	19q13.33	-0.32721	5.54E-11	7.73E-10
BAHD1	15q15.1	0.327081	5.64E-11	7.86E-10
R3HDML	20q13.12	-0.32697	5.73E-11	7.98E-10
TMEM134	11q13.2	-0.32696	5.74E-11	7.98E-10
POLR2J4	7p13	-0.32695	5.75E-11	7.98E-10
TUT1	11q12.3	-0.32695	5.75E-11	7.98E-10
ZNF691	1p34.2	-0.32693	5.76E-11	8.00E-10
ZMYND11	10p15.3	0.326912	5.78E-11	8.02E-10
SLIRP	14q24.3	-0.3269	5.79E-11	8.02E-10
PAPSS2	10q23.2-q23.31	0.326868	5.82E-11	8.06E-10
DAG1	3p21.31	0.326852	5.83E-11	8.07E-10

ATXN1L	16q22.2	0.326846	5.83E-11	8.07E-10
DTWD2	5q23.1	0.326827	5.85E-11	8.09E-10
TMCC3	12q22	0.326766	5.90E-11	8.15E-10
THAP7	22q11.21	-0.32673	5.93E-11	8.18E-10
APPBP2	17q23.2	0.32671	5.95E-11	8.20E-10
MIF	22q11.23	-0.32669	5.96E-11	8.22E-10
TUBGCP4	15q15.3	0.326631	6.02E-11	8.29E-10
EIF4EBP3	5q31.3	-0.32653	6.10E-11	8.40E-10
DRG1	22q12.2	-0.32651	6.12E-11	8.42E-10
TTLL9	20q11.21	-0.32645	6.17E-11	8.49E-10
SLC27A5	19q13.43	-0.3264	6.22E-11	8.54E-10
ITGB1	10p11.22	0.326335	6.27E-11	8.61E-10
CRACR2A	12p13.32	0.326293	6.31E-11	8.66E-10
RPL14	3p22.1	-0.32626	6.34E-11	8.69E-10
SNX33	15q24.2	0.326239	6.36E-11	8.71E-10
SPATA2L	16q24.3	-0.32616	6.43E-11	8.80E-10
APRT	16q24.3	-0.32615	6.44E-11	8.81E-10
PTS	11q23.1	-0.32606	6.52E-11	8.91E-10
GLI4	8q24.3	-0.32599	6.59E-11	9.00E-10
RAB14	9q33.2	0.325876	6.69E-11	9.14E-10
FRY	13q13.1	0.325871	6.70E-11	9.14E-10
SWI5	9q34.11	-0.32585	6.72E-11	9.16E-10
SYNJ2BP	14q24.2	0.32581	6.76E-11	9.21E-10
RPS2	16p13.3	-0.32577	6.80E-11	9.26E-10
SIRT3	11p15.5	-0.32567	6.89E-11	9.37E-10
BCAS1	20q13.2	0.325611	6.95E-11	9.45E-10
CCDC58	3q21.1	-0.32557	6.99E-11	9.50E-10
ARF6	14q21.3	0.32551	7.05E-11	9.57E-10
RPS6KC1	1q32.3	0.325474	7.09E-11	9.61E-10
NPM3	10q24.32	-0.32531	7.25E-11	9.83E-10
MON1A	3p21.31	-0.32526	7.30E-11	9.90E-10
ATF7IP	12p13.1	0.325251	7.31E-11	9.90E-10
PLXNA2	1q32.2	0.325185	7.38E-11	9.99E-10
RHOT2	16p13.3	-0.3251	7.47E-11	1.01E-09
PTAFR	1p35.3	0.325064	7.51E-11	1.01E-09
MEA1	6p21.1	-0.32492	7.67E-11	1.04E-09
SEC24D	4q26	0.324885	7.70E-11	1.04E-09
PI4KA	22q11.21	0.324851	7.74E-11	1.04E-09
GATAD2B	1q21.3	0.324744	7.85E-11	1.06E-09
DDTL	22q11.23	-0.32473	7.87E-11	1.06E-09
MTCH2	11p11.2	-0.32473	7.87E-11	1.06E-09
APTX	9p21.1	-0.32471	7.89E-11	1.06E-09
ACTR2	2p14	0.324658	7.95E-11	1.07E-09
NDUFA1	Xq24	-0.32454	8.08E-11	1.09E-09
RPL23A	17q11.2	-0.32453	8.10E-11	1.09E-09
MTR	1q43	0.324526	8.10E-11	1.09E-09
FBL	19q13.2	-0.32448	8.15E-11	1.09E-09
GLYCTK	3p21.2	-0.3244	8.25E-11	1.10E-09
STAM2	2q23.3	0.324365	8.29E-11	1.11E-09
RIDA	8q22.2	-0.32432	8.34E-11	1.12E-09
ZMAT3	3q26.32	0.324298	8.36E-11	1.12E-09
CASP7	10q25.3	0.324269	8.40E-11	1.12E-09
WDR4	21q22.3	-0.32425	8.42E-11	1.12E-09
TCP11L2	12q23.3	0.324236	8.44E-11	1.13E-09
ANKRD49	11q21	-0.32419	8.49E-11	1.13E-09
SESTD1	2q31.2	0.324083	8.62E-11	1.15E-09
DDX6	11q23.3	0.324056	8.65E-11	1.15E-09
RPS8	1p34.1	-0.32406	8.65E-11	1.15E-09

ZKSCAN1	7q22.1	0.324036	8.68E-11	1.15E-09
TC2N	14q32.12	0.324007	8.71E-11	1.16E-09
DSN1	20q11.23	-0.324	8.72E-11	1.16E-09
LIN37	19q13.12	-0.32394	8.79E-11	1.17E-09
FAM160B1	10q25.3	0.323739	9.05E-11	1.20E-09
DGAT1	8q24.3	-0.32369	9.12E-11	1.21E-09
CCSER2	10q23.1	0.32362	9.20E-11	1.22E-09
EVI2B	17q11.2	0.323577	9.25E-11	1.23E-09
CCDC130	19p13.13	-0.32356	9.27E-11	1.23E-09
OTUD4	4q31.21	0.323553	9.29E-11	1.23E-09
ARHGAP1	11p11.2	0.323531	9.32E-11	1.23E-09
WASHC4	12q23.3	0.323523	9.33E-11	1.23E-09
ZFYVE9	1p32.3	0.323513	9.34E-11	1.23E-09
KIF13B	8p12	0.323444	9.43E-11	1.24E-09
TP53I13	17q11.2	-0.32344	9.44E-11	1.24E-09
YES1	18p11.32	0.323423	9.46E-11	1.25E-09
SMARCA5	4q31.21	0.323128	9.86E-11	1.30E-09
BIN1	2q14.3	-0.32309	9.91E-11	1.30E-09
CLINT1	5q33.3	0.323059	9.95E-11	1.31E-09
MTF1	1p34.3	0.323016	1.00E-10	1.31E-09
SUV39H1	Xp11.23	-0.32289	1.02E-10	1.34E-09
FAM222A-AS1	12q24.11	-0.32284	1.03E-10	1.35E-09
GALNT1	18q12.2	0.322824	1.03E-10	1.35E-09
RPL31	2q11.2	-0.32282	1.03E-10	1.35E-09
PROCR	20q11.22	-0.3228	1.03E-10	1.35E-09
PUF60	8q24.3	-0.32278	1.03E-10	1.35E-09
ZNF414	19p13.2	-0.32277	1.04E-10	1.36E-09
STOML2	9p13.3	-0.32275	1.04E-10	1.36E-09
E4F1	16p13.3	-0.32273	1.04E-10	1.36E-09
GBE1	3p12.2	0.322653	1.05E-10	1.37E-09
CEMP1	16p13.3	-0.32242	1.09E-10	1.42E-09
SNHG32	6p21.33	-0.32238	1.09E-10	1.43E-09
UGCG	9q31.3	0.32231	1.11E-10	1.44E-09
OGFR	20q13.33	-0.32228	1.11E-10	1.44E-09
ZCCHC17	1p35.2	-0.32212	1.13E-10	1.47E-09
SNX29	16p13.13-p13.12	0.322042	1.15E-10	1.49E-09
NIPBL	5p13.2	0.321993	1.16E-10	1.50E-09
AFAP1L2	10q25.3	0.321951	1.16E-10	1.51E-09
MAP3K9	14q24.2	0.321875	1.17E-10	1.52E-09
SKIL	3q26.2	0.32187	1.18E-10	1.52E-09
DNPH1	6p21.1	-0.32183	1.18E-10	1.53E-09
TAF1D	11q21	-0.32182	1.18E-10	1.53E-09
PRAP1	10q26.3	-0.32169	1.21E-10	1.56E-09
BHLHE41	12p12.1	0.321628	1.22E-10	1.57E-09
MAGI3	1p13.2	0.321605	1.22E-10	1.58E-09
VPS51	11q13.1	-0.32159	1.22E-10	1.58E-09
RSPRY1	16q13	0.321529	1.23E-10	1.59E-09
DCUN1D1	3q26.33	0.32145	1.25E-10	1.61E-09
SLC17A5	6q13	0.321427	1.25E-10	1.61E-09
AAR2	20q11.23	-0.32141	1.25E-10	1.61E-09
SGCB	4q12	0.321349	1.26E-10	1.63E-09
GNPDA1	5q31.3	-0.3213	1.27E-10	1.64E-09
NOL7	6p23	-0.32128	1.28E-10	1.64E-09
SLC39A4	8q24.3	-0.32121	1.29E-10	1.66E-09
PTGES2-AS1	9q34.11	-0.32119	1.29E-10	1.66E-09
MAP2K2	19p13.3	-0.32117	1.29E-10	1.66E-09
MMAB	12q24.11	-0.32113	1.30E-10	1.67E-09
NBPF10	1q21.1	0.321118	1.30E-10	1.67E-09

SAMD9	7q21.2	0.321099	1.31E-10	1.68E-09
FTSJ1	Xp11.23	-0.32108	1.31E-10	1.68E-09
PFDN4	20q13.2	-0.3207	1.38E-10	1.77E-09
RBFOX2	22q12.3	0.320652	1.39E-10	1.78E-09
SNRNP25	16p13.3	-0.32055	1.41E-10	1.80E-09
PLSCR4	3q24	0.320425	1.44E-10	1.83E-09
RTL6	22q13.31	0.320357	1.45E-10	1.85E-09
PPIAL4G	1q21.2	-0.32033	1.46E-10	1.86E-09
KIF1B	1p36.22	0.320299	1.46E-10	1.86E-09
PES1	22q12.2	-0.32026	1.47E-10	1.87E-09
IFT43	14q24.3	-0.32013	1.50E-10	1.90E-09
PTCD1	7q22.1	-0.32006	1.51E-10	1.92E-09
IRS1	2q36.3	0.319928	1.54E-10	1.96E-09
FOXJ2	12p13.31	0.319841	1.56E-10	1.98E-09
LRBA	4q31.3	0.319748	1.58E-10	2.00E-09
LRWD1	7q22.1	-0.31967	1.60E-10	2.02E-09
ENDOG	9q34.11	-0.31962	1.61E-10	2.04E-09
MEF2D	1q22	0.319614	1.61E-10	2.04E-09
ALG5	13q13.3	-0.31952	1.63E-10	2.06E-09
APP	21q21.3	0.319518	1.63E-10	2.06E-09
ORC6	16q11.2	-0.31946	1.64E-10	2.07E-09
TLR6	4p14	0.319458	1.64E-10	2.07E-09
TAF1C	16q24.1	-0.31944	1.65E-10	2.08E-09
TRAK1	3p22.1	0.31939	1.66E-10	2.09E-09
LYRM1	16p12.3	-0.31932	1.67E-10	2.11E-09
ERC1	12p13.33	0.319255	1.69E-10	2.13E-09
ELK4	1q32.1	0.31917	1.71E-10	2.15E-09
SPECC1L	22q11.23	0.319127	1.72E-10	2.16E-09
SERGEF	11p15.1	-0.31908	1.73E-10	2.18E-09
PRKCZ	1p36.33	-0.31906	1.74E-10	2.18E-09
CARD19	9q22.31	-0.31905	1.74E-10	2.18E-09
MLXIP	12q24.31	0.319016	1.75E-10	2.19E-09
RPS11	19q13.33	-0.31899	1.75E-10	2.20E-09
WAC	10p12.1 10p12.1-p11.2	0.318976	1.76E-10	2.20E-09
ISOC2	19q13.42	-0.31897	1.76E-10	2.20E-09
SLC8A1	2p22.1	0.318935	1.77E-10	2.21E-09
MTMR3	22q12.2	0.318825	1.79E-10	2.24E-09
MUTYH	1p34.1	-0.31872	1.82E-10	2.27E-09
TMEM42	3p21.31	-0.31862	1.84E-10	2.31E-09
POLR3H	22q13.2	-0.31861	1.85E-10	2.31E-09
DAPK1	9q21.33	0.318601	1.85E-10	2.31E-09
CGGBP1	3p11.1	0.318584	1.85E-10	2.31E-09
TVP23B	17p11.2	0.318562	1.86E-10	2.32E-09
RAI1	17p11.2	0.318488	1.88E-10	2.34E-09
LYPLA2P1	6p21.32	-0.31847	1.88E-10	2.34E-09
XRN1	3q23	0.31846	1.88E-10	2.35E-09
MRPL32	7p14.1	-0.31845	1.89E-10	2.35E-09
TKT	3p21.1	-0.31842	1.89E-10	2.36E-09
ZNF76	6p21.31	-0.31839	1.90E-10	2.37E-09
RPL32	3p25.2	-0.31823	1.95E-10	2.42E-09
LOC256880	4q23	-0.31822	1.95E-10	2.42E-09
FER1L6	8q24.13	0.318193	1.96E-10	2.42E-09
TXNDC12	1p32.3	-0.31818	1.96E-10	2.43E-09
DPM1	20q13.13	-0.31815	1.97E-10	2.44E-09
COMMD9	11p13	-0.31813	1.97E-10	2.44E-09
ZNF524	19q13.42	-0.31811	1.98E-10	2.45E-09
ETS1	11q24.3	0.318065	1.99E-10	2.46E-09
RPF2	6q21	-0.31807	1.99E-10	2.46E-09

ETV3L	1q23.1	0.318002	2.01E-10	2.48E-09
BSCL2	11q12.3	-0.318	2.01E-10	2.48E-09
BRI3	7q21.3	-0.31798	2.01E-10	2.48E-09
BRPF3	6p21.31	0.317867	2.04E-10	2.52E-09
TNPO1	5q13.2	0.317738	2.08E-10	2.56E-09
CLIC5	6p21.1	0.317685	2.10E-10	2.58E-09
ATF2	2q31.1	0.317642	2.11E-10	2.59E-09
RBM47	4p14	0.317617	2.12E-10	2.60E-09
RAB5A	3p24.3	0.317511	2.15E-10	2.64E-09
TPD52L2	20q13.33	-0.31749	2.15E-10	2.64E-09
ARPC5L	9q33.3	-0.31716	2.25E-10	2.76E-09
TTC28-AS1	22q12.1	-0.31716	2.25E-10	2.76E-09
SLC16A7	12q14.1	0.317128	2.26E-10	2.77E-09
TOB2	22q13.2	0.317114	2.27E-10	2.78E-09
SPACA3	17q11.2	-0.31711	2.27E-10	2.78E-09
PGAP2	11p15.4	-0.3171	2.27E-10	2.78E-09
CCDC137	17q25.3	-0.31701	2.30E-10	2.81E-09
ZBTB8OS	1p35.1	-0.3168	2.37E-10	2.89E-09
PLCE1	10q23.33	0.316676	2.41E-10	2.94E-09
ATP7A	Xq21.1	0.316654	2.41E-10	2.95E-09
GTF2F2	13q14.12-q14.13	-0.31656	2.45E-10	2.98E-09
RALBP1	18p11.22	0.31649	2.47E-10	3.01E-09
SLCO2A1	3q22.1-q22.2	0.316487	2.47E-10	3.01E-09
ATP5PD	17q25.1	-0.31638	2.51E-10	3.05E-09
CLNS1A	11q14.1	-0.31627	2.55E-10	3.10E-09
POLR2C	16q21	-0.31626	2.55E-10	3.10E-09
VPS13B	8q22.2	0.316235	2.56E-10	3.11E-09
FAM45BP	Xq26.1	0.316222	2.56E-10	3.11E-09
ALYREF	17q25.3	-0.31619	2.57E-10	3.12E-09
TLN1	9p13.3	0.316155	2.59E-10	3.14E-09
KRTCAP2	1q22	-0.3161	2.60E-10	3.16E-09
STAT3	17q21.2	0.316062	2.62E-10	3.17E-09
HCFC2	12q23.3	0.316046	2.62E-10	3.18E-09
KIAA1217	10p12.2-p12.1	0.316044	2.62E-10	3.18E-09
DEXI	16p13.13	-0.31596	2.65E-10	3.21E-09
TEX264	3p21.2	-0.31596	2.66E-10	3.21E-09
RFT1	3p21.1	-0.31588	2.68E-10	3.24E-09
EXOSC3	9p13.2	-0.31584	2.70E-10	3.26E-09
UAP1	1q23.3	0.315812	2.71E-10	3.27E-09
GSTP1	11q13.2	-0.31576	2.73E-10	3.29E-09
MGAT5	2q21.2-q21.3	0.315736	2.74E-10	3.30E-09
MYL6B	12q13.2	-0.31567	2.76E-10	3.33E-09
RCAN3	1p36.11	0.315613	2.78E-10	3.35E-09
C10ORF12	10q24.1	0.315452	2.84E-10	3.42E-09
CDK5RAP3	17q21.32	-0.31537	2.88E-10	3.46E-09
BCL2	18q21.33	0.315364	2.88E-10	3.46E-09
LRRC45	17q25.3	-0.31534	2.89E-10	3.47E-09
TMEM120B	12q24.31	-0.31531	2.90E-10	3.48E-09
THOC6	16p13.3	-0.31528	2.91E-10	3.49E-09
BAG5	14q32.33	0.315196	2.95E-10	3.53E-09
MMUT	6p12.3	0.315179	2.95E-10	3.54E-09
PDCD2	6q27	-0.31516	2.96E-10	3.54E-09
SLC9A2	2q12.1	0.315097	2.99E-10	3.57E-09
EIF4EBP1	8p11.23	-0.31508	2.99E-10	3.58E-09
VPS13D	1p36.22-p36.21	0.314913	3.06E-10	3.66E-09
SPTY2D1	11p15.1	0.314912	3.06E-10	3.66E-09
ZNF366	5q13.2 5q13.2	0.314892	3.07E-10	3.66E-09
SUZ12P1	17q11.2	-0.31479	3.11E-10	3.71E-09



POP5	12q24.31	-0.31475	3.13E-10	3.73E-09
BID	22q11.21	-0.31475	3.13E-10	3.73E-09
MED4	13q14.2	-0.31474	3.13E-10	3.73E-09
HEMK1	3p21.31	-0.31467	3.16E-10	3.76E-09
DCAF13	8q22.3	-0.31466	3.17E-10	3.77E-09
TCTE3	6q27	-0.31451	3.23E-10	3.84E-09
GNE	9p13.3	0.314434	3.27E-10	3.88E-09
GIT1	17q11.2	-0.31442	3.27E-10	3.89E-09
ETFB	19q13.41	-0.3144	3.28E-10	3.89E-09
ERMARD	6q27	-0.31432	3.32E-10	3.93E-09
IMP4	2q21.1	-0.31428	3.34E-10	3.95E-09
MRPL40	22q11.21	-0.31426	3.34E-10	3.96E-09
SHARPIN	8q24.3	-0.31425	3.35E-10	3.96E-09
MZT2B	2q21.1	-0.31425	3.35E-10	3.96E-09
FADS3	11q12.2	-0.31419	3.38E-10	3.99E-09
RHOD	11q13.2	-0.3141	3.42E-10	4.04E-09
ERO1A	14q22.1	0.313862	3.53E-10	4.17E-09
SPATA18	4q12	0.313844	3.54E-10	4.18E-09
MED13	17q23.2	0.313808	3.56E-10	4.19E-09
BBX	3q13.12	0.313773	3.57E-10	4.21E-09
RIOK3	18q11.2	0.313773	3.57E-10	4.21E-09
PRDX4	Xp22.11	-0.31374	3.59E-10	4.22E-09
GALK1	17q25.1	-0.31373	3.60E-10	4.23E-09
KIF9	3p21.31	-0.31372	3.60E-10	4.23E-09
NEU1	6p21.33	-0.31351	3.70E-10	4.35E-09
CHD3	17p13.1	0.313471	3.72E-10	4.37E-09
PALLD	4q32.3	0.313391	3.76E-10	4.42E-09
TLR4	9q33.1	0.313331	3.79E-10	4.45E-09
ARNT2	15q25.1	0.313256	3.83E-10	4.49E-09
GDF9	5q31.1	-0.31325	3.83E-10	4.49E-09
NDUFS7	19p13.3	-0.31324	3.84E-10	4.50E-09
SPATA24	5q31.2	-0.31311	3.91E-10	4.58E-09
EGFL8	6p21.32	-0.3131	3.91E-10	4.58E-09
TRAPPC8	18q12.1	0.313049	3.94E-10	4.61E-09
COX6A1	12q24.31 12q24.2	-0.31296	3.99E-10	4.66E-09
TIMM29	19p13.2	-0.31284	4.05E-10	4.73E-09
TMEM74B	20p13	-0.31282	4.06E-10	4.74E-09
DICER1-AS1	14q32.13	-0.31281	4.07E-10	4.75E-09
MRPL43	10q24.31	-0.3128	4.07E-10	4.75E-09
EDF1	9q34.3	-0.31273	4.11E-10	4.79E-09
FAM122A	9q21.11	0.312688	4.14E-10	4.82E-09
LENG1	19q13.42	-0.31265	4.16E-10	4.84E-09
SCNM1	1q21.3	-0.31265	4.16E-10	4.84E-09
CTNBL1	20q11.23	-0.31262	4.17E-10	4.85E-09
RHPN1	8q24.3	-0.31261	4.18E-10	4.86E-09
DEF8	16q24.3	-0.31227	4.37E-10	5.08E-09
TXNIP	1q21.1	0.312228	4.40E-10	5.11E-09
MRM2	7p22.3	-0.31221	4.41E-10	5.11E-09
TRAM2	6p12.2	0.312131	4.46E-10	5.17E-09
GCDH	19p13.13	-0.31206	4.50E-10	5.21E-09
METTL5	2q31.1	-0.31199	4.55E-10	5.26E-09
HIVEP1	6p24.1	0.311943	4.57E-10	5.29E-09
ARHGAP26	5q31.3	0.31194	4.57E-10	5.29E-09
MFS12	19p13.3	-0.3119	4.60E-10	5.31E-09
CEL2	10p14	0.31185	4.63E-10	5.35E-09
TEAD4	12p13.33	-0.31182	4.65E-10	5.37E-09
PPP4R1	18p11.22	0.311774	4.68E-10	5.40E-09
MGMT	10q26.3	-0.31172	4.71E-10	5.43E-09

URAHP	16q24.3	-0.31161	4.78E-10	5.51E-09
TLR7	Xp22.2	0.311583	4.80E-10	5.53E-09
SLC35E1	19p13.11	0.311546	4.82E-10	5.55E-09
LMTK2	7q21.3	0.311542	4.83E-10	5.55E-09
EEF1AKMT1	13q12.11	-0.31151	4.85E-10	5.57E-09
SLC44A2	19p13.2	0.311434	4.90E-10	5.63E-09
EHHADH	3q27.2	0.311413	4.91E-10	5.64E-09
IPMK	10q21.1	0.311375	4.94E-10	5.66E-09
STRN3	14q12	0.311329	4.97E-10	5.70E-09
SLC39A6	18q12.2	0.311311	4.98E-10	5.71E-09
LOC728743	7q36.1	-0.31128	5.00E-10	5.72E-09
USP34	2p15	0.311276	5.00E-10	5.73E-09
ZNF791	19p13.13	0.311247	5.02E-10	5.75E-09
SMIM1	1p36.32	-0.31123	5.03E-10	5.75E-09
PRR14L	22q12.2	0.311226	5.03E-10	5.76E-09
RPS15A	16p12.3	-0.31122	5.04E-10	5.76E-09
CD180	5q12.3	0.311139	5.09E-10	5.82E-09
KIDINS220	2p25.1	0.311102	5.12E-10	5.84E-09
COP5	8q13.1	-0.31109	5.13E-10	5.85E-09
FZD1	7q21.13	0.310933	5.24E-10	5.97E-09
PARD3B	2q33.3	0.310919	5.25E-10	5.98E-09
CTDSP2	12q14.1	0.310846	5.30E-10	6.03E-09
NCK1	3q22.3	0.310769	5.35E-10	6.09E-09
NIPAL2	8q22.2	0.310747	5.37E-10	6.11E-09
CAMKMT	2p21	-0.3107	5.40E-10	6.14E-09
ATP2C1	3q22.1	0.310646	5.44E-10	6.18E-09
DCAF6	1q24.2	0.310575	5.49E-10	6.24E-09
AGBL5	2p23.3	-0.3105	5.55E-10	6.30E-09
SLC39A3	19p13.3	-0.31048	5.56E-10	6.31E-09
EPS15	1p32.3	0.310451	5.58E-10	6.33E-09
ASMTL-AS1	Xp22.33 and Yp11.2	-0.31042	5.61E-10	6.36E-09
SETBP1	18q12.3	0.310395	5.63E-10	6.37E-09
HEATR5B	2p22.2	0.310334	5.67E-10	6.42E-09
RPS19BP1	22q13.1	-0.31032	5.68E-10	6.42E-09
ELP6	3p21.31	-0.31022	5.76E-10	6.51E-09
LPIN3	20q12	-0.31017	5.80E-10	6.55E-09
TMED10	14q24.3	0.310094	5.86E-10	6.61E-09
CENPS	1p36.22	-0.31008	5.87E-10	6.62E-09
IARS2	1q41	0.310078	5.87E-10	6.62E-09
MIR17HG	13q31.3	-0.31004	5.90E-10	6.65E-09
AP4M1	7q22.1	-0.31002	5.92E-10	6.67E-09
SNX21	20q13.12	-0.30997	5.95E-10	6.70E-09
FIBP	11q13.1	-0.30989	6.02E-10	6.77E-09
UBE2H	7q32.2	0.309843	6.06E-10	6.81E-09
FKBP2	11q13.1	-0.30984	6.06E-10	6.81E-09
TMPPE	3p22.3	0.309794	6.10E-10	6.85E-09
RPL34	4q25	-0.30979	6.10E-10	6.85E-09
C12ORF10	12q13.13	-0.30974	6.14E-10	6.89E-09
NDUFA4	7p21.3	-0.30971	6.17E-10	6.91E-09
OAZ1	19p13.3	-0.3097	6.17E-10	6.91E-09
TMEM199	17q11.2	-0.30967	6.20E-10	6.94E-09
TRANK1	3p22.2	0.309617	6.24E-10	6.99E-09
MRPL34	19p13.11	-0.30958	6.27E-10	7.02E-09
EIF2B3	1p34.1	-0.30956	6.29E-10	7.03E-09
NCOA1	2p23.3	0.309534	6.31E-10	7.05E-09
CUTC	10q24.2	-0.3094	6.42E-10	7.17E-09
GSTO1	10q25.1	-0.3094	6.43E-10	7.18E-09
TKFC	11q12.2	-0.30939	6.43E-10	7.18E-09

RNF169	11q13.4	0.309383	6.44E-10	7.18E-09
RELL2	5q31.3	-0.30938	6.44E-10	7.18E-09
CLPP	19p13.3	-0.30929	6.52E-10	7.26E-09
SNX6	14q13.1	0.309217	6.58E-10	7.33E-09
CCDC34	11p14.1	-0.30919	6.61E-10	7.36E-09
POLR1D	13q12.2	-0.30907	6.71E-10	7.47E-09
PLXNC1	12q22	0.309051	6.73E-10	7.48E-09
NGRN	15q26.1	0.30903	6.75E-10	7.50E-09
SEC61G	7p11.2	-0.30885	6.91E-10	7.67E-09
CDCA3	12p13.31	-0.30875	7.00E-10	7.77E-09
TMEM132B	12q24.31-q24.32	0.308729	7.02E-10	7.79E-09
PARL	3q27.1	-0.30867	7.08E-10	7.85E-09
MRPS7	17q25.1	-0.30861	7.13E-10	7.90E-09
MTG2	20q13.33	-0.30859	7.15E-10	7.92E-09
TP53RK	20q13.12	-0.30859	7.16E-10	7.92E-09
GNAI1	7q21.11	0.308557	7.19E-10	7.95E-09
PLEKHM1	17q21.31	0.308553	7.19E-10	7.95E-09
COPE	19p13.11	-0.30849	7.25E-10	8.00E-09
BRWD3	Xq21.1	0.308447	7.29E-10	8.05E-09
TMEM127	2q11.2	0.308381	7.36E-10	8.12E-09
HERC2	15q13.1	0.308364	7.37E-10	8.13E-09
PIK3C3	18q12.3	0.308361	7.38E-10	8.13E-09
SNX18	5q11.2	0.308295	7.44E-10	8.20E-09
RBMX2	Xq26.1	-0.30821	7.52E-10	8.28E-09
HSF4	16q22.1	-0.30812	7.62E-10	8.38E-09
CDC42SE1	1q21.3	0.307941	7.80E-10	8.58E-09
PKN2	1p22.2	0.307795	7.95E-10	8.74E-09
RPPH1	14q11.2	-0.30775	7.99E-10	8.78E-09
PHLPP1	18q21.33	0.307746	8.00E-10	8.79E-09
SH3GLB2	9q34.11	-0.30771	8.04E-10	8.82E-09
PGGT1B	5q22.3	0.307679	8.07E-10	8.85E-09
DLG5	10q22.3	0.307469	8.30E-10	9.10E-09
ZP3	7q11.23	-0.30746	8.31E-10	9.10E-09
BDP1	5q13.2	0.307419	8.36E-10	9.15E-09
C1RL	12p13.31	0.307394	8.38E-10	9.17E-09
RPS5	19q13.43	-0.30734	8.45E-10	9.24E-09
WRNIP1	6p25.2	-0.3072	8.60E-10	9.40E-09
COX17	3q13.33	-0.30716	8.64E-10	9.44E-09
ASCC3	6q16.3	0.307148	8.66E-10	9.46E-09
RAD54L2	3p21.2	0.307135	8.67E-10	9.47E-09
POMP	13q12.3	-0.30708	8.74E-10	9.53E-09
NEK3	13q14.3	-0.30692	8.92E-10	9.73E-09
SURF1	9q34.2	-0.30691	8.94E-10	9.74E-09
CFAP298	21q22.11	-0.30689	8.96E-10	9.76E-09
EEF2KMT	16p13.3	-0.30687	8.98E-10	9.77E-09
ABCF2	7q36.1	-0.30684	9.02E-10	9.82E-09
POLR2D	2q14.3	-0.30677	9.11E-10	9.90E-09
GALNT5	2q24.1	0.306659	9.24E-10	1.00E-08
MYPOP	19q13.32	-0.30665	9.24E-10	1.00E-08
COASY	17q21.2	-0.30663	9.27E-10	1.01E-08
HEG1	3q21.2	0.306635	9.27E-10	1.01E-08
UNC5B	10q22.1	0.306557	9.36E-10	1.02E-08
SGPP1	14q23.2	0.306474	9.46E-10	1.03E-08
KLHL17	1p36.33	-0.30645	9.49E-10	1.03E-08
TUT7	9q21.33	0.306434	9.51E-10	1.03E-08
RELCH	18q21.33	0.306297	9.69E-10	1.05E-08
CARM1	19p13.2	-0.30628	9.71E-10	1.05E-08
CDADC1	13q14.2	-0.30613	9.91E-10	1.07E-08

LINC01816	2p13.3	-0.30612	9.91E-10	1.07E-08
LITAF	16p13.13	0.306083	9.96E-10	1.08E-08
ZFYVE1	14q24.2	0.306009	1.01E-09	1.09E-08
LGR4	11p14.1	0.305913	1.02E-09	1.10E-08
DVL1	1p36.33	-0.30589	1.02E-09	1.10E-08
CDKL1	14q21.3	0.305866	1.03E-09	1.10E-08
PACSIN2	22q13.2	0.305607	1.06E-09	1.14E-08
ADAT2	6q24.2	-0.30531	1.10E-09	1.19E-08
MRPS25	3p25.1	-0.30531	1.10E-09	1.19E-08
DNAJC30	7q11.23	-0.30512	1.13E-09	1.22E-08
PHAX	5q23.2	0.305107	1.13E-09	1.22E-08
EPC2	2q23.1	0.305059	1.14E-09	1.22E-08
ADPRHL2	1p34.3	-0.30505	1.14E-09	1.22E-08
PHKG2	16p11.2	-0.30505	1.14E-09	1.22E-08
NF1	17q11.2	0.305034	1.14E-09	1.23E-08
KIFC2	8q24.3	-0.305	1.15E-09	1.23E-08
CLASP2	3p22.3	0.304991	1.15E-09	1.23E-08
CPD	17q11.2	0.304914	1.16E-09	1.24E-08
POR	7q11.23	-0.30488	1.17E-09	1.25E-08
CYP2R1	11p15.2	-0.30488	1.17E-09	1.25E-08
CLPB	11q13.4	-0.30487	1.17E-09	1.25E-08
SLC12A9	7q22.1	-0.30482	1.18E-09	1.26E-08
TLR3	4q35.1	0.304794	1.18E-09	1.26E-08
ADSL	22q13.1	-0.30478	1.18E-09	1.26E-08
ADSS	1q44	0.304736	1.19E-09	1.27E-08
GPR137B	1q42.3	0.30459	1.21E-09	1.29E-08
MDH2	7q11.23	-0.30455	1.22E-09	1.30E-08
TPD52L1	6q22.31	-0.30452	1.22E-09	1.30E-08
GTF2H4	6p21.33	-0.30443	1.24E-09	1.32E-08
LRRC8C	1p22.2	0.30443	1.24E-09	1.32E-08
ENPP4	6p21.1	0.304381	1.25E-09	1.32E-08
MICALCL	11p15.3	0.304335	1.25E-09	1.33E-08
AGO4	1p34.3	0.304313	1.26E-09	1.33E-08
NCSTN	1q23.2	0.304231	1.27E-09	1.35E-08
MRPL18	6q25.3	-0.3042	1.28E-09	1.35E-08
CREB3L2	7q33	0.304105	1.29E-09	1.37E-08
FICD	12q23.3	0.303952	1.32E-09	1.40E-08
PAXIP1-AS1	7q36.2	-0.30395	1.32E-09	1.40E-08
RBM27	5q32	0.303931	1.32E-09	1.40E-08
ZBTB7C	18q21.1	0.303869	1.33E-09	1.41E-08
KLHDC10	7q32.2	0.303744	1.35E-09	1.43E-08
ZNF789	7q22.1	-0.30374	1.35E-09	1.43E-08
NDEL1	17p13.1	0.303703	1.36E-09	1.44E-08
TUBGCP5	15q11.2	0.303688	1.36E-09	1.44E-08
CHCHD1	10q22.2	-0.30367	1.37E-09	1.44E-08
SSC4D	7q11.23	-0.30365	1.37E-09	1.45E-08
MRPL47	3q26.33	-0.30359	1.38E-09	1.45E-08
MESD	15q25.1	0.303582	1.38E-09	1.46E-08
SDK2	17q25.1	0.303544	1.39E-09	1.46E-08
TSR2	Xp11.22	-0.30352	1.39E-09	1.47E-08
RHBDD3	22q12.2	-0.30352	1.39E-09	1.47E-08
NOP9	14q12	0.30348	1.40E-09	1.47E-08
ARSJ	4q26	0.303437	1.41E-09	1.48E-08
CMC4	Xq28	-0.3034	1.42E-09	1.49E-08
SQOR	15q21.1	0.303336	1.43E-09	1.50E-08
PSPH	7p11.2	-0.30318	1.46E-09	1.53E-08
RANGRF	17p13.1	-0.30315	1.46E-09	1.53E-08
ARIH2OS	3p21.31	-0.30314	1.46E-09	1.53E-08

ARHGEF2	1q22	0.303131	1.47E-09	1.54E-08
DDX10	11q22.3	-0.30312	1.47E-09	1.54E-08
TRAF4	17q11.2	-0.30303	1.49E-09	1.55E-08
E2F6	2p25.1	-0.30302	1.49E-09	1.56E-08
NTHL1	16p13.3	-0.30294	1.50E-09	1.57E-08
CEMIP2	9q21.13	0.302886	1.51E-09	1.58E-08
DUSP28	2q37.3	-0.30279	1.53E-09	1.60E-08
C16ORF72	16p13.2	0.302724	1.54E-09	1.61E-08
KRBA2	17p13.1	0.302719	1.55E-09	1.61E-08
RPSAP58	19p12	-0.30266	1.56E-09	1.62E-08
ATRX	Xq21.1	0.302659	1.56E-09	1.62E-08
SLC5A6	2p23.3	-0.30266	1.56E-09	1.62E-08
BLOC1S1	12q13.2	-0.30261	1.57E-09	1.63E-08
ENY2	8q23.1	-0.30249	1.59E-09	1.66E-08
MTRF1	13q14.11	-0.30249	1.59E-09	1.66E-08
CD81	11p15.5	-0.30249	1.59E-09	1.66E-08
CASD1	7q21.3	0.302463	1.60E-09	1.66E-08
VEZF1	17q22	0.302456	1.60E-09	1.66E-08
TRIO	5p15.2	0.302368	1.62E-09	1.68E-08
RPL18A	19p13.11	-0.30227	1.64E-09	1.70E-08
MRNIP	5q35.3	-0.30222	1.65E-09	1.71E-08
KLF12	13q22.1	0.302203	1.65E-09	1.71E-08
USP39	2p11.2	-0.30218	1.66E-09	1.72E-08
LUC7L	16p13.3	-0.30217	1.66E-09	1.72E-08
CWF19L1	10q24.31	-0.30208	1.68E-09	1.74E-08
LRMP	12p12.1	0.302062	1.68E-09	1.74E-08
CCDC22	Xp11.23	-0.30206	1.68E-09	1.74E-08
MRPL27	17q21.33	-0.30198	1.70E-09	1.76E-08
MFSD1	3q25.32	0.301982	1.70E-09	1.76E-08
PPARA	22q13.31	0.301963	1.71E-09	1.76E-08
NR2C2	3p25.1	0.301796	1.74E-09	1.80E-08
CREBL2	12p13.1	0.30172	1.76E-09	1.81E-08
TOMM40	19q13.32	-0.30168	1.77E-09	1.82E-08
SETD6	16q21	-0.30151	1.81E-09	1.86E-08
NDUFV1	11q13.2	-0.30146	1.82E-09	1.87E-08
ZNF699	19p13.2	0.30143	1.83E-09	1.88E-08
GVINP1	11p15.4	0.301418	1.83E-09	1.88E-08
TGFBRAP1	2q12.1-q12.2	0.301414	1.83E-09	1.88E-08
FRYL	4p11	0.30141	1.83E-09	1.88E-08
FAM102B	1p13.3	0.301384	1.84E-09	1.89E-08
PTAR1	9q21.12	0.301354	1.84E-09	1.89E-08
NAV1	1q32.1	0.301316	1.85E-09	1.90E-08
UBE2J1	6q15	0.301316	1.85E-09	1.90E-08
DOCK10	2q36.2	0.301307	1.86E-09	1.90E-08
TLR1	4p14	0.301299	1.86E-09	1.90E-08
SLC38A3	3p21.31	-0.30124	1.87E-09	1.92E-08
CARD6	5p13.1	0.301185	1.89E-09	1.93E-08
PSMC3IP	17q21.2	-0.30115	1.89E-09	1.94E-08
GALT	9p13.3	-0.3011	1.91E-09	1.95E-08
HERC3	4q22.1	0.301069	1.91E-09	1.95E-08
RSF1	11q14.1	0.301064	1.92E-09	1.96E-08
D2HGDH	2q37.3	-0.30102	1.93E-09	1.97E-08
SAMD8	10q22.2	0.300936	1.95E-09	1.99E-08
FEM1C	5q22.3	0.300923	1.95E-09	1.99E-08
FAM83G	17p11.2	0.300917	1.95E-09	1.99E-08
RNF144A	2p25.1	0.300909	1.95E-09	1.99E-08
MOB2	11p15.5	-0.30088	1.96E-09	2.00E-08
AIMP2	7p22.1	-0.30079	1.98E-09	2.02E-08

ACBD5	10p12.1	0.300756	1.99E-09	2.03E-08
NPRL3	16p13.3	-0.30068	2.01E-09	2.05E-08
SETD7	4q31.1	0.300512	2.06E-09	2.09E-08
SYNE2	14q23.2	0.300484	2.06E-09	2.09E-08
RASAL2	1q25.2	0.30046	2.07E-09	2.10E-08
LAMB1	7q31.1	0.300451	2.07E-09	2.10E-08
VPS28	8q24.3	-0.30035	2.10E-09	2.13E-08
SESN3	11q21	0.300347	2.10E-09	2.13E-08
ITGA1	5q11.2	0.300263	2.12E-09	2.15E-08
MLF2	12p13.31	-0.3002	2.14E-09	2.17E-08
PRKCA	17q24.2	0.300163	2.15E-09	2.18E-08
USP38	4q31.21	0.300096	2.17E-09	2.19E-08
GNL1	6p21.33	-0.30007	2.18E-09	2.20E-08
ARID1A	1p36.11	0.300055	2.18E-09	2.20E-08
POGZ	1q21.3	0.300002	2.20E-09	2.22E-08
PRR14	16p11.2	-0.29998	2.20E-09	2.22E-08
AGAP3	7q36.1	-0.29997	2.20E-09	2.22E-08
CFAP126	1q23.3	0.299962	2.21E-09	2.22E-08
TYSND1	10q22.1	-0.29995	2.21E-09	2.23E-08
TMEM120A	7q11.23	-0.29995	2.21E-09	2.23E-08
ERCC4	16p13.12	0.299929	2.22E-09	2.23E-08
ZNF562	19p13.2	0.299738	2.27E-09	2.28E-08
ZBTB8A	1p35.1	0.299695	2.28E-09	2.30E-08
SRGAP1	12q14.2	0.299661	2.29E-09	2.31E-08
ATXN1	6p22.3	0.299628	2.30E-09	2.31E-08
ENTPD3	3p22.1	0.2996	2.31E-09	2.32E-08
ARHGAP39	8q24.3	-0.2995	2.34E-09	2.35E-08
SLC2A4RG	20q13.33	-0.29948	2.35E-09	2.35E-08
NCLN	19p13.3	-0.29944	2.36E-09	2.36E-08
TNFRSF12A	16p13.3	-0.29936	2.38E-09	2.39E-08
DDX12P	12p13.31	-0.29921	2.43E-09	2.43E-08
KMT2D	12q13.12	0.299174	2.44E-09	2.44E-08
MST1P2	1p36.13	-0.29916	2.45E-09	2.45E-08
RDM1	17q12	-0.29913	2.46E-09	2.46E-08
ANKRD13C	1p31.1	0.299117	2.46E-09	2.46E-08
PRKACB	1p31.1	0.299022	2.49E-09	2.49E-08
WDFY1	2q36.1	0.298978	2.50E-09	2.50E-08
DST	6p12.1	0.298942	2.52E-09	2.51E-08
AFMID	17q25.3	-0.29893	2.52E-09	2.51E-08
KIF13A	6p22.3	0.298891	2.53E-09	2.52E-08
RPS27A	2p16.1	-0.29887	2.54E-09	2.53E-08
GPATCH3	1p36.11	-0.29881	2.56E-09	2.55E-08
ARHGAP12	10p11.22	0.298803	2.56E-09	2.55E-08
TIPARP	3q25.31	0.298616	2.62E-09	2.61E-08
MAML1	5q35.3	0.29861	2.62E-09	2.61E-08
RRP7BP	22q13.2	-0.2986	2.63E-09	2.61E-08
FAM192A	16q13	-0.29859	2.63E-09	2.61E-08
IQGAP2	5q13.3	0.298541	2.65E-09	2.63E-08
SNRPB	20p13	-0.29854	2.65E-09	2.63E-08
ZNF45	19q13.31	0.298462	2.67E-09	2.65E-08
NUCKS1	1q32.1	0.298459	2.68E-09	2.65E-08
DIS3L	15q22.31	0.298362	2.71E-09	2.68E-08
HSD11B1L	19p13.3	-0.29833	2.72E-09	2.69E-08
C7ORF26	7p22.1	-0.29831	2.73E-09	2.70E-08
ADAM28	8p21.2	0.298216	2.76E-09	2.73E-08
RNASE4	14q11.2	0.298215	2.76E-09	2.73E-08
PRR5-ARHGAP8	22q13.31	-0.29821	2.76E-09	2.73E-08
HDAC8	Xq13.1	-0.29821	2.76E-09	2.73E-08

GMFB	14q22.2	0.298188	2.77E-09	2.73E-08
HES6	2q37.3	-0.29815	2.78E-09	2.75E-08
ROCK2	2p25.1	0.298127	2.79E-09	2.75E-08
GFER	16p13.3	-0.29796	2.85E-09	2.81E-08
SPATA25	20q13.12	-0.29793	2.86E-09	2.82E-08
SULT2A1	19q13.33	-0.2979	2.87E-09	2.83E-08
KTN1	14q22.3	0.297829	2.90E-09	2.85E-08
SPNS1	16p11.2	-0.29781	2.91E-09	2.86E-08
ZNF397	18q12.2	0.297782	2.92E-09	2.87E-08
UBR2	6p21.1	0.297766	2.92E-09	2.87E-08
POGK	1q24.1	0.297742	2.93E-09	2.88E-08
RASSF7	11p15.5	-0.29772	2.94E-09	2.89E-08
HNF1A	12q24.31	-0.29769	2.95E-09	2.90E-08
PRXL2B	1p36.32	-0.2976	2.99E-09	2.93E-08
RNF8	6p21.2	-0.29755	3.00E-09	2.94E-08
KMT2E	7q22.3	0.297528	3.01E-09	2.95E-08
DAZAP1	19p13.3	-0.29741	3.06E-09	3.00E-08
THRAP3	1p34.3	0.297385	3.07E-09	3.00E-08
SNF8	17q21.32	-0.29738	3.07E-09	3.00E-08
NNT	5p12	0.297382	3.07E-09	3.00E-08
RNF166	16q24.2-q24.3	-0.29737	3.07E-09	3.00E-08
PDZD11	Xq13.1	-0.29736	3.08E-09	3.01E-08
FLII	17p11.2	0.297334	3.09E-09	3.02E-08
PRMT1	19q13.33	-0.29726	3.12E-09	3.05E-08
ACYP1	14q24.3	-0.29724	3.12E-09	3.05E-08
MSH5	6p21.33	-0.29716	3.16E-09	3.08E-08
PREX2	8q13.2	0.297156	3.16E-09	3.08E-08
ANAPC7	12q24.11	-0.2971	3.18E-09	3.10E-08
EPOP	17q12	-0.29708	3.19E-09	3.10E-08
GCSAML	1q44	0.297065	3.19E-09	3.11E-08
NR3C2	4q31.23	0.297061	3.20E-09	3.11E-08
GOLGA5	14q32.12	0.29706	3.20E-09	3.11E-08
SMARCA2	9p24.3	0.297026	3.21E-09	3.12E-08
PCNX1	14q24.2	0.297016	3.21E-09	3.12E-08
RPL7A	9q34.2	-0.29699	3.23E-09	3.13E-08
POLDIP2	17q11.2	-0.29698	3.23E-09	3.13E-08
FOSL2	2p23.2	0.296976	3.23E-09	3.14E-08
PCDHGA9	5q31.3	0.296918	3.26E-09	3.16E-08
DPY30	2p22.3	-0.29689	3.27E-09	3.17E-08
CDC37	19p13.2	-0.29687	3.27E-09	3.17E-08
C9ORF43	9q32	-0.29682	3.30E-09	3.19E-08
MTHFD2L	4q13.3	-0.29675	3.32E-09	3.22E-08
MALT1	18q21.32	0.296728	3.33E-09	3.23E-08
TMEM263	12q23.3	0.296711	3.34E-09	3.23E-08
CENPW	6q22.32	-0.29667	3.36E-09	3.25E-08
TMEM179B	11q12.3	-0.29663	3.38E-09	3.26E-08
MRPS28	8q21.13	-0.29655	3.41E-09	3.29E-08
PBX4	19p13.11	-0.29652	3.42E-09	3.30E-08
MRPL10	17q21.32	-0.29647	3.45E-09	3.32E-08
NRBP2	8q24.3	-0.29637	3.49E-09	3.37E-08
KCNA3	1p13.3	0.296358	3.49E-09	3.37E-08
RPS18	6p21.32	-0.2963	3.52E-09	3.39E-08
WASH3P	15q26.3	-0.29626	3.54E-09	3.41E-08
FAM24B	10q26.13	-0.29613	3.60E-09	3.46E-08
IP6K2	3p21.31	-0.29613	3.60E-09	3.46E-08
WDR34	9q34.11	-0.29602	3.65E-09	3.51E-08
SCML1	Xp22.13	-0.29598	3.66E-09	3.52E-08
EVI5	1p22.1	0.295957	3.68E-09	3.53E-08

MYL5	4p16.3	-0.29593	3.69E-09	3.54E-08
COA5	2q11.2	-0.29572	3.79E-09	3.64E-08
C12ORF49	12q24.22	0.295688	3.80E-09	3.65E-08
ZNF205	16p13.3	-0.29561	3.84E-09	3.69E-08
IFNAR1	21q22.11	0.295372	3.96E-09	3.79E-08
CHRM4	11p11.2	0.295235	4.03E-09	3.86E-08
SPDYA	2p23.2	-0.29522	4.03E-09	3.86E-08
MCRIP1	17q25.3	-0.29519	4.05E-09	3.88E-08
TUBA4A	2q35	-0.29517	4.06E-09	3.89E-08
PEBP1	12q24.23	-0.29515	4.07E-09	3.89E-08
PTEN	10q23.31	0.295084	4.11E-09	3.92E-08
MORF4	4q34.1	0.295017	4.14E-09	3.95E-08
DPH2	1p34.1	-0.29499	4.16E-09	3.97E-08
RPSA	3p22.1	-0.2949	4.20E-09	4.01E-08
SLC25A28	10q24.2	-0.29482	4.24E-09	4.04E-08
MCAT	22q13.2	-0.2947	4.31E-09	4.11E-08
WASHC2A	10q11.23	0.294659	4.33E-09	4.13E-08
SMIM14	4p14	0.29444	4.45E-09	4.24E-08
PRKAR1B	7p22.3	-0.29439	4.48E-09	4.26E-08
SPRED2	2p14	0.294355	4.50E-09	4.28E-08
WDR59	16q23.1	-0.29435	4.50E-09	4.28E-08
ACTR3C	7q36.1	-0.2943	4.53E-09	4.30E-08
CENPC	4q13.2	0.294296	4.53E-09	4.31E-08
STARD10	11q13.4	-0.2942	4.59E-09	4.36E-08
WIPI2	7p22.1	-0.29411	4.64E-09	4.40E-08
EDIL3	5q14.3	0.29407	4.66E-09	4.42E-08
LSMEM1	7q31.1	-0.29403	4.69E-09	4.44E-08
RSBN1	1p13.2	0.293977	4.72E-09	4.47E-08
CHCHD5	2q14.1	-0.29386	4.79E-09	4.53E-08
GCSAM	3q13.2	0.293829	4.81E-09	4.55E-08
QRICH1	3p21.31	0.293816	4.81E-09	4.56E-08
SSH1	12q24.11	0.293786	4.83E-09	4.57E-08
RNMT	18p11.21	0.29351	5.00E-09	4.73E-08
RBBP8NL	20q13.33	-0.29345	5.04E-09	4.76E-08
ZC3H7A	16p13.13	0.293448	5.04E-09	4.76E-08
ZNHIT3	17q12	-0.2934	5.07E-09	4.79E-08
CAMTA2	17p13.2	0.293364	5.10E-09	4.81E-08
FYB1	5p13.1	0.293227	5.18E-09	4.89E-08
RAB3B	1p32.3	0.293215	5.19E-09	4.89E-08
TRAF6	11p12	0.293192	5.21E-09	4.91E-08
MST1	3p21.31	-0.29311	5.26E-09	4.95E-08
STYXL1	7q11.23	-0.29309	5.27E-09	4.97E-08
FOXRED1	11q24.2	-0.29299	5.34E-09	5.03E-08
CERS6	2q24.3	0.292893	5.40E-09	5.08E-08
PLA2G6	22q13.1	-0.29285	5.44E-09	5.11E-08
ZDHHC20	13q12.11	0.292805	5.46E-09	5.14E-08
SMPD4	2q21.1	-0.29279	5.48E-09	5.14E-08
TOMM22	22q13.1	-0.29267	5.56E-09	5.22E-08
ATP5MC2	12q13.13	-0.29262	5.59E-09	5.25E-08
MINK1	17p13.2	0.292566	5.63E-09	5.28E-08
TMEM126B	11q14.1	-0.29256	5.63E-09	5.28E-08
UROD	1p34.1	-0.29254	5.65E-09	5.29E-08
GON4L	1q22	0.292509	5.67E-09	5.31E-08
ADNP2	18q23	0.292464	5.70E-09	5.34E-08
ACER3	11q13.5	0.292455	5.71E-09	5.34E-08
TMEM255A	Xq24	0.29245	5.71E-09	5.34E-08
SYNE1	6q25.2	0.292418	5.73E-09	5.36E-08
PAFAH1B2	11q23.3	0.292391	5.75E-09	5.38E-08



RBM10	Xp11.3	-0.29235	5.78E-09	5.40E-08
LRRC14	8q24.3	-0.29231	5.81E-09	5.42E-08
ZNF358	19p13.2	-0.2923	5.82E-09	5.43E-08
MPST	22q12.3	-0.29227	5.84E-09	5.45E-08
GPATCH8	17q21.31	0.292167	5.92E-09	5.52E-08
ARRDC3	5q14.3	0.292152	5.93E-09	5.52E-08
MRPS9	2q12.1	-0.2921	5.97E-09	5.56E-08
ARRDC1-AS1	9q34.3	-0.29203	6.02E-09	5.60E-08
CIC	19q13.2	0.291993	6.05E-09	5.63E-08
CNPY2	12q13.3	-0.29188	6.13E-09	5.70E-08
WDR13	Xp11.23	-0.29186	6.15E-09	5.71E-08
TGFBR2	3p24.1	0.29184	6.16E-09	5.73E-08
POF1B	Xq21.1	0.291836	6.17E-09	5.73E-08
RGPD3	2q12.2	0.29182	6.18E-09	5.74E-08
ATXN7L2	1p13.3	-0.29181	6.18E-09	5.74E-08
RFX3	9p24.2	0.291765	6.22E-09	5.77E-08
TMEM181	6q25.3	0.291748	6.23E-09	5.78E-08
NME6	3p21.31	-0.29172	6.26E-09	5.80E-08
HPGDS	4q22.3	0.29166	6.30E-09	5.84E-08
PUM1	1p35.2	0.291635	6.32E-09	5.85E-08
ZNF252P-AS1	8q24.3	-0.29163	6.32E-09	5.85E-08
TTC32	2p24.1	-0.29161	6.34E-09	5.86E-08
ATP9B	18q23	0.291605	6.35E-09	5.87E-08
SUGP1	19p13.11	-0.2916	6.35E-09	5.87E-08
PMPCB	7q22.1	-0.29157	6.37E-09	5.88E-08
OLA1	2q31.1	-0.29151	6.42E-09	5.93E-08
ANKRD23	2q11.2	-0.29148	6.45E-09	5.95E-08
FAM173A	16p13.3	-0.29139	6.52E-09	6.01E-08
INPP5J	22q12.2	-0.29137	6.53E-09	6.02E-08
GAPT	5q11.2	0.291363	6.54E-09	6.03E-08
RPL37	5p13.1	-0.29127	6.61E-09	6.09E-08
ITGB7	12q13.13	0.291259	6.62E-09	6.10E-08
SS18	18q11.2	0.291166	6.70E-09	6.17E-08
NT5E	6q14.3	0.291127	6.73E-09	6.20E-08
RCAN2	6p12.3	0.291056	6.79E-09	6.25E-08
FAM20B	1q25.2	0.291051	6.80E-09	6.25E-08
ZNF624	17p11.2	0.291025	6.82E-09	6.26E-08
ITGA8	10p13	0.290933	6.90E-09	6.33E-08
IQSEC1	3p25.2-p25.1	0.290933	6.90E-09	6.33E-08
ZDHHC7	16q24.1	0.29091	6.92E-09	6.35E-08
BEND3P3	10q22.3	0.290899	6.93E-09	6.35E-08
C1ORF35	1q42.13	-0.29088	6.95E-09	6.37E-08
DHX35	20q11.23-q12	-0.29086	6.96E-09	6.38E-08
LMAN1	18q21.32	0.290848	6.97E-09	6.38E-08
UPK3BL1	7q22.1	-0.2908	7.01E-09	6.42E-08
WDR20	14q32.31	0.290772	7.04E-09	6.44E-08
FAM177A1	14q13.2	0.290662	7.13E-09	6.52E-08
COX14	12q13.12	-0.29052	7.26E-09	6.63E-08
LINS1	15q26.3	0.290506	7.27E-09	6.64E-08
YME1L1	10p12.1	0.290497	7.28E-09	6.65E-08
USO1	4q21.1	0.290483	7.29E-09	6.66E-08
CYB5B	16q22.1	-0.29042	7.35E-09	6.71E-08
PDE5A	4q26	0.290395	7.37E-09	6.72E-08
MMP24	20q11.22	-0.29038	7.38E-09	6.73E-08
FAM107B	10p13	0.290347	7.42E-09	6.76E-08
PIGN	18q21.33	0.290278	7.48E-09	6.81E-08
MIA2	14q13.2	0.290234	7.52E-09	6.85E-08
MGLL	3q21.3	0.290129	7.62E-09	6.93E-08

PSMD3	17q21.1	-0.28987	7.87E-09	7.16E-08
RIC1	9p24.1	0.289801	7.94E-09	7.21E-08
AKR1C8P	10p15.1	-0.28978	7.95E-09	7.23E-08
PIGB	15q21.3	0.289739	8.00E-09	7.26E-08
ICE2	15q22.2	0.289725	8.01E-09	7.27E-08
MEIS2	15q14	0.28968	8.05E-09	7.31E-08
N4BP1	16q12.1	0.289606	8.13E-09	7.37E-08
SPDYC	11q13.1	-0.28959	8.15E-09	7.39E-08
CHMP4B	20q11.22	-0.28955	8.19E-09	7.42E-08
CGN	1q21.3	0.289477	8.26E-09	7.48E-08
MCM7	7q22.1	-0.28947	8.26E-09	7.48E-08
WWTR1	3q25.1	0.289402	8.34E-09	7.54E-08
SAP18	13q12.11	-0.28938	8.36E-09	7.56E-08
C19ORF48	19q13.33	-0.28931	8.43E-09	7.62E-08
RNF125	18q12.1	0.289236	8.51E-09	7.69E-08
ARHGAP20	11q22.3-q23.1	0.289221	8.52E-09	7.70E-08
LINC00265	7p14.1	-0.28919	8.56E-09	7.73E-08
TMEM259	19p13.3	-0.28918	8.56E-09	7.73E-08
ATP2B1	12q21.33	0.289175	8.57E-09	7.73E-08
DUSP23	1q23.2	-0.28915	8.59E-09	7.75E-08
SMAD4	18q21.2	0.289091	8.66E-09	7.81E-08
TUBA1C	12q13.12	-0.28908	8.68E-09	7.82E-08
SMIM26	20p11.23	-0.28907	8.69E-09	7.82E-08
CSGALNACT2	10q11.21	0.28905	8.70E-09	7.84E-08
FAM177B	1q41	0.288973	8.79E-09	7.91E-08
DMAP1	1p34.1	-0.28895	8.82E-09	7.93E-08
MOSPD3	7q22.1	-0.28894	8.82E-09	7.93E-08
ATP6V1A	3q13.31	0.288937	8.83E-09	7.93E-08
TMEM249	8q24.3	-0.28892	8.84E-09	7.94E-08
SIGLEC6	19q13.41	0.288848	8.92E-09	8.01E-08
DIXDC1	11q23.1	0.288815	8.96E-09	8.04E-08
SCN9A	2q24.3	0.288671	9.12E-09	8.18E-08
RPSAP9	9q21.13	-0.28862	9.18E-09	8.23E-08
SNTA1	20q11.21	-0.28856	9.24E-09	8.28E-08
TRIM33	1p13.2	0.288403	9.43E-09	8.44E-08
KCNMA1	10q22.3	0.288363	9.47E-09	8.48E-08
LOC285074	2p11.2	-0.28835	9.49E-09	8.49E-08
LINC00115	1p36.33	-0.28826	9.60E-09	8.58E-08
LDLRAD4	18p11.21	0.288229	9.63E-09	8.61E-08
TOP2B	3p24.2	0.288188	9.68E-09	8.65E-08
SLC30A2	1p36.11	-0.28815	9.72E-09	8.68E-08
TAF1L	9p21.1	0.2881	9.78E-09	8.74E-08
DPM3	1q22	-0.28809	9.80E-09	8.74E-08
AR	Xq12	0.288035	9.86E-09	8.80E-08
KIAA1211	4q12	0.288028	9.87E-09	8.80E-08
RABEP1	17p13.2	0.28799	9.92E-09	8.84E-08
SLC35A5	3q13.2	0.287958	9.96E-09	8.87E-08
PPP3CA	4q24	0.287795	1.02E-08	9.04E-08
WDR5	9q34.2	-0.28778	1.02E-08	9.06E-08
C8ORF44	8q13.1	-0.28775	1.02E-08	9.09E-08
GALNT7	4q34.1	0.287733	1.02E-08	9.10E-08
RSC1A1	1p36.21	0.287685	1.03E-08	9.15E-08
IPO8	12p11.21	0.287628	1.04E-08	9.21E-08
MTUS1	8p22	0.287542	1.05E-08	9.30E-08
ARHGAP11B	15q13.2	0.287537	1.05E-08	9.30E-08
FERMT3	11q13.1	0.287484	1.06E-08	9.36E-08
MIGA2	9q34.11	-0.28746	1.06E-08	9.39E-08
ZNF263	16p13.3	-0.28741	1.07E-08	9.44E-08

TNFSF13	17p13.1	0.287375	1.07E-08	9.48E-08
RUFY2	10q21.3	0.287327	1.08E-08	9.53E-08
MRPL51	12p13.31	-0.28729	1.08E-08	9.56E-08
ITPA	20p13	-0.28728	1.08E-08	9.58E-08
PSMB10	16q22.1	-0.2872	1.09E-08	9.66E-08
AGL	1p21.2	0.287191	1.09E-08	9.67E-08
PMS2P3	7q11.23	-0.28718	1.10E-08	9.68E-08
RAB5B	12q13.2	0.287153	1.10E-08	9.70E-08
GTPBP6	Xp22.33 and Yp11.31	-0.2871	1.11E-08	9.76E-08
MED10	5p15.31	-0.28706	1.11E-08	9.80E-08
FAM104B	Xp11.21	-0.28702	1.12E-08	9.85E-08
ITPKB	1q42.12	0.286925	1.13E-08	9.96E-08
SMAD3	15q22.33	0.286848	1.14E-08	1.01E-07
AP3B1	5q14.1	0.286827	1.14E-08	1.01E-07
ANKRD16	10p15.1	-0.28681	1.15E-08	1.01E-07
ANXA2P2	9p13.3	0.286809	1.15E-08	1.01E-07
MROH1	8q24.3	-0.2868	1.15E-08	1.01E-07
IGF2R	6q25.3	0.286761	1.15E-08	1.01E-07
PLS1	3q23	0.286757	1.15E-08	1.01E-07
C8ORF82	8q24.3	-0.28675	1.15E-08	1.01E-07
TROAP	12q13.12	-0.28669	1.16E-08	1.02E-07
MYO5A	15q21.2	0.286624	1.17E-08	1.03E-07
MNX1	7q36.3	-0.2865	1.19E-08	1.04E-07
CR1	1q32.2	0.286468	1.19E-08	1.05E-07
UBTD2	5q35.1	0.286436	1.20E-08	1.05E-07
UEVLD	11p15.1	0.286374	1.21E-08	1.06E-07
CEP131	17q25.3	-0.28632	1.22E-08	1.07E-07
DDX51	12q24.33	-0.28628	1.22E-08	1.07E-07
SNORA72	8q22.2	-0.28624	1.23E-08	1.07E-07
WDR53	3q29	-0.28622	1.23E-08	1.08E-07
OGG1	3p25.3	-0.28599	1.27E-08	1.11E-07
CDK2AP2	11q13.2	-0.28586	1.29E-08	1.12E-07
GNA11	19p13.3	0.285831	1.29E-08	1.13E-07
RUNX1T1	8q21.3	0.285817	1.29E-08	1.13E-07
RBM19	12q24.13-q24.21	-0.28581	1.29E-08	1.13E-07
NPAT	11q22.3	0.285739	1.31E-08	1.14E-07
MDFIC	7q31.1-q31.2	0.285708	1.31E-08	1.14E-07
ITPRID2	2q31.3	0.285671	1.32E-08	1.15E-07
XYLT1	16p12.3	0.285638	1.32E-08	1.15E-07
PLXDC2	10p12.31	0.285625	1.32E-08	1.15E-07
USP32	17q23.1-q23.2	0.2856	1.33E-08	1.16E-07
MBNL1-AS1	3q25.1	0.285596	1.33E-08	1.16E-07
CFL1	11q13.1	-0.28559	1.33E-08	1.16E-07
TIAM1	21q22.11	0.285527	1.34E-08	1.16E-07
UBE2S	19q13.42	-0.28552	1.34E-08	1.16E-07
TAF5L	1q42.13	0.285435	1.35E-08	1.18E-07
CCDC24	1p34.1	-0.2854	1.36E-08	1.18E-07
CDV3	3q22.1	0.285392	1.36E-08	1.18E-07
SLC25A44	1q22	0.285316	1.37E-08	1.19E-07
SH3RF1	4q32.3-q33	0.285312	1.37E-08	1.19E-07
MOB1A	2p13.1	0.285303	1.38E-08	1.19E-07
SRSF6	20q13.11	-0.28528	1.38E-08	1.20E-07
ACAD9	3q21.3	-0.28527	1.38E-08	1.20E-07
POLK	5q13.3	0.285265	1.38E-08	1.20E-07
GLS2	12q13.3	-0.28526	1.38E-08	1.20E-07
TCF7L2	10q25.2-q25.3	0.285245	1.39E-08	1.20E-07
VAC14	16q22.1-q22.2	-0.28517	1.40E-08	1.21E-07
KLHDC3	6p21.1	-0.28517	1.40E-08	1.21E-07

GLG1	16q23.1	0.285155	1.40E-08	1.21E-07
BNIP3L	8p21.2	0.285075	1.41E-08	1.22E-07
ANO1	11q13.3	0.285031	1.42E-08	1.23E-07
PTTG1	5q33.3	-0.285	1.43E-08	1.23E-07
FAM13B	5q31.2	0.284981	1.43E-08	1.23E-07
YAE1	7p14.1	-0.28497	1.43E-08	1.23E-07
RUNX1	21q22.12	0.28496	1.43E-08	1.24E-07
SRP54	14q13.2	0.284925	1.44E-08	1.24E-07
TMTC3	12q21.32	0.284895	1.45E-08	1.24E-07
LSP1P4	2p11.2	-0.28486	1.45E-08	1.25E-07
DDR2	1q23.3	0.284798	1.46E-08	1.26E-07
NDUFB6	9p21.1	-0.28473	1.48E-08	1.27E-07
CYP2D6	22q13.2	-0.28469	1.48E-08	1.27E-07
ITGA4	2q31.3	0.284674	1.49E-08	1.28E-07
RHBDL2	1p34.3	0.284665	1.49E-08	1.28E-07
HMOX2	16p13.3	-0.28466	1.49E-08	1.28E-07
DNLZ	9q34.3	-0.28464	1.49E-08	1.28E-07
ACOT7	1p36.31	-0.28461	1.50E-08	1.28E-07
HECTD2	10q23.32	0.284608	1.50E-08	1.28E-07
RALGPS2	1q25.2	0.284586	1.50E-08	1.29E-07
TMEM60	7q11.23	-0.28456	1.51E-08	1.29E-07
R3HDM4	19p13.3	-0.28442	1.53E-08	1.31E-07
DSP	6p24.3	0.284326	1.55E-08	1.33E-07
ZNF90	19p12	-0.2843	1.55E-08	1.33E-07
TEAD1	11p15.3	0.284283	1.56E-08	1.33E-07
CCDC6	10q21.2	0.284184	1.58E-08	1.35E-07
WDR45	Xp11.23	-0.28408	1.60E-08	1.36E-07
PRSS3	9p13.3	-0.28405	1.60E-08	1.37E-07
SLITRK6	13q31.1	0.284017	1.61E-08	1.37E-07
NTN1	17p13.1	0.283963	1.62E-08	1.38E-07
RAPGEF2	4q32.1	0.283961	1.62E-08	1.38E-07
ZNF195	11p15.4	-0.28396	1.62E-08	1.38E-07
ANKRD54	22q13.1	-0.28393	1.62E-08	1.38E-07
MPHOSPH6	16q23.3	-0.28391	1.63E-08	1.39E-07
C9ORF129	9q22.31	0.283831	1.64E-08	1.40E-07
ACBD4	17q21.31	-0.28379	1.65E-08	1.41E-07
CORT	1p36.22	-0.28377	1.66E-08	1.41E-07
MRPS31	13q14.11	-0.28373	1.66E-08	1.42E-07
SDR39U1	14q12	-0.28371	1.67E-08	1.42E-07
BRIX1	5p13.2	-0.28371	1.67E-08	1.42E-07
DOCK2	5q35.1	0.283624	1.69E-08	1.43E-07
PRIMA1	14q32.12	0.283606	1.69E-08	1.43E-07
HS3ST3B1	17p12	0.283562	1.70E-08	1.44E-07
WDR77	1p13.2	-0.28349	1.71E-08	1.45E-07
SLC22A11	11q13.1	-0.28339	1.73E-08	1.47E-07
LOC150776	2q21.1	-0.28338	1.74E-08	1.47E-07
ATF1	12q13.12	0.283364	1.74E-08	1.47E-07
SYCE1L	16q23.1	-0.2833	1.75E-08	1.48E-07
DUSP4	8p12	0.283276	1.76E-08	1.49E-07
GTF2IRD1	7q11.23	-0.28323	1.77E-08	1.50E-07
CNOT6L	4q21.1	0.28315	1.78E-08	1.51E-07
NIBAN1	1q25.3	0.283143	1.79E-08	1.51E-07
CD84	1q23.3	0.283121	1.79E-08	1.51E-07
DDX60	4q32.3	0.283107	1.79E-08	1.52E-07
MFF	2q36.3	-0.2831	1.80E-08	1.52E-07
STK10	5q35.1	0.283004	1.82E-08	1.53E-07
C1ORF226	1q23.3	0.282953	1.83E-08	1.54E-07
AGPAT4-IT1	6q26	0.28287	1.85E-08	1.56E-07

B3GALT6	1p36.33	-0.28284	1.85E-08	1.56E-07
PPFIA3	19q13.33	-0.28281	1.86E-08	1.57E-07
PTPRE	10q26.2	0.282779	1.87E-08	1.57E-07
HPSE	4q21.23	0.282769	1.87E-08	1.57E-07
TACO1	17q23.3	-0.28275	1.87E-08	1.58E-07
LAS1L	Xq12	-0.28272	1.88E-08	1.58E-07
CEP85L	6q22.31	0.282717	1.88E-08	1.58E-07
SLIT2	4p15.31	0.282714	1.88E-08	1.58E-07
SLC25A6	Xp22.33 and Yp11.2	-0.28256	1.92E-08	1.61E-07
SLC35B1	17q21.33	-0.28247	1.94E-08	1.63E-07
UBE2I	16p13.3	-0.28245	1.94E-08	1.63E-07
MAD1L1	7p22.3	-0.28243	1.95E-08	1.63E-07
CIDECP1	3p25.3	-0.28242	1.95E-08	1.63E-07
TGDS	13q32.1	-0.28239	1.96E-08	1.64E-07
DPF3	14q24.2	0.282366	1.96E-08	1.64E-07
CTSS	1q21.3	0.282131	2.02E-08	1.69E-07
CTSV	9q22.33	-0.28212	2.02E-08	1.69E-07
NAA30	14q22.3	0.282122	2.02E-08	1.69E-07
CPSF3	2p25.1	-0.28209	2.03E-08	1.70E-07
CTSO	4q32.1	0.282032	2.04E-08	1.71E-07
TRAPPC4	11q23.3	-0.28203	2.04E-08	1.71E-07
PNKD	2q35	-0.282	2.05E-08	1.71E-07
CCM2	7p13	-0.28194	2.06E-08	1.72E-07
CENPH	5q13.2	-0.28191	2.07E-08	1.73E-07
IKZF1	7p12.2	0.281887	2.08E-08	1.73E-07
PRDX5	11q13.1	-0.28188	2.08E-08	1.73E-07
LOC388955	2p15	-0.28183	2.09E-08	1.74E-07
BIRC5	17q25.3	-0.28181	2.10E-08	1.75E-07
KMT2A	11q23.3	0.281782	2.10E-08	1.75E-07
PHC3	3q26.2	0.281768	2.11E-08	1.75E-07
SCAF8	6q25.2	0.281764	2.11E-08	1.75E-07
RBM43	2q23.3	0.281716	2.12E-08	1.76E-07
TRIT1	1p34.2	-0.28171	2.12E-08	1.76E-07
IL16	15q25.1	0.281687	2.13E-08	1.77E-07
ENDOD1	11q21	0.281676	2.13E-08	1.77E-07
STYX	14q22.1	0.281521	2.17E-08	1.80E-07
NIFK	2q14.3	-0.28147	2.18E-08	1.81E-07
PAG1	8q21.13	0.281286	2.23E-08	1.85E-07
CCNH	5q14.3	-0.28124	2.24E-08	1.86E-07
RPL6	12q24.13	-0.28123	2.25E-08	1.86E-07
PKMYT1	16p13.3	-0.2812	2.25E-08	1.87E-07
YPEL2	17q22	0.281167	2.26E-08	1.88E-07
GPC2	7q22.1	-0.28111	2.28E-08	1.89E-07
TEN1	17q25.1	-0.28099	2.31E-08	1.91E-07
EME1	17q21.33	-0.28097	2.32E-08	1.92E-07
UNC45A	15q26.1	0.280862	2.35E-08	1.94E-07
DAPP1	4q23	0.280849	2.35E-08	1.94E-07
BOP1	8q24.3	-0.28081	2.36E-08	1.95E-07
IL1RAP	3q28	0.280771	2.37E-08	1.96E-07
KIAA1328	18q12.2	0.280727	2.39E-08	1.97E-07
HECTD4	12q24.13	0.280619	2.42E-08	1.99E-07
ARHGEF11	1q23.1	0.280572	2.43E-08	2.01E-07
AK2	1p35.1	-0.28054	2.44E-08	2.01E-07
SIK2	11q23.1	0.280515	2.45E-08	2.02E-07
SMC5	9q21.12	0.280498	2.45E-08	2.02E-07
NOC2LP2	2q21.1	-0.28047	2.46E-08	2.03E-07
DIS3L2	2q37.1	-0.28047	2.46E-08	2.03E-07
PHF3	6q12	0.280448	2.47E-08	2.03E-07

SLC29A2	11q13.2	-0.28044	2.47E-08	2.03E-07
THOC7	3p14.1	-0.28041	2.48E-08	2.04E-07
LDLR	19p13.2	0.280381	2.49E-08	2.04E-07
NINJ1	9q22.31	-0.28035	2.49E-08	2.05E-07
MED1	17q12	0.280282	2.52E-08	2.07E-07
SRBD1	2p21	0.280224	2.53E-08	2.08E-07
NUAK1	12q23.3	0.280213	2.54E-08	2.08E-07
C18ORF25	18q21.1	0.280058	2.58E-08	2.12E-07
ARHGEF6	Xq26.3	0.280051	2.59E-08	2.12E-07
RPL22	1p36.31	-0.28003	2.59E-08	2.12E-07
PSEN1	14q24.2	0.27999	2.60E-08	2.13E-07
LIFR	5p13.1	0.279968	2.61E-08	2.14E-07
ATP2A3	17p13.2	0.279866	2.64E-08	2.16E-07
TATDN1	8q24.13	-0.27986	2.65E-08	2.17E-07
ZFYVE26	14q24.1	0.279701	2.70E-08	2.21E-07
FAM83B	6p12.1	0.279685	2.70E-08	2.21E-07
UBE2G1	17p13.2	0.279669	2.71E-08	2.21E-07
SMAD9	13q13.3	0.279637	2.72E-08	2.22E-07
LRRC8B	1p22.2	0.279527	2.75E-08	2.25E-07
KLF8	Xp11.21	0.27946	2.77E-08	2.26E-07
CAMK2D	4q26	0.279362	2.81E-08	2.29E-07
ATAT1	6p21.33	-0.27935	2.81E-08	2.29E-07
GNG12	1p31.3	0.279327	2.82E-08	2.30E-07
PRR19	19q13.2	-0.27931	2.82E-08	2.30E-07
NCAPH2	22q13.33	-0.27926	2.84E-08	2.31E-07
EFCAB10	7q22.3	-0.27926	2.84E-08	2.31E-07
RPS6	9p22.1	-0.27925	2.84E-08	2.31E-07
RRS1	8q13.1	-0.27922	2.85E-08	2.32E-07
DDX24	14q32.12	0.279214	2.86E-08	2.32E-07
PIKFYVE	2q34	0.279135	2.88E-08	2.34E-07
TOP1P2	22q11.23	-0.27914	2.88E-08	2.34E-07
BMP2	20p12.3	0.279093	2.90E-08	2.35E-07
PCP2	19p13.2	-0.27908	2.90E-08	2.36E-07
AFF3	2q11.2	0.279049	2.91E-08	2.36E-07
PITHD1	1p36.11	-0.27899	2.93E-08	2.38E-07
KIAA2026	9p24.1	0.278956	2.94E-08	2.39E-07
GABPB2	1q21.3	0.278948	2.95E-08	2.39E-07
ADAMTS15	11q24.3	0.278897	2.96E-08	2.40E-07
LONRF3	Xq24	0.278797	3.00E-08	2.43E-07
DNAAF5	7p22.3	-0.27879	3.00E-08	2.43E-07
PTDSS1	8q22.1	-0.27871	3.03E-08	2.45E-07
CD320	19p13.2	-0.27869	3.04E-08	2.46E-07
RTF2	20q13.31	-0.27869	3.04E-08	2.46E-07
ZNF776	19q13.43	0.278633	3.06E-08	2.47E-07
BMX	Xp22.2	0.27856	3.09E-08	2.49E-07
NMNAT3	3q23	-0.27852	3.10E-08	2.51E-07
TXN	9q31.3	-0.27851	3.10E-08	2.51E-07
TMEM189	20q13.13	-0.27847	3.12E-08	2.52E-07
ALOX5	10q11.21	0.278367	3.16E-08	2.55E-07
NSMF	9q34.3	-0.27835	3.16E-08	2.55E-07
NDUFS5	1p34.3	-0.27828	3.19E-08	2.57E-07
DBF4B	17q21.31 17q21	-0.27828	3.19E-08	2.57E-07
ZNF573	19q13.12	0.278123	3.25E-08	2.62E-07
STIP1	11q13.1	-0.2781	3.26E-08	2.62E-07
LINC00339	1p36.12	-0.27805	3.28E-08	2.64E-07
PTPRC	1q31.3-q32.1	0.278032	3.28E-08	2.64E-07
STX1A	7q11.23	-0.27799	3.30E-08	2.65E-07
UPF3A	13q34	-0.27788	3.34E-08	2.69E-07

KLF4	9q31.2	0.277822	3.37E-08	2.71E-07
PAAF1	11q13.4	-0.27777	3.39E-08	2.72E-07
SLC35D1	1p31.3	0.277701	3.41E-08	2.74E-07
TMX3	18q22.1	0.277666	3.43E-08	2.75E-07
ERCC6L2	9q22.32	0.277654	3.43E-08	2.75E-07
DNASE1	16p13.3	-0.27762	3.45E-08	2.76E-07
CEP170	1q43	0.27759	3.46E-08	2.77E-07
MRPL22	5q33.2	-0.27758	3.46E-08	2.78E-07
CD28	2q33.2	0.277476	3.51E-08	2.81E-07
CAPN2	1q41	0.27746	3.51E-08	2.81E-07
CMTM6	3p22.3	0.277427	3.53E-08	2.82E-07
P2RY12	3q25.1	0.277369	3.55E-08	2.84E-07
MED30	8q24.11	-0.27733	3.57E-08	2.85E-07
SERPINB8	18q22.1	0.277241	3.60E-08	2.88E-07
DGKA	12q13.2	0.277185	3.63E-08	2.90E-07
JAGN1	3p25.3	-0.27715	3.64E-08	2.91E-07
DNAJC2	7q22.1	-0.27712	3.65E-08	2.92E-07
SH2B1	16p11.2	-0.27712	3.66E-08	2.92E-07
PDZD8	10q25.3-q26.11	0.277091	3.67E-08	2.93E-07
RGS13	1q31.2	0.277071	3.68E-08	2.93E-07
GSTK1	7q34	-0.27702	3.70E-08	2.95E-07
ZNF436-AS1	1p36.12	-0.27701	3.70E-08	2.95E-07
FBXL15	10q24.32	-0.27699	3.71E-08	2.96E-07
GMEB2	20q13.33	-0.27694	3.74E-08	2.97E-07
U2AF1	21q22.3	-0.27692	3.74E-08	2.98E-07
MPZL1	1q24.2	0.276914	3.75E-08	2.98E-07
ABCA11P	4p16.3	-0.27689	3.75E-08	2.99E-07
PRDM1	6q21	0.276883	3.76E-08	2.99E-07
GFPT1	2p13.3	0.276702	3.84E-08	3.05E-07
EIF4E3	3p13	0.276595	3.89E-08	3.09E-07
PRPF40B	12q13.12	-0.27659	3.89E-08	3.09E-07
TAS2R20	12p13.2	-0.27659	3.89E-08	3.09E-07
TAGAP	6q25.3	0.276566	3.90E-08	3.10E-07
KCTD1	18q11.2	0.276531	3.92E-08	3.11E-07
WDR18	19p13.3	-0.27652	3.92E-08	3.11E-07
TNFSF8	9q32-q33.1	0.276515	3.92E-08	3.11E-07
MCTS1	Xq24	-0.2765	3.93E-08	3.12E-07
RPS14	5q33.1	-0.27647	3.94E-08	3.12E-07
ABI1	10p12.1	0.27637	3.99E-08	3.16E-07
SYNJ2	6q25.3	0.276344	4.00E-08	3.17E-07
HSBP1	16q23.3	-0.27634	4.01E-08	3.17E-07
RC3H1	1q25.1	0.276237	4.05E-08	3.21E-07
SFMBT2	10p14	0.276139	4.10E-08	3.24E-07
ABHD17A	19p13.3	-0.27612	4.11E-08	3.25E-07
NHSL2	Xq13.1	0.27591	4.21E-08	3.33E-07
MRPS16	10q22.2	-0.27584	4.25E-08	3.35E-07
KIF22	16p11.2	-0.27581	4.26E-08	3.36E-07
AUNIP	1p36.11	-0.2758	4.26E-08	3.36E-07
PHKB	16q12.1	0.275787	4.27E-08	3.37E-07
FAM207A	21q22.3	-0.27577	4.28E-08	3.37E-07
FBXO38	5q32	0.275771	4.28E-08	3.37E-07
SLC19A1	21q22.3	-0.27575	4.29E-08	3.38E-07
PMS2P1	7q22.1	-0.27568	4.32E-08	3.40E-07
PTPRJ	11p11.2	0.275681	4.33E-08	3.40E-07
CHMP2A	19q13.43	-0.2756	4.37E-08	3.43E-07
BRICD5	16p13.3	-0.2756	4.37E-08	3.43E-07
CCR4	3p22.3	0.275575	4.38E-08	3.44E-07
COX7A2L	2p21	-0.27557	4.38E-08	3.44E-07

UQCRB	8q22.1	-0.27556	4.39E-08	3.45E-07
CHL1	3p26.3	0.275507	4.42E-08	3.47E-07
ALG8	11q14.1	-0.27536	4.49E-08	3.52E-07
ATP5F1EP2	13q12.2	-0.27529	4.53E-08	3.55E-07
WASH5P	19p13.3	-0.27522	4.57E-08	3.58E-07
TIPARP-AS1	3q25.31	-0.27512	4.62E-08	3.62E-07
PLEKHB2	2q21.1	0.275058	4.65E-08	3.65E-07
PPFIBP1	12p11.23-p11.22	0.275014	4.68E-08	3.66E-07
YBX1	1p34.2	-0.27501	4.68E-08	3.66E-07
TRAPPC11	4q35.1	0.274939	4.72E-08	3.69E-07
GPR34	Xp11.4	0.274921	4.73E-08	3.70E-07
EIF3M	11p13	-0.27491	4.73E-08	3.70E-07
B3GALT5	21q22.2	0.274906	4.74E-08	3.70E-07
YARS	1p35.1	-0.27488	4.75E-08	3.71E-07
FBXO2	1p36.22	-0.27486	4.76E-08	3.72E-07
LINC00634	22q13.2	-0.27482	4.78E-08	3.73E-07
ZMAT5	22q12.2	-0.27479	4.80E-08	3.75E-07
URB1-AS1	21q22.11	-0.27474	4.83E-08	3.77E-07
BOLA3	2p13.1	-0.27474	4.83E-08	3.77E-07
CETN2	Xq28	-0.27474	4.83E-08	3.77E-07
ADGRG6	6q24.2	0.274693	4.85E-08	3.78E-07
GSDMD	8q24.3	-0.27461	4.90E-08	3.82E-07
ZNF26	12q24.33	-0.2746	4.91E-08	3.82E-07
TLDC2	20q11.23	-0.27454	4.94E-08	3.85E-07
RBM39	20q11.22	-0.27453	4.95E-08	3.85E-07
HS1BP3	2p24.1	-0.27447	4.98E-08	3.88E-07
F11R	1q23.3	0.274451	4.99E-08	3.88E-07
ABI3BP	3q12.2	0.27443	5.01E-08	3.89E-07
RNF11	1p32.3	0.27442	5.01E-08	3.89E-07
TLL1	4q32.3	0.274417	5.01E-08	3.89E-07
DHX29	5q11.2	0.27439	5.03E-08	3.90E-07
SERINC5	5q14.1	0.274334	5.06E-08	3.93E-07
SGMS1	10q11.23	0.274322	5.07E-08	3.93E-07
RPS24	10q22.3	-0.27431	5.07E-08	3.93E-07
LOC100272217	9q34.11	-0.27424	5.12E-08	3.97E-07
PEF1	1p35.2	-0.27421	5.13E-08	3.98E-07
RNFT2	12q24.22	-0.2742	5.14E-08	3.98E-07
TRIM44	11p13	0.274197	5.14E-08	3.98E-07
CD55	1q32.2	0.274137	5.18E-08	4.01E-07
OST4	2p23.3	-0.27413	5.18E-08	4.01E-07
RIT1	1q22	0.274087	5.21E-08	4.03E-07
NUFIP1	13q14.12	-0.27409	5.21E-08	4.03E-07
PRSS12	4q26	0.274075	5.22E-08	4.03E-07
UBL4A	Xq28	-0.27407	5.22E-08	4.03E-07
RNF220	1p34.1	-0.27402	5.25E-08	4.05E-07
SAMD9L	7q21.2	0.274019	5.25E-08	4.05E-07
BICRAL	6p21.1	0.27401	5.26E-08	4.05E-07
CYBB	Xp21.1-p11.4	0.274006	5.26E-08	4.05E-07
TNFAIP8	5q23.1	0.273933	5.30E-08	4.09E-07
MBD3	19p13.3	-0.27389	5.33E-08	4.10E-07
LOC155060	7q36.1	-0.27389	5.33E-08	4.11E-07
SPRN	10q26.3	-0.2738	5.39E-08	4.15E-07
SF3A2	19p13.3	-0.27378	5.40E-08	4.16E-07
NAT16	7q22.1	-0.27377	5.41E-08	4.16E-07
LOC642846	12p13.31	-0.27377	5.41E-08	4.16E-07
SLC7A6OS	16q22.1	-0.27373	5.43E-08	4.17E-07
MPEG1	11q12.1	0.273718	5.44E-08	4.18E-07
NUP42	7p15.3	-0.27369	5.46E-08	4.19E-07



ZNF688	16p11.2	-0.27368	5.46E-08	4.19E-07
C16ORF74	16q24.1	-0.27366	5.47E-08	4.20E-07
MFSD9	2q12.1	0.273626	5.50E-08	4.22E-07
ARHGAP42	11q22.1	0.273588	5.52E-08	4.23E-07
FAM156A	Xp11.22	-0.27358	5.53E-08	4.24E-07
CTAGE1	18q11.2	0.273573	5.53E-08	4.24E-07
TEX12	11q23.1	-0.27353	5.55E-08	4.26E-07
TOX	8q12.1	0.273441	5.61E-08	4.30E-07
IL32	16p13.3	-0.27341	5.63E-08	4.31E-07
PRKD1	14q12	0.273409	5.63E-08	4.31E-07
SRRT	7q22.1	-0.27336	5.66E-08	4.33E-07
FKBP8	19p13.11	-0.27336	5.67E-08	4.33E-07
ITPRIPL2	16p12.3	0.273355	5.67E-08	4.33E-07
SLAMF6	1q23.2-q23.3	0.273345	5.68E-08	4.34E-07
RHBDL1	16p13.3	-0.27329	5.71E-08	4.36E-07
ZKSCAN8	6p22.1	0.27329	5.71E-08	4.36E-07
ALKBH2	12q24.11	-0.27321	5.77E-08	4.40E-07
RAB17	2q37.3	-0.2732	5.78E-08	4.41E-07
TIGD3	11q13.1	-0.27312	5.83E-08	4.44E-07
TOX4	14q11.2	0.273092	5.85E-08	4.46E-07
HILPDA	7q32.1	-0.27305	5.87E-08	4.48E-07
ARID3B	15q24.1	0.272947	5.94E-08	4.53E-07
MTMR9	8p23.1	0.272931	5.95E-08	4.53E-07
ATP5MD	10q24.33	-0.27293	5.96E-08	4.53E-07
OTUD1	10p12.2	0.272924	5.96E-08	4.53E-07
HRH1	3p25.3	0.272876	5.99E-08	4.56E-07
NFIC	19p13.3	0.272832	6.02E-08	4.58E-07
C5ORF51	5p13.1	0.272828	6.03E-08	4.58E-07
WDR11	10q26.12	0.272814	6.04E-08	4.59E-07
NUDT16L1	16p13.3	-0.27278	6.06E-08	4.60E-07
PRKG1	10q11.23-q21.1	0.272756	6.08E-08	4.61E-07
DOHH	19p13.3	-0.27275	6.08E-08	4.61E-07
TRERF1	6p21.1	0.272746	6.08E-08	4.62E-07
TNFRSF21	6p12.3	0.272655	6.15E-08	4.66E-07
PPM1D	17q23.2	0.272612	6.18E-08	4.68E-07
CLDN15	7q22.1	-0.27257	6.21E-08	4.71E-07
EFNA5	5q21.3	0.272562	6.21E-08	4.71E-07
PIGS	17q11.2	0.272395	6.34E-08	4.80E-07
FTH1	11q12.3	-0.27231	6.40E-08	4.84E-07
MLPH	2q37.3	0.272217	6.47E-08	4.89E-07
PHACTR2	6q24.2	0.272159	6.51E-08	4.92E-07
CYTIP	2q24.1	0.272141	6.52E-08	4.93E-07
PSMA5	1p13.3	-0.27205	6.59E-08	4.98E-07
NFKBIB	19q13.2	-0.27198	6.65E-08	5.02E-07
PRKAR2A	3p21.31	0.271929	6.68E-08	5.05E-07
PHPT1	9q34.3	-0.27191	6.70E-08	5.06E-07
FKBPL	6p21.32	-0.27189	6.71E-08	5.07E-07
MIER1	1p31.3	0.271879	6.72E-08	5.07E-07
PIRT	17p12	0.271856	6.74E-08	5.08E-07
MDM2	12q15	0.271807	6.78E-08	5.11E-07
NDRG3	20q11.23	-0.2718	6.78E-08	5.11E-07
RPP38-DT	10p13	-0.27179	6.79E-08	5.11E-07
GDPGP1	15q26.1	0.271773	6.80E-08	5.12E-07
TNKS	8p23.1	0.271708	6.86E-08	5.16E-07
CCDC150	2q33.1	-0.27169	6.87E-08	5.17E-07
MRPS2	9q34.3	-0.27168	6.88E-08	5.17E-07
SLC16A2	Xq13.2	0.271663	6.89E-08	5.18E-07
UQCRHL	1p36.21	-0.27166	6.89E-08	5.18E-07

MYOCD	17p12	0.271628	6.92E-08	5.20E-07
SEC16A	9q34.3	0.271447	7.07E-08	5.31E-07
LRRC75B	22q11.23	-0.27125	7.23E-08	5.42E-07
TSHZ2	20q13.2	0.271168	7.29E-08	5.47E-07
DHX9	1q25.3	0.271101	7.35E-08	5.51E-07
EEA1	12q22	0.271071	7.38E-08	5.53E-07
ST7-AS1	7q31.2	-0.27085	7.57E-08	5.67E-07
DUS4L	7q22.3	-0.27078	7.62E-08	5.71E-07
LEMD2	6p21.31	-0.27077	7.64E-08	5.72E-07
UFD1	22q11.21	-0.27074	7.66E-08	5.73E-07
NXPE3	3q12.3	0.270734	7.67E-08	5.74E-07
MBD5	2q23.1	0.270717	7.68E-08	5.75E-07
PHIP	6q14.1	0.27063	7.76E-08	5.80E-07
CYSLTR1	Xq21.1	0.270614	7.77E-08	5.81E-07
MRPL13	8q24.12	-0.27055	7.83E-08	5.85E-07
GNB2	7q22.1	-0.27054	7.83E-08	5.85E-07
PSMD14	2q24.2	-0.27052	7.86E-08	5.87E-07
PEX26	22q11.21	0.270414	7.95E-08	5.94E-07
ZNF804A	2q32.1	0.270388	7.98E-08	5.95E-07
NQO2	6p25.2	-0.27038	7.98E-08	5.96E-07
STK19	6p21.33	-0.27032	8.04E-08	5.99E-07
CCDC73	11p13	-0.27022	8.13E-08	6.06E-07
TRPC4AP	20q11.22	-0.27021	8.14E-08	6.06E-07
SAMD10	20q13.33	-0.27019	8.16E-08	6.08E-07
SIPA1L3	19q13.13-q13.2	0.270144	8.20E-08	6.11E-07
ITGB3	17q21.32	0.270142	8.20E-08	6.11E-07
TMEM219	16p11.2	-0.27014	8.21E-08	6.11E-07
PITPNM3	17p13.2-p13.1	0.270044	8.30E-08	6.17E-07
PPDPF	20q13.33	-0.27004	8.30E-08	6.17E-07
ANXA9	1q21.3	-0.27002	8.32E-08	6.18E-07
MTX1	1q22	-0.26993	8.40E-08	6.24E-07
TWSG1	18p11.22	0.269917	8.42E-08	6.25E-07
XAB2	19p13.2	-0.26991	8.43E-08	6.25E-07
PSRC1	1p13.3	-0.2698	8.53E-08	6.33E-07
FRMD3	9q21.32	0.269792	8.54E-08	6.33E-07
LPIN2	18p11.31	0.269756	8.57E-08	6.36E-07
SLC12A2	5q23.3	0.269734	8.59E-08	6.37E-07
EFCAB14	1p33	0.269691	8.64E-08	6.40E-07
POMGNT1	1p34.1	-0.26969	8.64E-08	6.40E-07
PTPN14	1q32.3-q41	0.269638	8.69E-08	6.43E-07
TAF12	1p35.3	-0.26962	8.71E-08	6.45E-07
ACER2	9p22.1	0.269575	8.75E-08	6.47E-07
CAPN9	1q42.2	0.26942	8.91E-08	6.59E-07
LAMTOR2	1q22	-0.2694	8.92E-08	6.60E-07
BOD1	5q35.2	-0.26939	8.94E-08	6.61E-07
DOCK1	10q26.2	0.269333	9.00E-08	6.65E-07
ZNF616	19q13.41	0.269289	9.04E-08	6.68E-07
PDXP	22q13.1	-0.26921	9.12E-08	6.73E-07
NACA2	17q23.2	-0.26921	9.13E-08	6.73E-07
HSPD1	2q33.1	-0.2692	9.13E-08	6.73E-07
POLD1	19q13.33	-0.26909	9.25E-08	6.82E-07
CCDC57	17q25.3	-0.26907	9.27E-08	6.83E-07
ABC8	7q36.1	-0.26906	9.27E-08	6.83E-07
EAF1	3p25.1	0.269038	9.30E-08	6.85E-07
CALM1	14q32.11	0.269038	9.30E-08	6.85E-07
MRM1	17q12	-0.26901	9.33E-08	6.87E-07
USP53	4q26	0.268989	9.35E-08	6.88E-07
DNAJC15	13q14.11	-0.26894	9.41E-08	6.92E-07

PLEKHA6	1q32.1	0.268933	9.41E-08	6.92E-07
LATS2	13q12.11	0.268806	9.55E-08	7.02E-07
DECR2	16p13.3	-0.26877	9.60E-08	7.05E-07
DANCR	4q12	-0.26868	9.69E-08	7.12E-07
HDAC3	5q31.3	-0.26866	9.72E-08	7.13E-07
MR1	1q25.3	0.268649	9.72E-08	7.14E-07
OSBP	11q12.1	0.268493	9.90E-08	7.26E-07
TCP11L1	11p13	0.268458	9.94E-08	7.29E-07
CKAP4	12q23.3	0.268422	9.98E-08	7.31E-07
STT3B	3p23	0.268341	1.01E-07	7.38E-07
TMEM220	17p13.1	0.268334	1.01E-07	7.38E-07
FRS3	6p21.1	-0.26827	1.02E-07	7.44E-07
ZFR	5p13.3	0.268258	1.02E-07	7.44E-07
GMPPA	2q35	-0.26824	1.02E-07	7.45E-07
DOC2B	17p13.3	0.268236	1.02E-07	7.45E-07
GPR82	Xp11.4	0.268227	1.02E-07	7.46E-07
LRRC47	1p36.32	-0.2682	1.02E-07	7.48E-07
TNFRSF14	1p36.32	-0.26816	1.03E-07	7.51E-07
ZC3H12C	11q22.3	0.268155	1.03E-07	7.51E-07
ZBTB21	21q22.3	0.268151	1.03E-07	7.51E-07
B3GALT1	2q24.3	0.267993	1.05E-07	7.64E-07
MMRN1	4q22.1	0.26798	1.05E-07	7.65E-07
DR1	1p22.1	0.26797	1.05E-07	7.66E-07
RASSF2	20p13	0.267924	1.06E-07	7.70E-07
RPS6KA5	14q32.11	0.267917	1.06E-07	7.70E-07
OBP2B	9q34.2	-0.26788	1.06E-07	7.73E-07
ASMTL	Xp22.33 and Yp11.2	-0.26773	1.08E-07	7.86E-07
ARCN1	11q23.3	0.267662	1.09E-07	7.92E-07
PIK3R2	19p13.11	-0.26765	1.09E-07	7.92E-07
TAF11	6p21.31	-0.26761	1.09E-07	7.95E-07
OSMR	5p13.1	0.267554	1.10E-07	8.00E-07
HIVEP3	1p34.2	0.267549	1.10E-07	8.01E-07
IQCB1	3q13.33 3q21.1	-0.26751	1.11E-07	8.04E-07
DNTTIP1	20q13.12	-0.26748	1.11E-07	8.06E-07
SLC25A22	11p15.5	-0.2674	1.12E-07	8.13E-07
CLYBL	13q32.3	-0.26739	1.12E-07	8.14E-07
IDE	10q23.33	0.267361	1.13E-07	8.16E-07
ZNF133	20p11.23	-0.26736	1.13E-07	8.16E-07
SVBP	1p34.2	-0.26735	1.13E-07	8.17E-07
CHML	1q43	0.267312	1.13E-07	8.20E-07
FLI1	11q24.3	0.267287	1.13E-07	8.22E-07
EPRS	1q41	0.267251	1.14E-07	8.25E-07
ENTPD7	10q24.2	0.267218	1.14E-07	8.28E-07
VPS35L	16p12.3	0.267162	1.15E-07	8.33E-07
ABHD5	3p21.33	0.267135	1.15E-07	8.35E-07
DNAJC19	3q26.33	-0.26713	1.16E-07	8.36E-07
POLL	10q24.32	-0.26706	1.16E-07	8.42E-07
GRAP2	22q13.1	0.267008	1.17E-07	8.46E-07
VPS53	17p13.3	0.267002	1.17E-07	8.46E-07
C8ORF33	8q24.3	-0.26687	1.19E-07	8.59E-07
DCAF5	14q24.1	0.266812	1.20E-07	8.64E-07
RABEP2	16p11.2	-0.26669	1.21E-07	8.76E-07
KIF21A	12q12	0.266611	1.22E-07	8.83E-07
CCDC88A	2p16.1	0.266607	1.22E-07	8.83E-07
RHBDD2	7q11.23	-0.26657	1.23E-07	8.86E-07
GIGYF2	2q37.1	0.266565	1.23E-07	8.87E-07
FBXL17	5q21.3	0.266558	1.23E-07	8.87E-07
CFAP20	16q21	-0.26654	1.23E-07	8.88E-07

SNORA10	16p13.3	-0.26654	1.23E-07	8.89E-07
ARHGEF28	5q13.2	0.266518	1.24E-07	8.90E-07
LRRIQ4	3q26.2	0.266511	1.24E-07	8.91E-07
RCL1	9p24.1	-0.26649	1.24E-07	8.92E-07
ZNF668	16p11.2	-0.26647	1.24E-07	8.94E-07
STOX2	4q35.1	0.266426	1.25E-07	8.98E-07
RNF113A	Xq24	-0.26635	1.26E-07	9.05E-07
BCL10	1p22.3	0.266351	1.26E-07	9.05E-07
ASB6	9q34.11	-0.26633	1.26E-07	9.07E-07
VEZT	12q22	0.266273	1.27E-07	9.13E-07
PYCR1	17q25.3	-0.26624	1.28E-07	9.16E-07
KLHL6	3q27.1	0.266207	1.28E-07	9.19E-07
ST3GAL4	11q24.2	0.2662	1.28E-07	9.19E-07
CHMP1A	16q24.3	-0.26618	1.28E-07	9.20E-07
ESYT1	12q13.2	0.266161	1.29E-07	9.22E-07
LRIG3	12q14.1	0.266159	1.29E-07	9.22E-07
AGMAT	1p36.21	-0.26601	1.31E-07	9.38E-07
COX7A2	6q14.1	-0.266	1.31E-07	9.38E-07
HSPG2	1p36.12	0.265964	1.32E-07	9.42E-07
SLC25A40	7q21.12	0.265961	1.32E-07	9.42E-07
ATP2B4	1q32.1	0.265916	1.32E-07	9.46E-07
AP5M1	14q22.3	0.265846	1.33E-07	9.53E-07
TMEM140	7q33	0.265844	1.33E-07	9.53E-07
DIAPH1	5q31.3	0.26582	1.34E-07	9.55E-07
EMSY	11q13.5	0.265687	1.36E-07	9.69E-07
GABPA	21q21.3	0.265664	1.36E-07	9.72E-07
PUS3	11q24.2	-0.26565	1.36E-07	9.72E-07
MAZ	16p11.2	-0.2656	1.37E-07	9.78E-07
WASF2	1p36.11	0.265541	1.38E-07	9.84E-07
TRAPPC6A	19q13.32	-0.26537	1.41E-07	1.00E-06
PIH1D2	11q23.1	-0.26536	1.41E-07	1.00E-06
HAGH	16p13.3	-0.26536	1.41E-07	1.00E-06
TAPT1-AS1	4p15.32	-0.26532	1.41E-07	1.01E-06
KIFAP3	1q24.2	0.265279	1.42E-07	1.01E-06
COMT	22q11.21	-0.26527	1.42E-07	1.01E-06
PSMC2	7q22.1	-0.26519	1.44E-07	1.02E-06
MEMO1	2p22.3	-0.26518	1.44E-07	1.02E-06
CIAPIN1	16q21	-0.26516	1.44E-07	1.02E-06
CACNA2D1	7q21.11	0.265112	1.45E-07	1.03E-06
PRKCSH	19p13.2	-0.2651	1.45E-07	1.03E-06
ZFAND6	15q25.1	0.265081	1.45E-07	1.03E-06
GNS	12q14.3	0.265019	1.46E-07	1.04E-06
C2CD5	12p12.1	0.265016	1.46E-07	1.04E-06
FBRSL1	12q24.33	-0.26494	1.48E-07	1.05E-06
PPM1G	2p23.3	-0.26492	1.48E-07	1.05E-06
SPR	2p13.2	-0.26489	1.49E-07	1.05E-06
GTF2I	7q11.23	0.26474	1.51E-07	1.07E-06
ABHD3	18q11.2	0.264738	1.51E-07	1.07E-06
ZDHHC8	22q11.21	-0.26466	1.52E-07	1.08E-06
LINC-PINT	7q32.3	-0.26465	1.53E-07	1.08E-06
MTM1	Xq28	0.264605	1.53E-07	1.08E-06
ANKRD52	12q13.3	0.264575	1.54E-07	1.09E-06
INAVA	1q32.1	0.264573	1.54E-07	1.09E-06
DCAF7	17q23.3	0.264554	1.54E-07	1.09E-06
DPYD	1p21.3	0.264516	1.55E-07	1.09E-06
KHNYN	14q12	0.264508	1.55E-07	1.09E-06
ACP1	2p25.3	-0.2645	1.55E-07	1.09E-06
BNIP2	15q22.2	0.264473	1.56E-07	1.10E-06

MCU	10q22.1	0.264419	1.57E-07	1.10E-06
GRPEL1	4p16.1	-0.26441	1.57E-07	1.10E-06
PDCD4	10q25.2	0.264336	1.58E-07	1.11E-06
SLC2A10	20q13.12	0.264269	1.59E-07	1.12E-06
SLFN5	17q12	0.264248	1.60E-07	1.12E-06
CX3CR1	3p22.2	0.264234	1.60E-07	1.12E-06
PPP1R9A	7q21.3	0.264096	1.62E-07	1.14E-06
BTBD8	1p22.1	0.264049	1.63E-07	1.15E-06
TMCO6	5q31.3	-0.26401	1.64E-07	1.15E-06
UTP4	16q22.1	-0.26397	1.65E-07	1.16E-06
PTGFRN	1p13.1	0.263957	1.65E-07	1.16E-06
MSMP	9p13.3	0.263912	1.66E-07	1.16E-06
AIG1	6q24.2	-0.2639	1.66E-07	1.16E-06
ZNF268	12q24.33	0.263884	1.66E-07	1.17E-06
SPSB2	12p13.31	-0.26381	1.68E-07	1.18E-06
B4GALT7	5q35.3	-0.26375	1.69E-07	1.18E-06
TM7SF2	11q13.1	-0.26373	1.69E-07	1.19E-06
MEX3B	15q25.2	0.263467	1.74E-07	1.22E-06
SPATC1L	21q22.3	-0.26341	1.75E-07	1.23E-06
RSRP1	1p36.11	-0.26331	1.77E-07	1.24E-06
IGHMBP2	11q13.3	-0.26326	1.78E-07	1.25E-06
SYTL2	11q14.1	0.263152	1.80E-07	1.26E-06
PELI1	2p14	0.263152	1.80E-07	1.26E-06
NARS2	11q14.1	-0.26314	1.80E-07	1.26E-06
NDUFAF6	8q22.1	-0.2631	1.81E-07	1.27E-06
UQCRH	1p33	-0.2631	1.81E-07	1.27E-06
HDHD3	9q32	-0.26308	1.82E-07	1.27E-06
DPY19L3	19q13.11	0.263054	1.82E-07	1.27E-06
ADK	10q22.2 10q11-q24	-0.26304	1.82E-07	1.27E-06
POP4	19q12	-0.26303	1.83E-07	1.27E-06
SUN2	22q13.1	0.26303	1.83E-07	1.27E-06
KLHL11	17q21.2	0.263017	1.83E-07	1.28E-06
LCP1	13q14.13	0.263006	1.83E-07	1.28E-06
PPOX	1q23.3	-0.263	1.83E-07	1.28E-06
KLF16	19p13.3	-0.26299	1.83E-07	1.28E-06
ASB13	10p15.1	-0.26295	1.84E-07	1.28E-06
VPS25	17q21.2	-0.26295	1.84E-07	1.28E-06
EYA3	1p35.3	0.262932	1.85E-07	1.29E-06
DKC1	Xq28	-0.26292	1.85E-07	1.29E-06
ATP8A2	13q12.13	0.262854	1.86E-07	1.30E-06
TOX2	20q13.12	0.26284	1.87E-07	1.30E-06
FBXL5	4p15.32	0.262822	1.87E-07	1.30E-06
TACC2	10q26.13	0.262805	1.87E-07	1.30E-06
TLK1	2q31.1	0.262798	1.87E-07	1.30E-06
RASGRP1	15q14	0.262763	1.88E-07	1.31E-06
SSPN	12p12.1	0.262759	1.88E-07	1.31E-06
SORCS1	10q25.1	0.262724	1.89E-07	1.31E-06
FTL	19q13.33	-0.26272	1.89E-07	1.31E-06
ADAMTS12	5p13.3-p13.2	0.262716	1.89E-07	1.31E-06
GALNT3	2q24.3	0.26266	1.90E-07	1.32E-06
FARSA	19p13.13	-0.26264	1.91E-07	1.32E-06
RECQL5	17q25.1	-0.26262	1.91E-07	1.32E-06
FBXO34	14q22.3	0.262592	1.92E-07	1.33E-06
DTNB	2p23.3	-0.26253	1.93E-07	1.34E-06
ZDHHC21	9p22.3	0.262525	1.93E-07	1.34E-06
PHF5A	22q13.2	-0.26252	1.93E-07	1.34E-06
SCFD1	14q12	0.262483	1.94E-07	1.34E-06
LTBP4	19q13.2	0.262464	1.94E-07	1.34E-06

RPL12	9q33.3	-0.26243	1.95E-07	1.35E-06
CHCHD3	7q32.3-q33	-0.26242	1.95E-07	1.35E-06
POLH	6p21.1	0.262367	1.97E-07	1.36E-06
ENGASE	17q25.3	-0.26235	1.97E-07	1.36E-06
SLC30A6	2p22.3	0.262346	1.97E-07	1.36E-06
SUFU	10q24.32	0.262344	1.97E-07	1.36E-06
PPIP5K2	5q21.1	0.262331	1.97E-07	1.36E-06
SDF2L1	22q11.21	-0.26229	1.98E-07	1.37E-06
GAN	16q23.2	0.262293	1.98E-07	1.37E-06
XPR1	1q25.3	0.262207	2.00E-07	1.38E-06
CEP192	18p11.21	0.262163	2.01E-07	1.38E-06
TPT1-AS1	13q14.13	-0.26215	2.01E-07	1.39E-06
NDUFB1	14q32.12	-0.26195	2.06E-07	1.42E-06
RNF150	4q31.21	0.261944	2.06E-07	1.42E-06
CDYL2	16q23.2	0.261839	2.08E-07	1.43E-06
SNTB2	16q22.1	0.261824	2.09E-07	1.44E-06
LINC01558	6q27	-0.26182	2.09E-07	1.44E-06
TRAPPC2	Xp22.2	-0.2618	2.09E-07	1.44E-06
CEMIP	15q25.1	0.261752	2.10E-07	1.45E-06
RUVBL1	3q21.3	-0.26174	2.11E-07	1.45E-06
TIGD1	2q37.1	-0.26168	2.12E-07	1.46E-06
FBN1	15q21.1	0.261672	2.12E-07	1.46E-06
KDM6A	Xp11.3	0.261623	2.13E-07	1.46E-06
CTR9	11p15.4	0.261612	2.14E-07	1.47E-06
LCMT1	16p12.1	-0.26161	2.14E-07	1.47E-06
EMC10	19q13.33	-0.2616	2.14E-07	1.47E-06
CNOT6	5q35.3	0.261564	2.15E-07	1.47E-06
PIAS2	18q21.1	0.261558	2.15E-07	1.47E-06
SNAPC4	9q34.3	-0.26154	2.15E-07	1.47E-06
AFDN-DT	6q27	-0.26149	2.17E-07	1.48E-06
KITLG	12q21.32	0.261451	2.18E-07	1.49E-06
MBP	18q23	0.261334	2.20E-07	1.51E-06
CAMK4	5q22.1	0.261312	2.21E-07	1.51E-06
KSR2	12q24.22-q24.23	0.261263	2.22E-07	1.52E-06
ESR1	6q25.1-q25.2	0.261244	2.23E-07	1.52E-06
YBX2	17p13.1	-0.26124	2.23E-07	1.52E-06
COPS2	15q21.1	0.261239	2.23E-07	1.52E-06
SP3	2q31.1	0.261199	2.24E-07	1.53E-06
DLG1	3q29	0.261196	2.24E-07	1.53E-06
METTL14	4q26	0.261105	2.26E-07	1.54E-06
SFMBT1	3p21.1	0.261104	2.26E-07	1.54E-06
VMA21	Xq28	-0.26107	2.27E-07	1.55E-06
STX16	20q13.32	-0.26104	2.27E-07	1.55E-06
PIAS3	1q21.1	0.26103	2.28E-07	1.55E-06
AGAP4	10q11.22	-0.26102	2.28E-07	1.55E-06
SPSB3	16p13.3	-0.26099	2.29E-07	1.56E-06
TMEM71	8q24.22	0.260991	2.29E-07	1.56E-06
DUOX1	15q21.1	0.260986	2.29E-07	1.56E-06
ZNF580	19q13.42	-0.26096	2.30E-07	1.56E-06
F2R	5q13.3	0.260943	2.30E-07	1.56E-06
EPAS1	2p21	0.260932	2.30E-07	1.56E-06
RO60	1q31.2	0.260848	2.32E-07	1.58E-06
KLHL14	18q12.1	0.260844	2.33E-07	1.58E-06
FLAD1	1q21.3	-0.26076	2.35E-07	1.59E-06
NKAPD1	11q23.1	-0.26071	2.36E-07	1.60E-06
CYLD	16q12.1	0.260713	2.36E-07	1.60E-06
IPCEF1	6q25.2	0.260709	2.36E-07	1.60E-06
C1ORF50	1p34.2	-0.2607	2.36E-07	1.60E-06

ACTL10	20q11.22	-0.26066	2.37E-07	1.61E-06
SRSF2	17q25.1	-0.26066	2.37E-07	1.61E-06
PLEKHA7	11p15.2-p15.1	0.260649	2.38E-07	1.61E-06
CHRNA7	15q13.3	0.26059	2.39E-07	1.62E-06
SIDT1	3q13.2	0.260588	2.39E-07	1.62E-06
PDS5A	4p14	0.260532	2.41E-07	1.63E-06
DCAKD	17q21.31	-0.2605	2.41E-07	1.63E-06
TTC39B	9p22.3	0.26049	2.42E-07	1.63E-06
CUEDC2	10q24.32	-0.26047	2.42E-07	1.64E-06
TMEM175	4p16.3	-0.26044	2.43E-07	1.64E-06
NBR1	17q21.31	0.260366	2.45E-07	1.65E-06
GAS5	1q25.1	-0.26035	2.45E-07	1.66E-06
PSMB8	6p21.32	-0.2603	2.47E-07	1.67E-06
ARHGAP11A	15q13.3	0.260238	2.49E-07	1.68E-06
MTUS2	13q12.3	0.260209	2.49E-07	1.68E-06
SGF29	16p11.2	-0.26021	2.49E-07	1.68E-06
LSM3	3p25.1	-0.26021	2.49E-07	1.68E-06
MAPK15	-	-0.26018	2.50E-07	1.68E-06
TNNI3	19q13.42	-0.26016	2.51E-07	1.69E-06
C9ORF64	9q21.32	0.260074	2.53E-07	1.70E-06
KIF5B	10p11.22	0.260037	2.54E-07	1.71E-06
NCKAP1L	12q13.13-q13.2	0.260031	2.54E-07	1.71E-06
TERC	3q26.2	-0.25998	2.56E-07	1.72E-06
ENTPD5	14q24.3	0.259981	2.56E-07	1.72E-06
ZNF516	18q23	0.259975	2.56E-07	1.72E-06
AKAP10	17p11.2	0.259917	2.57E-07	1.73E-06
RNF213	17q25.3	0.259865	2.59E-07	1.74E-06
SNHG7	9q34.3	-0.25986	2.59E-07	1.74E-06
SORL1	11q24.1	0.259861	2.59E-07	1.74E-06
SUGT1	13q14.3	-0.25976	2.62E-07	1.76E-06
SNORA57	11q12.3	-0.25969	2.64E-07	1.77E-06
CDT1	16q24.3	-0.25965	2.65E-07	1.78E-06
FGFR2	10q26.13	0.259639	2.65E-07	1.78E-06
BTBD9	6p21.2	0.259551	2.68E-07	1.80E-06
RITA1	12q24.13	-0.25955	2.68E-07	1.80E-06
PDCL3	2q11.2	-0.2595	2.70E-07	1.80E-06
RNF2	1q25.3	0.259451	2.71E-07	1.81E-06
FMOD	1q32.1	0.259443	2.71E-07	1.81E-06
DDX41	5q35.3	-0.25943	2.71E-07	1.82E-06
NAXD	13q34	-0.25942	2.72E-07	1.82E-06
PILRB	7q22.1	-0.2594	2.72E-07	1.82E-06
USP47	11p15.3	0.259377	2.73E-07	1.82E-06
C2ORF88	2q32.2	0.259376	2.73E-07	1.82E-06
APOBR	16p12.1	0.259371	2.73E-07	1.83E-06
TMEM246	9q31.1	0.259367	2.73E-07	1.83E-06
HIPK2	7q34	0.259325	2.75E-07	1.83E-06
SNORA8	11q21	-0.25931	2.75E-07	1.84E-06
SYNPO	5q33.1	0.259301	2.75E-07	1.84E-06
DNAH2	17p13.1	0.259295	2.76E-07	1.84E-06
CPA3	3q24	0.259281	2.76E-07	1.84E-06
NPY6R	5q31.2	0.259266	2.76E-07	1.84E-06
CPM	12q15	0.259219	2.78E-07	1.85E-06
KIT	4q12	0.2592	2.78E-07	1.85E-06
PIK3C2A	11p15.1	0.25916	2.80E-07	1.86E-06
IQCC	1p35.2	-0.2591	2.82E-07	1.87E-06
TP53INP1	8q22.1	0.258982	2.85E-07	1.90E-06
C3ORF70	3q27.2	0.258959	2.86E-07	1.90E-06
AGPS	2q31.2	0.258955	2.86E-07	1.90E-06

KIRREL3	11q24.2	0.258929	2.87E-07	1.91E-06
DLEU1	13q14.2-q14.3	-0.25893	2.87E-07	1.91E-06
MAP4	3p21.31	0.258917	2.87E-07	1.91E-06
PPIF	10q22.3	-0.25887	2.89E-07	1.92E-06
TBCA	5q14.1	-0.2588	2.91E-07	1.93E-06
THSD7A	7p21.3	0.258708	2.94E-07	1.95E-06
UBE3B	12q24.11	0.258701	2.94E-07	1.95E-06
PRKCB	16p12.2-p12.1	0.258664	2.95E-07	1.96E-06
BASP1	5p15.1	0.258661	2.95E-07	1.96E-06
NUP133	1q42.13	0.258651	2.96E-07	1.96E-06
RBP2	3q23	-0.25864	2.96E-07	1.96E-06
SLC35E3	12q15	0.258627	2.96E-07	1.96E-06
WDFY4	10q11.23	0.258579	2.98E-07	1.97E-06
ADCK1	14q24.3	-0.25853	2.99E-07	1.98E-06
FAM193B	5q35.3	-0.25853	3.00E-07	1.98E-06
LTBP1	2p22.3	0.258526	3.00E-07	1.98E-06
RSPH14	22q11.22-q11.23	-0.25849	3.01E-07	1.99E-06
VGLL3	3p12.1	0.258469	3.02E-07	1.99E-06
MAN2B2	4p16.1	0.258467	3.02E-07	1.99E-06
GAS7	17p13.1	0.258447	3.02E-07	2.00E-06
TEFM	17q11.2	-0.25838	3.04E-07	2.01E-06
CCDC51	3p21.31	-0.25829	3.07E-07	2.03E-06
ERBIN	5q12.3	0.258285	3.08E-07	2.03E-06
ACCS	11p11.2	-0.25827	3.08E-07	2.03E-06
MXD1	2p13.3	0.258238	3.09E-07	2.04E-06
ITPR1	3p26.1	0.258235	3.09E-07	2.04E-06
CDC16	13q34	-0.25822	3.10E-07	2.04E-06
HSPBAP1	3q21.1	-0.2582	3.10E-07	2.04E-06
C8ORF76	8q24.13	-0.25808	3.14E-07	2.07E-06
KRT10	17q21.2	-0.25805	3.16E-07	2.08E-06
STYK1	12p13.2	0.257979	3.18E-07	2.09E-06
TRAF2	9q34.3	-0.25797	3.18E-07	2.09E-06
EPS8	12p12.3	0.257972	3.18E-07	2.09E-06
SLC25A15	13q14.11	-0.25794	3.19E-07	2.10E-06
POU2AF1	11q23.1	0.257925	3.20E-07	2.10E-06
FAXDC2	5q33.2	0.257883	3.21E-07	2.11E-06
RNF32	7q36.3	-0.25787	3.22E-07	2.11E-06
PNKP	19q13.33	-0.25781	3.24E-07	2.13E-06
GAS2	11p14.3	-0.25778	3.25E-07	2.13E-06
RPL13AP3	14q22.3	-0.25773	3.27E-07	2.14E-06
APOO	Xp22.11	-0.25772	3.27E-07	2.14E-06
ATP5MPL	14q32.33	-0.25771	3.27E-07	2.15E-06
TBC1D8B	Xq22.3	0.257681	3.29E-07	2.15E-06
PMS2P5	7q11.23	-0.25766	3.29E-07	2.16E-06
PDE10A	6q27	0.257605	3.31E-07	2.17E-06
TRIB2	2p24.3	0.257583	3.32E-07	2.17E-06
HINT2	9p13.3	-0.25758	3.32E-07	2.17E-06
WDR75	2q32.2	-0.25756	3.33E-07	2.18E-06
MSANTD1	4p16.3	-0.25749	3.36E-07	2.19E-06
MAPK13	6p21.31	-0.25747	3.36E-07	2.20E-06
ATP8A1	4p13	0.257256	3.44E-07	2.25E-06
LRP5L	22q11.23	-0.25716	3.48E-07	2.27E-06
SEMA3D	7q21.11	0.257148	3.48E-07	2.27E-06
MYORG	9p13.3	0.257066	3.51E-07	2.29E-06
FAM135A	6q13	0.25701	3.53E-07	2.31E-06
ENTPD6	20p11.21	-0.257	3.54E-07	2.31E-06
ATXN7L1	7q22.3	0.256995	3.54E-07	2.31E-06
DSTYK	1q32.1	0.256961	3.55E-07	2.32E-06



ADGRF1	6p12.3 6	0.256958	3.55E-07	2.32E-06
LRP3	19q13.11	-0.25695	3.56E-07	2.32E-06
ZHX1	8q24.13	0.256926	3.56E-07	2.32E-06
INPP5F	10q26.11	0.256901	3.57E-07	2.33E-06
RSL1D1	16p13.13	-0.2569	3.58E-07	2.33E-06
KAT8	16p11.2	-0.25687	3.59E-07	2.33E-06
REXO4	9q34.2	-0.25686	3.59E-07	2.34E-06
RIMBP3	22q11.21	0.256752	3.63E-07	2.36E-06
TBC1D12	10q23.33	0.256726	3.64E-07	2.37E-06
PPP2CB	8p12	0.256705	3.65E-07	2.37E-06
SH2B2	7q22.1	-0.2567	3.65E-07	2.37E-06
ZFXH3	16q22.2-q22.3	0.256668	3.67E-07	2.38E-06
SENP7	3q12.3	0.256662	3.67E-07	2.38E-06
C11ORF1	11q23.1	-0.25662	3.68E-07	2.39E-06
SLC49A4	3q21.1	0.256613	3.69E-07	2.39E-06
NPC1	18q11.2	0.256576	3.70E-07	2.40E-06
DPEP1	16q24.3	-0.25656	3.71E-07	2.41E-06
CHRFAM7A	15q13.2	0.256477	3.74E-07	2.43E-06
ESD	13q14.2	-0.25644	3.76E-07	2.44E-06
AMPD1	1p13.2	0.256427	3.76E-07	2.44E-06
SH3D19	4q31.3	0.256408	3.77E-07	2.44E-06
NET1	10p15.1	0.256376	3.78E-07	2.45E-06
GLRX3	10q26.3	-0.25631	3.81E-07	2.47E-06
C1ORF116	1q32.1	0.256268	3.83E-07	2.48E-06
MGST2	4q31.1	-0.25626	3.83E-07	2.48E-06
ETFA	15q24.2-q24.3	0.256221	3.85E-07	2.49E-06
UBE3D	6q14.1	-0.2562	3.85E-07	2.49E-06
MRPL37	1p32.3	-0.25619	3.86E-07	2.49E-06
SETD4	21q22.12	-0.25611	3.89E-07	2.51E-06
FCGBP	19q13.2	0.256111	3.89E-07	2.51E-06
AGK	7q34	-0.25608	3.90E-07	2.52E-06
LOC148696	1q32.2	0.256074	3.91E-07	2.52E-06
C11ORF71	11q23.2	-0.25606	3.91E-07	2.53E-06
MAP4K4	2q11.2	0.256041	3.92E-07	2.53E-06
CTNNA1	5q31.2	0.255925	3.97E-07	2.56E-06
METTL23	17q25.1	-0.25591	3.98E-07	2.56E-06
EID1	15q21.1	0.255906	3.98E-07	2.56E-06
AATF	17q12	-0.25585	4.00E-07	2.58E-06
WASHC3	12q23.2	-0.25583	4.01E-07	2.58E-06
UFL1	6q16.1	0.255801	4.03E-07	2.59E-06
NOL3	16q22.1	-0.25578	4.03E-07	2.60E-06
BICC1	10q21.1	0.255739	4.05E-07	2.61E-06
JAK2	9p24.1	0.25567	4.08E-07	2.63E-06
B3GALT5-AS1	21q22.2	0.255605	4.11E-07	2.64E-06
APOOL	Xq21.1	0.255602	4.11E-07	2.64E-06
HDDC2	6q22.31	-0.25558	4.12E-07	2.65E-06
SRCAP	16p11.2	0.255544	4.14E-07	2.66E-06
CCDC68	18q21.2	0.255453	4.18E-07	2.68E-06
ARHGAP32	11q24.3	0.255453	4.18E-07	2.68E-06
SATB1	3p24.3	0.255384	4.21E-07	2.70E-06
JCHAIN	4q13.3	0.255368	4.22E-07	2.71E-06
TSHZ3	19q12	0.25536	4.22E-07	2.71E-06
RASSF5	1q32.1	0.255338	4.23E-07	2.71E-06
RRAGC	1p34.3	0.255322	4.24E-07	2.72E-06
ZNF689	16p11.2	0.255321	4.24E-07	2.72E-06
DNAJB4	1p31.1	0.255304	4.25E-07	2.72E-06
NAGPA	16p13.3	-0.2553	4.25E-07	2.72E-06
FANCF	11p14.3	-0.25529	4.25E-07	2.72E-06

HSD17B3	9q22.32	-0.25523	4.28E-07	2.74E-06
EHD4	15q15.1	0.255199	4.29E-07	2.75E-06
GID8	20q13.33	-0.25519	4.30E-07	2.75E-06
PTPRM	18p11.23	0.25519	4.30E-07	2.75E-06
FAS	10q23.31	0.255174	4.31E-07	2.75E-06
ZNF771	16p11.2	-0.25514	4.32E-07	2.76E-06
SPATA6	1p33	0.255123	4.33E-07	2.76E-06
TARBP2	12q13.13	-0.2551	4.34E-07	2.77E-06
TOGARAM1	14q21.2	0.255028	4.37E-07	2.79E-06
AARSD1	17q21.31	-0.25498	4.40E-07	2.80E-06
CTAGE10P	13q14.2	0.25495	4.41E-07	2.81E-06
KIF12	9q32	-0.25495	4.41E-07	2.81E-06
POLG2	17q23.3	-0.25491	4.43E-07	2.82E-06
MUC4	3q29	0.254907	4.43E-07	2.82E-06
CCNI	4q21.1	0.254902	4.43E-07	2.82E-06
YIF1B	19q13.2	-0.25489	4.44E-07	2.83E-06
WDR37	10p15.3	0.254871	4.45E-07	2.83E-06
NDST1	5q33.1	0.254865	4.45E-07	2.83E-06
LTBP2	14q24.3	0.254834	4.47E-07	2.84E-06
H2AFJ	12p12.3	-0.2548	4.48E-07	2.85E-06
ATP1B1	1q24.2	0.254776	4.49E-07	2.86E-06
CGREF1	2p23.3	-0.25476	4.50E-07	2.86E-06
CDCP1	3p21.31	0.254687	4.54E-07	2.88E-06
LOC100130987	11q13.2	-0.25468	4.54E-07	2.88E-06
GRTP1	13q34	-0.25463	4.56E-07	2.90E-06
PDXDC1	16p13.11	0.254614	4.57E-07	2.90E-06
SART1	11q13.1	-0.25461	4.58E-07	2.90E-06
TSPAN3	15q24.3	0.254573	4.59E-07	2.91E-06
ADCY9	16p13.3	0.254568	4.59E-07	2.91E-06
VMP1	17q23.1	-0.25454	4.61E-07	2.92E-06
RGS7BP	5q12.3	0.254406	4.68E-07	2.96E-06
RBMS2	12q13.3	0.254395	4.68E-07	2.97E-06
CCT6A	7p11.2	-0.25438	4.69E-07	2.97E-06
KRTCAP3	2p23.3	-0.25436	4.70E-07	2.97E-06
ARL15	5q11.2	0.254354	4.70E-07	2.98E-06
TECR	19p13.12	-0.25435	4.70E-07	2.98E-06
CBX3	7p15.2	-0.25428	4.74E-07	3.00E-06
CSF2RB	22q12.3	0.254199	4.78E-07	3.02E-06
PPFIA2	12q21.31	0.254196	4.78E-07	3.02E-06
KIAA0895L	16q22.1	-0.25417	4.80E-07	3.03E-06
ARHGAP25	2p13.3	0.254019	4.87E-07	3.08E-06
TANK	2q24.2	0.254014	4.88E-07	3.08E-06
ZNF335	20q13.12	-0.25401	4.88E-07	3.08E-06
DHDH	19q13.33	-0.254	4.88E-07	3.08E-06
ELMOD3	2p11.2	-0.25397	4.90E-07	3.09E-06
CUX2	12q24.11-q24.12	0.253939	4.91E-07	3.10E-06
ATP6V1C2	-	-0.25387	4.95E-07	3.12E-06
RPS23	5q14.2	-0.25385	4.96E-07	3.13E-06
IKZF3	17q12-q21.1	0.253815	4.98E-07	3.14E-06
BABAM2	2p23.2	-0.2538	4.99E-07	3.14E-06
PA2G4	12q13.2	-0.25379	5.00E-07	3.15E-06
ORMDL1	2q32.2	-0.25376	5.01E-07	3.15E-06
MOGS	2p13.1	-0.25376	5.01E-07	3.15E-06
NAPRT	8q24.3	-0.25374	5.02E-07	3.16E-06
OSBPL11	3q21.2	0.253699	5.04E-07	3.17E-06
KCNN3	1q21.3	0.253691	5.05E-07	3.17E-06
FHIT	3p14.2	-0.25368	5.05E-07	3.17E-06
GPX2	14q23.3	-0.25368	5.05E-07	3.17E-06

ADA	20q13.12	-0.25358	5.11E-07	3.21E-06
RBM28	7q32.1	-0.25355	5.12E-07	3.22E-06
MAPK8	10q11.22	0.253498	5.15E-07	3.23E-06
PHLDA1	12q21.2	0.253494	5.15E-07	3.23E-06
PLA2G4D	15q15.1	0.253486	5.16E-07	3.24E-06
VWA3B	2q11.2	0.253461	5.17E-07	3.24E-06
SORT1	1p13.3 1p21.3-p13.1	0.253458	5.17E-07	3.24E-06
ACSL3	2q36.1	0.253418	5.20E-07	3.26E-06
ZNF831	20q13.32	0.253357	5.23E-07	3.28E-06
CKMT2	5q14.1	-0.25335	5.23E-07	3.28E-06
CD226	18q22.2	0.253324	5.25E-07	3.29E-06
OXCT1	5p13.1	0.253315	5.25E-07	3.29E-06
CCDC149	4p15.2	0.253307	5.26E-07	3.29E-06
ZNF687	1q21.3	0.253306	5.26E-07	3.29E-06
G2E3	14q12	0.253235	5.30E-07	3.31E-06
AGAP6	10q11.23	-0.2532	5.32E-07	3.32E-06
TECPR2	14q32.31	0.253155	5.34E-07	3.34E-06
ST5	11p15.4	0.253126	5.36E-07	3.35E-06
EMP1	12p13.1	0.253084	5.38E-07	3.36E-06
TRMT1L	1q25.3	0.253079	5.39E-07	3.36E-06
MYSM1	1p32.1	0.25295	5.46E-07	3.41E-06
SUCO	1q24.3	0.252933	5.47E-07	3.41E-06
DDX27	20q13.13	-0.25291	5.48E-07	3.42E-06
PMM2	16p13.2	-0.25288	5.50E-07	3.43E-06
ZDHHC12	9q34.11	-0.25287	5.51E-07	3.43E-06
SMIM20	4p15.2	-0.25284	5.52E-07	3.44E-06
WWP1	8q21.3	0.252837	5.53E-07	3.44E-06
GUSBP11	22q11.23	-0.25274	5.59E-07	3.48E-06
NOL10	2p25.1	-0.25273	5.59E-07	3.48E-06
PLD6	17p11.2	-0.25272	5.60E-07	3.48E-06
TMTC1	12p11.22	0.252656	5.63E-07	3.51E-06
MIS18BP1	14q21.2	0.252623	5.65E-07	3.52E-06
RPL13AP20	12p13.1	-0.25261	5.66E-07	3.52E-06
UBE2MP1	16p11.2	-0.25261	5.66E-07	3.52E-06
ATRN	20p13	0.252591	5.67E-07	3.53E-06
SCAMP4	19p13.3	-0.25259	5.68E-07	3.53E-06
WBP1	2p13.1	-0.25258	5.68E-07	3.53E-06
HGS	17q25.3	-0.25256	5.69E-07	3.54E-06
HPDL	1p34.1	-0.25254	5.70E-07	3.54E-06
OXSRI	3p22.2	0.252527	5.71E-07	3.55E-06
ZEB2	2q22.3	0.252486	5.74E-07	3.56E-06
IFT52	20q13.12	-0.25238	5.80E-07	3.60E-06
GS1-124K5.11	7q11.21	-0.25238	5.80E-07	3.60E-06
DDX46	5q31.1	0.252373	5.81E-07	3.60E-06
IL1R1	2q11.2-q12.1	0.252325	5.84E-07	3.62E-06
NID2	14q22.1	0.252312	5.84E-07	3.62E-06
CCT6P1	7q11.21	-0.25231	5.85E-07	3.62E-06
TMEM250	9q34.3	-0.25227	5.87E-07	3.63E-06
NEXMIF	Xq13.3	0.252246	5.89E-07	3.64E-06
PARM1	4q13.3	0.252179	5.93E-07	3.67E-06
PXMP4	20q11.22	-0.25215	5.95E-07	3.68E-06
SERTAD2	2p14	0.252136	5.95E-07	3.68E-06
TIAF1	17q11.2	-0.2521	5.98E-07	3.69E-06
IER5L	9q34.11	-0.25209	5.99E-07	3.70E-06
GUSBP4	6p11.2	-0.25203	6.02E-07	3.72E-06
AGPAT4	6q26	0.251904	6.10E-07	3.77E-06
ARHGAP30	1q23.3	0.25184	6.14E-07	3.79E-06
CDC14C	7p12.3	0.251838	6.15E-07	3.79E-06

TOM1L2	17p11.2	0.251819	6.16E-07	3.80E-06
SHPRH	6q24.3	0.251809	6.16E-07	3.80E-06
ATXN3	14q32.12	0.251808	6.16E-07	3.80E-06
CSNK2A2	16q21	-0.25178	6.18E-07	3.81E-06
ADAT3	19p13.3	-0.25176	6.20E-07	3.82E-06
PACC1	1q32.3	-0.25172	6.22E-07	3.83E-06
DMAC1	9p24.1	-0.25172	6.22E-07	3.83E-06
SIGLEC10	19q13.41	0.251696	6.24E-07	3.84E-06
PDE4B	1p31.3	0.251683	6.25E-07	3.84E-06
IPO9	1q32.1	0.251682	6.25E-07	3.84E-06
ADIPOR1	1q32.1	0.251675	6.25E-07	3.85E-06
ZNF706	8q22.3	-0.25164	6.27E-07	3.86E-06
TSNAXIP1	16q22.1	-0.25158	6.32E-07	3.88E-06
FAM53A	4p16.3	-0.25152	6.35E-07	3.90E-06
ETV6	12p13.2	0.251515	6.36E-07	3.91E-06
FBF1	17q25.1	-0.25151	6.36E-07	3.91E-06
PPM1J	1p13.2	-0.2515	6.37E-07	3.91E-06
SOCS5	2p21	0.251443	6.41E-07	3.93E-06
C2ORF68	2p11.2	-0.25143	6.41E-07	3.93E-06
RNF114	20q13.13	-0.25142	6.42E-07	3.94E-06
NUDT5	10p14	-0.25139	6.44E-07	3.95E-06
MARVELD1	10q24.2	0.251376	6.45E-07	3.96E-06
CCR2	3p21.31	0.25132	6.49E-07	3.98E-06
RORA	15q22.2	0.251295	6.51E-07	3.99E-06
NOTUM	17q25.3	-0.25117	6.59E-07	4.04E-06
SEMA4A	1q22	0.251151	6.61E-07	4.05E-06
TNNI3K	1p31.1	0.251108	6.64E-07	4.06E-06
ZADH2	18q22.3	0.251084	6.66E-07	4.07E-06
MSN	Xq12	0.251052	6.68E-07	4.08E-06
ABCF3	3q27.1	-0.25097	6.73E-07	4.12E-06
KCTD9	8p21.2	0.250954	6.75E-07	4.12E-06
SLC38A1	12q13.11	0.250937	6.76E-07	4.13E-06
AREL1	14q24.3	0.250888	6.79E-07	4.15E-06
RAB21	12q21.1	0.250818	6.84E-07	4.18E-06
TBC1D31	8q24.13	-0.25079	6.87E-07	4.19E-06
TUBA8	22q11.21	-0.25076	6.89E-07	4.20E-06
ANAPC5	12q24.31	-0.25075	6.89E-07	4.21E-06
C12ORF76	12q24.11	-0.25073	6.91E-07	4.21E-06
KCTD10	12q24.11	0.250698	6.93E-07	4.23E-06
TPX2	20q11.21	-0.25064	6.97E-07	4.25E-06
HACD4	9p21.3	0.250644	6.97E-07	4.25E-06
RHEB	7q36.1	-0.25064	6.98E-07	4.25E-06
FAM186A	12q13.12	-0.25063	6.98E-07	4.25E-06
NENF	1q32.3	-0.25063	6.98E-07	4.25E-06
PDCD6	5p15.33	-0.25061	7.00E-07	4.26E-06
EIF3H	8q23.3-q24.11	-0.25056	7.03E-07	4.28E-06
ADAT1	16q23.1	0.250556	7.04E-07	4.28E-06
COPB2	3q23	0.250552	7.04E-07	4.28E-06
MS4A2	11q12.1	0.250548	7.04E-07	4.28E-06
NR4A2	2q24.1	0.250456	7.11E-07	4.32E-06
NRDE2	14q32.11	0.250445	7.12E-07	4.32E-06
CEBPA-DT	19q13.11	-0.25045	7.12E-07	4.32E-06
C3ORF36	3q22.1	0.250445	7.12E-07	4.32E-06
CDK3	17q25.1	-0.25043	7.13E-07	4.33E-06
CHST3	10q22.1	0.250381	7.17E-07	4.35E-06
RCSD1	1q24.2	0.250075	7.40E-07	4.49E-06
BCL2L2	14q11.2	0.250032	7.43E-07	4.51E-06
PPP1R16B	20q11.23	0.250007	7.45E-07	4.52E-06

CD5	11q12.2	0.24998	7.48E-07	4.53E-06
FAM71E1	19q13.33	-0.24995	7.50E-07	4.54E-06
PPP1R7	2q37.3	-0.24992	7.53E-07	4.56E-06
RIBC1	Xp11.22	-0.24991	7.53E-07	4.56E-06
DPH5	1p21.2	-0.2499	7.54E-07	4.56E-06
ABRACL	6q24.1	-0.24988	7.55E-07	4.57E-06
FRRS1	1p21.2	0.249821	7.60E-07	4.60E-06
PAK1IP1	6p24.2	-0.24981	7.61E-07	4.60E-06
KCTD17	22q12.3	-0.24974	7.67E-07	4.64E-06
ZFX	Xp22.11	0.249687	7.71E-07	4.66E-06
ZBTB6	9q33.2	0.249685	7.71E-07	4.66E-06
BTK	Xq22.1	0.249604	7.78E-07	4.70E-06
SLC33A1	3q25.31	0.249513	7.85E-07	4.74E-06
THSD1P1	13q14.3	-0.2495	7.87E-07	4.75E-06
HDHD5	22q11.1	-0.24947	7.89E-07	4.76E-06
CNTNAP3	9p12	0.249443	7.91E-07	4.77E-06
TLR8	Xp22.2	0.249439	7.91E-07	4.77E-06
SIGLEC8	19q13.41	0.249406	7.94E-07	4.79E-06
PRKCH	14q23.1	0.249386	7.96E-07	4.80E-06
C15ORF39	15q24.2	0.249381	7.96E-07	4.80E-06
DHPS	19p13.13	-0.24936	7.97E-07	4.80E-06
SH3GL1	19p13.3	-0.24936	7.98E-07	4.80E-06
CTBP1	4p16.3	-0.2493	8.03E-07	4.83E-06
CCNE1	19q12	-0.24927	8.06E-07	4.85E-06
ULK4P2	15q13.2	0.249236	8.08E-07	4.86E-06
C6ORF52	6p24.2	-0.24921	8.10E-07	4.87E-06
UCK1	9q34.13	-0.2492	8.11E-07	4.88E-06
SH3PXD2B	5q35.1	0.249123	8.18E-07	4.92E-06
TRIM38	6p22.2	0.249096	8.20E-07	4.93E-06
TPM4	19p13.12-p13.11	0.249073	8.22E-07	4.94E-06
CENPA	2p23.3	-0.24906	8.23E-07	4.94E-06
KIAA2013	1p36.22	-0.24905	8.24E-07	4.95E-06
CRYM-AS1	16p12.2	-0.24899	8.29E-07	4.98E-06
SOX13	1q32.1	0.248973	8.31E-07	4.99E-06
LYAR	4p16.3	-0.24895	8.33E-07	5.00E-06
MTCH1	6p21.2	-0.24895	8.33E-07	5.00E-06
ITGB3BP	1p31.3	-0.24893	8.35E-07	5.01E-06
PDZD7	10q24.31	-0.24892	8.35E-07	5.01E-06
NEFL	8p21.2	0.248907	8.37E-07	5.01E-06
CSF1R	5q32	0.248882	8.39E-07	5.02E-06
C16ORF54	16p11.2	0.248848	8.42E-07	5.04E-06
EYS	6q12	0.248842	8.42E-07	5.04E-06
RNF19A	8q22.2	0.248835	8.43E-07	5.04E-06
FAHD2B	2q11.2	-0.24883	8.43E-07	5.05E-06
RNF144B	6p22.3	0.24868	8.57E-07	5.12E-06
IL23R	1p31.3	0.248661	8.58E-07	5.13E-06
MCF2L2	3q27.1	0.24863	8.61E-07	5.15E-06
NAA20	20p11.23	-0.2486	8.64E-07	5.16E-06
PPME1	11q13.4	-0.24852	8.71E-07	5.20E-06
ASB8	12q13.11	0.248509	8.72E-07	5.21E-06
GNL3	3p21.1	-0.2485	8.73E-07	5.21E-06
MORN2	2p22.1	-0.24847	8.75E-07	5.22E-06
PRUNE2	9q21.2	0.248414	8.81E-07	5.26E-06
RCN2	15q24.3	0.248377	8.84E-07	5.27E-06
TRIL	7p14.3	0.248347	8.87E-07	5.29E-06
CCNB1IP1	14q11.2	-0.24832	8.89E-07	5.30E-06
PTPRF	1p34.2	0.248318	8.90E-07	5.30E-06
HAUS5	19q13.12	-0.24831	8.90E-07	5.31E-06

CNR1	6q15	0.248271	8.94E-07	5.33E-06
NTRK2	9q21.33	0.248217	8.99E-07	5.35E-06
ZNF513	2p23.3	-0.24821	8.99E-07	5.35E-06
IKBKG	Xq28	-0.24821	9.00E-07	5.36E-06
TPRN	9q34.3	-0.2482	9.01E-07	5.36E-06
SEPTIN7P2	7p12.3	-0.24816	9.04E-07	5.38E-06
NR3C1	5q31.3	0.248103	9.10E-07	5.41E-06
TTC9C	11q12.3	-0.24808	9.12E-07	5.42E-06
BEND4	4p13	0.248017	9.18E-07	5.45E-06
TMEM18	2p25.3	-0.24796	9.23E-07	5.49E-06
RECQL	12p12.1	0.24794	9.25E-07	5.50E-06
RAD54L	1p34.1	-0.24793	9.27E-07	5.50E-06
GINS2	16q24.1	-0.24792	9.27E-07	5.50E-06
UBN1	16p13.3	0.247905	9.29E-07	5.51E-06
SSBP2	5q14.1	0.247895	9.30E-07	5.52E-06
ERN1	17q23.3	0.247868	9.32E-07	5.53E-06
MRPS18B	6p21.33	-0.24776	9.43E-07	5.59E-06
TCF4	18q21.2	0.2477	9.49E-07	5.62E-06
WASH2P	2q14.1	-0.2477	9.49E-07	5.62E-06
ZNF707	8q24.3	-0.24769	9.50E-07	5.63E-06
MATR3	5q31.2	0.247605	9.58E-07	5.67E-06
JPH4	14q11.2	0.247572	9.61E-07	5.69E-06
SRSF7	2p22.1	-0.24757	9.62E-07	5.69E-06
BCL7B	7q11.23	-0.2475	9.68E-07	5.73E-06
TASOR2	10p15.1	0.247485	9.70E-07	5.74E-06
EP400	12q24.33	0.247468	9.72E-07	5.75E-06
VILL	3p22.2	0.247449	9.74E-07	5.76E-06
ABHD14B	3p21.2	-0.24743	9.75E-07	5.76E-06
NOB1	16q22.1	-0.24736	9.83E-07	5.81E-06
SDHB	1p36.13	-0.24735	9.84E-07	5.81E-06
GTPBP3	19p13.11	-0.24727	9.92E-07	5.86E-06
NELFA	4p16.3	-0.24726	9.93E-07	5.86E-06
AMDHD2	16p13.3	-0.24725	9.94E-07	5.87E-06
NXPE2	11q23.2-q23.3	0.247242	9.95E-07	5.87E-06
NLRP3	1q44	0.247217	9.98E-07	5.88E-06
WDR76	15q15.3	0.247216	9.98E-07	5.88E-06
SMDT1	22q13.2	-0.24718	1.00E-06	5.90E-06
CSE1L	20q13.13	-0.24715	1.00E-06	5.92E-06
COQ9	16q21	-0.24711	1.01E-06	5.94E-06
ETV4	17q21.31	-0.24705	1.02E-06	5.98E-06
CEBPA	19q13.11	-0.24702	1.02E-06	5.99E-06
FIGN	2q24.3	0.247004	1.02E-06	6.00E-06
RPL13A	19q13.33	-0.24693	1.03E-06	6.04E-06
PRSS53	16p11.2	-0.24692	1.03E-06	6.05E-06
ZBTB16	11q23.2	0.246868	1.03E-06	6.08E-06
SLC25A27	6p12.3	-0.24685	1.04E-06	6.09E-06
CSAD	12q13.13	-0.24673	1.05E-06	6.17E-06
SPCS2	11q13.4	-0.24667	1.06E-06	6.20E-06
CA8	8q12.1	0.246664	1.06E-06	6.20E-06
PSMC1	14q32.11	-0.24662	1.06E-06	6.23E-06
TAPT1	4p15.32	0.246562	1.07E-06	6.27E-06
JMJD6	17q25.1	-0.24655	1.07E-06	6.27E-06
CRYAA	21q22.3	-0.24652	1.07E-06	6.29E-06
ZBTB48	1p36.31	-0.24643	1.08E-06	6.35E-06
KCNQ1	11p15.5-p15.4	-0.24639	1.09E-06	6.37E-06
PPP2R5A	1q32.3	0.246389	1.09E-06	6.37E-06
PTOV1	19q13.33	-0.24635	1.09E-06	6.39E-06
PTPN13	4q21.3	0.246346	1.09E-06	6.40E-06

PSMD4	1q21.3	-0.24634	1.09E-06	6.40E-06
GFRA1	10q25.3	0.246302	1.10E-06	6.42E-06
FLT1	13q12.3	0.24629	1.10E-06	6.43E-06
UBR7	14q32.12	0.246235	1.10E-06	6.46E-06
TMCC1	3q22.1	0.24621	1.11E-06	6.47E-06
LRRC29	16q22.1	-0.24621	1.11E-06	6.47E-06
KRT23	17q21.2	-0.24616	1.11E-06	6.51E-06
ATG101	12q13.13	-0.24614	1.12E-06	6.52E-06
ATRNL1	10q25.3	0.246125	1.12E-06	6.53E-06
NEURL2	20q13.12	-0.24608	1.12E-06	6.56E-06
ASNS	7q21.3	-0.246	1.13E-06	6.61E-06
CD151	11p15.5	-0.24591	1.14E-06	6.67E-06
RPS6KL1	14q24.3	-0.2459	1.14E-06	6.67E-06
UGT8	4q26	0.245889	1.14E-06	6.68E-06
RCN1	11p13	-0.24587	1.15E-06	6.69E-06
MAN2A2	15q26.1	0.245827	1.15E-06	6.72E-06
ACE	17q23.3	0.245815	1.15E-06	6.72E-06
POMT1	9q34.13	-0.24579	1.16E-06	6.74E-06
SUSD1	9q31.3-q32	0.24576	1.16E-06	6.76E-06
POLRMT	19p13.3	-0.24575	1.16E-06	6.76E-06
GNG2	14q22.1	0.245711	1.17E-06	6.79E-06
ANK2	4q25-q26	0.245686	1.17E-06	6.80E-06
ARL5B	10p12.31	0.245602	1.18E-06	6.86E-06
CLASRP	19q13.32	-0.24554	1.19E-06	6.90E-06
PER2	2q37.3	0.245492	1.19E-06	6.93E-06
STARD3	17q12	-0.24547	1.20E-06	6.95E-06
FCHSD1	5q31.3	-0.24546	1.20E-06	6.95E-06
CDC42EP3	2p22.2	0.24543	1.20E-06	6.97E-06
PIPOX	17q11.2	-0.24539	1.21E-06	7.00E-06
CXCR4	2q22.1	0.245367	1.21E-06	7.01E-06
DDX55	12q24.31	-0.24535	1.21E-06	7.03E-06
SHE	1q21.3	0.245344	1.21E-06	7.03E-06
PRR34-AS1	22q13.31	-0.24532	1.21E-06	7.04E-06
IL7R	5p13.2	0.245305	1.22E-06	7.05E-06
PRDM2	1p36.21	0.245273	1.22E-06	7.07E-06
TMEM198	2q35	-0.24527	1.22E-06	7.07E-06
CST3	20p11.21	-0.24526	1.22E-06	7.08E-06
JOSD2	19q13.33	-0.24524	1.22E-06	7.09E-06
RPP38	10p13	-0.24521	1.23E-06	7.11E-06
DBNDD2	20q13.12	-0.24521	1.23E-06	7.11E-06
ASAH2B	10q11.23	0.245193	1.23E-06	7.12E-06
TAF6	7q22.1	-0.24519	1.23E-06	7.12E-06
B3GNTL1	17q25.3	-0.24516	1.23E-06	7.14E-06
PGS1	17q25.3	-0.2451	1.24E-06	7.18E-06
DTX3L	3q21.1	0.245092	1.24E-06	7.18E-06
FLT3	13q12.2	0.245064	1.25E-06	7.20E-06
UBALD1	16p13.3	-0.24505	1.25E-06	7.21E-06
WIPF1	2q31.1	0.24504	1.25E-06	7.22E-06
CADM3	1q23.2	0.245037	1.25E-06	7.22E-06
LINC01101	2q14.2	-0.24501	1.25E-06	7.23E-06
CDCA5	11q13.1	-0.245	1.25E-06	7.24E-06
P2RY8	Xp22.33 and Yp11.2	0.244938	1.26E-06	7.28E-06
FLJ42627	16p13.3	0.244891	1.27E-06	7.32E-06
KRTAP3-2	17q21.2	-0.24488	1.27E-06	7.32E-06
RAB18	10p12.1	0.244878	1.27E-06	7.32E-06
SUMO1	2q33.1	-0.24479	1.28E-06	7.38E-06
TMED1	19p13.2	-0.24479	1.28E-06	7.38E-06
MICAL2	11p15.3	0.244768	1.28E-06	7.40E-06

NME1-NME2	17q21.33	-0.24476	1.29E-06	7.40E-06
SMARCD2	17q23.3	-0.24475	1.29E-06	7.41E-06
RABL6	9q34.3	-0.2447	1.29E-06	7.45E-06
NFKBIL1	6p21.33	-0.24469	1.29E-06	7.45E-06
SLC7A5	16q24.2	-0.24468	1.30E-06	7.46E-06
SRA1	5q31.3	-0.24457	1.31E-06	7.54E-06
KDM4B	19p13.3	0.244568	1.31E-06	7.54E-06
CENPM	22q13.2	-0.24457	1.31E-06	7.54E-06
ECM1	1q21.2	0.244564	1.31E-06	7.54E-06
CCDC88C	14q32.11-q32.12	0.244558	1.31E-06	7.54E-06
MAP2K4	17p12	0.244558	1.31E-06	7.54E-06
GPRC5B	16p12.3	0.244534	1.32E-06	7.55E-06
CLBA1	14q32.33	-0.24453	1.32E-06	7.55E-06
NSMCE2	8q24.13	-0.2445	1.32E-06	7.58E-06
ITPRID1	7p14.3	0.244459	1.33E-06	7.60E-06
AFG3L1P	16q24.3	-0.24427	1.35E-06	7.75E-06
PGGHG	11p15.5	-0.24424	1.36E-06	7.77E-06
SOD3	4p15.2	0.244238	1.36E-06	7.77E-06
RNF126	19p13.3	-0.24417	1.37E-06	7.83E-06
CHD1	5q15-q21.1	0.244113	1.37E-06	7.87E-06
ABCA6	17q24.2-q24.3	0.244103	1.38E-06	7.87E-06
TMEM184C	4q31.23	0.244086	1.38E-06	7.88E-06
DDOST	1p36.12	-0.24408	1.38E-06	7.88E-06
SLC22A23	6p25.2	0.244067	1.38E-06	7.90E-06
PRMT9	4q31.23	0.244063	1.38E-06	7.90E-06
ALDH9A1	1q24.1	0.244015	1.39E-06	7.93E-06
RPP30	10q23.31	-0.24399	1.39E-06	7.95E-06
SLC18A2	10q25.3	0.243972	1.39E-06	7.96E-06
LOC401052	3p25.3	-0.24397	1.39E-06	7.97E-06
YKT6	7p13	-0.24396	1.40E-06	7.97E-06
DOLK	9q34.11	-0.24396	1.40E-06	7.97E-06
DTX1	12q24.13	0.243921	1.40E-06	8.00E-06
INTS1	7p22.3	-0.2439	1.40E-06	8.01E-06
SDK1	7p22.2	0.243901	1.40E-06	8.01E-06
HHAT	1q32.2	0.243897	1.40E-06	8.01E-06
GMCL1	2p13.3	0.243869	1.41E-06	8.03E-06
ASAH1	8p22	0.243869	1.41E-06	8.03E-06
FUOM	10q26.3	-0.24385	1.41E-06	8.04E-06
HAUS2	15q15.2	0.243824	1.42E-06	8.06E-06
GIT2	12q24.11	0.243813	1.42E-06	8.07E-06
ING5	2q37.3	-0.24378	1.42E-06	8.10E-06
NDUFAF5	20p12.1	-0.24377	1.42E-06	8.10E-06
SF3B1	2q33.1	0.243766	1.42E-06	8.10E-06
SH3GLB1	1p22.3	0.243762	1.42E-06	8.10E-06
TMEM256	17p13.1	-0.24372	1.43E-06	8.13E-06
HMGA1	6p21.31	-0.24362	1.44E-06	8.21E-06
VPS4A	16q22.1	-0.24358	1.45E-06	8.24E-06
SPN	16p11.2	0.243567	1.45E-06	8.25E-06
PIP4K2A	10p12.2	0.243557	1.45E-06	8.26E-06
DYNC1I2	2q31.1	0.24355	1.46E-06	8.26E-06
CCT4	2p15	-0.24352	1.46E-06	8.29E-06
A2M	12p13.31	0.243518	1.46E-06	8.29E-06
EIF3K	19q13.2	-0.24348	1.47E-06	8.31E-06
IFITM1	11p15.5	-0.24345	1.47E-06	8.34E-06
HSF2	6q22.31	-0.24342	1.48E-06	8.36E-06
LY6E	8q24.3	-0.24341	1.48E-06	8.37E-06
ELL2	5q15	0.24335	1.49E-06	8.42E-06
SMAD7	18q21.1	0.243324	1.49E-06	8.44E-06



ADD1	4p16.3	0.243288	1.49E-06	8.47E-06
C19ORF47	19q13.2	-0.24328	1.50E-06	8.47E-06
UST	6q25.1	0.243279	1.50E-06	8.47E-06
AKR1C4	10p15.1	-0.24325	1.50E-06	8.49E-06
EEF1E1	6p24.3	-0.24324	1.50E-06	8.50E-06
ABHD16B	20q13.33	-0.24313	1.52E-06	8.59E-06
APMAP	20p11.21	-0.24302	1.54E-06	8.69E-06
SLC24A3	20p11.23	0.242996	1.54E-06	8.71E-06
ZNF767P	7q36.1	-0.24296	1.55E-06	8.73E-06
FFAR4	10q23.33	0.242924	1.55E-06	8.76E-06
DCLK2	4q31.23-q31.3	0.242802	1.57E-06	8.87E-06
H2AFZ	4q23	-0.2428	1.57E-06	8.87E-06
ACVR1	2q24.1	0.242748	1.58E-06	8.92E-06
RPL5	1p22.1	-0.24262	1.60E-06	9.03E-06
VPS39	15q15.1	0.242616	1.60E-06	9.03E-06
FLYWCH2	16p13.3	-0.24259	1.60E-06	9.05E-06
FGL2	7q11.23	0.242559	1.61E-06	9.08E-06
FAT4	4q28.1	0.242549	1.61E-06	9.08E-06
COL6A3	2q37.3	0.242544	1.61E-06	9.09E-06
NWD1	19p13.11	0.242539	1.61E-06	9.09E-06
FGFR4	5q35.2	-0.24251	1.62E-06	9.12E-06
RBSN	3p25.1	0.242458	1.63E-06	9.16E-06
NEGR1	1p31.1	0.242427	1.63E-06	9.19E-06
SPACA6	19q13.41	-0.24238	1.64E-06	9.22E-06
TNIP2	4p16.3	-0.24236	1.64E-06	9.24E-06
SLF2	10q24.31	0.2423	1.65E-06	9.30E-06
FTH1P3	2p23.3	-0.24225	1.66E-06	9.34E-06
IMMP1L	11p13	-0.24223	1.66E-06	9.36E-06
GTF2H5	6q25.3	-0.2422	1.67E-06	9.38E-06
TJAP1	6p21.1	-0.24218	1.67E-06	9.40E-06
EDC3	15q24.1	0.242159	1.68E-06	9.42E-06
BRAF	7q34	0.242146	1.68E-06	9.43E-06
C9ORF163	9q34.3	-0.24213	1.68E-06	9.44E-06
DNAH17	17q25.3	-0.24212	1.68E-06	9.44E-06
ZNF251	8q24.3	-0.24211	1.69E-06	9.46E-06
DFFA	1p36.22	-0.2421	1.69E-06	9.47E-06
CACNA1C	12p13.33	0.242075	1.69E-06	9.48E-06
G6PD	Xq28	-0.24207	1.69E-06	9.49E-06
NKD2	5p15.33	-0.24204	1.70E-06	9.51E-06
AGFG1	2q36.3	0.242033	1.70E-06	9.51E-06
CNTD1	17q21.2-q21.31	-0.24199	1.71E-06	9.56E-06
GIGYF1	7q22.1	-0.24189	1.72E-06	9.65E-06
GPR35	2q37.3	-0.24189	1.72E-06	9.65E-06
RPL10	Xq28	-0.24188	1.72E-06	9.65E-06
ZNF800	7q31.33	0.241833	1.73E-06	9.70E-06
ANKRD45	1q25.1	0.241735	1.75E-06	9.79E-06
SP2	17q21.32	0.241725	1.75E-06	9.80E-06
SAPCD2	9q34.3	-0.24171	1.75E-06	9.81E-06
GATB	4q31.3	-0.24169	1.76E-06	9.83E-06
LAMTOR5	1p13.3	-0.24164	1.77E-06	9.87E-06
YY1AP1	1q22	0.241619	1.77E-06	9.89E-06
ADCY10P1	6p21.1	-0.24157	1.78E-06	9.94E-06
SP6	17q21.32	-0.24153	1.79E-06	9.98E-06
TASOR	3p14.3	0.241517	1.79E-06	9.99E-06
CCDC59	12q21.31	-0.24151	1.79E-06	9.99E-06
LAX1	1q32.1	0.241479	1.80E-06	1.00E-05
ZEB1	10p11.22	0.241453	1.80E-06	1.00E-05
ZSCAN22	19q13.43	0.241351	1.82E-06	1.01E-05

PRDM8	4q21.21	0.241347	1.82E-06	1.01E-05
ZNF296	19q13.32	-0.24134	1.82E-06	1.01E-05
TRIM56	7q22.1	0.24127	1.84E-06	1.02E-05
ANOS1	Xp22.31	0.241255	1.84E-06	1.02E-05
MUC2	11p15.5	0.241254	1.84E-06	1.02E-05
SNRPD3	22q11.23	-0.24122	1.84E-06	1.03E-05
P2RY10	Xq21.1	0.241217	1.84E-06	1.03E-05
ABCA1	9q31.1	0.241196	1.85E-06	1.03E-05
BAG3	10q26.11	0.241194	1.85E-06	1.03E-05
CD4	12p13.31	0.241177	1.85E-06	1.03E-05
APOM	6p21.33	-0.24113	1.86E-06	1.03E-05
MPDZ	9p23	0.241079	1.87E-06	1.04E-05
KIF2A	5q12.1	0.241057	1.88E-06	1.04E-05
BCL2L1	20q11.21	-0.24105	1.88E-06	1.04E-05
MAMLD1	Xq28	0.241031	1.88E-06	1.04E-05
METTL7A	12q13.12	0.240998	1.89E-06	1.05E-05
UTP25	1q32.2	0.24091	1.90E-06	1.06E-05
AKT1S1	19q13.33	-0.24089	1.91E-06	1.06E-05
BARD1	2q35	0.24088	1.91E-06	1.06E-05
C10ORF105	10q22.1	0.240843	1.92E-06	1.06E-05
DDC	7p12.2-p12.1	-0.24081	1.92E-06	1.07E-05
AHCYL2	7q32.1	0.240805	1.92E-06	1.07E-05
CELP	9q34.13	-0.24078	1.93E-06	1.07E-05
XRCC3	14q32.33	-0.24077	1.93E-06	1.07E-05
ARMC10	7q22.1	-0.24075	1.93E-06	1.07E-05
CD109	6q13	0.240697	1.94E-06	1.08E-05
SLC19A3	2q36.3	-0.24067	1.95E-06	1.08E-05
SHISA5	3p21.31	-0.24052	1.98E-06	1.09E-05
SKA3	13q12.11	-0.24044	2.00E-06	1.10E-05
ADAMTSL3	15q25.2	0.24043	2.00E-06	1.10E-05
MRPS18C	4q21.23	-0.24043	2.00E-06	1.10E-05
UTP11	1p34.3	-0.24041	2.00E-06	1.11E-05
TMEM106A	17q21.31	0.240359	2.01E-06	1.11E-05
ADGRL2	1p31.1	0.240348	2.01E-06	1.11E-05
FAM174B	15q26.1	0.2403	2.02E-06	1.12E-05
FAM114A2	5q33.2	0.240251	2.03E-06	1.12E-05
ZBTB17	1p36.13	-0.24024	2.04E-06	1.12E-05
MAPKAPK3	3p21.2	-0.24023	2.04E-06	1.12E-05
APBB1IP	10p12.1	0.240133	2.06E-06	1.13E-05
NARF	17q25.3	-0.2401	2.07E-06	1.14E-05
CBFA2T3	16q24.3	0.240085	2.07E-06	1.14E-05
LONP1	19p13.3	-0.24008	2.07E-06	1.14E-05
USP22	17p11.2	0.240063	2.07E-06	1.14E-05
FPGS	9q34.11	-0.24003	2.08E-06	1.15E-05
TJP2	9q21.11	0.239934	2.10E-06	1.16E-05
ITGAM	16p11.2	0.239919	2.10E-06	1.16E-05
CD276	15q24.1	0.239794	2.13E-06	1.17E-05
MOCS3	20q13.13	-0.23977	2.14E-06	1.17E-05
GAB1	4q31.21	0.239719	2.15E-06	1.18E-05
TBL2	7q11.23	-0.23963	2.16E-06	1.19E-05
DDX39B	6p21.33	-0.23959	2.17E-06	1.19E-05
TECPR1	7q21.3	0.239593	2.17E-06	1.19E-05
AURKB	17p13.1	-0.23958	2.18E-06	1.20E-05
SHISAL1	22q13.31	0.23955	2.18E-06	1.20E-05
FANCG	9p13.3	-0.2395	2.19E-06	1.20E-05
PGR	11q22.1	0.239482	2.20E-06	1.21E-05
DESI1	22q13.2	-0.23946	2.20E-06	1.21E-05
INPP4B	4q31.21	0.239426	2.21E-06	1.21E-05

CAP1	1p34.2	0.239415	2.21E-06	1.21E-05
SLC25A1	22q11.21	-0.2394	2.22E-06	1.22E-05
CTSE	1q32.1	0.239387	2.22E-06	1.22E-05
RMRP	9p13.3	-0.23936	2.22E-06	1.22E-05
KRBOX4	Xp11.3	-0.23935	2.23E-06	1.22E-05
CPSF1	8q24.3	-0.23929	2.24E-06	1.23E-05
CD163L1	12p13.31	0.239284	2.24E-06	1.23E-05
DESI2	1q44	0.239254	2.25E-06	1.23E-05
MRAP2	6q14.2	0.23911	2.28E-06	1.25E-05
TADA2B	4p16.1	0.23911	2.28E-06	1.25E-05
CXORF40A	Xq28	-0.2391	2.28E-06	1.25E-05
NUFIP2	17q11.2	0.239093	2.28E-06	1.25E-05
ZNF517	8q24.3	-0.23909	2.29E-06	1.25E-05
NELFB	9q34.3	-0.23908	2.29E-06	1.25E-05
HSPA2	14q23.3	0.239059	2.29E-06	1.25E-05
SLC25A17	22q13.2	-0.23906	2.29E-06	1.25E-05
TMEM243	7q21.12	-0.23905	2.30E-06	1.25E-05
TENM4	11q14.1	0.239014	2.30E-06	1.26E-05
PBX1	1q23.3	0.238977	2.31E-06	1.26E-05
RAD51B	14q24.1	-0.23895	2.32E-06	1.26E-05
SGK1	6q23.2	0.238919	2.33E-06	1.27E-05
METTL7B	12q13.2	-0.23892	2.33E-06	1.27E-05
AIMP1	4q24	-0.23883	2.34E-06	1.28E-05
LINC00653	20p11.23	-0.23871	2.37E-06	1.29E-05
NDUFAF4	6q16.1	-0.2387	2.38E-06	1.30E-05
EIF2B1	12q24.31	-0.23869	2.38E-06	1.30E-05
CFDP1	16q23.1	-0.23868	2.38E-06	1.30E-05
ZNF225	19q13.31	0.23867	2.38E-06	1.30E-05
SHFL	19p13.2	-0.23865	2.39E-06	1.30E-05
CHRNA3	15q25.1	0.238614	2.40E-06	1.30E-05
FAM13A	4q22.1	0.238549	2.41E-06	1.31E-05
EEF1B2	2q33.3	-0.23855	2.41E-06	1.31E-05
PSMA3	14q23.1	-0.23855	2.41E-06	1.31E-05
CEP120	5q23.2	0.238537	2.42E-06	1.31E-05
SEC62	3q26.2	0.238444	2.44E-06	1.32E-05
CES4A	16q22.1	-0.23843	2.44E-06	1.33E-05
GARS	7p14.3	-0.2384	2.45E-06	1.33E-05
VIT	2p22.2	0.238393	2.45E-06	1.33E-05
JAG1	20p12.2	0.238355	2.46E-06	1.34E-05
TMSB10	2p11.2	-0.23828	2.48E-06	1.34E-05
SOAT1	1q25.2	0.238225	2.49E-06	1.35E-05
C7ORF13	7q36.3	-0.23816	2.51E-06	1.36E-05
RGPD1	2p11.2	0.238157	2.51E-06	1.36E-05
MAPK1IP1L	14q22.3	0.238142	2.51E-06	1.36E-05
LINC00910	17q21.31	-0.23812	2.52E-06	1.36E-05
ANKRD28	3p25.1	0.23811	2.52E-06	1.37E-05
IFI16	1q23.1	0.238103	2.52E-06	1.37E-05
MAGOHB	12p13.2	-0.23807	2.53E-06	1.37E-05
SCIMP	17p13.2	0.238058	2.53E-06	1.37E-05
CDH11	16q21	0.238051	2.54E-06	1.37E-05
HMGB1	13q12.3	-0.238	2.55E-06	1.38E-05
FOXA1	14q21.1	0.237953	2.56E-06	1.38E-05
METTL25	12q21.31	0.23792	2.57E-06	1.39E-05
BAP1	3p21.1	-0.23792	2.57E-06	1.39E-05
TSNARE1	8q24.3	-0.23791	2.57E-06	1.39E-05
FKBP15	9q32	0.237886	2.58E-06	1.39E-05
PCM1	8p22	0.237874	2.58E-06	1.39E-05
SPRYD7	13q14.2	-0.23785	2.59E-06	1.40E-05

BNC2	9p22.3-p22.2	0.237838	2.59E-06	1.40E-05
SLC16A6	17q24.2	0.237823	2.59E-06	1.40E-05
PPARGC1B	5q32	0.23778	2.61E-06	1.41E-05
DSCC1	8q24.12	-0.23762	2.65E-06	1.43E-05
USP54	10q22.2	0.237589	2.66E-06	1.43E-05
ZGLP1	19p13.2	-0.23758	2.66E-06	1.43E-05
TBC1D23	3q12.1-q12.2	0.237572	2.66E-06	1.43E-05
RBKS	2p23.2	-0.2375	2.68E-06	1.44E-05
SMG6	17p13.3	0.237484	2.68E-06	1.45E-05
UPF2	10p14	0.237476	2.69E-06	1.45E-05
SCG5	15q13.3	0.237465	2.69E-06	1.45E-05
MTFR2	6q23.3	-0.23745	2.69E-06	1.45E-05
CARS	11p15.4	-0.23743	2.70E-06	1.45E-05
GIMAP8	7q36.1	0.237413	2.70E-06	1.45E-05
SCN4B	11q23.3	0.237393	2.71E-06	1.46E-05
DNAJC7	17q21.2	-0.23734	2.72E-06	1.46E-05
PIGQ	16p13.3	-0.23733	2.73E-06	1.46E-05
ZIK1	19q13.43	0.237287	2.74E-06	1.47E-05
FLVCR1	1q32.3	0.237284	2.74E-06	1.47E-05
NEDD8	14q12	-0.23727	2.74E-06	1.47E-05
BARX2	11q24.3	0.237254	2.75E-06	1.47E-05
COA6	1q42.2	-0.2372	2.76E-06	1.48E-05
BLCAP	20q11.23	-0.23718	2.76E-06	1.48E-05
ZNF696	8q24.3	-0.23715	2.77E-06	1.49E-05
THBS1	15q14	0.237089	2.79E-06	1.50E-05
DHX33	17p13.2	0.237039	2.80E-06	1.50E-05
CLTA	9p13.3	-0.23702	2.81E-06	1.51E-05
SPOCK2	10q22.1	0.236935	2.83E-06	1.52E-05
CHCHD4	3p25.1	-0.23685	2.86E-06	1.53E-05
FAT1	4q35.2	0.236835	2.86E-06	1.53E-05
GGH	8q12.3	-0.23683	2.86E-06	1.53E-05
ARSB	5q14.1	0.236743	2.89E-06	1.55E-05
SYS1-DBNDD2	20q13.12	-0.23673	2.89E-06	1.55E-05
CCDC159	19p13.2	-0.23672	2.90E-06	1.55E-05
PDE4A	19p13.2	0.236675	2.91E-06	1.56E-05
CENPN	16q23.2	-0.23667	2.91E-06	1.56E-05
PDE3A	12p12.2	0.236663	2.91E-06	1.56E-05
CRYBB3	22q11.23	-0.23665	2.92E-06	1.56E-05
MYLK	3q21.1	0.236643	2.92E-06	1.56E-05
PIK3R3	1p34.1	0.236574	2.94E-06	1.57E-05
PDZD2	5p13.3	0.236538	2.95E-06	1.57E-05
GPATCH11	2p22.2	0.236514	2.95E-06	1.58E-05
CIDEB	14q12	0.23645	2.97E-06	1.59E-05
C14ORF132	14q32.2	0.236421	2.98E-06	1.59E-05
GEMIN8P4	1p22.2	-0.23639	2.99E-06	1.60E-05
PTP4A3	8q24.3	-0.23638	2.99E-06	1.60E-05
NDUFB4	3q13.33	-0.23638	3.00E-06	1.60E-05
SLC9A9	3q24	0.23636	3.00E-06	1.60E-05
ATP5F1C	10p14	-0.23635	3.00E-06	1.60E-05
NPIP3	16p12.2	-0.23633	3.01E-06	1.60E-05
BACH2	6q15	0.236298	3.02E-06	1.61E-05
NCAM2	21q21.1	0.236292	3.02E-06	1.61E-05
ZFYVE16	5q14.1	0.236279	3.02E-06	1.61E-05
RGS18	1q31.2	0.236226	3.04E-06	1.62E-05
TIMM23	10q11.22	-0.23615	3.06E-06	1.63E-05
IPP	1p34.1	0.236097	3.08E-06	1.64E-05
ST8SIA4	5q21.1	0.236024	3.10E-06	1.65E-05
ANKHD1-EIF4EBP3	5q31.3	0.236003	3.11E-06	1.65E-05

ZNF221	19q13.31	0.235975	3.12E-06	1.66E-05
GALNTL6	4q34.1	0.235962	3.12E-06	1.66E-05
ANP32A-IT1	15q23	0.235934	3.13E-06	1.66E-05
EIF1	17q21.2	-0.23585	3.15E-06	1.68E-05
PRC1	15q26.1	0.235839	3.16E-06	1.68E-05
PCOTH	13q12.12	-0.23583	3.16E-06	1.68E-05
DPYSL3	5q32	0.235824	3.16E-06	1.68E-05
PRKAB2	1q21.1	0.235821	3.16E-06	1.68E-05
MGAT2	14q21.3	0.235752	3.19E-06	1.69E-05
CANT1	17q25.3	0.235751	3.19E-06	1.69E-05
CDC42SE2	5q31.1	0.235675	3.21E-06	1.70E-05
CBWD2	2q14.1	-0.23567	3.21E-06	1.70E-05
COL8A1	3q12.1	0.235662	3.21E-06	1.70E-05
APEX2	Xp11.21	-0.23563	3.22E-06	1.71E-05
TTC37	5q15	0.235548	3.25E-06	1.72E-05
RPA2	1p35.3	-0.23552	3.26E-06	1.73E-05
FAM189A2	9q21.12	0.235475	3.27E-06	1.73E-05
GPRC5A	12p13.1	0.23545	3.28E-06	1.74E-05
GOLGA3	12q24.33	0.235445	3.28E-06	1.74E-05
KDM6B	17p13.1	0.235437	3.29E-06	1.74E-05
NCBP3	17p13.2	0.235431	3.29E-06	1.74E-05
FARSB	2q36.1	-0.23543	3.29E-06	1.74E-05
APPL1	3p14.3	0.235378	3.31E-06	1.75E-05
YIPF2	19p13.2	-0.23528	3.34E-06	1.76E-05
SCARB2	4q21.1	0.235252	3.35E-06	1.77E-05
TMEM191A	22q11.21	-0.23524	3.35E-06	1.77E-05
GP1BA	17p13.2	0.2352	3.36E-06	1.78E-05
VEPH1	3q25.31-q25.32	0.235199	3.36E-06	1.78E-05
KIAA0232	4p16.1	0.235159	3.38E-06	1.78E-05
C1ORF109	1p34.3	-0.23509	3.40E-06	1.79E-05
POLR2K	8q22.2	-0.23505	3.41E-06	1.80E-05
SCARNA16	17q25.2	-0.23505	3.42E-06	1.80E-05
TMED7	5q22.3	0.235005	3.43E-06	1.81E-05
PAX5	9p13.2	0.234996	3.43E-06	1.81E-05
MAMDC2	9q21.12	0.234987	3.44E-06	1.81E-05
C6ORF163	6q15	-0.23496	3.45E-06	1.81E-05
COL4A4	2q36.3	0.234945	3.45E-06	1.82E-05
DYRK1A	21q22.13	0.23493	3.46E-06	1.82E-05
QPRT	16p11.2	-0.23491	3.46E-06	1.82E-05
NXPE1	11q23.2	0.234911	3.46E-06	1.82E-05
H2AFY	5q31.1	-0.23488	3.47E-06	1.83E-05
SLC37A2	11q24.2	0.234873	3.47E-06	1.83E-05
SH3BP5	3p25.1	0.234863	3.48E-06	1.83E-05
TSC22D2	3q25.1	0.234838	3.49E-06	1.83E-05
AHSA2P	2p15	-0.23478	3.51E-06	1.84E-05
ITK	5q33.3	0.23476	3.51E-06	1.85E-05
CDC123	10p14-p13	-0.23474	3.52E-06	1.85E-05
RPL21	13q12.2	-0.23473	3.52E-06	1.85E-05
DACT1	14q23.1	0.234707	3.53E-06	1.85E-05
TNKS1BP1	11q12.1	0.234671	3.54E-06	1.86E-05
CYSLTR2	13q14.2	0.23467	3.54E-06	1.86E-05
CPSF2	14q32.12	0.234624	3.56E-06	1.87E-05
LY6G6D	6p21.33	-0.23462	3.56E-06	1.87E-05
MOB3A	19p13.3	0.234608	3.57E-06	1.87E-05
PKM	15q23	0.234593	3.57E-06	1.87E-05
HIST1H2AH	6p22.1	-0.23457	3.58E-06	1.88E-05
TRPS1	8q23.3	0.234524	3.60E-06	1.88E-05
RNF216P1	7p22.1	-0.23452	3.60E-06	1.88E-05

MAP3K13	3q27.2	0.234496	3.61E-06	1.89E-05
ORC5	7q22.1-q22.2	-0.23442	3.63E-06	1.90E-05
MSANTD2	11q24.2	-0.23436	3.65E-06	1.91E-05
ZNF37A	10p11.1	0.234362	3.65E-06	1.91E-05
FKBP11	12q13.12	-0.23432	3.67E-06	1.92E-05
CITED2	6q24.1	0.234322	3.67E-06	1.92E-05
LAPTM4B	8q22.1	-0.23431	3.67E-06	1.92E-05
ATP8B4	15q21.2	0.234301	3.68E-06	1.92E-05
FILIP1	6q14.1	0.234275	3.68E-06	1.92E-05
SLC2A11	22q11.23	-0.23425	3.69E-06	1.93E-05
ABHD12	20p11.21	-0.23423	3.70E-06	1.93E-05
CDC25C	5q31.2	-0.2342	3.71E-06	1.94E-05
CDK6	7q21.2	0.234176	3.72E-06	1.94E-05
FRMD6	14q22.1	0.234083	3.75E-06	1.96E-05
LRP6	12p13.2	0.234079	3.76E-06	1.96E-05
PCBP4	3p21.2	-0.23408	3.76E-06	1.96E-05
KCNT1	9q34.3	-0.23402	3.78E-06	1.97E-05
SEC14L1	17q25.2-q25.3	0.234014	3.78E-06	1.97E-05
PWAR5	15q11.2	0.234003	3.78E-06	1.97E-05
GABRE	Xq28	-0.23398	3.79E-06	1.98E-05
COMMD1	2p15	-0.23398	3.79E-06	1.98E-05
SLC36A1	5q33.1	0.233939	3.81E-06	1.98E-05
PSMG1	21q22.2	-0.23386	3.84E-06	2.00E-05
CDKN2B	9p21.3	0.233863	3.84E-06	2.00E-05
STMN1	1p36.11	-0.23385	3.84E-06	2.00E-05
SEC61A2	10p14	-0.23383	3.85E-06	2.00E-05
SYNPO2	4q26	0.233821	3.85E-06	2.00E-05
LETMD1	12q13.12	-0.23382	3.85E-06	2.00E-05
ITGA6	2q31.1	0.233764	3.87E-06	2.01E-05
CFAP70	10q22.2	-0.23373	3.89E-06	2.02E-05
MEGF10	5q23.2	0.233649	3.92E-06	2.03E-05
INHBA	7p14.1	0.233634	3.92E-06	2.04E-05
GPR107	9q34.11	0.233618	3.93E-06	2.04E-05
ILDR2	1q24.1	0.233599	3.94E-06	2.04E-05
MAB21L3	1p13.1	0.233541	3.96E-06	2.05E-05
DLG5-AS1	10q22.3	-0.23352	3.97E-06	2.06E-05
FGF11	17p13.1	0.233506	3.97E-06	2.06E-05
SS18L1	20q13.33	-0.23346	3.99E-06	2.07E-05
TRIP13	5p15.33	-0.23346	3.99E-06	2.07E-05
GSPT1	16p13.13	0.233433	4.00E-06	2.07E-05
SPECC1	17p11.2	0.233395	4.02E-06	2.08E-05
GPR27	3p13	0.233373	4.02E-06	2.08E-05
AHDC1	1p36.11-p35.3	0.233365	4.03E-06	2.09E-05
ZDHHC16	10q24.1	-0.23336	4.03E-06	2.09E-05
NPFF	12q13.13	-0.23331	4.05E-06	2.10E-05
UTP14A	Xq26.1	-0.23331	4.05E-06	2.10E-05
THEM6	8q24.3	-0.23326	4.07E-06	2.10E-05
TLR10	4p14	0.233256	4.07E-06	2.10E-05
TMEM9	1q32.1	-0.23325	4.07E-06	2.10E-05
FAM216A	12q24.11	-0.23323	4.08E-06	2.11E-05
BAG4	8p11.23	0.233215	4.09E-06	2.11E-05
GNAO1	16q13	0.233202	4.09E-06	2.11E-05
BTG1	12q21.33	0.233191	4.10E-06	2.12E-05
FAN1	15q13.3	0.233126	4.12E-06	2.13E-05
IMPACT	18q11.2	0.233105	4.13E-06	2.13E-05
C16ORF58	16p11.2	-0.23309	4.14E-06	2.13E-05
NSDHL	Xq28	-0.23305	4.15E-06	2.14E-05
CARD14	17q25.3	-0.23304	4.16E-06	2.15E-05

ALKBH3	11p11.2	-0.23302	4.17E-06	2.15E-05
FBXL8	16q22.1	-0.233	4.18E-06	2.15E-05
EIF4G2	11p15.4	0.232997	4.18E-06	2.15E-05
HDAC11	3p25.1	-0.23295	4.19E-06	2.16E-05
STX12	1p35.3	0.232943	4.20E-06	2.16E-05
LSP1P5	1q21.1	-0.23293	4.20E-06	2.16E-05
ZNF704	8q21.13	0.232906	4.21E-06	2.17E-05
DHRS12	13q14.3	-0.23285	4.24E-06	2.18E-05
CSNK1G3	5q23.2	0.232823	4.25E-06	2.19E-05
CCDC141	2q31.2	0.23279	4.26E-06	2.19E-05
SCEL	13q22.3	0.232752	4.28E-06	2.20E-05
PSME2	14q12	-0.23272	4.29E-06	2.21E-05
GGTA1P	9q33.2	0.232704	4.30E-06	2.21E-05
AKAP2	9q31.3	0.23261	4.34E-06	2.23E-05
AMPD3	11p15.4	0.232498	4.38E-06	2.25E-05
SCN3A	2q24.3	0.232496	4.38E-06	2.25E-05
SGCD	5q33.2-q33.3	0.23241	4.42E-06	2.27E-05
HDGFL2	19p13.3	-0.2324	4.43E-06	2.27E-05
ERN2	16p12.2	0.232358	4.44E-06	2.28E-05
PPM1B	2p21	0.232332	4.45E-06	2.29E-05
GPR183	13q32.3	0.232324	4.46E-06	2.29E-05
WDYHV1	8q24.13	-0.23232	4.46E-06	2.29E-05
P2RY13	3q25.1	0.232315	4.46E-06	2.29E-05
TEK	9p21.2	0.232248	4.49E-06	2.30E-05
CSNK1A1	5q32	0.232238	4.50E-06	2.30E-05
PKP3	11p15.5	-0.23222	4.50E-06	2.31E-05
DNMT3B	20q11.21	-0.23217	4.52E-06	2.32E-05
PNPO	17q21.32	-0.23217	4.53E-06	2.32E-05
PDCD2L	19q13.11	-0.23215	4.54E-06	2.32E-05
IGSF10	3q25.1	0.232127	4.54E-06	2.33E-05
PNPT1	2p16.1	-0.23211	4.55E-06	2.33E-05
STMP1	7q33	-0.23211	4.55E-06	2.33E-05
C2ORF72	2q37.1	0.232103	4.56E-06	2.33E-05
NEURL3	2q11.2	-0.2321	4.56E-06	2.33E-05
SURF6	9q34.2	-0.23208	4.57E-06	2.33E-05
ELAVL4	1p33-p32.3	0.232049	4.58E-06	2.34E-05
RBPJ	4p15.2	0.232033	4.59E-06	2.34E-05
UTP6	17q11.2	-0.23202	4.59E-06	2.34E-05
CYBC1	17q25.3	-0.23198	4.61E-06	2.35E-05
CMKLR1	12q23.3	0.231977	4.61E-06	2.35E-05
DNAJC22	12q13.12	0.231958	4.62E-06	2.36E-05
SSUH2	3p25.3	-0.23189	4.65E-06	2.37E-05
TMEM187	Xq28	-0.23188	4.65E-06	2.37E-05
PRKG2	4q21.21	0.231871	4.66E-06	2.38E-05
PDE6D	2q37.1	-0.23184	4.67E-06	2.38E-05
POLE4	2p12	-0.23184	4.67E-06	2.38E-05
RFC3	13q13.2	-0.23183	4.68E-06	2.38E-05
CERS5	12q13.12	-0.23183	4.68E-06	2.38E-05
GLO1	6p21.2	-0.23179	4.69E-06	2.39E-05
PAGR1	16p11.2	-0.23176	4.71E-06	2.40E-05
YJU2	19p13.3	-0.23174	4.72E-06	2.40E-05
IGF1	12q23.2	0.23171	4.73E-06	2.41E-05
ZNF815P	7p22.1	-0.23169	4.74E-06	2.41E-05
GSKIP	14q32.2	0.231677	4.75E-06	2.41E-05
KTI12	1p32.3	-0.23167	4.75E-06	2.42E-05
REM2	14q11.2	-0.23167	4.75E-06	2.42E-05
RFXAP	13q13.3	-0.23166	4.76E-06	2.42E-05
NLGN3	Xq13.1	0.231656	4.76E-06	2.42E-05

ZNF7	8q24.3	-0.23163	4.77E-06	2.42E-05
IFITM3	11p15.5	-0.23163	4.77E-06	2.42E-05
RSBN1L	7q11.23	0.231598	4.78E-06	2.43E-05
SCLY	2q37.3	-0.23156	4.80E-06	2.44E-05
CNNM4	2q11.2	0.231533	4.81E-06	2.44E-05
GALK2	15q21.1-q21.2	0.23142	4.87E-06	2.47E-05
NIP7	16q22.1	-0.23142	4.87E-06	2.47E-05
TMEM61	1p32.3	0.231303	4.92E-06	2.50E-05
SMG1	16p12.3	0.231286	4.93E-06	2.50E-05
C17ORF53	17q21.31	-0.23127	4.94E-06	2.50E-05
SPG7	16q24.3	-0.23126	4.94E-06	2.51E-05
ACAP3	1p36.33	-0.23123	4.96E-06	2.51E-05
MRPL16	11q12.1	-0.2312	4.97E-06	2.52E-05
VWF	12p13.31	0.231168	4.99E-06	2.53E-05
ARMH4	14q23.1	0.231154	4.99E-06	2.53E-05
BRD9	5p15.33	-0.23113	5.00E-06	2.53E-05
SND1	7q32.1	-0.23113	5.01E-06	2.53E-05
SPC25	2q24.3	-0.23107	5.03E-06	2.55E-05
PARD6A	16q22.1	-0.23107	5.04E-06	2.55E-05
FAH	15q25.1	-0.231	5.07E-06	2.56E-05
HIST1H4J	6p22.1	-0.23099	5.07E-06	2.56E-05
KIRREL1	1q23.1	0.230991	5.07E-06	2.56E-05
CNTN1	12q12	0.230972	5.08E-06	2.57E-05
TUBG1	17q21.2	-0.23092	5.11E-06	2.58E-05
KARS	16q23.1	-0.23091	5.11E-06	2.58E-05
AKT3	1q43-q44	0.230899	5.12E-06	2.58E-05
SV2B	15q26.1	0.230887	5.12E-06	2.59E-05
ATP8B2	1q21.3	0.230881	5.13E-06	2.59E-05
IRF4	6p25.3	0.230692	5.22E-06	2.63E-05
LTN1	21q21.3	0.230689	5.22E-06	2.63E-05
HMCN1	1q25.3-q31.1	0.230668	5.23E-06	2.64E-05
CD209	19p13.2	0.230653	5.24E-06	2.64E-05
PLK2	5q11.2	0.230641	5.25E-06	2.64E-05
C1QTNF7	4p15.32	0.230615	5.26E-06	2.65E-05
FADD	11q13.3	-0.23057	5.29E-06	2.66E-05
GPR141	7p14.1	0.230557	5.29E-06	2.66E-05
PEG3	19q13.43	0.230539	5.30E-06	2.67E-05
PCYT2	17q25.3	-0.23051	5.32E-06	2.68E-05
STON1	2p16.3	0.230505	5.32E-06	2.68E-05
NKAP	Xq24	-0.2305	5.32E-06	2.68E-05
DPCD	10q24.32	-0.23045	5.35E-06	2.69E-05
	1-Mar 4q32.2-q32.3	0.230314	5.42E-06	2.72E-05
NFYC-AS1	1p34.2	-0.23027	5.44E-06	2.73E-05
C1ORF174	1p36.32	-0.23027	5.44E-06	2.73E-05
ETV7	6p21.31	-0.23025	5.45E-06	2.74E-05
EGLN2	19q13.2	-0.23018	5.49E-06	2.76E-05
MRPS6	21q22.11	-0.23017	5.49E-06	2.76E-05
CBWD6	9p11.2	-0.23015	5.50E-06	2.76E-05
ITGB1BP1	2p25.1	-0.23015	5.50E-06	2.76E-05
MAN1B1	9q34.3	-0.23008	5.54E-06	2.78E-05
SLFN12L	17q12	0.230038	5.56E-06	2.79E-05
KCTD12	13q22.3	0.22996	5.60E-06	2.81E-05
GSN	9q33.2	0.229936	5.62E-06	2.82E-05
TSPAN13	7p21.1	0.229933	5.62E-06	2.82E-05
LRRC43	12q24.31	-0.22991	5.63E-06	2.82E-05
VSTM5	11q21	0.229893	5.64E-06	2.83E-05
TNFSF14	19p13.3	0.229854	5.66E-06	2.84E-05
CLMP	11q24.1	0.229842	5.67E-06	2.84E-05



ANTXR1	2p13.3	0.229836	5.67E-06	2.84E-05
GAR1	4q25	-0.22978	5.70E-06	2.85E-05
CSDE1	1p13.2	0.22977	5.71E-06	2.86E-05
BSG	19p13.3	-0.22976	5.71E-06	2.86E-05
AHR	7p21.1	0.229751	5.72E-06	2.86E-05
ATP6V1B2	8p21.3	0.229738	5.73E-06	2.86E-05
RAPGEF5	7p15.3	0.229715	5.74E-06	2.87E-05
LEMD3	12q14.3	0.229695	5.75E-06	2.87E-05
SNRPE	1q32.1	-0.22966	5.77E-06	2.88E-05
TMEM14B	6p24.2	-0.22965	5.77E-06	2.88E-05
FAHD2CP	2q11.2	-0.22962	5.79E-06	2.89E-05
DCLK1	13q13.3	0.229538	5.84E-06	2.91E-05
KLHL25	15q25.3	0.229528	5.84E-06	2.92E-05
LINC01550	14q32.2	0.229516	5.85E-06	2.92E-05
KLF9	9q21.12	0.229474	5.87E-06	2.93E-05
FAM131C	1p36.13	-0.22946	5.88E-06	2.93E-05
PRICKLE1	12q12	0.229456	5.88E-06	2.93E-05
NDUFB3	2q33.1	-0.22931	5.96E-06	2.97E-05
LY9	1q23.3	0.229311	5.96E-06	2.97E-05
P2RY14	3q25.1	0.22927	5.99E-06	2.98E-05
JAZF1	7p15.2-p15.1	0.229233	6.01E-06	2.99E-05
IGF2BP2-AS1	3q27.2	-0.22923	6.01E-06	2.99E-05
ZNF436	1p36.12	0.229229	6.01E-06	2.99E-05
MIB2	1p36.33	-0.22922	6.02E-06	3.00E-05
SCAP	3p21.31	-0.2292	6.03E-06	3.00E-05
SNORA68	19p13.11	-0.2292	6.03E-06	3.00E-05
FAM241B	10q22.1	-0.22914	6.06E-06	3.02E-05
MBTPS1	16q23.3-q24.1	0.229115	6.08E-06	3.02E-05
STK17B	2q32.3	0.229109	6.08E-06	3.02E-05
SCUBE2	11p15.4	0.229079	6.10E-06	3.03E-05
NRP1	10p11.22	0.22907	6.10E-06	3.03E-05
RBX1	22q13.2	-0.22905	6.12E-06	3.04E-05
SCX	8q24.3	-0.22904	6.12E-06	3.04E-05
MPRIP	17p11.2	0.229034	6.13E-06	3.04E-05
AGR2	7p21.1	0.229024	6.13E-06	3.04E-05
KCNMB4	12q15	-0.229	6.15E-06	3.05E-05
CNTN4	3p26.3-p26.2	0.228956	6.17E-06	3.06E-05
VSIG2	11q24.2	0.228856	6.23E-06	3.09E-05
SH2D7	15q25.1	0.228761	6.29E-06	3.12E-05
LAMA2	6q22.33	0.228734	6.30E-06	3.13E-05
LY6G5B	6p21.33	-0.22871	6.32E-06	3.13E-05
INSYN2B	5q35.1	0.228691	6.33E-06	3.14E-05
BCCIP	10q26.2	-0.22866	6.35E-06	3.15E-05
C22ORF46	22q13.2	0.228655	6.35E-06	3.15E-05
LYG1	2q11.2	-0.22862	6.37E-06	3.16E-05
PNMA1	14q24.3	0.228615	6.38E-06	3.16E-05
RHBDL3	17q11.2	0.228588	6.39E-06	3.16E-05
ZNF3	7q22.1	-0.22856	6.41E-06	3.17E-05
INSR	19p13.2	0.228503	6.44E-06	3.19E-05
ABHD1	2p23.3	-0.22848	6.46E-06	3.19E-05
BIRC2	11q22.2	0.228462	6.47E-06	3.20E-05
ZC3H11A	1q32.1	0.228435	6.49E-06	3.21E-05
ATP6VOC	16p13.3	-0.22838	6.52E-06	3.22E-05
PTGS1	9q33.2	0.22836	6.53E-06	3.23E-05
SELL	1q24.2	0.228355	6.54E-06	3.23E-05
EVC	4p16.2	0.228353	6.54E-06	3.23E-05
HABP4	9q22.32	-0.22835	6.54E-06	3.23E-05
TMX1	14q22.1	0.228304	6.57E-06	3.24E-05

COL12A1	6q13-q14.1	0.228296	6.57E-06	3.24E-05
PLAC8L1	5q32	-0.22829	6.58E-06	3.24E-05
CCHCR1	6p21.33	-0.22826	6.60E-06	3.25E-05
ZNF860	3p23-p22.3	0.228228	6.62E-06	3.26E-05
VSIG1	Xq22.3	0.228222	6.62E-06	3.26E-05
C7ORF25	7p14.1	-0.22821	6.62E-06	3.27E-05
DLG2	11q14.1	0.228184	6.64E-06	3.27E-05
LUC7L3	17q21.33	-0.22818	6.64E-06	3.27E-05
SPON1	11p15.2	0.22816	6.66E-06	3.28E-05
SPATA2	20q13.13	-0.2281	6.70E-06	3.30E-05
ST6GALNAC1	17q25.1	0.228083	6.71E-06	3.30E-05
PICK1	22q13.1	-0.22804	6.74E-06	3.31E-05
TTI1	20q11.23	-0.22803	6.74E-06	3.32E-05
SDCBP	8q12.1	0.228024	6.75E-06	3.32E-05
KHDRBS3	8q24.23	-0.228	6.76E-06	3.32E-05
C17ORF75	17q11.2	-0.22798	6.77E-06	3.33E-05
RNF187	1q42.13	-0.22796	6.79E-06	3.34E-05
TMEM178A	2p22.1	-0.22795	6.80E-06	3.34E-05
SCNN1D	1p36.33	-0.22794	6.80E-06	3.34E-05
NUDCD2	5q34	-0.22792	6.81E-06	3.35E-05
TAF3	10p14	0.227907	6.82E-06	3.35E-05
ALCAM	3q13.11	0.22778	6.91E-06	3.39E-05
UGP2	2p15	0.227774	6.91E-06	3.39E-05
TENT5C	1p12	0.22776	6.92E-06	3.40E-05
FPR3	19q13.41	0.227732	6.94E-06	3.40E-05
KLF6	10p15.2	0.227729	6.94E-06	3.40E-05
RPL13AP6	10q25.2	-0.22773	6.94E-06	3.40E-05
SULT1B1	4q13.3	0.227726	6.94E-06	3.40E-05
NUDT7	16q23.1	-0.22765	6.99E-06	3.43E-05
STX4	16p11.2	-0.22764	7.00E-06	3.43E-05
CNKS2	Xp22.12	0.227601	7.02E-06	3.44E-05
TTLL7	1p31.1	0.227581	7.04E-06	3.45E-05
SLFN11	17q12	0.227578	7.04E-06	3.45E-05
CXORF40B	Xq28	-0.22757	7.04E-06	3.45E-05
TSHZ1	18q22.3	0.227555	7.06E-06	3.45E-05
PCED1A	20p13	-0.22755	7.06E-06	3.45E-05
SELENOS	15q26.3	0.227544	7.06E-06	3.45E-05
ARRB2	17p13.2	-0.22754	7.06E-06	3.46E-05
ECI1	16p13.3	-0.22753	7.07E-06	3.46E-05
RAB35	12q24.23	0.227521	7.08E-06	3.46E-05
PGAP1	2q33.1	0.227497	7.09E-06	3.47E-05
ETFBKMT	12p11.21	0.227495	7.10E-06	3.47E-05
HIST1H4C	6p22.2	-0.22749	7.10E-06	3.47E-05
GP3M3	6p21.32	0.227453	7.12E-06	3.48E-05
NOP56	20p13	-0.22743	7.14E-06	3.49E-05
EIF2B5	3q27.1	-0.22743	7.14E-06	3.49E-05
EPB41L4A-AS1	5q22.1	-0.22738	7.18E-06	3.50E-05
PIEZO2	18p11.22-p11.21	0.227374	7.18E-06	3.50E-05
RABGGTB	1p31.1	-0.22736	7.19E-06	3.50E-05
CAVIN2	2q32.3	0.227248	7.26E-06	3.54E-05
VPS26C	21q22.13	0.227224	7.28E-06	3.55E-05
ZNF74	22q11.21	-0.22722	7.28E-06	3.55E-05
PFDN1	5q31.3	-0.22721	7.29E-06	3.55E-05
PAICS	4q12	-0.2272	7.30E-06	3.56E-05
LIMCH1	4p13	0.227168	7.32E-06	3.56E-05
GRK6	5q35.3	-0.22717	7.32E-06	3.56E-05
DOK6	18q22.2	0.22716	7.33E-06	3.57E-05
XPA	9q22.33	-0.22715	7.33E-06	3.57E-05

BMP3	4q21.21	0.22714	7.34E-06	3.57E-05
UQCR10	22q12.2	-0.22711	7.36E-06	3.58E-05
TCF7	5q31.1	-0.22708	7.38E-06	3.59E-05
LOC441204	7p15.2	0.227016	7.43E-06	3.61E-05
DNAJC10	2q32.1	0.226987	7.45E-06	3.62E-05
METTL3	14q11.2	-0.22698	7.45E-06	3.62E-05
AKAP17A	Xp22.33 and Yp11.2	-0.22698	7.45E-06	3.62E-05
GFRA2	8p21.3	0.226972	7.46E-06	3.62E-05
CD93	20p11.21	0.226928	7.49E-06	3.64E-05
LINC00479	21q22.3	-0.22693	7.49E-06	3.64E-05
RBMS3	3p24.1	0.226908	7.50E-06	3.64E-05
COQ4	9q34.11	-0.22689	7.52E-06	3.65E-05
ULK4P3	15q13.2	0.226888	7.52E-06	3.65E-05
CPLANE1	5p13.2	0.226869	7.53E-06	3.65E-05
CD53	1p13.3	0.226862	7.54E-06	3.65E-05
TMEM41A	3q27.2	-0.2268	7.58E-06	3.68E-05
ARHGEF3	3p14.3	0.226748	7.62E-06	3.69E-05
C20ORF194	20p13	0.226738	7.62E-06	3.69E-05
ACSS1	20p11.21	-0.22671	7.65E-06	3.70E-05
SEC11A	15q25.2-q25.3	0.226706	7.65E-06	3.70E-05
JOSD1	22q13.1	0.226635	7.70E-06	3.73E-05
CEL	9q34.13	-0.22656	7.75E-06	3.75E-05
PLBD2	12q24.13	0.226552	7.76E-06	3.76E-05
WDR27	6q27	-0.22654	7.77E-06	3.76E-05
CALML6	1p36.33	-0.22652	7.78E-06	3.76E-05
ASH1L-AS1	1q22	-0.22651	7.79E-06	3.77E-05
BRSK2	11p15.5	-0.22651	7.79E-06	3.77E-05
CDK19	6q21	0.226485	7.81E-06	3.78E-05
ZNF430	19p12	0.226483	7.81E-06	3.78E-05
SCML2	Xp22.13	-0.22643	7.85E-06	3.80E-05
MMRN2	10q23.2	0.2264	7.87E-06	3.80E-05
TLNRD1	15q25.1	0.226309	7.94E-06	3.83E-05
BPHL	6p25.2	-0.22631	7.94E-06	3.83E-05
LAMA4	6q21	0.226302	7.95E-06	3.84E-05
TMEM116	12q24.12-q24.13	-0.2263	7.95E-06	3.84E-05
RET	10q11.21	0.226282	7.96E-06	3.84E-05
SAT2	17p13.1	-0.22627	7.97E-06	3.84E-05
HINT3	6q22.32	0.226255	7.98E-06	3.85E-05
TGIF2	20q11.23	-0.22622	8.01E-06	3.86E-05
CARNMT1	9q21.13	0.226214	8.01E-06	3.86E-05
ZMIZ2	7p13	-0.22621	8.02E-06	3.86E-05
ATP10D	4p12	0.22619	8.03E-06	3.87E-05
ZNF77	19p13.3	-0.22617	8.05E-06	3.88E-05
ADAMDEC1	8p21.2	0.226043	8.14E-06	3.92E-05
COL14A1	8q24.12	0.226037	8.15E-06	3.92E-05
STK16	2q35	-0.22603	8.15E-06	3.92E-05
ASPM	1q31.3	0.226021	8.16E-06	3.93E-05
SUMF2	7p11.2	-0.22602	8.16E-06	3.93E-05
ANXA2	15q22.2	0.226002	8.18E-06	3.93E-05
MEPCE	7q22.1	-0.226	8.18E-06	3.93E-05
GTF3C4	9q34.13	0.225961	8.21E-06	3.95E-05
REG4	1p12	0.225937	8.23E-06	3.95E-05
NUP153	6p22.3	0.225929	8.23E-06	3.96E-05
THUMPD2	2p22.1 2p22-p21	-0.22592	8.24E-06	3.96E-05
STARD8	Xq13.1	0.225917	8.24E-06	3.96E-05
CCDC33	15q24.1	0.225863	8.28E-06	3.98E-05
HGF	7q21.11	0.225847	8.30E-06	3.98E-05
ZNF33A	10p11.1	0.225832	8.31E-06	3.99E-05

WRN	8p12	0.225772	8.36E-06	4.01E-05
RSAD1	17q21.33	-0.22576	8.36E-06	4.01E-05
ARHGAP24	4q21.23-q21.3	0.225747	8.38E-06	4.02E-05
LOC143188	10q25.2	-0.22573	8.39E-06	4.02E-05
FECH	18q21.31	0.225723	8.39E-06	4.02E-05
CLPSL2	6p21.31	-0.22563	8.47E-06	4.06E-05
SNX30	9q32	0.225617	8.48E-06	4.06E-05
RBCK1	20p13	-0.22557	8.52E-06	4.08E-05
TMEM53	1p34.1	-0.22549	8.58E-06	4.11E-05
KRT32	17q21.2	-0.22546	8.61E-06	4.12E-05
THUMPD1	16p12.3	0.225451	8.61E-06	4.12E-05
SPEN	1p36.21-p36.13	0.225433	8.63E-06	4.13E-05
CMTM7	3p22.3	-0.22541	8.65E-06	4.14E-05
MICAL3	22q11.21	0.225375	8.67E-06	4.15E-05
SBF2	11p15.4	0.225374	8.68E-06	4.15E-05
EGLN3	14q13.1	0.225359	8.69E-06	4.15E-05
EPO	7q22.1	-0.22536	8.69E-06	4.15E-05
ARHGEF19	1p36.13	-0.22534	8.70E-06	4.16E-05
MSI2	17q22	0.225317	8.72E-06	4.17E-05
GOPC	6q22.1	0.225315	8.72E-06	4.17E-05
PXDN	2p25.3	0.225309	8.73E-06	4.17E-05
RBM8A	1q21.1	0.225286	8.75E-06	4.18E-05
PDGFRA	4q12	0.225236	8.79E-06	4.19E-05
UROS	10q26.2	-0.22523	8.80E-06	4.20E-05
CYTOR	2p11.2	-0.22522	8.80E-06	4.20E-05
C12ORF65	12q24.31	-0.22519	8.82E-06	4.21E-05
NKRF	Xq24	-0.22518	8.83E-06	4.21E-05
IRAK3	12q14.3	0.225177	8.84E-06	4.21E-05
CD22	19q13.12	0.225106	8.90E-06	4.24E-05
GAS8	16q24.3	-0.2251	8.90E-06	4.24E-05
FCHSD2	11q13.4	0.225049	8.95E-06	4.26E-05
POMGNT2	3p22.1	-0.22504	8.95E-06	4.26E-05
TRAPPC1	17p13.1	-0.22504	8.95E-06	4.26E-05
SEC22B	1p12	0.225034	8.96E-06	4.26E-05
ATP5PF	21q21.3	-0.22499	9.00E-06	4.28E-05
TIRAP	11q24.2	0.224971	9.01E-06	4.29E-05
NSF	17q21.31	0.224951	9.03E-06	4.29E-05
DPH6	15q14	-0.22492	9.05E-06	4.30E-05
ZNF521	18q11.2	0.224881	9.09E-06	4.32E-05
THAP4	2q37.3	-0.22486	9.11E-06	4.33E-05
PYCR2	1q42.12	-0.22478	9.17E-06	4.36E-05
FGA	4q31.3	-0.22477	9.18E-06	4.36E-05
C20ORF96	20p13	-0.22477	9.19E-06	4.36E-05
FNBP1L	1p22.1	0.224721	9.23E-06	4.38E-05
GLUD2	Xq24	0.224708	9.24E-06	4.39E-05
RPS4X	Xq13.1	-0.2247	9.24E-06	4.39E-05
RIN3	14q32.12	0.224664	9.27E-06	4.40E-05
C3AR1	12p13.31	0.224662	9.28E-06	4.40E-05
POLA2	11q13.1	-0.22458	9.35E-06	4.43E-05
SNRPGP15	19p13.12	-0.22457	9.35E-06	4.44E-05
PEMT	17p11.2	-0.22456	9.37E-06	4.44E-05
ECSIT	19p13.2	-0.22454	9.38E-06	4.45E-05
CBY1	22q13.1	-0.22452	9.40E-06	4.46E-05
GBP3	1p22.2	0.22449	9.43E-06	4.47E-05
SYNE3	14q32.13	0.224486	9.43E-06	4.47E-05
KATNBL1	15q14	0.224455	9.46E-06	4.48E-05
RAB30	11q14.1	0.224439	9.47E-06	4.48E-05
SLC6A4	17q11.2	-0.22444	9.47E-06	4.48E-05

C6ORF226	6p21.1	-0.2244	9.51E-06	4.50E-05
PCDHB4	5q31.3	0.224396	9.51E-06	4.50E-05
MTFP1	22q12.2	-0.22439	9.52E-06	4.50E-05
SSTR1	14q21.1	0.224337	9.56E-06	4.52E-05
NLGN4X	Xp22.32-p22.31	0.224296	9.60E-06	4.54E-05
ITGB6	2q24.2	0.224281	9.61E-06	4.54E-05
BRD3OS	9q34.2	-0.22423	9.66E-06	4.57E-05
BLOC1S4	4p16.1	-0.22422	9.67E-06	4.57E-05
OMP	11q13.5	-0.2242	9.69E-06	4.58E-05
AGER	6p21.32	-0.22419	9.69E-06	4.58E-05
ASF1B	19p13.12	-0.22418	9.71E-06	4.58E-05
HLCS	21q22.13	0.224064	9.81E-06	4.63E-05
ASIC1	12q13.12	-0.22403	9.85E-06	4.65E-05
TP63	3q28	0.224007	9.86E-06	4.65E-05
ALKBH5	17p11.2 17p11.2	0.223998	9.87E-06	4.66E-05
HYAL1	3p21.31	0.22398	9.89E-06	4.66E-05
AP3S2	15q26.1	0.223958	9.91E-06	4.67E-05
MIA2	14q21.1	0.223907	9.96E-06	4.69E-05
PEX11A	15q26.1	0.223855	1.00E-05	4.72E-05
SLFN12	17q12	0.223834	1.00E-05	4.72E-05
GADD45G	9q22.2	-0.22383	1.00E-05	4.73E-05
KBTBD4	11p11.2	0.223735	1.01E-05	4.76E-05
OSGIN1	16q23.3	-0.22372	1.01E-05	4.77E-05
LDHAL6B	15q22.2	0.223713	1.01E-05	4.77E-05
HAX1	1q21.3	-0.22367	1.02E-05	4.79E-05
NBEA	13q13.3	0.223667	1.02E-05	4.79E-05
RNF180	5q12.3	0.223649	1.02E-05	4.80E-05
PTCHD1	Xp22.11	0.223607	1.02E-05	4.82E-05
HIF1AN	10q24.31	0.223605	1.02E-05	4.82E-05
ME3	11q14.2	-0.22359	1.03E-05	4.82E-05
ZNF581	19q13.42	-0.22358	1.03E-05	4.83E-05
LRRTM2	5q31.2	0.223508	1.03E-05	4.86E-05
ARFGAP2	11p11.2	-0.2235	1.03E-05	4.86E-05
LGALS7	19q13.2	-0.22345	1.04E-05	4.88E-05
PPP2R3A	3q22.2-q22.3	0.223267	1.06E-05	4.96E-05
GALNT4	12q21.33	0.223257	1.06E-05	4.97E-05
AGGF1	5q13.3	0.223188	1.06E-05	5.00E-05
MZT2A	2q21.1	-0.22315	1.07E-05	5.02E-05
CCDC85A	2p16.1	0.223136	1.07E-05	5.02E-05
PIF1	15q22.31	-0.22313	1.07E-05	5.02E-05
SSB	2q31.1	-0.22311	1.07E-05	5.03E-05
METAP1D	2q31.1	-0.22309	1.07E-05	5.04E-05
MSX1	4p16.2	-0.22308	1.08E-05	5.04E-05
IL10RA	11q23.3	0.223079	1.08E-05	5.04E-05
NT5C2	10q24.32-q24.33	0.223075	1.08E-05	5.04E-05
NRN1L	16q22.1	-0.22306	1.08E-05	5.04E-05
BORCS5	12p13.2	-0.22306	1.08E-05	5.05E-05
GPAA1	8q24.3	-0.22306	1.08E-05	5.05E-05
MTMR12	5p13.3	0.223016	1.08E-05	5.06E-05
OLFM1	9q34.3	0.223013	1.08E-05	5.06E-05
RHBG	1q22	-0.22299	1.09E-05	5.07E-05
PFKFB2	1q32.1	0.222983	1.09E-05	5.08E-05
CCDC78	16p13.3	-0.22294	1.09E-05	5.09E-05
FBXO21	12q24.22	0.222881	1.10E-05	5.12E-05
LOC100132287	1p36.33	-0.22287	1.10E-05	5.13E-05
PYGO1	15q21.3	0.222857	1.10E-05	5.13E-05
KPNA5	6q22.1	0.22283	1.10E-05	5.14E-05
POU5F1	6p21.33	-0.22283	1.10E-05	5.14E-05

NFX1	9p13.3	0.222826	1.10E-05	5.14E-05
LRP1	12q13.3	0.222758	1.11E-05	5.17E-05
C17ORF58	17q24.2	-0.22274	1.11E-05	5.18E-05
RIMBP3C	22q11.21	0.222658	1.12E-05	5.22E-05
TRIM2	4q31.3	0.22263	1.12E-05	5.23E-05
SLC38A2	12q13.11	0.222627	1.12E-05	5.23E-05
CDK14	7q21.13	0.222567	1.13E-05	5.26E-05
UQCRBP1	Xp11.21	-0.22256	1.13E-05	5.26E-05
UBE2D4	7p13	-0.22255	1.13E-05	5.27E-05
PADI2	1p36.13	0.222519	1.13E-05	5.28E-05
SNED1	2q37.3	0.222495	1.14E-05	5.29E-05
RMDN3	15q15.1	0.222463	1.14E-05	5.31E-05
PCDH17	13q21.1	0.222453	1.14E-05	5.31E-05
RPN1	3q21.3	-0.22245	1.14E-05	5.31E-05
KLHL31	6p12.1	-0.22243	1.14E-05	5.32E-05
PCDH7	4p15.1	0.222418	1.14E-05	5.32E-05
ZNF532	18q21.32	0.2224	1.15E-05	5.33E-05
GALE	1p36.11	-0.22239	1.15E-05	5.34E-05
USP16	21q21.3	0.222332	1.15E-05	5.36E-05
KBTBD7	13q14.11	0.222299	1.16E-05	5.38E-05
MCC	5q22.2	0.222274	1.16E-05	5.39E-05
ADAM6	14q32.33	0.222265	1.16E-05	5.39E-05
RNF103	2p11.2	0.222226	1.16E-05	5.41E-05
NFATC2	20q13.2	0.222225	1.16E-05	5.41E-05
SLA	8q24.22	0.222166	1.17E-05	5.44E-05
RPS26	12q13.2	-0.22216	1.17E-05	5.44E-05
RAB4B	19q13.2	-0.22213	1.17E-05	5.45E-05
CAPRIN1	11p13	0.22211	1.18E-05	5.46E-05
PNO1	2p14	-0.22211	1.18E-05	5.46E-05
FLOT1	6p21.33	-0.22211	1.18E-05	5.46E-05
VPS33B	15q26.1	0.222091	1.18E-05	5.47E-05
SFXN5	2p13.2	-0.22209	1.18E-05	5.47E-05
LMNA	1q22	0.222076	1.18E-05	5.47E-05
WDR82	3p21.2	0.221971	1.19E-05	5.53E-05
AKAP6	14q12	0.221964	1.19E-05	5.53E-05
CHST15	10q26.13	0.221949	1.20E-05	5.53E-05
IMPDH1	7q32.1	-0.22194	1.20E-05	5.54E-05
ARAP2	4p14	0.221924	1.20E-05	5.54E-05
STX6	1q25.3	0.221904	1.20E-05	5.55E-05
ANXA2P1	4q31.3	0.221896	1.20E-05	5.56E-05
AIFM1	Xq26.1	-0.22189	1.20E-05	5.56E-05
CZIB	1p32.3	-0.22189	1.20E-05	5.56E-05
GOLT1A	1q32.1	-0.22188	1.20E-05	5.56E-05
STK11IP	2q35	-0.22188	1.20E-05	5.56E-05
CGNL1	15q21.3	0.221861	1.20E-05	5.57E-05
ZNF611	19q13.41	0.221824	1.21E-05	5.59E-05
VAMP8	2p11.2	-0.22181	1.21E-05	5.59E-05
STARD4	5q22.1	0.221803	1.21E-05	5.59E-05
RPL23P8	7p21.1	-0.2217	1.22E-05	5.65E-05
PDGFC	4q32.1	0.221696	1.22E-05	5.65E-05
SYT16	14q23.2	0.221688	1.22E-05	5.65E-05
ABCA9	17q24.2	0.221666	1.23E-05	5.66E-05
RPN2	20q11.23	-0.22165	1.23E-05	5.67E-05
EIF4G1	3q27.1	0.221641	1.23E-05	5.67E-05
BMPR1B	4q22.3	0.221633	1.23E-05	5.67E-05
VAPA	18p11.22	0.221565	1.24E-05	5.71E-05
CCDC17	1p34.1	-0.22155	1.24E-05	5.71E-05
TSPYL5	8q22.1	0.221553	1.24E-05	5.71E-05

GCOM1	15q21.3	0.221531	1.24E-05	5.72E-05
FAM32A	19p13.11	-0.22152	1.24E-05	5.73E-05
MRPL49	11q13.1	-0.22149	1.25E-05	5.74E-05
OGT	Xq13.1	-0.22147	1.25E-05	5.75E-05
PRRG4	11p13	0.221465	1.25E-05	5.75E-05
EIF4E2	2q37.1	-0.22145	1.25E-05	5.76E-05
CDC14A	1p21.2	0.221441	1.25E-05	5.76E-05
MYOT	5q31.2	0.221419	1.26E-05	5.77E-05
SLC4A4	4q13.3	0.221404	1.26E-05	5.78E-05
SLC25A46	5q22.1	0.221358	1.26E-05	5.80E-05
SLC35F6	2p23.3	-0.22126	1.27E-05	5.86E-05
TRAPPC10	21q22.3	0.221197	1.28E-05	5.89E-05
ZDHHC2	8p22	0.221157	1.29E-05	5.91E-05
F10	13q34	-0.2211	1.29E-05	5.94E-05
KDR	4q12	0.221096	1.29E-05	5.94E-05
SNX19	11q24.3-q25	0.221084	1.29E-05	5.94E-05
B3GNT6	11q13.5	0.221021	1.30E-05	5.98E-05
ZC3H14	14q31.3	0.221015	1.30E-05	5.98E-05
MAP3K21	1q42.2	0.221011	1.30E-05	5.98E-05
TAF9	5q13.2	-0.22097	1.31E-05	6.00E-05
OAF	11q23.3	-0.22094	1.31E-05	6.02E-05
MED25	19q13.33	-0.22094	1.31E-05	6.02E-05
TM6SF1	15q25.2	0.220902	1.32E-05	6.03E-05
HRH2	5q35.2	0.22085	1.32E-05	6.06E-05
ARID5B	10q21.2	0.220839	1.32E-05	6.07E-05
PA2G4P4	3q25.31	-0.22083	1.33E-05	6.07E-05
B2M	15q21.1	0.220825	1.33E-05	6.07E-05
KIF14	1q32.1	0.220812	1.33E-05	6.08E-05
PDHA1	Xp22.12	-0.22081	1.33E-05	6.08E-05
CKS1B	1q21.3	-0.22081	1.33E-05	6.08E-05
ABCB6	2q35	-0.2208	1.33E-05	6.08E-05
CLSTN1	1p36.22	0.220739	1.34E-05	6.11E-05
CYBRD1	2q31.1	0.220733	1.34E-05	6.12E-05
HELB	12q14.3 12q	0.220721	1.34E-05	6.12E-05
GEMIN8	Xp22.2	-0.22067	1.35E-05	6.15E-05
FAT3	11q14.3	0.220667	1.35E-05	6.15E-05
APBB2	4p14-p13	0.220624	1.35E-05	6.17E-05
MTHFSD	16q24.1	-0.22057	1.36E-05	6.20E-05
COPS8	2q37.3	-0.22056	1.36E-05	6.20E-05
CNTRL	9q33.2	0.220555	1.36E-05	6.21E-05
LRRC37A4P	17q21.31	0.220552	1.36E-05	6.21E-05
ILVBL	19p13.12	-0.22053	1.36E-05	6.22E-05
SIGLEC5	19q13.41	0.220516	1.36E-05	6.23E-05
BIN2	12q13.13	0.22047	1.37E-05	6.25E-05
CRYBG1	6q21	0.220425	1.38E-05	6.27E-05
CENPV	17p11.2	-0.22041	1.38E-05	6.28E-05
MAP1A	15q15.3	0.220387	1.38E-05	6.29E-05
KLF2	19p13.11	0.220359	1.38E-05	6.31E-05
PYCARD	16p11.2	-0.22034	1.39E-05	6.32E-05
PRPF6	20q13.33	-0.2203	1.39E-05	6.34E-05
RIPK1	6p25.2	0.2203	1.39E-05	6.34E-05
SLC25A38	3p22.1	-0.22027	1.40E-05	6.36E-05
CYP2W1	7p22.3	-0.22024	1.40E-05	6.37E-05
KRTAP5-1	11p15.5	-0.22023	1.40E-05	6.38E-05
VSIR	10q22.1	0.220211	1.40E-05	6.39E-05
PARVA	11p15.3	0.220185	1.41E-05	6.40E-05
LRRC23	12p13.31	-0.22017	1.41E-05	6.41E-05
LY6G6F	6p21.33	-0.22014	1.41E-05	6.42E-05

CTC1	17p13.1	0.220125	1.41E-05	6.43E-05
FANCL	2p16.1	-0.2201	1.42E-05	6.44E-05
CXORF21	Xp21.2	0.219981	1.43E-05	6.51E-05
GOLGA1	9q33.3	0.219974	1.43E-05	6.52E-05
ZNF212	7q36.1	-0.21996	1.44E-05	6.53E-05
THRSP	11q14.1	-0.21992	1.44E-05	6.55E-05
SLCO4A1	20q13.33	-0.21988	1.45E-05	6.57E-05
PPP4R3B	2p16.1	0.219869	1.45E-05	6.57E-05
TPBG	6q14.1	0.219857	1.45E-05	6.58E-05
LRRC20	10q22.1	-0.21985	1.45E-05	6.58E-05
SUPT7L	2p23.3	-0.21985	1.45E-05	6.58E-05
SF3A3	1p34.3	-0.21983	1.45E-05	6.59E-05
MAGEE2	Xq13.3	0.219785	1.46E-05	6.62E-05
TLCD1	17q11.2	-0.21974	1.47E-05	6.64E-05
ATL1	14q22.1	0.219736	1.47E-05	6.64E-05
DUS2	16q22.1	-0.21968	1.47E-05	6.67E-05
ANP32A	15q23	0.219685	1.47E-05	6.67E-05
ZNF626	19p12	0.219653	1.48E-05	6.69E-05
TCTEX1D2	3q29	-0.21965	1.48E-05	6.69E-05
ITM2A	Xq21.1	0.219622	1.48E-05	6.71E-05
PCDHB6	5q31.3	0.219535	1.49E-05	6.76E-05
LRRN2	1q32.1	0.219506	1.50E-05	6.77E-05
RBM38	20q13.31	-0.21949	1.50E-05	6.78E-05
DUSP14	17q12	-0.21948	1.50E-05	6.79E-05
HERC4	10q21.3	0.219426	1.51E-05	6.82E-05
MYCBP2	13q22.3	0.219408	1.51E-05	6.83E-05
VPS18	15q15.1	0.219369	1.52E-05	6.85E-05
CD3EAP	19q13.32	-0.21934	1.52E-05	6.87E-05
ZRANB1	10q26.13	0.219324	1.52E-05	6.88E-05
FLRT2	14q31.3	0.219317	1.52E-05	6.88E-05
GRHPR	9p13.2	-0.21929	1.53E-05	6.89E-05
RFPL1S	22q12.2	0.219248	1.53E-05	6.92E-05
TTC9	14q24.2	0.219239	1.53E-05	6.92E-05
ZNF618	9q32	0.219121	1.55E-05	7.00E-05
LGALS8	1q43	0.219081	1.56E-05	7.02E-05
ST20	15q25.1	-0.21907	1.56E-05	7.03E-05
LRRC46	17q21.32	-0.21907	1.56E-05	7.03E-05
DYM	18q21.1	0.219057	1.56E-05	7.03E-05
MED19	11q12.1	-0.21903	1.56E-05	7.05E-05
FZD4	11q14.2	0.219034	1.56E-05	7.05E-05
TAF13	1p13.3	0.218997	1.57E-05	7.07E-05
RPL23AP7	2q14.1	-0.21898	1.57E-05	7.08E-05
RLN2	9p24.1	-0.21898	1.57E-05	7.08E-05
PTMA	2q37.1	-0.21897	1.57E-05	7.08E-05
CORO2B	15q23	0.218962	1.57E-05	7.08E-05
UTP18	17q21.33	-0.21894	1.58E-05	7.10E-05
DDIT3	12q13.3	-0.21884	1.59E-05	7.16E-05
MC5R	18p11.21	0.218818	1.59E-05	7.17E-05
SYT11	1q22	0.218792	1.60E-05	7.19E-05
TMEM39B	1p35.2	-0.2187	1.61E-05	7.25E-05
YRDC	1p34.3	-0.21867	1.62E-05	7.27E-05
ZNF318	6p21.1	0.218647	1.62E-05	7.28E-05
GUK1	1q42.13	-0.21862	1.62E-05	7.30E-05
	7-Mar 2q24.2	0.218619	1.62E-05	7.30E-05
CLDN9	16p13.3	-0.21859	1.63E-05	7.32E-05
ADGRE4P	19p13.2	0.218494	1.64E-05	7.38E-05
PPT2	6p21.32	-0.2184	1.66E-05	7.44E-05
BCR	22q11.23	0.218369	1.66E-05	7.46E-05



CDC45	22q11.21	-0.21825	1.68E-05	7.54E-05
DOK1	2p13.1	-0.21823	1.68E-05	7.55E-05
SLC9A4	2q12.1	0.218223	1.68E-05	7.55E-05
UBAC1	9q34.3	-0.21821	1.69E-05	7.56E-05
CD79A	19q13.2	0.218198	1.69E-05	7.57E-05
ALG10	12p11.1	0.21818	1.69E-05	7.58E-05
L3MBTL1	20q13.12	-0.21814	1.70E-05	7.60E-05
AURKA	20q13.2	-0.21813	1.70E-05	7.61E-05
EIF2AK1	7p22.1	-0.2181	1.70E-05	7.63E-05
ITGAL	16p11.2	0.2181	1.70E-05	7.63E-05
RAD51C	17q22	-0.21806	1.71E-05	7.65E-05
HSD17B7P2	10p11.1	-0.21805	1.71E-05	7.66E-05
USP51	Xp11.21	0.218031	1.71E-05	7.67E-05
CSNK2A3	11p15.4	0.218004	1.72E-05	7.69E-05
PTENP1	9p13.3	0.217971	1.72E-05	7.71E-05
HIBADH	7p15.2	-0.21797	1.72E-05	7.71E-05
LOC100133331	1p36.33	-0.21796	1.72E-05	7.71E-05
ESCO1	18q11.2	0.217944	1.73E-05	7.72E-05
APBA3	19p13.3	-0.2179	1.74E-05	7.75E-05
FZD5	2q33.3	0.217865	1.74E-05	7.77E-05
FAM122B	Xq26.3	-0.21779	1.75E-05	7.83E-05
MYH11	16p13.11	0.217765	1.76E-05	7.84E-05
XCR1	3p21.31	0.21776	1.76E-05	7.84E-05
GK5	3q23	0.21773	1.76E-05	7.86E-05
PICALM	11q14.2	0.217711	1.76E-05	7.87E-05
EOMES	3p24.1	0.217673	1.77E-05	7.90E-05
MFSD13A	10q24.32	-0.21767	1.77E-05	7.90E-05
C11ORF74	11p12	-0.21767	1.77E-05	7.90E-05
ZBTB11	3q12.3	0.217642	1.78E-05	7.92E-05
CNOT1	16q21	0.21764	1.78E-05	7.92E-05
GPR1	2q33.3	0.217635	1.78E-05	7.92E-05
PLXNA4	7q32.3	0.217607	1.78E-05	7.94E-05
SIRT6	19p13.3	-0.21756	1.79E-05	7.97E-05
PEX11G	19p13.2	-0.21755	1.79E-05	7.97E-05
EPB41L3	18p11.31	0.217537	1.79E-05	7.98E-05
INPP5E	9q34.3	-0.21753	1.79E-05	7.99E-05
GAS2L3	12q23.1	0.217513	1.80E-05	8.00E-05
MEF2C	5q14.3	0.217496	1.80E-05	8.01E-05
DDX59	1q32.1	0.217489	1.80E-05	8.01E-05
FAM49A	2p24.2	0.217463	1.80E-05	8.03E-05
SOD1	21q22.11	-0.21746	1.81E-05	8.03E-05
GLI3	7p14.1	0.217416	1.81E-05	8.06E-05
ZBTB14	18p11.31	0.217355	1.82E-05	8.10E-05
ACSS3	12q21.31	0.21725	1.84E-05	8.18E-05
DBI	2q14.2	-0.21722	1.85E-05	8.20E-05
PAX9	14q13.3	0.217157	1.86E-05	8.24E-05
SLITRK5	13q31.2	0.217114	1.86E-05	8.27E-05
MPZL3	11q23.3	0.217054	1.87E-05	8.32E-05
RSPO1	1p34.3	0.216953	1.89E-05	8.39E-05
MFSD4A	1q32.1	0.216953	1.89E-05	8.39E-05
SATL1	Xq21.1	-0.21694	1.89E-05	8.40E-05
VCAN	5q14.2-q14.3	0.216911	1.90E-05	8.42E-05
WWOX	16q23.1-q23.2	-0.21689	1.90E-05	8.43E-05
C5ORF24	5q31.1	0.216863	1.91E-05	8.45E-05
CD37	19q13.33	0.216841	1.91E-05	8.46E-05
AP2B1	17q12	0.216825	1.91E-05	8.48E-05
SP4	7p15.3	0.216787	1.92E-05	8.50E-05
YOD1	1q32.1	0.216714	1.93E-05	8.56E-05

PMS2	7p22.1	-0.2166	1.95E-05	8.64E-05
NPY1R	4q32.2	0.216604	1.95E-05	8.64E-05
UGDH	4p14	0.2166	1.95E-05	8.64E-05
DDX60L	4q32.3	0.216561	1.96E-05	8.67E-05
SIGLEC7	19q13.41	0.216556	1.96E-05	8.67E-05
WASL	7q31.32	0.216523	1.97E-05	8.70E-05
PIK3R5	17p13.1	0.216504	1.97E-05	8.71E-05
PROCA1	17q11.2	-0.21649	1.97E-05	8.72E-05
CHUK	10q24.31	0.21648	1.97E-05	8.72E-05
GJC2	1q42.13	0.21638	1.99E-05	8.80E-05
ETV1	7p21.2	0.216369	1.99E-05	8.81E-05
NUDT22	11q13.1	-0.21637	1.99E-05	8.81E-05
PORCN	Xp11.23	-0.21635	2.00E-05	8.82E-05
TMEM245	9q31.3	0.216332	2.00E-05	8.83E-05
PRICKLE3	Xp11.23	-0.21633	2.00E-05	8.83E-05
HIGD2A	5q35.2	-0.21632	2.00E-05	8.83E-05
COLEC12	18p11.32	0.216318	2.00E-05	8.84E-05
HMG2N2	1p36.11	-0.21632	2.00E-05	8.84E-05
CCL15	17q12	-0.21628	2.01E-05	8.86E-05
TGFBR1	9q22.33	0.2162	2.02E-05	8.92E-05
TNXB	6p21.33-p21.32	0.2162	2.02E-05	8.92E-05
RAP1B	12q15	0.216193	2.02E-05	8.93E-05
WNT9A	1q42.13	0.216185	2.03E-05	8.93E-05
FZD8	10p11.21	0.216174	2.03E-05	8.94E-05
TMEM70	8q21.11	-0.21617	2.03E-05	8.94E-05
ITGB2	21q22.3	0.216139	2.03E-05	8.96E-05
ST3GAL5	2p11.2	0.216133	2.04E-05	8.97E-05
SAP30BP	17q25.1	-0.21612	2.04E-05	8.97E-05
MITF	3p13	0.216118	2.04E-05	8.97E-05
CASP8AP2	6q15	0.216094	2.04E-05	8.99E-05
FAM89B	11q13.1	-0.21608	2.05E-05	9.00E-05
PIK3R6	17p13.1	0.216047	2.05E-05	9.03E-05
TRIM22	11p15.4	0.21604	2.05E-05	9.03E-05
ZBTB34	9q33.3	0.215997	2.06E-05	9.06E-05
MAP1B	5q13.2	0.215973	2.07E-05	9.08E-05
EPN1	19q13.42	-0.21596	2.07E-05	9.09E-05
MTCP1	Xq28	-0.21595	2.07E-05	9.09E-05
KCNJ5	11q24.3	0.215943	2.07E-05	9.10E-05
ZFYVE27	10q24.2	-0.21594	2.07E-05	9.10E-05
FYN	6q21	0.215907	2.08E-05	9.12E-05
TRIAP1	12q24.31	-0.21589	2.08E-05	9.13E-05
ZNF146	19q13.12	0.215836	2.09E-05	9.18E-05
PRSS35	6q14.2	0.21581	2.10E-05	9.20E-05
CEP135	4q12	0.215771	2.10E-05	9.23E-05
C12ORF45	12q23.3	-0.21574	2.11E-05	9.25E-05
IBA57	1q42.13	0.215739	2.11E-05	9.25E-05
FCRL5	1q23.1	0.215736	2.11E-05	9.25E-05
TFPT	19q13.42	-0.21569	2.12E-05	9.29E-05
ZDHHC15	Xq13.3	0.21568	2.12E-05	9.29E-05
PREX1	20q13.13	0.215677	2.12E-05	9.30E-05
SCAMP1	5q14.1	0.215674	2.12E-05	9.30E-05
BIRC7	20q13.33	-0.21566	2.12E-05	9.30E-05
B4GALNT3	12p13.33	0.215657	2.13E-05	9.31E-05
TSPAN14	10q23.1	0.215634	2.13E-05	9.32E-05
CARD11	7p22.2	0.215583	2.14E-05	9.36E-05
CTDSPL	3p22.2	0.215543	2.15E-05	9.40E-05
SUCLG2	3p14.1	0.215518	2.15E-05	9.42E-05
WDR97	8q24.3	-0.2155	2.16E-05	9.43E-05

TXNDC16	14q22.1	0.215444	2.17E-05	9.47E-05
KRI1	19p13.2	-0.21543	2.17E-05	9.49E-05
GNAL	18p11.2.1	0.215387	2.18E-05	9.52E-05
SLC27A2	15q21.2	0.215317	2.19E-05	9.58E-05
USP46	4q12	0.215292	2.20E-05	9.60E-05
CHIC1	Xq13.2	0.21529	2.20E-05	9.60E-05
SPHKAP	2q36.3	0.215288	2.20E-05	9.60E-05
NDST2	10q22.2	0.215274	2.20E-05	9.60E-05
ERCC1	19q13.32	-0.21527	2.20E-05	9.60E-05
SLBP	4p16.3	-0.21527	2.20E-05	9.61E-05
TXK	4p12	0.215264	2.20E-05	9.61E-05
UHRF1BP1	6p21.31	0.215205	2.21E-05	9.66E-05
BTBD16	10q26.13	-0.2152	2.22E-05	9.66E-05
PCDHA3	5q31.3	0.215099	2.23E-05	9.74E-05
TBCEL	11q23.3	0.215088	2.24E-05	9.75E-05
PLA2G12B	10q22.1	-0.21508	2.24E-05	9.76E-05
MRPS18A	6p21.1	-0.21504	2.25E-05	9.79E-05
EEFSEC	3q21.3	-0.21504	2.25E-05	9.79E-05
TSTD2	9q22.33	0.21503	2.25E-05	9.80E-05
MNDA	1q23.1	0.215026	2.25E-05	9.80E-05
ZNF202	11q24.1	-0.21501	2.25E-05	9.81E-05
PPP1R8	1p35.3	-0.21493	2.27E-05	9.87E-05
SSRP1	11q12.1	-0.2149	2.28E-05	9.90E-05
JAKMIP3	10q26.3	0.214885	2.28E-05	9.91E-05
CNBD2	20q11.23	-0.21488	2.28E-05	9.92E-05
RAPGEF1	9q34.13	0.214871	2.28E-05	9.92E-05
RAB20	13q34	-0.21487	2.28E-05	9.92E-05
CLDN3	7q11.23	-0.21485	2.29E-05	9.94E-05
HDLBP	2q37.3	0.214834	2.29E-05	9.95E-05
UNC13D	17q25.1	0.214804	2.29E-05	9.97E-05
CAPN7	3p25.1	0.214803	2.30E-05	9.97E-05
JMY	5q14.1	0.214767	2.30E-05	0.0001
GPR176	15q14-q15.1	0.214741	2.31E-05	0.0001
PBXIP1	1q21.3	0.214723	2.31E-05	0.0001
ECHDC2	1p32.3	-0.21472	2.31E-05	0.0001
ZNF394	7q22.1	-0.21471	2.31E-05	0.0001
GOLM1	9q21.33	0.214695	2.32E-05	0.000101
RTTN	18q22.2	0.214665	2.32E-05	0.000101
DTWD1	15q21.2	0.214636	2.33E-05	0.000101
PEPD	19q13.11	-0.21462	2.33E-05	0.000101
ADGRE2	19p13.12	0.214615	2.33E-05	0.000101
GNB4	3q26.33	0.214608	2.34E-05	0.000101
SNHG4	5q31.2	-0.21458	2.34E-05	0.000101
ACTR3	2q14.1	0.214561	2.35E-05	0.000102
PSAT1	9q21.2	-0.21456	2.35E-05	0.000102
CACUL1	10q26.11	0.214538	2.35E-05	0.000102
ZNF396	18q12.2	0.214522	2.35E-05	0.000102
DISC1	1q42.2	0.214507	2.36E-05	0.000102
ZNF496	1q44	0.214456	2.37E-05	0.000102
HLA-DOA	6p21.32	0.214452	2.37E-05	0.000102
APH1B	15q22.2	0.214401	2.38E-05	0.000103
MATN2	8q22.1-q22.2	0.214369	2.39E-05	0.000103
LRRC15	3q29	0.214322	2.40E-05	0.000104
GIMAP6	7q36.1	0.214317	2.40E-05	0.000104
MRPL15	8q11.23	-0.21432	2.40E-05	0.000104
MTNR1A	4q35.2	0.214256	2.41E-05	0.000104
SPIN1	9q22.1	0.214214	2.42E-05	0.000105
FAM223B	Xq28	-0.21419	2.43E-05	0.000105

ING1	13q34	-0.21418	2.43E-05	0.000105
HEXD	17q25.3	-0.21416	2.43E-05	0.000105
USP33	1p31.1	0.214161	2.43E-05	0.000105
ZFP69	1p34.2	-0.21413	2.44E-05	0.000105
DCTN3	9p13.3	-0.2141	2.44E-05	0.000105
USP35	11q14.1	-0.21408	2.45E-05	0.000106
RCC1	1p35.3	-0.21408	2.45E-05	0.000106
NUGGC	8p21.1	0.214019	2.46E-05	0.000106
MRPS22	3q23	-0.21395	2.48E-05	0.000107
POU2F2	19q13.2	0.213918	2.48E-05	0.000107
HFE	6p22.2	0.213899	2.49E-05	0.000107
FCER1A	1q23.2	0.213884	2.49E-05	0.000107
CNKS1R	1p36.11	-0.21388	2.49E-05	0.000107
SFT2D1	6q27	-0.21388	2.49E-05	0.000107
MYL12A	18p11.31	0.213859	2.50E-05	0.000108
RPL19P12	7q22.1	-0.21377	2.52E-05	0.000108
NAPG	18p11.22	0.213772	2.52E-05	0.000108
GPX8	5q11.2	0.213749	2.52E-05	0.000109
SPCS1	3p21.1	-0.21374	2.53E-05	0.000109
MAMSTR	19q13.33	-0.21363	2.55E-05	0.00011
IZUMO4	19p13.3	-0.21363	2.55E-05	0.00011
RAB11B	19p13.2	-0.21362	2.55E-05	0.00011
AOC3	17q21.31	0.213616	2.55E-05	0.00011
TTC28	22q12.1	0.213594	2.56E-05	0.00011
TNS1	2q35	0.213523	2.57E-05	0.000111
VAMP2	17p13.1	0.213505	2.58E-05	0.000111
PCIF1	20q13.12	-0.21349	2.58E-05	0.000111
HIST1H4E	6p22.2	-0.21344	2.59E-05	0.000111
PML	15q24.1	0.213394	2.60E-05	0.000112
EZR	6q25.3	0.213363	2.61E-05	0.000112
SLC27A6	5q23.3	0.213359	2.61E-05	0.000112
SVEP1	9q31.3	0.213339	2.62E-05	0.000112
GNPTG	16p13.3	-0.21334	2.62E-05	0.000112
ERP29	12q24.13	-0.21329	2.63E-05	0.000113
CA2	8q21.2	0.213282	2.63E-05	0.000113
LACTB2	8q13.3	-0.21326	2.63E-05	0.000113
EYA2	20q13.12	0.213256	2.64E-05	0.000113
BTBD3	20p12.2	0.213212	2.65E-05	0.000113
LIX1L	1q21.1	0.213169	2.66E-05	0.000114
PRKAR2B	7q22.3	0.21314	2.66E-05	0.000114
GORAB	1q24.2	0.21313	2.67E-05	0.000114
NPY2R	4q32.1	0.213108	2.67E-05	0.000114
TOP3B	22q11.22	-0.21311	2.67E-05	0.000114
LILRB1	19q13.42	0.213094	2.67E-05	0.000114
ZNF579	19q13.42	-0.21307	2.68E-05	0.000115
ZNF836	19q13.41	0.213055	2.68E-05	0.000115
CAMKV	3p21.31	-0.21301	2.69E-05	0.000115
EPM2A	6q24.3	0.212977	2.70E-05	0.000116
ZNF337	20p11.21	-0.21297	2.70E-05	0.000116
PCDHGA12	5q31.3	0.212956	2.71E-05	0.000116
IPO5	13q32.2	-0.21295	2.71E-05	0.000116
HSDL2	9q32	-0.21295	2.71E-05	0.000116
AGAP1	2q37.2	0.212934	2.71E-05	0.000116
CHM	Xq21.2	0.212924	2.72E-05	0.000116
ILF3-DT	19p13.2	-0.21292	2.72E-05	0.000116
NKAPP1	Xq24	-0.2129	2.72E-05	0.000116
NUP93	16q13	-0.2129	2.72E-05	0.000116
SNORA71E	20q11.23	-0.21287	2.73E-05	0.000116

ANP32E	1q21.2	0.212851	2.73E-05	0.000117
LPAR1	9q31.3	0.212842	2.73E-05	0.000117
KY	3q22.2	0.212812	2.74E-05	0.000117
CCDC115	2q21.1	-0.21281	2.74E-05	0.000117
HTR7	10q23.31	0.212801	2.75E-05	0.000117
GINM1	6q25.1	0.212798	2.75E-05	0.000117
PHLDB2	3q13.2	0.212779	2.75E-05	0.000117
ADORA3	1p13.2	0.212764	2.75E-05	0.000117
RPL15	3p24.2	-0.21273	2.76E-05	0.000118
IL1RL1	2q12.1	0.212729	2.76E-05	0.000118
MAGI2	7q21.11	0.212683	2.77E-05	0.000118
ZSCAN12P1	6p22.1	0.212655	2.78E-05	0.000118
GBAP1	1q22	-0.21264	2.78E-05	0.000118
CD44	11p13	0.212636	2.79E-05	0.000118
ZNF282	7q36.1	-0.21263	2.79E-05	0.000119
L3MBTL3	6q23.1	0.212623	2.79E-05	0.000119
PDIA3P1	1q21.1	0.212609	2.79E-05	0.000119
PUS7	7q22.3	-0.2126	2.79E-05	0.000119
TLL2	10q24.1	0.212529	2.81E-05	0.000119
MMP28	17q12	0.212526	2.81E-05	0.000119
AREG	4q13.3	-0.21252	2.81E-05	0.000119
PIGK	1p31.1	0.212497	2.82E-05	0.00012
PSMD8	19q13.2	-0.21244	2.84E-05	0.00012
ARPC4	3p25.3	-0.21241	2.84E-05	0.000121
AGBL1	15q25.3	0.212405	2.84E-05	0.000121
LARGE2	11p11.2	-0.2124	2.84E-05	0.000121
RLN1	9p24.1	-0.21237	2.85E-05	0.000121
CLIC1	6p21.33	-0.21233	2.86E-05	0.000121
EIF1AD	11q13.1	-0.21231	2.87E-05	0.000122
TNFRSF17	16p13.13	0.212288	2.87E-05	0.000122
CTAGE11P	13q22.2	0.212272	2.88E-05	0.000122
ABCC6P2	16p13.11	-0.21226	2.88E-05	0.000122
SIGIRR	11p15.5	-0.21226	2.88E-05	0.000122
WDR90	16p13.3	-0.21222	2.89E-05	0.000122
CD2BP2	16p11.2	-0.21219	2.90E-05	0.000123
MYO1B	2q32.3	0.212174	2.90E-05	0.000123
TMEM99	17q21.2	-0.21217	2.90E-05	0.000123
CPED1	7q31.31	0.212097	2.92E-05	0.000124
PHF2	9q22.31	0.212034	2.94E-05	0.000124
PNMA2	8p21.2	0.212002	2.95E-05	0.000125
ABCC2	10q24.2	-0.212	2.95E-05	0.000125
CFAP97	4q35.1	0.211969	2.96E-05	0.000125
ARHGAP29	1p22.1	0.211952	2.96E-05	0.000125
PLD4	14q32.33	0.211892	2.98E-05	0.000126
NIF3L1	2q33.1	-0.21188	2.98E-05	0.000126
GNG4	1q42.3	-0.21183	2.99E-05	0.000126
BORA	13q21.33	-0.21182	2.99E-05	0.000126
ADAP1	7p22.3	-0.21181	3.00E-05	0.000127
RFTN1	3p24.3	0.211791	3.00E-05	0.000127
ZYG11B	1p32.3	0.211781	3.01E-05	0.000127
DIP2A	21q22.3	0.211761	3.01E-05	0.000127
VAV2	9q34.2	-0.21174	3.02E-05	0.000127
CEP170P1	4q26	0.211733	3.02E-05	0.000127
CCNJL	5q33.3	0.211725	3.02E-05	0.000127
GCLM	1p22.1	0.21172	3.02E-05	0.000127
ENPP2	8q24.12	0.211718	3.02E-05	0.000127
IFRD1	7q31.1	-0.21164	3.04E-05	0.000128
ICE1	5p15.32	0.211624	3.05E-05	0.000128

TPSAB1	16p13.3	0.211589	3.06E-05	0.000129
EPB41L4A	5q22.1-q22.2	0.211568	3.06E-05	0.000129
UBE2F	2q37.3	-0.21153	3.07E-05	0.000129
KANK2	19p13.2	0.211513	3.08E-05	0.00013
KIF2C	1p34.1	-0.21147	3.09E-05	0.00013
COPB1	11p15.2	0.211408	3.11E-05	0.000131
FCRL2	1q23.1	0.211373	3.12E-05	0.000131
HTR3E	3q27.1	0.21136	3.12E-05	0.000131
EXOC3-AS1	5p15.33	-0.21134	3.12E-05	0.000131
BGLAP	1q22	-0.21133	3.13E-05	0.000132
PLCH1	3q25.31	0.211309	3.13E-05	0.000132
ATG4D	19p13.2	-0.21129	3.14E-05	0.000132
TMEM163	2q21.3	0.21127	3.14E-05	0.000132
ADAM23	2q33.3	0.211269	3.14E-05	0.000132
IRF2BP1	19q13.32	-0.21125	3.15E-05	0.000132
NME4	16p13.3	-0.21122	3.16E-05	0.000133
PPP2R5C	14q32.31	0.211215	3.16E-05	0.000133
	6-Mar 5p15.2	0.211206	3.16E-05	0.000133
PRSS30P	16p13.3	-0.21115	3.18E-05	0.000133
CHKA	11q13.2	-0.21115	3.18E-05	0.000133
TMEM80	11p15.5	-0.21113	3.18E-05	0.000133
MANEA	6q16.1	0.211131	3.18E-05	0.000133
SCN7A	2q24.3	0.21113	3.18E-05	0.000133
CYP1B1	2p22.2	0.211111	3.19E-05	0.000134
SPINT1	15q15.1	0.21111	3.19E-05	0.000134
RASSF8	12p12.1	0.211107	3.19E-05	0.000134
BNIP1	5q35.1	-0.21108	3.20E-05	0.000134
MMP14	14q11.2	0.211078	3.20E-05	0.000134
FSCN1	7p22.1	0.211057	3.20E-05	0.000134
IL6R	1q21.3	0.211016	3.22E-05	0.000135
UBASH3B	11q24.1	0.210991	3.22E-05	0.000135
PRMT3	11p15.1	-0.21093	3.24E-05	0.000136
C2CD3	11q13.4	0.210927	3.24E-05	0.000136
SYT4	18q12.3	0.210924	3.24E-05	0.000136
CCNYL1	2q33.3	0.210904	3.25E-05	0.000136
GASK1B	4q32.1	0.210904	3.25E-05	0.000136
NEFH	22q12.2	0.210879	3.25E-05	0.000136
MRPL45	17q12	-0.21086	3.26E-05	0.000136
PHF11	13q14.2	-0.21085	3.26E-05	0.000136
GOLGA7B	10q24.2	-0.21085	3.26E-05	0.000136
LINC00341	14q32.13	0.210843	3.26E-05	0.000136
CSRP1	1q32.1	0.21082	3.27E-05	0.000137
AKAP8L	19p13.12	-0.21081	3.27E-05	0.000137
BANK1	4q24	0.210787	3.28E-05	0.000137
ZNF598	16p13.3	-0.21077	3.29E-05	0.000137
CD163	12p13.31	0.210749	3.29E-05	0.000137
LY6G6E	6p21.33	-0.21068	3.31E-05	0.000138
SPTLC3	20p12.1	0.210646	3.32E-05	0.000139
TMEM184B	22q13.1	0.210646	3.32E-05	0.000139
OSBPL10	3p23	0.210609	3.33E-05	0.000139
CTSA	20q13.12	-0.21058	3.34E-05	0.000139
TBCC	6p21.1	-0.21058	3.34E-05	0.000139
NAT10	11p13	-0.21057	3.35E-05	0.000139
TERT	5p15.33	-0.21056	3.35E-05	0.000139
TMEM156	4p14	0.210534	3.35E-05	0.00014
RPL9	4p14	-0.21052	3.36E-05	0.00014
RPS6KA4	11q13.1	-0.21051	3.36E-05	0.00014
QDPR	4p15.32	-0.21048	3.37E-05	0.00014

SARAF	8p12	0.210468	3.37E-05	0.00014
MTIF3	13q12.2	-0.21044	3.38E-05	0.000141
PLEKHA5	12p12.3	0.210423	3.39E-05	0.000141
ZNF32	10q11.21	-0.2104	3.39E-05	0.000141
DGKH	13q14.11	0.210366	3.40E-05	0.000142
ZNF792	19q13.11	0.210364	3.41E-05	0.000142
WBP4	13q14.11	-0.21035	3.41E-05	0.000142
PPP1R12C	19q13.42	-0.21033	3.42E-05	0.000142
TFB1M	6q25.3	-0.2103	3.43E-05	0.000142
RNF7	3q23	-0.21029	3.43E-05	0.000142
CARHSP1	16p13.2	-0.21029	3.43E-05	0.000142
NTPCR	1q42.2	-0.21029	3.43E-05	0.000142
PATJ	1p31.3	0.210247	3.44E-05	0.000143
NAA38	17p13.1	-0.21024	3.44E-05	0.000143
CHMP1B	18p11.21	0.21019	3.46E-05	0.000143
GCAT	22q13.1	-0.21017	3.46E-05	0.000144
SEPTIN10	2q13	0.210163	3.47E-05	0.000144
SKIV2L	6p21.33	-0.21016	3.47E-05	0.000144
RNF5	6p21.32	-0.21011	3.48E-05	0.000144
IDI2	10p15.3	-0.21007	3.49E-05	0.000145
UBE2Q2P1	15q25.2	0.209977	3.52E-05	0.000146
CDPF1	22q13.31	-0.20993	3.54E-05	0.000147
DRG2	17p11.2	-0.20993	3.54E-05	0.000147
AGAP7P	10q11.22	-0.20992	3.54E-05	0.000147
S1PR1	1p21.2	0.209903	3.55E-05	0.000147
SUMO1P3	1q23.2	-0.20988	3.55E-05	0.000147
SENP8	15q23	0.209858	3.56E-05	0.000147
ANO6	12q12	0.209833	3.57E-05	0.000148
PLEKHG3	14q23.3	0.209807	3.58E-05	0.000148
DCAF15	19p13.12	-0.20978	3.58E-05	0.000148
CCT5	5p15.2	-0.20976	3.59E-05	0.000148
NEK9	14q24.3	0.209684	3.61E-05	0.000149
CCR8	3p22.1	0.209671	3.62E-05	0.00015
C2ORF76	2q14.2	-0.20965	3.63E-05	0.00015
USP12	13q12.13	0.209632	3.63E-05	0.00015
AMELX	Xp22.2	-0.20961	3.64E-05	0.00015
SP8	7p21.1	0.209543	3.66E-05	0.000151
RDH13	19q13.42	-0.20952	3.67E-05	0.000151
NTN4	12q22	0.209468	3.68E-05	0.000152
BET1	7q21.3	-0.20946	3.69E-05	0.000152
CALU	7q32.1	0.20944	3.69E-05	0.000152
BTBD2	19p13.3	-0.20943	3.70E-05	0.000153
NAP1L3	Xq21.32	0.209402	3.71E-05	0.000153
LUZP2	11p14.3	0.209363	3.72E-05	0.000153
ARHGAP45	19p13.3	-0.20935	3.72E-05	0.000153
TSEN2	3p25.2	-0.20935	3.72E-05	0.000153
ST6GALNAC6	9q34.11	0.209353	3.72E-05	0.000153
	3-Mar 5q23.2	0.209289	3.74E-05	0.000154
PDE1C	7p14.3	0.209228	3.76E-05	0.000155
EFEMP1	2p16.1	0.209174	3.78E-05	0.000156
PSTK	10q26.13	-0.20915	3.79E-05	0.000156
ENOPH1	4q21.22	-0.20913	3.79E-05	0.000156
MMP20	11q22.2	-0.20911	3.80E-05	0.000157
ERG	21q22.2	0.209105	3.80E-05	0.000157
AMOTL1	11q21	0.209068	3.81E-05	0.000157
GLI2	2q14.2	0.209047	3.82E-05	0.000157
KLHL2	4q32.3	0.209041	3.82E-05	0.000157
ALOX15B	17p13.1	0.209013	3.83E-05	0.000158

WSB2	12q24.23	0.208997	3.84E-05	0.000158
GCNT3	15q22.2	0.208939	3.86E-05	0.000159
STRADB	2q33.1	-0.20893	3.86E-05	0.000159
SNORD22	11q12.3	-0.20893	3.86E-05	0.000159
PIR	Xp22.2	-0.20891	3.87E-05	0.000159
MYO10	5p15.1	0.208867	3.88E-05	0.000159
DCANP1	5q31.1	0.20884	3.89E-05	0.00016
MTOR	1p36.22	0.208833	3.89E-05	0.00016
GHRLOS	3p25.3	-0.20883	3.90E-05	0.00016
GOLGA6L6	15q11.2	-0.20871	3.94E-05	0.000162
ZDHHC4	7p22.1	-0.2087	3.94E-05	0.000162
SCARNA7	3q25.33	-0.20868	3.95E-05	0.000162
ALDH1A3	15q26.3	0.208672	3.95E-05	0.000162
RPL31P11	1q23.3	-0.20867	3.95E-05	0.000162
FCRLA	1q23.3	0.208655	3.96E-05	0.000162
GAS6	13q34	-0.20859	3.98E-05	0.000163
BAZ1B	7q11.23	0.208582	3.98E-05	0.000163
TXN2	22q12.3	-0.20857	3.98E-05	0.000163
RNF38	9p13.2	0.208567	3.99E-05	0.000163
MID2	Xq22.3	0.208535	4.00E-05	0.000164
RHOJ	14q23.2	0.208519	4.00E-05	0.000164
LY86	6p25.1	0.208466	4.02E-05	0.000165
GAPVD1	9q33.3	0.208457	4.02E-05	0.000165
EFHC1	6p12.2	-0.20845	4.03E-05	0.000165
BICDL2	16p13.3	-0.20844	4.03E-05	0.000165
TYW3	1p31.1	0.208416	4.04E-05	0.000165
RAP1A	1p13.2	0.208361	4.06E-05	0.000166
YTHDF1	20q13.33	-0.20835	4.06E-05	0.000166
TSPAN1	1p34.1	0.208328	4.07E-05	0.000166
IL1R2	2q11.2	0.208319	4.07E-05	0.000166
GHDC	17q21.2	-0.20829	4.08E-05	0.000167
PSMB9	6p21.32	-0.20829	4.08E-05	0.000167
B3GNT5	3q27.1	0.208269	4.09E-05	0.000167
DNM1P46	15q26.3	0.208225	4.11E-05	0.000168
PHKA2	Xp22.13	-0.20822	4.11E-05	0.000168
SMURF1	7q22.1	0.208208	4.11E-05	0.000168
LPIN1	2p25.1	0.208194	4.12E-05	0.000168
ITSN1	21q22.11	0.208168	4.13E-05	0.000168
LRRC36	16q22.1	-0.20816	4.13E-05	0.000169
POLR1E	9p13.2	-0.20816	4.13E-05	0.000169
ITGB4	17q25.1	0.208153	4.13E-05	0.000169
SAMSN1	21q11.2	0.208141	4.14E-05	0.000169
HS3ST3A1	17p12	0.208119	4.14E-05	0.000169
SYDE2	1p22.3	0.208062	4.16E-05	0.00017
KCNQ5	6q13	0.20806	4.17E-05	0.00017
CHKB-CPT1B	22q13.33	-0.20805	4.17E-05	0.00017
RIPOR2	6p22.3	0.208044	4.17E-05	0.00017
MAP11	7q22.1	-0.20797	4.20E-05	0.000171
NICN1	3p21.31	-0.20797	4.20E-05	0.000171
THAP11	16q22.1	-0.20795	4.20E-05	0.000171
GOLGA2	9q34.11	0.207933	4.21E-05	0.000171
KCTD11	17p13.1	0.207912	4.22E-05	0.000172
FHL1	Xq26.3	0.207903	4.22E-05	0.000172
C4ORF19	4p14	0.207901	4.22E-05	0.000172
IRF2	4q35.1	0.207877	4.23E-05	0.000172
PLCXD3	5p13.1	0.207875	4.23E-05	0.000172
PCSK4	19p13.3	-0.20786	4.24E-05	0.000172
ACVRL1	12q13.13	0.207837	4.25E-05	0.000173



DTD1	20p11.23	-0.20784	4.25E-05	0.000173
MPHOSPH9	12q24.31	0.207819	4.25E-05	0.000173
ATP5PO	21q22.11	-0.20781	4.26E-05	0.000173
CASS4	20q13.31	0.207795	4.26E-05	0.000173
NSMCE4A	10q26.13	-0.20772	4.29E-05	0.000174
SCGB2A1	11q12.3	0.20771	4.29E-05	0.000174
PABPC4L	4q28.3	0.207705	4.30E-05	0.000174
TXNL4B	16q22.2	-0.20767	4.31E-05	0.000175
AFDN	6q27	0.207647	4.32E-05	0.000175
FABP5	8q21.13	-0.20761	4.33E-05	0.000176
CLIP4	2p23.2	0.207518	4.37E-05	0.000177
NFE2L2	2q31.2	0.207507	4.37E-05	0.000177
RBM4	11q13.2	-0.2075	4.37E-05	0.000177
TRIM23	5q12.3	0.207493	4.38E-05	0.000177
TMEM69	1p34.1	-0.20749	4.38E-05	0.000177
PAC SIN3	11p11.2	-0.20746	4.39E-05	0.000178
QKI	6q26	0.207441	4.40E-05	0.000178
ADAMTSL1	9p22.2-p22.1	0.207419	4.40E-05	0.000178
STK39	2q24.3	0.207412	4.41E-05	0.000178
PPID	4q32.1	-0.20741	4.41E-05	0.000178
MN1	22q12.1	0.20734	4.43E-05	0.000179
ERMN	2q24.1	0.207328	4.44E-05	0.00018
DNAH12	3p14.3	-0.20732	4.44E-05	0.00018
SRSF3	6p21.31-p21.2	-0.20732	4.44E-05	0.00018
FAM214B	9p13.3	0.207299	4.45E-05	0.00018
THAP8	19q13.12	-0.20729	4.45E-05	0.00018
PCDHGC4	5q31.3	0.207256	4.47E-05	0.000181
NUP50	22q13.31	0.207256	4.47E-05	0.000181
EIF3IP1	7q31.1	-0.20719	4.49E-05	0.000182
NPAS3	14q13.1	0.207153	4.51E-05	0.000182
DAAM2	6p21.2	0.207101	4.53E-05	0.000183
UNC93B1	11q13.2	-0.2071	4.53E-05	0.000183
EGR3	8p21.3	0.20708	4.54E-05	0.000183
SRPRB	3q22.1	-0.20704	4.55E-05	0.000184
RNF157	17q25.1	-0.20701	4.56E-05	0.000184
RPL10A	6p21.31	-0.207	4.57E-05	0.000184
CDC25B	20p13	-0.20699	4.57E-05	0.000184
POLB	8p11.21	-0.20699	4.57E-05	0.000184
AAMDC	11q14.1	-0.20696	4.58E-05	0.000185
CD27	12p13.31	0.20695	4.59E-05	0.000185
EVC2	4p16.2	0.206909	4.60E-05	0.000186
KLF7	2q33.3	0.206877	4.62E-05	0.000186
HS6ST1	2q14.3	-0.20687	4.62E-05	0.000186
COG4	16q22.1	-0.20685	4.63E-05	0.000186
SCNN1A	12p13.31	0.20682	4.64E-05	0.000187
PARD6B	20q13.13	-0.2068	4.65E-05	0.000187
NUDT8	11q13.2	-0.20679	4.65E-05	0.000187
THBD	20p11.21	0.206788	4.65E-05	0.000187
BASP1-AS1	5p15.1	0.206757	4.66E-05	0.000188
PCDHB10	5q31.3	0.206737	4.67E-05	0.000188
ASTN1	1q25.2	0.206737	4.67E-05	0.000188
PRRG2	19q13.33	-0.20673	4.67E-05	0.000188
DDX47	12p13.1	-0.20673	4.67E-05	0.000188
RIMS1	6q13	0.206719	4.68E-05	0.000188
ZNF426	19p13.2	0.206714	4.68E-05	0.000188
SCYL3	1q24.2	0.20671	4.68E-05	0.000188
THUMPD3-AS1	3p25.3	-0.20667	4.70E-05	0.000189
RNF149	2q11.2	-0.20667	4.70E-05	0.000189

GPNMB	7p15.3	0.206652	4.71E-05	0.000189
UCN	2p23.3	-0.20664	4.71E-05	0.000189
TMEM89	3p21.31	-0.20664	4.71E-05	0.000189
FUT10	8p12	0.206634	4.71E-05	0.000189
PRPF4	9q32	-0.20662	4.72E-05	0.000189
MXRA5	Xp22.33	0.206607	4.72E-05	0.00019
TMEM14C	6p24.2	-0.2066	4.73E-05	0.00019
LMBR1L	12q13.12	-0.20658	4.74E-05	0.00019
IFT20	17q11.2	-0.20654	4.75E-05	0.000191
RASGRP4	19q13.2	0.206532	4.76E-05	0.000191
PSMC4	19q13.2	-0.20651	4.76E-05	0.000191
LINC00189	21q21.3	0.206456	4.79E-05	0.000192
CDCA4	14q32.33	-0.20645	4.79E-05	0.000192
SMPDL3A	6q22.31	0.206417	4.80E-05	0.000192
CWH43	4p11	0.206406	4.81E-05	0.000193
RAB40C	16p13.3	-0.2064	4.81E-05	0.000193
MTX3	5q14.1	0.206385	4.82E-05	0.000193
SH2D2A	1q23.1	-0.20637	4.82E-05	0.000193
SLC13A3	20q13.12	-0.20629	4.86E-05	0.000194
GRB14	2q24.3	-0.20628	4.86E-05	0.000194
EPN2	17p11.2	0.206276	4.86E-05	0.000194
PTCHD4	6p12.3	0.206272	4.86E-05	0.000195
NSUN3	3q11.2	0.206233	4.88E-05	0.000195
FGF19	11q13.3	-0.2062	4.89E-05	0.000196
ZC3H3	8q24.3	-0.20617	4.91E-05	0.000196
DYNLL1	12q24.31	-0.20616	4.91E-05	0.000196
GOLGA8A	15q14	-0.20614	4.92E-05	0.000197
CYP4F2	19p13.12	-0.20614	4.92E-05	0.000197
PCDH18	4q28.3	0.20611	4.93E-05	0.000197
NFAM1	22q13.2	0.206106	4.93E-05	0.000197
CHMP6	17q25.3	-0.2061	4.94E-05	0.000197
NXF1	11q12.3	-0.20609	4.94E-05	0.000197
SOX5	12p12.1	0.206088	4.94E-05	0.000197
HOXD1	2q31.1	0.206073	4.95E-05	0.000197
SNX8	7p22.3	-0.20604	4.96E-05	0.000198
PDE7B	6q23.3	0.206037	4.96E-05	0.000198
P2RX7	12q24.31	0.206013	4.97E-05	0.000198
CALCRL	2q32.1	0.205995	4.98E-05	0.000199
ANKZF1	2q35	-0.20596	5.00E-05	0.000199
FOXF2	6p25.3	0.205918	5.01E-05	0.0002
SMAD5	5q31.1	0.205842	5.05E-05	0.000201
PRADC1	2p13.2	-0.2058	5.07E-05	0.000202
DOCK4	7q31.1	0.205796	5.07E-05	0.000202
LOC153684	5p12	0.205776	5.08E-05	0.000202
ABL2	1q25.2	0.205761	5.08E-05	0.000202
RBL2	16q12.2	0.205717	5.10E-05	0.000203
XKR5	8p23.1	0.205714	5.10E-05	0.000203
CD3G	11q23.3	0.205711	5.10E-05	0.000203
COL5A1	9q34.3	0.205702	5.11E-05	0.000203
IFT57	3q13.12-q13.13	-0.2057	5.11E-05	0.000203
NOP58	2q33.1	-0.20565	5.13E-05	0.000204
PHLDB1	11q23.3	0.205501	5.20E-05	0.000207
NRF1	7q32.2	-0.20549	5.20E-05	0.000207
ZNF511	10q26.3	-0.20542	5.23E-05	0.000208
KIF16B	20p12.1	0.205416	5.24E-05	0.000208
EVI2A	17q11.2	0.205393	5.25E-05	0.000208
MAB21L1	13q13.3	0.205372	5.25E-05	0.000209
SLC5A7	2q12.3	0.205355	5.26E-05	0.000209

MAFB	20q12	0.205348	5.27E-05	0.000209
MFSD14A	1p21.2	0.205278	5.30E-05	0.00021
SNORD10	17p13.1	-0.20527	5.30E-05	0.00021
TLCD4	1p21.3	0.205196	5.33E-05	0.000212
CAMSAP1	9q34.3	0.205157	5.35E-05	0.000212
KCNIP2	10q24.32	-0.20515	5.36E-05	0.000212
DYNLT1	6q25.3	-0.20509	5.38E-05	0.000213
SELPLG	12q24.11	0.205049	5.40E-05	0.000214
DBF4	7q21.12	-0.20501	5.42E-05	0.000215
ANG	14q11.2	0.205008	5.42E-05	0.000215
ADCY2	5p15.31	0.204888	5.48E-05	0.000217
NFE2L1	17q21.32	0.204861	5.49E-05	0.000218
ESS2	22q11.21 22q11.2	-0.20484	5.50E-05	0.000218
ZSCAN30	18q12.2	0.204832	5.50E-05	0.000218
NFATC3	16q22.1	0.204785	5.53E-05	0.000219
ZSWIM3	20q13.12	-0.20477	5.53E-05	0.000219
PODXL2	3q21.3	-0.20474	5.55E-05	0.00022
HAP1	17q21.2	-0.20474	5.55E-05	0.00022
FNDC1	6q25.3	0.204713	5.56E-05	0.00022
PCNX4	14q23.1	0.204694	5.57E-05	0.00022
KLRG2	7q34	-0.20468	5.57E-05	0.00022
ZNF502	3p21.31	-0.20463	5.60E-05	0.000221
GPA33	1q24.1	0.204611	5.61E-05	0.000222
ATIC	2q35	-0.2046	5.62E-05	0.000222
BRWD1	21q22.2	0.204555	5.64E-05	0.000223
BMS1P20	22q11.22	0.204534	5.65E-05	0.000223
PRPS1	Xq22.3	-0.20452	5.65E-05	0.000223
EXT1	8q24.11	0.204506	5.66E-05	0.000224
MFNG	22q13.1	0.204493	5.67E-05	0.000224
GAL	11q13.2	-0.20448	5.67E-05	0.000224
STIM2	4p15.2	0.204475	5.67E-05	0.000224
ANXA1	9q21.13	0.204469	5.68E-05	0.000224
FCMR	1q32.1	0.204453	5.69E-05	0.000224
CFH	1q31.3	0.204373	5.72E-05	0.000226
RAB11FIP1	8p11.23	0.204349	5.74E-05	0.000226
RBM6	3p21.31	-0.20432	5.75E-05	0.000227
ABHD17B	9q21.13	0.204298	5.76E-05	0.000227
CTNND2	5p15.2	0.204297	5.76E-05	0.000227
JAM2	21q21.3	0.204177	5.82E-05	0.000229
PODN	1p32.3	0.204142	5.84E-05	0.00023
CHRNA10	11p15.4	-0.20414	5.84E-05	0.00023
COX7C	5q14.3	-0.20408	5.87E-05	0.000231
HIST1H1B	6p22.1	-0.20404	5.89E-05	0.000232
TK1	17q25.3	-0.204	5.91E-05	0.000233
ADCY7	16q12.1	0.203967	5.93E-05	0.000233
NAT14	19q13.42	-0.20393	5.94E-05	0.000234
ALDH1L1	3q21.3	0.203881	5.97E-05	0.000235
STARD3NL	7p14.1	-0.20379	6.02E-05	0.000237
TSSK6	19p13.11	-0.20374	6.04E-05	0.000238
SLC18A1	8p21.3	0.203731	6.05E-05	0.000238
HSPA13	21q11.2	0.203681	6.07E-05	0.000239
ITGA11	15q23	0.203673	6.08E-05	0.000239
TRIM58	1q44	0.203614	6.11E-05	0.00024
GIMAP4	7q36.1	0.203603	6.11E-05	0.00024
LSM6	4q31.22	-0.20359	6.12E-05	0.00024
GPR15	3q11.2	0.20359	6.12E-05	0.00024
PDPR	16q22.1	0.203588	6.12E-05	0.00024
HCLS1	3q13.33	0.203569	6.13E-05	0.000241

PRR22	19p13.3	-0.20357	6.13E-05	0.000241
TRIM28	19q13.43	-0.20355	6.14E-05	0.000241
UQCRC1	3p21.31	-0.20353	6.15E-05	0.000241
IL12A	3q25.33	-0.20347	6.18E-05	0.000242
GCN1	12q24.23	0.203457	6.19E-05	0.000243
FLJ23867	1q25.2	0.203452	6.19E-05	0.000243
FLRT3	20p12.1	0.203409	6.21E-05	0.000244
RRP12	10q24.1	-0.2034	6.22E-05	0.000244
PROSER3	19q13.12	0.203398	6.22E-05	0.000244
ARHGAP28	18p11.31	0.203397	6.22E-05	0.000244
GPR55	2q37.1	0.203366	6.24E-05	0.000244
MYADM	19q13.42	0.203354	6.24E-05	0.000245
TMEM129	4p16.3	-0.20335	6.24E-05	0.000245
TRMT11	6q22.32	-0.20333	6.26E-05	0.000245
SMARCE1	17q21.2	-0.20328	6.29E-05	0.000246
USP15	12q14.1	0.203271	6.29E-05	0.000246
TMEM97	17q11.2	-0.20322	6.31E-05	0.000247
DLC1	8p22	0.203213	6.32E-05	0.000247
PDCL	9q33.2	0.203212	6.32E-05	0.000247
KCNAB2	1p36.31	-0.20321	6.32E-05	0.000247
VSTM4	10q11.23	0.203204	6.32E-05	0.000247
PAH	12q23.2	-0.20315	6.36E-05	0.000248
SLC41A1	1q32.1	0.203117	6.37E-05	0.000249
SYT10	12p11.1	0.203117	6.37E-05	0.000249
PCMTD2	20q13.33	-0.20311	6.37E-05	0.000249
ZNF138	7q11.21	-0.20311	6.37E-05	0.000249
NCAM1	11q23.2	0.203094	6.38E-05	0.000249
ADGRL3	4q13.1	0.203063	6.40E-05	0.00025
KLF11	2p25.1	0.203062	6.40E-05	0.00025
PPIAL4D	1q21.1	-0.20305	6.41E-05	0.00025
ATRIP	3p21.31	-0.20302	6.42E-05	0.000251
ZBTB7A	19p13.3	0.203012	6.43E-05	0.000251
LAIR1	19q13.42	0.202943	6.47E-05	0.000252
CEBPE	14q11.2	0.202941	6.47E-05	0.000252
ATG9B	7q36.1	-0.20294	6.47E-05	0.000252
ATP6V0D2	8q21.3	0.202913	6.48E-05	0.000253
CSTF1	20q13.2-q13.31	-0.2029	6.49E-05	0.000253
FCRL3	1q23.1	0.202892	6.49E-05	0.000253
NOP53	19q13.33	-0.20287	6.51E-05	0.000253
NUTM2D	10q23.2	0.202855	6.51E-05	0.000254
SOBP	6q21	0.20284	6.52E-05	0.000254
JCAD	10p11.23	0.202826	6.53E-05	0.000254
ECHS1	10q26.3	-0.20282	6.53E-05	0.000254
FEZ2	2p22.2	0.202806	6.54E-05	0.000255
ZNF469	16q24.2	0.202784	6.55E-05	0.000255
PLA2G2D	1p36.12	0.202769	6.56E-05	0.000255
MND1	4q31.3	-0.20275	6.57E-05	0.000256
SDSL	12q24.13	-0.20275	6.57E-05	0.000256
NAP1L2	Xq13.2	0.202734	6.58E-05	0.000256
ZDBF2	2q33.3	0.202711	6.59E-05	0.000256
TRIM7	5q35.3	0.202701	6.60E-05	0.000257
DLX3	17q21.33	-0.2027	6.60E-05	0.000257
SLC6A14	Xq23	0.202684	6.61E-05	0.000257
FAAH	1p33	-0.20268	6.61E-05	0.000257
SLC8A3	14q24.2	0.202676	6.61E-05	0.000257
WFDC10A	20q13.12	-0.20267	6.62E-05	0.000257
TRAF3IP2	6q21	0.202652	6.63E-05	0.000257
POC1A	3p21.2	-0.20262	6.65E-05	0.000258

SIGLEC17P	19q13.41	0.202604	6.65E-05	0.000258
NDUFS1	2q33.3	0.202564	6.68E-05	0.000259
RHPN2	19q13.11	0.202555	6.68E-05	0.000259
ZNF25	10p11.21	0.202547	6.69E-05	0.000259
CLIC4	1p36.11	0.202542	6.69E-05	0.000259
CHMP2B	3p11.2	0.202503	6.71E-05	0.00026
FLJ30679	16q24.1	-0.2025	6.71E-05	0.00026
SAAL1	11p15.1	-0.2025	6.72E-05	0.00026
CBL	11q23.3	0.202478	6.73E-05	0.000261
ABCD3	1p21.3	0.202471	6.73E-05	0.000261
ARIH2	3p21.31	-0.20246	6.74E-05	0.000261
SEC1P	19q13.33	0.202422	6.76E-05	0.000262
PTPN22	1p13.2	0.202401	6.77E-05	0.000262
PARP8	5q11.1	0.20238	6.78E-05	0.000263
GCNT1	9q21.13	0.202356	6.80E-05	0.000263
CYYR1	21q21.3	0.202341	6.80E-05	0.000263
SEC24C	10q22.2	0.202328	6.81E-05	0.000264
ADGRA2	8p11.23	0.202311	6.82E-05	0.000264
ANK1	8p11.21	0.202308	6.82E-05	0.000264
KCNK1	1q42.2	0.202287	6.84E-05	0.000264
RWDD1	6q22.1	-0.20228	6.84E-05	0.000264
IFT22	7q22.1	-0.20225	6.85E-05	0.000265
ZXDB	Xp11.21	0.202254	6.85E-05	0.000265
TIMP2	17q25.3	0.202233	6.87E-05	0.000265
FBXL12	19p13.2	-0.20221	6.88E-05	0.000266
TMEM270	7q11.23	-0.2022	6.88E-05	0.000266
HECW2	2q32.3	0.202189	6.89E-05	0.000266
C1ORF52	1p22.3	-0.20219	6.89E-05	0.000266
SPIRE2	16q24.3	-0.20219	6.89E-05	0.000266
BRIP1	17q23.2	0.20218	6.90E-05	0.000266
EHMT2	6p21.33	-0.20217	6.90E-05	0.000266
TCAP	17q12	-0.20217	6.90E-05	0.000266
METTL4	18p11.32	0.202169	6.90E-05	0.000266
LONP2	16q12.1	0.202159	6.91E-05	0.000266
PRH2	12p13.2	-0.20216	6.91E-05	0.000266
CDYL	6p25.1	0.202153	6.91E-05	0.000266
ZNF695	1q44	-0.20213	6.93E-05	0.000267
B4GALT1	9p21.1	0.202121	6.93E-05	0.000267
GPR174	Xq21.1	0.20208	6.96E-05	0.000268
TNN	1q25.1	0.202079	6.96E-05	0.000268
ZHX2	8q24.13	0.202075	6.96E-05	0.000268
SPART	13q13.3	0.202073	6.96E-05	0.000268
SOWAHB	4q21.1	0.202072	6.96E-05	0.000268
SULF1	8q13.2-q13.3	0.202064	6.97E-05	0.000268
MRS2	6p22.3	-0.20204	6.98E-05	0.000269
DNAL1	14q24.3	0.201969	7.02E-05	0.00027
VNN2	6q23.2	0.20196	7.03E-05	0.00027
SIDT2	11q23.3	0.201938	7.04E-05	0.000271
CHST6	16q23.1	0.201924	7.05E-05	0.000271
GOLIM4	3q26.2	0.201923	7.05E-05	0.000271
RBBP7	Xp22.2	-0.20192	7.05E-05	0.000271
ALDH4A1	1p36.13	-0.2019	7.06E-05	0.000271
ATP13A1	19p13.11	-0.20189	7.07E-05	0.000272
SIRPB2	20p13	0.201881	7.07E-05	0.000272
COL5A2	2q32.2	0.201692	7.19E-05	0.000276
ATG16L2	11q13.4	-0.20168	7.19E-05	0.000276
NOSTRIN	2q24.3	0.201667	7.20E-05	0.000277
MMP16	8q21.3	0.201666	7.20E-05	0.000277

COL8A2	1p34.3	0.20164	7.22E-05	0.000277
NSD3	8p11.23	0.201592	7.25E-05	0.000278
KCNT2	1q31.3	0.20159	7.25E-05	0.000278
TFEC	7q31.2	0.201584	7.25E-05	0.000278
LSP1	11p15.5	0.201583	7.25E-05	0.000278
TENM3	4q34.3-q35.1	0.201579	7.26E-05	0.000278
P2RX1	17p13.2	0.201559	7.27E-05	0.000279
TRA2A	7p15.3	-0.20154	7.28E-05	0.000279
VAT1L	16q23.1	0.201516	7.29E-05	0.00028
AAAS	12q13.13	-0.20149	7.31E-05	0.00028
PPP5C	19q13.32	-0.20147	7.32E-05	0.000281
IAH1	2p25.1	-0.20144	7.34E-05	0.000281
SELP	1q24.2	0.201443	7.34E-05	0.000281
N4BP2L2-IT2	13q13.1	-0.20144	7.34E-05	0.000281
PTK2B	8p21.2	0.201433	7.35E-05	0.000281
MDS2	1p36.11	-0.20141	7.36E-05	0.000282
TRAPPC6B	14q21.1	0.201399	7.37E-05	0.000282
SUPT16H	14q11.2	0.201352	7.40E-05	0.000283
SLIT3	5q34-q35.1	0.20134	7.40E-05	0.000283
ACSBG2	19p13.3	-0.20132	7.42E-05	0.000284
PGM3	6q14.1	0.201321	7.42E-05	0.000284
MED8	1p34.2	-0.20131	7.42E-05	0.000284
VAV1	19p13.3	0.201279	7.44E-05	0.000284
PCDHGB7	5q31.3	0.201227	7.47E-05	0.000286
KCTD3	1q41	0.201211	7.49E-05	0.000286
TMEM150B	19q13.42	-0.20116	7.52E-05	0.000287
KLHL35	11q13.4	-0.20116	7.52E-05	0.000287
TSSC2	11p15.4	-0.20109	7.56E-05	0.000289
CCN4	8q24.22	0.201083	7.57E-05	0.000289
ST7-OT4	7q31.2	-0.20107	7.57E-05	0.000289
UNC5D	8p12	0.201058	7.58E-05	0.000289
SHLD1	20p12.3	-0.20105	7.59E-05	0.000289
DHCR7	11q13.4	-0.20104	7.59E-05	0.00029
FRMPD2	10q11.22	0.20104	7.59E-05	0.00029
USP14	18p11.32	0.201037	7.60E-05	0.00029
C3ORF52	3q13.2	0.201009	7.61E-05	0.00029
FAM135B	8q24.23	0.201005	7.62E-05	0.00029
RIMKLA	1p34.2	0.200938	7.66E-05	0.000292
PPP1R18	6p21.33	0.200826	7.73E-05	0.000295
PPAN-P2RY11	19p13.2	0.200824	7.73E-05	0.000295
ZFPM2	8q23.1	0.200797	7.75E-05	0.000295
CD1E	1q23.1	0.200789	7.76E-05	0.000295
RBM25	14q24.2	0.200785	7.76E-05	0.000295
RASD2	22q12.3	0.200735	7.79E-05	0.000297
PPFIA1	11q13.3	0.20073	7.79E-05	0.000297
MYLK2	20q11.21	-0.2007	7.82E-05	0.000297
NAE1	16q22.1	-0.20069	7.82E-05	0.000298
C2ORF48	2p25.1	-0.20065	7.85E-05	0.000298
PTTG2	4p14	-0.20063	7.86E-05	0.000299
SASH3	Xq26.1	0.200608	7.87E-05	0.000299
DEUP1	11q21	0.200584	7.89E-05	0.0003
PSMC5	17q23.3	-0.20052	7.93E-05	0.000302
RAB43	3q21.3	0.200489	7.95E-05	0.000302
GAB2	11q14.1	0.200488	7.95E-05	0.000302
ITPRIP	10q25.1	0.200347	8.05E-05	0.000306
HCK	20q11.21	0.200342	8.05E-05	0.000306
DSCR9	21q22.13	-0.20032	8.06E-05	0.000306
EMC9	14q12	-0.20028	8.09E-05	0.000307

RGMA	15q26.1	0.200274	8.10E-05	0.000307
FCN3	1p36.11	-0.20027	8.10E-05	0.000307
MS4A6A	11q12.2	0.200266	8.10E-05	0.000307
ARPC1A	7q22.1	-0.20025	8.11E-05	0.000308
KPTN	19q13.32	-0.20025	8.12E-05	0.000308
SNHG5	6q14.3	-0.20024	8.12E-05	0.000308
LPXN	11q12.1	0.200224	8.13E-05	0.000308
APPL2	12q23.3	0.20019	8.15E-05	0.000309
TMEM91	19q13.2	-0.20013	8.19E-05	0.000311
TSPAN8	12q21.1	0.200123	8.20E-05	0.000311
RAP2B	3q25.2	0.200103	8.21E-05	0.000311
MAGEA11	Xq28	-0.20003	8.26E-05	0.000313
ARGLU1	13q33.3	-0.20003	8.26E-05	0.000313
ENC1	5q13.3	0.200025	8.27E-05	0.000313
FAM222A	12q24.11	-0.20002	8.27E-05	0.000313
STPG3	9q34.3	-0.20001	8.28E-05	0.000313
MED26	19p13.11	-0.20001	8.28E-05	0.000313
JAML	11q23.3	0.19998	8.30E-05	0.000314
VOPP1	7p11.2	-0.19998	8.30E-05	0.000314
PSMD7	16q23.1	-0.19996	8.32E-05	0.000315
ESPN	1p36.31	-0.19991	8.35E-05	0.000316
PTGDR	14q22.1	0.199895	8.36E-05	0.000316
LGALS9B	17p11.2	0.199891	8.36E-05	0.000316
IMPG2	3q12.3	0.199885	8.37E-05	0.000316
MRV1	11p15.4	0.199878	8.37E-05	0.000316
HHIP	4q31.21	0.199852	8.39E-05	0.000317
PIP5K1A	1q21.3	0.199824	8.41E-05	0.000318
DUOX2	15q21.1	0.199771	8.45E-05	0.000319
MEI1	22q13.2	0.19977	8.45E-05	0.000319
MS4A8	11q12.2	0.199747	8.46E-05	0.000319
LOC90784	2p11.2	0.199733	8.47E-05	0.00032
TAT	16q22.2	0.1997	8.50E-05	0.000321
UNC93A	6q27	-0.1997	8.50E-05	0.000321
PMM1	22q13.2	-0.19965	8.53E-05	0.000322
NASP	1p34.1	-0.19962	8.55E-05	0.000323
CLEC7A	12p13.2	0.199573	8.59E-05	0.000324
POLR3E	16p12.2	-0.19956	8.60E-05	0.000324
MCTP1	5q15	0.199529	8.62E-05	0.000325
CSTF2T	10q21.1	0.19952	8.62E-05	0.000325
UGGT1	2q14.3	0.199509	8.63E-05	0.000325
LIPT1	2q11.2	-0.19949	8.64E-05	0.000326
DDN	12q13.12	-0.19949	8.65E-05	0.000326
PRR11	17q22	0.199487	8.65E-05	0.000326
RPRD1A	18q12.2	0.199469	8.66E-05	0.000326
CYP4B1	1p33	-0.19946	8.66E-05	0.000326
SMURF2	17q23.3-q24.1	0.199417	8.70E-05	0.000327
NBR2	17q21.31	-0.19941	8.71E-05	0.000328
SPIB	19q13.33	0.199399	8.71E-05	0.000328
GYG2	Xp22.33	-0.1994	8.71E-05	0.000328
KLC1	14q32.33	0.199392	8.72E-05	0.000328
TMEM141	9q34.3	-0.19939	8.72E-05	0.000328
RACK1	5q35.3	-0.19938	8.72E-05	0.000328
JKAMP	14q23.1	0.199376	8.73E-05	0.000328
AQP3	9p13.3	0.199375	8.73E-05	0.000328
TRIM16	17p12	0.19934	8.75E-05	0.000329
BAAT	9q31.1	-0.19932	8.77E-05	0.000329
CNTN2	1q32.1	0.199312	8.78E-05	0.00033
TSFM	12q14.1	-0.19927	8.81E-05	0.000331

YWHAH	22q12.3	0.199267	8.81E-05	0.000331
TUBB4B	9q34.3	-0.19927	8.81E-05	0.000331
DSG4	18q12.1	0.199259	8.81E-05	0.000331
TONSL	8q24.3	-0.1992	8.86E-05	0.000332
SI	3q26.1	0.199173	8.88E-05	0.000333
PRR15L	17q21.32	-0.19914	8.90E-05	0.000334
FLVCR2	14q24.3	0.199136	8.91E-05	0.000334
RNF24	20p13	0.199088	8.94E-05	0.000335
GPR31	6q27	0.199086	8.94E-05	0.000335
LMTK3	19q13.33	-0.19905	8.97E-05	0.000336
PELI2	14q22.3	0.199046	8.97E-05	0.000336
COQ7	16p12.3	-0.19903	8.99E-05	0.000337
TOR2A	9q34.11	-0.19901	9.00E-05	0.000337
ARHGAP22	10q11.22-q11.23	0.198984	9.02E-05	0.000338
PPIAL4C	1q21.2	-0.19896	9.03E-05	0.000338
STMN3	20q13.33	-0.19895	9.04E-05	0.000339
KCTD13	16p11.2	-0.19892	9.07E-05	0.000339
DPAGT1	11q23.3	-0.1989	9.08E-05	0.00034
TMUB2	17q21.31	-0.1989	9.08E-05	0.00034
PRND	20p13	0.198894	9.09E-05	0.00034
LMOD1	1q32.1	0.198893	9.09E-05	0.00034
CD68	17p13.1	0.198859	9.11E-05	0.000341
CBR1	21q22.12	-0.19885	9.12E-05	0.000341
LINC00589	8p12	0.198835	9.13E-05	0.000341
OPTN	10p13	0.198799	9.16E-05	0.000342
CROCC	1p36.13	-0.19877	9.18E-05	0.000343
LRCH2	Xq23	0.198758	9.19E-05	0.000343
ADGRF5	6p12.3	0.198717	9.22E-05	0.000344
RER1	1p36.32	-0.1987	9.23E-05	0.000345
CNTNAP2	7q35-q36.1	-0.19866	9.27E-05	0.000346
MOXD1	6q23.2	0.198637	9.28E-05	0.000347
KRT15	17q21.2	-0.1986	9.31E-05	0.000348
TOP3A	17p11.2	0.198579	9.33E-05	0.000348
SLC30A9	4p13	0.198578	9.33E-05	0.000348
PLEKHG5	1p36.31	-0.19855	9.35E-05	0.000349
NCEH1	3q26.31	0.198537	9.36E-05	0.000349
NUDT15	13q14.2	-0.19853	9.36E-05	0.000349
CILP	15q22.31	0.198503	9.39E-05	0.00035
F3	1p21.3	0.198503	9.39E-05	0.00035
RICTOR	5p13.1	0.198463	9.42E-05	0.000351
ATAD2B	2p24.1-p23.3	0.198431	9.44E-05	0.000352
GUCY1A1	4q32.1	0.198354	9.50E-05	0.000354
ADH1B	4q23	0.19835	9.51E-05	0.000354
SYNM	15q26.3	0.198323	9.53E-05	0.000355
MINAR1	15q25.1	0.198319	9.53E-05	0.000355
PPP1R13B	14q32.33	0.198294	9.55E-05	0.000356
DMAC2	19q13.2	-0.19827	9.57E-05	0.000356
RPL7	8q21.11	-0.19825	9.58E-05	0.000357
ADGRB3	6q12-q13	0.198236	9.60E-05	0.000357
ARHGEF40	14q11.2	0.198226	9.61E-05	0.000357
EFNA4	1q21.3	-0.19822	9.61E-05	0.000357
PRSS16	6p22.1	0.198219	9.61E-05	0.000357
FUT8	14q23.3	0.198206	9.62E-05	0.000358
HERPUD1	16q13	0.198186	9.64E-05	0.000358
DENND1A	9q33.3	-0.19818	9.64E-05	0.000358
IGFBP5	2q35	0.198169	9.65E-05	0.000359
DBT	1p21.2	0.198136	9.68E-05	0.00036
GPC6	13q31.3-q32.1	0.198101	9.70E-05	0.000361



ST18	8q11.23	0.198097	9.71E-05	0.000361
KCNB2	8q21.11	0.198075	9.73E-05	0.000361
HHLA3	1p31.1	-0.19804	9.75E-05	0.000362
ZNF738	19p12	-0.19794	9.83E-05	0.000365
GMCL2	5q35.3	0.197921	9.85E-05	0.000366
GOLPH3	5p13.3	0.197887	9.88E-05	0.000367
FAM45A	10q26.11	0.197884	9.88E-05	0.000367
ZNF70	22q11.23	0.197804	9.95E-05	0.000369
USP44	12q22	0.197784	9.96E-05	0.000369
PRDM12	9q34.12	-0.19778	9.97E-05	0.00037
PRTG	15q21.3	0.197724	0.0001	0.000371
LOC90246	3q21.3	0.197683	0.0001	0.000372
UBR4	1p36.13	0.197665	0.000101	0.000373
LGI2	4p15.2	0.197654	0.000101	0.000373
PLN	6q22.31	0.197652	0.000101	0.000373
MSRB2	10p12.2	-0.1976	0.000101	0.000375
TMEM273	10q11.23	0.197577	0.000101	0.000375
UXS1	2q12.2	-0.19757	0.000101	0.000375
C9ORF152	9q31.3	0.197572	0.000101	0.000375
FAF2	5q35.2	0.197557	0.000102	0.000376
OPLAH	8q24.3	-0.19752	0.000102	0.000377
SPARCL1	4q22.1	0.197499	0.000102	0.000377
COL11A1	1p21.1	0.197476	0.000102	0.000378
CNGA1	4p12	0.197475	0.000102	0.000378
TTLL3	3p25.3	-0.19747	0.000102	0.000378
IL18R1	2q12.1	0.197468	0.000102	0.000378
LTV1	6q24.2	-0.19742	0.000103	0.000379
LSM14B	20q13.33	-0.19742	0.000103	0.00038
RIPK2	8q21.3	-0.19741	0.000103	0.00038
F13A1	6p25.1	0.197396	0.000103	0.00038
PCDHGA4	5q31.3	0.197353	0.000103	0.000381
TH	11p15.5	-0.19734	0.000103	0.000382
MVK	12q24.11	-0.19732	0.000103	0.000382
IGSF6	16p12.2	0.197291	0.000104	0.000383
B4GAT1	11q13.2	-0.19721	0.000104	0.000385
CNNM2	10q24.32	0.197195	0.000105	0.000386
CCDC28B	1p35.2	-0.19719	0.000105	0.000386
TUSC3	8p22	0.197164	0.000105	0.000387
ZNF561	19p13.2	0.197129	0.000105	0.000388
MFAP5	12p13.31	0.197097	0.000105	0.000389
GJA1	6q22.31	0.19709	0.000106	0.000389
PDE3B	11p15.2	0.197067	0.000106	0.00039
SDHAF4	6q13	-0.19703	0.000106	0.000391
BCKDK	16p11.2	-0.197	0.000106	0.000392
MYCBP	1p34.3	-0.19697	0.000107	0.000393
OAZ2	15q22.31	0.196965	0.000107	0.000393
LMO2	11p13	0.196964	0.000107	0.000393
TRAPPC2B	19q13.43	-0.19696	0.000107	0.000393
ZNF124	1q44	0.196955	0.000107	0.000393
PSMB5	14q11.2	-0.19695	0.000107	0.000393
SND1-IT1	7q32.1	-0.19694	0.000107	0.000393
CDIPT	16p11.2	-0.19691	0.000107	0.000394
SFI1	22q12.2	-0.19687	0.000107	0.000395
CDH5	16q21	0.196838	0.000108	0.000396
ZWILCH	15q22.31	0.196808	0.000108	0.000397
SPIRE1	18p11.21	0.196794	0.000108	0.000397
YTHDC2	5q22.2	0.196764	0.000108	0.000398
EHD2	19q13.33	0.196755	0.000108	0.000399

CRIPT	2p21	-0.19674	0.000109	0.000399
SOHLH1	9q34.3	-0.19672	0.000109	0.0004
TPT1	13q14.13	-0.19669	0.000109	0.0004
GAL3ST2	2q37.3	0.196665	0.000109	0.000401
ZNF584	19q13.43	-0.19666	0.000109	0.000401
SLC30A7	1p21.2	0.196647	0.000109	0.000402
VPS72	1q21.3	-0.19664	0.00011	0.000402
SMN2	5q13.2	-0.19663	0.00011	0.000402
SH2D5	1p36.12	-0.19661	0.00011	0.000403
PLCL1	2q33.1	0.196589	0.00011	0.000403
C9ORF116	9q34.3	-0.19658	0.00011	0.000404
USPL1	13q12.3	-0.19658	0.00011	0.000404
SLC43A1	11q12.1	-0.19657	0.00011	0.000404
ZNF835	19q13.43	0.19657	0.00011	0.000404
LRRC61	7q36.1	-0.19656	0.00011	0.000404
OR56B4	11p15.4	0.196542	0.00011	0.000404
FAM78A	9q34.13	0.196504	0.000111	0.000406
SNX17	2p23.3	-0.1965	0.000111	0.000406
SNRFB2	20p12.1	-0.19647	0.000111	0.000407
LINC01140	1p22.3	0.196466	0.000111	0.000407
ATMIN	16q23.2	0.196455	0.000111	0.000407
MRPL9	1q21.3	-0.19645	0.000111	0.000407
C6ORF89	6p21.2	0.196448	0.000111	0.000407
SCN3B	11q24.1	0.196425	0.000111	0.000408
FBXO8	4q34.1	0.196416	0.000112	0.000408
FMNL1	17q21.31	0.196395	0.000112	0.000409
AKIRIN2	6q15	-0.19637	0.000112	0.000409
MIPEP	13q12.12	-0.19634	0.000112	0.00041
ZNF750	17q25.3	0.196311	0.000112	0.000411
SLC4A7	3p24.1	0.1963	0.000113	0.000412
ADGRF3	2p23.3	-0.19627	0.000113	0.000412
SPIN2B	Xp11.21	-0.19626	0.000113	0.000413
KCTD15	19q13.11	0.196239	0.000113	0.000413
FEN1	11q12.2	-0.19623	0.000113	0.000414
TMED7-TICAM2	5q22.3	0.196196	0.000114	0.000415
ABCA8	17q24.2	0.196163	0.000114	0.000416
FOS	14q24.3	0.196137	0.000114	0.000417
FAM151B	5q14.1	0.196115	0.000114	0.000417
HIST1H2AE	6p22.2	-0.19609	0.000115	0.000418
PRICKLE2	3p14.1	0.196061	0.000115	0.000419
SPATS2L	2q33.1	0.196032	0.000115	0.00042
TNFSF4	1q25.1	0.196008	0.000115	0.000421
AFTPH	2p14	0.195995	0.000115	0.000421
OTUD7A	15q13.3	0.19597	0.000116	0.000422
NAPSB	19q13.33	0.195934	0.000116	0.000423
CARD8	19q13.33	0.195932	0.000116	0.000423
MTA1	14q32.33	-0.19593	0.000116	0.000423
CAMK1D	10p13	0.19592	0.000116	0.000423
INTS12	4q24	-0.19591	0.000116	0.000424
SNCA	4q22.1	0.195896	0.000116	0.000424
RPLP0	12q24.23	-0.19583	0.000117	0.000426
PKLR	1q22	-0.19583	0.000117	0.000426
ZNF660	3p21.31	0.195808	0.000117	0.000427
CPTP	1p36.33	-0.19576	0.000118	0.000428
VEGFB	11q13.1	-0.19571	0.000118	0.00043
MAP7	6q23.3	0.195686	0.000118	0.000431
ARL4A	7p21.3	-0.19566	0.000119	0.000432
VCAM1	1p21.2	0.195627	0.000119	0.000433

TLE3	15q23	0.195617	0.000119	0.000433
SCG2	2q36.1	0.195613	0.000119	0.000433
TMEM115	3p21.31	-0.19561	0.000119	0.000433
MAN1C1	1p36.11	0.195607	0.000119	0.000433
TCOF1	5q32-q33.1	-0.19559	0.000119	0.000433
EML4	2p21	0.195582	0.000119	0.000434
TNFRSF13B	17p11.2	0.195575	0.000119	0.000434
ELAVL1	19p13.2	-0.19557	0.00012	0.000434
NRXN1	2p16.3	0.195565	0.00012	0.000434
CSGALNACT1	8p21.3	0.195565	0.00012	0.000434
SLX4IP	20p12.2	0.19555	0.00012	0.000434
COX19	7p22.3	-0.19555	0.00012	0.000434
PFN4	2p23.3	-0.19551	0.00012	0.000436
HLA-DQA1	6p21.32	0.195478	0.00012	0.000437
LINC00174	7q11.21	-0.19546	0.000121	0.000437
TMEM255B	13q34	-0.19546	0.000121	0.000437
NCF1B	7q11.23	0.195458	0.000121	0.000437
LIMK2	22q12.2	0.19545	0.000121	0.000438
DPF2	11q13.1	-0.19543	0.000121	0.000438
TAMM41	3p25.2	-0.19543	0.000121	0.000438
ZC3HAV1L	7q34	0.195423	0.000121	0.000438
NCF2	1q25.3	0.195405	0.000121	0.000439
DYSF	2p13.2	0.195396	0.000121	0.000439
BBS4	15q24.1	0.19539	0.000121	0.000439
LIN52	14q24.3	0.195343	0.000122	0.000441
CALD1	7q33	0.1953	0.000122	0.000442
SH2D4A	8p21.3	0.195298	0.000122	0.000442
LPAR5	12p13.31	0.195297	0.000122	0.000442
RTN1	14q23.1	0.195253	0.000123	0.000444
CDK16	Xp11.3	-0.19522	0.000123	0.000445
FZR1	19p13.3	-0.19517	0.000124	0.000447
PTPRH	19q13.42	0.195119	0.000124	0.000448
CELF5	19p13.3	-0.19512	0.000124	0.000448
POLR3B	12q23.3	0.195105	0.000124	0.000449
METTL27	7q11.23	-0.1951	0.000124	0.000449
GKAP1	9q21.32	-0.1951	0.000124	0.000449
MSRB3	12q14.3	0.195095	0.000124	0.000449
CXCR5	11q23.3	0.195082	0.000124	0.000449
FAM166B	9p13.3	-0.19508	0.000124	0.000449
LAMP1	13q34	-0.19504	0.000125	0.000451
UPF3B	Xq24	-0.19502	0.000125	0.000451
CTBS	1p22.3	0.194993	0.000125	0.000452
PSMB6	17p13.2	-0.19498	0.000125	0.000453
SCN2B	11q23.3	0.194946	0.000126	0.000454
JADE3	Xp11.3	-0.19494	0.000126	0.000454
MAF	16q23.2	0.194942	0.000126	0.000454
FAM120A	9q22.31	0.194934	0.000126	0.000454
SH2B3	12q24.12	0.19492	0.000126	0.000454
RTEL1	20q13.33	-0.1949	0.000126	0.000455
LINC01003	7q36.1	-0.19486	0.000127	0.000456
PITPNA	17p13.3	0.194818	0.000127	0.000458
RPS3A	4q31.3	-0.19481	0.000127	0.000458
PGBD3	10q11.23	0.194789	0.000127	0.000459
MRPL24	1q23.1	-0.19479	0.000127	0.000459
CD33	19q13.41	0.19477	0.000128	0.00046
PIK3AP1	10q24.1	0.194717	0.000128	0.000461
ATP5MC3	2q31.1	-0.1947	0.000128	0.000462
CUL1	7q36.1	-0.19467	0.000129	0.000463

FTO	16q12.2	0.194659	0.000129	0.000463
PRSS22	16p13.3	-0.19465	0.000129	0.000464
PI4KAP1	22q11.21	-0.19464	0.000129	0.000464
CMIP	16q23.2-q23.3	0.194638	0.000129	0.000464
AZI2	3p24.1	0.19463	0.000129	0.000464
SAV1	14q22.1	0.194627	0.000129	0.000464
CCR1	3p21.31	0.194581	0.00013	0.000466
ARVCF	22q11.21	-0.19452	0.00013	0.000468
PERM1	1p36.33	-0.19452	0.00013	0.000468
SZRD1	1p36.13	-0.19451	0.00013	0.000468
NID1	1q42.3	0.194506	0.00013	0.000468
ALOX5AP	13q12.3	0.194497	0.00013	0.000469
ERAP1	5q15	0.194428	0.000131	0.000471
DDX11	12p11.21	-0.19437	0.000132	0.000473
YTHDC1	4q13.2	0.194368	0.000132	0.000473
CDH19	18q22.1	0.194325	0.000132	0.000475
CP	3q24-q25.1	0.194318	0.000132	0.000475
TUBB4A	19p13.3	-0.19428	0.000133	0.000476
SCARNA9	11q21	-0.19422	0.000133	0.000479
PXK	3p14.3	0.194213	0.000134	0.000479
PABPN1	14q11.2	-0.19416	0.000134	0.000481
LOC100126784	11p15.1	0.1941	0.000135	0.000483
C10ORF25	10q11.21	0.194085	0.000135	0.000484
LINC00261	20p11.21	0.194072	0.000135	0.000484
NDUFC1	4q31.1	-0.19405	0.000135	0.000485
CHD4	12p13.31	0.194044	0.000135	0.000485
RAB11FIP5	2p13.2	0.194041	0.000135	0.000485
GINS1	20p11.21	-0.19403	0.000136	0.000485
IL2RA	10p15.1	0.194022	0.000136	0.000486
PLEK	2p14	0.193989	0.000136	0.000487
HIST1H4I	6p22.1	-0.19399	0.000136	0.000487
WNT11	11q13.5	-0.19397	0.000136	0.000487
TMEM45A	3q12.2	0.193958	0.000136	0.000488
SLC35B3	6p24.3	0.193952	0.000136	0.000488
NRAP	10q25.3	0.193941	0.000137	0.000488
VLDLR	9p24.2	0.193907	0.000137	0.000489
MAP3K1	5q11.2	0.193869	0.000137	0.000491
ASGR1	17p13.1	-0.19385	0.000138	0.000492
PRDM6	5q23.2	0.193846	0.000138	0.000492
PMP22	17p12	0.193764	0.000138	0.000495
ADTRP	6p24.1	0.193757	0.000139	0.000495
GPD1	12q13.12	-0.19374	0.000139	0.000496
CSF1	1p13.3	0.193733	0.000139	0.000496
SLC10A7	4q31.22	0.193731	0.000139	0.000496
TMEM173	5q31.2	0.193723	0.000139	0.000496
TMEM167A	5q14.2	0.193706	0.000139	0.000497
LCP2	5q35.1	0.19369	0.000139	0.000497
EXOSC9	4q27	-0.19365	0.00014	0.000499
GCNA	Xq13.1	-0.19364	0.00014	0.000499
SRPK2	7q22.3	0.193634	0.00014	0.000499
MZT1	13q21.33	-0.19356	0.000141	0.000502
EMC6	17p13.2	-0.19355	0.000141	0.000503
ADAMTS5	21q21.3	0.193529	0.000141	0.000503
LRRC25	19p13.11	0.193482	0.000142	0.000505
RPL23AP53	8p23.3	0.193469	0.000142	0.000505
FAM219B	15q24.1-q24.2	0.193464	0.000142	0.000506
FAM168B	2q21.1	0.193425	0.000142	0.000507
MUS81	11q13.1	-0.19342	0.000142	0.000507

BCL9	1q21.2	0.193407	0.000143	0.000508
NUDCD1	8q23.1	-0.19337	0.000143	0.000509
RHEX	1q32.1	0.193333	0.000143	0.00051
RGPD4	2q12.3	0.193309	0.000144	0.000511
LRRK2	12q12	0.193272	0.000144	0.000513
MDN1	6q15	0.193222	0.000145	0.000515
ST8SIA1	12p12.1	0.193176	0.000145	0.000517
SUSD4	1q41	0.193145	0.000146	0.000518
TOMM20L	14q23.1	-0.19312	0.000146	0.000519
IGSF22	11p15.1	-0.19312	0.000146	0.000519
SLC35F5	2q14.1	0.193055	0.000147	0.000521
LILRA1	19q13.42	0.193038	0.000147	0.000522
UHRF1BP1L	12q23.1	0.193036	0.000147	0.000522
ARL10	5q35.2	0.193024	0.000147	0.000522
ARMC12	6p21.31	-0.19298	0.000148	0.000524
HEATR6	17q23.1	0.192953	0.000148	0.000525
ITGB8	7p21.1	0.192942	0.000148	0.000526
NFKBIE	6p21.1	-0.19291	0.000148	0.000527
BLOC1S3	19q13.32	-0.19291	0.000148	0.000527
MS4A7	11q12.2	0.192888	0.000149	0.000528
CKAP2L	2q14.1	0.192846	0.000149	0.000529
ZXDA	Xp11.21	0.192823	0.000149	0.00053
MKS1	17q22	-0.19282	0.000149	0.00053
KCNK13	14q32.11	0.192791	0.00015	0.000531
CHST12	7p22.3	-0.19278	0.00015	0.000532
SPNS3	17p13.2	-0.19276	0.00015	0.000533
LAMB3	1q32.2	0.192747	0.00015	0.000533
LYZ	12q15	0.192726	0.000151	0.000534
INSL3	19p13.11	0.192703	0.000151	0.000535
FRG1	4q35.2	-0.1927	0.000151	0.000535
FAM216B	13q14.11	0.192694	0.000151	0.000535
FAM66A	8p23.1	0.192692	0.000151	0.000535
DOCK8-AS1	9p24.3	0.192681	0.000151	0.000535
U2AF1L4	19q13.12	-0.19266	0.000151	0.000536
HECA	6q24.1	0.192661	0.000151	0.000536
FCSK	16q22.1	-0.1926	0.000152	0.000538
NPTX1	17q25.3	0.192584	0.000152	0.000539
RPS6KA3	Xp22.12	0.19258	0.000152	0.000539
GPR85	7q31.1	0.192578	0.000152	0.000539
SPDEF	6p21.31	0.192576	0.000152	0.000539
VAR52	6p21.33	-0.19257	0.000153	0.000539
TIGD4	4q31.3	-0.19256	0.000153	0.00054
PNOC	8p21.1	0.192551	0.000153	0.00054
RBM17	10p15.1	-0.19255	0.000153	0.00054
CDC20	1p34.2	-0.19252	0.000153	0.000541
FAM92A	8q22.1	-0.19246	0.000154	0.000544
SLC25A29	14q32.2	-0.19245	0.000154	0.000544
F7	13q34	-0.19244	0.000154	0.000544
AGPAT2	9q34.3	-0.19241	0.000155	0.000546
NCOA7	6q22.31-q22.32	0.192391	0.000155	0.000546
EHD3	2p23.1	0.192384	0.000155	0.000546
RBMXL1	1p22.2	0.192356	0.000155	0.000548
SELENOK	3p21.1	-0.19233	0.000155	0.000549
FAM83E	19q13.33	0.192322	0.000156	0.000549
DBNL	7p13	-0.19231	0.000156	0.000549
SIRT7	17q25.3	-0.1923	0.000156	0.00055
HCN3	1q22	-0.19228	0.000156	0.000551
FBXL7	5p15.1	0.192261	0.000156	0.000551

CFAP410	21q22.3	-0.19225	0.000157	0.000552
BUD13	11q23.3	-0.19224	0.000157	0.000552
SHLD2P3	10q11.22	0.192169	0.000158	0.000555
HDAC9	7p21.1	0.192139	0.000158	0.000556
DRP2	Xq22.1	0.192134	0.000158	0.000556
ANGPTL1	1q25.2	0.192085	0.000159	0.000559
FDXR	17q25.1	-0.19206	0.000159	0.00056
PRRX1	1q24.2	0.192052	0.000159	0.00056
RAB33B	4q31.1	0.192043	0.000159	0.00056
RTN4IP1	6q21	-0.19202	0.000159	0.000561
MRC1	10p12.33	0.192022	0.000159	0.000561
LTBR	12p13.31	-0.19202	0.000159	0.000561
ZNF182	Xp11.23	-0.19202	0.000159	0.000561
MAP3K3	17q23.3	0.19201	0.00016	0.000561
TESPA1	12q13.2	0.192008	0.00016	0.000561
TENM2	5q34	0.191997	0.00016	0.000562
IL1A	2q14.1	0.191995	0.00016	0.000562
FAM86C2P	11q13.2	-0.19199	0.00016	0.000562
TCL6	14q32.13	0.191951	0.00016	0.000563
TTC3	21q22.13	0.19192	0.000161	0.000564
ZSWIM5	1p34.1	0.19192	0.000161	0.000564
EIF4A3	17q25.3	-0.19192	0.000161	0.000565
GREM1	15q13.3	0.191885	0.000161	0.000566
RDH16	12q13.3	-0.19188	0.000161	0.000566
PCSK5	9q21.13	0.191884	0.000161	0.000566
NDE1	16p13.11	0.191884	0.000161	0.000566
SLC28A3	9q21.32-q21.33	0.191881	0.000161	0.000566
DGLUCY	14q32.11	0.191841	0.000162	0.000567
PNLIPRP2	10q25.3	-0.19182	0.000162	0.000568
EMILIN2	18p11.32-p11.31	0.191807	0.000162	0.000569
GTF2IRD1P1	7q11.21	-0.1918	0.000162	0.000569
AP1M2	19p13.2	-0.19179	0.000162	0.000569
NAPB	20p11.21	-0.19179	0.000162	0.000569
ZNF720	16p11.2	0.191785	0.000162	0.000569
HIST1H1E	6p22.2	-0.19177	0.000163	0.00057
GFI1	1p22.1	0.191767	0.000163	0.00057
ERP27	12p12.3	-0.19163	0.000164	0.000576
EED	11q14.2	-0.19161	0.000165	0.000577
EDA2R	Xq12	0.191601	0.000165	0.000577
MTHFD1L	6q25.1	-0.1916	0.000165	0.000577
SULT1C4	2q12.3	0.191535	0.000166	0.00058
CCR7	17q21.2	0.191528	0.000166	0.00058
TNFSF12	17p13.1	0.191517	0.000166	0.000581
APBA1	9q21.12	0.1915	0.000166	0.000581
PHLPP2	16q22.2	0.191497	0.000166	0.000582
AKT2	19q13.2	-0.19147	0.000167	0.000583
AAK1	2p13.3	0.191443	0.000167	0.000584
TMEM119	12q23.3	0.191441	0.000167	0.000584
LENG8	19q13.42	-0.19142	0.000167	0.000584
BVES	6q21	0.191423	0.000167	0.000584
CMC1	3p24.1	-0.19142	0.000167	0.000584
XPNPEP2	Xq26.1	-0.1914	0.000168	0.000585
NKD1	16q12.1	-0.19134	0.000168	0.000588
PCDH1	5q31.3	0.191323	0.000169	0.000589
PALMD	1p21.2	0.191315	0.000169	0.000589
ABO	9q34.2	0.191296	0.000169	0.00059
JADE2	5q31.1	0.191284	0.000169	0.00059
MINDY4	7p14.3	-0.19123	0.00017	0.000593

NUDT16	3q22.1	0.19122	0.00017	0.000593
TESK1	9p13.3	-0.19122	0.00017	0.000593
IL15RA	10p15.1	-0.19111	0.000172	0.000598
MOGAT2	11q13.5	0.191099	0.000172	0.000599
TRPM2	21q22.3	-0.19109	0.000172	0.000599
FERMT2	14q22.1	0.191023	0.000173	0.000602
CALML4	15q23	0.191015	0.000173	0.000602
PKNOX2	11q24.2	0.191014	0.000173	0.000602
STX11	6q24.2	0.190998	0.000173	0.000603
SRSF9	12q24.31	-0.19096	0.000174	0.000605
CARMIL1	6p22.2	0.190931	0.000174	0.000606
ADAMTS18	16q23.1	0.190915	0.000174	0.000607
XYLT2	17q21.33	-0.19091	0.000174	0.000607
PFKFB3	10p15.1	0.1909	0.000174	0.000607
TLX1	10q24.31	-0.19088	0.000175	0.000608
LINC00893	Xq28	-0.19087	0.000175	0.000608
EI24	11q24.2	-0.19082	0.000176	0.000611
KIAA0100	17q11.2	0.190804	0.000176	0.000611
PLTP	20q13.12	-0.19079	0.000176	0.000612
CEP250	20q11.22	-0.19077	0.000176	0.000613
CXCR3	Xq13.1	-0.19075	0.000176	0.000614
ADA2	22q11.1	0.190748	0.000177	0.000614
MYLPF	16p11.2	-0.19068	0.000178	0.000617
C5ORF15	5q31.1	0.190613	0.000178	0.00062
FGF2	4q28.1	0.19058	0.000179	0.000622
MPZL2	11q23.3	0.190577	0.000179	0.000622
TRPV1	17p13.2	-0.19051	0.00018	0.000625
SPCS2P4	1p35.3	-0.1905	0.00018	0.000625
FIBIN	11p14.2	0.19049	0.00018	0.000626
NDUFV3	21q22.3	-0.19041	0.000181	0.00063
DISP1	1q41	0.190408	0.000181	0.00063
PGAM5	12q24.33	-0.19038	0.000182	0.000631
TOLLIP	11p15.5	-0.19037	0.000182	0.000631
NANOS3	19p13.12	-0.19035	0.000182	0.000632
GRIK3	1p34.3	0.190353	0.000182	0.000632
BOC	3q13.2	0.19035	0.000182	0.000632
C10ORF82	10q25.3	-0.19034	0.000182	0.000632
SLC38A5	Xp11.23	-0.19032	0.000183	0.000633
C5AR1	19q13.32	0.190291	0.000183	0.000635
TNFRSF10A	8p21.3	0.190283	0.000183	0.000635
TRAT1	3q13.13	0.19024	0.000184	0.000637
SH3BP5L	1q44	0.190207	0.000184	0.000639
ZNF577	19q13.41	-0.1902	0.000184	0.000639
SNORA71A	20q11.23	-0.1902	0.000184	0.000639
PDCD1LG2	9p24.1	0.19017	0.000185	0.00064
PDIA3	15q15.3	0.190163	0.000185	0.00064
DZIP1	13q32.1	0.190145	0.000185	0.000641
IL17REL	22q13.33	0.190102	0.000186	0.000643
GMEB1	1p35.3	0.190085	0.000186	0.000644
NOP2	12p13.31	-0.19002	0.000187	0.000648
MSH3	5q14.1	0.189995	0.000187	0.000648
FAM106C	17p11.2	0.189992	0.000188	0.000648
HUWE1	Xp11.22	0.189979	0.000188	0.000649
TGFA	2p13.3	0.189979	0.000188	0.000649
FGF3	11q13.3	-0.18993	0.000188	0.000651
RHOA	3p21.31	0.189879	0.000189	0.000654
SLC9A1	1p36.11	0.189786	0.000191	0.000659
RMND1	6q25.1	-0.18977	0.000191	0.00066

SFT2D3	2q14.3	-0.18974	0.000191	0.000661
ETNK2	1q32.1	-0.18972	0.000192	0.000662
FLYWCH1	16p13.3	-0.1897	0.000192	0.000662
ABRAXAS2	10q26.13	0.189692	0.000192	0.000663
GPR152	11q13.2	0.189692	0.000192	0.000663
TTC4	1p32.3	-0.18967	0.000192	0.000664
CD86	3q13.33	0.189673	0.000192	0.000664
NACC2	9q34.3	0.189578	0.000194	0.000669
TNR	1q25.1	0.189531	0.000195	0.000671
AMPD2	1p13.3	-0.18952	0.000195	0.000671
WBP1L	10q24.32	0.189492	0.000195	0.000673
GLRB	4q32.1	0.189452	0.000196	0.000675
GPR142	17q25.1	0.189452	0.000196	0.000675
RAB19	7q34	0.189437	0.000196	0.000675
ORAI1	12q24.31	-0.1894	0.000196	0.000677
BCAT1	12p12.1	0.189389	0.000197	0.000678
THOC3	5q35.2	-0.18938	0.000197	0.000678
LGMIN	14q32.12	0.189372	0.000197	0.000678
PDPK1	16p13.3	0.189339	0.000198	0.00068
MGC12916	17p12	0.189262	0.000199	0.000684
CLEC10A	17p13.1	0.189197	0.0002	0.000688
SMPD3	16q22.1	0.189137	0.000201	0.000691
RANGAP1	22q13.2	-0.18912	0.000201	0.000691
SUB1	5p13.3	-0.1891	0.000201	0.000693
WSCD1	17p13.2	0.189077	0.000202	0.000694
NAA40	11q13.1	-0.18905	0.000202	0.000695
PIH1D1	19q13.33	-0.18904	0.000202	0.000695
ARHGAP19	10q24.1	0.189039	0.000202	0.000695
KDF1	1p36.11	-0.18899	0.000203	0.000698
MYC	8q24.21	-0.18898	0.000203	0.000698
ST6GALNAC4	9q34.11	-0.18897	0.000203	0.000699
GAL3ST4	7q22.1	0.188958	0.000204	0.000699
EIF2AK2	2p22.2	0.188905	0.000204	0.000702
NPEPPS	17q21.32	0.188878	0.000205	0.000704
AVPR2	Xq28	0.188871	0.000205	0.000704
FBXW2	9q33.2	0.188846	0.000205	0.000705
BEND6	6p12.1	0.188811	0.000206	0.000707
CD300C	17q25.1	0.188808	0.000206	0.000707
LAPTM5	1p35.2	0.188751	0.000207	0.00071
LRRC58	3q13.33	0.188749	0.000207	0.00071
RDH14	2p24.2	-0.18875	0.000207	0.00071
FBXO11	2p16.3	0.188727	0.000207	0.000711
ZNF536	19q12	0.188712	0.000208	0.000712
CES3	16q22.1	0.188704	0.000208	0.000712
DET1	15q26.1	0.188675	0.000208	0.000714
WDR48	3p22.2	0.188665	0.000208	0.000714
PNMA8A	19q13.32	0.188647	0.000209	0.000715
PPIL1	6p21.2	-0.18862	0.000209	0.000716
B4GALT2	1p34.1	-0.18861	0.000209	0.000717
SMYD4	17p13.3	0.188603	0.000209	0.000717
KDM3A	2p11.2	0.188597	0.000209	0.000717
AFG3L2	18p11.21	0.188568	0.00021	0.000719
JPX	Xq13.2	-0.18855	0.00021	0.00072
GBX2	2q37.2	-0.18854	0.00021	0.00072
RAC2	22q13.1	0.188518	0.000211	0.000721
CYP1B1-AS1	2p22.2	0.188492	0.000211	0.000723
TUBG2	17q21.2	-0.18847	0.000212	0.000724
FAM183A	1p34.2	-0.18847	0.000212	0.000724



PTGFR	1p31.1	0.188431	0.000212	0.000726
H2AFV	7p13	-0.1884	0.000213	0.000728
REPIN1	7q36.1	-0.18836	0.000213	0.00073
CXADR	21q21.1	0.188347	0.000214	0.00073
ABCC9	12p12.1	0.188346	0.000214	0.00073
SNPH	20p13	0.188332	0.000214	0.000731
ERRFI1	1p36.23	0.188285	0.000215	0.000733
MGC16275	17q25.1	-0.18827	0.000215	0.000734
XIAP	Xq25	0.188234	0.000216	0.000736
COG2	1q42.2	0.188224	0.000216	0.000737
B4GALNT2	17q21.32	0.188215	0.000216	0.000737
CMTM1	16q21	0.188188	0.000216	0.000738
TP53INP2	20q11.22	0.188181	0.000216	0.000739
COL3A1	2q32.2	0.188169	0.000217	0.000739
ST20-AS1	15q25.1	0.188124	0.000217	0.000742
PKD2	4q22.1	0.188116	0.000218	0.000742
FUNDC2P2	2p11.2	-0.18811	0.000218	0.000743
KDM2A	11q13.2	0.188093	0.000218	0.000743
AGR3	7p21.1	0.188078	0.000218	0.000744
CREB3L1	11p11.2	0.188077	0.000218	0.000744
RASAL1	12q24.13	0.188063	0.000218	0.000745
PCED1B-AS1	12q13.11	0.188045	0.000219	0.000745
PLCG1	20q12	-0.18801	0.000219	0.000748
TGFB2	1q41	0.188005	0.000219	0.000748
CHRM3	1q43	0.187991	0.00022	0.000748
POFUT1	20q11.21	-0.18796	0.00022	0.00075
COPG1	3q21.3	0.187961	0.00022	0.00075
FLJ37453	1p36.21	-0.18794	0.000221	0.000751
VWA2	10q25.3	0.187915	0.000221	0.000752
TMEM26	10q21.2	0.187861	0.000222	0.000755
LOC93622	4p16.1	-0.18784	0.000222	0.000757
FCGR2B	1q23.3	0.187834	0.000222	0.000757
FSTL1	3q13.33	0.187817	0.000223	0.000758
C17ORF107	17p13.2	0.187785	0.000223	0.000759
ZNF558	19p13.2	-0.18778	0.000223	0.000759
MFSD10	4p16.3	-0.18777	0.000224	0.00076
U2AF2	19q13.42	-0.18774	0.000224	0.000762
SLC25A5-AS1	Xq24	-0.18772	0.000224	0.000763
SUZ12	17q11.2	0.187684	0.000225	0.000765
PEX5	12p13.31	-0.18761	0.000226	0.000769
SMARCA1	Xq25-q26.1	0.187595	0.000227	0.00077
SLX1B	16p11.2	-0.18756	0.000227	0.000772
CDK18	1q32.1	-0.18752	0.000228	0.000774
CDX1	5q32	-0.18748	0.000229	0.000777
FBXO32	8q24.13	0.187464	0.000229	0.000777
SNORD15B	11q13.4	-0.18744	0.00023	0.000779
FXR2	17p13.1	0.187407	0.00023	0.000781
ZNF787	19q13.43	-0.18741	0.00023	0.000781
FAM107A	3p14.3-p14.2	0.187386	0.00023	0.000782
GPN1	2p23.3	-0.18738	0.00023	0.000782
ACSF2	17q21.33	-0.18734	0.000231	0.000784
LINC00999	10p11.1	-0.1873	0.000232	0.000786
MED22	9q34.2	-0.18729	0.000232	0.000787
CD177	19q13.31	0.187276	0.000232	0.000788
GPRASP2	Xq22.1	0.187255	0.000233	0.000789
ERMP1	9p24.1	0.18725	0.000233	0.000789
CCR5	3p21.31	0.187236	0.000233	0.00079
LILRB4	19q13.42	0.18721	0.000234	0.000791

HMGB1P1	20q13.31	-0.18718	0.000234	0.000793
MYO18A	17q11.2	0.187155	0.000235	0.000794
RNF19B	1p35.1	0.187152	0.000235	0.000794
PACRGL	4p15.31	-0.18714	0.000235	0.000795
CYBA	16q24.2	-0.18711	0.000235	0.000797
AKR1C1	10p15.1	-0.18708	0.000236	0.000798
PWWP2A	5q33.3	0.187079	0.000236	0.000798
CABLES2	20q13.33	-0.18705	0.000237	0.0008
FBLIM1	1p36.21	0.18702	0.000237	0.000802
PLEKHD1	14q24.1	0.186999	0.000238	0.000803
MTTP	4q23	-0.18699	0.000238	0.000804
CYP7B1	8q12.3	0.186965	0.000238	0.000805
RHOU	1q42.13	0.186941	0.000239	0.000806
ZNF354B	5q35.3	-0.18692	0.000239	0.000808
ID1	20q11.21	-0.1869	0.000239	0.000809
SPA17	11q24.2	-0.18689	0.00024	0.000809
CTDP1	18q23	0.186871	0.00024	0.00081
SAP30L	5q33.2	0.18684	0.000241	0.000812
C11ORF68	11q13.1	-0.18681	0.000241	0.000814
PHF12	17q11.2	0.186807	0.000241	0.000814
ISCU	12q23.3	-0.18678	0.000242	0.000816
ZNF444	19q13.43	-0.18676	0.000242	0.000816
FOXP3	Xp11.23	0.186708	0.000243	0.00082
C3ORF35	3p22.2	-0.18669	0.000243	0.000821
RBM11	21q11.2	-0.18667	0.000244	0.000822
SLAMF7	1q23.3	0.186612	0.000245	0.000826
DIMT1	5q12.1	-0.1866	0.000245	0.000826
BBOF1	14q24.3	0.186576	0.000246	0.000828
PTP4A1	6q12	0.186523	0.000247	0.000831
EPB41L4A-DT	5q22.2	0.186503	0.000247	0.000832
COL9A3	20q13.33	-0.18649	0.000247	0.000833
CDH13	16q23.3	0.18647	0.000248	0.000834
EREG	4q13.3	-0.18642	0.000249	0.000837
SLC25A47	14q32.2	-0.18641	0.000249	0.000838
DLST	14q24.3	0.186402	0.000249	0.000838
NOL4	18q12.1	0.186368	0.00025	0.00084
HYI	1p34.2	-0.18631	0.000251	0.000844
EFNA1	1q22	-0.1863	0.000251	0.000844
MEIG1	10p13	-0.18629	0.000251	0.000844
C3	19p13.3	0.18629	0.000251	0.000845
TSNAX	1q42.2	0.186268	0.000251	0.000846
ARTN	1p34.1	-0.18626	0.000252	0.000846
RABGAP1	9q33.2-q33.3	0.186248	0.000252	0.000847
MAN1A1	6q22.31	0.186232	0.000252	0.000848
STMN2	8q21.13	0.186229	0.000252	0.000848
MUC7	4q13.3	0.186226	0.000252	0.000848
PCDHB7	5q31.3	0.186221	0.000252	0.000848
HPSE2	10q24.2	0.186213	0.000253	0.000849
BCL2L11	2q13	0.186205	0.000253	0.000849
COL4A1	13q34	0.186199	0.000253	0.000849
GZMB	14q12	-0.18617	0.000253	0.000851
MRC2	17q23.2	0.186147	0.000254	0.000852
DENND4C	9p22.1	0.186127	0.000254	0.000854
RAB1B	11q13.2	-0.18607	0.000255	0.000857
NIN	14q22.1	0.186069	0.000255	0.000857
ELMOD2	4q31.1	0.186065	0.000256	0.000857
CHSY3	5q23.3	0.186022	0.000256	0.00086
MEAF6	1p34.3	-0.18595	0.000258	0.000865

LINC02035	3q21.1	0.185929	0.000258	0.000866
SGSM1	22q11.23	0.185917	0.000258	0.000867
ABCD2	12q12	0.185878	0.000259	0.000869
LPO	17q22	-0.18586	0.00026	0.00087
GLOD5	Xp11.23	-0.18585	0.00026	0.00087
GREM2	1q43	0.185845	0.00026	0.000871
EPHA1	7q34-q35	-0.18584	0.00026	0.000871
PCNX2	1q42.2	0.185797	0.000261	0.000874
FCGR2A	1q23.3	0.185695	0.000263	0.000881
SUCLG1	2p11.2	-0.18568	0.000263	0.000882
TTLL2	6q27	-0.18568	0.000263	0.000882
VASH1	14q24.3	0.185643	0.000264	0.000884
ARX	Xp21.3	0.18559	0.000265	0.000887
KIAA0355	19q13.11	0.18559	0.000265	0.000887
SLC1A5	19q13.32	-0.18558	0.000265	0.000887
PHACTR4	1p35.3	0.185577	0.000265	0.000888
USP40	2q37.1	-0.18556	0.000266	0.000889
GJB6	13q12.11	0.185493	0.000267	0.000893
HAGHL	16p13.3	-0.18545	0.000268	0.000896
GAB3	Xq28	0.185449	0.000268	0.000896
BIVM	13q33.1	-0.18544	0.000268	0.000897
DLL3	19q13.2	-0.18542	0.000269	0.000898
SLAMF8	1q23.2	0.185387	0.000269	0.0009
LIPA	10q23.31	0.185384	0.000269	0.0009
SH3RF3	2q13	0.185361	0.00027	0.000902
HMCES	3q21.3	-0.18536	0.00027	0.000902
FANCA	16q24.3	-0.18531	0.000271	0.000904
UBAP2L	1q21.3	0.185313	0.000271	0.000904
SNRNP35	12q24.31	-0.18529	0.000271	0.000906
ERH	14q24.1	-0.18526	0.000272	0.000908
FCGR2C	1q23.3	0.185229	0.000273	0.00091
ARF4	3p14.3	0.185171	0.000274	0.000914
PAPPA	9q33.1	0.185157	0.000274	0.000915
TMEM229B	14q24.1	0.18512	0.000275	0.000917
PLXNB1	3p21.31	-0.18511	0.000275	0.000918
TREML4	6p21.1	0.185093	0.000276	0.000919
TSC22D4	7q22.1	-0.18506	0.000276	0.000921
ZNF16	8q24.3	-0.18505	0.000276	0.000921
FOLR2	11q13.4	0.185044	0.000277	0.000922
FITM1	14q12	-0.18504	0.000277	0.000922
EIF3E	8q23.1	-0.18504	0.000277	0.000922
WDR81	17p13.3	0.185023	0.000277	0.000923
HIST1H3G	6p22.2	-0.18502	0.000277	0.000923
ZFAND1	8q21.13	-0.18501	0.000277	0.000923
P4HA1	10q22.1	0.185002	0.000278	0.000924
MIER3	5q11.2	0.184999	0.000278	0.000924
COL19A1	6q13	0.184998	0.000278	0.000924
TSPAN11	12p11.21	0.184902	0.00028	0.000931
TNFSF10	3q26.31	0.184878	0.00028	0.000932
NADSYN1	11q13.4	-0.18487	0.00028	0.000933
SMTNL2	17p13.2	-0.18486	0.000281	0.000933
LOXL2	8p21.3	0.184818	0.000282	0.000936
DPYSL2	8p21.2	0.184774	0.000282	0.000939
LINC00552	13q34	-0.18476	0.000283	0.00094
DKK3	11p15.3	0.184758	0.000283	0.00094
ING4	12p13.31	-0.18474	0.000283	0.000941
MRPL54	19p13.3	-0.18473	0.000283	0.000941
CNOT2	12q15	0.184666	0.000285	0.000946

NSUN6	10p12.31	-0.18467	0.000285	0.000946
ZNF576	19q13.31	-0.18464	0.000285	0.000948
PDSS1	10p12.1	-0.18458	0.000287	0.000952
C20ORF197	20q13.33	0.184555	0.000287	0.000954
FOXO1	13q14.11	0.184548	0.000287	0.000954
RGL3	19p13.2	0.184548	0.000287	0.000954
LINC01144	1p34.1	-0.18454	0.000288	0.000954
MRPS30	5p12	-0.1845	0.000289	0.000957
SPPL2B	19p13.3	-0.1845	0.000289	0.000957
PEAR1	1q23.1	0.184471	0.000289	0.000959
PAK3	Xq23	0.184466	0.000289	0.000959
TCN2	22q12.2	0.184443	0.00029	0.000961
UNC13B	9p13.3	0.184431	0.00029	0.000961
IL17RB	3p21.1	-0.18443	0.00029	0.000961
SNORA52	11p15.5	-0.18442	0.00029	0.000962
KDELR3	22q13.1	0.184406	0.000291	0.000963
BBC3	19q13.32	-0.18438	0.000291	0.000965
HEPH	Xq12	0.184366	0.000292	0.000966
NDUFA10	2q37.3	-0.18433	0.000292	0.000968
DNAJC12	10q21.3	0.18431	0.000293	0.000969
ARL4C	2q37.1	0.184307	0.000293	0.00097
NEFM	8p21.2	0.184292	0.000293	0.000971
CACNB4	2q23.3	0.184283	0.000293	0.000971
SYTL5	Xp11.4	0.184279	0.000294	0.000971
DCBLD2	3q12.1 3	0.184277	0.000294	0.000971
CD36	7q21.11	0.184273	0.000294	0.000971
CSRNP3	2q24.3	0.184265	0.000294	0.000972
EVA1A	2p12	-0.18425	0.000294	0.000973
SERPINA3	14q32.13	0.184235	0.000295	0.000974
KNOP1	16p12.3	-0.18422	0.000295	0.000975
WDCP	2p23.3	-0.18422	0.000295	0.000975
AKNAD1	1p13.3	-0.18421	0.000295	0.000975
PFKP	10p15.2	0.184177	0.000296	0.000977
DHRS4-AS1	14q11.2	0.184167	0.000296	0.000978
FGD2	6p21.2	0.184149	0.000296	0.000979
NRBF2	10q21.3	0.184143	0.000297	0.000979
ADPRH	3q13.33	0.184142	0.000297	0.000979
TIMMDC1	3q13.33	-0.18414	0.000297	0.000979
WNT6	2q35	-0.18414	0.000297	0.000979
AMZ2P1	17q24.1	-0.18412	0.000297	0.000981
RELN	7q22.1	0.184098	0.000298	0.000982
ELMO1	7p14.2-p14.1	0.184083	0.000298	0.000983
WDR5B	3q21.1	-0.18407	0.000298	0.000984
SEMA4G	10q24.31	0.18406	0.000299	0.000984
SNAP29	22q11.21	0.184057	0.000299	0.000985
ASXL1	20q11.21	-0.18405	0.000299	0.000985
LRRC8A	9q34.11	0.184029	0.000299	0.000986
ANGPTL2	9q33.3	0.184029	0.000299	0.000986
NLRC4	2p22.3	0.18402	0.000299	0.000987
NIPAL3	1p36.11	0.18399	0.0003	0.000989
ADD2	2p13.3	0.183973	0.000301	0.00099
TINF2	14q12	0.183972	0.000301	0.00099
MAPK7	17p11.2	0.183953	0.000301	0.000991
MEIS3P1	17p12	0.183929	0.000302	0.000993
POLR2J3	7q22.1	-0.1839	0.000302	0.000995
PTTG3P	8q13.1	-0.1839	0.000302	0.000995
FAM189A1	15q13.1	0.183886	0.000303	0.000996
IGBP1	Xq13.1	-0.18386	0.000303	0.000997

ADGRE3	19p13.12	0.183846	0.000304	0.000998
CBX5	12q13.13	0.183839	0.000304	0.000999
SLC23A2	20p13	0.183825	0.000304	0.001
FOXJ3	1p34.2	0.183818	0.000304	0.001
IL22RA1	1p36.11	-0.18381	0.000304	0.001
COLGALT2	1q25.3	0.183805	0.000304	0.001001
DAB2IP	9q33.2	0.183797	0.000305	0.001001
MSR1	8p22	0.183737	0.000306	0.001006
SOCS4	14q22.3	0.183732	0.000306	0.001006
INPP1	2q32.2	0.183724	0.000306	0.001006
MYD88	3p22.2	0.18372	0.000306	0.001006
FILIP1L	3q12.1	0.183714	0.000307	0.001007
PRELID3B	20q13.32	-0.18369	0.000307	0.001008
CSMD1	8p23.2	0.183682	0.000307	0.001009
FAM27C	9q13	-0.18363	0.000309	0.001013
CSTF3	11p13	-0.18362	0.000309	0.001013
SEMA3C	7q21.11	0.183606	0.000309	0.001014
RPA4	Xq21.33	-0.18359	0.000309	0.001015
SALL2	14q11.2	0.18356	0.00031	0.001018
NEDD4L	18q21.31	0.183547	0.000311	0.001018
CYP8B1	3p22.1	0.183546	0.000311	0.001018
SNAPC3	9p22.3	0.183533	0.000311	0.001019
LRFN4	11q13.2	-0.18349	0.000312	0.001023
EXD2	14q24.1	0.183484	0.000312	0.001023
CHRM1	11q12.3	0.183406	0.000314	0.001029
DNASE2B	1p31.1-p22.3	0.183396	0.000314	0.001029
RNF121	11q13.4	-0.18338	0.000315	0.00103
RBM12B	8q22.1	0.183292	0.000317	0.001037
ANKRD10	13q34	-0.18326	0.000317	0.00104
CLEC18A	16q22.1	-0.18326	0.000318	0.00104
TTC1	5q33.3	-0.18324	0.000318	0.001041
IDS	Xq28	0.183234	0.000318	0.001041
ANKRD55	5q11.2	0.18323	0.000318	0.001041
MUC5B	11p15.5	0.183228	0.000318	0.001041
CYTH4	22q13.1	0.183159	0.00032	0.001047
SNRPD1	18q11.2	-0.18314	0.00032	0.001048
RAB31	18p11.22	0.18314	0.00032	0.001048
PROZ	13q34	-0.18311	0.000321	0.00105
MICALL2	7p22.3	-0.18309	0.000322	0.001051
HIST1H4D	6p22.2	-0.18306	0.000322	0.001054
DSEL	18q22.1	0.183019	0.000323	0.001057
FAM117B	2q33.2	0.182997	0.000324	0.001059
NDUFB2-AS1	7q34	-0.18294	0.000325	0.001063
PCMT1	6q25.1	-0.18287	0.000327	0.001069
GPATCH2L	14q24.3	0.182815	0.000329	0.001073
NAB1	2q32.2	0.182802	0.000329	0.001074
UBE2N	12q22	-0.1828	0.000329	0.001074
SERPINB5	18q21.33	0.182796	0.000329	0.001074
APCDD1L	20q13.32	0.182789	0.000329	0.001074
PCDHGC5	5q31.3	0.182779	0.000329	0.001075
CA3	8q21.2	-0.18277	0.00033	0.001076
TMEM100	17q22	0.182754	0.00033	0.001077
GPR88	1p21.2	0.182753	0.00033	0.001077
CUL4A	13q34	-0.18274	0.00033	0.001078
NCF1	7q11.23	0.18272	0.000331	0.001079
VKORC1	16p11.2	-0.1827	0.000331	0.00108
ANKRD13A	12q24.11	0.182561	0.000335	0.001092
RGN	Xp11.3	-0.18254	0.000336	0.001094

NROB2	1p36.11	-0.18252	0.000336	0.001095
CLSPN	1p34.3	0.182515	0.000336	0.001095
SPERT	13q14.13	-0.18246	0.000338	0.001099
ZC4H2	Xq11.2	-0.18245	0.000338	0.001101
TRIB3	20p13	-0.18236	0.00034	0.001107
KANSL1	17q21.31	0.18236	0.00034	0.001108
LPAR6	13q14.2	0.182337	0.000341	0.001109
PKHD1L1	8q23.1-q23.2	0.182307	0.000342	0.001112
CISH	3p21.2	-0.18229	0.000342	0.001113
COL1A2	7q21.3	0.182292	0.000342	0.001113
RNASEK	17p13.1	-0.18227	0.000342	0.001114
TSHB	1p13.2	0.182244	0.000343	0.001116
LDB3	10q23.2	0.182227	0.000344	0.001118
PAXIP1-AS2	7q36.2	0.182193	0.000345	0.00112
MARCKS	6q21	0.182192	0.000345	0.00112
LOC541473	7q11.23	-0.18219	0.000345	0.001121
DPEP2	16q22.1	0.182178	0.000345	0.001121
INPP5K	17p13.3	0.182163	0.000345	0.001122
TTC22	1p32.3	0.182146	0.000346	0.001124
ARHGAP8	22q13.31	-0.18213	0.000346	0.001125
ROPN1B	3q21.2	0.18206	0.000348	0.001131
NUDT10	Xp11.22	0.182033	0.000349	0.001133
SCRIB	8q24.3	-0.18201	0.000349	0.001134
HRH4	18q11.2	0.182002	0.00035	0.001135
ANGPTL7	1p36.22	0.181955	0.000351	0.001139
JMJD8	16p13.3	-0.18193	0.000351	0.001141
ATP6V1E2	2p21 2p16-p12	-0.18191	0.000352	0.001143
ARHGEF37	5q32	0.181892	0.000353	0.001144
BHLHE40	3p26.1	0.181891	0.000353	0.001144
FN1	2q35	0.181879	0.000353	0.001145
TRIM8	10q24.32	0.181872	0.000353	0.001145
DDX21	10q22.1	0.18187	0.000353	0.001145
UGT1A8	2q37.1	0.181864	0.000353	0.001145
UNC13A	19p13.11	0.181863	0.000353	0.001145
MS4A4A	11q12.2	0.181843	0.000354	0.001147
FBXO6	1p36.22	-0.18182	0.000354	0.001149
TCN1	11q12.1	0.181804	0.000355	0.00115
PCDHB5	5q31.3	0.181786	0.000355	0.001151
SLAMF1	1q23.3	0.181783	0.000356	0.001151
OVGP1	1p13.2	-0.18176	0.000356	0.001153
AMPH	7p14.1	0.181754	0.000356	0.001153
PAPPA2	1q25.2	0.181754	0.000356	0.001153
TPO	2p25.3	0.181744	0.000357	0.001154
BMPR1A	10q23.2	0.181738	0.000357	0.001154
TRNAU1AP	1p35.3	-0.18172	0.000357	0.001156
TNC	9q33.1	0.181708	0.000358	0.001157
DDX11L2	2q14.1	-0.18168	0.000358	0.001159
ABCB10	1q42.13	0.181676	0.000358	0.001159
DHX36	3q25.2	0.181648	0.000359	0.001161
STAM	10p12.33	0.181608	0.00036	0.001165
GSR	8p12	0.181603	0.00036	0.001165
C3P1	19p13.2	-0.1816	0.00036	0.001165
ABCB11	2q31.1	0.181587	0.000361	0.001166
DLEU2	13q14.2	-0.18157	0.000361	0.001167
NFIB	9p23-p22.3	0.181559	0.000362	0.001168
FDX1	11q22.3	-0.18155	0.000362	0.001168
PTCD3	2p11.2	-0.18155	0.000362	0.001169
ARHGAP18	6q22.33	0.181531	0.000362	0.00117

ADAM19	5q33.3	0.181519	0.000363	0.001171
SEMA7A	15q24.1	0.181511	0.000363	0.001171
CEP83	12q22	-0.18147	0.000364	0.001175
OLFML1	11p15.4	0.181444	0.000365	0.001177
HECW1	7p14.1-p13	0.181443	0.000365	0.001177
RPL3	22q13.1	-0.18144	0.000365	0.001177
CD300LB	17q25.1	0.181413	0.000366	0.001179
JUND	19p13.11	-0.18141	0.000366	0.00118
SEL1L3	4p15.2	0.181396	0.000366	0.00118
GCH1	14q22.2	0.181388	0.000366	0.001181
DNASE1L2	16p13.3	-0.18138	0.000366	0.001181
GATM	15q21.1	0.181345	0.000368	0.001184
FAM199X	Xq22.2	0.181343	0.000368	0.001184
DOCK9	13q32.3	0.181309	0.000369	0.001187
TTC12	11q23.2	-0.18127	0.00037	0.00119
ASPH	8q12.3	0.18127	0.00037	0.001191
NEXN	1p31.1	0.181267	0.00037	0.001191
SORCS2	4p16.1	0.181258	0.00037	0.001191
TNFRSF1B	1p36.22	-0.18124	0.000371	0.001193
STAP1	4q13.2	0.181225	0.000371	0.001194
RCOR3	1q32.2-q32.3	0.181222	0.000371	0.001194
GIMAP7	7q36.1	0.18121	0.000371	0.001195
GNG13	16p13.3	0.181182	0.000372	0.001197
B3GALT4	6p21.32	0.181176	0.000372	0.001198
FGB	4q31.3	-0.18117	0.000373	0.001198
TOPORS	9p21.1	0.18115	0.000373	0.0012
CCDC183	9q34.3	-0.18115	0.000373	0.0012
FAM122C	Xq26.3	-0.18112	0.000374	0.001202
NRP2	2q33.3	0.181086	0.000375	0.001205
DIO2	14q31.1	0.181084	0.000375	0.001205
RPS12	6q23.2	-0.18106	0.000376	0.001207
SH3BGRL2	6q14.1	0.181043	0.000376	0.001208
CD1C	1q23.1	0.181035	0.000376	0.001209
NCBP2	3q29	-0.181	0.000377	0.001212
RSPH10B2	7p22.1	-0.181	0.000377	0.001212
ENO3	17p13.2	-0.18098	0.000378	0.001213
FLNA	Xq28	0.180969	0.000378	0.001214
PDGFRL	8p22	0.180965	0.000378	0.001214
WAS	Xp11.23	0.180953	0.000379	0.001215
LILRA2	19q13.42	0.180896	0.00038	0.00122
CUL5	11q22.3	0.180881	0.000381	0.001221
ZBTB47	3p22.1	0.180845	0.000382	0.001225
AKAP12	6q25.1	0.180838	0.000382	0.001225
ITM2C	2q37.1	0.180788	0.000383	0.001229
ZFP36L1	14q24.1	0.180772	0.000384	0.001231
ZNF408	11p11.2	-0.18076	0.000384	0.001231
SNORC	2q37.1	-0.18075	0.000385	0.001233
TRMT10B	9p13.2	-0.18074	0.000385	0.001233
ACR	22q13.33	-0.1807	0.000386	0.001237
PDE9A	21q22.3	0.180652	0.000387	0.001241
LINC00685	Xp22.33 and Yp11.31	-0.18061	0.000389	0.001245
PCSK1	5q15	0.180599	0.000389	0.001246
MKKS	20p12.2	-0.1806	0.000389	0.001246
LOC148709	1q32.1	-0.18058	0.00039	0.001247
SLC41A3	3q21.2-q21.3	-0.18053	0.000391	0.001251
ADAMTS7	15q25.1	0.180498	0.000392	0.001254
CEP95	17q23.3	-0.18046	0.000393	0.001258
SEPHS1	10p13	-0.18046	0.000393	0.001258

ULK2	17p11.2	0.180406	0.000395	0.001262
KBTBD6	13q14.11	-0.1804	0.000395	0.001263
ST7-OT3	7q31.2	-0.18038	0.000396	0.001265
SIL1	5q31.2	-0.18035	0.000397	0.001268
CRISPLD2	16q24.1	0.180274	0.000399	0.001274
NLRX1	11q23.3	0.180273	0.000399	0.001274
PTPN11	12q24.13	0.180271	0.000399	0.001274
FAM41C	1p36.33	-0.18025	0.000399	0.001276
ACKR2	3p22.1	0.180216	0.0004	0.001279
PCDHA4	5q31.3	0.180215	0.0004	0.001279
HEXIM2	17q21.31	-0.18019	0.000401	0.001281
ISG20	15q26.1	0.180145	0.000403	0.001285
ABLIM3	5q32	0.180123	0.000403	0.001287
SHMT2	12q13.3	-0.18012	0.000403	0.001287
HIST1H3F	6p22.2	-0.18012	0.000404	0.001288
CCZ1	7p22.1	-0.18005	0.000406	0.001294
MIOX	22q13.33	-0.18003	0.000406	0.001295
ZNF271P	18q12.2	0.180018	0.000407	0.001297
ZNF41	Xp11.3	0.179929	0.000409	0.001305
ZNF48	16p11.2	-0.17992	0.000409	0.001306
ZFHX4	8q21.13	0.179908	0.00041	0.001307
UBQLN2	Xp11.21	0.1799	0.00041	0.001307
CNTNAP1	17q21.2	0.179858	0.000411	0.001311
XRCC2	7q36.1	-0.17984	0.000412	0.001313
TMEM87B	2q13	0.179821	0.000413	0.001315
TNRC6A	16p12.1	0.17981	0.000413	0.001315
PCYOX1	2p13.3	0.179797	0.000413	0.001317
MST1L	1p36.13	-0.17978	0.000414	0.001318
ROBO2	3p12.3	0.179749	0.000415	0.001321
AGMO	7p21.2	0.17971	0.000416	0.001325
SCN11A	3p22.2	0.17969	0.000417	0.001326
LOC100130238	12q24.33	-0.17968	0.000417	0.001327
TUBD1	17q23.1	-0.17965	0.000418	0.00133
FLNC	7q32.1	0.179616	0.000419	0.001333
OPA3	19q13.32	0.179615	0.000419	0.001333
GRIN2C	17q25.1	-0.1796	0.00042	0.001334
ZNF597	16p13.3	0.179582	0.00042	0.001336
PHTF2	7q11.23-q21.11	0.179536	0.000422	0.00134
SCML4	6q21	-0.17953	0.000422	0.00134
ZNF292	6q14.3	0.17953	0.000422	0.001341
DCTPP1	16p11.2	-0.17945	0.000424	0.001348
BLK	8p23.1	0.179421	0.000425	0.001351
RSPO3	6q22.33	0.17939	0.000426	0.001354
RPAIN	17p13.2	-0.17939	0.000426	0.001354
NPPA	1p36.22	-0.17937	0.000427	0.001356
GLB1L2	11q25	-0.17935	0.000427	0.001357
ABR	17p13.3	0.179342	0.000428	0.001358
BICD1	12p11.21	0.179293	0.000429	0.001363
NUP37	12q23.2	-0.17926	0.00043	0.001366
OR2W3	1q44	0.179227	0.000431	0.001369
PCGF5	10q23.32	0.179174	0.000433	0.001374
MED28	4p15.32	-0.17917	0.000433	0.001374
PNPLA3	22q13.31	0.179167	0.000433	0.001375
GRIN2A	16p13.2	0.179157	0.000434	0.001376
HMGCS1	5p12	0.179109	0.000435	0.00138
RBM23	14q11.2	0.179098	0.000436	0.001381
METTL17	14q11.2	-0.17907	0.000437	0.001384
MYDGF	19p13.3	-0.17904	0.000438	0.001387



SAMHD1	20q11.23	0.179041	0.000438	0.001387
MAIP1	2q33.1	-0.17902	0.000438	0.001388
TPSB2	16p13.3	0.179017	0.000438	0.001389
ADAM12	10q26.2	0.178989	0.000439	0.001391
EIF3D	22q12.3	-0.17899	0.000439	0.001391
ABHD15	17q11.2	0.178921	0.000442	0.001398
LINC01106	2q13	-0.17891	0.000442	0.001399
NR2F6	19p13.11	-0.17891	0.000442	0.001399
C2CD4D-AS1	1q21.3	0.178905	0.000442	0.001399
ZBTB43	9q33.3	0.178885	0.000443	0.001401
HPRT1	Xq26.2-q26.3	-0.17887	0.000443	0.001402
CEACAM5	19q13.2	0.178873	0.000443	0.001402
REXO5	16p12.3	-0.17887	0.000443	0.001402
RAB1A	2p14	0.178859	0.000444	0.001403
LEKR1	3q25.31	-0.17884	0.000444	0.001405
ZZZ3	1p31.1	0.178839	0.000444	0.001405
VPS29	12q24.11	-0.1788	0.000445	0.001408
ZNF682	19p12	-0.17879	0.000446	0.00141
LRRC31	3q26.2	0.178781	0.000446	0.00141
CCDC80	3q13.2	0.178776	0.000446	0.00141
CLEC17A	19p13.12	0.178737	0.000448	0.001414
MIR4435-2HG	2q13	-0.17872	0.000448	0.001415
CD164	6q21	0.178703	0.000449	0.001417
FLJ44635	Xq13.1	-0.17868	0.00045	0.001419
KLHDC9	1q23.3	-0.17867	0.00045	0.00142
CIPC	14q24.3	0.178657	0.00045	0.001422
DUOXA1	15q21.1	0.178628	0.000451	0.001424
FBLN5	14q32.12	0.178593	0.000453	0.001428
LRRC55	11q12.1	0.178579	0.000453	0.001429
SLC1A3	5p13.2	0.17856	0.000454	0.001431
CDC5L	6p21.1	0.178551	0.000454	0.001432
SLC17A9	20q13.33	-0.17853	0.000455	0.001434
PLB1	2p23.2	-0.17851	0.000455	0.001436
STAG3L3	7q11.23	-0.1785	0.000456	0.001436
SRGN	10q22.1	0.178493	0.000456	0.001437
EGR2	10q21.3	0.178437	0.000458	0.001443
CHTF8	16q22.1	0.178435	0.000458	0.001443
TIMM10B	11p15.4	-0.17839	0.000459	0.001448
MCM3AP	21q22.3	0.178358	0.000461	0.001451
ADAMTS2	5q35.3	0.178339	0.000461	0.001453
APBB3	5q31.3	-0.1783	0.000463	0.001457
VPS13A	9q21.2	0.178274	0.000464	0.001459
NBAS	2p24.3	0.178245	0.000465	0.001462
FMO5	1q21.1	0.178241	0.000465	0.001463
ADCYAP1	18p11.32	0.17821	0.000466	0.001466
TXNDC11	16p13.13	0.178206	0.000466	0.001466
PRRG3	Xq28	0.178157	0.000468	0.001471
MUC13	3q21.2	0.178152	0.000468	0.001471
VGLL4	3p25.3-p25.2	0.17815	0.000468	0.001471
PCDHAC1	5q31.3	0.178099	0.00047	0.001477
PCDHGA10	5q31.3	0.178091	0.00047	0.001477
DIP2C	10p15.3	0.178067	0.000471	0.00148
USP24	1p32.3	0.17803	0.000472	0.001484
MAPK10	4q21.3	0.178025	0.000472	0.001484
RAB10	2p23.3	0.178014	0.000473	0.001485
ARL6IP5	3p14.1	0.178006	0.000473	0.001486
SLC44A4	6p21.33	0.178002	0.000473	0.001486
TNS4	17q21.2	0.177947	0.000475	0.001492

HMG3	6q14.1	-0.17793	0.000476	0.001493
ZNF135	19q13.43	0.177926	0.000476	0.001494
LOX	5q23.1	0.177914	0.000476	0.001495
NUTM2G	9q22.33	-0.1779	0.000477	0.001496
SNAP91	6q14.2	0.177877	0.000477	0.001498
C11ORF49	11p11.2	-0.17786	0.000478	0.0015
LINC01548	21q22.11	-0.1778	0.00048	0.001506
PRR3	6p21.33	-0.1778	0.00048	0.001506
CTPS1	1p34.2	-0.17777	0.000481	0.00151
C5AR2	19q13.32	0.177754	0.000482	0.001511
SETD1B	12q24.31	0.17775	0.000482	0.001511
NGDN	14q11.2	-0.17775	0.000482	0.001511
AXL	19q13.2	0.177731	0.000483	0.001513
FUBP3	9q34.11-q34.12	0.177722	0.000483	0.001514
PIFO	1p13.2	-0.1777	0.000484	0.001515
UGT1A10	2q37.1	0.177692	0.000484	0.001517
VHL	3p25.3	0.177683	0.000484	0.001517
PSAP	10q22.1	0.177667	0.000485	0.001519
HNRNPU	1q44	0.177645	0.000486	0.001521
GNB5	15q21.2	0.177638	0.000486	0.001522
NACA	12q13.3	-0.17764	0.000486	0.001522
SH3BGRL	Xq21.1	0.177624	0.000487	0.001523
SRPX2	Xq22.1	-0.17762	0.000487	0.001523
KLF5	13q22.1	0.177618	0.000487	0.001523
AKNA	9q32	0.177496	0.000491	0.001537
FLG	1q21.3	0.177483	0.000492	0.001538
SNORA63	3q27.3	-0.17747	0.000492	0.001539
BCAR3	1p22.1	0.177449	0.000493	0.001541
LSM11	5q33.3	0.177419	0.000494	0.001545
ERLEC1	2p16.2	0.177398	0.000495	0.001547
ZFAND2A	7p22.3	-0.17734	0.000497	0.001553
PRH1	12p13.2	-0.17734	0.000497	0.001553
OXSM	3p24.2	-0.17733	0.000497	0.001554
DNMT3L	21q22.3	-0.17731	0.000498	0.001556
B3GNT9	16q22.1	0.177294	0.000499	0.001558
ZNF208	19p12	0.177293	0.000499	0.001558
ATP1A2	1q23.2	0.177257	0.0005	0.001561
C1S	12p13.31	0.17719	0.000503	0.001569
TIFAB	5q31.1	0.177164	0.000504	0.001572
TIMM9	14q23.1	-0.17711	0.000506	0.001578
KPNA6	1p35.2	0.177108	0.000506	0.001578
ZBTB46	20q13.33	0.177073	0.000507	0.001582
WNK1	12p13.33	0.177055	0.000508	0.001584
FAM30A	14q32.33	0.177054	0.000508	0.001584
YTHDF3	8q12.3	0.177049	0.000508	0.001584
SNORD94	2p11.2	-0.17705	0.000508	0.001584
DNAH14	1q42.12	-0.17705	0.000508	0.001584
GOT2	16q21	-0.17703	0.000509	0.001586
SULT2B1	19q13.33	-0.17702	0.000509	0.001586
CHKB	22q13.33	-0.17702	0.000509	0.001586
GPR132	14q32.33	0.17701	0.000509	0.001587
PPP2R1A	19q13.41	-0.177	0.00051	0.001588
UNC79	14q32.12	0.176993	0.00051	0.001589
PLCB2	15q15.1	0.176954	0.000511	0.001593
PARVB	22q13.31	-0.17695	0.000512	0.001593
SIGLEC12	19q13.41	0.176938	0.000512	0.001594
SLC24A4	14q32.12	0.176927	0.000513	0.001595
ZNF669	1q44	0.176858	0.000515	0.001603

PLEKHG4	16q22.1	-0.17685	0.000515	0.001604
LINC00894	Xq28	-0.17682	0.000517	0.001607
ZNF184	6p22.1	0.176801	0.000517	0.001609
ESYT2	7q36.3	0.17678	0.000518	0.001612
SOCS2	12q22	0.176768	0.000519	0.001613
PDGFD	11q22.3	0.176759	0.000519	0.001614
SLC35A1	6q15	0.176754	0.000519	0.001614
CCR3	3p21.31	0.176735	0.00052	0.001616
EGFL7	9q34.3	-0.17673	0.00052	0.001617
CCDC154	16p13.3	-0.17671	0.000521	0.001619
OTUD5	Xp11.23	-0.1767	0.000521	0.001619
PLAAT5	11q12.3	0.176691	0.000522	0.00162
FBN2	5q23.3	0.176687	0.000522	0.001621
PLA2G7	6p12.3	0.176601	0.000525	0.001631
FCGRT	19q13.33	-0.17659	0.000526	0.001632
SYNE4	19q13.12	-0.17656	0.000527	0.001635
SLC36A4	11q21	0.176554	0.000527	0.001636
SLC39A9	14q24.1	0.176549	0.000527	0.001636
SPOCK1	5q31.2	0.176504	0.000529	0.001641
GOLGA8B	15q14	-0.1765	0.000529	0.001641
MB	22q12.3	0.176493	0.000529	0.001642
MTERF2	12q23.3	-0.17649	0.00053	0.001643
PKDREJ	22q13.31	0.176448	0.000531	0.001647
XDH	2p23.1	0.176419	0.000532	0.00165
HLA-DQA2	6p21.32	0.176401	0.000533	0.001652
APOL6	22q12.3	0.176385	0.000534	0.001654
SIX4	14q23.1	0.176385	0.000534	0.001654
TNFRSF11B	8q24.12	0.176341	0.000535	0.001659
ARHGAP35	19q13.32	0.176249	0.000539	0.00167
IGDCC4	15q22.31	0.176208	0.000541	0.001675
FER1L4	20q11.22	-0.17618	0.000542	0.001677
CAMLG	5q31.1	-0.17618	0.000542	0.001678
MNT	17p13.3	0.176177	0.000542	0.001678
TCTA	3p21.31	-0.17612	0.000544	0.001684
NTN5	19q13.33	-0.1761	0.000545	0.001687
LIPT2	11q13.4	-0.1761	0.000545	0.001687
NLGN1	3q26.31	0.176052	0.000547	0.001692
TFCP2	12q13.12-q13.13	0.176006	0.000549	0.001698
FGD5	3p25.1	0.176005	0.000549	0.001698
FPR1	19q13.41	0.175995	0.000549	0.001699
MYO6	6q14.1	0.175992	0.000549	0.001699
PLXND1	3q22.1	0.175978	0.00055	0.0017
TOR1B	9q34.11	0.175978	0.00055	0.0017
DCAF1	3p21.2	0.175974	0.00055	0.0017
GNL2	1p34.3	-0.17597	0.00055	0.0017
ARMCX2	Xq22.1	0.175947	0.000551	0.001703
XKR8	1p35.3	-0.17594	0.000551	0.001703
ZNF354C	5q35.3	0.175939	0.000552	0.001703
SNX20	16q12.1	0.175938	0.000552	0.001703
GRAMD2B	5q23.2	0.175936	0.000552	0.001703
RLF	1p34.2	0.175927	0.000552	0.001704
FAM227A	22q13.1	-0.17589	0.000554	0.001709
CORO1B	11q13.2	-0.17588	0.000554	0.00171
XBP1	22q12.1 22q12	0.175838	0.000556	0.001715
C7	5p13.1	0.175824	0.000556	0.001716
PKP4	2q24.1	0.175816	0.000557	0.001717
CITED4	1p34.2 1p35-p34	-0.17582	0.000557	0.001717
HSD17B8	6p21.32	-0.17581	0.000557	0.001717

PDE2A	11q13.4	0.175781	0.000558	0.001721
LOC100132215	2p15	-0.17577	0.000558	0.001722
IL4R	16p12.1	0.175712	0.000561	0.001729
HARS	5q31.3	-0.17571	0.000561	0.001729
PLOD3	7q22.1	-0.1757	0.000561	0.00173
SLC35B2	6p21.1	-0.17567	0.000562	0.001733
WFDC10B	20q13.12	-0.17567	0.000563	0.001734
MGAT4B	5q35.3	-0.17563	0.000564	0.001739
KLHL4	Xq21.31	0.175621	0.000565	0.001739
CCDC116	22q11.21	-0.17562	0.000565	0.001739
AMFR	16q13	-0.17555	0.000568	0.001748
NFATC1	18q23	0.175532	0.000568	0.00175
AKR7L	1p36.13 1p35-p36.1	-0.1755	0.00057	0.001753
HTR2A	13q14.2	0.175489	0.00057	0.001755
SLC35A2	Xp11.23	-0.17548	0.000571	0.001756
C5ORF22	5p13.3	0.175471	0.000571	0.001756
DYNC2LI1	2p21	-0.17547	0.000571	0.001757
KCNH1	1q32.2	0.175456	0.000572	0.001758
BCAS4	20q13.13	-0.17545	0.000572	0.001758
DHRS2	14q11.2	-0.17544	0.000572	0.001759
JPT1	17q25.1	-0.17541	0.000573	0.001763
ZNF346	5q35.2	-0.17539	0.000574	0.001766
SMG7	1q25.3	0.17535	0.000576	0.00177
ALPK2	18q21.31-q21.32	0.17531	0.000578	0.001775
FOXK2	17q25.3	-0.1753	0.000578	0.001776
PLP1	Xq22.2	0.175304	0.000578	0.001776
CDC27	17q21.32	0.175297	0.000578	0.001776
GDAP1L1	20q13.12	-0.17526	0.00058	0.001781
RNF141	11p15.4 11p15	0.175215	0.000582	0.001786
LRRC10B	11q12.2	-0.1752	0.000582	0.001788
HOMEZ	14q11.2	0.175152	0.000585	0.001794
MDP1	14q12	-0.17515	0.000585	0.001794
SP140	2q37.1	0.175142	0.000585	0.001795
CDX2	13q12.2	-0.17514	0.000585	0.001795
HSDL1	16q24.1	-0.17511	0.000586	0.001798
CBX4	17q25.3	-0.1751	0.000587	0.001799
NRTN	19p13.3	-0.17506	0.000589	0.001805
TOP1P1	1q24.3	-0.17504	0.00059	0.001808
PHOX2B	4p13	0.174965	0.000593	0.001817
KRT83	12q13.13	-0.17496	0.000593	0.001817
TTLL10	1p36.33	-0.17494	0.000594	0.00182
ASAP3	1p36.12	0.174935	0.000594	0.00182
PIGR	1q32.1	0.174894	0.000596	0.001825
PCDHGA3	5q31.3	0.174881	0.000596	0.001827
NECAB1	8q21.3	0.174861	0.000597	0.001829
CASR	3q13.33-q21.1	0.174856	0.000597	0.001829
PHB2	12p13.31	-0.17485	0.000598	0.00183
ABCA3	16p13.3	0.174837	0.000598	0.001831
CLCN5	Xp11.23	-0.17484	0.000598	0.001831
STK32B	4p16.2	0.174836	0.000598	0.001831
MMP2	16q12.2	0.174797	0.0006	0.001836
MRS2P2	12q21.1	-0.17479	0.0006	0.001836
CCT3	1q22	-0.17478	0.000601	0.001838
CLP1	11q12.1	-0.17475	0.000602	0.001842
TBC1D3	17q12	-0.17475	0.000602	0.001842
WEE2-AS1	7q34	0.174725	0.000603	0.001844
SHISA2	13q12.13	0.174704	0.000604	0.001847
PRELID3A	18p11.21	-0.1747	0.000604	0.001848

LMAN2	5q35.3	-0.17467	0.000605	0.001851
B4GALNT4	11p15.5	-0.17466	0.000606	0.001852
SNX9	6q25.3	0.174626	0.000608	0.001857
RAN	12q24.33	-0.17461	0.000608	0.001859
GDF6	8q22.1	0.174558	0.000611	0.001865
C1ORF198	1q42.2	0.17449	0.000614	0.001874
ZBTB49	4p16.3	-0.17448	0.000614	0.001876
FNBP4	11p11.2	-0.17446	0.000615	0.001878
CACTIN	19p13.3	-0.17445	0.000616	0.001879
PDGFRB	5q32	0.17444	0.000616	0.00188
EXOSC6	16q22.1	-0.17444	0.000616	0.00188
ENAM	4q13.3	0.174411	0.000617	0.001883
PLAC1	Xq26.3	-0.17441	0.000617	0.001883
FGFBP1	4p15.32	0.174405	0.000617	0.001884
TFF1	21q22.3	0.174359	0.00062	0.00189
LOC646214	15q11.2	0.174353	0.00062	0.00189
HRG	3q27.3	-0.17435	0.00062	0.00189
LDLRAD2	1p36.12	-0.17434	0.00062	0.001891
TRIQQ	8q22.1	0.17432	0.000621	0.001894
SLC25A2	5q31.3	-0.17431	0.000622	0.001896
ZBTB38	3q23	0.174291	0.000623	0.001897
MEOX2	7p21.2	0.17429	0.000623	0.001897
EHBP1	2p15	0.174284	0.000623	0.001898
SLC5A3	21q22.11	0.174281	0.000623	0.001898
LINC00324	17p13.1	0.174271	0.000624	0.001899
TSPAN31	12q14.1	-0.17427	0.000624	0.0019
TCEAL8	Xq22.1	0.174231	0.000625	0.001904
GDNF	5p13.2	0.174216	0.000626	0.001906
BRD7	16q12.1	-0.17419	0.000627	0.00191
LMO3	12p12.3	0.174185	0.000628	0.00191
FAM225B	9q32	0.174177	0.000628	0.00191
GALNT2	1q42.13	0.17417	0.000628	0.001911
TPD52	8q21.13	0.174132	0.00063	0.001916
TUBGCP6	22q13.33	-0.17412	0.000631	0.001918
SCARNA9L	Xp22.12	-0.17411	0.000631	0.001918
TTC31	2p13.1	-0.17411	0.000631	0.001919
CCDC91	12p11.22	0.174076	0.000633	0.001923
RNF138P1	5q11.2	0.174047	0.000634	0.001927
CTSG	14q12	0.174041	0.000634	0.001927
STAB2	12q23.3	0.173981	0.000637	0.001935
TMBIM6	12q13.12	0.173962	0.000638	0.001938
ACADM	1p31.1	0.173918	0.00064	0.001944
PIGT	20q13.12	-0.17389	0.000641	0.001947
ZNF267	16p11.2	0.173883	0.000642	0.001948
MEST	7q32.2	-0.17387	0.000642	0.001949
C14ORF93	14q11.2	-0.17384	0.000643	0.001953
MYO1G	7p13	0.173792	0.000646	0.00196
PPP1R3C	10q23.32	0.173785	0.000646	0.001961
OR6T1	11q24.1	0.173766	0.000647	0.001963
DEAF1	11p15.5	-0.17375	0.000648	0.001966
SHBG	17p13.1	-0.17374	0.000648	0.001966
SPAG9	17q21.33	0.173725	0.000649	0.001968
ZKSCAN2	16p12.1	0.173714	0.00065	0.00197
LINC00852	3p25.3	-0.17371	0.00065	0.00197
SDC4	20q13.12	-0.17371	0.00065	0.00197
ONECUT1	15q21.3	0.17368	0.000651	0.001974
BTLA	3q13.2	0.17367	0.000652	0.001975
SNORA31	13q14.13	-0.17364	0.000653	0.001978

MTX2	2q31.1	-0.17362	0.000654	0.001981
SHF	15q21.1	0.173566	0.000657	0.001989
PDCL3P4	3q12.3	-0.17354	0.000658	0.001992
SNRNP40	1p35.2	-0.17353	0.000658	0.001993
KIAA1549L	11p13	0.173477	0.000661	0.002001
FAM155A	13q33.3	0.173472	0.000661	0.002001
MRPS21	1q21.2	-0.17344	0.000663	0.002006
SMIM12	1p34.3	-0.17342	0.000664	0.002009
PARP15	3q21.1	0.173415	0.000664	0.002009
F5	1q24.2	0.173404	0.000664	0.00201
SSC5D	19q13.42	0.173375	0.000666	0.002014
FHL2	2q12.2	0.173342	0.000667	0.002019
ZMYM4	1p34.3	0.17334	0.000667	0.002019
HIST2H2AB	1q21.2	-0.17331	0.000669	0.002024
LIAS	4p14	-0.17323	0.000673	0.002034
ADAP2	17q11.2	0.173229	0.000673	0.002034
F12	5q35.3	-0.17321	0.000674	0.002036
PRSS8	16p11.2	-0.17318	0.000675	0.002041
TP53TG1	7q21.12	-0.17315	0.000677	0.002045
EMILIN1	2p23.3	0.173131	0.000678	0.002048
CPNE8	12q12	0.173111	0.000679	0.00205
SLC22A4	5q31.1	-0.17309	0.00068	0.002053
CNGA3	2q11.2	0.173088	0.00068	0.002053
UBIAD1	1p36.22	-0.17308	0.00068	0.002053
MAPK8IP3	16p13.3	-0.17302	0.000683	0.002063
GOSR1	17q11.2	0.173009	0.000684	0.002064
STC2	5q35.2	-0.17299	0.000685	0.002066
H1FX-AS1	3q21.3	-0.17299	0.000685	0.002067
ZBTB7B	1q21.3	0.172972	0.000686	0.002069
DIPK2A	3q24	0.172955	0.000687	0.002071
KCTD6	3p14.3	-0.17291	0.000689	0.002077
C3ORF38	3p11.1	0.17288	0.00069	0.002082
TEX10	9q31.1	-0.17286	0.000691	0.002084
LPCAT4	15q14	0.172813	0.000694	0.002091
MYO9B	19p13.11	0.172811	0.000694	0.002091
PLPP2	19p13.3	-0.17279	0.000695	0.002094
RPS6KA2	6q27	0.172783	0.000695	0.002095
PDZRN4	12q12	0.172696	0.0007	0.002108
TMEM63B	6p21.1	0.172684	0.0007	0.002109
ABCC6	16p13.11	-0.17268	0.0007	0.002109
OIT3	10q22.1	-0.17267	0.000701	0.002111
IL5RA	3p26.2	0.172665	0.000701	0.002111
MROH6	8q24.3	-0.17265	0.000702	0.002113
CCN3	8q24.12	0.17264	0.000702	0.002114
SFSWAP	12q24.33	-0.17263	0.000703	0.002116
PLXNB2	22q13.33	0.172584	0.000705	0.002122
ZNF341	20q11.22	-0.17257	0.000706	0.002125
PDE1A	2q32.1	0.172561	0.000706	0.002125
TMEM82	1p36.21	-0.17255	0.000707	0.002126
PTGER3	1p31.1	0.172505	0.000709	0.002133
WFDC9	20q13.12	-0.1725	0.00071	0.002134
COQ3	6q16.2	-0.17246	0.000712	0.00214
TBC1D10A	22q12.2	0.172431	0.000713	0.002144
CD27-AS1	12p13.31	-0.17243	0.000713	0.002144
CXCR2	2q35	0.172421	0.000714	0.002145
KANK4	1p31.3	0.17242	0.000714	0.002145
PRPF4B	6p25.2	0.172412	0.000714	0.002145
TDRP	8p23.3	0.172405	0.000714	0.002146

FER	5q21.3	0.172368	0.000716	0.002152
TMEM39A	3q13.33	0.172366	0.000717	0.002152
HIST2H3D	1q21.2	-0.17236	0.000717	0.002152
FAHD1	16p13.3	-0.17233	0.000718	0.002156
SCARNA10	12p13.31	-0.1723	0.00072	0.002161
DUSP2	2q11.2	-0.17229	0.000721	0.002163
TTC25	17q21.2	-0.17228	0.000721	0.002164
LOXHD1	18q21.1	0.17227	0.000722	0.002165
ACPP	3q22.1	0.172251	0.000723	0.002168
TIMD4	5q33.3	0.172247	0.000723	0.002168
MYO1D	17q11.2	0.172204	0.000725	0.002174
PHGDH	1p12	-0.1722	0.000725	0.002175
AKR7A2P1	1p13.2	-0.17219	0.000726	0.002176
PTER	10p13	0.172185	0.000726	0.002176
OS9	12q13.3-q14.1	0.172182	0.000726	0.002176
MAP6D1	3q27.1	-0.17218	0.000726	0.002176
AFAP1-AS1	4p16.1	0.172177	0.000726	0.002176
SNORD116-20	15q11.2	0.172123	0.000729	0.002185
ATP2A1	16p11.2	-0.17209	0.000731	0.00219
BANP	16q24.2	-0.17208	0.000732	0.002191
ABHD16A	6p21.33	-0.17204	0.000734	0.002197
LONRF2	2q11.2	0.172024	0.000734	0.002199
SLC7A2	8p22	0.172016	0.000735	0.0022
TNS2	12q13.13	0.172002	0.000736	0.002202
KCNQ4	1p34.2	0.171975	0.000737	0.002206
TAF1A	1q41	0.171962	0.000738	0.002208
SCARA5	8p21.1	0.171888	0.000742	0.002219
TSTD1	1q23.3	-0.17183	0.000745	0.002227
LCK	1p35.2	0.171833	0.000745	0.002227
GPR65	14q31.3	0.171784	0.000747	0.002235
SSTR3	22q13.1	0.171768	0.000748	0.002237
CACNG4	17q24.2	-0.17175	0.000749	0.00224
C4A	6p21.33	0.171717	0.000751	0.002245
C1R	12p13.31	0.171678	0.000753	0.002251
ANKFN1	17q22	0.171667	0.000754	0.002252
CEP128	14q31.1	0.171642	0.000755	0.002256
ATL3	11q13.1	0.171623	0.000756	0.002259
PPP3CB	10q22.2	0.17162	0.000756	0.002259
CFAP36	2p16.1	-0.17161	0.000757	0.00226
QARS	3p21.31	-0.1716	0.000758	0.002262
SMIM8	6q15	-0.17159	0.000758	0.002262
VDR	12q13.11	0.171588	0.000758	0.002263
MYH7B	20q11.22	-0.17159	0.000758	0.002263
GLT8D2	12q23.3	0.17157	0.000759	0.002265
PLEKHA1	10q26.13	0.171556	0.00076	0.002267
MOGAT3	7q22.1	-0.17155	0.00076	0.002267
BAALC	8q22.3	0.171531	0.000761	0.00227
ADAMTSL4	1q21.2	0.171499	0.000763	0.002275
RSPO2	8q23.1	0.17149	0.000763	0.002276
RHPN1-AS1	8q24.3	-0.17148	0.000764	0.002277
NDRG1	8q24.22	0.171461	0.000765	0.002281
FN3K	17q25.3	-0.17144	0.000766	0.002283
MFAP4	17p11.2	0.171432	0.000767	0.002285
GLTPD2	17p13.2	-0.17143	0.000767	0.002285
SARNP	12q13.2	-0.17142	0.000767	0.002285
OPA1	3q29	0.171325	0.000773	0.002301
ADAMTS3	4q13.3	0.171322	0.000773	0.002302
RIIAD1	1q21.3	-0.1713	0.000774	0.002306

PP7080	5p15.33	-0.1712	0.000779	0.002321
SERF1A	5q13.2	-0.17117	0.000781	0.002325
MUSK	9q31.3	0.171173	0.000781	0.002325
LIPG	18q21.1	0.171151	0.000782	0.002328
HEXA	15q23	0.17115	0.000782	0.002328
RAB42	1p35.3	0.171125	0.000784	0.002332
ARHGEF17	11q13.4	0.171117	0.000784	0.002333
SEMG1	20q13.12	0.1711	0.000785	0.002336
CPN1	10q24.2	-0.17108	0.000786	0.002338
CD96	3q13.13-q13.2	0.171077	0.000787	0.002339
TMEM59	1p32.3	0.171061	0.000787	0.002341
FBXL14	12p13.33	0.171049	0.000788	0.002342
STAG3L4	7q11.21	-0.17105	0.000788	0.002342
HACD3	15q22.31	0.171018	0.00079	0.002347
LMNTD2	11p15.5	-0.17098	0.000792	0.002353
SPRTN	1q42.2	0.170894	0.000797	0.002368
FAM193A	4p16.3	0.170863	0.000799	0.002373
ZXDC	3q21.3	0.170856	0.000799	0.002373
NPY4R	10q11.22	0.170855	0.000799	0.002373
TFDP1	13q34	-0.17084	0.0008	0.002376
UNC119B	12q24.31	0.170798	0.000802	0.002382
ATP10A	15q12	0.17077	0.000804	0.002387
SNORA3B	11p15.4	-0.17077	0.000804	0.002387
LPL	8p21.3	0.170767	0.000804	0.002387
KTN1-AS1	14q22.3	-0.17076	0.000805	0.002388
DNM2	19p13.2	0.170745	0.000806	0.00239
SERPINA7	Xq22.3	-0.17074	0.000806	0.002391
BCL11A	2p16.1	-0.1707	0.000808	0.002397
C15ORF48	15q21.1	0.170651	0.000811	0.002405
MOB1B	4q13.3	0.170622	0.000813	0.002409
RPLP1	15q23	-0.17059	0.000815	0.002415
ZBED4	22q13.33	0.170565	0.000816	0.002419
CEP164	11q23.3	-0.17055	0.000817	0.002421
GPR108	19p13.3	-0.17054	0.000817	0.002422
RIN1	11q13.2	-0.17054	0.000818	0.002422
LIG1	19q13.33	-0.17054	0.000818	0.002422
SIGLEC9	19q13.41	0.170495	0.00082	0.002429
C4ORF36	4q21.3	0.170458	0.000822	0.002435
KLHL38	8q24.13	0.170438	0.000823	0.002438
HOXB2	17q21.32	0.170394	0.000826	0.002446
ADH1A	4q23	0.170381	0.000827	0.002448
IGBP1P1	14q13.2	-0.17038	0.000827	0.002448
CNBP	3q21.3	-0.17036	0.000828	0.00245
CCNB1	5q13.2	-0.17033	0.00083	0.002455
MRAS	3q22.3	0.170333	0.00083	0.002455
KRTAP5-5	11p15.5	-0.17031	0.000831	0.002458
WDR31	9q32	0.170242	0.000835	0.00247
C12ORF60	12p13.1-p12.3	-0.17024	0.000835	0.00247
GABRP	5q35.1	0.170204	0.000837	0.002476
LMO4	1p22.3	0.170202	0.000838	0.002476
NAALADL1	11q13.1	-0.17016	0.00084	0.002484
MFS6L	17p13.1	0.170151	0.000841	0.002484
PIK3R1	5q13.1	0.170136	0.000842	0.002486
OPRL1	20q13.33	0.170134	0.000842	0.002486
DRICH1	22q11.23	-0.17012	0.000843	0.002489
S1PR3	9q22.1	0.170105	0.000843	0.002491
CACNA1E	1q25.3	0.170078	0.000845	0.002496
AMZ2	17q24.2	-0.17003	0.000848	0.002504



OSGEP	14q11.2	-0.17001	0.000849	0.002508
EIF4EBP2	10q22.1	0.170001	0.00085	0.002508
LOC646762	7p14.3	-0.16999	0.00085	0.00251
AQP7P3	9q21.11	-0.16993	0.000854	0.002521
SUCNR1	3q25.1	0.169913	0.000855	0.002523
HAAO	2p21	-0.1699	0.000856	0.002526
CHRAC1	8q24.3	-0.16989	0.000856	0.002526
ITPR2	12p11.23	0.169876	0.000857	0.002528
ZBTB20	3q13.31	0.169812	0.000861	0.00254
ASNA1	19p13.13	-0.1698	0.000862	0.002542
ST3GAL1	8q24.22	0.169783	0.000863	0.002544
THRA	17q21.1	-0.16976	0.000865	0.002548
CD200R1	3q13.2	0.169741	0.000866	0.002551
EXOC6	10q23.33	0.169718	0.000867	0.002555
FAM204A	10q26.11	-0.16969	0.000869	0.00256
TMX2	11q12.1	-0.16969	0.000869	0.00256
THOC5	22q12.2	-0.16968	0.00087	0.002561
CCDC153	11q23.3	-0.16966	0.00087	0.002563
NOVA1	14q12	0.169661	0.000871	0.002564
GNB1	1p36.33	0.169656	0.000871	0.002564
ACRBP	12p13.31	0.169655	0.000871	0.002564
THAP2	12q21.1	0.169637	0.000872	0.002567
CRISPLD1	8q21.13	0.169603	0.000874	0.002573
ZNF460	19q13.43	0.169593	0.000875	0.002574
TBC1D3B	17q12	-0.16957	0.000876	0.002577
ADRB2	5q32	0.169499	0.000881	0.002591
SHISA3	4p13	0.16949	0.000881	0.002592
ALDH1A2	15q21.3	0.169469	0.000883	0.002595
USP1	1p31.3	0.169459	0.000883	0.002597
ERVFRD-1	6p24.2	0.169451	0.000884	0.002598
POC5	5q13.3	-0.16944	0.000884	0.002599
LANCL3	Xp21.1	0.169439	0.000885	0.002599
FGFBP2	4p15.32	0.169437	0.000885	0.002599
PAGE2B	Xp11.21	-0.16942	0.000886	0.002602
DIRAS2	9q22.2	0.169412	0.000886	0.002603
KALRN	3q21.1-q21.2	0.169394	0.000887	0.002606
PLCD1	3p22.2	0.169394	0.000887	0.002606
MIPOL1	14q13.3-q21.1	0.169381	0.000888	0.002608
MAPRE1	20q11.21	-0.16935	0.00089	0.002614
WNT2B	1p13.2	0.169343	0.000891	0.002614
PDE7A	8q13.1	-0.16933	0.000892	0.002617
PCDHA6	5q31.3	0.169319	0.000892	0.002618
PSMD9	12q24.31	-0.16931	0.000893	0.002619
FAM226B	Xq13.1	-0.1693	0.000894	0.002622
SARS2	19q13.2	-0.16926	0.000896	0.002627
GTPBP1	22q13.1	0.169258	0.000896	0.002628
PLEKHG2	19q13.2	0.169257	0.000896	0.002628
ERCC3	2q14.3	-0.16926	0.000896	0.002628
MIRLET7BHG	22q13.31	-0.16921	0.000899	0.002636
MTFR1L	1p36.11	-0.16921	0.000899	0.002636
SNRNP200	2q11.2	0.169192	0.0009	0.002638
IGSF9B	11q25	0.169189	0.000901	0.002639
TIGIT	3q13.31	0.16915	0.000903	0.002646
ENPP6	4q35.1	0.169142	0.000904	0.002647
SERTAD4-AS1	1q32.2	0.169112	0.000905	0.002652
YWHAB	20q13.12	-0.1691	0.000906	0.002654
FBXO33	14q21.1	0.16907	0.000908	0.002659
AFF2	Xq28	0.169055	0.000909	0.002662

MAD2L1	4q27	-0.16905	0.00091	0.002663
DCP1A	3p21.1	0.169039	0.00091	0.002664
FAM86HP	3q22.1	-0.16901	0.000912	0.002669
YY1	14q32.2	0.168944	0.000916	0.002681
SETD2	3p21.31	0.168931	0.000917	0.002683
TMC4	19q13.42	0.168905	0.000919	0.002688
DCP2	5q22.2	0.168868	0.000921	0.002694
NAPSA	19q13.33	-0.16885	0.000922	0.002697
KRTAP3-3	17q21.2	-0.16885	0.000922	0.002697
CEP72	5p15.33	-0.16882	0.000925	0.002703
ZNF600	19q13.41	-0.16881	0.000925	0.002704
LINC01134	1p36.32	-0.1688	0.000926	0.002705
PABPC5	Xq21.31	0.168782	0.000927	0.002709
RAI14	5p13.2	0.168769	0.000928	0.002711
CYP2U1	4q25	0.16876	0.000928	0.002712
SARS	1p13.3	-0.16875	0.000929	0.002714
IGIP	5q31.3	0.168738	0.00093	0.002716
FAM180A	7q33	0.168726	0.000931	0.002717
RPS27L	15q22.2	0.168704	0.000932	0.002721
FGFR1	8p11.23	0.168662	0.000935	0.002729
GIMAP1	7q36.1	0.168661	0.000935	0.002729
ROR2	9q22.31	0.168657	0.000935	0.002729
CDH6	5p13.3	0.168652	0.000936	0.00273
TRAF3IP3	1q32.2	0.168633	0.000937	0.002733
HMGCR	5q13.3	0.168593	0.00094	0.002741
CD200	3q13.2	0.168587	0.00094	0.002741
B4GALT3	1q23.3	-0.16857	0.000941	0.002744
IFI35	17q21.31	-0.16856	0.000942	0.002746
GALNT12	9q22.33	0.168516	0.000945	0.002754
CRHBP	5q13.3	0.168502	0.000946	0.002756
SEZ6L	22q12.1	0.168485	0.000947	0.002759
OCLN	5q13.2	0.16846	0.000948	0.002764
CDKN2A	9p21.3	-0.16845	0.000949	0.002765
ELAVL3	19p13.2	0.168399	0.000953	0.002775
ACOX3	4p16.1	-0.16839	0.000953	0.002775
GRIA4	11q22.3	0.168365	0.000955	0.002781
ZNF273	7q11.21	-0.16836	0.000955	0.002781
TMSB4XP8	4q22.1	-0.16835	0.000956	0.002782
BRD1	22q13.33	0.168333	0.000957	0.002785
MRI1	19p13.13	-0.16833	0.000957	0.002785
ZNF837	19q13.43	-0.16833	0.000957	0.002785
CAPN15	16p13.3	-0.16832	0.000958	0.002786
CMTR1	6p21.2	-0.16832	0.000958	0.002787
CDKN1A	6p21.2	0.168318	0.000958	0.002787
SOX10	22q13.1	0.168289	0.00096	0.002792
WNT3A	1q42.13	-0.16827	0.000962	0.002796
C7ORF33	7q36.1	-0.16826	0.000962	0.002796
HEY1	8q21.13	0.168241	0.000963	0.0028
SNORA74A	5q31.2	-0.16824	0.000963	0.0028
CUZD1	10q26.13	-0.16823	0.000964	0.002802
TBC1D19	4p15.2	0.168203	0.000966	0.002807
EIF2D	1q32.1	-0.16817	0.000968	0.002813
MAP2	2q34	0.168161	0.000969	0.002814
SUSD5	3p22.3	0.168144	0.00097	0.002817
HIST1H3J	6p22.1	-0.16814	0.00097	0.002817
STXBP3	1p13.3	0.168134	0.000971	0.002818
GRWD1	19q13.33	-0.16812	0.000972	0.002821
ADGRA3	4p15.2	0.168042	0.000977	0.002836

CSNK1G2	19p13.3	-0.16804	0.000977	0.002836
HGD	3q13.33	0.168041	0.000977	0.002836
FAM200B	4p15.32	-0.16803	0.000978	0.002838
SLC14A1	18q12.3	0.167995	0.00098	0.002844
SLC22A12	11q13.1	-0.16799	0.000981	0.002846
RASL10B	17q12	-0.16796	0.000983	0.002851
ZNF454	5q35.3	0.167953	0.000983	0.002851
PTPRZ1	7q31.32	0.16791	0.000986	0.002859
STOX1	10q22.1	-0.16789	0.000987	0.002862
ELOVL4	6q14.1	0.167893	0.000987	0.002862
EFNB2	13q33.3	0.167884	0.000988	0.002863
EFTUD2	17q21.31	-0.16788	0.000988	0.002863
NIBAN2	9q34.11	0.167882	0.000988	0.002863
NUP107	12q15	-0.16788	0.000988	0.002863
ABCG1	21q22.3	0.167878	0.000988	0.002863
NMD3	3q26.1	0.167873	0.000989	0.002864
TAB1	22q13.1	-0.16786	0.00099	0.002865
CNR2	1p36.11	0.16785	0.00099	0.002868
FAM167A	8p23.1	0.167839	0.000991	0.002869
CPEB1	15q25.2	0.167823	0.000992	0.002872
CHRNA4	15q25.1	0.167808	0.000993	0.002875
RASGRP3	2p22.3	0.167807	0.000993	0.002875
MAPKBP1	15q15.1	0.167762	0.000997	0.002883
HNRNPL	19q13.2	-0.16775	0.000997	0.002885
HSF2BP	21q22.3	-0.16773	0.000999	0.002889
ACBD7	10p13	-0.16772	0.001	0.002891
DOP1A	6q14.1	0.167673	0.001003	0.0029
DNAJC4	11q13.1	-0.16766	0.001004	0.002901
NHS	Xp22.2-p22.13	0.167648	0.001005	0.002904
NSG2	5q35.2	0.167647	0.001005	0.002904
MS4A1	11q12.2	0.167592	0.001009	0.002915
EFNB3	17p13.1	0.167578	0.00101	0.002917
ISG15	1p36.33	-0.16757	0.00101	0.002918
MAN1B1-DT	9q34.3	-0.16756	0.001011	0.00292
STX17	9q31.1	0.167555	0.001011	0.002921
TMEM167B	1p13.3	0.167549	0.001012	0.002921
CLIC2	Xq28	0.167549	0.001012	0.002921
MOCS2	5q11.2	-0.16754	0.001013	0.002924
GTF2H1	11p15.1	-0.16753	0.001013	0.002924
CLVS1	8q12.2-q12.3	-0.1675	0.001015	0.002931
GAPDHS	19q13.12	-0.16748	0.001017	0.002934
JAKMIP2	5q32	0.167476	0.001017	0.002934
ZNF385D	3p24.3	0.167471	0.001017	0.002935
RFLNB	17p13.3	0.167427	0.00102	0.002943
ZDHHC5	11q12.1	0.167379	0.001024	0.002953
IFIH1	2q24.2	0.167329	0.001028	0.002963
TMED8	14q24.3	0.167326	0.001028	0.002963
PCDHGB3	5q31.3	0.167316	0.001028	0.002965
RIC3	11p15.4	0.167315	0.001029	0.002965
CCDC144B	17p11.2	0.16731	0.001029	0.002965
CLK1	2q33.1	-0.1673	0.001029	0.002966
CEP83-DT	12q22	-0.1673	0.00103	0.002966
TBL1XR1	3q26.32	0.167278	0.001031	0.002971
KCNK15	20q13.12	-0.16727	0.001032	0.002973
SH3BP4	2q37.2	0.16725	0.001033	0.002976
IL33	9p24.1	0.167212	0.001036	0.002983
ODC1	2p25.1	-0.16719	0.001038	0.002988
ARHGDI1A	17q25.3	-0.16717	0.001039	0.002992

TLX1NB	10q24.31	-0.16715	0.00104	0.002994
PLAT	8p11.21	0.16714	0.001041	0.002997
ACKR1	1q23.2	0.167121	0.001043	0.003
AGXT	2q37.3	-0.16712	0.001043	0.003001
AKR7A2	1p36.13	-0.16711	0.001044	0.003002
PLCG2	16q23.3	0.167065	0.001047	0.003011
PDE11A	2q31.2	0.167044	0.001048	0.003015
AEBP1	7p13	0.167033	0.001049	0.003017
GRB7	17q12	-0.16702	0.00105	0.00302
BARX1	9q22.32	0.167007	0.001051	0.003021
ALK	2p23.2-p23.1	0.166991	0.001052	0.003025
MYPN	10q21.3	0.166968	0.001054	0.003029
SLC30A5	5q13.1-q13.2	0.166965	0.001054	0.003029
PXN	12q24.23	0.166964	0.001054	0.003029
MRPS10	6p21.1	-0.16696	0.001055	0.00303
LRRC32	11q13.5	0.166912	0.001058	0.003039
C2	6p21.33	-0.1669	0.001059	0.003041
EIF3CL	16p12.1	-0.1669	0.001059	0.003041
FBXO30	6q24.3	0.166883	0.00106	0.003044
ABCC6P1	16p12.3	-0.16687	0.001061	0.003046
HVCN1	12q24.11	0.166865	0.001062	0.003047
MTREX	5q11.2	0.16686	0.001062	0.003048
NOD1	7p14.3	-0.16684	0.001064	0.003052
ATXN2	12q24.12	0.166837	0.001064	0.003052
NREP	5q22.1	0.166832	0.001064	0.003053
LRRC74A	14q24.3	-0.16683	0.001064	0.003053
ADAM8	10q26.3	0.166825	0.001065	0.003053
CISD1	10q21.1	-0.1668	0.001066	0.003057
CLCA1	1p22.3	0.166784	0.001068	0.003061
MRPL30	2q11.2	-0.16677	0.001069	0.003063
EBF1	5q33.3	0.16677	0.001069	0.003063
GOLGA8CP	15q11.2	-0.16676	0.00107	0.003065
ZFAND4	10q11.22	0.166745	0.001071	0.003068
ARNTL2	12p11.23	0.166697	0.001074	0.003078
HIST2H2AC	1q21.2	-0.16665	0.001078	0.003088
CXCL16	17p13.2	0.166624	0.00108	0.003093
RAB39B	Xq28	0.16662	0.00108	0.003093
DOK4	16q21	-0.1666	0.001082	0.003098
IRAK1	Xq28	-0.16659	0.001083	0.003099
CDS1	4q21.23	0.166567	0.001084	0.003103
CACNA1H	16p13.3	0.166533	0.001087	0.00311
PCGF6	10q24.33	-0.16651	0.001088	0.003114
KCNQ1OT1	11p15.5	-0.16651	0.001088	0.003114
WNK4	17q21.2	0.166509	0.001089	0.003114
SLC39A13	11p11.2	-0.1665	0.001089	0.003115
CHST13	3q21.3	-0.1665	0.001089	0.003115
KDM1A	1p36.12	-0.1665	0.00109	0.003115
MADD	11p11.2	0.166487	0.00109	0.003117
HIST1H2BL	6p22.1	-0.16648	0.001091	0.003119
FAM89A	1q42.2	-0.16646	0.001093	0.003123
SLC40A1	2q32.2	0.166435	0.001094	0.003127
CD300A	17q25.1	0.166433	0.001094	0.003127
LOC728613	5p15.33	-0.16641	0.001096	0.003132
LANCL1	2q34	0.166407	0.001096	0.003132
ACAD11	3q22.1	-0.16638	0.001098	0.003137
REC8	14q12	-0.16638	0.001099	0.003137
KRTAP5-3	11p15.5	-0.16637	0.001099	0.003138
UBE2T	1q32.1	-0.16636	0.0011	0.00314

CFAP58	10q25.1	0.166348	0.001101	0.003143
CMTM4	16q21-q22.1	0.166338	0.001102	0.003145
GCNT2	6p24.3-p24.2	0.166334	0.001102	0.003145
NECTIN4	1q23.3	0.166294	0.001105	0.003153
ARMC2	6q21	-0.16628	0.001106	0.003156
ADCY5	3q21.1	0.166261	0.001108	0.00316
INPP4A	2q11.2	0.166251	0.001109	0.003162
GLYATL1	11q12.1	-0.16624	0.001109	0.003164
FST	5q11.2	0.166219	0.001111	0.003168
TCF21	6q23.2	0.166201	0.001112	0.003171
JPH2	20q13.12	0.166201	0.001112	0.003171
RARRES1	3q25.32	0.166198	0.001113	0.003171
SERHL2	22q13.2	-0.16612	0.001118	0.003187
ZNF667	19q13.43	0.166099	0.00112	0.003192
SELENOP	5p12	0.166087	0.001121	0.003195
ZNF217	20q13.2	0.166049	0.001124	0.003203
NDUFA12	12q22	-0.16604	0.001125	0.003205
COQ5	12q24.31	-0.16604	0.001125	0.003205
GARNL3	9q33.3	-0.16602	0.001127	0.003208
GPKOW	Xp11.23	-0.166	0.001128	0.003211
RPAP1	15q15.1	0.166002	0.001128	0.003211
USP36	17q25.3	-0.16595	0.001132	0.003222
ARHGDIB	12p12.3	0.165949	0.001132	0.003222
DUSP22	6p25.3	-0.16593	0.001133	0.003225
MZB1	5q31.2	0.165933	0.001134	0.003225
ASB2	14q32.12	0.165921	0.001135	0.003227
CAV1	7q31.2	0.165911	0.001135	0.003229
LRTOMT	11q13.4	-0.1659	0.001136	0.00323
CSMD2	1p35.1	0.165899	0.001136	0.00323
ZNF34	8q24.3	-0.16589	0.001137	0.003232
ANKRD46	8q22.3	-0.16586	0.001139	0.003239
PPP1R14A	19q13.2	-0.16579	0.001145	0.003254
SDHAF3	7q21.3	-0.16577	0.001147	0.003259
URB2	1q42.13	0.165737	0.001149	0.003265
GFI1B	9q34.13	0.165733	0.00115	0.003265
PAPOLA	14q32.2	0.165725	0.00115	0.003267
ZCCHC7	9p13.2	-0.1657	0.001152	0.003271
CALHM2	10q24.33	0.165702	0.001152	0.003271
ZNF264	19q13.43	0.165682	0.001154	0.003275
CNOT4	7q33	0.165679	0.001154	0.003275
C1QC	1p36.12	0.165679	0.001154	0.003275
LOC100134368	16p13.3	-0.16568	0.001154	0.003275
VPS54	2p15-p14	0.165662	0.001155	0.003278
ECT2	3q26.31	0.165651	0.001156	0.00328
SPATA13	13q12.12	0.165649	0.001156	0.00328
VPS45	1q21.2	0.165646	0.001157	0.00328
DAB2	5p13.1	0.165635	0.001157	0.003282
STX3	11q12.1	-0.16562	0.001158	0.003285
TRIM72	16p11.2	0.165619	0.001159	0.003285
SYNDIG1	20p11.21	0.165589	0.001161	0.003291
F8A1	Xq28	-0.16558	0.001162	0.003293
ADGRE1	19p13.3-p13.2	0.165507	0.001168	0.00331
AICDA	12p13.31	0.165501	0.001168	0.00331
NR5A2	1q32.1	0.165481	0.00117	0.003315
CDC42EP4	17q25.1	0.165472	0.001171	0.003316
CD40LG	Xq26.3	0.165438	0.001173	0.003324
FADS6	17q25.1	-0.16542	0.001175	0.003327
GALNT15	3p25.1	0.1654	0.001177	0.003331

MBOAT2	2p25.1	0.165369	0.001179	0.003338
OR51E2	11p15.4	0.165369	0.001179	0.003338
NR1H4	12q23.1	0.16534	0.001182	0.003344
GCK	7p13	-0.16534	0.001182	0.003345
B3GALT2	1q31.2	0.165333	0.001182	0.003345
COL15A1	9q22.33	0.165325	0.001183	0.003346
NCF1C	7q11.23	0.165303	0.001185	0.003351
FOXN1	17q11.2	0.165301	0.001185	0.003351
PRKD3	2p22.2	0.1653	0.001185	0.003351
PRORP	14q13.2	0.165294	0.001185	0.003352
OBP2A	9q34.3	-0.16525	0.001189	0.003362
NRG4	15q24.2	0.165198	0.001193	0.003373
MUC1	1q22	0.165187	0.001194	0.003375
XKR4	8q12.1	0.16516	0.001196	0.003381
DHRS13	17q11.2	-0.16515	0.001197	0.003382
PAN2	12q13.3	-0.16512	0.0012	0.003389
C6ORF203	6q21	-0.16512	0.0012	0.003389
PALM3	19p13.12	-0.16512	0.0012	0.003389
ABITRAM	9q31.3	-0.16508	0.001203	0.003396
CD69	12p13.31	0.165084	0.001203	0.003396
CDK12	17q12	0.165075	0.001204	0.003398
FOPNL	16p13.11	-0.16507	0.001204	0.003399
CADPS2	7q31.32	0.16505	0.001206	0.003403
PCAT18	18q11.2	0.165048	0.001206	0.003403
UBTD1	10q24.1-q24.2	-0.16503	0.001208	0.003407
LRRC19	9p21.2	0.165025	0.001208	0.003407
EML1	14q32.2	0.165018	0.001208	0.003409
TMEM108	3q22.1	0.164988	0.001211	0.003415
LFNG	7p22.3	-0.16496	0.001213	0.003422
MRTFA	22q13.1-q13.2	0.164957	0.001214	0.003422
SCN8A	12q13.13	0.164951	0.001214	0.003422
OSGEPL1	2q32.2	-0.16495	0.001214	0.003423
ERI1	8p23.1	0.164941	0.001215	0.003424
ADRA2A	10q25.2	0.164937	0.001215	0.003424
SNAI2	8q11.21	0.164847	0.001223	0.003445
UGT2B15	4q13.2	0.164815	0.001226	0.003453
TGOLN2	2p11.2	0.164786	0.001228	0.003459
VAPB	20q13.32	-0.16478	0.001228	0.003459
CFAP54	12q23.1	0.164784	0.001228	0.003459
ST6GALNAC5	1p31.1	0.164771	0.001229	0.003461
HGSNAT	8p11.21-p11.1	0.164746	0.001231	0.003467
ZNF768	16p11.2	-0.16463	0.001242	0.003495
SLC4A5	2p13.1	-0.16463	0.001242	0.003495
FKBP4	12p13.33	-0.16462	0.001242	0.003495
ZSCAN2	15q25.2	0.16462	0.001242	0.003495
EDNRB	13q22.3	0.164608	0.001243	0.003498
PEG10	7q21.3	0.164549	0.001248	0.003512
HAVCR2	5q33.3	0.164546	0.001249	0.003512
MAPKAPK5	12q24.12-q24.13	-0.16453	0.00125	0.003514
VSIG4	Xq12	0.164531	0.00125	0.003515
CA5BP1	Xp22.2	-0.16451	0.001251	0.003518
ZNF775	7q36.1	-0.1645	0.001253	0.003521
SLC39A5	12q13.3	-0.1645	0.001253	0.003521
KIF7	15q26.1	0.164498	0.001253	0.003521
ZNF551	19q13.43	0.164461	0.001256	0.003529
GPR20	8q24.3	0.164456	0.001257	0.00353
TCEAL3	Xq22.2	0.164421	0.00126	0.003538
TTC21A	3p22.2	-0.16441	0.001261	0.003541

NHLRC1	6p22.3	-0.1644	0.001261	0.003541
MIS12	17p13.2	0.164362	0.001265	0.003551
SULT1C3	2q12.3	0.164346	0.001266	0.003554
LCMT2	15q15.3	0.164343	0.001266	0.003555
NPY5R	4q32.2	0.164319	0.001269	0.003556
EXPH5	11q22.3	0.164281	0.001272	0.003569
C9ORF57	9q21.13	-0.16428	0.001272	0.00357
SPIN3	Xp11.21	-0.16422	0.001277	0.003583
CRYGD	2q33.3	0.164215	0.001278	0.003584
PLEKHA2	8p11.22	0.164212	0.001278	0.003584
SMS	Xp22.11	-0.16419	0.00128	0.003589
FAM13C	10q21.1	0.164185	0.00128	0.00359
BCAR4	16p13.13	-0.16417	0.001282	0.003592
YWHAEP7	17q12	0.164171	0.001282	0.003592
FAM81A	15q22.2	0.164171	0.001282	0.003592
ZNF428	19q13.31	-0.16414	0.001285	0.0036
BOLA1	1q21.2	-0.16413	0.001286	0.003602
HJURP	2q37.1	-0.1641	0.001288	0.003608
FAM228B	2p23.3	-0.16401	0.001296	0.003629
C1GALT1C1	Xq24	-0.16401	0.001296	0.003631
TVP23C	17p12	0.163979	0.001299	0.003637
MAB21L4	2q37.3	-0.16395	0.001301	0.003643
SNORA67	17p13.1	-0.16394	0.001303	0.003646
SKI	1p36.33-p36.32	0.163923	0.001304	0.003649
HINT1	5q23.3	-0.16392	0.001304	0.003649
TM9SF4	20q11.21	-0.16391	0.001305	0.003652
CLRN1-AS1	3q25.1	-0.16391	0.001305	0.003652
CCDC144A	17p11.2	0.163905	0.001306	0.003652
GPRASP1	Xq22.1	0.163893	0.001307	0.003655
GPR68	14q32.11	0.163884	0.001307	0.003656
ISG20L2	1q23.1	0.163847	0.001311	0.003665
SEZ6L2	16p11.2	0.163831	0.001312	0.003668
RNASET2	6q27	-0.16383	0.001312	0.003668
FOXRED2	22q12.3	-0.16381	0.001314	0.003673
DCC	18q21.2	0.163803	0.001315	0.003674
ITLN1	1q23.3	0.163788	0.001316	0.003678
TWINK	10q24.31	-0.16375	0.001319	0.003686
ISL1	5q11.1	0.163732	0.001321	0.003691
LRRC4C	11p12	0.163708	0.001323	0.003697
HLA-DPB2	6p21.32	0.163706	0.001324	0.003697
C22ORF23	22q13.1	0.163683	0.001326	0.003702
EPHA3	3p11.1	0.163678	0.001326	0.003703
NDUFAF1	15q15.1	0.163676	0.001326	0.003703
CANX	5q35.3	0.163666	0.001327	0.003705
SIGLEC1	20p13	0.163648	0.001329	0.003709
LINC00244	7q36.3	-0.16365	0.001329	0.003709
MRPL23-AS1	11p15.5	-0.16364	0.00133	0.00371
ZNF276	16q24.3	-0.16363	0.00133	0.003711
DHRS9	2q31.1	0.163623	0.001331	0.003713
NPHP1	2q13	-0.1636	0.001334	0.00372
HERC6	4q22.1	0.163568	0.001336	0.003726
AK4	1p31.3	-0.16357	0.001337	0.003726
ANPEP	15q26.1	0.163548	0.001338	0.003731
FGGY	1p32.1	-0.16354	0.001338	0.003731
AMBP	9q32	-0.16354	0.001339	0.003731
SIRT5	6p23	-0.16353	0.001339	0.003733
SBDSP1	7q11.23	-0.16351	0.001342	0.003739
RUNDC1	17q21.31	0.163506	0.001342	0.003739

NOTCH3	19p13.12	0.163489	0.001344	0.003743
WDR12	2q33.2	-0.16348	0.001344	0.003743
ALDH1L2	12q23.3	0.163444	0.001348	0.003753
NPM1	5q35.1	-0.16343	0.00135	0.003758
SLC10A3	Xq28	-0.16338	0.001353	0.003768
POGLUT3	11q22.3	0.163362	0.001355	0.003773
KIF1C	17p13.2	0.163344	0.001357	0.003777
CALHM5	6q22.1	0.163312	0.00136	0.003785
KLK11	19q13.41	0.163311	0.00136	0.003785
IL22RA2	6q23.3	0.163293	0.001362	0.003789
DHX15	4p15.2	0.163266	0.001365	0.003796
CTHRC1	8q22.3	0.163256	0.001365	0.003797
LOC283856	16q13	0.163251	0.001366	0.003798
COPZ1	12q13.13	-0.16324	0.001367	0.0038
CRAMP1	16p13.3	0.163226	0.001368	0.003803
RAVER1	19p13.2	-0.16323	0.001368	0.003803
FGF7	15q21.2	0.163216	0.001369	0.003805
AHSA1	14q24.3	-0.1632	0.001371	0.003809
UBXN2B	8q12.1	0.163196	0.001371	0.003809
HTR1B	6q14.1	0.163176	0.001373	0.003814
TMEM145	19q13.2	-0.16317	0.001373	0.003814
PNPLA4	Xp22.31	-0.16314	0.001376	0.003822
HDAC4	2q37.3	0.163127	0.001378	0.003826
UBALD2	17q25.1	-0.1631	0.001381	0.003833
SYT7	11q12.2	-0.16308	0.001382	0.003837
PHF21A	11p11.2	0.163073	0.001383	0.003838
CCDC61	19q13.32	-0.16307	0.001383	0.003839
NKAPL	6p22.1	0.163052	0.001385	0.003843
RRP36	6p21.1	-0.16305	0.001385	0.003843
SNIP1	1p34.3	0.163046	0.001385	0.003843
TBX1	22q11.21	0.163029	0.001387	0.003847
FAR2	12p11.22	0.163022	0.001388	0.003848
PPP2R2A	8p21.2	0.163016	0.001388	0.00385
GPR21	9q33.2	0.163011	0.001389	0.00385
GZMK	5q11.2	0.162993	0.00139	0.003855
FXVD2	11q23.3	-0.16299	0.001391	0.003856
TPM3	1q21.3	0.162942	0.001395	0.003867
CYP11A1	15q24.1	0.162897	0.0014	0.003879
ZKSCAN3	6p22.1	0.162856	0.001404	0.003889
GNAT3	7q21.11	0.162854	0.001404	0.003889
TMEM135	11q14.2	0.162851	0.001404	0.003889
TRIM6	11p15.4	0.162847	0.001404	0.00389
MCPH1	8p23.1	0.162824	0.001407	0.003895
C2CD4A	15q22.2	0.162822	0.001407	0.003895
TP73-AS1	1p36.32	0.162821	0.001407	0.003895
PPP1CB	2p23.2	0.162812	0.001408	0.003897
CD101	1p13.1	0.162806	0.001408	0.003898
RTP3	3p21.31	-0.16279	0.00141	0.003902
IL21R	16p12.1	0.162779	0.001411	0.003904
RBP1	3q23	-0.16278	0.001411	0.003904
PIK3CD	1p36.22	0.162749	0.001414	0.003911
HMSD	18q22.1	0.162729	0.001416	0.003916
PARD3	10p11.22-p11.21	0.162654	0.001423	0.003936
PPP1R32	11q12.2	-0.16263	0.001425	0.003942
SLFN13	17q12	0.162579	0.001431	0.003955
CLDND2	19q13.41	-0.16257	0.001431	0.003957
KLHL30	2q37.3	0.162566	0.001432	0.003958
PLPPR4	1p21.3-p21.2	0.162532	0.001435	0.003966



CLIP3	19q13.12	0.162526	0.001436	0.003967
TAS1R1	1p36.31	0.162443	0.001444	0.003989
NUP43	6q25.1	-0.16242	0.001446	0.003994
PLAUR	19q13.31	0.16241	0.001447	0.003997
DIRAS1	19p13.3	0.162395	0.001449	0.004001
CYP46A1	14q32.2	0.162394	0.001449	0.004001
PRSS33	16p13.3	-0.16237	0.001451	0.004007
CBS	21q22.3	-0.16233	0.001455	0.004016
ASPHD2	22q12.1	0.162255	0.001463	0.004037
HMGCL	1p36.11	-0.16225	0.001463	0.004038
BHLHA15	7q21.3	0.162237	0.001465	0.004041
LINC01555	1p22.3	-0.16223	0.001466	0.004043
NDUFB5	3q26.33	-0.16222	0.001466	0.004044
PRELP	1q32.1	0.162186	0.00147	0.004054
CLPTM1L	5p15.33	-0.16218	0.00147	0.004055
CECR7	22q11.1	0.162163	0.001472	0.004059
GLP2R	17p13.1	0.162155	0.001473	0.004061
KCNN2	5q22.3	0.162106	0.001478	0.004074
LGI1	10q23.33	0.162093	0.001479	0.004077
ZNF875	19q13.12	-0.16208	0.001481	0.00408
THBS2	6q27	0.162063	0.001482	0.004084
GPR173	Xp11.22	0.16204	0.001485	0.00409
RFTN2	2q33.1	0.162017	0.001487	0.004096
AGBL2	11p11.2	-0.16199	0.00149	0.004103
TCEAL9	Xq22.2	0.161953	0.001493	0.004113
MAB21L2	4q31.3	0.161884	0.001501	0.004132
HDAC1	1p35.2-p35.1	-0.16188	0.001501	0.004132
TET3	2p13.1	0.16185	0.001504	0.00414
RIMKLB	12p13.31	0.161847	0.001504	0.00414
TEX45	19p13.2	-0.16184	0.001505	0.004142
USP25	21q21.1	0.161799	0.001509	0.004153
COL4A2	13q34	0.16179	0.00151	0.004155
CRACR2B	11p15.5	-0.16177	0.001512	0.004159
TECTA	11q23.3	0.161766	0.001513	0.004161
JTB	1q21.3	-0.16175	0.001514	0.004164
SHLD2	10q23.2	0.161718	0.001518	0.004173
DUSP6	12q21.33	0.161681	0.001521	0.004183
CLIC6	21q22.12	0.16168	0.001522	0.004183
LINC00476	9q22.32	-0.16165	0.001524	0.00419
HAR1B	20q13.33	0.16162	0.001528	0.004199
KIAA0753	17p13.1	0.161617	0.001528	0.004199
PLRG1	4q31.3	-0.16161	0.001529	0.004202
HEPACAM2	7q21.2	0.161605	0.001529	0.004202
SCARB1	12q24.31	-0.1616	0.00153	0.004202
MANF	3p21.2	-0.1616	0.00153	0.004202
ORM2	9q32	-0.16156	0.001534	0.004212
ANKIB1	7q21.2	0.16156	0.001534	0.004212
SNAI1	20q13.13	-0.16148	0.001543	0.004235
FHL5	6q16.1	0.161472	0.001543	0.004236
MSL2	3q22.3	0.161466	0.001544	0.004238
KLHL21	1p36.31	-0.16145	0.001546	0.004242
CDKN2D	19p13.2	-0.16143	0.001548	0.004248
BACE1	11q23.3	0.161398	0.001551	0.004256
ALMS1	2p13.1	0.16139	0.001552	0.004257
MAT2A	2p11.2	-0.16139	0.001553	0.004258
ZNF250	8q24.3	-0.16137	0.001554	0.004262
NAV2	11p15.1	0.161348	0.001556	0.004268
HIST1H4B	6p22.2	-0.16132	0.001559	0.004274

ZNF174	16p13.3	-0.1613	0.001562	0.004281
COA8	14q32.33	-0.16129	0.001562	0.004282
KERA	12q21.33	0.16127	0.001565	0.004288
MYOM1	18p11.31	0.16123	0.001569	0.004299
SDR16C5	8q12.1	0.161224	0.00157	0.004301
SGSH	17q25.3	-0.16122	0.00157	0.004301
CTSB	8p23.1	0.161196	0.001573	0.004307
CPNE5	6p21.2	0.161191	0.001573	0.004308
PAQR8	6p12.2	0.161162	0.001576	0.004316
KCNB1	20q13.13	0.161159	0.001577	0.004317
RPS26P11	Xq13.1	-0.1611	0.001583	0.004333
RECK	9p13.3	0.16108	0.001585	0.004339
RGS7	1q43 1q23.1	0.161061	0.001587	0.004344
AQP12B	2q37.3	-0.16105	0.001589	0.004348
INTS14	15q22.31	0.161042	0.001589	0.004348
NPIPA1	16p13.11	-0.16103	0.001591	0.004352
CBWD3	9q21.11	-0.16102	0.001592	0.004355
CSK	15q24.1	0.16101	0.001593	0.004356
FZD2	17q21.31	0.161008	0.001593	0.004356
PGBD2	1q44	0.161005	0.001593	0.004356
GDI1	Xq28	-0.161	0.001593	0.004356
GTF2H3	12q24.31	0.16093	0.001601	0.004377
SRL	16p13.3	0.160928	0.001602	0.004377
SERPINF2	17p13.3	-0.16088	0.001607	0.00439
MEGF8	19q13.2	0.160842	0.001611	0.004402
CCNI2	5q31.1	-0.16084	0.001612	0.004403
MOCS1	6p21.2	-0.16083	0.001612	0.004404
SUGT1P3	13q14.11	-0.16082	0.001613	0.004405
ACTR1B	2q11.2	-0.16081	0.001614	0.004408
ZNF440	19p13.2	0.160767	0.001619	0.004422
FAM162A	3q21.1	-0.16074	0.001622	0.004427
NUP214	9q34.13	0.160744	0.001622	0.004427
GDPD5	11q13.4-q13.5	-0.16073	0.001623	0.00443
PDP2	16q22.1	0.160732	0.001623	0.00443
LGALS9C	17p11.2	0.160725	0.001624	0.004431
SPI1	11p11.2	0.1607	0.001627	0.004438
RGS9	17q24.1	0.160695	0.001627	0.004439
GPN2	1p36.11	-0.16064	0.001633	0.004454
IQC�	19p13.11	0.160625	0.001635	0.004459
N4BP2L2	13q13.1	-0.16059	0.001639	0.004468
MAT2B	5q34	0.160499	0.001649	0.004496
PIGY	4q22.1	-0.16042	0.001658	0.004521
RANBP3	19p13.3	-0.16041	0.001659	0.004522
LIN54	4q21.22	0.160346	0.001666	0.004541
AK7	14q32.2	0.160327	0.001669	0.004546
ZFP92	Xq28	0.160326	0.001669	0.004546
TRAPPC12	2p25.3	-0.16033	0.001669	0.004546
ZNF843	16p11.2	0.16032	0.001669	0.004547
FUNDC1	Xp11.3	-0.1603	0.001671	0.004551
PTPN4	2q14.2	0.160292	0.001672	0.004554
RPS29	14q21.3	-0.16027	0.001675	0.00456
AGAP2	12q14.1	0.160254	0.001677	0.004565
APBA2	15q13.1	0.160212	0.001682	0.004577
CORO1A	16p11.2	0.160175	0.001686	0.004588
RIN2	20p11.23	0.16017	0.001686	0.004589
STK31	7p15.3	-0.16015	0.001688	0.004593
SAYSD1	6p21.2	-0.16015	0.001689	0.004594
DISP2	15q15.1	0.160142	0.00169	0.004595

CR1L	1q32.2	0.160141	0.00169	0.004595
ZNF713	7p11.2	0.160118	0.001692	0.004602
AQP11	11q14.1	-0.1601	0.001694	0.004606
EXO5	1p34.2	-0.16009	0.001696	0.004609
NFE2L3P2	17q21.32	-0.16005	0.0017	0.00462
ADORA2A-AS1	22q11.23	-0.16003	0.001703	0.004628
TM7SF3	12p11.23	0.160024	0.001703	0.004628
SGCA	17q21.33	0.159999	0.001706	0.004636
METTL16	17p13.3	0.159994	0.001707	0.004636
LINC01089	12q24.31	-0.15997	0.001709	0.004642
ARPC1B	7q22.1	-0.15996	0.001711	0.004646
STAB1	3p21.1	0.15994	0.001713	0.004651
EBAG9	8q23.2	-0.15992	0.001716	0.004658
POU6F1	12q13.13	0.159906	0.001717	0.004661
RANBP9	6p23	0.159877	0.00172	0.00467
TRIP10	19p13.3	-0.15987	0.001721	0.004671
GPALPP1	13q14.12	-0.15986	0.001722	0.004674
PRAM1	19p13.2	0.159846	0.001724	0.004677
QSOX2	9q34.3	-0.1598	0.001729	0.004691
SHD	19p13.3	-0.1598	0.00173	0.004692
SPINK4	9p13.3	0.159768	0.001733	0.0047
UNC13C	15q21.3	0.159756	0.001734	0.004703
SRD5A1	5p15.31	-0.1597	0.001741	0.00472
WHAMMP2	15q13.1	0.159699	0.001741	0.00472
COMMD4	15q24.2	-0.15966	0.001746	0.004733
RUNX3	1p36.11	0.159646	0.001747	0.004736
VIM	10p13	0.159637	0.001748	0.004738
CORO7	16p13.3	-0.15963	0.001749	0.00474
INE2	Xp22.2	-0.15962	0.001751	0.004744
KCNE1	21q22.12	0.159581	0.001755	0.004754
CNNM1	10q24.2	0.159562	0.001757	0.00476
PTPN7	1q32.1	0.159558	0.001758	0.00476
SLITRK4	Xq27.3	0.159529	0.001761	0.004769
PPP2R5D	6p21.1	-0.15952	0.001762	0.004769
KIF26B	1q44	0.159525	0.001762	0.004769
PRRC2B	9q34.13	0.159523	0.001762	0.004769
TPTE	21p11.2	0.15951	0.001763	0.004773
TBC1D8	2q11.2	0.159466	0.001769	0.004786
RTN2	19q13.32	0.159438	0.001772	0.004794
CLDN18	3q22.3	0.159416	0.001775	0.004801
TXNDC17	17p13.1	-0.15939	0.001778	0.004809
GDPD3	16p11.2	0.159383	0.001779	0.00481
RD3	1q32.3	0.159373	0.00178	0.004813
CCL13	17q12	0.159371	0.00178	0.004813
NOP14	4p16.3	-0.15937	0.001781	0.004813
FRZB	2q32.1	0.15936	0.001781	0.004815
MAL	2q11.1	0.159353	0.001782	0.004817
FGF1	5q31.3	0.159336	0.001784	0.004821
LRRC1	6p12.1	0.159335	0.001784	0.004821
PCDHB9	5q31.3	0.159309	0.001788	0.004829
CFLAR	2q33.1	0.15928	0.001791	0.004838
RNPEPL1	2q37.3	-0.15923	0.001797	0.004853
SPRYD4	12q13.3	-0.15908	0.001815	0.004901
KDM7A	7q34	0.159081	0.001815	0.004901
NDUFA6	22q13.2	-0.15907	0.001817	0.004906
RASSF1	3p21.31	-0.15902	0.001822	0.004919
ANKRD36	2q11.2	-0.159	0.001825	0.004925
LOC400940	2p25.2	0.158961	0.00183	0.004938

LOH12CR2	12p13.2	-0.15896	0.001831	0.004939
TJP3	19p13.3	0.158956	0.001831	0.004939
AKR1C3	10p15.1	-0.15895	0.001831	0.004939
P4HTM	3p21.31 3p21.3	-0.15895	0.001831	0.004939
ESRP1	8q22.1	0.158942	0.001832	0.004942
PARP10	8q24.3	-0.15893	0.001834	0.004944
IFIT2	10q23.31	0.15891	0.001836	0.004951
C4BPA	1q32.2	0.15887	0.001841	0.004963
MATN4	20q13.12	-0.15886	0.001842	0.004965
SCN1B	19q13.11	0.158862	0.001842	0.004965
LOXL1	15q24.1	0.15883	0.001846	0.004974
OGFOD3	17q25.3	-0.15883	0.001846	0.004974
PCDH11X	Xq21.31	0.158784	0.001852	0.004989
MAN2B1	19p13.13	0.158766	0.001854	0.004994
REP15	12p11.22	0.158759	0.001855	0.004996
GIMAP2	7q36.1	0.158752	0.001856	0.004998
VWCE	11q12.2	-0.15872	0.00186	0.005007
CATSPERB	14q32.12	0.158715	0.001861	0.005009
BCL9L	11q23.3	0.158712	0.001861	0.005009
ARL17A	17q21.31	-0.1587	0.001862	0.005011
P4HA2	5q31.1	0.158698	0.001863	0.005013
METTL24	6q21	0.158692	0.001863	0.005014
NANP	20p11.21	-0.15864	0.00187	0.005029
WDR70	5p13.2	-0.15864	0.00187	0.005029
TREML1	6p21.1	0.158641	0.00187	0.005029
C5ORF34	5p12	-0.15862	0.001872	0.005035
IGFBP3	7p12.3	0.158616	0.001873	0.005036
PRPS2	Xp22.2	-0.15858	0.001877	0.005047
DOK3	5q35.3	0.158539	0.001883	0.005061
LYVE1	11p15.4	0.158534	0.001883	0.005062
PTCHD3P1	10p11.23	0.158485	0.00189	0.005078
CD164L2	1p36.11	-0.15844	0.001895	0.005093
CD300LF	17q25.1	0.158396	0.001901	0.005107
ILDR1	3q13.33	0.158393	0.001901	0.005107
SFTA2	6p21.33	-0.15839	0.001901	0.005107
DIPK2B	Xp11.3	0.158344	0.001908	0.005123
DCAF10	9p13.2	0.158299	0.001913	0.005138
SCARNA6	2q37.1	-0.15829	0.001914	0.005138
EFHD2	1p36.21	-0.15829	0.001914	0.005138
NKIRAS2	17q21.2	-0.15827	0.001917	0.005145
PMS2P2	7q11.23	-0.15827	0.001917	0.005145
MBLAC1	7q22.1	-0.15826	0.001918	0.005147
KLRC4	12p13.2	0.15826	0.001918	0.005147
ZNF484	9q22.31	0.158248	0.00192	0.00515
ZNF121	19p13.2	0.158245	0.00192	0.00515
SRRM2	16p13.3	0.158244	0.00192	0.00515
ZNF681	19p12	-0.15821	0.001925	0.005162
SNORD17	20p11.23	-0.15818	0.001928	0.005171
PRIM2	6p11.2	-0.15818	0.001929	0.005172
PYHIN1	1q23.1	0.158173	0.001929	0.005172
C21ORF58	21q22.3	-0.15816	0.001932	0.005178
WDR63	1p22.3	0.158151	0.001932	0.005179
RTN3	11q13.1	-0.15813	0.001935	0.005184
CDC40	6q21	0.158125	0.001936	0.005186
CD79B	17q23.3	0.158115	0.001937	0.005189
TIPRL	1q24.2	0.158112	0.001937	0.005189
ANAPC10	4q31.21	-0.1581	0.001939	0.005192
SMYD3	1q44	-0.158	0.001952	0.005226

MLKL	16q23.1	0.157974	0.001955	0.005236
LINC00899	22q13.31	-0.15794	0.00196	0.005246
SCO2	22q13.33	-0.15793	0.001961	0.00525
OAS2	12q24.13	0.157919	0.001963	0.005253
ESYT3	3q22.3	-0.1579	0.001965	0.005258
ACBD6	1q25.2-q25.3	-0.15788	0.001968	0.005266
FNBP1	9q34.11	0.157874	0.001969	0.005266
ATP13A3	3q29	0.157873	0.001969	0.005266
AMACR	5p13.2	-0.15787	0.001969	0.005267
COL1A1	17q21.33	0.157862	0.00197	0.005268
TSPO	22q13.2	-0.15785	0.001972	0.005272
ARHGAP15	2q22.2-q22.3	0.157848	0.001972	0.005272
NKPD1	19q13.32	-0.15784	0.001974	0.005276
TDRD9	14q32.33	0.157809	0.001977	0.005284
PRKRA	2q31.2	-0.15779	0.00198	0.00529
WDR93	15q26.1	-0.15778	0.001981	0.005292
KIAA1958	9q32	0.157771	0.001982	0.005296
KCND2	7q31.31	0.157766	0.001983	0.005297
FCGR3A	1q23.3	0.157736	0.001987	0.005307
ZSCAN21	7q22.1	-0.15766	0.001997	0.005332
IFI27L1	14q32.12	-0.15766	0.001997	0.005332
DCAF12	9p13.3	0.157658	0.001997	0.005332
RYR1	19q13.2	0.15765	0.001998	0.005334
CAPN14	2p23.1	0.15759	0.002006	0.005355
TSPAN6	Xq22.1	-0.15758	0.002008	0.005359
SIAE	11q24.2	0.157571	0.002009	0.005361
VPS37D	7q11.23	-0.15755	0.002012	0.005368
LARGE1	22q12.3	0.157529	0.002014	0.005374
ECM2	9q22.31	0.157521	0.002016	0.005376
PRR12	19q13.33	0.157426	0.002028	0.00541
BCAS3	17q23.2	0.157405	0.002031	0.005417
SLC25A41	19p13.3	-0.15739	0.002033	0.005422
MARS	12q13.3	-0.15738	0.002034	0.005423
GJB2	13q12.11	0.157336	0.002041	0.005439
TBXAS1	7q34	0.157334	0.002041	0.005439
NRSN1	6p22.3	0.157325	0.002042	0.005442
UBE4B	1p36.22	0.157299	0.002046	0.005451
NAA16	13q14.11	-0.15729	0.002046	0.005452
HSPH1	13q12.3	-0.15728	0.002048	0.005455
PLSCR1	3q24	0.157244	0.002053	0.005469
HIST1H3B	6p22.2	-0.15722	0.002056	0.005475
ZSWIM8	10q22.2	0.157214	0.002057	0.005478
FRMD4A	10p13	0.157202	0.002059	0.005482
CBX2	17q25.3	-0.15719	0.002061	0.005487
KCNMB1	5q35.1	0.157177	0.002062	0.00549
SDF2	17q11.2	-0.15716	0.002065	0.005496
FN3KRP	17q25.3	-0.15715	0.002066	0.005496
SLC26A4	7q22.3	0.157152	0.002066	0.005496
SLC10A6	4q21.3	0.157126	0.002069	0.005505
IL1RN	2q14.1	0.157116	0.002071	0.005508
SHC4	15q21.1	0.15708	0.002076	0.005521
PCDHGB6	5q31.3	0.157072	0.002077	0.005523
HNRNPA2B1	7p15.2	-0.15704	0.002081	0.005534
LOXL4	10q24.2	0.157015	0.002085	0.005543
POLE2	14q21.3	-0.157	0.002087	0.005548
UBR5	8q22.3	0.156984	0.002089	0.005552
RHOH	4p14	0.156966	0.002092	0.005558
ARMCX1	Xq22.1	0.156958	0.002093	0.005561

IL17RA	22q11.1	0.156938	0.002096	0.005567
BTAF1	10q23.32	0.156896	0.002101	0.005582
CWC22	2q31.3	0.156854	0.002107	0.005597
TGFB1	19q13.2	0.156841	0.002109	0.005601
PCDHGA2	5q31.3	0.156832	0.00211	0.005603
LINC01512	6p21.1	-0.15683	0.002111	0.005603
SUMO2	17q25.1	-0.15683	0.002111	0.005603
ST7	7q31.2	-0.15682	0.002112	0.005605
FAM171B	2q32.1	0.156782	0.002117	0.005619
FGF10	5p12	0.156781	0.002117	0.005619
LRRC39	1p21.2	-0.15676	0.00212	0.005625
FAM171A2	17q21.31	0.156751	0.002122	0.005629
HCFC1	Xq28	0.156691	0.00213	0.00565
CTAG1B	Xq28	-0.15669	0.00213	0.00565
STUM	1q42.12	0.15668	0.002132	0.005653
SOCS7	17q12	0.15666	0.002135	0.00566
KRT18	12q13.13	-0.15662	0.00214	0.005673
PDZRN3	3p13	0.15662	0.00214	0.005673
FLJ25758	19p13.2	-0.15661	0.002142	0.005677
MDGA1	6p21.2	0.156597	0.002144	0.00568
PTX3	3q25.32	0.156596	0.002144	0.00568
C1ORF105	1q24.3	-0.15659	0.002145	0.005683
CFAP69	7q21.13	-0.15658	0.002145	0.005683
PTGIS	20q13.13	0.156583	0.002146	0.005683
SREBF2	22q13.2	0.156582	0.002146	0.005683
DHX8	17q21.31	0.15658	0.002146	0.005683
CNIH3	1q42.12	0.156571	0.002147	0.005685
ANKRD34A	1q21.1	0.156566	0.002148	0.005687
PLD2	17p13.2	0.156555	0.002149	0.00569
CCDC71	3p21.31	-0.15654	0.002151	0.005694
MRPL1	4q21.1	-0.15653	0.002153	0.005697
ADAMTS13	9q34.2	-0.15651	0.002156	0.005703
NBDY	Xp11.21	-0.15651	0.002156	0.005704
AHCTF1	1q44	0.156499	0.002158	0.005707
ZNF518A	10q24.1	0.156494	0.002158	0.005708
GRIK2	6q16.3	0.156492	0.002158	0.005708
SLC4A10	2q24.2	0.156486	0.002159	0.00571
PTPN5	11p15.1	0.156474	0.002161	0.005714
PDK4	7q21.3	0.156463	0.002163	0.005717
GHR	5p13.1-p12	0.156373	0.002176	0.00575
LDB2	4p15.32	0.156367	0.002176	0.005752
HTR1F	3p11.2-p11.1	0.156347	0.002179	0.005759
NUDT9	4q22.1	-0.15631	0.002185	0.005774
KCTD20	6p21.31	0.156276	0.00219	0.005785
ZNF141	4p16.3	-0.15626	0.002192	0.00579
C22ORF39	22q11.21	-0.15626	0.002192	0.00579
MMP12	11q22.2	0.156252	0.002193	0.005791
MVD	16q24.2	-0.15614	0.002209	0.005832
BTRC	10q24.32	0.156128	0.002211	0.005838
MRRF	9q33.2	-0.15609	0.002216	0.00585
BTBD10	11p15.3	0.156083	0.002218	0.005854
STEAP2	7q21.13	0.155991	0.002231	0.005889
CHRD1	Xq23	0.155988	0.002232	0.005889
GBA3	4p15.2	0.155986	0.002232	0.005889
ABLIM2	4p16.1	-0.15597	0.002235	0.005896
ALG1	16p13.3	-0.15595	0.002237	0.0059
NAPEPLD	7q22.1	0.155941	0.002239	0.005904
CCR9	3p21.31	0.155898	0.002245	0.005921

DAZAP2	12q13.13	0.155868	0.00225	0.005931
FBLN2	3p25.1	0.155854	0.002252	0.005936
PROB1	5q31.2	0.155848	0.002253	0.005938
MPPE1	18p11.21	0.155845	0.002253	0.005938
LHPP	10q26.13	-0.15584	0.002254	0.005939
BCL6	3q27.3	0.155817	0.002257	0.005947
TNNT1	19q13.42	0.155792	0.002261	0.005956
SGCE	7q21.3	0.155775	0.002264	0.005963
ATAD3C	1p36.33	-0.15577	0.002265	0.005966
FES	15q26.1	0.155754	0.002267	0.005969
DRAIC	15q23	-0.15573	0.002271	0.005979
FOXF1	16q24.1	0.155696	0.002275	0.00599
IKBIP	12q23.1	0.155678	0.002278	0.005997
ASB11	Xp22.2	0.155673	0.002279	0.005998
KRTAP12-1	21q22.3	-0.15566	0.002281	0.006002
KRT40	17q21.2	-0.15565	0.002282	0.006005
ZCCHC9	5q14.1	-0.15562	0.002287	0.006016
CSNK1E	22q13.1	-0.15559	0.002291	0.006025
NUDCD3	7p13	-0.15559	0.002291	0.006025
FCN1	9q34.3	0.155577	0.002293	0.006031
CHRD	3q27.1	0.155528	0.002301	0.00605
CCNO	5q11.2	-0.15551	0.002303	0.006055
MDH1	2p15	-0.15551	0.002304	0.006056
RAPGEF3	12q13.11	0.155503	0.002305	0.006058
MRPS14	1q25.1	-0.15546	0.002311	0.006075
PRR15	7p14.3	-0.15546	0.002312	0.006075
KCNA1	12p13.32	0.155413	0.002318	0.006091
SPATA17	1q41	-0.15541	0.002319	0.006093
GPM6A	4q34.2	0.155403	0.00232	0.006094
CHGB	20p12.3	0.155387	0.002322	0.0061
SLC7A14	3q26.2	0.155385	0.002323	0.0061
TAS2R3	7q34	0.155368	0.002325	0.006106
PARP1	1q42.12	0.155355	0.002327	0.00611
C18ORF21	18q12.2	-0.15533	0.002331	0.006118
STIM1	11p15.4	0.155319	0.002333	0.006123
SMPD1	11p15.4	0.155306	0.002335	0.006128
	9-Mar 12q14.1	-0.15529	0.002337	0.006132
MAPKAP1	9q33.3	-0.15527	0.002341	0.006141
HLA-DPA1	6p21.32	0.155256	0.002343	0.006145
STAG3L2	7q11.23	-0.15526	0.002343	0.006145
FUCA2	6q24.2	-0.15525	0.002344	0.006147
SAP130	2q14.3	0.155195	0.002352	0.006168
RNF115	1q21.1	0.155184	0.002354	0.006171
SENP2	3q27.2	0.155176	0.002355	0.006174
DNER	2q36.3	0.155168	0.002356	0.006176
C17ORF49	17p13.1	-0.15513	0.002361	0.006189
PNPLA1	6p21.31	-0.15511	0.002365	0.006198
POLM	7p13	-0.1551	0.002366	0.006199
DRC1	2p23.3	-0.1551	0.002366	0.006199
RUBCN	3q29	0.155098	0.002367	0.006201
ADAMTS1	21q21.3	0.155086	0.002369	0.006205
TENM3-AS1	4q34.3	0.155074	0.002371	0.006209
KIN	10p14	-0.15507	0.002372	0.006211
BAHCC1	17q25.3	0.155039	0.002376	0.006221
LAMA1	18p11.31	0.155024	0.002379	0.006227
KLHL12	1q32.1	0.155021	0.002379	0.006227
IHH	2q35	-0.15502	0.00238	0.006228
IFITM5	11p15.5	-0.15497	0.002387	0.006247

ZNF143	11p15.4	0.154966	0.002388	0.006247
TM2D3	15q26.3	0.154921	0.002395	0.006265
CLECL1	12p13.31	0.154909	0.002397	0.006269
HNRNPLL	2p22.1	0.154907	0.002397	0.006269
UBE2QL1	5p15.31	0.154897	0.002398	0.006272
CISD2	4q24	-0.15489	0.002399	0.006274
GNG5	1p22.3	-0.15484	0.002407	0.006293
CNTLN	9p22.2	0.154839	0.002408	0.006294
LUM	12q21.33	0.154837	0.002408	0.006294
ELN	7q11.23	0.154797	0.002414	0.00631
LHX9	1q31.3	0.154792	0.002415	0.006311
CLEC9A	12p13.2	0.154787	0.002416	0.006312
ZNF587	19q13.43	0.154748	0.002422	0.006328
ZNFX1	20q13.13	0.154678	0.002433	0.006356
HTATIP2	11p15.1	-0.15467	0.002434	0.006358
DBP	19q13.33	-0.15467	0.002435	0.006359
SCIN	7p21.3	0.154662	0.002436	0.00636
GLRX2	1q31.2	-0.15462	0.002443	0.006379
ARFGEF1	8q13.2	0.154613	0.002444	0.006379
WDSUB1	2q24.2	-0.15459	0.002448	0.006389
PAOX	10q26.3	-0.15457	0.00245	0.006394
ADAMTS16	5p15.32	0.154535	0.002456	0.00641
CNTN3	3p12.3	0.154518	0.002459	0.006416
CYP3A5	7q22.1	0.154515	0.00246	0.006416
FLT4	5q35.3	0.154502	0.002462	0.00642
NTRK1	1q23.1	0.154501	0.002462	0.00642
RAB9B	Xq22.2	0.154499	0.002462	0.00642
CYSRT1	9q34.3	-0.15445	0.002469	0.006439
IDH3B	20p13	-0.15444	0.002472	0.006443
C21ORF91	21q21.1	0.154436	0.002472	0.006444
RIC8B	12q23.3	0.154432	0.002473	0.006445
KBTBD11	8p23.3	0.15437	0.002483	0.006471
HHEX	10q23.33	0.154335	0.002489	0.006485
ADCY3	2p23.3	-0.15433	0.00249	0.006486
SEMA3E	7q21.11	0.154309	0.002493	0.006494
MYBPHL	1p13.3	-0.15425	0.002503	0.00652
LYRM9	17q11.2	-0.15424	0.002505	0.006524
AKR1A1	1p34.1	-0.15421	0.002508	0.006532
CRLS1	20p12.3	-0.15417	0.002515	0.006549
CASP10	2q33.1	0.154166	0.002516	0.006551
ADARB2	10p15.3	0.154157	0.002518	0.006554
FABP6	5q33.3	-0.15413	0.002522	0.006565
MEOX1	17q21.31	0.154114	0.002525	0.006571
PRPH	12q13.12	0.154089	0.002529	0.006581
FCAR	19q13.42	0.154077	0.002531	0.006585
KDSR	18q21.33	0.154067	0.002533	0.006587
P2RY4	Xq13.1	0.154067	0.002533	0.006587
ZNF799	19p13.2	-0.15407	0.002533	0.006587
NBPF14	1q21.2	0.154001	0.002544	0.006615
GLI1	12q13.3	0.15398	0.002547	0.006622
BMT2	7q31.1	0.15398	0.002547	0.006622
SWT1	1q25.3	0.153975	0.002548	0.006623
ZNF830	17q12	-0.15394	0.002554	0.006637
CASZ1	1p36.22	0.153929	0.002556	0.006641
PCDH15	10q21.1	0.153907	0.00256	0.00665
ZNF638	2p13.3-p13.2	0.1539	0.002561	0.006652
SLC37A1	21q22.3	0.153899	0.002561	0.006652
SLAIN1	13q22.3	0.153895	0.002561	0.006653



ZDHHC3	3p21.31	0.153891	0.002562	0.006653
TMEM8B	9p13.3	-0.15389	0.002563	0.006655
TBC1D2	9q22.33	0.153864	0.002567	0.006663
HEBP2	6q24.1	-0.15386	0.002567	0.006663
SIGLEC15	18q12.3	0.153855	0.002568	0.006666
COLCA1	11q23.1	0.153843	0.00257	0.00667
CLDN12	7q21.13	0.153816	0.002575	0.006681
KYNU	2q22.2	0.153789	0.002579	0.006692
POLE3	9q32	-0.15376	0.002584	0.006702
LINC00523	14q32.2	0.153752	0.002586	0.006706
ECT2L	6q24.1	-0.15375	0.002586	0.006706
KCNIP1	5q35.1	0.15367	0.002599	0.006741
BCL2L13	22q11.21	0.153652	0.002602	0.006748
KLHL7	7p15.3	-0.15365	0.002603	0.006748
SMC6	2p24.2	0.153613	0.002609	0.006763
CHRD12	11q13.4	0.15358	0.002615	0.006777
SCP2	1p32.3	0.153514	0.002626	0.006805
FBXL16	16p13.3	0.153499	0.002629	0.006811
ANP32B	9q22.33	-0.15348	0.002633	0.006821
ALX1	12q21.31	-0.15346	0.002635	0.006825
PILRA	7q22.1	0.153441	0.002639	0.006833
C1RL-AS1	12p13.31	0.153441	0.002639	0.006833
ABCC3	17q21.33	0.153439	0.002639	0.006833
ERP44	9q31.1	-0.15343	0.002641	0.006838
SETMAR	3p26.1	-0.1534	0.002645	0.006848
ZNF780A	19q13.2	0.153366	0.002652	0.006863
FAM83H	8q24.3	-0.15336	0.002652	0.006863
OAS3	12q24.13	0.153363	0.002652	0.006863
PMP2	8q21.13	0.153362	0.002652	0.006863
AVPR1A	12q14.2	0.153357	0.002653	0.006864
TNFAIP8L3	15q21.2	0.153337	0.002657	0.006872
GGA1	22q13.1	-0.15331	0.002661	0.006882
GUSBP1	5p14.3	-0.15329	0.002665	0.006893
FAM124B	2q36.2	0.153266	0.002669	0.006901
DAP3	1q22	-0.15325	0.002672	0.006908
TMTC4	13q32.3	-0.15325	0.002672	0.006908
AXIN1	16p13.3	-0.15321	0.002679	0.006924
HRCT1	9p13.3	-0.15319	0.002682	0.006931
C9ORF78	9q34.11	-0.15318	0.002684	0.006936
GNMT	6p21.1	-0.15317	0.002685	0.006937
ZNF429	19p12	0.153165	0.002686	0.00694
ZNF541	19q13.33	-0.15312	0.002694	0.006959
TRUB1	10q25.3	0.153118	0.002695	0.00696
SETD5	3p25.3	0.153089	0.0027	0.006972
SMIM30	7q31.1	-0.15304	0.002709	0.006996
SUSD3	9q22.31	-0.15303	0.00271	0.006997
CD300E	17q25.1	0.153018	0.002712	0.007002
SPAG4	20q11.22	-0.15302	0.002713	0.007002
HAUS8	19p13.11	-0.15301	0.002713	0.007003
GRIN3A	9q31.1	0.153002	0.002715	0.007007
SLC26A1	4p16.3	-0.15299	0.002718	0.007012
BHMT2	5q14.1	0.152967	0.002721	0.007021
KPNA3	13q14.2	-0.15296	0.002723	0.007024
TRPC6	11q22.1	0.152955	0.002723	0.007024
INSYN1	15q24.1	0.152952	0.002724	0.007025
ABHD4	14q11.2	0.15293	0.002728	0.007034
ANXA10	4q32.3	0.152924	0.002729	0.007036
CACYBP	1q25.1	-0.15292	0.00273	0.007037

ADAMTSL5	19p13.3	-0.15288	0.002736	0.007053
ATP1B3	3q23	-0.15287	0.002739	0.007058
KIAA0825	5q15	0.152795	0.002752	0.007091
SLC1A2	11p13	0.152784	0.002754	0.007096
ARMT1	6q25.1	0.152762	0.002758	0.007105
CD300LG	17q21.31	0.152756	0.002759	0.007107
PRPF38A	1p32.3	-0.15275	0.002761	0.00711
PJVK	2q31.2	-0.15274	0.002763	0.007114
ZNRF2P1	7p14.3	0.152717	0.002766	0.007122
DHX37	12q24.31	-0.15271	0.002768	0.007126
TACR1	2p12	0.152698	0.002769	0.007129
MAP3K11	11q13.1	-0.15267	0.002774	0.007139
GRIP2	3p25.1	0.15266	0.002776	0.007144
C1ORF56	1q21.3	-0.15263	0.002782	0.007159
LOC728554	5q35.3	-0.15262	0.002784	0.007162
KIAA0556	16p12.1	0.152612	0.002785	0.007163
KIF5C	2q23.1-q23.2	0.152612	0.002785	0.007163
COQ8B	19q13.2	-0.15256	0.002794	0.007187
FGR	1p35.3	0.152551	0.002796	0.00719
FAM172A	5q15	0.152548	0.002796	0.00719
RETSAT	2p11.2	0.15254	0.002798	0.007193
ADGRL4	1p31.1	0.152477	0.002809	0.007222
NDOR1	9q34.3	-0.15247	0.002811	0.007225
PROX1	1q32.3	0.152461	0.002812	0.007227
UMODL1	21q22.3	-0.15246	0.002813	0.007229
DRGX	10q11.23	0.152446	0.002815	0.007233
IGSF21	1p36.13	0.152419	0.00282	0.007244
ABCG8	2p21	0.152415	0.002821	0.007245
COX10	17p12	0.152404	0.002823	0.007249
RGS22	8q22.2	0.152366	0.00283	0.007267
VMAC	19p13.3	-0.15235	0.002832	0.007272
RNU11	1p35.3	-0.15235	0.002833	0.007272
TMBIM1	2q35	0.152322	0.002838	0.007284
C22ORF24	22q12.3	0.152312	0.00284	0.007288
RTP2	3q27.3	0.152274	0.002847	0.007305
ZNF175	19q13.41	0.152258	0.00285	0.007312
ACSL1	4q35.1	0.152216	0.002857	0.007331
GALNS	16q24.3	-0.15221	0.002858	0.007332
ANAPC4	4p15.2	-0.1522	0.002861	0.007339
FCRL1	1q23.1	0.152176	0.002865	0.007347
CD38	4p15.32	0.152139	0.002872	0.007363
SMAP2	1p34.2	0.152065	0.002885	0.007398
HMGB2	4q34.1	-0.15206	0.002886	0.0074
ZNF137P	19q13.41	-0.15204	0.00289	0.007407
TRIM5	11p15.4	0.152	0.002898	0.007426
CMTM8	3p22.3	-0.15198	0.002902	0.007437
PER1	17p13.1	0.151956	0.002906	0.007446
CADM2	3p12.1	0.151954	0.002906	0.007446
TMEM229A	7q31.32	0.151938	0.002909	0.007453
TMEM176A	7q36.1	-0.15192	0.002913	0.007461
TGFB1I1	16p11.2	0.151874	0.002921	0.007481
HEATR1	1q43	0.15187	0.002922	0.007482
CDR1	Xq27.1	0.151849	0.002926	0.007492
ABI3	17q21.32	0.151812	0.002933	0.007509
KIF18B	17q21.31	-0.15177	0.00294	0.007526
LMCD1	3p25.3	0.151773	0.00294	0.007526
BMF	15q15.1	0.151738	0.002947	0.007542
HOXA3	7p15.2	-0.15173	0.002948	0.007542

OR7E156P	13q21.31	-0.1517	0.002954	0.007558
FLRT1	11q13.1	-0.15168	0.002959	0.007569
ULBP2	6q25.1	0.151671	0.00296	0.00757
IFT27	22q12.3	-0.15164	0.002965	0.007583
NUTM1	15q14	0.151618	0.00297	0.007594
ZCWPW2	3p24.1	0.151615	0.00297	0.007595
NT5M	17p11.2	-0.15161	0.002971	0.007595
CNOT8	5q33.2	0.151586	0.002976	0.007607
LDLRAD3	11p13	-0.15158	0.002977	0.007608
ENO1	1p36.23	-0.15156	0.00298	0.007616
TCEAL5	Xq22.1	0.151556	0.002982	0.007619
CREB3L4	1q21.3	0.151506	0.002992	0.007643
APCDD1	18p11.22	-0.1515	0.002992	0.007643
ZNF747	16p11.2	0.151484	0.002996	0.007652
ADH1C	4q23	0.151479	0.002997	0.007653
FAM83C	20q11.22	-0.15147	0.002998	0.007655
IL2RB	22q12.3	0.151447	0.003003	0.007667
TBPL1	6q23.2	-0.15143	0.003007	0.007675
MFSD4A-AS1	1q32.1	0.151411	0.00301	0.007682
KIAA1324	1p13.3	0.15141	0.00301	0.007682
NP1PB5	16p12.2	-0.15139	0.003013	0.007689
AQP9	15q21.3	0.151364	0.003019	0.007703
KRT35	17q21.2	-0.15131	0.003029	0.007727
ELF2	4q31.1	0.151312	0.003029	0.007727
PSMD6	3p14.1	-0.15131	0.00303	0.007728
ADAMTS9	3p14.1	0.151294	0.003033	0.007734
SPATA46	1q23.3	0.151292	0.003033	0.007734
CYP26B1	2p13.2	0.151284	0.003035	0.007737
GNAI3	1p13.3	0.151261	0.003039	0.007748
MBD2	18q21.2	0.151257	0.00304	0.007748
CRKL	22q11.21	0.151255	0.00304	0.007748
TBKBP1	17q21.32	-0.15124	0.003044	0.007758
KIAA0087	7p15.2	0.151195	0.003052	0.007776
BRD2	6p21.32	0.151188	0.003053	0.007779
IVD	15q15.1	0.151185	0.003054	0.00778
HLA-F-AS1	6p22.1	-0.15115	0.003062	0.007798
UBE2L3	22q11.21	-0.15114	0.003063	0.007801
TAF2	12q14.1	0.151122	0.003066	0.007808
PLEKHA3	2q31.2	0.151101	0.003071	0.007818
SAXO2	15q25.2	0.151068	0.003077	0.007833
MFGE8	15q26.1	0.151067	0.003077	0.007833
IFT46	11q23.3	-0.15105	0.003081	0.00784
NLRP1	17p13.2	0.151023	0.003086	0.007853
NAPA	19q13.32-q13.33	-0.15102	0.003087	0.007855
CCL15-CCL14	17q12	-0.15101	0.003088	0.007856
APOA2	1q23.3	-0.15095	0.003101	0.007889
NTM	11q25	0.150871	0.003116	0.007926
CRTAM	11q24.1	0.150861	0.003118	0.00793
FIZ1	19q13.42	-0.15085	0.00312	0.007932
CHST11	12q23.3	0.150852	0.00312	0.007932
HBEGF	5q31.3	0.150852	0.00312	0.007932
MAST1	19p13.13	-0.15084	0.003122	0.007935
FAM86JP	3q21.2	-0.15084	0.003122	0.007935
FBLN7	2q13-q14.1	0.150819	0.003127	0.007946
CLEC5A	7q34	0.150809	0.003129	0.00795
LAMB2	3p21.31	0.1508	0.003131	0.007953
FAM110A	20p13	-0.15077	0.003136	0.007965
CHST2	3q24	0.150771	0.003136	0.007966

TMEM128	4p16.3	-0.15075	0.00314	0.007973
ORMDL3	17q21.1	-0.15075	0.00314	0.007973
FOXP2	7q31.1	0.15075	0.003141	0.007973
ADGRD2	9q33.3	-0.15075	0.003141	0.007973
GNA15	19p13.3	0.150743	0.003142	0.007976
GPR171	3q25.1	0.150704	0.00315	0.007994
TMEM190	19q13.42	-0.15067	0.003156	0.008009
OR10A4	11p15.4	-0.15066	0.003159	0.008016
PARP4	13q12.12	0.150655	0.00316	0.008017
DGKI	7q33	0.150621	0.003167	0.008033
SETDB2	13q14.2	-0.15062	0.003168	0.008034
CD80	3q13.33	0.150615	0.003168	0.008034
ERBB3	12q13.2	0.150609	0.003169	0.008036
ADPGK	15q24.1	0.150568	0.003178	0.008056
SLC38A4	12q13.11	0.150561	0.003179	0.008059
INKA2	1p13.2	0.15053	0.003185	0.008074
ENTPD1	10q24.1	0.150502	0.003191	0.008087
FBXO22	15q24.2	0.150488	0.003194	0.008093
CLDN22	4q35.1	-0.15048	0.003196	0.008097
SLC6A15	12q21.31	0.150479	0.003196	0.008097
VPS37A	8p22	0.150469	0.003198	0.0081
MT3	16q13	-0.15046	0.003199	0.008102
CSTF2	Xq22.1	-0.15046	0.003201	0.008106
SHC1	1q21.3	0.150438	0.003204	0.008114
MLANA	9p24.1	0.150419	0.003208	0.008122
UNKL	16p13.3	-0.1504	0.003211	0.00813
OXCT2	1p34.2	-0.1504	0.003213	0.008132
AKAP7	6q23.2	0.150388	0.003214	0.008135
LRFN5	14q21.1	0.150379	0.003216	0.008139
CD14	5q31.3	0.150364	0.003219	0.008146
ART1	11p15.4	0.150335	0.003225	0.00816
EZH2	7q36.1	-0.15032	0.003227	0.008164
CDC25A	3p21.31	-0.15028	0.003238	0.008189
BLM	15q26.1	0.150263	0.00324	0.008194
PCDH12	5q31.3	0.150263	0.00324	0.008194
WDR92	2p14	-0.15026	0.003241	0.008195
C11ORF95	11q13.1	-0.15025	0.003243	0.008199
ZNF362	1p35.1	0.150245	0.003244	0.0082
TENM1	Xq25	0.150194	0.003255	0.008226
TSPAN17	5q35.2	-0.15019	0.003256	0.008227
GOLGA8G	15q13.1	-0.15018	0.003257	0.008231
HIST1H2BI	6p22.2	-0.15016	0.003262	0.008241
GUCY1A2	11q22.3	0.150157	0.003262	0.008241
CCDC8	19q13.32	0.150151	0.003264	0.008243
SLC7A5P1	16p11.2	-0.15015	0.003264	0.008243
SORBS2	4q35.1	0.15013	0.003268	0.008252
PCDHGB5	5q31.3	0.150108	0.003273	0.008263
KIAA1210	Xq24	0.150081	0.003278	0.008276
PNPLA8	7q31.1	0.150065	0.003282	0.008283
C1QTNF3	5p13.2	0.150061	0.003282	0.008284
LINC00173	12q24.22	-0.15006	0.003284	0.008287
RPS17	15q25.2	-0.15003	0.00329	0.008301
C9ORF153	9q21.33	-0.15002	0.00329	0.008301
LINC02085	3q12.3	0.149993	0.003297	0.008316
ARL3	10q24.32	-0.14993	0.00331	0.008348
ELK1	Xp11.23	-0.14992	0.003311	0.008351
ITIH5	10p14	0.149863	0.003324	0.008383
ATP10B	5q34	0.149841	0.003329	0.008393

EPPK1	8q24.3	0.149822	0.003333	0.008403
ASMT	Xp22.33 and Yp11.2	-0.14981	0.003335	0.008408
MTHFR	1p36.22	0.149717	0.003355	0.008457
MAP4K1	19q13.2	0.149706	0.003358	0.008462
PARD6G	18q23	0.149689	0.003361	0.00847
NUSAP1	15q15.1	0.149683	0.003363	0.008472
RAI2	Xp22.13	0.14967	0.003365	0.008478
NIM1K	5p12	0.149658	0.003368	0.008483
GJD3	17q21.2	0.149651	0.00337	0.008486
CHMP3	2p11.2	0.149613	0.003378	0.008506
CDH3	16q22.1	-0.14961	0.003378	0.008506
SIRPD	20p13	0.149591	0.003383	0.008516
PLA2G3	22q12.2	0.149565	0.003388	0.008529
RHOT1	17q11.2	-0.14956	0.00339	0.008532
FAM185A	7q22.1	-0.14955	0.003391	0.008533
SNORA21	17q12	-0.14955	0.003391	0.008533
APEH	3p21.31	-0.14954	0.003393	0.008536
LILRB5	19q13.42	0.149541	0.003393	0.008536
MED12	Xq13.1	0.149533	0.003395	0.00854
CSKMT	11q12.3	-0.14953	0.003397	0.008543
EPHB6	7q34	0.149518	0.003398	0.008546
NCS1	9q34.11	-0.14943	0.003418	0.008594
PLEKHG4B	5p15.33	0.149425	0.003418	0.008594
DCN	12q21.33	0.149421	0.003419	0.008596
LRRC37A16P	17q24.2	0.149378	0.003429	0.008618
S100A3	1q21.3	-0.14934	0.003437	0.008638
PRSS45P	3p21.31	-0.14933	0.00344	0.008644
DTL	1q32.3	0.14931	0.003444	0.008652
DNAH5	5p15.2	0.149302	0.003445	0.008655
AGT	1q42.2	-0.14928	0.003449	0.008664
CAMK2A	5q32	0.149274	0.003451	0.008668
USP27X	Xp11.23	-0.14911	0.003489	0.008761
ATP6AP1	Xq28	-0.14908	0.003495	0.008775
MEF2B	19p13.11	-0.14905	0.003502	0.008792
ADGRG2	Xp22.13	0.149037	0.003504	0.008795
LOC100130872	4p16.3	-0.14904	0.003504	0.008795
DDX54	12q24.13	-0.14903	0.003506	0.008798
GALR1	18q23	0.149027	0.003506	0.008798
SYVN1	11q13.1	-0.14902	0.003507	0.0088
SLC22A1	6q25.3	-0.14902	0.003509	0.008802
THEMIS	6q22.33	0.149012	0.003509	0.008803
SLC18A3	10q11.23	0.149001	0.003512	0.008808
TCL1A	14q32.13	0.149	0.003512	0.008808
HIST1H3E	6p22.2	0.148996	0.003513	0.008809
MPND	19p13.3	-0.14896	0.003521	0.008827
PSME1	14q12	-0.14895	0.003524	0.008833
ZNRF1	16q23.1	-0.14895	0.003524	0.008833
GID4	17p11.2 17p11.2	0.148875	0.00354	0.008872
GBP2	1p22.2	0.148858	0.003544	0.008881
LARP4	12q13.12	0.148829	0.003551	0.008896
ALPK3	15q25.3	0.148825	0.003551	0.008897
FHAD1	1p36.21	0.14881	0.003555	0.008905
LSAMP	3q13.31	0.148805	0.003556	0.008906
CLCA2	1p22.3	0.148803	0.003556	0.008906
VPS41	7p14.1	0.148797	0.003558	0.008908
HEXA-AS1	15q23	0.148794	0.003558	0.008908
BMP8A	1p34.3	0.148794	0.003558	0.008908
PROSER2	10p14	-0.14877	0.003564	0.00892

EPOR	19p13.2	0.148758	0.003567	0.008926
RNF165	18q21.1	0.148754	0.003567	0.008927
CDO1	5q22.3	0.148701	0.00358	0.008956
CORIN	4p12	0.148694	0.003581	0.008959
IER5	1q25.3	0.148692	0.003582	0.008959
ZNF727	7q11.21	0.148684	0.003583	0.008963
GRIPAP1	Xp11.23	-0.14868	0.003584	0.008963
NECTIN3	3q13.13	0.148679	0.003585	0.008963
OLR1	12p13.2	0.148591	0.003604	0.009012
BBS12	4q27	0.148585	0.003606	0.009015
ZNF180	19q13.31	0.148541	0.003616	0.009038
SLCO2B1	11q13.4	0.14853	0.003618	0.009044
ANKS1B	12q23.1	0.148528	0.003619	0.009044
C2ORF69	2q33.1	0.148492	0.003627	0.009063
MORC2-AS1	22q12.2	-0.14849	0.003629	0.009066
SMIM7	19p13.11	-0.14848	0.003631	0.00907
CD48	1q23.3	0.14845	0.003637	0.009084
PRX	19q13.2	0.148446	0.003638	0.009085
TSPEAR	21q22.3	-0.14842	0.003645	0.009101
GRIP1	12q14.3	0.148397	0.003649	0.009111
SEPTIN8	5q31.1	0.148373	0.003655	0.009124
NIBAN3	19p13.11	0.148367	0.003656	0.009126
CCL22	16q21	0.148359	0.003658	0.009129
CCDC103	17q21.31	-0.14836	0.003658	0.009129
NLGN2	17p13.1	0.148331	0.003664	0.009144
MYH10	17p13.1	0.148327	0.003665	0.009145
ACAA2	18q21.1	0.148324	0.003666	0.009145
ANKRD37	4q35.1	0.148278	0.003677	0.009171
SPP1	4q22.1	0.148227	0.003689	0.009199
C18ORF32	18q21.1	0.148226	0.003689	0.009199
ZNF507	19q13.11	0.148191	0.003697	0.009218
LPAR4	Xq21.1	0.14818	0.0037	0.009223
BMS1	10q11.21	0.148176	0.0037	0.009224
LEPR	1p31.3	0.148157	0.003705	0.009235
FKBP14	7p14.3	0.148151	0.003706	0.009237
GATC	12q24.31	-0.14814	0.003709	0.009242
DNAJB2	2q35	-0.14812	0.003713	0.009251
STAT2	12q13.3	0.148119	0.003714	0.009252
TTPAL	20q13.12	-0.14812	0.003714	0.009252
DNAJC9	10q22.2	-0.14811	0.003716	0.009254
JAG2	14q32.33	-0.1481	0.003717	0.009258
MBIP	14q13.3	0.148094	0.00372	0.009262
SLC16A9	10q21.2	0.148086	0.003722	0.009266
IL1B	2q14.1	0.14803	0.003735	0.009297
TMEM51	1p36.21	-0.14799	0.003745	0.00932
PGAM4	Xq21.1	0.147971	0.003749	0.00933
CRYBA4	22q12.1	-0.14796	0.00375	0.009333
OLFML2B	1q23.3	0.147952	0.003753	0.009338
BBS5	2q31.1	-0.14795	0.003754	0.009338
MPHOSPH10	2p13.3	-0.14794	0.003755	0.009342
CCDC113	16q21	-0.14793	0.003759	0.009349
TUG1	22q12.2	0.147871	0.003773	0.009382
PIGX	3q29	-0.14786	0.003775	0.009388
LINC00698	3p14.2	-0.14785	0.003777	0.009391
NAIF1	9q34.11	-0.14781	0.003788	0.009417
TRRAP	7q22.1	0.147796	0.00379	0.009421
SLC4A11	20p13	0.147795	0.003791	0.009421
SCARA3	8p21.1	0.147783	0.003793	0.009426

PAPOLG	2p16.1	0.147783	0.003794	0.009426
ZNF81	Xp11.23	0.147779	0.003795	0.009427
ZNF17	19q13.43	0.147776	0.003795	0.009428
APOA1	11q23.3	-0.14777	0.003797	0.009431
HMX3	10q26.13	0.147766	0.003798	0.009432
ADAMTS8	11q24.3	0.147736	0.003805	0.009448
ZIC4	3q24	-0.14771	0.00381	0.009461
HDC	15q21.2	0.147705	0.003812	0.009464
CLEC12A	12p13.31	0.147693	0.003815	0.00947
CYP27C1	2q14.3	0.147687	0.003817	0.009473
CAMK2N1	1p36.12	-0.14768	0.003819	0.009478
SNX27	1q21.3	0.147663	0.003822	0.009484
CCNK	14q32.2	0.147643	0.003827	0.009496
CPT1B	22q13.33	-0.14762	0.003832	0.009507
BAIAP2	17q25.3	-0.14762	0.003833	0.009508
SNORA65	9q33.3	-0.14756	0.003847	0.009542
PHACTR1	6p24.1	0.147508	0.00386	0.009572
ZNF446	19q13.43	-0.1475	0.003862	0.009576
HMGB3	Xq28	-0.1475	0.003863	0.009577
PRUNE1	1q21.3	0.147487	0.003865	0.009581
C20ORF203	20q11.21	-0.14747	0.003869	0.009589
SFR1	10q25.1	-0.14746	0.003871	0.009593
PLEC	8q24.3	0.147454	0.003873	0.009597
LSM12	17q21.31	-0.14742	0.00388	0.009614
MAP7D2	Xp22.12	-0.14742	0.003882	0.009616
EMCN	4q24	0.147415	0.003883	0.009617
LINGO4	1q21.3	0.14741	0.003884	0.009619
ABCA4	1p22.1	0.1474	0.003886	0.009624
SKAP2	7p15.2	0.147398	0.003887	0.009624
ALAS1	3p21.2	0.14739	0.003889	0.009628
RETREG3	17q21.2	-0.14737	0.003895	0.00964
ZDHHC6	10q25.2	-0.14737	0.003895	0.00964
AHCYL1	1p13.3	0.147362	0.003896	0.009641
PAX2	10q24.31	0.147314	0.003907	0.009669
ASB16-AS1	17q21.31	-0.14728	0.003916	0.009691
WNT10A	2q35	-0.14723	0.003928	0.009718
BPNT1	1q41	0.147226	0.003929	0.009719
CADM1	11q23.3	0.147197	0.003936	0.009736
TMEM185A	Xq28	-0.14719	0.003938	0.00974
TBC1D9	4q31.21	0.147169	0.003943	0.00975
ADGRL1	19p13.12	-0.14716	0.003944	0.009752
RTL5	Xq13.1	0.147159	0.003946	0.009754
EPHB2	1p36.12	-0.14715	0.003948	0.009758
HIC1	17p13.3	0.14715	0.003948	0.009758
CCDC87	11q13.2	0.147143	0.003949	0.00976
ANAPC16	10q22.1	-0.14711	0.003958	0.00978
FKBP5	6p21.31	0.147066	0.003969	0.009806
SPTB	14q23.3	0.147054	0.003972	0.009811
ZNF136	19p13.2	0.147024	0.003979	0.009829
DRD2	11q23.2	-0.14702	0.00398	0.009829
WNT9B	17q21.32	0.147008	0.003983	0.009836
CERS4	19p13.2	-0.147	0.003986	0.009841
TLE1	9q21.32	0.146992	0.003987	0.009844
SNORA11	Xp11.21	-0.14698	0.003991	0.009852
CHRM5	15q14	0.14697	0.003993	0.009855
TEKT4	2q11.1	-0.14696	0.003996	0.009862
TRIM40	6p22.1	0.146927	0.004004	0.009879
SPATA32	17q21.31	0.146891	0.004013	0.0099

C11ORF80	11q13.2	-0.14688	0.004014	0.009904
SH3KBP1	Xp22.12	0.146876	0.004016	0.009907
TMEM54	1p35.1	-0.14687	0.004018	0.009911
LMLN	3q29	0.146848	0.004023	0.009922
LOC284009	17p13.3	-0.14685	0.004024	0.009922
SPTSSB	3q26.1	0.146814	0.004032	0.009941
FCER1G	1q23.3	0.146796	0.004037	0.009951
SLC16A4	1p13.3	0.14678	0.004041	0.00996
IL13RA1	Xq24	0.146747	0.004049	0.009979
PROM1	4p15.32	0.146738	0.004051	0.009984
DDX19A	16q22.1	-0.14672	0.004055	0.009992
PRAG1	8p23.1	0.146704	0.00406	0.010002
DDX31	9q34.13	-0.14665	0.004073	0.010033
MBOAT4	8p12	0.146566	0.004095	0.010086
CYP4F29P	21q11.2	-0.14652	0.004108	0.010117
TPPP3	16q22.1	-0.14651	0.004109	0.010118
BRD3	9q34.2	0.146492	0.004114	0.01013
RGS1	1q31.2	0.146481	0.004117	0.010135
LRSAM1	9q33.3-q34.11	-0.14645	0.004125	0.010154
MADCAM1	19p13.3	0.146432	0.00413	0.010164
BZW1	2q33.1	0.146355	0.00415	0.010212
GPHN	14q23.3-q24.1	0.146344	0.004152	0.010218
MASP1	3q27.3	0.146308	0.004162	0.010239
NFASC	1q32.1	0.146299	0.004164	0.010244
FAM8A1	6p22.3	0.146289	0.004167	0.010249
SLC6A3	5p15.33	-0.14624	0.004178	0.010276
NR1D2	3p24.2	0.146237	0.00418	0.01028
NTRK3	15q25.3	0.146226	0.004183	0.010284
SMARCC1	3p21.31	0.146225	0.004183	0.010284
RAMAC	15q25.2	0.146225	0.004183	0.010284
STK38L	12p11.23	0.146219	0.004185	0.010287
OR1J2	9q33.2	-0.14622	0.004186	0.010287
PEAK3	19p13.3	0.146204	0.004189	0.010293
KBTBD3	11q22.3	-0.1462	0.00419	0.010295
FITM2	20q13.12	-0.14619	0.004193	0.010302
NFU1	2p13.3	-0.14614	0.004205	0.010329
PCSK2	20p12.1	0.146125	0.00421	0.010339
FAM222B	17q11.2	0.146113	0.004213	0.010346
FAIM	3q22.3	0.1461	0.004216	0.010353
FUT2	19q13.33	0.146064	0.004226	0.010375
VDAC1	5q31.1	-0.14606	0.004227	0.010378
UBXN6	19p13.3	-0.146	0.004243	0.010414
USP13	3q26.33	0.145985	0.004247	0.010422
F2RL1	5q13.3	0.145971	0.00425	0.01043
ATN1	12p13.31	0.145964	0.004252	0.010434
PCYT1A	3q29	0.14592	0.004264	0.010461
HSD17B2	16q23.3	0.145909	0.004267	0.010466
EIF5A	17p13.1	-0.14591	0.004267	0.010466
OLMALINC	10q24.31	-0.14585	0.004282	0.010502
MAGEL2	15q11.2	0.145846	0.004284	0.010504
LILRA6	19q13.42	0.145812	0.004293	0.010526
LARP4B	10p15.3	0.145791	0.004298	0.010538
CEACAM1	19q13.2	0.145783	0.0043	0.010542
VPS37B	12q24.31	0.145781	0.004301	0.010542
STAMBP	2p13.1	-0.14576	0.004306	0.010553
MYCT1	6q25.2	0.145743	0.004311	0.010564
HIST1H2AL	6p22.1	-0.14574	0.004312	0.010565
C2ORF73	2p16.2	0.145731	0.004314	0.010569



AS3MT	10q24.32	-0.14573	0.004316	0.010572
LILRA4	19q13.42	0.14572	0.004317	0.010574
AHNAK2	14q32.33	0.145711	0.00432	0.010579
DHTKD1	10p14	0.145709	0.00432	0.010579
USF2	19q13.12	-0.14569	0.004326	0.010591
NONO	Xq13.1	-0.14568	0.004329	0.010596
LMAN2L	2q11.2	-0.14566	0.004333	0.010605
DDIAS	11q14.1	-0.14564	0.004338	0.010618
DZIP1L	3q22.3	0.145628	0.004342	0.010626
MIR503HG	Xq26.3	-0.1456	0.004349	0.010642
PRORS1P	2p16.1	-0.14559	0.004352	0.010646
PABPC1	8q22.3	-0.14559	0.004352	0.010646
PSPC1	13q12.11	-0.14559	0.004353	0.010647
EPHA7	6q16.1	0.145582	0.004355	0.01065
ADGRE5	19p13.12	0.145575	0.004356	0.010653
GABARAPL2	16q23.1	-0.14552	0.004373	0.010691
UBD	6p22.1	-0.14551	0.004374	0.010693
PHF19	9q33.2	-0.1455	0.004377	0.0107
GUCA1B	6p21.1	-0.14549	0.004378	0.010701
GNLY	2p11.2	-0.14548	0.004383	0.010712
LOC100128164	3q26.2	0.145464	0.004387	0.010718
SPATA5	4q28.1	0.145464	0.004387	0.010718
PPP2R2B	5q32	0.145453	0.00439	0.010724
CDCA8	1p34.3	-0.14544	0.004394	0.010732
NKX2-3	10q24.2	0.145429	0.004396	0.010737
SEPHS2	16p11.2	-0.14542	0.0044	0.010745
NDUFS2	1q23.3	0.145394	0.004406	0.010757
PDE4C	19p13.11	0.145394	0.004406	0.010757
SLC25A32	8q22.3	-0.14539	0.004407	0.010758
L1TD1	1p31.3	0.14537	0.004413	0.01077
SEC22A	3q21.1	-0.14537	0.004413	0.01077
HLA-J	6p22.1	-0.14536	0.004415	0.010773
FBXL22	15q22.31	0.145343	0.00442	0.010784
OSBPL9	1p32.3	0.145342	0.00442	0.010784
VSTM2A	7p11.2	0.145326	0.004425	0.010793
TTC33	5p13.1	0.145272	0.00444	0.010828
BIRC3	11q22.2	0.14526	0.004443	0.010835
TRIOBP	22q13.1	0.14525	0.004446	0.01084
TSPAN33	7q32.1	-0.14522	0.004454	0.010859
DPH3P1	20q13.33	-0.14522	0.004455	0.010861
ABCB9	12q24.31	-0.1452	0.00446	0.01087
SLC35D2	9q22.32	-0.1452	0.00446	0.01087
CRYBB1	22q12.1	0.145185	0.004464	0.010878
SEPTIN6	Xq24	0.14518	0.004465	0.01088
TPTE2P3	13q14.3	-0.14518	0.004466	0.010881
ATCAY	19p13.3	0.145167	0.004468	0.010886
FAM98C	19q13.2	-0.14516	0.004471	0.010891
ARL1	12q23.2	0.145154	0.004472	0.010892
WDHD1	14q22.2-q22.3	0.145144	0.004475	0.010897
DHFR2	3q11.2	0.145132	0.004478	0.010904
TULP1	6p21.31	-0.14513	0.00448	0.010906
IMPDH2	3p21.31	-0.14513	0.00448	0.010906
DBNDD1	16q24.3	-0.14512	0.004483	0.010911
ZNF419	19q13.43	-0.14511	0.004483	0.010912
RAF1	3p25.2	0.145107	0.004485	0.010914
HENMT1	1p13.3	-0.14508	0.004493	0.010931
PASK	2q37.3	-0.14504	0.004503	0.010956
GJA9	1p34.3	0.145033	0.004506	0.010961

GOLGA8IP	15q11.2	0.145021	0.004509	0.010965
CDIP1	16p13.3	-0.14502	0.004509	0.010965
KRTAP3-1	17q21.2	-0.14502	0.004509	0.010965
DPPA4	3q13.13	0.145004	0.004514	0.010975
TET1	10q21.3	0.144985	0.004519	0.010987
SNX25	4q35.1	0.144978	0.004521	0.01099
ATPSCKMT	5p15.2	-0.14496	0.004526	0.011
TMEM45B	11q24.3	-0.14493	0.004535	0.01102
SPRED3	19q13.2	0.144923	0.004537	0.011023
CHRNA6	8p11.21	0.144923	0.004537	0.011023
ZWINT	10q21.1	-0.14492	0.004538	0.011025
MTA2	11q12.3	-0.14491	0.00454	0.011028
SNX13	7p21.1	0.144893	0.004545	0.011039
GAP43	3q13.31	0.144888	0.004546	0.011041
CHRNA6	2q37.1	-0.14488	0.004548	0.011042
MTMR2	11q21	0.14487	0.004552	0.01105
PVR	19q13.31	-0.14487	0.004552	0.011051
CACNA1A	19p13.13	0.144861	0.004554	0.011054
PBLD	10q21.3	0.144853	0.004556	0.011058
SFXN1	5q35.2	0.144851	0.004557	0.011058
SIRT2	19q13.2	-0.14484	0.00456	0.011065
SYBU	8q23.2	-0.14482	0.004566	0.011077
TMEM106B	7p21.3	0.144801	0.004571	0.011089
CCNB3	Xp11.22	0.144755	0.004584	0.011119
LARP1B	4q28.2	0.144745	0.004587	0.011124
HIP1	7q11.23	0.144735	0.00459	0.01113
SLC22A3	6q25.3	-0.14471	0.004598	0.011148
VPS11	11q23.3	-0.1447	0.004599	0.011148
NR2F1-AS1	5q15	0.144679	0.004606	0.011164
RNF17	13q12.12	0.144659	0.004612	0.011177
SBNO2	19p13.3	0.14455	0.004643	0.011252
LIME1	20q13.33	-0.14455	0.004644	0.011253
ZNF189	9q31.1	0.144544	0.004645	0.011253
QRSL1	6q21	-0.14454	0.004646	0.011256
TMEM218	11q24.2	-0.14453	0.004648	0.011258
FBXO46	19q13.32	-0.14452	0.00465	0.011262
CCL19	9p13.3	0.144523	0.004651	0.011262
DAO	12q24.11	0.144479	0.004663	0.011291
EPHA8	1p36.12	-0.14442	0.004679	0.011328
RGS14	5q35.3	-0.14441	0.004684	0.01134
MARVELD2	5q13.2	0.144397	0.004687	0.011345
HDGFL3	15q25.2	0.144386	0.00469	0.011351
FOSL1	11q13.1	-0.14434	0.004702	0.011379
TUBA4B	2q35	-0.14434	0.004705	0.011383
FAF1	1p32.3	-0.14432	0.004709	0.011393
ULBP3	6q25.1	0.144303	0.004714	0.011403
CCSAP	1q42.13	0.144272	0.004723	0.011424
UBE2O	17q25.1	-0.14423	0.004735	0.011451
LCA5	6q14.1	0.144223	0.004738	0.011456
ANKRD9	14q32.31	-0.1442	0.004745	0.011473
SNORA74B	5q35.1	-0.14416	0.004757	0.011501
CCDC7	10p11.22	0.144149	0.004759	0.011504
INAFM1	19q13.32	-0.14413	0.004765	0.011516
NFE2L3	7p15.2	-0.14411	0.004772	0.011531
LIN28B	6q16.3-q21	-0.14411	0.004772	0.011531
JAM3	11q25	0.144083	0.004779	0.011546
CLEC18B	16q23.1	-0.14402	0.004799	0.011593
NCK2	2q12.2	-0.14401	0.004801	0.011596

KCNK9	8q24.3	-0.14401	0.004801	0.011596
PARS2	1p32.3	-0.144	0.004803	0.011598
DCBLD1	6q22.1	0.144	0.004803	0.011598
KCNS3	2p24.2	0.143991	0.004806	0.011603
C12ORF29	12q21.32	-0.14395	0.004817	0.011628
DEPDC7	11p13	-0.14393	0.004824	0.011643
CTSK	1q21.3	0.143924	0.004826	0.011647
RASGEF1B	4q21.21	0.143919	0.004827	0.011648
SLC4A2	7q36.1	-0.14392	0.004828	0.011648
CTXN2	15q21.1	0.143884	0.004838	0.011671
GPR19	12p13.1	-0.14387	0.004841	0.011676
SH2D1A	Xq25	0.143872	0.004841	0.011676
EFCAB3	17q23.2	-0.14387	0.004841	0.011676
SLC15A3	11q12.2	0.143864	0.004844	0.01168
GNGT2	17q21.32	0.143849	0.004848	0.011689
RETREG1	5p15.1	0.143816	0.004858	0.011711
CCDC43	17q21.31	-0.14381	0.004858	0.011711
CAPN6	Xq23	0.143804	0.004861	0.011717
GCHFR	15q15.1	-0.14377	0.004871	0.011739
SH2D1B	1q23.3	0.143752	0.004877	0.011752
CXCL2	4q13.3	-0.14367	0.004902	0.011811
PPARGC1A	4p15.2	0.143666	0.004903	0.011812
NMT1	17q21.31	-0.14366	0.004906	0.011817
PITX1	5q31.1	-0.14364	0.004912	0.01183
TCTEX1D1	1p31.3	0.143635	0.004912	0.01183
LINC00473	6q27	0.143619	0.004917	0.01184
PMS2CL	7p22.1	-0.14359	0.004926	0.011859
PDZK1P1	1q21.2	-0.14359	0.004926	0.011859
DMRTA1	9p21.3	0.143581	0.004929	0.011864
THADA	2p21	-0.14358	0.004931	0.011867
TPST1	7q11.21	0.14357	0.004932	0.01187
SENP1	12q13.11	0.143524	0.004946	0.011902
PSMA6	14q13.2	-0.14344	0.004972	0.011961
AQP7P1	9q13	-0.14344	0.004972	0.011961
ZNF653	19p13.2	-0.14344	0.004973	0.011961
FNDC3A	13q14.2	0.143435	0.004973	0.011961
PCDHB2	5q31.3	0.143433	0.004974	0.011961
CYP17A1	10q24.32	-0.14342	0.004978	0.011969
COL17A1	10q25.1	0.143418	0.004979	0.01197
PWWP3A	19p13.3	-0.14341	0.004982	0.011977
BCL2L15	1p13.2	0.143403	0.004983	0.011977
POSTN	13q13.3	0.143385	0.004988	0.011989
SST	3q27.3	0.14338	0.00499	0.011992
PDPN	1p36.21	0.143367	0.004994	0.011999
TFF2	21q22.3	0.143351	0.004999	0.01201
PCDH10	4q28.3	0.143345	0.005001	0.012013
C9ORF24	9p13.3	-0.14334	0.005002	0.012014
EGR1	5q31.2	0.14334	0.005002	0.012014
STK36	2q35	-0.14333	0.005006	0.01202
PCMTD1	8q11.23	0.143285	0.005019	0.012052
C17ORF67	17q22	-0.14327	0.005023	0.012059
OFD1	Xp22.2	-0.14325	0.005031	0.012075
DMTF1	7q21.12	-0.14325	0.005031	0.012075
SPRY1	4q28.1	0.143233	0.005035	0.012084
NOMO2	16p12.3	0.143228	0.005037	0.012086
ZNF583	19q13.43	0.143208	0.005043	0.0121
ZNF473	19q13.33	-0.14317	0.005055	0.012126
HIST1H2AM	6p22.1	-0.14317	0.005056	0.012128

RAB11FIP2	10q26.11	0.143164	0.005057	0.012128
DIRC3	2q35	0.143158	0.005058	0.012131
PDE12	3p14.3	0.143152	0.00506	0.012134
USP37	2q35	0.143134	0.005066	0.012146
EPHX3	19p13.12	0.143087	0.005081	0.01218
GPR158	10p12.1	0.143074	0.005085	0.012188
TIA1	2p13.3	-0.14307	0.005087	0.012192
LOC646999	7p14.1	-0.14302	0.0051	0.012223
RRN3P1	16p12.2	-0.14302	0.005101	0.012223
FUS	16p11.2	-0.14297	0.005117	0.01226
RBFOX1	16p13.3	0.142967	0.005118	0.012261
RESF1	12p11.21	0.142935	0.005128	0.012283
SNORA59B	17p11.2	-0.1429	0.005138	0.012307
KCP	7q32.1	-0.14288	0.005144	0.012319
PHACTR3	20q13.32-q13.33	-0.14288	0.005145	0.012319
ARHGEF18	19p13.2	0.142876	0.005147	0.012322
CCL28	5p12	0.142847	0.005156	0.012342
ATM	11q22.3	0.14284	0.005158	0.012346
THEMIS2	1p35.3	0.142839	0.005158	0.012346
SDC2	8q22.1	0.142757	0.005185	0.012407
TREML2	6p21.1	0.142737	0.005191	0.01242
ALG14	1p21.3	-0.14273	0.005194	0.012426
PEX11B	1q21.1	0.142725	0.005194	0.012426
CDH20	18q21.33	0.142719	0.005196	0.012429
ABCA12	2q35	0.142706	0.005201	0.012438
KCNJ15	21q22.13-q22.2	0.142689	0.005206	0.012449
KRT38	17q21.2	-0.14269	0.005206	0.012449
STAP2	19p13.3	-0.14264	0.00522	0.01248
TBP	6q27	-0.14264	0.005221	0.01248
NLRC3	16p13.3	0.142639	0.005222	0.012481
RXFP1	4q32.1	0.142637	0.005223	0.012481
ZNF572	8q24.13	-0.14261	0.00523	0.012497
N4BP3	5q35.3	0.142604	0.005233	0.012503
C4BPB	1q32.1	0.142574	0.005243	0.012525
ALLC	2p25.3	-0.14255	0.00525	0.01254
RADIL	7p22.1	0.14252	0.00526	0.012563
XRCC1	19q13.31	-0.14251	0.005264	0.01257
GATD3A	21q22.3	-0.14245	0.005284	0.012617
PODXL	7q32.3	0.142434	0.005288	0.012625
PUM3	9p24.2	-0.14242	0.005292	0.012633
UBE2D3	4q24	0.142416	0.005294	0.012636
BTD	3p25.1	0.142411	0.005295	0.012639
TEX29	13q34	-0.14239	0.005303	0.012656
POLR3F	20p11.23	-0.14234	0.005319	0.012692
HEPHL1	11q21	-0.14233	0.00532	0.012693
CTIF	18q21.1	0.142248	0.005348	0.012759
LOC143666	11p15.5	-0.14224	0.005351	0.012763
NCOA5	20q13.12	-0.1422	0.005364	0.012794
RBBP8	18q11.2	0.142177	0.005372	0.01281
CXORF65	Xq13.1	-0.14217	0.005375	0.012817
ACP6	1q21.2	-0.14216	0.005378	0.012821
HSD17B6	12q13.3	0.142147	0.005381	0.012828
SF3B2	11q13.1	-0.14213	0.005386	0.012839
FTCD	21q22.3	-0.14212	0.005389	0.012843
LDHAL6A	11p15.1	0.142121	0.00539	0.012844
ZNF655	7q22.1	0.142083	0.005402	0.012873
DCAF11	14q12	0.142072	0.005406	0.012879
VAX1	10q25.3	-0.14204	0.005416	0.012902

RSAD2	2p25.2	0.142032	0.005419	0.012908
GPIHBP1	8q24.3	0.14203	0.00542	0.012908
ZNF185	Xq28	0.142009	0.005427	0.012923
NRROS	3q29	0.141957	0.005444	0.012962
IGSF8	1q23.2	-0.14195	0.005446	0.012965
OTUD6B	8q21.3	-0.14194	0.005448	0.012969
GXYLT2	3p13	0.141929	0.005453	0.012979
UGGT2	13q32.1	-0.14193	0.005454	0.012981
CMPK1	1p33	0.141918	0.005457	0.012985
OGFRL1	6q13	0.141913	0.005459	0.012988
MLLT1	19p13.3	-0.14191	0.005461	0.012991
BAX	19q13.33	-0.1419	0.005462	0.012993
GABRB3	15q12	0.141882	0.005469	0.013006
PDK3	Xp22.11	-0.14188	0.005469	0.013006
PLA2G4A	1q31.1	0.141842	0.005482	0.013037
PABPC1P2	2q22.3	-0.14182	0.00549	0.013053
CDK7	5q13.2	-0.14182	0.005491	0.013053
PHF13	1p36.31	-0.1418	0.005495	0.013062
VAMP4	1q24.3	0.141793	0.005498	0.013069
ARFGAP3	22q13.2	0.141752	0.005512	0.0131
DNM1P35	15q24.2	-0.14174	0.005515	0.013104
CXADRP3	18p11.21	0.141736	0.005518	0.01311
SPINK1	5q32	-0.14171	0.005528	0.013132
IFNAR2	21q22.11	0.141695	0.005532	0.01314
CASP6	4q25	-0.14167	0.00554	0.013159
XRCC4	5q14.2	-0.14167	0.005541	0.01316
CALHM1	10q24.33	0.141654	0.005545	0.013164
PRSS41	16p13.3	-0.14165	0.005545	0.013164
LCAT	16q22.1	-0.14165	0.005545	0.013164
SYCE2	19p13.13	-0.14165	0.005546	0.013164
PCNT	21q22.3	0.141636	0.005551	0.013175
INSM2	14q13.2	0.141619	0.005557	0.013187
ANGPT1	8q23.1	0.141618	0.005557	0.013187
KCNK12	2p16.3	0.141602	0.005563	0.013198
TEF	22q13.2	0.14157	0.005574	0.013223
TSN	2q14.3	-0.14156	0.005578	0.013232
RBM7	11q23.2	0.141532	0.005586	0.01325
MTSS1	8q24.13	0.141504	0.005596	0.013271
HS3ST2	16p12.2	0.141468	0.005608	0.013298
FAM104A	17q25.1	-0.14144	0.005618	0.013319
TNS3	7p12.3	0.141439	0.005618	0.013319
ARHGDIG	16p13.3	0.141429	0.005621	0.013325
R3HCC1L	10q24.2	0.141424	0.005623	0.013327
CLHC1	2p16.1	-0.14142	0.005626	0.013331
CRCP	7q11.21	-0.14141	0.00563	0.013339
GXYLT1	12q12	0.141392	0.005634	0.013347
TNFRSF9	1p36.23	0.141392	0.005634	0.013347
C6ORF201	6p25.2	0.141371	0.005641	0.013362
CYTH1	17q25.3	0.141363	0.005644	0.013368
ELMO3	16q22.1	-0.14136	0.005646	0.013369
XK	Xp21.1	0.141352	0.005648	0.013373
MYO1F	19p13.2	0.141337	0.005653	0.013384
COQ10B	2q33.1	0.141333	0.005654	0.013386
PNMA8B	19q13.32	0.141318	0.005659	0.013396
RAD9B	12q24.11	-0.14132	0.00566	0.013397
CHRND	2q37.1	-0.14129	0.005668	0.013413
PI4KB	1q21.3	0.141265	0.005678	0.013434
C2ORF66	2q33.1	0.141254	0.005682	0.013442

CPZ	4p16.1	0.141207	0.005698	0.013478
IKZF4	12q13.2	0.141196	0.005702	0.013486
DHRS11	17q12	-0.14116	0.005715	0.013515
MBD1	18q21.1	0.141151	0.005717	0.013519
GATA3	10p14	0.141133	0.005723	0.013533
FCRL6	1q23.2	0.141127	0.005725	0.013536
WDR35	2p24.1	-0.14112	0.005729	0.013544
LOC389705	9p22.3	-0.14109	0.00574	0.013567
SEC14L5	16p13.3	0.141077	0.005743	0.013572
PNRC2	1p36.11	-0.14108	0.005743	0.013572
CAPNS1	19q13.12	-0.14102	0.005763	0.013617
HIST3H3	1q42.13	0.141005	0.005768	0.013626
RGPD6	2q13	0.140998	0.00577	0.013631
SLC28A2	15q21.1	0.140996	0.005771	0.013631
MIR100HG	11q24.1	0.140974	0.005779	0.013648
BCHE	3q26.1	0.140947	0.005788	0.013668
CYP27A1	2q35	-0.14093	0.005795	0.013683
NAIP	5q13.2	0.140907	0.005802	0.013698
SPAG8	9p13.3	-0.1409	0.005806	0.013705
BNC1	15q25.2	0.140885	0.00581	0.013712
TRIM36	5q22.3	0.140885	0.00581	0.013712
OR7E91P	2p13.3	0.140883	0.005811	0.013712
ZFP41	8q24.3	-0.14087	0.005817	0.013725
CADM4	19q13.31	-0.14086	0.00582	0.013731
EFCAB7	1p31.3	-0.14082	0.005832	0.013757
GRID1	10q23.1-q23.2	0.140817	0.005834	0.01376
TAF1	Xq13.1	0.140769	0.005851	0.013798
TNFSF13B	13q33.3	0.140765	0.005852	0.0138
PCDHB12	5q31.3	0.140759	0.005855	0.013804
ZNF154	19q13.43	0.140751	0.005857	0.013809
BRF1	14q32.33	-0.14074	0.005862	0.013819
PRAF2	Xp11.23	-0.14072	0.005869	0.013833
TK2	16q21	0.140701	0.005875	0.013845
HLA-DPB1	6p21.32	0.14065	0.005893	0.013886
KDM4A	1p34.2-p34.1	0.140621	0.005903	0.013909
ADCY6	12q13.12	0.140586	0.005916	0.013937
LOC344967	4p14	-0.14057	0.005922	0.013949
GJC1	17q21.31	0.140543	0.005931	0.01397
SP5	2q31.1	-0.1405	0.005945	0.014001
MAPK3	16p11.2	0.140495	0.005949	0.014007
KIF23	15q23	0.140482	0.005953	0.014017
PODNL1	19p13.12	0.140465	0.005959	0.01403
RFC5	12q24.23	-0.14045	0.005965	0.01404
CENPB	20p13	-0.14045	0.005965	0.01404
PIANP	12p13.31	0.140445	0.005967	0.014041
FGFR1OP2	12p11.23	0.140415	0.005977	0.014065
PRR16	5q23.1	0.140391	0.005986	0.014083
PLEKHG6	12p13.31	-0.14032	0.006012	0.014142
GNAS	20q13.32	-0.1403	0.006018	0.014157
ZBTB39	12q13.3	0.140297	0.00602	0.014159
PLA2G10	16p13.12	0.140288	0.006023	0.014165
TAF4	20q13.33	-0.14027	0.006028	0.014174
FASTKD3	5p15.31	-0.14027	0.00603	0.014177
OVOL1	11q13.1	-0.14025	0.006037	0.014192
UBE2D2	5q31.2	-0.14024	0.006039	0.014196
TRMT61B	2p23.2	-0.14022	0.006049	0.014218
AURKAP1	1q41	-0.14021	0.006053	0.014226
FMNL2	2q23.3	0.140197	0.006056	0.014231

CORO1C	12q24.11	0.140192	0.006058	0.014234
GPANK1	6p21.33	-0.14014	0.006078	0.014277
SLFNL1	1p34.2	-0.14013	0.006079	0.01428
FGF5	4q21.21	0.140101	0.006091	0.014306
HOGA1	10q24.2	-0.1401	0.006092	0.014306
GPRIN1	5q35.2	0.140076	0.006101	0.014325
CDKN2C	1p32.3	0.140044	0.006113	0.014351
CAV2	7q31.2	0.140007	0.006126	0.014381
TLX2	2p13.1	0.140001	0.006128	0.014385
NALCN	13q32.3-q33.1	0.13999	0.006132	0.014393
FPGT	1p31.1	0.139922	0.006157	0.01445
SMC2	9q31.1	0.139912	0.006161	0.014457
CSF3R	1p34.3	0.139867	0.006178	0.014494
SYNGR2	17q25.3	-0.13986	0.006181	0.014499
COL6A1	21q22.3	0.139858	0.006181	0.014499
SMARCD1	12q13.12	-0.13985	0.006183	0.014502
EIF4ENIF1	22q12.2	0.139844	0.006186	0.014507
CCDC69	5q33.1	0.139812	0.006198	0.014534
OSTM1	6q21	0.1398	0.006203	0.014542
ANKRD35	1q21.1	0.139797	0.006204	0.014543
AVL9	7p14.3	0.139789	0.006207	0.014549
ZNF862	7q36.1	-0.13979	0.006208	0.014549
TIAM2	6q25.2-q25.3	0.139722	0.006232	0.014605
MANBA	4q24	0.139715	0.006234	0.014608
TPSD1	16p13.3	0.139685	0.006246	0.014633
COL24A1	1p22.3	0.139664	0.006254	0.01465
UBAP2	9p13.3	0.139651	0.006259	0.01466
RBAKDN	7p22.1	-0.13961	0.006275	0.014695
OXT	20p13	-0.13961	0.006275	0.014695
CNDP2	18q22.3	0.139565	0.006291	0.01473
RPH3AL	17p13.3	0.13956	0.006293	0.014733
TNNC1	3p21.1	-0.13956	0.006294	0.014733
C19ORF18	19q13.43	-0.13955	0.006296	0.014736
OLFML2A	9q33.3	0.139534	0.006303	0.014751
A1BG-AS1	19q13.43	0.139531	0.006304	0.014751
BANF2	20p12.1	-0.13951	0.006312	0.01477
GPER1	7p22.3	0.139505	0.006314	0.014772
ACSM5	16p12.3	0.1395	0.006316	0.014773
PIGO	9p13.3	0.139499	0.006316	0.014773
CKLF	16q21	-0.13948	0.006324	0.01479
AWAT1	Xq13.1	-0.13947	0.006328	0.014797
PCDHB3	5q31.3	0.139464	0.006329	0.014799
LINGO2	9p21.2-p21.1	0.139442	0.006337	0.014817
RIC8A	11p15.5	-0.13943	0.006342	0.014825
FOXC2	16q24.1	0.139427	0.006343	0.014827
SPDYE8P	7q11.23	-0.13942	0.006345	0.014829
DNHD1	11p15.4	-0.13941	0.006349	0.014837
MILR1	17q23.3	0.139402	0.006353	0.014844
CFAP43	10q25.1	-0.13937	0.006365	0.014872
FPR2	19q13.41	0.139354	0.006371	0.014882
LHFPL6	13q13.3-q14.11	0.139353	0.006371	0.014882
GDAP2	1p12	0.139292	0.006395	0.014935
MED24	17q21.1	-0.13926	0.006406	0.01496
TNRC6C	17q25.3	0.139248	0.006412	0.014971
DYNC2H1	11q22.3	0.139222	0.006422	0.014993
SLC35E4	22q12.2	-0.13921	0.006425	0.014998
FKBP9P1	7p11.2	0.139202	0.006429	0.015006
KIF20B	10q23.31	0.1392	0.00643	0.015006

FMO2	1q24.3	0.1392	0.00643	0.015006
SPATA31A6	9p11.2	-0.13916	0.006446	0.015041
LOC401463	8q12.3	0.139155	0.006448	0.015041
FMR1NB	Xq27.3-q28	-0.13915	0.006448	0.015041
SAMD4A	14q22.2	0.139131	0.006457	0.01506
CLNK	4p16.1	0.139094	0.006471	0.015092
SLC9A5	16q22.1	-0.13909	0.006472	0.015092
NCOR2	12q24.31	0.139077	0.006478	0.015104
TSC22D3	Xq22.3	0.13907	0.00648	0.015109
TIMP3	22q12.3	0.139042	0.006491	0.015132
HORMAD1	1q21.3	0.139035	0.006494	0.015137
PMEL	12q13.2	-0.13902	0.006501	0.015152
SFN	1p36.11	-0.139	0.006506	0.015162
ZBED6CL	7q36.1	-0.139	0.006507	0.015162
TMEFF2	2q32.3	0.138994	0.00651	0.015167
DBR1	3q22.3	0.138986	0.006513	0.015172
FANCI	15q26.1	0.138974	0.006518	0.01518
EFCAB8	20q11.21	-0.13897	0.006518	0.01518
OR1J1	9q33.2	-0.13894	0.00653	0.015207
GPR137C	14q22.1	0.138936	0.006532	0.015207
HES2	1p36.31	0.138936	0.006532	0.015207
LHFPL4	3p25.3	0.138936	0.006533	0.015207
SLC25A53	Xq22.2	0.138932	0.006534	0.015209
MOK	14q32.31	-0.13889	0.006549	0.015243
KLRF1	12p13.31	0.138873	0.006557	0.015259
SRRM4	12q24.23	0.138868	0.006559	0.015262
PCDHA12	5q31.3	0.138857	0.006563	0.015269
KANSL2	12q13.11	-0.13886	0.006564	0.015269
PYY2	17q11.2	-0.13885	0.006565	0.01527
ABHD18	4q28.2	0.138851	0.006566	0.01527
SYT6	1p13.2	0.138838	0.006571	0.015279
ZFP90	16q22.1	0.138838	0.006571	0.015279
KCNK17	6p21.2	-0.13883	0.006572	0.01528
BOK	2q37.3	-0.13882	0.006579	0.015292
KLHDC7A	1p36.13	0.138817	0.006579	0.015292
CYP4F12	19p13.12	-0.13881	0.006581	0.015296
ZNF91	19p12	0.138808	0.006583	0.015297
LINC00167	11q24.3	-0.1388	0.006585	0.0153
ZNF284	19q13.31	0.138791	0.006589	0.015309
SCAMP3	1q22	-0.13878	0.006595	0.015321
CLCA4	1p22.3	0.138741	0.006609	0.015352
LOC283731	15q24.1	0.138722	0.006616	0.015367
PPM1K	4q22.1	0.138717	0.006618	0.01537
FAM241A	4q25	0.138705	0.006623	0.015379
DNAJB5	9p13.3	0.138692	0.006628	0.015389
CC2D2A	4p15.32	0.138681	0.006633	0.015397
DRD4	11p15.5	-0.13859	0.006667	0.015476
PCDHB8	5q31.3	0.138592	0.006668	0.015476
ZRANB2	1p31.1	-0.13859	0.00667	0.015479
CXCL12	10q11.21	0.138582	0.006672	0.015481
UPP1	7p12.3	-0.13856	0.006682	0.015503
SPACA9	9q34.13	-0.13855	0.006685	0.015509
SRD5A3	4q12	0.138545	0.006687	0.01551
SLC9A3R1	17q25.1	-0.13852	0.006696	0.015529
SIK3	11q23.3	0.138512	0.0067	0.015537
SLC26A6	3p21.31	-0.1385	0.006704	0.015545
SFRP4	7p14.1	0.138495	0.006707	0.01555
DTX2	7q11.23	-0.13849	0.006709	0.015552



SNX2	5q23.2	0.138487	0.00671	0.015553
ERGIC1	5q35.1	0.138485	0.006711	0.015553
FOXD4	9p24.3	0.138473	0.006716	0.015563
CRYBG2	1p36.11	-0.13847	0.006717	0.015564
LINC00896	22q11.21	-0.13846	0.006722	0.015574
RARG	12q13.13	0.138448	0.006726	0.015581
ANP32AP1	15q14	0.138442	0.006728	0.015584
KLHL5	4p14	0.138417	0.006738	0.015606
GPR3	1p36.11	-0.13841	0.006742	0.015614
CRB3	19p13.3	-0.13839	0.00675	0.01563
MOB3B	9p21.2	0.138353	0.006764	0.01566
TBRG1	11q24.2	-0.13833	0.006774	0.015683
PDCD7	15q22.31	0.138324	0.006775	0.015683
SACM1L	3p21.31	0.138321	0.006777	0.015684
GATA2	3q21.3	0.138297	0.006786	0.015704
C6ORF47	6p21.33	-0.13828	0.006794	0.015721
KIAA1755	20q11.23	0.138272	0.006797	0.015725
CEP70	3q22.3	0.13826	0.006801	0.015734
PEX3	6q24.2	-0.13825	0.006806	0.015743
METTL6	3p25.1	-0.13822	0.006816	0.015762
COX20	1q44	-0.13822	0.006816	0.015762
C8ORF34	8q13.2	0.138189	0.00683	0.015793
TUBA3D	2q21.1	0.138129	0.006854	0.015848
ISLR2	15q24.1	0.138121	0.006858	0.015853
FYTTD1	3q29	0.138107	0.006863	0.015865
SMIM24	19p13.3	-0.1381	0.006865	0.015867
TMED10P1	8q24.3	0.138097	0.006867	0.01587
CABIN1	22q11.23	0.138086	0.006872	0.015879
CCDC127	5p15.33	-0.13808	0.006873	0.01588
GNAI2	3p21.31	0.138025	0.006897	0.015934
PRSS50	3p21.31	-0.13801	0.006901	0.015941
DDX58	9p21.1	0.138012	0.006902	0.015941
SELENOT	3q25.1	0.138011	0.006903	0.015941
WNK3	Xp11.22	0.138008	0.006904	0.015942
FMN2	1q43	0.138004	0.006906	0.015944
METRNL	16p13.3	-0.13799	0.006913	0.01596
NAGA	22q13.2	0.137983	0.006914	0.01596
CASQ2	1p13.1	0.137968	0.00692	0.015972
PCNA	20p12.3	-0.13797	0.006921	0.015972
CRY2	11p11.2	0.137957	0.006925	0.015979
MYO7B	2q14.3	0.137945	0.00693	0.015989
ARHGAP9	12q13.3	0.137944	0.00693	0.015989
FBXL19	16p11.2	-0.13793	0.006936	0.015998
FBXO31	16q24.2	-0.13792	0.006941	0.01601
LINC02381	12q13.13	0.137875	0.006959	0.016048
SOX12	20p13	-0.13786	0.006966	0.016064
PLPP3	1p32.2	0.137846	0.006971	0.016073
PLA2G1B	12q24.31	-0.13782	0.00698	0.016091
ZSCAN23	6p22.1	0.137754	0.007009	0.016157
MAOA	Xp11.3	0.137745	0.007013	0.016163
TRIM52	5q35.3	-0.13773	0.007018	0.016173
NCOA3	20q13.12	0.13773	0.007019	0.016174
FIGNL1	7p12.2	-0.13772	0.007023	0.016181
CTBP1-DT	4p16.3	0.137692	0.007035	0.016207
FAM110B	8q12.1	0.137639	0.007057	0.016256
INTS4P2	7q11.21	0.137599	0.007074	0.016293
COMMD3	10p12.2	-0.1376	0.007075	0.016295
ACTR8	3p21.1	0.13759	0.007078	0.016298

NLRP12	19q13.42	0.137561	0.007089	0.016323
MRPL50	9q31.1	-0.13755	0.007093	0.016331
FANCB	Xp22.2	-0.13753	0.007101	0.016345
RASL10A	22q12.2	-0.13749	0.007117	0.016381
HOXD8	2q31.1	0.137494	0.007118	0.016381
DZANK1	20p11.23	-0.13746	0.007132	0.016411
SLC45A2	5p13.2	-0.13743	0.007146	0.016443
ATG16L1	2q37.1	-0.13738	0.007164	0.016482
IQCG	3q29	0.137378	0.007167	0.016486
MAGIX	Xp11.23	-0.13737	0.007169	0.01649
ZRANB3	2q21.3	0.137353	0.007178	0.016507
ZNF395	8p21.1	0.137351	0.007178	0.016507
POLR3A	10q22.3	0.137322	0.007191	0.016534
NOS1	12q24.22	0.137317	0.007193	0.016537
SLC4A8	12q13.13	0.137312	0.007195	0.01654
CYP2S1	19q13.2	-0.13729	0.007206	0.016563
GSTA1	6p12.2	0.137259	0.007217	0.016587
SCRN3	2q31.1	0.137209	0.007239	0.016635
PPIC	5q23.2	0.137204	0.007241	0.016638
SLC6A16	19q13.33	0.137178	0.007252	0.016661
POLR2B	4q12	0.137176	0.007253	0.016662
MMACHC	1p34.1	-0.13716	0.00726	0.016675
NAA35	9q21.33	0.137146	0.007266	0.016688
ZNF503	10q22.2	-0.13707	0.007297	0.016757
SQSTM1	5q35.3	-0.13704	0.007312	0.016789
SRGAP2	1q32.1	0.137034	0.007314	0.016792
STXBP4	17q22	0.136998	0.00733	0.016826
ZNF385B	2q31.2-q31.3	0.136991	0.007333	0.016831
VIPR2	7q36.3	0.136978	0.007338	0.016842
FBLN1	22q13.31	0.136967	0.007343	0.016851
PARP16	15q22.31	0.136953	0.007349	0.016863
EIF4G3	1p36.12	0.13695	0.007351	0.016864
LBH	2p23.1	0.136948	0.007351	0.016864
TRPV2	17p11.2	0.136921	0.007363	0.01689
ZC3H12D	6q25.1	0.136913	0.007366	0.016895
ZNF845	19q13.42	0.136901	0.007372	0.016906
IRX3	16q12.2	0.136894	0.007375	0.016911
AUH	9q22.31	-0.13688	0.00738	0.01692
AIF1	6p21.33	0.136879	0.007381	0.016922
RXFP3	5p13.2	0.136869	0.007386	0.016928
MICA	6p21.33	-0.13687	0.007386	0.016928
SCYL1	11q13.1	-0.13685	0.007395	0.016947
MICU1	10q22.1	0.13683	0.007403	0.016961
COL2A1	12q13.11	-0.13683	0.007403	0.016961
KLHDC1	14q21.3	0.136827	0.007404	0.016962
UBE3C	7q36.3	0.136775	0.007427	0.017012
IPO7	11p15.4	0.136763	0.007432	0.017022
CDC37L1	9p24.1	0.136758	0.007434	0.017025
SEZ6	17q11.2	0.136739	0.007443	0.017043
INTS7	1q32.3	0.136723	0.00745	0.017057
TBC1D5	3p24.3	0.136709	0.007456	0.017069
CD6	11q12.2	0.1367	0.00746	0.017076
TMEM200C	18p11.31	0.136685	0.007466	0.017089
WWP2	16q22.1	0.136655	0.00748	0.017117
RHOBTB3	5q15	0.136589	0.007508	0.017181
CDC6	17q21.2	-0.13656	0.007522	0.01721
OLFM3	1p21.1	0.136506	0.007545	0.017262
HUS1B	6p25.3	-0.1365	0.007547	0.017263

PPP1R3B	8p23.1	0.136495	0.007551	0.01727
PARVG	22q13.31	0.136419	0.007584	0.017345
COL4A3	2q36.3	0.136413	0.007587	0.017349
OSBPL6	2q31.2	0.136378	0.007603	0.017383
CCL21	9p13.3	0.136371	0.007606	0.017388
TOM1	22q12.3	-0.13635	0.007616	0.01741
CTAGE15	7q35	0.136335	0.007622	0.017421
NAA60	16p13.3	-0.13632	0.00763	0.017437
RNASE6	14q11.2	0.136314	0.007631	0.017438
ISX	22q12.3	0.13631	0.007633	0.01744
CELSR1	22q13.31	0.136304	0.007636	0.017445
KIAA1522	1p35.1	0.136299	0.007638	0.017448
HNF4G	8q21.13	0.136293	0.007641	0.017452
RBM4B	11q13.2	-0.13628	0.007646	0.017463
TEKT5	16p13.13	-0.13627	0.00765	0.017469
MRGPRF	11q13.3	0.136252	0.007659	0.017488
MSS51	10q22.2	-0.13622	0.007674	0.017519
ADCYAP1R1	7p14.3	0.136195	0.007685	0.017543
CD34	1q32.2	0.136185	0.00769	0.017552
DEPP1	10q11.21	0.136165	0.007698	0.017569
SETDB1	1q21.3	0.136118	0.00772	0.017616
TTC30B	2q31.2	0.136113	0.007722	0.01762
ATP12A	13q12.12 13q12.1-q12.3	0.136105	0.007725	0.017625
PHETA2	22q13.2	0.136045	0.007753	0.017685
C6ORF136	6p21.33	-0.13604	0.007755	0.017688
DLL1	6q27	0.13598	0.007782	0.017749
PNRC1	6q15	0.135957	0.007793	0.017771
SPEF1	20p13	-0.13594	0.007799	0.017783
DCAF13P3	15q21.2	-0.13594	0.007803	0.017789
SLU7	5q33.3	0.135904	0.007817	0.017821
NEK4	3p21.1	0.135876	0.00783	0.017848
HNRNPK	9q21.32	0.135853	0.00784	0.01787
SPTA1	1q23.1	0.135816	0.007858	0.017907
EVA1B	1p34.3	-0.13578	0.007872	0.017937
SCUBE1	22q13.2	0.135771	0.007878	0.01795
LINC00924	15q26.2	0.135756	0.007885	0.017964
STBD1	4q21.1	0.135743	0.007891	0.017975
ZFP3	17p13.2	0.135732	0.007896	0.017985
PTTG1IP	21q22.3	0.135724	0.0079	0.017991
XPO7	8p21.3	0.135716	0.007904	0.017998
DCAF4	14q24.2	-0.1357	0.007913	0.018016
RCBTB1	13q14.2	-0.13569	0.007914	0.018016
PPIL6	6q21	-0.13568	0.007922	0.018032
CLDN8	21q22.11	0.135645	0.007937	0.018064
NARS	18q21.31	0.13564	0.007939	0.018068
ADAM21	14q24.2	0.135636	0.007941	0.01807
GBP4	1p22.2	0.135595	0.00796	0.018111
RIPPLY3	21q22.13	-0.13558	0.007965	0.018121
KCNK6	19q13.2	0.135547	0.007982	0.018158
PTPN12	7q11.23	0.135542	0.007985	0.018162
ARHGEF15	17p13.1	0.135536	0.007987	0.018165
ACY3	11q13.2	-0.13553	0.007989	0.018167
TUBB1	20q13.32	-0.13552	0.007994	0.018175
NAP1L1	12q21.2	-0.13552	0.007994	0.018175
RNF219	13q31.1	-0.13552	0.007997	0.018179
PCDH9	13q21.32	0.135502	0.008004	0.018192
MDH1B	2q33.3	-0.13549	0.008009	0.018203
PLEKHA8P1	12q12	-0.13548	0.008013	0.018209

RMI2	16p13.13	-0.13544	0.008033	0.018252
RNF182	6p23	-0.13543	0.008035	0.018256
TMEM232	5q22.1	0.135401	0.008051	0.018289
AKAP4	Xp11.22	-0.1354	0.008052	0.01829
RBP3	10q11.22	0.135387	0.008058	0.0183
LOC652276	16p13.3	-0.13537	0.008064	0.018311
ICOS	2q33.2	0.135344	0.008078	0.018341
TAF5	22q13.32	0.135342	0.008078	0.018341
RNF151	16p13.3	-0.13533	0.008083	0.018348
UFM1	13q13.3	-0.13531	0.008092	0.018367
DPP3	11q13.2	-0.13531	0.008094	0.018371
CD302	2q24.2	0.135296	0.0081	0.018383
LILRB3	19q13.42	0.135288	0.008104	0.01839
LRRC40	1p31.1	0.13528	0.008108	0.018396
SEPSECS	4p15.2	0.135274	0.008111	0.0184
ATP1A1-AS1	1p13.1	-0.13524	0.008125	0.018431
DMRTA2	1p32.3	0.135237	0.008128	0.018436
MIR31HG	9p21.3	0.135229	0.008132	0.018442
ZNF503-AS2	10q22.2	-0.13522	0.008137	0.018452
PLCXD2	3q13.2	0.135197	0.008147	0.018472
PUS7L	12q12	0.135173	0.008159	0.018497
TMED4	7p13	-0.13515	0.008169	0.018518
HMG20B	19p13.3	-0.13514	0.008176	0.018531
PTBP3	9q32	0.135128	0.00818	0.018539
CLEC4A	12p13.31	0.135093	0.008197	0.018575
PPAT	4q12	-0.13507	0.008207	0.018595
COG5	7q22.3	0.135068	0.008209	0.018597
MCMDC2	8q13.1	-0.13506	0.008214	0.018607
PRDM5	4q27	0.135	0.008242	0.018667
EBF2	8p21.2	0.13499	0.008246	0.018676
SPC24	19p13.2	-0.13498	0.008254	0.01869
UNC50	2q11.2	-0.13493	0.008275	0.018735
ELOVL6	4q25	0.13493	0.008275	0.018735
FAM86B3P	8p23.1	-0.13491	0.008286	0.018756
HAS3	16q22.1	0.134879	0.0083	0.018787
C12ORF4	12p13.32	0.134872	0.008303	0.018791
LBX2-AS1	2p13.1	-0.13487	0.008304	0.018791
SMC3	10q25.2	0.134869	0.008305	0.018791
ZGRF1	4q25	-0.13484	0.008317	0.018816
MT1A	16q13	-0.13483	0.008321	0.018824
NHSL1	6q24.1	0.134815	0.008331	0.018844
GGNBP2	17q12	0.134791	0.008343	0.018868
CENPJ	13q12.12-q12.13	-0.13478	0.008348	0.018878
NECTIN2	19q13.32	0.134765	0.008355	0.018893
LOC407835	7q32.1	-0.13476	0.008358	0.018896
GPT2	16q11.2	-0.13476	0.00836	0.018898
ZNF438	10p11.23	0.134743	0.008366	0.018911
JADE1	4q28.2	0.134686	0.008394	0.01897
RPS6KA1	1p36.11	-0.13468	0.008397	0.018975
TOR3A	1q25.2	-0.13466	0.008408	0.018998
MIR22HG	17p13.3	0.134642	0.008415	0.019013
NOG	17q22	0.134589	0.008441	0.019069
REXO2	11q23.2	-0.13458	0.008448	0.019083
PRR4	12p13.2	-0.13455	0.008459	0.019106
GRIA1	5q33.2	0.1345	0.008485	0.019162
H6PD	1p36.22	0.134471	0.0085	0.019193
KHDC4	1q22	-0.13444	0.008517	0.019228
ZNF222	19q13.31	0.134435	0.008517	0.019228

B3GNT7	2q37.1 2q37.1	0.134409	0.00853	0.019255
ART5	11p15.4	-0.13435	0.00856	0.01932
AAGAB	15q23	0.134342	0.008564	0.019326
KLHL24	3q27.1	0.134336	0.008566	0.01933
SCRT1	8q24.3	-0.13429	0.008591	0.019383
HDHD5-AS1	22q11.1	-0.13428	0.008594	0.019389
HS6ST2	Xq26.2	-0.13427	0.008598	0.019395
COX18	4q13.3	-0.13427	0.008601	0.0194
ITGBL1	13q33.1	0.134228	0.00862	0.019441
TMEM41B	11p15.4	-0.13422	0.008624	0.019448
ASPN	9q22.31	0.134174	0.008647	0.019497
MALAT1	11q13.1	-0.13412	0.008673	0.019553
ACSL6	5q31.1	-0.13411	0.008677	0.019559
CCT2	12q15	-0.13411	0.008677	0.019559
VCX3A	Xp22.31	-0.13411	0.00868	0.019563
NCR3LG1	11p15.1	0.134101	0.008684	0.019569
ASNSD1	2q32.2	-0.13406	0.008705	0.019614
ERMAP	1p34.2	0.134058	0.008706	0.019614
CENPO	2p23.3	-0.13403	0.008718	0.019638
INSIG2	2q14.1-q14.2	0.134033	0.008718	0.019638
RNF138	18q12.1	0.134028	0.008721	0.019641
ADHFE1	8q13.1	0.13401	0.00873	0.01966
INF2	14q32.33	0.133983	0.008743	0.019688
LRRC28	15q26.3	0.133968	0.008751	0.019703
PLEKHF1	19q12	-0.13396	0.008753	0.019705
TATDN3	1q32.3	0.13395	0.00876	0.019719
ANKMY1	2q37.3	-0.13394	0.008764	0.019725
TMCO2	1p34.2	-0.13394	0.008766	0.019729
PPARD	6p21.31	0.133934	0.008768	0.019731
ARL5A	2q23.3	0.133932	0.008769	0.019731
CLCN2	3q27.1	-0.13387	0.0088	0.019797
PRSS36	16p11.2	-0.13387	0.008801	0.019797
MLLT3	9p21.3	0.133869	0.008802	0.019797
ARHGAP17	16p12.1	0.13386	0.008806	0.019804
CDH9	5p14.1	-0.13385	0.008813	0.019817
ITGAX	16p11.2	0.133837	0.008818	0.019826
TFDP2	3q23	-0.13381	0.008832	0.019856
DDAH2	6p21.33	-0.13378	0.008848	0.019889
SNX4	3q21.2	0.133744	0.008866	0.019927
PLAAT3	11q12.3-q13.1	-0.13372	0.00888	0.019952
C1QL3	10p13	0.133714	0.00888	0.019952
USP48	1p36.12	0.133714	0.008881	0.019952
SNX24	5q23.2	0.133713	0.008881	0.019952
DEPDC1B	5q12.1	-0.13371	0.008882	0.019952
MAP3K4	6q26	0.133662	0.008907	0.020007
CDH10	5p14.2-p14.1	0.133628	0.008925	0.020045
GTSF1L	20q13.12	0.133623	0.008928	0.020049
GSTO2	10q25.1	-0.13359	0.008943	0.020079
ZNF677	19q13.42	0.133593	0.008943	0.020079
PTP4A2	1p35.2	0.133569	0.008956	0.020103
ARPC5	1q25.3	0.133568	0.008956	0.020103
GABARAPL1	12p13.2	0.133566	0.008957	0.020103
EFR3B	2p23.3	0.133565	0.008958	0.020103
C6ORF15	6p21.33	-0.13356	0.00896	0.020105
LRRC52-AS1	1q23.3-q24.1	-0.13355	0.008965	0.020114
CDK1	10q21.2	-0.13351	0.008985	0.020157
FAM117A	17q21.33	-0.13351	0.008986	0.020157
PBX3	9q33.3	0.133485	0.008999	0.020184

TREM1	6p21.1	0.133474	0.009005	0.020195
COL10A1	6q22.1	0.133471	0.009006	0.020195
BLMH	17q11.2	-0.13347	0.009007	0.020195
TNPO2	19p13.13	-0.13346	0.009009	0.020198
GCSAML-AS1	1q44	0.133437	0.009024	0.020229
FAM161A	2p15	-0.13343	0.009027	0.020234
LOC100130093	1q42.13	-0.1334	0.009045	0.020272
DPYSL4	10q26.3	0.133388	0.00905	0.02028
TMEM169	2q35	0.133379	0.009054	0.020288
SUPT4H1	17q22	-0.13336	0.009064	0.020306
CACNA1S	1q32.1	0.133354	0.009067	0.020311
RAD51D	17q12	-0.13335	0.009068	0.020311
INTS2	17q23.2	0.133347	0.009071	0.020316
CD59	11p13	0.133343	0.009073	0.020318
IL10RB	21q22.11	0.133317	0.009087	0.020347
PCLO	7q21.11	0.133288	0.009102	0.020379
ORC3	6q15	-0.13322	0.009138	0.020457
EWSR1	22q12.2	-0.1332	0.00915	0.020481
ZNF833P	19p13.2	-0.13316	0.009168	0.020519
SLC25A21	14q13.3	0.133148	0.009176	0.020534
HLA-DQB2	6p21.32	0.133103	0.009199	0.020585
FAM86EP	4p16.3	-0.1331	0.009204	0.020593
CENPU	4q35.1	-0.13309	0.009208	0.0206
FAM169A	5q13.3	0.133082	0.009211	0.020603
CFL2	14q13.1	0.133073	0.009215	0.020612
INHBA-AS1	7p14.1	0.13306	0.009222	0.020625
NT5C3A	7p14.3	-0.13305	0.009227	0.020634
TTC27	2p22.3	-0.13303	0.009238	0.020655
MFN1	3q26.33	0.133023	0.009242	0.020662
CXCR1	2q35	0.133018	0.009245	0.020666
DEK	6p22.3	0.133016	0.009246	0.020666
DCAF4L1	4p13	-0.13301	0.009247	0.020667
TSSK4	14q12	0.132999	0.009255	0.020681
TCP1	6q25.3	-0.13299	0.009261	0.020692
CCL25	19p13.2	-0.13298	0.009263	0.020695
NCDN	1p34.3	-0.13297	0.009272	0.020712
SPATA1	1p22.3	0.132946	0.009283	0.020736
GRIA3	Xq25	0.132938	0.009288	0.020743
PRPF39	14q21.2	-0.13292	0.009298	0.020763
IL17RD	3p14.3	0.132913	0.009301	0.020768
FJX1	11p13	-0.1329	0.009306	0.020778
GBP5	1p22.2	0.132885	0.009316	0.020796
DIPK1B	9q34.3	-0.13288	0.009317	0.020796
CNRIP1	2p14	0.132876	0.00932	0.020802
DOK2	8p21.3	0.132866	0.009326	0.020813
DENND2C	1p13.2	0.132859	0.00933	0.020818
ATP11C	Xq27.1	0.132836	0.009342	0.020842
HOXB4	17q21.32	0.132835	0.009343	0.020842
RAD52	12p13.33	-0.13283	0.009343	0.020842
NUDT3	6p21.31	-0.13283	0.009346	0.020845
C16ORF70	16q22.1	-0.13278	0.009371	0.0209
PHF2P1	13q12.11	-0.13277	0.009378	0.020913
PBDC1	Xq13.3	-0.13274	0.009393	0.020943
HSPA5	9q33.3	0.132734	0.009397	0.02095
LOC653653	17q23.1	0.132726	0.009401	0.020957
HCN2	19p13.3	0.132694	0.009418	0.020993
ZNF786	7q36.1	-0.13267	0.009433	0.021023
STARD5	15q25.1	0.132664	0.009435	0.021025

UXT-AS1	Xp11.23	-0.13264	0.009447	0.021049
KDM7A-DT	7q34	-0.13261	0.009462	0.02108
GLDC	9p24.1	-0.13261	0.009464	0.021083
FRMD8	11q13.1	-0.13261	0.009466	0.021085
LRRC37A6P	10p12.1	0.132595	0.009472	0.021097
GNAZ	22q11.22-q11.23	-0.13258	0.009479	0.021109
GSDME	7p15.3	0.132581	0.00948	0.021109
PRKCE	2p21	0.132567	0.009488	0.021124
CBX6	22q13.1	0.132533	0.009506	0.021163
STOM	9q33.2	0.132519	0.009514	0.021178
PARG	10q11.23	0.132503	0.009523	0.021195
UPK2	11q23.3	-0.13249	0.009529	0.021207
KCNA6	12p13.32	0.132469	0.009541	0.021231
ANKRD34B	5q14.1	0.132467	0.009542	0.021231
CCDC90B	11q14.1	-0.13245	0.009553	0.021252
FOXD4L1	2q14.1	0.132431	0.009562	0.02127
LINC00930	15q26.1	0.132423	0.009566	0.021278
HESX1	3p14.3	-0.13242	0.009568	0.02128
MMGT1	Xq26.3	0.132417	0.009569	0.02128
SFRP1	8p11.21	0.132393	0.009583	0.021308
GPRC5D	12p13.1	0.132367	0.009597	0.021336
CYP3A43	7q22.1	-0.13236	0.009601	0.021343
EIF2S3	Xp22.11	-0.13228	0.009643	0.021433
ISL2	15q24.3	0.132282	0.009644	0.021433
CTCFL	20q13.31	-0.13228	0.009645	0.021434
NUP62CL	Xq22.3	-0.13226	0.009655	0.021454
CHCHD10	22q11.23	-0.13222	0.009678	0.021501
SNORD1C	17q25.1	-0.13222	0.009679	0.021502
MFSD5	12q13.13	-0.13221	0.009683	0.021507
MICU3	8p22	0.132211	0.009683	0.021507
TMEM68	8q12.1	-0.13221	0.009685	0.021508
TCEAL2	Xq22.1	0.132161	0.009711	0.021564
BTN3A3	6p22.2	0.132149	0.009718	0.021576
ERC2	3p14.3	0.132131	0.009728	0.021596
NSUN7	4p14	0.132118	0.009735	0.02161
ANO4	12q23.1	0.132109	0.00974	0.021619
BMP7	20q13.31	-0.13209	0.00975	0.021638
HELQ	4q21.23	0.132082	0.009755	0.021647
SNAP25	20p12.2	0.132069	0.009763	0.021661
FOCAD	9p21.3	0.132064	0.009765	0.021665
MSL3	Xp22.2	-0.13206	0.009768	0.021668
FKBP3	14q21.2	-0.13201	0.009795	0.021727
AP4S1	14q12	0.132007	0.009797	0.021728
CRIP1	14q32.33	0.131996	0.009803	0.02174
C1ORF146	1p22.1	-0.13199	0.009806	0.021743
YIPF4	2p22.3	0.131971	0.009817	0.021766
EID2	19q13.2	-0.13197	0.009821	0.021771
ENTPD8	9q34.3	0.131942	0.009833	0.021797
RGPD5	2q13	0.131864	0.009877	0.021892
SRCIN1	17q12	-0.13185	0.009886	0.021909
USP9X	Xp11.4	0.131827	0.009899	0.021934
MTHFD2	2p13.1	-0.1318	0.009911	0.02196
MBD4	3q21.3	0.131791	0.009919	0.021974
CPNE4	3q22.1	0.131772	0.009929	0.021995
CABP4	11q13.2	0.13176	0.009937	0.022007
EFR3A	8q24.22	0.131758	0.009937	0.022007
NPHP4	1p36.31	-0.13176	0.009939	0.022009
AMT	3p21.31	-0.13175	0.009941	0.02201

HSD17B7	1q23.3	-0.13175	0.009942	0.02201
ASL	7q11.21	-0.13174	0.009945	0.022015
ACAD8	11q25	-0.13174	0.009948	0.022019
CDC26	9q32	-0.13171	0.009963	0.02205
OR10A2	11p15.4	-0.13169	0.009976	0.022076
AMOT	Xq23	0.131671	0.009987	0.022098
LRRC4	7q32.1	0.131642	0.010004	0.022132
FOXO3B	17p11.2	0.131619	0.010017	0.02216
FGF18	5q35.1	-0.13161	0.010021	0.022166
EP400P1	12q24.33	-0.13157	0.010043	0.022213
ERICH4	19q13.2	-0.13155	0.010055	0.022236
TMPRSS9	19p13.3	-0.13155	0.010057	0.022239
GALNT8	12p13.32	0.131519	0.010074	0.022274
SELENOW	19q13.33	-0.13152	0.010075	0.022274
UNC80	2q34	0.131508	0.01008	0.022282
PYM1	12q13.2	-0.1315	0.010082	0.022285
SNORA18	11q21	-0.1315	0.010085	0.022287
ITGA5	12q13.13	0.131473	0.010101	0.02232
NSL1	1q32.3	0.131444	0.010117	0.022354
NR6A1	9q33.3	-0.13143	0.010123	0.022365
NPR3	5p13.3	0.131417	0.010133	0.022384
WRAP53	17p13.1	-0.1314	0.010141	0.0224
PI4KAP2	22q11.21	-0.13139	0.010147	0.02241
NATD1	17p11.2	0.131382	0.010153	0.022421
EPST1	13q14.11	-0.13138	0.010157	0.022427
SUPT20H	13q13.3	-0.13135	0.010172	0.022458
PDZD3	11q23.3	-0.13132	0.010186	0.022486
JSRP1	19p13.3	0.131316	0.010191	0.022496
TMEM168	7q31.1	0.131303	0.010199	0.022507
ACKR4	3q22.1	0.131302	0.010199	0.022507
UBE2NL	Xq27.3	-0.1313	0.0102	0.022507
ADORA1	1q32.1	0.131297	0.010202	0.02251
ARFIP1	4q31.3	0.13126	0.010224	0.022555
DCPS	11q24.2	-0.13121	0.010252	0.022615
CD3E	11q23.3	0.131196	0.010261	0.022632
HYPK	15q15.3	-0.13116	0.010281	0.022673
TAS2R14	12p13.2	-0.13115	0.010289	0.022689
TMCC2	1q32.1	0.131146	0.01029	0.022689
UBE2A	Xq24	-0.13113	0.010299	0.022706
GJC3	7q22.1	-0.13111	0.010312	0.022732
BATF2	11q13.1	-0.13106	0.01034	0.022791
AARD	8q24.11	0.131053	0.010345	0.022799
SSH3	11q13.2	-0.13105	0.010347	0.022802
CA1	8q21.2	0.131036	0.010355	0.022816
ZNF571	19q13.12	-0.13103	0.010358	0.022817
CLEC6A	12p13.31	0.13103	0.010358	0.022817
ENG	9q34.11	0.13103	0.010359	0.022817
C9ORF40	9q21.13	-0.13103	0.010361	0.02282
ZNF674	Xp11.3	-0.13102	0.010365	0.022827
TCIRG1	11q13.2	-0.13096	0.010397	0.022895
GOLGA6L5P	15q25.2	0.130956	0.010402	0.022903
RXRΒ	6p21.32	-0.13094	0.010411	0.02292
G6PC2	2q31.1	0.130911	0.010429	0.022957
UPB1	22q11.23	-0.1309	0.010435	0.022969
DACT3	19q13.32	0.130863	0.010457	0.023014
GPR63	6q16.1	0.130861	0.010459	0.023014
NT5DC2	3p21.1	-0.13086	0.010459	0.023014
FUT1	19q13.33	-0.13084	0.010469	0.02303



BEST2	19p13.13	0.130841	0.010471	0.02303
LILRB2	19q13.42	0.130839	0.010471	0.02303
FSD1	19p13.3	-0.13084	0.010472	0.02303
CXADRP2	15q11.2	0.130824	0.010481	0.023048
MORF4L2	Xq22.2	-0.13077	0.010511	0.023113
PUDP	Xp22.31	-0.13077	0.010515	0.023118
PLBD1	12p13.1	0.13076	0.010519	0.023124
ZNF529	19q13.12	-0.13076	0.010521	0.023126
PTGS2	1q31.1	0.130747	0.010527	0.023132
HEYL	1p34.2	0.130746	0.010527	0.023132
AKR1C2	10p15.1	-0.13075	0.010527	0.023132
PRR13	12q13.13	-0.13074	0.010531	0.023138
CD207	2p13.3	0.130716	0.010545	0.023166
MIAT	22q12.1	0.13071	0.010548	0.023169
DNASE1L3	3p14.3	0.13071	0.010549	0.023169
MLH3	14q24.3	0.130665	0.010576	0.023226
ZNF563	19p13.2	-0.13066	0.01058	0.023233
CCNL1	3q25.31	-0.13065	0.010585	0.023241
GUCY1B1	4q32.1	0.130637	0.010592	0.023255
PELI3	11q13.2	-0.13063	0.010597	0.023263
FBXO3	11p13	0.130624	0.0106	0.023266
LINC00515	21q21.3	-0.13062	0.010601	0.023266
RHBDD1	2q36.3	0.130616	0.010605	0.023272
MOBP	3p22.1	0.130599	0.010615	0.023292
NR2C1	12q22	-0.13058	0.010628	0.023318
NKX2-8	14q13.3	0.130568	0.010634	0.023328
CYS1	2p25.1	0.130565	0.010636	0.02333
SDF4	1p36.33	-0.13054	0.010648	0.023354
MARCKSL1	1p35.1	-0.13054	0.010649	0.023355
DERA	12p12.3	-0.13053	0.010658	0.023371
OSR1	2p24.1	0.13052	0.010663	0.023379
DCTN6	8p12	0.130515	0.010666	0.023382
L3HYPDH	14q23.1	-0.13051	0.010667	0.023382
VNN1	6q23.2	0.130495	0.010678	0.023404
CLIP2	7q11.23	0.130491	0.01068	0.023407
CCNA1	13q13.3	0.130482	0.010686	0.023417
ZNF530	19q13.43	-0.13048	0.010689	0.023421
CYCS	7p15.3	-0.13046	0.010697	0.023437
NXPE4	11q23.2	0.130448	0.010707	0.023454
KRTAP1-1	17q21.2	-0.13043	0.010716	0.023473
IGSF11	3q13.32	0.13042	0.010724	0.023487
ELAC1	18q21.2	0.130403	0.010734	0.023506
OSCP1	1p34.3	-0.13039	0.01074	0.023518
HYAL2	3p21.31	-0.13038	0.01075	0.023538
NFKBID	19q13.12	-0.13036	0.010758	0.023551
CRMP1	4p16.2	0.130358	0.010761	0.023556
KIAA0319	6p22.3	0.130347	0.010768	0.023568
CBARP	19p13.3	-0.13034	0.010773	0.023577
CCT8	21q21.3	-0.13033	0.010776	0.02358
CNPPD1	2q35	-0.13033	0.010781	0.023589
CSRNP1	3p22.2	0.130316	0.010786	0.023598
BCL11B	14q32.2	-0.1303	0.010796	0.023616
PRDM7	16q24.3	-0.1303	0.010799	0.023621
ATP5F1A	18q21.1	0.130288	0.010804	0.023628
DZIP3	3q13.13	0.130284	0.010806	0.023631
PARP11	12p13.32	0.130272	0.010814	0.023645
ZCRB1	12q12	-0.13026	0.010823	0.023659
CRYBB2	22q11.23	-0.13026	0.010823	0.023659

EIF3J	15q21.1	0.130256	0.010824	0.023659
ZNF345	19q13.12	-0.13022	0.010848	0.02371
GRIN1	9q34.3	0.130212	0.01085	0.023712
KRT9	17q21.2	0.130207	0.010853	0.023717
CNFN	19q13.2	-0.13014	0.010896	0.023807
TLE6	19p13.3	0.130111	0.010912	0.02384
CEP44	4q34.1	-0.13011	0.010916	0.023841
GLIS2	16p13.3	0.130105	0.010916	0.023841
PKDCC	2p21	-0.1301	0.010918	0.023841
MTBP	8q24.12	-0.1301	0.010918	0.023841
SFRP2	4q31.3	0.130083	0.010929	0.023864
TAS2R5	7q34	-0.13008	0.010932	0.023866
RUFY1	5q35.3	0.130079	0.010932	0.023866
LRRC24	8q24.3	-0.13008	0.010934	0.023866
SHANK1	19q13.33	0.130064	0.010941	0.02388
GPAT3	4q21.23	0.130034	0.01096	0.023918
SMG1P3	16p12.2	0.130024	0.010966	0.023929
STX7	6q23.2	0.130003	0.010979	0.023954
RAP1GAP	1p36.12	0.129972	0.010998	0.023994
UGT2B11	4q13.2	0.129969	0.011001	0.023996
ECRG4	2q12.2	0.129967	0.011002	0.023996
POFUT2	21q22.3	-0.12996	0.011004	0.023998
ORC4	2q23.1	-0.12995	0.011014	0.024014
KLHL34	Xp22.12	0.129945	0.011015	0.024014
SEMA5A	5p15.31	0.129945	0.011015	0.024014
KCNK5	6p21.2	-0.12994	0.011016	0.024014
IGFL2	19q13.32	0.129905	0.01104	0.024064
GIMAP5	7q36.1	0.129903	0.011041	0.024064
FXN	9q21.11	-0.1299	0.011045	0.024069
AHRR	5p15.33	0.129852	0.011073	0.024129
ST8SIA2	15q26.1	0.129845	0.011077	0.024135
ATOH7	10q21.3 10q21.3-q22.1	-0.1298	0.011105	0.024192
PMS2P4	7q11.21	-0.12978	0.011117	0.024216
SENP6	6q14.1	0.129755	0.011134	0.02425
HDGF	1q23.1	-0.12975	0.011137	0.024253
FNTB	14q23.3	0.129736	0.011146	0.02427
TCF3	19p13.3	-0.12971	0.01116	0.024298
TUBB3	16q24.3	-0.12971	0.011162	0.024298
NDUFA9	12p13.32	-0.12971	0.011162	0.024298
MGAT3	22q13.1	0.129678	0.011183	0.02434
PLEKHH1	14q24.1	0.129661	0.011193	0.024358
SEMA6B	19p13.3	0.129661	0.011193	0.024358
HYPM	Xp11.4	-0.12964	0.011207	0.024386
P3H2	3q28	0.129613	0.011224	0.024419
PCDHB14	5q31.3	0.129601	0.011231	0.024433
RALA	7p14.1	-0.12959	0.011241	0.024451
CCT6B	17q12	-0.12951	0.011288	0.02455
C5ORF52	5q33.3	0.129489	0.011302	0.024578
CERS2	1q21.3	0.129479	0.011308	0.024589
CSNK1G2-AS1	19p13.3	0.129478	0.011309	0.024589
HAND2-AS1	4q34.1	0.129468	0.011316	0.0246
DRAM1	12q23.2	0.129395	0.011362	0.024698
TNFSF18	1q25.1	0.12939	0.011365	0.024702
PIK3IP1	22q12.2	0.129381	0.011371	0.024713
IL12RB2	1p31.3	0.129364	0.011382	0.024734
NEU3	11q13.4	0.129352	0.01139	0.024748
MTIF2	2p16.1	-0.12935	0.011392	0.02475
CLEC14A	14q21.1	0.129337	0.011399	0.024762

COIL	17q22	-0.12933	0.0114	0.024763
WWC2	4q35.1	0.129314	0.011414	0.024789
ZNRF3	22q12.1	-0.12928	0.011438	0.024839
SEMA3G	3p21.1	0.129272	0.011441	0.024842
C2CD6	2q33.1	0.129241	0.011461	0.024883
CPLANE2	1p36.13	-0.12922	0.011474	0.02491
MYH13	17p13.1	0.129195	0.01149	0.024942
RBPM52	15q22.31	0.129174	0.011504	0.024969
SPARC	5q33.1	0.129164	0.01151	0.024981
BDNF	11p14.1	0.129157	0.011515	0.024985
LARP1	5q33.2	0.129157	0.011515	0.024985
CSPG4	15q24.2	0.129155	0.011516	0.024985
CST2	20p11.21	0.129127	0.011534	0.025021
CHURC1	14q23.3	0.129126	0.011535	0.025021
GLYR1	16p13.3	0.129118	0.01154	0.025028
DCLRE1C	10p13	-0.12911	0.011546	0.025039
TBCK	4q24	0.129087	0.01156	0.025067
PFKFB1	Xp11.21	-0.12909	0.011561	0.025067
CCDC144CP	17p11.2	0.129074	0.011569	0.02508
BTG2	1q32.1	0.129066	0.011574	0.025089
PGBD5	1q42.13	0.129055	0.011581	0.025101
LRRC69	8q21.3	-0.12905	0.011582	0.025101
CCN2	6q23.2	0.129044	0.011588	0.025111
LINC00847	5q35.3	0.129038	0.011592	0.025117
SRMS	20q13.33	0.129026	0.0116	0.025129
METTL21EP	13q33.1	-0.12903	0.0116	0.025129
IRF2BPL	14q24.3	0.129021	0.011603	0.025133
LINC01881	2q37.3	0.129	0.011617	0.025159
C1QB	1p36.12	0.128998	0.011618	0.025159
SNORA84	9q22.31	-0.12898	0.011627	0.025176
RASD1	17p11.2	0.128978	0.011631	0.025183
RAET1L	6q25.1	0.128938	0.011657	0.025236
NUTM2A-AS1	10q23.2	-0.12886	0.011709	0.025344
SNORA53	12q23.1	-0.12886	0.01171	0.025344
CHRM2	7q33	0.128741	0.011787	0.025509
CPSF6	12q15	0.128731	0.011793	0.025517
MZF1-AS1	19q13.43	0.128731	0.011793	0.025517
RAB3C	5q11.2	0.128674	0.011831	0.025597
TRIM66	11p15.4	-0.12867	0.011836	0.025601
CCNF	16p13.3	-0.12867	0.011836	0.025601
RARA	17q21.2	-0.12865	0.011845	0.025617
MAGEA6	Xq28	-0.12864	0.011852	0.02563
FAAP24	19q13.11	-0.12862	0.01187	0.025666
CMTR2	16q22.2	0.128607	0.011875	0.025675
TAOK2	16p11.2	0.128598	0.011882	0.025686
CCDC47	17q23.3	0.128586	0.011889	0.0257
TUB	11p15.4	0.128575	0.011897	0.025712
SLC44A3	1p21.3	0.128574	0.011898	0.025712
CHRNA5	15q25.1	0.128571	0.0119	0.025714
ANGPTL6	19p13.2	-0.12857	0.011902	0.025715
PIGV	1p36.11	-0.12856	0.011905	0.025719
C11ORF21	11p15.5	0.128554	0.011911	0.02573
AFP	4q13.3	-0.12854	0.011917	0.02574
LY96	8q21.11	0.128541	0.011919	0.025743
ABL1	9q34.12	0.128519	0.011934	0.025772
ZNF547	19q13.43	-0.12849	0.011956	0.025816
SFT2D2	1q24.2	0.128464	0.011971	0.025846
KDM1B	6p22.3	0.128421	0.012	0.025905

EBF3	10q26.3	0.128402	0.012013	0.02593
FCRL4	1q23.1	0.128399	0.012015	0.025931
SUV39H2	10p13	-0.1284	0.012016	0.025931
GASK1A	3p22.1	0.12837	0.012034	0.025968
AJM1	9q34.3	0.128324	0.012065	0.026031
TNFRSF13C	22q13.2	0.128319	0.012068	0.026036
HYAL3	3p21.31	-0.12831	0.012077	0.026052
LRRN4	20p12.3	-0.1283	0.012083	0.026062
RAB33A	Xq26.1	0.128275	0.012098	0.026092
INGX	Xq13.1	-0.12826	0.012108	0.02611
TNIP1	5q33.1	0.128226	0.012132	0.026158
B3GNT2	2p15	0.128206	0.012145	0.026184
MAS1L	6p22.1	0.12816	0.012176	0.026249
SLX4	16p13.3	0.12814	0.01219	0.026275
SLC43A3	11q12.1	0.128129	0.012197	0.026289
KLF17	1p34.1	0.128101	0.012216	0.026327
FNTA	8p11.21	-0.1281	0.01222	0.02633
ACIN1	14q11.2	0.128094	0.012221	0.02633
HPCAL4	1p34.2	0.128084	0.012228	0.026342
DOK5	20q13.2	0.128081	0.01223	0.026342
UFC1	1q23.3	-0.12808	0.01223	0.026342
SNX15	11q13.1	-0.12808	0.012232	0.026344
CDCA7	2q31.1	-0.12807	0.012234	0.026346
TCAF2	7q35	0.128066	0.01224	0.026356
ARPC3	12q24.11	-0.12805	0.012251	0.026376
SEPHS1P1	7q11.21	-0.12804	0.012255	0.026381
VTCN1	1p13.1-p12	0.128041	0.012257	0.026384
CD1A	1q23.1	0.127999	0.012286	0.026443
ZC3H8	2q14.1	-0.12796	0.01231	0.026493
KCNQ3	8q24.22	0.12793	0.012333	0.026538
CBFA2T2	20q11.21-q11.22	-0.12792	0.01234	0.02655
LEPROTL1	8p12	0.127913	0.012345	0.026558
PRRT3	3p25.3	-0.1279	0.012354	0.026574
DDHD2	8p11.23	0.127888	0.012362	0.02659
PLCD3	17q21.31	0.12787	0.012375	0.026613
RBM12	20q11.22	0.127863	0.01238	0.026621
NPR2	9p13.3	0.127792	0.012428	0.026722
RNF20	9q31.1	0.127791	0.012429	0.026722
DHRS7B	17p11.2	-0.12777	0.012442	0.026747
UBA6	4q13.2	0.127769	0.012444	0.026749
GDF3	12p13.31	0.127764	0.012448	0.026754
TCP10L2	6q27	-0.12776	0.012451	0.026755
UTF1	10q26.3	-0.12776	0.012452	0.026755
CMA1	14q12	0.127757	0.012452	0.026755
SCG3	15q21.2	0.127748	0.012459	0.026764
KIF27	9q21.32	0.127748	0.012459	0.026764
BHLHE22	8q12.3	0.127711	0.012484	0.026815
C5ORF56	5q31.1	-0.12771	0.012488	0.026819
LUZP6	7q33	0.127659	0.012521	0.026888
MYL2	12q24.11	0.127651	0.012526	0.026897
MAPK12	22q13.33	-0.12764	0.012531	0.026903
LIMS3-LOC440895	2q13	-0.12764	0.012534	0.026908
AZGP1	7q22.1	-0.1276	0.012565	0.026971
RPS28	19p13.2	-0.12756	0.012589	0.027019
CCBE1	18q21.32	0.127554	0.012594	0.027024
SERPING1	11q12.1	0.127553	0.012595	0.027024
KIF26A	14q32.33	0.127553	0.012595	0.027024
ADGRD1	12q24.33	0.127543	0.012602	0.027036

SPIDR	8q11.21	-0.12752	0.012617	0.027065
ST6GALNAC3	1p31.1	0.127437	0.012676	0.02719
UNK	17q25.1	-0.12742	0.012688	0.027211
AGO1	1p34.3	0.127416	0.012691	0.027215
CNOT9	2q35	0.127392	0.012708	0.027249
TCEAL6	Xq22.1	0.127354	0.012735	0.027303
IL27RA	19p13.12	0.127325	0.012755	0.027345
SNORD15A	11q13.4	-0.12732	0.012762	0.027356
NAA50	3q13.31	0.127272	0.012792	0.027416
CYB5D2	17p13.2	0.127272	0.012793	0.027416
PLEKHO2	15q22.31	0.127256	0.012804	0.027438
TEX38	1p33	-0.12724	0.012817	0.027461
NR1D1	17q21.1	-0.12721	0.012838	0.027503
CROCCP3	1p36.13	-0.12718	0.012859	0.027546
NEDD1	12q23.1	0.127177	0.01286	0.027546
HCFC1R1	16p13.3	-0.12712	0.012904	0.027636
SPATA5L1	15q21.1	0.127103	0.012913	0.027654
ZNHIT6	1p22.3	0.127089	0.012924	0.027672
ANO8	19p13.11	0.127083	0.012927	0.027678
F2RL3	19p13.11	0.127066	0.01294	0.027701
TRIM10	6p22.1	0.127002	0.012985	0.027793
TCAM1P	17q23.3	-0.127	0.012986	0.027793
GAS2L1	22q12.2	0.126993	0.012992	0.027802
KIAA1257	3q21.3	-0.12699	0.012993	0.027802
ZPBP	7p12.2	-0.12699	0.012995	0.027804
UBE2G2	21q22.3	-0.12695	0.013022	0.027859
CATSPER4	1p36.11	-0.12695	0.013025	0.027863
CEND1	11p15.5	0.12693	0.013037	0.027885
NACA4P	8q22.3	-0.12693	0.013038	0.027885
ATP6V1E1	22q11.21	-0.12692	0.013045	0.027896
SRRD	22q12.1	-0.1269	0.013056	0.027917
HSFX2	Xq28	-0.12689	0.013068	0.027939
HABP2	10q25.3	0.126881	0.013073	0.027948
KDM4C	9p24.1	0.126874	0.013078	0.027956
TGFB3	14q24.3	0.126863	0.013086	0.027969
STK32C	10q26.3	-0.12686	0.013087	0.027969
LURAP1	1p34.1	0.126809	0.013125	0.028047
SUN3	7p12.3	-0.1268	0.013135	0.028065
HTR3C	3q27.1	0.126793	0.013137	0.028066
MED12L	3q25.1	0.126783	0.013144	0.028078
NUDT13	10q22.2	-0.12677	0.013156	0.028101
MAP3K7	6q15	0.126755	0.013164	0.028116
B3GALNT2	1q42.3	0.126742	0.013174	0.028133
SLCO4C1	5q21.1	0.126736	0.013178	0.02814
ARRDC5	19p13.3	0.126723	0.013187	0.028156
BRF2	8p11.23	-0.12671	0.013196	0.028172
BUB1B	15q15.1	0.126703	0.013203	0.028182
KIF11	10q23.33	0.126683	0.013217	0.028209
LY6G5C	6p21.33	-0.12668	0.013218	0.028209
ZSWIM7	17p12	-0.12664	0.013248	0.028269
LYNX1	8q24.3	0.126639	0.013249	0.028269
SNAI3-AS1	16q24.2	-0.12662	0.013259	0.028289
TRMT10C	3q12.3	-0.12662	0.013261	0.02829
ITGB5	3q21.2	0.126612	0.013269	0.028302
UBP1	3p22.3	0.126606	0.013273	0.02831
TMEM184A	7p22.3	-0.1266	0.013281	0.028322
MEFV	16p13.3	0.126594	0.013282	0.028322
SYF2	1p36.11	-0.12658	0.013289	0.028332

UBA6-AS1	4q13.2	-0.12658	0.013289	0.028332
ST6GALNAC2	17q25.1	0.126578	0.013293	0.028337
SNORA49	12q24.33	-0.12658	0.013295	0.028338
VTA1	6q24.1-q24.2	0.126555	0.01331	0.028367
SIRPG	20p13	0.126551	0.013314	0.028371
KCND1	Xp11.23	0.126527	0.013331	0.028405
CALCR	7q21.3	0.126474	0.01337	0.028486
XPC	3p25.1	0.126428	0.013405	0.028556
TRIM14	9q22.33	0.126413	0.013415	0.028575
TMEM52B	12p13.2	0.1264	0.013425	0.028593
POPDC3	6q21	0.126393	0.01343	0.028602
DUBR	3q13.12	0.126386	0.013435	0.028609
LZTR1	22q11.21 22q11.1-q11.2	-0.12638	0.013442	0.028621
HCN4	15q24.1	0.126373	0.013445	0.028624
NKX3-1	8p21.2	0.126365	0.013451	0.028633
ADAMTS6	5q12.3	0.12635	0.013462	0.028654
CRYBA1	17q11.2	-0.12633	0.013474	0.028674
CALB1	8q21.3	0.126333	0.013474	0.028674
DEFA1B	8p23.1	-0.12633	0.013478	0.028678
RWDD2A	6q14.1	-0.12632	0.013486	0.028692
TTC21B	2q24.3	0.126302	0.013497	0.028714
INA	10q24.33	0.126274	0.013518	0.028755
ANAPC1	2q13	0.126264	0.013526	0.028768
CCDC60	12q24.23	0.126259	0.013529	0.028773
YIPF6	Xq12-q13.1	0.12625	0.013537	0.028785
C11ORF42	11p15.4	0.126239	0.013545	0.0288
TSHR	14q31.1	0.126222	0.013557	0.028823
SPATA12	3p14.3	-0.12619	0.013579	0.028867
MPI	15q24.1	0.126189	0.013582	0.02887
COLEC11	2p25.3	-0.12616	0.013603	0.028912
WIF1	12q14.3	-0.12616	0.013605	0.028912
RCAN1	21q22.12	0.126155	0.013608	0.028913
RPRD1B	20q11.23	-0.12615	0.013608	0.028913
CATSPER2	15q15.3	-0.12612	0.013633	0.028962
CD274	9p24.1	0.126118	0.013635	0.028964
ATXN7L3	17q21.31	-0.12611	0.013638	0.028966
SYT17	16p12.3	0.126109	0.013642	0.028972
CHST5	16q23.1	0.126102	0.013647	0.02898
GLCE	15q23	0.126087	0.013658	0.029
SMOX	20p13	-0.12609	0.013659	0.029
UBE2Q2P2	15q25.2	0.126081	0.013663	0.029005
HIST1H3H	6p22.1	-0.12606	0.013677	0.029032
ZNF257	19p12	0.126053	0.013684	0.029043
CBX7	22q13.1	0.126029	0.013702	0.029079
GFPT2	5q35.3	0.126027	0.013704	0.029079
SERPINF1	17p13.3	0.126024	0.013706	0.02908
NEIL3	4q34.3	-0.12601	0.013717	0.029101
LEFTY1	1q42.12	0.125995	0.013728	0.029121
SOWAHC	2q13	0.125989	0.013732	0.029127
HNRNPA1	12q13.13	-0.12598	0.013738	0.029136
BDKRB2	14q32.2	0.125972	0.013745	0.029146
MYH4	17p13.1	-0.12597	0.013746	0.029146
CD19	16p11.2	0.125906	0.013795	0.029247
KMO	1q43	0.125905	0.013796	0.029247
NAT1	8p22	0.125895	0.013804	0.02926
RBMXL2	11p15.4	-0.12589	0.013807	0.029265
YIPF1	1p32.3	-0.12588	0.013815	0.029277
NFKBIZ	3q12.3	0.125852	0.013836	0.02932

GOS2	1q32.2	-0.12584	0.013843	0.029331
PINX1	8p23.1	-0.12583	0.01385	0.029341
FBXL4	6q16.1-q16.2	0.125833	0.013851	0.029341
RAB40B	17q25.3	-0.12583	0.013856	0.029349
SCARF1	17p13.3	0.125822	0.013859	0.029352
ATF6B	6p21.32	-0.12581	0.013866	0.029365
STK11	19p13.3	-0.1258	0.013877	0.029385
COPG2	7q32.2	-0.12577	0.013896	0.029421
OR3A2	17p13.3	0.125695	0.013956	0.029545
CALML3	10p15.1	-0.12565	0.013993	0.02962
FOXQ1	6p25.3	-0.12563	0.014008	0.029648
GPBP1L1	1p34.1	0.12562	0.014013	0.029657
FBXO41	2p13.2	-0.12561	0.014019	0.029666
SNORD89	2q11.2	-0.1256	0.014029	0.029684
SLC22A15	1p13.1	0.125595	0.014033	0.029689
CYB5R4	6q14.2	0.125564	0.014057	0.029736
DTHD1	4p14	0.125532	0.014081	0.029785
DEPDC4	12q23.1	-0.12553	0.014084	0.029789
RASAL3	19p13.12	0.125524	0.014088	0.029793
SLC35F3	1q42.2	0.125519	0.014091	0.029797
RERG	12p12.3	0.125491	0.014113	0.029838
ZNF365	10q21.2	0.12549	0.014114	0.029838
GRID2IP	7p22.1	-0.12546	0.014135	0.029879
ATG4C	1p31.3	0.125461	0.014136	0.029879
SLC9A8	20q13.13	-0.12543	0.014161	0.029929
CRTAC1	10q24.2	0.125404	0.014181	0.029967
NR4A3	9q31.1	0.125385	0.014195	0.029995
FOXA3	19q13.32	0.125375	0.014203	0.030008
SERPINA5	14q32.13	0.125351	0.014222	0.030045
RING1	6p21.32	-0.12533	0.014237	0.030074
LRRN3	7q31.1	0.125251	0.0143	0.030202
ISM1	20p12.1	0.12525	0.014301	0.030202
DNAJB12	10q22.1	-0.1252	0.014337	0.030275
TTLL5	14q24.3	0.125182	0.014354	0.030308
PLEKHB1	11q13.4	-0.12518	0.014358	0.030313
PCDHB13	5q31.3	0.125161	0.014371	0.030336
CDIPTOSP	16p11.2	-0.12513	0.014392	0.030378
ZC2HC1A	8q21.13	0.125122	0.014401	0.030395
NBPF7	1p12	0.125052	0.014457	0.030508
MALL	2q13	0.125042	0.014464	0.030522
RNASE2	14q11.2	0.12504	0.014466	0.030522
ELP4	11p13	-0.12502	0.014485	0.030555
TTC30A	2q31.2	0.125016	0.014485	0.030555
SLC23A3	2q35	-0.12497	0.01452	0.030626
DIO3OS	14q32.31	-0.12497	0.014525	0.030632
TM4SF18	3q25.1	0.12495	0.014537	0.030656
HDAC6	Xp11.23	-0.12495	0.014541	0.03066
KPNA1	3q21.1	0.124937	0.014547	0.03067
RPL41	12q13.2	-0.12493	0.014552	0.030676
ATP6V0E2	7q36.1	-0.12492	0.01456	0.030689
ACTN3	11q13.2	0.124921	0.014561	0.030689
MAGED4B	Xp11.22	0.124889	0.014586	0.030739
LIMD1	3p21.31	0.12488	0.014593	0.030751
LOC100133920	2q11.1	-0.12486	0.014609	0.030782
ZNF418	19q13.43	0.124824	0.014638	0.030838
RND1	12q13.12	0.124808	0.01465	0.030862
TMEM204	16p13.3	0.124758	0.01469	0.030942
KCTD21	11q14.1	0.124722	0.014719	0.031

CORO2A	9q22.33	0.124709	0.01473	0.031019
FAM163A	1q25.2	0.1247	0.014737	0.031031
CLDN6	16p13.3	-0.12468	0.014752	0.03106
ORAI3	16p11.2	-0.12467	0.014762	0.031077
NOX4	11q14.3	0.124666	0.014765	0.031079
LOC100131496	20q13.12	-0.12465	0.014779	0.031107
KCNE4	2q36.1	0.124641	0.014784	0.031112
OPHN1	Xq12	0.124641	0.014785	0.031112
RGS2	1q31.2	0.124637	0.014788	0.031116
AMIGO1	1p13.3	0.124634	0.01479	0.031117
ATP6V1G1	9q32	-0.12463	0.014792	0.031117
HSD11B1	1q32.2	0.124549	0.014859	0.031255
TENT2	5q14.1	0.124529	0.014875	0.031283
CPLX2	5q35.2	-0.12453	0.014875	0.031283
GIN53	16q21	-0.12452	0.014879	0.031287
AEN	15q26.1	0.12452	0.014882	0.031291
APLNR	11q12.1	0.124507	0.014893	0.031308
CD1D	1q23.1	0.124506	0.014893	0.031308
MGAT1	5q35.3	0.124504	0.014895	0.031309
SNAPC2	19p13.2	-0.1245	0.014898	0.03131
PYROXD2	10q24.2	0.124497	0.014901	0.031312
UBOX5	20p13	-0.1245	0.014902	0.031312
GMIP	19p13.11	0.124494	0.014903	0.031312
BRINP3	1q31.1	0.124462	0.014929	0.03136
FCGR3B	1q23.3	0.124462	0.014929	0.03136
TRABD	22q13.33	-0.12445	0.014937	0.031374
SAR1A	10q22.1	0.12444	0.014947	0.031392
NXF3	Xq22.1	0.124426	0.014958	0.031412
GM2A	5q33.1	0.124416	0.014967	0.031426
CHRN2	1q21.3	0.124385	0.014992	0.031476
BICD2	9q22.31	0.124382	0.014994	0.031476
HIGD1A	3p22.1	0.124381	0.014995	0.031476
CATSPERG	19q13.2	0.124369	0.015005	0.031494
ZBTB42	14q32.33	0.124363	0.01501	0.031498
S1PR4	19p13.3	0.124362	0.015011	0.031498
PPP3R1	2p14	0.124345	0.015025	0.031524
BTBD19	1p34.1	0.124343	0.015026	0.031524
SLC25A36	3q23	-0.12432	0.015041	0.031552
CHMP4A	14q12	-0.12432	0.015043	0.031552
TNFSF12-TNFSF13	17p13.1	-0.12431	0.015055	0.031576
ELOVL2	6p24.2	0.124301	0.015061	0.031584
KLHL8	4q22.1	0.124281	0.015077	0.031612
DHX30	3p21.31	-0.12428	0.015078	0.031612
COL4A5	Xq22.3	0.124278	0.015079	0.031613
SCRG1	4q34.1	0.124273	0.015084	0.031617
C9ORF47	9q22.1	0.124272	0.015085	0.031617
ZNF630	Xp11.23	-0.12427	0.015089	0.031622
GREB1	2p25.1	0.124243	0.015109	0.03166
MTMR6	13q12.13	0.124232	0.015118	0.031676
MFSB8	4q28.2	-0.1242	0.015141	0.031723
DNMBP	10q24.2	0.124197	0.015146	0.03173
VDAC2	10q22.2	-0.12418	0.015161	0.031757
PRR35	16p13.3	-0.12417	0.015165	0.031763
GPLD1	6p22.3	0.124171	0.015168	0.031764
PLVAP	19p13.11	0.124161	0.015176	0.031778
LOC100270746	6p22.2	-0.12414	0.01519	0.031804
TOE1	1p34.1	-0.12411	0.015215	0.031854
CFAP100	3q21.3	-0.12411	0.015217	0.031855



NAV3	12q21.2	0.124087	0.015237	0.031892
KLRB1	12p13.31	0.124074	0.015247	0.031911
TMEM38B	9q31.2	-0.12407	0.015255	0.031924
FCF1	14q24.3	0.124035	0.01528	0.031973
C1QTNF9	13q12.12	0.124033	0.015281	0.031973
AUTS2	7q11.22	0.124011	0.0153	0.032009
PAFAH2	1p36.11	0.123974	0.015331	0.03207
IFT140	16p13.3	0.123939	0.01536	0.032125
ZNF229	19q13.31	0.123938	0.015361	0.032125
TAF7	5q31.3	-0.12391	0.015381	0.032161
NEDD4	15q21.3	0.123914	0.015381	0.032161
MCHR1	22q13.2	0.123902	0.01539	0.032177
SLC2A12	6q23.2	-0.12387	0.015415	0.032225
PPA1	10q22.1	-0.12386	0.015427	0.032247
RPA1	17p13.3	0.123804	0.015473	0.03234
FRAS1	4q21.21	0.12379	0.015484	0.03236
WIPI1	17q24.2	0.123779	0.015494	0.032376
KRTAP10-6	21q22.3	-0.12377	0.015502	0.03239
CDC42BPG	11q13.1	0.123757	0.015512	0.032408
STC1	8p21.2	0.123747	0.015521	0.032422
KRTAP12-4	21q22.3	-0.12374	0.015527	0.032432
VSTM1	19q13.42	0.123718	0.015545	0.032466
MPL	1p34.2	0.123707	0.015555	0.032482
PITPNM2	12q24.31	0.123704	0.015557	0.032482
TIE1	1p34.2	0.123702	0.015558	0.032482
GDA	9q21.13	0.123701	0.015559	0.032482
GPS2	17p13.1	-0.1237	0.015564	0.032488
SULT1A3	16p11.2	-0.12369	0.015567	0.032493
FOXD1	5q13.2	0.123687	0.015571	0.032497
ANKRD6	6q15	0.123665	0.01559	0.032533
INTS5	11q12.3	-0.12366	0.015593	0.032537
KRT24	17q21.2	0.123655	0.015598	0.032544
LHX4	1q25.2	0.123646	0.015605	0.032555
ZNF777	7q36.1	-0.12364	0.015612	0.032563
WDR17	4q34.2	0.123639	0.015612	0.032563
HCCS	Xp22.2	-0.12359	0.01565	0.032639
IL1RAPL2	Xq22.3	0.123586	0.015656	0.032648
ZBTB10	8q21.13	0.123572	0.015668	0.032669
ECPAS	9q31.3	0.123568	0.015672	0.032674
SLC13A1	7q31.32	0.123503	0.015727	0.032785
ANKRD36BP2	2p11.2	0.123481	0.015746	0.03282
PCDHB16	5q31.3	0.123478	0.015749	0.032823
PIP5K1C	19p13.3	0.123465	0.01576	0.032843
RBBP4	1p35.1	-0.12346	0.015762	0.032845
DARS2	1q25.1	0.123421	0.015797	0.032913
REXO1	19p13.3	-0.12342	0.015798	0.032913
SAA1	11p15.1	-0.12341	0.01581	0.032933
PLP2	Xp11.23	-0.1234	0.015815	0.032941
GCA	2q24.2	-0.12336	0.015853	0.033017
CWC25	17q12	-0.12335	0.01586	0.033029
SLC27A3	1q21.3	0.123335	0.015871	0.033047
ANKS1A	6p21.31	0.123254	0.01594	0.033188
SLC4A9	5q31.3	-0.12325	0.015943	0.033191
C2ORF81	2p13.1	-0.12318	0.016007	0.03332
MESP1	15q26.1	-0.12317	0.01601	0.033323
PIMREG	17p13.2	-0.12316	0.016021	0.033342
LOC220729	3q29	-0.12315	0.016033	0.033363
COG8	16q22.1	0.123144	0.016035	0.033365

CFAP206	6q15	0.12314	0.016039	0.033368
PTPN23	3p21.31	0.12313	0.016048	0.033384
GIPC3	19p13.3	0.123127	0.01605	0.033386
CKM	19q13.32	-0.12312	0.016055	0.033391
ZBED8	5q33.3	-0.12311	0.016064	0.033408
TDRD3	13q21.2	-0.12309	0.016085	0.033448
ITPR3	6p21.31	0.123067	0.016102	0.03348
MKI67	10q26.2	0.123039	0.016127	0.033528
GTPBP4	10p15.3	-0.12302	0.016145	0.033562
ZNF671	19q13.43	0.123	0.016161	0.033591
LSG1	3q29	-0.123	0.016164	0.033594
HSF5	17q22	0.122993	0.016167	0.033597
SLC23A1	5q31.2	-0.12297	0.01619	0.033642
PEX19	1q23.2	0.122962	0.016193	0.033645
CAPS	19p13.3	-0.12295	0.016202	0.033659
EIF1AX	Xp22.12	-0.12295	0.016207	0.033666
APLF	2p13.3	-0.12294	0.016213	0.033673
FMO3	1q24.3	0.122939	0.016214	0.033673
DHRX	Xp22.33 and Yp11.2	-0.12291	0.016238	0.033719
VSTM2B	19q12	-0.12289	0.016257	0.033756
ACTR10	14q23.1	0.122878	0.016267	0.033774
VDAC3	8p11.21	-0.12286	0.016284	0.033805
SGIP1	1p31.3	0.122853	0.016289	0.033813
AK5	1p31.1	0.12284	0.0163	0.033832
MPZ	1q23.3	-0.12284	0.016302	0.033832
GAS1	9q21.33	0.122758	0.016373	0.033975
ZNF544	19q13.43	-0.12274	0.016391	0.034009
KANSL1L	2q34	0.122714	0.016411	0.034048
CAB39L	13q14.2	-0.12268	0.016443	0.03411
LINC00520	14q22.3	0.122663	0.016457	0.034135
SPATA48	7p12.2	0.122636	0.016481	0.034181
H2AFB1	Xq28	-0.1226	0.016509	0.034237
RSRC1	3q25.32	0.122601	0.016511	0.034238
GFAP	17q21.31	0.122594	0.016518	0.034248
CDK15	2q33.1	0.122579	0.016531	0.034271
TM9SF1	14q12	0.122573	0.016536	0.034279
BLNK	10q24.1	0.122559	0.016549	0.034302
C1QTNF6	22q12.3	0.122549	0.016557	0.034316
TMEM81	1q32.1	-0.12254	0.016563	0.034323
TWF2	3p21.2	-0.12254	0.016567	0.034329
FGF14	13q33.1	0.122525	0.016579	0.03435
CPA4	7q32.2	-0.12251	0.016589	0.034368
EIF4B	12q13.13	0.122508	0.016594	0.034374
ENTHD1	22q13.1	0.122496	0.016605	0.034393
TRPA1	8q21.11	0.122493	0.016607	0.034395
SLITRK3	3q26.1	0.122473	0.016626	0.034429
HIST1H2AJ	6p22.1	-0.12246	0.016637	0.034449
AKIRIN1	1p34.3	0.122374	0.016714	0.034604
TACR2	10q22.1	0.122371	0.016717	0.034607
HIST1H2BG	6p22.2	-0.12235	0.016734	0.03464
EPHX1	1q42.12	-0.12235	0.016737	0.034642
CIB3	19p13.11	0.122337	0.016747	0.034659
ZNF423	16q12.1	0.12231	0.016771	0.034705
ACY1	3p21.2	-0.1223	0.016783	0.034722
BRAP	12q24.12	0.122298	0.016783	0.034722
UBAP1L	15q22.31	-0.12229	0.016788	0.03473
S100A7	1q21.3	-0.12229	0.016793	0.034736
UTS2B	3q28	0.122284	0.016795	0.034736

ACADSB	10q26.13	0.122278	0.0168	0.034744
KLHL41	2q31.1	-0.12225	0.01683	0.034799
SH3YL1	2p25.3	-0.12224	0.01683	0.034799
DKK2	4q25	0.122236	0.016838	0.034812
GABPB1	15q21.2	0.12223	0.016844	0.034819
PAPOLB	7p22.1	0.122224	0.016849	0.034827
RABAC1	19q13.2	-0.12222	0.016852	0.03483
HSPA1L	6p21.33	0.122197	0.016874	0.034871
HOXA4	7p15.2	-0.12219	0.016883	0.034887
NPR1	1q21.3	0.122159	0.016908	0.034934
HNRNPR	1p36.12	0.122135	0.016929	0.034975
TMEM254-AS1	10q22.3	-0.12212	0.01694	0.034994
AIFM2	10q22.1	-0.1221	0.016962	0.035034
SLC7A11	4q28.3	0.122098	0.016963	0.035034
RIMS3	1p34.2	0.122093	0.016968	0.035039
ARSE	Xp22.33	-0.12209	0.016973	0.035048
CPQ	8q22.1	0.122079	0.016981	0.035056
LOC154761	7q35	0.122078	0.016981	0.035056
XXYL1	3q29	-0.12205	0.017011	0.035114
WEE1	11p15.4	0.122041	0.017015	0.035119
DDA1	19p13.11	-0.12203	0.017027	0.035141
TRAF3	14q32.32	0.122017	0.017037	0.035158
UNC5CL	6p21.1	-0.122	0.017053	0.035186
ESCO2	8p21.1	0.121995	0.017057	0.035192
HDX	Xq21.1	0.12199	0.017061	0.035197
KISS1	1q32.1	-0.12196	0.01709	0.035251
ACTL8	1p36.13	-0.12194	0.017108	0.035285
SERPINA10	14q32.13	-0.1219	0.017147	0.035363
CD82	11p11.2	0.121858	0.017183	0.035433
PIBF1	13q21.33-q22.1	-0.12183	0.017212	0.035489
CHAT	10q11.23	0.121825	0.017214	0.035489
CR2	1q32.2	0.121818	0.01722	0.035497
ECE1	1p36.12	0.121816	0.017221	0.035497
ATOH8	2p11.2	0.121813	0.017224	0.0355
IPO11	5q12.1	0.12181	0.017227	0.035501
HPCAL1	2p25.1	-0.12178	0.017259	0.035563
B4GALT6	18q12.1	0.121768	0.017266	0.035575
PLOD2	3q24	0.121711	0.017318	0.035678
TEX261	2p13.3	-0.12165	0.017373	0.035787
TMEM131L	4q31.3	0.121641	0.017384	0.035802
ABCB4	7q21.12	0.121641	0.017384	0.035802
ZNF664	12q24.31	0.121632	0.017392	0.035815
PKIB	6q22.31	0.121626	0.017398	0.035821
PPT1	1p34.2	-0.12163	0.017398	0.035821
ZNF585B	19q13.12	0.121621	0.017402	0.035826
SEMA6D	15q21.1	0.121604	0.017418	0.035854
CPS1	2q34	0.121599	0.017423	0.03586
POM121L4P	22q11.21	0.121595	0.017426	0.035861
ZNF239	10q11.21	-0.12159	0.017427	0.035861
LRRC66	4q12	0.121564	0.017455	0.035916
PANX1	11q21	0.12155	0.017468	0.035939
FANCM	14q21.2	0.121545	0.017473	0.035945
TSSK1B	5q22.2	0.12154	0.017477	0.03595
ARHGAP33	19q13.12	-0.12154	0.017479	0.03595
POTEC	18p11.21	0.121535	0.017482	0.035953
WARS	14q32.2	0.121528	0.017489	0.035964
SLC7A10	19q13.11	-0.12152	0.017493	0.035969
C16ORF89	16p13.3	0.121518	0.017498	0.035975

LNP1	3q12.2	0.121464	0.017549	0.036075
NEURL1	10q24.33	0.121446	0.017565	0.036106
KCNJ2	17q24.3	0.121423	0.017587	0.036146
EPS8L2	11p15.5	-0.12142	0.017589	0.036146
NAGLU	17q21.2	-0.12142	0.017594	0.036153
STAT4	2q32.2-q32.3	0.121394	0.017614	0.036191
CYP2C18	10q23.33	0.121375	0.017632	0.036221
EMB	5q11.1	0.121374	0.017633	0.036221
C12ORF77	12p12.1	0.121373	0.017634	0.036221
CHPT1	12q23.2	-0.12137	0.017639	0.036227
PCDHB11	5q31.3	0.121351	0.017655	0.036256
ZNF646	16p11.2	0.121315	0.017688	0.036321
HLA-DRA	6p21.32	0.12129	0.017712	0.036367
TDRD1	10q25.3	0.121287	0.017715	0.036368
TMEM272	13q14.3	-0.12126	0.017742	0.03642
EFS	14q11.2	0.121245	0.017755	0.036443
STK4	20q13.12	-0.12121	0.017786	0.036504
SLC9A6	Xq26.3	0.121193	0.017804	0.036537
ZNF28	19q13.41	0.121169	0.017827	0.036579
OSBPL1A	18q11.2	0.121156	0.017839	0.036601
DUSP1	5q35.1	0.121139	0.017855	0.03663
HNRNPAB	5q35.3	-0.12114	0.017859	0.036634
MIR99AHG	21q21.1	0.121129	0.017865	0.036643
KLK5	19q13.41	-0.12111	0.01788	0.03667
HHIPL1	14q32.2	0.121109	0.017884	0.036674
PPP1R36	14q23.3	0.121105	0.017887	0.036677
SMC1A	Xp11.22	0.121089	0.017902	0.036704
SLC25A11	17p13.2	-0.12109	0.017904	0.036704
TEX9	15q21.3	0.121055	0.017935	0.036764
TMEM121B	22q11.1	0.121052	0.017938	0.036767
ADRA1A	8p21.2	0.121038	0.017951	0.03679
FEZ1	11q24.2	0.120991	0.017996	0.036877
ACAA1	3p22.2	-0.12099	0.018001	0.036885
BTC	4q13.3	0.120977	0.01801	0.036899
FCER2	19p13.2	0.120974	0.018013	0.036901
EML2	19q13.32	0.120971	0.018015	0.036902
NOX3	6q25.3	-0.12094	0.018049	0.036967
ITGA10	1q21.1	0.12092	0.018065	0.036996
PHLDA2	11p15.4	-0.12092	0.018067	0.036996
LASP1	17q12	0.120828	0.018153	0.037169
XG	Xp22.33	-0.12082	0.018157	0.037174
PPIEL	1p34.3	-0.12079	0.018186	0.037228
OGN	9q22.31	0.120787	0.018193	0.037239
NPLOC4	17q25.3	-0.12078	0.018197	0.037245
CSPP1	8q13.1-q13.2	-0.12077	0.018205	0.037257
SLC2A3	12p13.31	0.120772	0.018207	0.037257
EXTL2	1p21.2	0.120746	0.018232	0.037305
SLC10A2	13q33.1	0.12074	0.018238	0.037313
CCM2L	20q11.21	0.120732	0.018246	0.037324
HSPA12B	20p13	0.120704	0.018273	0.037377
COL6A2	21q22.3	0.120701	0.018276	0.037378
HSPB7	1p36.13	0.120699	0.018278	0.037379
CYB5A	18q22.3	-0.12069	0.018285	0.037385
ACTL6A	3q26.33	-0.12069	0.018285	0.037385
LGALS7B	19q13.2	-0.12069	0.018286	0.037385
HOXA2	7p15.2	-0.12067	0.018303	0.037415
NMNAT2	1q25.3	0.120665	0.01831	0.037426
MRPS36	5q13.2	-0.12066	0.018313	0.037427

GNAT1	3p21.31	-0.12066	0.018316	0.037431
BMS1P1	10q11.22	0.120638	0.018337	0.037468
DBH	9q34.2	0.120637	0.018338	0.037468
RWDD3	1p21.3	-0.12062	0.018357	0.037502
ANXA5	4q27	0.120613	0.018361	0.037507
RBM20	10q25.2	0.1206	0.018374	0.037529
LY75	2q24.2	0.120595	0.018379	0.037534
NEMP2	2q32.2	0.120594	0.01838	0.037534
DES	2q35	0.120554	0.018419	0.03761
TNFRSF10D	8p21.3	0.12055	0.018423	0.037613
THPO	3q27.1	0.120529	0.018444	0.037652
LRRC56	11p15.5	-0.12049	0.018478	0.037719
ZNF658	9q21.11	0.120483	0.018488	0.037736
RNF14	5q31.3	0.120476	0.018495	0.037746
EVL	14q32.2	0.120472	0.0185	0.037751
UCA1	19p13.12	-0.12045	0.018521	0.037791
RTKN2	10q21.2	0.120445	0.018526	0.037797
SMOC1	14q24.2	-0.12039	0.018582	0.037906
KRT73	12q13.13	0.120387	0.018583	0.037906
TAS2R38	7q34	0.120379	0.018591	0.037918
STKLD1	9q34.2	-0.12037	0.018597	0.037926
CSNK1A1L	13q13.3	0.120366	0.018604	0.037937
DCHS1	11p15.4	0.12036	0.018609	0.037944
RNU4ATAC	2q14.2	-0.12035	0.018618	0.037958
BRPF1	3p25.3	0.120331	0.018638	0.037994
DCUN1D4	4q12	-0.12031	0.01866	0.038034
TUBA1B	12q13.12	-0.12031	0.018661	0.038034
CALHM4	6q22.1	0.120288	0.01868	0.03807
HLA-DMB	6p21.32	0.120278	0.01869	0.038086
SNORA6	3p22.1	-0.12024	0.018726	0.038155
PLEKHA8	7p14.3	-0.12023	0.018735	0.038168
SERPINB1	6p25.2	0.120232	0.018736	0.038168
NRK	Xq22.3	0.120207	0.018761	0.038214
DUSP21	Xp11.3	0.120188	0.01878	0.038249
LINC00205	21q22.3	0.120157	0.018811	0.038306
OMD	9q22.31	0.120154	0.018813	0.038306
RARB	3p24.2	0.120154	0.018813	0.038306
DHRS1	14q12	-0.12014	0.018827	0.03833
CFAP46	10q26.3	0.120113	0.018854	0.038381
TMEM47	Xp21.1	0.120078	0.018889	0.038449
SUPV3L1	10q22.1	-0.12007	0.018899	0.038464
CELF4	18q12.2	0.120064	0.018903	0.038468
PPHLN1	12q12	-0.12005	0.018918	0.038496
TXNRD3NB	3q21.3	-0.12004	0.018925	0.038505
TRMT12	8q24.13	-0.12003	0.018939	0.038531
LRRC49	15q23	0.120016	0.018951	0.038551
CALR	19p13.13	-0.12001	0.018953	0.038551
CYP1A1	15q24.1	0.120003	0.018964	0.038569
UTP14C	13q14.3	0.119995	0.018972	0.038582
CHI3L2	1p13.2	0.119967	0.019	0.038635
CD2	1p13.1	0.11995	0.019018	0.038664
NUP155	5p13.2	0.119949	0.019018	0.038664
CLN8	8p23.3	0.119914	0.019053	0.038732
UBE2W	8q21.11	0.1199	0.019067	0.038755
SYTL3	6q25.3	0.119893	0.019075	0.038767
ZNF711	Xq21.1	-0.11987	0.019099	0.038812
MS4A12	11q12.2	0.119867	0.019101	0.038812
TPH1	11p15.1	0.119842	0.019126	0.03886

GPN3	12q24.11	-0.11981	0.01916	0.038925
SH2D4B	10q23.1	0.1198	0.019168	0.038938
CFAP74	1p36.33	-0.11977	0.0192	0.038998
GNG7	19p13.3	0.119745	0.019224	0.039042
SAG	2q37.1	-0.11974	0.019229	0.039049
FBXO39	17p13.1	0.119697	0.019273	0.039131
NPTX2	7q22.1	-0.1197	0.019275	0.039131
LAYN	11q23.1	0.119695	0.019275	0.039131
GOLGA6L1	15q11.2	-0.11969	0.019283	0.039143
AK8	9q34.13	-0.11965	0.019325	0.039225
ANXA7	10q22.2	0.119619	0.019352	0.039275
RGS5	1q23.3	0.119602	0.01937	0.039307
HES4	1p36.33	-0.11959	0.019379	0.039322
B4GALT4	3q13.32	0.119583	0.019389	0.039337
ZNF540	19q13.12	0.119567	0.019405	0.039367
SLC49A3	4p16.3	0.119561	0.019411	0.039375
LAMP3	3q27.1	0.119559	0.019414	0.039377
COX16	14q24.2	-0.11956	0.019416	0.039377
ROGDI	16p13.3	-0.11955	0.019427	0.039395
MPPED2	11p14.1	0.119534	0.019439	0.039416
SELENON	1p36.11	0.119524	0.019449	0.03943
CPAMD8	19p13.11	0.119523	0.01945	0.03943
CCL26	7q11.23	0.119516	0.019458	0.039442
SYNCRIP	6q14.3	0.119507	0.019467	0.039457
ECI2	6p25.2	0.119492	0.019482	0.039483
ZDHHC9	Xq26.1	-0.11949	0.019486	0.039486
MAPK8IP2	22q13.33	-0.11946	0.019516	0.039542
CD47	3q13.12	-0.11946	0.019517	0.039542
KANK1	9p24.3	0.119443	0.019533	0.039566
WASHC2C	10q11.22	0.119443	0.019533	0.039566
CCDC74A	2q21.1	-0.11944	0.019537	0.03957
RBBP6	16p12.1	0.119427	0.019549	0.03959
ZFAT	8q24.22	0.119421	0.019555	0.039598
LINC00654	20p12.3	0.119381	0.019596	0.039677
ACTL9	19p13.2	-0.11938	0.019599	0.039679
GPR83	11q21	-0.11937	0.019606	0.039689
IL12B	5q33.3	0.119361	0.019617	0.039709
OTX2	14q22.3	0.119308	0.019672	0.039814
STAU1	20q13.13	-0.1193	0.019678	0.039824
MKNK2	19p13.3	0.119294	0.019686	0.039835
CXORF49B	Xq13.1	-0.11918	0.019809	0.04008
IGSF5	21q22.2	0.119165	0.01982	0.040098
MAP3K15	Xp22.12	0.119127	0.01986	0.040172
OPTC	1q32.1	-0.11913	0.019861	0.040172
FSD2	15q25.2	0.119095	0.019893	0.040234
CLC	19q13.2	0.119091	0.019897	0.040239
ADRB1	10q25.3	0.119068	0.019921	0.040283
FNDC11	20q13.33	-0.11905	0.019935	0.040307
SCARNA5	2q37.1	-0.11905	0.01994	0.040312
KIF5A	12q13.3	0.119024	0.019968	0.040365
TDP2	6p22.3	0.119003	0.019989	0.040404
ZNF595	4p16.3	-0.119	0.019996	0.040415
CDH2	18q12.1	0.118956	0.020039	0.040497
PCDHGA6	5q31.3	0.118948	0.020048	0.04051
PHOSPHO2	2q31.1	-0.11894	0.02006	0.040531
VIP	6q25.2	0.118926	0.02007	0.040547
SPSB4	3q23	0.11889	0.020108	0.04062
TOR4A	9q34.3	0.11888	0.020119	0.040637

RCC2	1p36.13	-0.11888	0.020121	0.040637
BAIAP2L1	7q21.3-q22.1	0.118865	0.020135	0.040662
ZNF491	19p13.2	0.118842	0.020159	0.040706
ZNF648	1q25.3	0.118795	0.020209	0.040802
ZRSR2	Xp22.2	-0.11878	0.020223	0.040827
KCNA2	1p13.3	0.118776	0.020229	0.040835
KCNK2	1q41	0.118772	0.020233	0.04084
ADORA2B	17p12	0.118733	0.020275	0.040919
YARS2	12p11.21	-0.11871	0.020297	0.04096
BEND3	6q21	0.118695	0.020315	0.040992
SHISA6	17p12	0.118688	0.020322	0.041002
LGALS9	17q11.2	0.118665	0.020346	0.041048
TACC3	4p16.3	-0.11864	0.020372	0.041095
KLK6	19q13.41	-0.11862	0.020394	0.041135
ADIRF	10q23.2	-0.1186	0.020414	0.041172
FAP	2q24.2	0.118574	0.020444	0.041223
C6ORF62	6p22.3	-0.11857	0.020444	0.041223
IL7	8q21.13	0.118558	0.020461	0.041254
WNT1	12q13.12	0.11855	0.020469	0.041266
ZNF814	19q13.43	-0.11855	0.020471	0.041266
LOC145474	14q24.2	-0.11854	0.020478	0.041273
CALM2	2p21	0.118541	0.020479	0.041273
ANO5	11p14.3	0.118539	0.020481	0.041273
TMEM151A	11q13.2	-0.11853	0.020493	0.041292
PCDHGA5	5q31.3	0.118523	0.020498	0.0413
DNAH6	2p11.2	-0.11851	0.020509	0.041318
PTRHD1	2p23.3	-0.11851	0.020514	0.041323
C1QTNF9B	13q12.12	-0.1185	0.020521	0.041332
ALS2CL	3p21.31	-0.1185	0.020527	0.04134
ZNF761	19q13.42	-0.11848	0.020546	0.041369
CRIPAK	4p16.3	-0.11848	0.020548	0.041369
ZNF497	19q13.43	-0.11848	0.020549	0.041369
ME2	18q21.2	0.118476	0.020549	0.041369
TMEM72	10q11.21	0.118473	0.020553	0.041372
OR10Q1	11q12.1	-0.11846	0.020563	0.041388
KATNAL1	13q12.3	0.118453	0.020574	0.041407
ZNF443	19p13.2	-0.11842	0.020605	0.041464
KLRC2	12p13.2	-0.1184	0.020627	0.0415
TANGO2	22q11.21	-0.1184	0.020629	0.0415
RDH11	14q24.1	0.118402	0.020629	0.0415
TMPRSS6	22q12.3	-0.11839	0.020646	0.041531
METTL11B	1q24.2	0.118381	0.020652	0.041538
AP1B1	22q12.2	0.118369	0.020664	0.041558
TSPO2	6p21.1	-0.11832	0.020713	0.041652
WHAMMP3	15q11.2	0.118315	0.020722	0.041662
PEX7	6q23.3	-0.11831	0.020723	0.041662
NSFL1C	20p13	-0.11831	0.020724	0.041662
RPL26	17p13.1	-0.11831	0.020726	0.041663
NUDT17	1q21.1	0.118303	0.020735	0.041677
ANKRD40	17q21.33	0.118258	0.020785	0.041772
M1AP	2p13.1	0.118199	0.020848	0.041896
DPF1	19q13.2	-0.1182	0.020852	0.041899
RHOQ	2p21	-0.11819	0.020855	0.041901
BDH2	4q24	-0.11816	0.020891	0.041966
RBPJL	20q13.12	-0.11816	0.020892	0.041966
SACS	13q12.12	0.11815	0.020902	0.041981
TNPO3	7q32.1	0.118133	0.02092	0.042015
ECHDC3	10p14	-0.11813	0.020926	0.042021

CST8	20p11.21	0.118109	0.020947	0.04206
ADGRF4	6p12.3	-0.11809	0.020967	0.042095
C10ORF91	10q26.3	-0.11808	0.020975	0.042108
RPL17	18q21.1	-0.11807	0.020984	0.042122
ZNF354A	5q35.3	-0.11807	0.020986	0.042122
RPL32P3	3q21.3	-0.11807	0.020991	0.042128
DENND3	8q24.3	0.118028	0.021035	0.042212
TP73	1p36.32	-0.118	0.021064	0.042264
GSTM5	1p13.3	0.117999	0.021067	0.042266
EXTL3	8p21.1	0.117998	0.021069	0.042266
PNISR	6q16.2	-0.11797	0.021099	0.042322
MYF5	12q21.31	0.117968	0.021102	0.042324
CMAHP	6p22.3	0.117889	0.021189	0.042494
ANKRD30B	18p11.21	0.117847	0.021235	0.042582
SLC22A18	11p15.4	-0.11781	0.02127	0.042649
CCDC157	22q12.2	-0.1178	0.021281	0.042667
LGALS14	19q13.2	-0.1178	0.021285	0.042671
NTNG1	1p13.3	0.117763	0.021327	0.042751
AGO3	1p34.3	0.117756	0.021336	0.042764
CSTL1	20p11.21	-0.11773	0.021366	0.042821
RRH	4q25	-0.11765	0.021453	0.042989
SESN1	6q21	-0.11764	0.021461	0.043001
LTA	6p21.33	0.117633	0.021473	0.043021
G3BP1	5q33.1	0.117611	0.021497	0.043065
HACL1	3p25.1	-0.1176	0.021507	0.043079
LRIF1	1p13.3	-0.1176	0.021509	0.043079
ISCA2	14q24.3	-0.11759	0.021523	0.043103
EFCAB5	17q11.2	0.117578	0.021534	0.043116
CAT	11p13	0.117578	0.021534	0.043116
CDH17	8q22.1	0.117577	0.021535	0.043116
C12ORF57	12p13.31	0.117557	0.021557	0.043155
MST1R	3p21.31	0.117541	0.021576	0.043188
OGDH	7p13	0.117535	0.021582	0.043195
SMPDL3B	1p35.3	-0.11753	0.021584	0.043195
MAP1LC3C	1q43	0.117508	0.021612	0.043248
STX8	17p13.1	-0.11748	0.02164	0.0433
UBXN4	2q21.3	0.117479	0.021645	0.043305
SLC5A1	22q12.3	0.117469	0.021657	0.043325
LOC100130449	2q37.3	0.117453	0.021674	0.043354
COLCA2	11q23.1	0.117436	0.021694	0.04339
DPP6	7q36.2	0.117431	0.021699	0.043396
PUM2	2p24.1	0.117426	0.021705	0.043403
MPP1	Xq28	-0.11742	0.021707	0.043403
CAPN8	1q41	0.117414	0.021718	0.043422
UNC45B	17q12	0.1174	0.021734	0.043448
TMEM171	5q13.2	0.117362	0.021778	0.043531
RANBP17	5q35.1	-0.11735	0.021788	0.043543
ANKRD31	5q13.3	0.11735	0.02179	0.043543
INTS13	12p11.23	-0.11735	0.02179	0.043543
AFAP1L1	5q32	0.117323	0.021821	0.0436
TMED9	5q35.3	-0.11731	0.021841	0.043635
SIGLEC11	19q13.33	0.117304	0.021842	0.043635
RAB4A	1q42.13	0.117293	0.021855	0.043655
KCNJ6	21q22.13	0.117289	0.021859	0.043656
RAVER2	1p31.3	0.117289	0.021859	0.043656
KCNG2	18q23	0.117284	0.021865	0.043662
C2ORF74	2p15	0.117266	0.021886	0.0437
DNAH8	6p21.2	0.117255	0.021898	0.043719



GRK5	10q26.11	0.117242	0.021913	0.043745
HOXA13	7p15.2	0.117229	0.021928	0.043771
SLC25A35	17p13.1	-0.11717	0.021993	0.043896
ZFP36	19q13.2	0.117168	0.021997	0.0439
SEPTIN7P9	10p11.1	-0.11715	0.022013	0.043927
GFM1	3q25.32	0.117139	0.02203	0.043957
FAM27B	9q21.11	-0.11712	0.022053	0.043997
HOOK1	1p32.1	0.117112	0.022061	0.044009
MAP1S	19p13.11	0.117085	0.022092	0.044068
OR5B21	11q12.1	0.117068	0.022112	0.044102
CATSPERE	1q44	0.117055	0.022127	0.044127
PVALB	22q12.3	0.117046	0.022136	0.044142
CTSL	9q21.33	0.117009	0.022179	0.044223
RINT1	7q22.3	-0.117	0.022184	0.044229
C7ORF69	7p12.3	0.117002	0.022187	0.044231
ZFP69B	1p34.2	-0.11698	0.022209	0.044269
TMEM19	12q21.1	0.116917	0.022285	0.044416
EZH1P	Xp11.22	0.11689	0.022316	0.044475
POU3F1	1p34.3	0.116872	0.022337	0.044511
TMCO1	1q24.1	0.11687	0.022339	0.044511
FCGR1CP	1q21.1	0.116868	0.022341	0.044511
ZC3H13	13q14.13	0.116858	0.022354	0.044531
NSA2	5q13.3	-0.11685	0.022359	0.044537
TBC1D14	4p16.1	0.116803	0.022417	0.044648
CCN1	1p22.3	0.116767	0.022459	0.044728
SLC47A1	17p11.2	0.116764	0.022462	0.044729
CHN2	7p14.3	-0.11675	0.022475	0.04475
HSD3B2	1p12	0.116715	0.022519	0.044835
GTF2F1	19p13.3	-0.1167	0.022534	0.044859
LCA5L	21q22.2	-0.11667	0.022568	0.044922
ZNF514	2q11.1	-0.11667	0.022571	0.044924
MIR9-3HG	15q26.1	0.116669	0.022573	0.044924
USP18	22q11.21	0.116626	0.022623	0.045018
DNAJC5	20q13.33	-0.11661	0.02264	0.045048
CEP76	18p11.21	0.116602	0.022651	0.045065
RASL11A	13q12.2	-0.11653	0.022731	0.04522
GEM	8q22.1	0.116526	0.02274	0.045233
SALL1	16q12.1	0.116517	0.02275	0.045249
CDK20	9q22.1	-0.11651	0.022756	0.045257
HIST1H2BB	6p22.2	-0.11649	0.022778	0.045297
SKOR1	15q23	0.116477	0.022797	0.045329
HBP1	7q22.3	0.116454	0.022824	0.045379
MEIS1	2p14	0.116449	0.02283	0.045387
HNRNPUL1	19q13.2	0.11635	0.022947	0.045614
CFAP45	1q23.2	-0.11635	0.022951	0.045616
ELP2	18q12.2	0.116343	0.022955	0.04562
CIT	12q24.23	0.116332	0.022968	0.045643
GFM2	5q13.3	0.116319	0.022984	0.045669
PROSER1	13q13.3	-0.1163	0.02301	0.045716
ATOH1	4q22.2	0.116271	0.02304	0.045769
BMP5	6p12.1	0.116271	0.023041	0.045769
HOXA10	7p15.2	-0.11625	0.023071	0.045818
LINC01001	11p15.5	-0.11624	0.023072	0.045818
LOC100272216	-	0.116244	0.023073	0.045818
BEX4	Xq22.1	0.116235	0.023083	0.045834
SNORD116-4	15q11.2	0.116205	0.023119	0.045901
CCDC148	2q24.1	0.116184	0.023144	0.045946
EMC2	8q23.1	-0.11617	0.023157	0.045967

CMTM3	16q22.1	0.116168	0.023163	0.045975
CLUU1OS	12q22	-0.11616	0.023172	0.045989
KLHL3	5q31.2	0.116155	0.023178	0.045996
GRAMD1B	11q24.1	0.11615	0.023184	0.046003
TRPV4	12q24.11	0.11612	0.023221	0.046071
CD52	1p36.11	0.1161	0.023244	0.046114
IGLON5	19q13.41	0.116089	0.023257	0.046134
ANKRD26P1	16q11.2	-0.11606	0.023292	0.046199
FGF17	8p21.3	-0.11601	0.023357	0.046324
RPE65	1p31.3	0.116001	0.023363	0.046331
S100Z	5q13.3	0.115976	0.023393	0.046384
SLITRK2	Xq27.3	0.11596	0.023413	0.04642
PSMD1	2q37.1	0.115951	0.023423	0.046437
ASH2L	8p11.23	0.115886	0.023502	0.046587
ETFDH	4q32.1	0.115856	0.023537	0.046653
ZNF552	19q13.43	0.115847	0.023549	0.046671
HEXIM1	17q21.31	0.115841	0.023556	0.046681
ZNF467	7q36.1	0.115818	0.023584	0.046731
ABCC10	6p21.1	-0.11579	0.023612	0.046783
RFPL2	22q12.3	-0.11579	0.023621	0.046795
BMI1	10p12.2	0.11578	0.02363	0.046802
ALPK1	4q25	0.115777	0.023633	0.046802
TRPC7	5q31.1	0.115777	0.023633	0.046802
CCNY	10p11.21	0.115777	0.023634	0.046802
ZNF300P1	5q33.1	0.115765	0.023647	0.046824
CEACAM6	19q13.2	0.115763	0.02365	0.046825
HAPLN1	5q14.3	0.115713	0.023711	0.046942
S100A2	1q21.3	-0.1157	0.023729	0.046973
OPN3	1q43	0.115682	0.023749	0.047008
HIST2H3C	1q21.2	-0.11563	0.023812	0.047128
LYN	8q12.1	0.115627	0.023815	0.047129
LOC341056	11q24.1	-0.11562	0.023827	0.047148
UBQLN1	9q21.32 9q21.2-q21.3	0.115613	0.023833	0.047155
LYPLAL1	1q41	-0.11559	0.023867	0.047217
SCGN	6p22.2	0.115568	0.023887	0.047254
SNORA41	2q33.3	-0.11557	0.023892	0.047257
POLR3G	5q14.3	-0.11553	0.023931	0.04733
RASGRP2	11q13.1	0.115531	0.023933	0.04733
PTHLH	12p11.22	0.115513	0.023955	0.047369
OR8S1	12q13.11	-0.11549	0.023989	0.047431
STEAP4	7q21.12	0.115482	0.023993	0.047435
SCGB1B2P	19q13.11	-0.1154	0.024094	0.047628
TRPC4	13q13.3	0.115381	0.024118	0.047671
ANTXRL	10q11.22	0.115356	0.024149	0.047725
AMHR2	12q13.13	0.115353	0.024152	0.047725
ARHGEF39	9p13.3	-0.11535	0.024152	0.047725
PAGE2	Xp11.21	-0.11533	0.024183	0.047779
PECAM1	17q23.3	0.115327	0.024184	0.047779
ZNF826P	19p12	0.115273	0.024251	0.047907
SUPT6H	17q11.2	0.115269	0.024256	0.047912
GLT1D1	12q24.33	0.115256	0.024272	0.047939
PREP	6q21	0.115239	0.024294	0.047976
DHDDS	1p36.11	0.115225	0.024311	0.048006
VSIG10L	19q13.41	0.115194	0.02435	0.048077
LINC01973	17q25.3	0.115175	0.024374	0.04812
KATNA1	6q25.1	-0.11516	0.024389	0.048145
UTS2R	17q25.3	0.11513	0.02443	0.048222
MAMDC4	9q34.3	-0.11512	0.024437	0.048231

SOAT2	12q13.13	-0.11512	0.024442	0.048236
PPP1R3F	Xp11.23	-0.11511	0.024458	0.048262
LINC01547	21q22.3	-0.11511	0.02446	0.048262
LEFTY2	1q42.12	0.115097	0.024471	0.048278
IL12RB1	19p13.11	0.115086	0.024484	0.048299
ACSM3	16p12.3	0.115048	0.024532	0.048389
IL34	16q22.1	-0.11504	0.024547	0.048411
SOD2	6q25.3	0.115035	0.024548	0.048411
HAT1	2q31.1	-0.11503	0.024555	0.048421
VCPIP1	8q13.1	0.115028	0.024557	0.048421
CACNB1	17q12	-0.11502	0.024561	0.048423
NLN	5q12.3	0.115013	0.024576	0.048444
MREG	2q35	0.115012	0.024577	0.048444
ADD3	10q25.1-q25.2	0.115006	0.024585	0.048457
ANKS6	9q22.33	-0.11499	0.024604	0.048489
CPN2	3q29	0.114968	0.024632	0.048539
NYAP1	7q22.1	0.11496	0.024642	0.048555
RGS21	1q31.2	0.114945	0.024661	0.048587
DDAH1	1p22.3	0.114941	0.024666	0.048593
ELMO2	20q13.12	-0.11492	0.024694	0.048642
LOC286359	9q22.33	-0.11489	0.024732	0.04871
KIF1A	2q37.3	0.114888	0.024733	0.04871
HIST1H3D	6p22.2	-0.11488	0.024738	0.048715
SRFBP1	5q23.1	0.11485	0.024781	0.048795
ZNF197	3p21.31	0.114843	0.02479	0.048807
SNAR-A2	19q13.33	-0.11483	0.024808	0.048838
TLCD3A	17p13.3	0.114818	0.024822	0.048861
SLC34A3	9q34.3	-0.11481	0.024836	0.048883
CEACAM7	19q13.2	0.114798	0.024847	0.048901
RSRC2	12q24.31	0.114792	0.024854	0.048909
DNAJB9	7q31.1 14q24.2-q24.3	0.114789	0.024858	0.04891
PDE6B	4p16.3	0.114788	0.024859	0.04891
EMBP1	1p11.2	0.114781	0.024869	0.048924
SNORA71C	20q11.23	-0.11476	0.024895	0.048968
GABRQ	Xq28	0.114759	0.024896	0.048968
MTPAP	10p11.23	-0.11474	0.024917	0.049004
SLC26A11	17q25.3	-0.11472	0.024943	0.04905
MAPK4	18q21.1-q21.2	0.114717	0.02495	0.049059
OXR1	8q23.1	0.114711	0.024958	0.04907
TINCR	19p13.3	0.114705	0.024965	0.04908
EBI3	19p13.3	0.11466	0.025022	0.049187
OCRL	Xq26.1	0.114654	0.02503	0.049198
CYP19A1	15q21.2	0.114632	0.025058	0.049249
ARL4D	17q21.31	-0.11462	0.02507	0.049264
CCDC36	3p21.31	0.11462	0.025073	0.049264
TOB1	17q21.33	0.114619	0.025075	0.049264
WDR64	1q43	0.114618	0.025076	0.049264
FFAR2	19q13.12	0.114607	0.02509	0.049286
PARP6	15q23	0.114587	0.025115	0.04933
AP2A1	19q13.33	0.114584	0.02512	0.049335
NANOS1	10q26.11	-0.11456	0.025147	0.049385
SPZ1	5q14.1	-0.11455	0.025159	0.049403
CCDC77	12p13.33	-0.11453	0.025192	0.049463
PAK6	15q15.1	0.114514	0.025208	0.04949
ZNF211	19q13.43	0.114485	0.025246	0.049555
FXVD6	11q23.3	0.114485	0.025247	0.049555
WDR62	19q13.12	-0.11443	0.025317	0.049689
RCBTB2	13q14.2	0.114417	0.025333	0.049715

PLAC8	4q21.22	0.114401	0.025354	0.049752
NKAIN3-IT1	8q12.3	0.114399	0.025357	0.049753
XPO5	6p21.1	-0.11438	0.02538	0.049793
VBP1	Xq28	-0.11436	0.025402	0.049832
FOXI2	10q26.2	0.114356	0.025412	0.049846
ESAM	11q24.2	0.114333	0.025442	0.049901
MLX	17q21.2	-0.11427	0.025523	0.050053
DAGLA	11q12.2	-0.11425	0.025555	0.050109
SLC12A7	5p15.33	-0.11424	0.025556	0.050109
FAM86DP	3p12.3	-0.11423	0.025578	0.050146
LRRC42	1p32.3	-0.11421	0.025605	0.050194
TMEM86B	19q13.42	-0.11421	0.025607	0.050194
RRAS	19q13.33	-0.1142	0.025611	0.050197
DHRS4L1	14q11.2	-0.11418	0.025639	0.050246
SNORA26	4q12	-0.11418	0.025642	0.050248
SPIC	12q23.2	0.114169	0.025655	0.050268
SHQ1	3p13	-0.11413	0.02571	0.050372
OXER1	2p21	-0.11412	0.025714	0.050374
SAMD15	14q24.3	0.114118	0.025721	0.050382
IMPAD1	8q12.1	0.114116	0.025723	0.050382
SCARNA1	1p35.3	-0.11411	0.025729	0.050386
USP43	17p13.1	0.114111	0.025731	0.050386
HAO2	1p12	-0.11411	0.025732	0.050386
LPAR2	19p13.11	-0.1141	0.025742	0.0504
SFTA1P	10p14	0.114097	0.025748	0.050406
HADHB	2p23.3	0.114092	0.025755	0.050414
ERCC2	19q13.32	-0.11403	0.025832	0.050561
SH2D3C	9q34.11	0.114017	0.025853	0.050598
RMND5B	5q35.3	-0.11401	0.025866	0.050617
STK32A	5q32	0.114	0.025876	0.050632
ADSSL1	14q32.33	0.113993	0.025885	0.050645
DDX17	22q13.1	0.113984	0.025896	0.050661
TCHH	1q21.3	0.113982	0.025899	0.050661
PTPRA	20p13	0.113973	0.025911	0.05068
SCD5	4q21.22	0.11395	0.025941	0.050732
MGME1	20p11.23	-0.11395	0.025942	0.050732
IFT88	13q12.11	-0.11394	0.025961	0.050763
EDC4	16q22.1	-0.11391	0.025991	0.050818
PFN1P2	1p11.2	0.113902	0.026005	0.050836
MORC2	22q12.2	-0.1139	0.026006	0.050836
AARS	16q22.1	-0.11383	0.026095	0.051006
SYMPK	19q13.32	-0.11383	0.026101	0.051013
COL6A5	3q22.1	0.11379	0.026153	0.051108
NOTCH4	6p21.32	0.113777	0.026169	0.051135
KNG1	3q27.3	-0.11377	0.026178	0.051147
GDF1	19p13.11	0.113768	0.026181	0.051148
AOAH	7p14.2	-0.11377	0.026184	0.05115
ASRGL1	11q12.3	0.113732	0.026229	0.051232
KL	13q13.1	0.113725	0.026239	0.051246
EPDR1	7p14.1	-0.11371	0.026254	0.051272
ZNF676	19p12	0.113704	0.026266	0.05129
CAND2	3p25.2	0.113694	0.02628	0.051312
CETN3	5q14.3	-0.11367	0.026308	0.051363
RRAGD	6q15	0.11367	0.026311	0.051363
LCE3D	1q21.3	-0.11366	0.026324	0.051382
NELL1	11p15.1	0.11363	0.026364	0.051457
GPR149	3q25.2	0.113627	0.026368	0.05146
ZNF772	19q13.43	0.113582	0.026428	0.051572

ARNTL	11p15.3	0.113578	0.026434	0.051578
PAGE1	Xp11.23	-0.11351	0.026521	0.051742
PPP6R1	19q13.42	0.113496	0.026544	0.051782
CECR2	22q11.1-q11.21	0.113483	0.026561	0.051811
FOXE3	1p33	-0.11347	0.026579	0.051841
LINGO1	15q24.3	0.113455	0.026598	0.051873
CLASP1	2q14.2-q14.3	0.113452	0.026603	0.051878
DPYSL5	2p23.3	0.113448	0.026608	0.051882
DUSP19	2q32.1	0.113428	0.026635	0.051929
NDN	15q11.2	0.113426	0.026638	0.051931
PTPN18	2q21.1	0.113419	0.026647	0.051942
IL3RA	Xp22.33 and Yp11.2	0.113378	0.026702	0.052046
WNT5A	3p14.3	0.113342	0.026751	0.052135
RSKR	17q11.2	-0.11333	0.026765	0.052157
FAR1	11p15.3	0.113326	0.026772	0.052166
RTL8A	Xq26.3	-0.11331	0.026799	0.052213
PLPP1	5q11.2	0.113305	0.026801	0.052213
SSX4	Xp11.23	-0.11329	0.026817	0.052239
C1ORF141	1p31.3	0.113283	0.026831	0.052261
LDOC1	Xq27.1	0.113258	0.026865	0.052321
PLK5	19p13.3	-0.11325	0.026869	0.052325
CYLC1	Xq21.1	-0.11325	0.026881	0.052344
DTNA	18q12.1	0.11324	0.026889	0.052353
BRD4	19p13.12	0.113198	0.026946	0.05246
HCG4	6p22.1	0.113187	0.026961	0.052483
VPS35	16q11.2	0.113168	0.026987	0.05253
ATP6V0E1	5q35.1	-0.11316	0.026999	0.052547
GPR84	12q13.13	0.113157	0.027002	0.052547
STRN4	19q13.32	-0.11313	0.02704	0.052616
TMEM254	10q22.3	0.113116	0.027058	0.052647
SAMD13	1p31.1	0.113058	0.027136	0.052794
DNAJB13	11q13.4	-0.11305	0.027154	0.052823
FCGR1A	1q21.2	0.113039	0.027162	0.052834
PABPC3	13q12.13	-0.11301	0.0272	0.052902
ACTA2	10q23.31	0.113006	0.027207	0.052911
ZNF417	19q13.43	0.112927	0.027316	0.053118
OR2AE1	7q22.1	0.112875	0.027388	0.053253
RIBC2	22q13.31	-0.11287	0.027392	0.053254
EEF1AKNMT	1q24.3	0.112858	0.027412	0.053288
AP3D1	19p13.3	0.112814	0.027472	0.0534
TSTA3	8q24.3	-0.1128	0.027493	0.053435
FAM106A	17p11.2	0.112786	0.027511	0.053466
SAA4	11p15.1	-0.11278	0.027525	0.053484
NKX3-2	4p15.33	0.112775	0.027526	0.053484
DUSP7	3p21.2	0.112755	0.027554	0.053534
NECAP1	12p13.31	0.112746	0.027567	0.053553
DMKN	19q13.12	0.112729	0.02759	0.053592
CPVL	7p14.3	0.11272	0.027601	0.05361
NRM	6p21.33	-0.11267	0.027673	0.053745
PARD6G-AS1	18q23	0.112648	0.027702	0.053794
MAP3K6	1p36.11	0.112646	0.027704	0.053794
LSM1	8p11.23	-0.11262	0.027735	0.05385
TCF20	22q13.2 22q13.3	0.112616	0.027747	0.053866
PPP2R3C	14q13.2	0.112603	0.027764	0.053894
AGBL4	1p33	0.112595	0.027775	0.053911
OCA2	15q12-q13.1	-0.11259	0.027781	0.053917
BMP6	6p24.3	0.112571	0.027809	0.053966
MYADML2	17q25.3	-0.11256	0.027828	0.053998

GRPR	Xp22.2	-0.11254	0.02785	0.054035
FAM3B	21q22.3	-0.11252	0.027878	0.054082
CTF1	16p11.2	0.112521	0.02788	0.054082
IFNE	9p21.3	0.112511	0.027893	0.054102
KRTAP17-1	17q21.2	-0.11251	0.027896	0.054103
SHKBP1	19q13.2	-0.1125	0.027904	0.054115
UBE2V2	8q11.21	-0.1125	0.027911	0.054122
SPRY4	5q31.3	0.112495	0.027916	0.054126
SLC16A14	2q36.3	0.112489	0.027925	0.054138
PLEKHA4	19q13.33	-0.11247	0.027946	0.054174
LINC01590	6q15	-0.11247	0.027952	0.05418
PRPF38B	1p13.3	0.112458	0.027967	0.054205
JMJD7-PLA2G4B	15q15.1	-0.11245	0.027973	0.054211
PGM1	1p31.3	0.112428	0.028009	0.054276
KRT37	17q21.2	-0.11243	0.028013	0.054277
C1ORF115	1q41	0.112414	0.02803	0.054305
SYPL2	1p13.3	0.112403	0.028045	0.054329
NKX1-2	10q26.13	-0.1124	0.028048	0.054331
RSPO4	20p13	-0.11239	0.028065	0.054355
MFSD4B	6q21	0.112387	0.028067	0.054355
SNORA2C	12q13.11	-0.11237	0.028097	0.05441
SLC32A1	20q11.23	0.112353	0.028115	0.054439
FAM238C	10p12.1	0.112325	0.028154	0.054508
TMEM200B	1p35.3	0.112323	0.028157	0.05451
CNP	17q21.2	-0.1123	0.028185	0.054558
AK9	6q21	-0.11229	0.02821	0.0546
RAG2	11p12	-0.11228	0.028212	0.0546
DNAH9	17p12	0.112275	0.028225	0.05462
VAMP5	2p11.2	-0.11225	0.028255	0.054673
TMEM8A	16p13.3	-0.11225	0.028264	0.054684
CLEC2B	12p13.31	0.112246	0.028266	0.054684
MRGPRX2	11p15.1	0.112239	0.028276	0.054698
MLEC	12q24.31	0.112226	0.028294	0.054727
ENOX1	13q14.11	0.112216	0.028309	0.054743
KIAA1614	1q25.3	0.112215	0.02831	0.054743
ZNF283	19q13.31	0.112215	0.02831	0.054743
RNF113B	13q32.2	-0.11219	0.028346	0.054801
APLP1	19q13.12	0.11219	0.028346	0.054801
SSPO	7q36.1	-0.11218	0.028361	0.054823
TBK1	12q14.2	0.112178	0.028363	0.054823
PAM	5q21.1	0.112159	0.02839	0.05487
ZBED5	11p15.4	-0.11214	0.028419	0.054922
STEAP1B	7p15.3	0.112094	0.028482	0.055038
SNAR-B2	19q13.33	-0.11205	0.028544	0.055151
FOXN2	2p16.3	0.112048	0.028548	0.055154
H19	11p15.5	-0.11204	0.028565	0.055182
STAC2	17q12	0.112027	0.028578	0.055201
SAR1B	5q31.1	0.11202	0.028587	0.055214
FAM209A	20q13.31	-0.11202	0.028594	0.055221
TTC14	3q26.33	-0.11199	0.028628	0.055281
PHF20L1	8q24.22	0.111986	0.028636	0.055293
NRADDP	3p21.31	-0.11197	0.028652	0.055318
USF1	1q23.3	-0.11197	0.028656	0.055321
CFAP52	17p13.1	-0.11197	0.028666	0.055334
PIN1P1	1p31.1	-0.11196	0.028678	0.055352
EXOC3	5p15.33	-0.11195	0.02869	0.05537
B3GALNT1	3q26.1	0.111927	0.028721	0.055425
LINC00240	6p22.2	-0.11192	0.028729	0.055435

SHISAL2A	1p32.3	0.111903	0.028754	0.055478
RBFA	18q23	-0.11188	0.028789	0.05554
TAGLN3	3q13.2	0.111858	0.028819	0.055593
NRAS	1p13.2	0.111852	0.028829	0.055602
GSK3A	19q13.2	-0.11185	0.02883	0.055602
DCTN4	5q33.1	0.111837	0.02885	0.055636
RGL2	6p21.32	-0.11183	0.02886	0.055649
CYTL1	4p16.2	0.111816	0.02888	0.055683
SH3D21	1p34.3	-0.11176	0.028967	0.055846
ZNF628	19q13.42	-0.11175	0.028977	0.05586
INO80D	2q33.3	0.111738	0.028993	0.055884
METTL2A	17q23.2	-0.11174	0.028996	0.055885
ALG12	22q13.33	-0.11171	0.029031	0.055948
RHBDF2	17q25.1	-0.1117	0.029043	0.055964
BTF3	5q13.2	-0.1117	0.029049	0.055971
HIST1H2AB	6p22.2	-0.11167	0.029085	0.056035
CDK9	9q34.11	-0.11166	0.02911	0.056074
HIST1H3I	6p22.1	-0.11166	0.029111	0.056074
ATP1A1	1p13.1	0.111645	0.029127	0.0561
C7ORF61	7q22.1	-0.11163	0.029149	0.056137
ACTC1	15q14	0.111619	0.029165	0.056162
MEGF11	15q22.31	-0.11158	0.029219	0.05626
BEND5	1p33	0.111574	0.029231	0.056278
TMPO	12q23.1	0.111534	0.029289	0.056385
NAA25	12q24.13	0.111505	0.029331	0.05646
TAPBP1	12p13.31	-0.11148	0.029364	0.056519
LOC100128076	9q22.31	-0.11147	0.02938	0.056544
TMPRSS11F	4q13.2	0.111435	0.029434	0.056641
C8ORF37	8q22.1	0.111428	0.029444	0.05665
LOC646471	1p36.11	-0.11143	0.029444	0.05665
EPHB4	7q22.1	0.111403	0.029481	0.056716
HIST1H2AK	6p22.1	-0.11138	0.02952	0.056786
BREA2	8q24.3	-0.11135	0.029554	0.056846
PGRMC1	Xq24	-0.11134	0.029579	0.056888
MRPL33	2p23.2	-0.11133	0.029589	0.0569
CST6	11q13.1	-0.11133	0.029592	0.0569
COL5A3	19p13.2	0.111326	0.029594	0.0569
THEM5	1q21.3	0.111304	0.029627	0.056958
SCGB2B2	19q13.11	0.111277	0.029666	0.057028
COL6A4P2	3q22.1	-0.11125	0.029712	0.057112
RBM15	1p13.3	0.111238	0.029723	0.057127
RAB2A	8q12.1-q12.2	0.111234	0.02973	0.057135
ATP5PB	1p13.2	-0.11122	0.02975	0.057169
RPL23AP82	22q13.33	-0.1112	0.029781	0.057219
LAT2	7q11.23	0.111198	0.029782	0.057219
TPST2	22q12.1	-0.11116	0.029837	0.057316
CASC8	8q24.21	-0.11116	0.029839	0.057316
KCNK3	2p23.3	0.111145	0.029862	0.057355
CASQ1	1q23.2	0.111121	0.029897	0.057417
ERAS	Xp11.23	-0.1111	0.029922	0.05746
MET	7q31.2	0.111073	0.029968	0.057542
RP1	8q11.23-q12.1	0.111069	0.029975	0.05755
RAB38	11q14.2	0.111048	0.030005	0.057603
BBS2	16q13	-0.11102	0.030053	0.057685
DUSP9	Xq28	-0.11102	0.030054	0.057685
KCNA5	12p13.32	0.111011	0.03006	0.057689
ODF3L2	19p13.3	-0.11101	0.030061	0.057689
PLEKHN1	1p36.33	-0.11096	0.030142	0.057838

CCDC28A	6q24.1	-0.11094	0.030174	0.057894
COL13A1	10q22.1	0.110928	0.030185	0.05791
FOXO3	6q21	0.110888	0.030245	0.058018
LGALS17A	19q13.2	-0.11089	0.030248	0.05802
RNF43	17q22	-0.11087	0.030276	0.058063
TYRP1	9p23	0.110867	0.030276	0.058063
HAPLN3	15q26.1	0.11086	0.030287	0.058078
ANKK1	11q23.2	-0.11084	0.030317	0.05813
MGAM2	7q34	0.110814	0.030356	0.058195
RELT	11q13.4	-0.11081	0.030357	0.058195
GLRX5	14q32.13	-0.1108	0.030374	0.058222
GRPEL2	5q32	-0.11079	0.030389	0.058245
REPS2	Xp22.2	0.110789	0.030393	0.058248
RAB22A	20q13.32	-0.11077	0.030421	0.058295
UBASH3A	21q22.3	0.110759	0.030439	0.058323
IGFL1	19q13.32	-0.11076	0.030441	0.058323
TNFAIP8L2	1q21.3	0.110734	0.030476	0.058383
LINC01096	4p15.33	0.11073	0.030483	0.058392
HPX	11p15.4	-0.11072	0.030498	0.058415
LINC00052	15q25.3	-0.11069	0.030536	0.058482
MORN1	1p36.32	-0.11068	0.030561	0.058524
ASB15	7q31.32	0.110674	0.030567	0.058529
HIST3H2A	1q42.13	-0.11063	0.030638	0.05866
CAVIN1	17q21.2	0.110623	0.030645	0.058668
SGTB	5q12.3	0.110612	0.030661	0.058687
NOL8	9q22.31	-0.11061	0.030666	0.058687
ACO1	9p21.1	0.110608	0.030667	0.058687
PGAP3	17q12	-0.11061	0.030667	0.058687
TRIM25	17q22	0.110594	0.030688	0.058722
IL19	1q32.1	0.110587	0.030699	0.058738
DCAF16	4p15.31	-0.11057	0.030722	0.058775
CRHR2	7p14.3	0.110557	0.030745	0.058814
TTY6B	Yq11.223	0.110541	0.03077	0.058856
SNORA78	16p13.3	-0.11054	0.030773	0.058856
CDKN2AIP	4q35.1	0.11053	0.030786	0.058876
NR1H3	11p11.2	-0.11049	0.030843	0.058979
ETNK1	12p12.1	0.11045	0.030908	0.059099
N4BP2L1	13q13.1	-0.11043	0.03094	0.059153
SNORA71D	20q11.23	-0.11042	0.030947	0.059161
ZNF805	19q13.43	0.110421	0.030952	0.059161
LINC02418	12q24.33	-0.11042	0.030952	0.059161
PPBPP2	4q13.3	-0.11042	0.030956	0.059162
STEAP1	7q21.13	0.110394	0.030994	0.059229
LRP12	8q22.3	0.110389	0.031001	0.059236
UBE2D1	10q21.1	0.11037	0.03103	0.059286
LGR5	12q21.1	0.110359	0.031048	0.059312
BNIP3	10q26.3	-0.11036	0.03105	0.059312
MS4A3	11q12.1	0.11035	0.03106	0.059327
CINP	14q32.31	-0.11027	0.031181	0.059552
CNN1	19p13.2	0.110266	0.03119	0.059563
NDNF	4q27	0.110254	0.031208	0.059592
BNIP1	1q21.3	-0.11025	0.031211	0.059592
CLUHP3	16p11.2	-0.11022	0.03126	0.059681
PPP1R27	17q25.3	-0.11022	0.031268	0.059688
RGS8	1q25.3	0.110214	0.03127	0.059688
RTL9	Xq23	0.110199	0.031293	0.059727
SNW1	14q24.3	0.110192	0.031304	0.059742
ZNF425	7q36.1	0.110183	0.031318	0.059762



PLAC4	21q22.2	-0.11017	0.031341	0.0598
NMUR2	5q33.1	0.110162	0.03135	0.059806
INPPL1	11q13.4	-0.11016	0.03135	0.059806
P4HA3	11q13.4	0.110148	0.031372	0.059843
C1QTNF2	5q33.3	0.110141	0.031383	0.059857
TBC1D20	20p13	0.110132	0.031396	0.059878
PMF1	1q22	-0.11012	0.031414	0.059906
KLHL33	14q11.2	0.110116	0.031422	0.059914
ASPA	17p13.2	0.110086	0.031468	0.059998
MYO3A	10p12.1	0.110079	0.031479	0.060013
COG7	16p12.2	0.110074	0.031486	0.060018
HSP90AB1	6p21.1	-0.11007	0.031488	0.060018
SERPINA1	14q32.13	0.110038	0.031542	0.060116
PGD	1p36.22	-0.11	0.031595	0.060211
CASP9	1p36.21	-0.10999	0.031614	0.06024
RALGDS	9q34.13-q34.2	-0.10998	0.031638	0.060281
ZNF433	19p13.2	-0.10997	0.031654	0.060306
CENPF	1q41	0.109962	0.031661	0.060313
HPS5	11p15.1	0.109955	0.031672	0.060329
CHEK1	11q24.2	-0.10994	0.0317	0.060377
HOXC13	12q13.13	-0.1099	0.031759	0.060483
DLG4	17p13.1	0.109888	0.031777	0.060511
HLA-DRB6	6p21.32	0.109833	0.031863	0.06067
IFFO1	12p13.31	0.109799	0.031916	0.060765
AKAP3	12p13.32	0.109796	0.031921	0.060768
MPC2	1q24.2	-0.10979	0.031928	0.060772
CSNK1D	17q25.3	-0.10979	0.031929	0.060772
CEBPD	8q11.21	-0.10978	0.031951	0.060808
SCT	11p15.5	-0.10977	0.031955	0.060811
GGT7	20q11.22	-0.10976	0.031977	0.060846
TMEM117	12q12	-0.10974	0.032013	0.060909
CFI	4q25	0.109728	0.032027	0.06093
CCDC107	9p13.3	-0.10972	0.032041	0.06095
TEDC1	14q32.33	-0.10972	0.032047	0.060955
FBXL19-AS1	16p11.2	0.109714	0.03205	0.060955
VEGFC	4q34.3	0.109671	0.032117	0.061078
SP100	2q37.1	0.109668	0.032122	0.061082
SLC38A9	5q11.2	-0.10961	0.032211	0.061245
LINC00663	19p13.11	-0.10959	0.032245	0.061304
FOXD3	1p31.3	0.10957	0.032277	0.061358
LINC00628	1q32.1	-0.10953	0.032334	0.061459
ARSI	5q32	0.109532	0.032337	0.061459
HTR7P1	12p13.1	0.109531	0.032339	0.061459
KLC2	11q13.2	-0.10951	0.032378	0.061526
DNAJC27	2p23.3	0.109496	0.032396	0.061555
IFFO2	1p36.13	-0.10949	0.032401	0.061559
SV2C	5q13.3	0.109476	0.032427	0.061603
MIXL1	1q42.12	0.109471	0.032436	0.061613
P3H3	12p13.31	0.109459	0.032454	0.061641
ZNF83	19q13.41	-0.10944	0.032481	0.061688
EFNB1	Xq13.1	-0.10944	0.032488	0.061696
ACO2	22q13.2	0.109346	0.032635	0.061968
LINC00471	2q37.1	-0.10933	0.032652	0.061996
PSMD10	Xq22.3	-0.10929	0.032717	0.062108
MSGN1	2p24.2	0.109293	0.032719	0.062108
CACNB2	10p12.33-p12.31	0.109292	0.032721	0.062108
TLR9	3p21.2	0.10929	0.032724	0.062109
FMNL3	12q13.12	0.109284	0.032734	0.062122

PAQR5	15q23	0.109274	0.032749	0.062144
TSPAN5	4q23	0.109224	0.03283	0.062291
SCARF2	22q11.21	0.109174	0.032911	0.062438
CELF1	11p11.2	0.109129	0.032983	0.06257
BCDIN3D-AS1	12q13.12	-0.10912	0.033004	0.062604
CDKN3	14q22.2	-0.1091	0.033024	0.062636
SCARNA21	17p13.1	-0.10909	0.033039	0.062658
HSPA4L	4q28.1	0.109076	0.033068	0.062708
FAM157A	3q29	0.109023	0.033155	0.062867
RORB	9q21.13	0.108998	0.033196	0.062937
AQP12A	2q37.3	-0.10899	0.0332	0.06294
PARP12	7q34	-0.10896	0.03326	0.063047
CXXC5	5q31.2	-0.10896	0.033264	0.06305
OR13G1	1q44	-0.10895	0.033279	0.063072
CDC42EP1	22q13.1	0.108943	0.033284	0.063075
SRSF4	1p35.3	-0.10894	0.033288	0.063076
FAM20A	17q24.2	0.108934	0.033299	0.063091
ARHGAP36	Xq26.1	0.10893	0.033305	0.063098
TRIM61	4q32.3	0.108912	0.033335	0.063148
GLDN	15q21.2	0.108909	0.033341	0.063153
SAE1	19q13.32	-0.1089	0.033361	0.063186
ARHGEF7	13q34	-0.10889	0.033369	0.063194
RASGRF2	5q14.1	0.108882	0.033383	0.063216
HARBI1	11p11.2	-0.10886	0.033419	0.063277
RHOBTB2	8p21.3	0.108856	0.033427	0.063287
ACTR3BP2	2p11.1	-0.10885	0.033438	0.063301
UBB	17p11.2	-0.10884	0.03345	0.063309
ITPKC	19q13.2	-0.10884	0.033451	0.063309
POMZP3	7q11.23	-0.10884	0.033452	0.063309
MSI1	12q24.31	-0.10884	0.03346	0.063309
DNAH11	7p15.3	0.108835	0.033461	0.063309
TAS2R41	7q35	0.108835	0.033461	0.063309
CES5A	16q12.2	-0.10881	0.033496	0.06337
EYA4	6q23.2	0.108811	0.0335	0.06337
TRADD	16q22.1	-0.10877	0.033562	0.063482
PFN3	5q35.3	-0.10877	0.033569	0.063489
MTMR4	17q22	0.10874	0.033617	0.063574
MSL3P1	2q37.1	-0.1087	0.033689	0.063704
ZNF782	9q22.33	-0.10869	0.033693	0.063705
PLXDC1	17q12	0.108683	0.03371	0.063731
MOSPD1	Xq26.3	-0.10867	0.033724	0.063752
OPCML	11q25	0.108645	0.033772	0.063838
GLYATL2	11q12.1	-0.10858	0.033885	0.064045
PYGM	11q13.1	0.108574	0.033889	0.064046
SCUBE3	6p21.31	0.108561	0.033912	0.064083
RGS3	9q32	0.108558	0.033916	0.064084
GBP1	1p22.2	0.108546	0.033936	0.064117
SCN10A	3p22.2	0.10854	0.033946	0.064129
DNAJA2	16q11.2	-0.10854	0.033953	0.064132
ZNF57	19p13.3	-0.10853	0.033956	0.064132
DAXX	6p21.32	-0.10853	0.033962	0.064132
LYPD8	1q44	0.10853	0.033962	0.064132
GH1	17q23.3	0.10853	0.033963	0.064132
LINC01142	1q24.2	0.108527	0.033968	0.064134
PPP1R1A	12q13.2	-0.1085	0.03401	0.064209
ZNF223	19q13.31	0.10848	0.034045	0.064269
SLC2A5	1p36.23	0.108467	0.034066	0.064302
RPRML	17q21.32	-0.10844	0.034117	0.064392

LHX1	17q12	0.108421	0.034143	0.064435
OTOP3	17q25.1	0.108402	0.034175	0.064489
NUTM2F	9q22.32	-0.1084	0.034178	0.064489
MIA	19q13.2	0.108383	0.034207	0.064534
FLOT2	17q11.2	-0.10838	0.034215	0.064534
CPA2	7q32.2	-0.10838	0.034215	0.064534
CTTNBP2	7q31.31	-0.10838	0.034215	0.064534
UBL3	13q12.3	0.10837	0.034228	0.064553
ZNF23	16q22.2	-0.10836	0.03425	0.064588
CDK8	13q12.13	-0.10835	0.034254	0.06459
CELF3	1q21.3	-0.10835	0.034261	0.064596
PFKM	12q13.11	-0.10834	0.034271	0.064609
CLDN4	7q11.23	-0.10834	0.034278	0.064617
C5ORF63	5q23.2	-0.10831	0.034324	0.064697
KLHL18	3p21.31	0.108287	0.034367	0.064772
LINC01622	6p25.3	-0.10828	0.034381	0.064793
GPR50	Xq28	-0.10826	0.034407	0.064834
CYP3A4	7q22.1	0.108261	0.034411	0.064837
ANKRD34C	15q25.1	0.108251	0.034427	0.06486
ZNF98	19p12	0.108248	0.034432	0.064861
VAV3	1p13.3	-0.10825	0.034434	0.064861
TRIM27	6p22.1	-0.10824	0.034438	0.064864
C8ORF48	8p22	0.108206	0.034503	0.064979
LRGUK	7q33	-0.10818	0.03455	0.065062
ANAPC2	9q34.3	-0.10818	0.034555	0.065065
SLCO1C1	12p12.2	0.108158	0.034584	0.065113
ZP2	16p12.3-p12.2	-0.10815	0.034598	0.065134
SIPA1	11q13.1	-0.10815	0.034603	0.065137
PON3	7q21.3	0.108144	0.034606	0.065137
NYNRIN	14q12	0.108143	0.034609	0.065137
ANAPC13	3q22.2	-0.10814	0.034621	0.065152
TBC1D9B	5q35.3	0.108126	0.034636	0.065176
ZDHHC19	3q29	-0.10812	0.034649	0.065193
NOL4L	20q11.21	-0.10811	0.034671	0.065228
GABRG1	4p12	-0.10809	0.034696	0.065269
RGL1	1q25.3	0.108086	0.034704	0.065276
MGP	12p12.3	0.108085	0.034706	0.065276
VRTN	14q24.3	0.108029	0.034801	0.065449
ISLR	15q24.1	0.107997	0.034855	0.065544
TULP3	12p13.33	0.107968	0.034905	0.065631
SMARCB1	22q11.23 22q11	-0.10797	0.034909	0.065633
KLF1	19p13.13	-0.10796	0.034916	0.06564
TOGARAM2	2p23.2	-0.10792	0.034992	0.065777
FDFT1	8p23.1	0.107896	0.035026	0.065834
TMEM130	7q22.1	0.107867	0.035075	0.06592
TMEM179	14q32.33	0.107848	0.035107	0.065975
HSPB1	7q11.23	-0.10784	0.035114	0.065981
OR2A4	6q23.2	0.107819	0.035157	0.066055
TMEM133	11q22.1	0.107816	0.035162	0.066059
RFC1	4p14	0.107796	0.035197	0.066119
SV2A	1q21.2	0.107776	0.035232	0.066177
EEF2K	16p12.2	0.107737	0.035298	0.066296
TAF2	8q24.12	0.107732	0.035307	0.066306
ZNF878	19p13.2	-0.10773	0.035314	0.066313
POLDIP3	22q13.2	0.107715	0.035335	0.066347
GABRA2	4p12	0.107667	0.035417	0.066494
MEG3	14q32.2	-0.10766	0.03543	0.066512
DENND6A	3p14.3	0.107652	0.035443	0.066531

DNASE2	19p13.13	-0.10764	0.035459	0.066555
KMT5B	11q13.2	0.107603	0.035528	0.066678
CHST14	15q15.1	0.107551	0.035617	0.066838
NUDT19	19q13.11	-0.10754	0.035628	0.066852
MRPL39	21q21.3	-0.1075	0.035707	0.066995
MAP9	4q32.1	0.107484	0.035732	0.067036
NELL2	12q12	0.10748	0.03574	0.067044
AKR1B15	7q33	0.107454	0.035784	0.06712
TIGD7	16p13.3	-0.10739	0.0359	0.067332
FAM126A	7p15.3	0.107378	0.035917	0.067357
SIM2	21q22.13	-0.10736	0.035951	0.067414
BLVRB	19q13.2	-0.10736	0.035955	0.067415
ATP6V0A4	7q34	-0.10734	0.035983	0.067462
CAMKK1	17p13.2	-0.10733	0.035992	0.067467
CEACAM22P	19q13.31	-0.10733	0.035994	0.067467
TRIM16L	17p11.2	0.107332	0.035995	0.067467
EIF5	14q32.32	0.107327	0.036005	0.067478
ACTG2	2p13.1	0.107311	0.036033	0.067524
NPHP3	3q22.1	-0.10726	0.036123	0.067687
LIX1	5q15	0.107201	0.036224	0.06787
SLC5A11	16p12.1	-0.10718	0.03626	0.067932
CCDC89	11q14.1	0.107158	0.0363	0.067999
MROH5	8q24.3	-0.10714	0.03633	0.068049
CREG2	2q11.2	0.107128	0.036353	0.06808
AGO2	8q24.3	0.107128	0.036353	0.06808
TUFT1	1q21.3	0.107118	0.036371	0.068106
LGI3	8p21.3	-0.10711	0.036383	0.068123
ADGRB1	8q24.3	0.107097	0.036406	0.068159
COL22A1	8q24.23-q24.3	0.107095	0.03641	0.068159
CCDC39	3q26.33	0.107094	0.036412	0.068159
KEAP1	19p13.2	-0.10709	0.036424	0.068174
PCYT1B	Xp22.11	0.107085	0.036427	0.068174
SCAF4	21q22.11	0.107079	0.036438	0.068188
KRCC1	2p11.2	0.107077	0.036443	0.06819
BBS1	11q13.2	0.107031	0.036524	0.068335
PEX13	2p15	0.107013	0.036555	0.068388
ZNF22	10q11.21	0.107001	0.036576	0.06842
ABCA10	17q24.3	0.106975	0.036622	0.0685
MRAP	21q22.11	0.106968	0.036634	0.068516
TMCO3	13q34	0.106957	0.036653	0.068545
PCDH11Y	Yp11.2	0.106932	0.036698	0.068623
VWA7	6p21.33	0.106901	0.036752	0.068717
PRO0628	20q12	-0.10684	0.036858	0.068909
GDF15	19p13.11	-0.10684	0.036861	0.068909
GRIK4	11q23.3	0.106828	0.036883	0.06894
BCL2A1	15q25.1	0.106826	0.036885	0.06894
SUOX	12q13.2	0.106808	0.036918	0.068996
MYO19	17q12	-0.10679	0.036943	0.069036
ACSF3	16q24.3	-0.10679	0.036958	0.069058
ELF5	11p13	-0.10678	0.036973	0.069079
ZNF546	19q13.2	0.106767	0.036991	0.069107
PLXNA3	Xq28	-0.10672	0.037078	0.069263
GLIPR1	12q21.2	0.106706	0.0371	0.069296
MRPS35	12p11.22	-0.10669	0.037128	0.069343
SEC13	3p25.3	-0.10667	0.03717	0.069415
ACAD10	12q24.12	-0.10666	0.037187	0.069439
DCDC2	6p22.3	0.106638	0.037221	0.069497
GRM1	6q24.3	0.106633	0.03723	0.069508

KLF3-AS1	4p14	-0.10662	0.037249	0.069536
ERICH3	1p31.1	0.10662	0.037253	0.069536
HSPA12A	10q25.3	-0.1066	0.037287	0.069595
PDE1B	12q13.2	0.106582	0.03732	0.069649
TTC7A	2p21	0.106581	0.037323	0.069649
TSACC	1q22	-0.10658	0.037333	0.06966
TRPM4	19q13.33	0.106573	0.037338	0.069663
MPP6	7p15.3	-0.10657	0.037343	0.069666
SCNN1B	16p12.2	0.106562	0.037357	0.069686
UGT2A3	4q13.2	0.106527	0.037419	0.069793
AP4B1	1p13.2	-0.10653	0.037421	0.069793
C1ORF140	1q41	0.106496	0.037476	0.069886
ANKS4B	16p12.2	0.106495	0.037478	0.069886
ALG9	11q23.1	-0.10647	0.037519	0.069955
NFIA	1p31.3	0.106445	0.037568	0.070041
RAB12	18p11.22	0.106433	0.037589	0.070073
TARDBP	1p36.22	-0.10643	0.037597	0.070082
LEAP2	5q31.1	-0.10639	0.037671	0.070214
CD244	1q23.3	0.106357	0.037726	0.07031
OSBP2	22q12.2	-0.10635	0.037737	0.070323
STK17A	7p13	0.10634	0.037756	0.070353
DENND5A	11p15.4	0.106338	0.037762	0.070355
FGG	4q32.1	-0.10634	0.037766	0.070358
GORASP2	2q31.1	0.10633	0.037776	0.070369
PSTPIP1	15q24.3	0.106305	0.037821	0.070446
URB1	21q22.11	0.106282	0.037862	0.070517
CPLX4	18q21.32	0.106274	0.037877	0.070538
NLRP9	19q13.42	0.106266	0.037892	0.070559
KRTAP10-11	21q22.3	-0.10626	0.037911	0.070587
RAC3	17q25.3	-0.10625	0.037917	0.070593
TMPRSS11D	4q13.2	0.106216	0.037982	0.070706
SLC15A1	13q32.2-q32.3	-0.1062	0.038014	0.070759
NTF3	12p13.31	0.106192	0.038027	0.070778
NLRP6	11p15.5	-0.10616	0.038092	0.070887
RTN4	2p16.1	0.106156	0.038093	0.070887
TMX4	20p12.3	0.106149	0.038105	0.070904
MGAT4A	2q11.2	0.10613	0.038139	0.070959
TEX14	17q22	-0.10612	0.038151	0.070976
UBE2Q1	1q21.3	0.10611	0.038177	0.071016
LINC00488	3q13.13	-0.1061	0.038196	0.071047
USB1	16q21	-0.10608	0.03823	0.071103
TPM3P9	19q13.42	-0.10605	0.038281	0.07119
ZNF286A	17p12	0.10602	0.038341	0.071295
SLC6A13	12p13.33	-0.106	0.038387	0.071374
ARMC5	16p11.2	-0.10599	0.038404	0.071399
PLA2G15	16q22.1	-0.10597	0.038431	0.071443
MAPK14	6p21.31	0.105955	0.03846	0.071487
TLCD3B	16p11.2	0.105953	0.038464	0.071487
ANGPTL3	1p31.3	-0.10595	0.038465	0.071487
IQSEC3	12p13.33	0.105888	0.038584	0.071701
POP1	8q22.2	-0.10587	0.038617	0.071756
ZC3H15	2q32.1	-0.10587	0.038624	0.071763
HNRNPUL2	11q12.3	0.105847	0.03866	0.071823
LACC1	13q14.11	0.105837	0.038678	0.071849
CNIH1	14q22.2	0.105829	0.038692	0.071869
TMEM62	15q15.2	0.105824	0.038701	0.071879
TRIM69	15q21.1	0.10581	0.038728	0.071922
S100G	Xp22.2	0.105786	0.038773	0.071999

LRP1B	2q22.1-q22.2	0.10577	0.038801	0.072045
SNORD116-28	15q11.2	0.10573	0.038877	0.072172
GRIK5	19q13.2	0.10573	0.038877	0.072172
NDRG2	14q11.2	0.10572	0.038895	0.072198
GAMT	19p13.3	-0.10571	0.038907	0.072214
TRIM32	9q33.1	0.105696	0.03894	0.072269
RAD54B	8q22.1	-0.10569	0.038956	0.072292
MAGEA4	Xq28	-0.10568	0.038962	0.072296
UBQLN3	11p15.4	0.105681	0.038968	0.0723
IGSF3	1p13.1	0.105669	0.038989	0.072332
GYPC	2q14.3	0.105664	0.038998	0.072344
SREBF1	17p11.2	0.10564	0.039045	0.072422
MORN3	12q24.31	-0.10562	0.039078	0.072478
COQ8A	1q42.13	-0.10562	0.039087	0.072489
DEFB136	8p23.1	-0.10561	0.039094	0.072494
SNORA7B	3q21.3	-0.1056	0.03911	0.072517
SNORA11E	Xp11.22	-0.1056	0.03912	0.072528
F8	Xq28	0.105586	0.039145	0.072568
ZBTB44	11q24.3	0.105582	0.039152	0.072575
FCGR1B	1p11.2	0.105575	0.039165	0.072593
TAF8	6p21.1	0.105569	0.039177	0.072607
LIF	22q12.2	0.105555	0.039203	0.072649
FAM9A	Xp22.31	-0.10555	0.039218	0.07267
FABP12	8q21.13	0.105545	0.039222	0.07267
FABP4	8q21.13	0.105535	0.039239	0.072688
TCIM	8p11.21	0.105534	0.039242	0.072688
VWA5A	11q24.2	0.105534	0.039242	0.072688
SMG9	19q13.31	-0.1055	0.039304	0.072795
SYN2	3p25.2	0.105479	0.039344	0.072864
IL10	1q32.1	0.105474	0.039355	0.072877
AGRN	1p36.33	0.105466	0.039368	0.072895
CD247	1q24.2	0.105461	0.039379	0.072908
XAGE3	Xp11.22	-0.10544	0.039421	0.07298
ZNF543	19q13.43	0.105403	0.039487	0.073095
GPX5	6p22.1	0.105392	0.039508	0.073126
SMYD1	2p11.2	0.105386	0.03952	0.073135
SOX6	11p15.2	0.105385	0.039522	0.073135
AP3M1	10q22.2	0.105384	0.039524	0.073135
STX5	11q12.3	-0.10538	0.039534	0.073148
GRAMD2A	15q23	-0.10534	0.039606	0.073273
RAB39A	11q22.3	0.105316	0.039651	0.073351
GALNT13	2q23.3-q24.1	0.105311	0.039661	0.07336
SNORA12	10q24.31	-0.10531	0.039663	0.07336
NCKAP5	2q21.2	0.105302	0.039678	0.073381
GALNT17	7q11.22	0.105288	0.039705	0.073423
HMGCS2	1p12	0.105273	0.039734	0.073469
ADGRG3	16q21	0.105262	0.039754	0.073496
PLAGL2	20q11.21	-0.10526	0.039756	0.073496
ZNF471	19q13.43	0.105255	0.039767	0.073511
STPG4	2p21	-0.10524	0.039788	0.073542
SSR2	1q22	-0.1052	0.039863	0.073674
ACAP1	17p13.1	0.105198	0.039876	0.073691
DYNLRB2	16q23.2	-0.1052	0.03988	0.073692
RGR	10q23.1	-0.10519	0.039892	0.073704
SNX7	1p21.3	0.105188	0.039894	0.073704
CHST9	18q11.2	0.105166	0.039935	0.073774
SIGLEC14	19q13.41	0.105161	0.039945	0.073786
ISM2	14q24.3	-0.10515	0.039961	0.073809

IL4I1	19q13.33	0.105144	0.039977	0.073827
	5-Mar 10q23.32-q23.33	0.105141	0.039983	0.073827
RNF4	4p16.3	0.10514	0.039985	0.073827
BCAR1	16q23.1	0.105139	0.039986	0.073827
SFTPB	2p11.2	-0.10513	0.040007	0.073858
CLEC4E	12p13.31	0.105124	0.040016	0.073868
METTL21A	2q33.3	-0.10511	0.040042	0.07391
MOSPD2	Xp22.2	0.105078	0.040103	0.074015
DTX4	11q12.1	0.105061	0.040136	0.074061
CLEC1A	12p13.2	0.10506	0.040137	0.074061
PGM5	9q21.11	0.105059	0.040139	0.074061
ADCY1	7p12.3	0.105031	0.040192	0.07414
CHORDC1	11q14.3	-0.10503	0.040192	0.07414
AP3B2	15q25.2	0.10503	0.040195	0.07414
TUT4	1p32.3	0.105029	0.040196	0.07414
MACROD2	20p12.1	0.104938	0.040372	0.074456
LRIG2	1p13.2	0.104914	0.040417	0.074534
WDR41	5q13.3-q14.1	0.104911	0.040422	0.074535
ADH4	4q23	-0.10487	0.040498	0.074668
COPZ2	17q21.32	0.104839	0.040561	0.074777
LZTS3	20p13	-0.10484	0.040568	0.074785
COX4I2	20q11.21	-0.10483	0.040575	0.074787
CASP8	2q33.1	0.104831	0.040577	0.074787
MICU2	13q12.11	-0.10481	0.040611	0.074842
TBC1D26	17p12	-0.10479	0.040658	0.074922
PHF24	9p13.3	0.10478	0.040675	0.074947
ARID5A	2q11.2	0.104762	0.04071	0.075004
TMPRSS5	11q23.2	-0.10475	0.040735	0.075043
PHLDB3	19q13.31	-0.10473	0.040764	0.075091
ZNF234	19q13.31	0.104669	0.04089	0.075315
PRR29	17q23.3	0.104662	0.040903	0.075333
HSCB	22q12.1	-0.10462	0.040992	0.075488
ZSCAN16	6p22.1	-0.10459	0.041043	0.075576
SLC26A2	5q32	0.104567	0.041087	0.07565
HSH2D	19p13.11	-0.10456	0.041091	0.075651
AMBRA1	11p11.2	0.104555	0.04111	0.075678
WSCD2	12q23.3	0.104544	0.041132	0.075713
CLCN1	7q34	-0.10454	0.041138	0.075716
PAMR1	11p13	0.104504	0.04121	0.075843
CROT	7q21.12	0.104498	0.041221	0.075856
GRIA2	4q32.1	0.104472	0.041273	0.075944
MBOAT1	6p22.3	0.10446	0.041295	0.075977
STXBP6	14q12	0.104426	0.041363	0.076095
GUCA2B	1p34.2	0.104423	0.041368	0.076095
PLEKHH2	2p21	0.104422	0.04137	0.076095
NUDT2	9p13.3	-0.10442	0.041383	0.076111
THBS4	5q14.1	0.104405	0.041404	0.076143
ATG10	5q14.1-q14.2	-0.1044	0.04142	0.076166
TXNL4A	18q23	-0.10439	0.041433	0.076183
EMC3	3p25.3	-0.10437	0.041479	0.07626
ZNF740	12q13.13	0.104354	0.041504	0.076299
RAB23	6p12.1-p11.2	0.104338	0.041534	0.076344
TRIM65	17q25.1	-0.10434	0.041536	0.076344
NACAD	7p13	0.10433	0.041551	0.076359
GNGT1	7q21.3	-0.10433	0.041552	0.076359
AIRE	21q22.3	-0.10431	0.041589	0.076419
TMEM14A	6p12.2	-0.10431	0.041592	0.076419
UCP2	11q13.4	0.104281	0.041647	0.076514

TMEM176B	7q36.1	-0.10427	0.041664	0.076534
BCL6B	17p13.1	0.104271	0.041667	0.076534
THOC1	18p11.32	-0.10426	0.041679	0.07655
OR2T34	1q44	0.10423	0.041747	0.076669
AP1M1	19p13.11	-0.10421	0.041789	0.076739
CRYL1	13q12.11	-0.1042	0.041814	0.076777
URGCP	7p13	-0.10417	0.041856	0.076848
GPR12	13q12.13	0.104153	0.041899	0.07692
TTC19	17p12	0.10412	0.041965	0.077034
CCDC152	5p12	0.104108	0.041989	0.07707
ZBTB25	14q23.3	0.1041	0.042004	0.077091
OR10J1	1q23.2	0.104076	0.042052	0.077172
KLHDC8A	1q32.1	0.104069	0.042066	0.077189
MYOC	1q24.3	0.104066	0.042071	0.077192
BAG1	9p13.3	0.104044	0.042116	0.077267
ACVR2B-AS1	3p22.2	-0.10403	0.042137	0.0773
LZTS1	8p21.3	0.104014	0.042176	0.077359
AP1S2	Xp22.2	0.104013	0.042177	0.077359
SDCCAG8	1q43-q44	0.104008	0.042188	0.077372
APOC3	11q23.3	-0.104	0.042198	0.077382
TWF1	12q12	0.103996	0.042211	0.077399
TNFRSF8	1p36.22	0.103994	0.042214	0.077399
KRTAP5-AS1	11p15.5	0.103957	0.042289	0.077529
BCAP29	7q22.3	0.103949	0.042305	0.077551
NABP1	2q32.3	-0.10394	0.042316	0.077564
PALM2-AKAP2	9q31.3	0.103923	0.042356	0.077631
DCTN1	2p13.1	0.103864	0.042475	0.077841
NIT1	1q23.3	-0.10386	0.042488	0.077858
VENTXP1	Xp21.3	-0.10384	0.04252	0.077908
WNT10B	12q13.12	-0.10382	0.042561	0.077973
NYAP2	2q36.3	0.103819	0.042564	0.077973
MEX3A	1q22	-0.10382	0.042566	0.077973
TULP2	19q13.33	0.103791	0.04262	0.078065
SRP9	1q42.12	0.103774	0.042655	0.078121
NXN	17p13.3	0.103741	0.042722	0.078236
GPAT2	2q11.2	0.103734	0.042736	0.078247
MYT1	20q13.33	-0.10373	0.042736	0.078247
GUCY2GP	10q25.2	-0.10373	0.04274	0.078247
MIDN	19p13.3	0.1037	0.042803	0.078356
RFX5	1q21.3	0.103696	0.042811	0.078364
SLC7A7	14q11.2	0.103693	0.042818	0.07837
IRGC	19q13.31	0.103684	0.042837	0.078396
FARS2	6p25.1	-0.10367	0.042856	0.078425
CCDC190	1q23.3	0.103672	0.042861	0.078426
TAF1	3p14.1	0.103658	0.042889	0.07847
SNORA56	Xq28	-0.10364	0.042923	0.078526
POLD4	11q13.2	-0.10364	0.042935	0.07854
TTYH2	17q25.1	0.103616	0.042974	0.078602
SNRPA1	15q26.3	-0.10361	0.042976	0.078602
DERL3	22q11.23	0.10361	0.042986	0.078613
ZNF679	7q11.21	-0.1036	0.042997	0.078622
MAGEA3	Xq28	-0.1036	0.043	0.078622
NDC1	1p32.3	0.103596	0.043014	0.078641
CFC1B	2q21.1	0.103571	0.043065	0.078718
ARMC7	17q25.1	-0.10357	0.043066	0.078718
CCIN	9p13.3	0.103568	0.04307	0.078718
STAC	3p22.3-p22.2	0.103568	0.043071	0.078718
MRO	18q21.2	0.103565	0.043076	0.078719



PANK4	1p36.32	-0.10356	0.043095	0.078742
	2-Mar 1q41	0.103555	0.043097	0.078742
LOC399815	10q26.13	-0.10355	0.043106	0.078749
TMEM161B	5q14.3	-0.10355	0.043108	0.078749
DENR	12q24.31	-0.10355	0.043115	0.078755
PCDHB18P	5q31.3	0.103537	0.043133	0.07878
TPI1	12p13.31	-0.10352	0.043162	0.078827
SVOP	12q24.11	0.103516	0.043176	0.078844
HSD17B13	4q22.1	-0.10351	0.043182	0.078849
MAP3K12	12q13.13	0.103507	0.043195	0.07886
HSP90AA1	14q32.31	0.103506	0.043197	0.07886
SPPL3	12q24.31	-0.1035	0.043203	0.078864
MAGEB16	Xp21.1	-0.10349	0.043226	0.078899
H1FX	3q21.3	-0.10347	0.043264	0.078962
NCAPG	4p15.31	-0.10345	0.043306	0.079032
PROC	2q14.3	-0.10344	0.043337	0.079081
PTGDR2	11q12.2	0.103434	0.043342	0.079082
PTK7	6p21.1	-0.10342	0.043377	0.079139
TPK1	7q35	0.103404	0.043404	0.079181
MMEL1	1p36.32	-0.1034	0.04341	0.079185
GRK2	11q13.2	-0.10339	0.043435	0.079218
CHRNA1	2q31.1	0.103388	0.043436	0.079218
ERCC6L	Xq13.1	-0.10337	0.043472	0.079277
LIN9	1q42.12	0.103366	0.04348	0.079285
ACSM1	16p12.3	0.103342	0.04353	0.079368
MCM3	6p12.2	-0.1033	0.04361	0.079505
BAIAP2L2	22q13.1	-0.1033	0.043613	0.079505
MGAM	7q34	0.10325	0.043718	0.079689
LOC643387	2q37.3	-0.10319	0.043848	0.079918
KCNRG	13q14.2	-0.10318	0.043858	0.07993
MOAP1	14q32.12	0.103173	0.043877	0.079957
C1QA	1p36.12	0.103144	0.043936	0.080057
SLC25A5	Xq24	-0.10314	0.043942	0.08006
DNAJC3	13q32.1	0.103115	0.043995	0.08015
KRTAP10-4	21q22.3	-0.1031	0.04403	0.080205
PRPH2	6p21.1	0.103072	0.044084	0.080297
AMY2B	1p21.1	-0.10305	0.044134	0.080382
PI4K2B	4p15.2	0.103042	0.044147	0.080397
SUCLA2	13q14.2	-0.10303	0.044172	0.080436
FBXW8	12q24.22	0.10301	0.044213	0.080503
EIF5AL1	10q22.3	-0.103	0.044241	0.080547
ROS1	6q22.1	0.102978	0.04428	0.080606
SUPT20HL2	Xp22.11	0.102977	0.044281	0.080606
FAM180B	11p11.2	-0.10297	0.044291	0.080616
SYDE1	19p13.12	0.102954	0.044329	0.080678
TMOD4	1q21.3	-0.10294	0.044361	0.080729
C11ORF58	11p15.2	-0.10292	0.044407	0.080805
USH1C	11p15.1	-0.10291	0.044423	0.080827
TCEA3	1p36.12	0.102873	0.044496	0.080953
LGALS4	19q13.2	0.102867	0.04451	0.080971
ZNF10	12q24.33	-0.10286	0.044525	0.08099
FAM99A	11p15.5	-0.10286	0.044529	0.08099
GOT1	10q24.2	-0.10284	0.044557	0.081034
NDUFS4	5q11.2	-0.10283	0.044584	0.081076
HCG27	6p21.33	-0.10275	0.044751	0.081373
DDX23	12q13.12	0.102734	0.044788	0.081431
SYNGR1	22q13.1	0.102728	0.044799	0.081442
CA14	1q21.2	0.102727	0.044802	0.081442

KLHL9	9p21.3	0.102724	0.044807	0.081445
LPAR3	1p22.3	0.102721	0.044814	0.081449
TRMT44	4p16.1	-0.10271	0.044833	0.081477
HOXC4	12q13.13	0.102699	0.044861	0.08152
TAL1	1p33	0.102624	0.045019	0.081799
SPAG11B	8p23.1	-0.10259	0.04508	0.081903
HOXB6	17q21.32	0.102587	0.045096	0.081924
EMILIN3	20q12	-0.10255	0.045171	0.082053
MAOB	Xp11.3	0.102544	0.045186	0.082073
LINC00323	21q22.2	0.102526	0.045225	0.082136
RHD	1p36.11	-0.10252	0.045234	0.082145
ADRA2B	2q11.2	0.102511	0.045256	0.082178
SLC35G2	3q22.3	0.102499	0.045281	0.082216
DRAXIN	1p36.22	0.102479	0.045324	0.082286
SERP2	13q14.11	-0.10247	0.045341	0.082309
GGN	19q13.2	0.102459	0.045365	0.082347
LDHD	16q23.1	0.102452	0.045379	0.082365
CYB561	17q23.3	-0.10245	0.045391	0.082379
SERPINB7	18q21.33	0.102435	0.045417	0.082419
CHGA	14q32.12	0.102428	0.045431	0.082437
BET1L	11p15.5	-0.10241	0.045478	0.082514
IZUMO2	19q13.33	-0.10234	0.045612	0.082749
PLIN4	19p13.3	0.102341	0.045616	0.08275
FAM118A	22q13.31	-0.10231	0.045674	0.082847
WDFY3-AS2	4q21.23	0.102296	0.045712	0.082908
CSDC2	22q13.2	0.102267	0.045773	0.083011
PLPPR1	9q31.1	0.10224	0.04583	0.083108
CCDC106	19q13.42	-0.10224	0.045836	0.083111
PIGW	17q12	-0.10222	0.045868	0.083162
PRPF18	10p13	0.10221	0.045896	0.083204
SLC39A11	17q24.3-q25.1	-0.1022	0.045907	0.083217
DLG3	Xq13.1	0.102164	0.045994	0.083366
RNF31	14q12	0.102155	0.046012	0.083387
ZKSCAN5	7q22.1	0.102154	0.046013	0.083387
STXBP2	19p13.2	-0.10215	0.046029	0.083407
UTP20	12q23.2	0.102144	0.046036	0.083413
SH3BGR	21q22.2	-0.10206	0.046214	0.083728
DGCR9	22q11.21	0.102057	0.046223	0.083736
TAS1R2	1p36.13	0.102054	0.046229	0.083739
PRPF40A	2q23.3	0.102004	0.046336	0.083925
TRPC3	4q27	0.101991	0.046364	0.083969
TSC22D1	13q14.11	-0.10198	0.046393	0.084007
ARHGEF35	7q35	0.101978	0.046394	0.084007
GPATCH2	1q41	0.101975	0.046398	0.084008
MARK3	14q32.32-q32.33	0.101952	0.046449	0.084092
BMERB1	16p13.11	0.101947	0.04646	0.084106
AP1S3	2q36.1	0.101942	0.04647	0.084115
RIMS2	8q22.3	0.101914	0.046531	0.084218
LINC01588	14q21.3	0.101911	0.046536	0.08422
CCDC184	12q13.11	0.101899	0.046563	0.08426
LRRC26	9q34.3	0.10189	0.046583	0.084287
SHTN1	10q25.3	0.101888	0.046586	0.084287
TNFSF11	13q14.11	0.101884	0.046595	0.084296
SNORA62	3p22.1	-0.10188	0.046599	0.084296
NIPSNAP2	7p11.2	-0.10186	0.046646	0.084374
ADAM33	20p13	0.101808	0.046759	0.08457
ISY1	3q21.3	-0.10181	0.046764	0.084571
SLC34A1	5q35.3	-0.10179	0.046789	0.084608

RASA3	13q34	0.101791	0.046797	0.084615
UIMC1	5q35.2	-0.10177	0.046844	0.084694
SERPINB2	18q21.33-q22.1	0.101718	0.046955	0.084886
GPRIN2	10q11.22	0.101699	0.046997	0.084954
UBA7	3p21.31	0.101688	0.04702	0.084988
OGA	10q24.32	0.101679	0.047041	0.085019
FGFR1OP	6q27	-0.10168	0.047045	0.085019
IL27	16p12.1-p11.2	-0.10167	0.047055	0.085028
ZNF542P	19q13.43	0.101667	0.047068	0.085044
AOC4P	17q21.31	0.101662	0.047077	0.085053
GGPS1	1q42.3	0.101627	0.047153	0.085183
LMOD3	3p14.1	-0.10162	0.047161	0.08519
TPRG1L	1p36.32	-0.1016	0.04722	0.085288
ZCCHC18	Xq22.2	0.101591	0.047232	0.085302
APOBEC3D	22q13.1	0.101585	0.047246	0.08532
C9	5p13.1	0.101562	0.047296	0.085403
MZF1	19q13.43	-0.10154	0.047347	0.085487
CDH26	20q13.33	-0.10152	0.047397	0.08557
IPPK	9q22.31	-0.10148	0.047479	0.08571
ENPP7	17q25.3	-0.10147	0.0475	0.085735
ABCA7	19p13.3	0.101468	0.047502	0.085735
GOSR2	17q21.32	-0.10144	0.047555	0.08582
ZPLD1	3q12.3	0.101443	0.047557	0.08582
RAB6D	2q21.1	0.101431	0.047584	0.085861
HIST2H4A	1q21.2	-0.10141	0.04763	0.085935
PKIA	8q21.13	0.101399	0.047654	0.085971
GBP6	1p22.2	0.101386	0.047683	0.086016
GSTM3	1p13.3	-0.10138	0.047688	0.086016
ZC3H7B	22q13.2	0.101382	0.047692	0.086016
KPNA4	3q25.33	0.101324	0.047819	0.086238
PCDHAC2	5q31.3	0.101316	0.047838	0.086265
SLC6A9	1p34.1	-0.10129	0.047901	0.08637
XKR6	8p23.1	0.101277	0.047925	0.086406
ANGEL2	1q32.3	0.101271	0.047936	0.086418
GGT5	22q11.23	0.101242	0.048002	0.086528
ARHGEF10L	1p36.13	-0.10123	0.048022	0.086558
COPS7A	12p13.31	-0.10123	0.048033	0.086569
HLA-DQB1	6p21.32	0.101208	0.048076	0.086639
TBC1D10B	16p11.2	-0.10116	0.048175	0.08681
LARS	5q32	-0.10115	0.048201	0.086849
NUCB2	11p15.1	0.10107	0.048385	0.087161
ZSCAN10	16p13.3	-0.10107	0.048387	0.087161
S100A6	1q21.3	-0.10107	0.048387	0.087161
ZSCAN32	16p13.3	-0.10105	0.048424	0.087219
TLE5	19p13.3	-0.10103	0.04848	0.087311
THAP7-AS1	22q11.21	-0.10102	0.048505	0.087349
SCAND2P	15q25.2	0.101003	0.048534	0.087387
PPIG	2q31.1	0.101003	0.048535	0.087387
LAMP5	20p12.2	0.100977	0.048592	0.087483
MRFAP1	4p16.1	-0.10096	0.048627	0.087531
C4ORF46	4q32.1	-0.10096	0.048628	0.087531
HPF1	4q33	-0.10096	0.04864	0.08754
RBP5	12p13.31	0.100955	0.048642	0.08754
ABCB5	7p21.1	0.100944	0.048665	0.087575
TXLNB	6q24.1	0.100925	0.04871	0.087647
HLA-DRB5	6p21.32	0.100922	0.048715	0.087649
TICRR	15q26.1	0.10089	0.048787	0.087768
ADRA2C	4p16.3	-0.10089	0.04879	0.087768

PICRAR	21q22.3	-0.10087	0.048837	0.087844
SOX15	17p13.1	0.100839	0.048901	0.087952
ENAH	1q42.12	0.100837	0.048907	0.087955
CREBZF	11q14.1	-0.10082	0.048947	0.088018
CYP11B2	8q24.3	-0.10081	0.048974	0.088058
PLEKHF2	8q22.1	0.100805	0.048979	0.088059
CCDC144NL	17p11.2	0.100786	0.049022	0.088129
COL6A6	3q22.1	0.100764	0.049072	0.088211
GTF2H2B	5q13.2	-0.10076	0.049076	0.088211
HPS1	10q24.2	-0.10075	0.049108	0.08826
SPOCK3	4q32.3	0.100733	0.04914	0.088311
BET1P1	7q36.1	-0.10072	0.049172	0.08836
FAM20C	7p22.3	0.100691	0.049235	0.088466
ATP1B2	17p13.1	0.100665	0.049295	0.088564
XRCC6	22q13.2	-0.10066	0.049299	0.088564
RGS11	16p13.3	0.100659	0.049309	0.088574
CHRNA4	20q13.33	-0.10065	0.049339	0.088611
CCDC93	2q14.1	0.100645	0.049341	0.088611
SLC44A1	9q31.1-q31.2	0.100643	0.049346	0.088611
SH3RF2	5q32	0.100642	0.049347	0.088611
HNRNPD	4q21.22	-0.10064	0.049355	0.088616
KLK8	19q13.41	-0.10059	0.04947	0.088815
KRTAP4-7	17q21.2	-0.10058	0.04949	0.088843
VRK2	2p16.1	0.100556	0.049543	0.088931
KCNJ9	1q23.2	0.100528	0.049607	0.089038
MAP7D3	Xq26.3	0.100511	0.049646	0.08909
TUBBP5	9q34.3	0.100511	0.049647	0.08909
XKRY2	Yq11.222	-0.10051	0.04965	0.08909
CGRRF1	14q22.2	0.100503	0.049664	0.089108
ALMS1P1	2p13.1	-0.10045	0.049796	0.089337
SLC44A5	1p31.1	-0.10044	0.049808	0.08935
KLHL15	Xp22.11	0.100428	0.049835	0.08939
PSPN	19p13.3	-0.10042	0.04985	0.089409
TMEM43	3p25.1	0.100418	0.049857	0.089414
KLC3	19q13.32	-0.10042	0.049864	0.089418
DIRAS3	1p31.3	0.100409	0.049879	0.089437
KRT1	12q13.13	0.100404	0.049891	0.08945
RILPL1	12q24.31	-0.10038	0.049941	0.089532
STARD7	2q11.2	-0.10036	0.049992	0.089615
OSTN	3q28	0.100341	0.050035	0.089685
RELL1	4p14	0.100332	0.050055	0.089714
PHTF1	1p13.2	0.1003	0.05013	0.089837
SNORA14B	1q42.3	-0.1003	0.050133	0.089837
PPP2R1B	11q23.1	0.100282	0.050171	0.089896
PTGES3	12q13.3 12	-0.10028	0.050182	0.089908
CLCN6	1p36.22	-0.10023	0.050287	0.090089
RNASE12	14q11.2	-0.10022	0.05031	0.090122
ARPP21	3p22.3	0.10021	0.050337	0.090162
CGAS	6q13	0.100191	0.050381	0.090227
PPP6R2	22q13.33	-0.10019	0.050383	0.090227
EXD3	9q34.3	-0.10015	0.050483	0.090398
PPP1R13L	19q13.32	0.100113	0.050561	0.090527
CLGN	4q31.1	-0.10011	0.050564	0.090527
ISYNA1	19p13.11	-0.10009	0.050614	0.090609
HERC2P2	15q11.2	-0.10007	0.050668	0.090698
TESMIN	11q13.3	-0.10001	0.050795	0.090911
THAP12	11q13.5	-0.10001	0.050796	0.090911
INPP5D	2q37.1	0.1	0.050824	0.090952

CFD	19p13.3	0.09998	0.05087	0.091027
ABHD11-AS1	7q11.23	-0.09997	0.050895	0.091064
ILRUN	6p21.31	0.099963	0.05091	0.091082
DNAJC5G	2p23.3	-0.09994	0.050969	0.09118
DAP	5p15.2	0.099911	0.05103	0.09128
MMP13	11q22.2	0.09989	0.05108	0.091362
PAQR9	3q23	-0.09988	0.051111	0.09141
LRIT3	4q25	-0.09987	0.051126	0.091428
OR5AN1	11q12.1	0.099859	0.051151	0.091459
CDH1	16q22.1	0.099859	0.051152	0.091459
GSX1	13q12.2	-0.09983	0.051228	0.091585
MAPT-IT1	17q21.31	-0.09981	0.051255	0.091621
LINC02716	11p11.2	0.099814	0.051257	0.091621
DNAH3	16p12.3	0.09981	0.051266	0.09163
ZNF93	19p12	-0.0998	0.051301	0.091684
STON1-GTF2A1L	2p16.3	0.099786	0.051322	0.091712
OR1F1	16p13.3	0.099778	0.051342	0.091741
KRTAP10-1	21q22.3	-0.09977	0.051367	0.091777
CYB561D2	3p21.31	-0.09975	0.051396	0.09182
PALD1	10q22.1	-0.09974	0.051441	0.091893
SLC6A17	1p13.3	0.099732	0.05145	0.0919
HMG1N1	21q22.2	-0.09971	0.051491	0.091965
ESR2	14q23.2-q23.3	0.099709	0.051503	0.091979
MAGEA5	Xq28	-0.09965	0.05164	0.092207
TOPBP1	3q22.1	0.099651	0.05164	0.092207
MIS18A	21q22.11	-0.09964	0.05166	0.092235
C5ORF58	5q35.1	0.099613	0.051729	0.09235
CDS2	20p12.3	0.09959	0.051783	0.092439
CEP41	7q32.2	-0.09959	0.051791	0.092443
C14ORF28	14q21.2	0.099566	0.05184	0.092524
HK3	5q35.2	0.099508	0.051979	0.092762
PSG7	19q13.31	-0.0995	0.05199	0.092774
PDK2	17q21.33	-0.09949	0.052014	0.092809
TDRD5	1q25.2	0.099482	0.052038	0.092844
ANKHD1	5q31.3	0.099463	0.052084	0.092917
CCR6	6q27	0.099452	0.052111	0.092948
CCDC191	3q13.31	-0.09945	0.052114	0.092948
AKAP14	Xq24	-0.09945	0.052115	0.092948
ZNF80	3q13.31	0.099447	0.052123	0.092953
RAPSN	11p11.2	-0.09942	0.05219	0.093064
NRL	14q11.2-q12	-0.0994	0.052229	0.093126
HIST2H2AA3	1q21.2	-0.09939	0.052252	0.093159
PIP5K1B	9q21.11	0.099378	0.052287	0.093214
FDCSP	4q13.3 4q13	0.09934	0.052377	0.093364
SUSD2	22q11.23	0.099322	0.05242	0.093434
RNU6ATAC	9q34.2	-0.09931	0.052444	0.093468
OR2H2	6p22.1	-0.09931	0.052451	0.093471
PCSK1N	Xp11.23	-0.09927	0.052538	0.093609
AKR1B10	7q33	0.099272	0.05254	0.093609
FAM49B	8q24.21	-0.09927	0.052542	0.093609
ARL14EP	11p14.1	-0.09927	0.052549	0.093613
CC2D1A	19p13.12	-0.09927	0.052556	0.093618
MYRF	11q12.2	0.099258	0.052574	0.093641
TSPAN32	11p15.5	0.099224	0.052655	0.093769
NCR1	19q13.42	0.099224	0.052655	0.093769
ACSS2	20q11.22	-0.09922	0.052667	0.093781
SULF2	20q13.12	0.099212	0.052684	0.093804
BTBD17	17q25.1	0.099199	0.052715	0.09385

TNFAIP3	6q23.3	0.099196	0.052721	0.093852
CUBN	10p13	0.099178	0.052764	0.093921
C17ORF98	17q12	-0.09916	0.052797	0.093959
LIG3	17q12	-0.09916	0.052799	0.093959
OSBPL5	11p15.4	0.099163	0.0528	0.093959
HIST1H2BF	6p22.2	-0.09916	0.052807	0.093964
PEA15	1q23.2	0.099152	0.052827	0.093991
SYTL4	Xq22.1	0.099144	0.052846	0.094016
OR51T1	11p15.4	0.099142	0.05285	0.094016
OR2T33	1q44	0.099109	0.052931	0.09415
MOG	6p22.1	0.09908	0.053001	0.094267
NINL	20p11.21	-0.09903	0.053126	0.094478
UBA5	3q22.1	0.099027	0.053129	0.094478
C11ORF52	11q23.1	-0.09902	0.053151	0.094508
KIF21B	1q32.1	0.098992	0.053213	0.094611
HIST1H3A	6p22.2	-0.09897	0.05326	0.094686
RNF216	7p22.1	-0.09896	0.053281	0.094714
PDZD4	Xq28	0.098951	0.053312	0.094763
PENK	8q12.1	0.098922	0.053381	0.094876
BAG2	6p12.1	-0.09891	0.053411	0.094913
DRD1	5q35.2	0.09891	0.053411	0.094913
DUOXA2	15q21.1	0.098891	0.053456	0.094984
BTN3A2	6p22.2	0.098867	0.053517	0.095083
CARD18	11q22.3	0.098862	0.053527	0.095093
XPO6	16p12.1	-0.09884	0.053577	0.095174
PCDHGC3	5q31.3	0.098816	0.05364	0.095276
CACNA2D3	3p21.1-p14.3	0.098776	0.053736	0.095439
KRTAP10-7	21q22.3	-0.09873	0.053853	0.095639
PLPP7	9q34.13	0.098693	0.05394	0.095785
ALG1L	3q21.2	-0.09869	0.053948	0.09579
MTMR14	3p25.3	-0.09868	0.053961	0.095804
GLIPR1L1	12q21.2	-0.09865	0.054035	0.095927
FBLL1	5q34	-0.09862	0.054123	0.096076
JDP2	14q24.3	0.098605	0.054155	0.096119
S1PR2	19p13.2	0.098604	0.054157	0.096119
CXCR2P1	2q35	0.098594	0.054183	0.096156
ZNF398	7q36.1	0.098585	0.054205	0.096187
GDPD2	Xq13.1	0.098538	0.05432	0.096382
CLN3	16p12.1	-0.09853	0.054337	0.096404
BIN3	8p21.3	-0.0985	0.054405	0.096516
BCO2	11q23.1	-0.0985	0.05442	0.096534
BEX3	Xq22.2	0.098479	0.054465	0.096606
ELOVL1	1p34.2	-0.09846	0.054516	0.096682
CIB1	15q26.1	0.098456	0.054521	0.096682
TRMT13	1p21.2	-0.09846	0.054523	0.096682
ZNF260	19q13.12	0.098427	0.054592	0.096796
CT62	15q23	0.098351	0.054779	0.09712
ACTL7A	9q31.3	0.098303	0.054901	0.097326
TCTE1	6p21.1	0.098295	0.054919	0.09735
MSTO1	1q22	-0.09829	0.054924	0.09735
CCDC66	3p14.3	-0.09825	0.05502	0.097512
ASB5	4q34.2	0.098213	0.055123	0.097685
VEGFA	6p21.1	-0.09819	0.055169	0.097758
RFX4	12q23.3	0.098188	0.055186	0.09778
GLRA1	5q33.1	0.098177	0.055213	0.09782
PTGDS	9q34.3	0.098174	0.055221	0.097826
PURG	8p12	0.098167	0.055237	0.097833
CPNE2	16q13	0.098166	0.05524	0.097833

DPT	1q24.2	0.098166	0.05524	0.097833
LTK	15q15.1	0.098103	0.055398	0.098103
PLAG1	8q12.1	-0.0981	0.055409	0.098114
LNX1	4q12	0.098093	0.055423	0.09813
RORC	1q21.3	0.098065	0.055493	0.098247
OSTC	4q25	-0.09806	0.055499	0.098248
CAV3	3p25.3	0.098044	0.055546	0.098323
FDXACB1	11q23.1	-0.09803	0.055575	0.098365
CD46	1q32.2	0.098017	0.055613	0.098423
TMEFF1	9q31.1	0.098006	0.05564	0.098463
FAM189B	1q22	-0.09799	0.055678	0.098522
WDR36	5q22.1	0.097987	0.055688	0.098531
AKAP8	19p13.12	-0.09798	0.055717	0.098572
LRRN4CL	11q12.3	0.097957	0.055762	0.098639
CCDC96	4p16.1	0.097957	0.055764	0.098639
LINC01018	5p15.31	0.09795	0.05578	0.098658
HCG9	6p22.1	-0.09792	0.055866	0.098802
KRTAP5-4	11p15.5	-0.09791	0.055873	0.098805
SMARCC2	12q13.2	0.097902	0.055901	0.098846
NXPH1	7p21.3	-0.09789	0.055922	0.098874
SPRR3	1q21.3	0.097891	0.05593	0.09888
CEP89	19q13.11	-0.09788	0.055946	0.0989
LGALS2	22q13.1	0.097853	0.056025	0.09903
SLC15A4	12q24.33	0.09785	0.056033	0.099036
APLP2	11q24.3	0.097838	0.056064	0.099078
DAW1	2q36.3	-0.09784	0.056067	0.099078
ZNF280C	Xq26.1	-0.09782	0.056097	0.099122
RP1L1	8p23.1	0.097798	0.056164	0.099232
ZFP14	19q13.12	0.097792	0.056179	0.099251
STAG2	Xq25	0.097783	0.056203	0.099276
UPK1A	19q13.12	-0.09778	0.056204	0.099276
CCDC138	2q13	-0.09776	0.05626	0.099366
CTLA4	2q33.2	0.097751	0.056283	0.099399
FAM205A	9p13.3	0.097743	0.056303	0.099419
ITGAD	16p11.2	0.097743	0.056304	0.099419
TP53I3	2p23.3	0.097735	0.056324	0.099444
FSCN3	7q32.1	-0.09772	0.056351	0.099483
PTX4	16p13.3	0.097713	0.05638	0.099526
SRC	20q11.23	-0.0977	0.056414	0.099578
SYT13	11p11.2	0.097687	0.056446	0.09962
GYPE	4q31.21	0.097686	0.056448	0.09962
PARPBP	12q23.2	-0.09766	0.056506	0.099713
IRS2	13q34	0.097646	0.056548	0.099779
METTL15	11p14.1	0.097629	0.056593	0.099849
CLEC2D	12p13.31	-0.09761	0.056649	0.099938
TXNRD1	12q23.3	0.097584	0.056708	0.100034
IL26	12q15	-0.09756	0.056756	0.10011
IP6K1	3p21.31	0.097557	0.056775	0.100136
NUTM2A	10q23.2	0.097547	0.056802	0.100173
THNSL1	10p12.1	-0.09753	0.056854	0.100257
GCLC	6p12.1	-0.09752	0.056859	0.100257
TRAM1L1	4q26	0.097486	0.056958	0.100423
KRT75	12q13.13	-0.09747	0.056995	0.100479
SRXN1	20p13	-0.09746	0.057019	0.100513
TRMT2B	Xq22.1	-0.09744	0.05708	0.10061
AACS	12q24.31	0.097428	0.057106	0.100648
HIST1H4A	6p22.2	-0.0974	0.057171	0.100754
CDK11B	1p36.33	-0.09738	0.057232	0.100852

FAIM2	12q13.12	0.097328	0.057362	0.101072
CERCAM	9q34.11	0.097313	0.057401	0.101133
HDHD2	18q21.1	0.097311	0.057407	0.101134
CDH12	5p14.3	-0.09729	0.057463	0.101223
ADCY4	14q12	0.097274	0.057502	0.101277
WFDC11	20q13.12	-0.09727	0.057503	0.101277
LIN7C	11p14.1	-0.09727	0.057514	0.101286
ELF1	13q14.11	0.097267	0.057519	0.101286
CLUAP1	16p13.3	-0.09726	0.057544	0.101319
HSPB3	5q11.2	-0.09726	0.057547	0.101319
GABRG2	5q34	0.097252	0.057558	0.101328
CCDC50	3q28	0.097239	0.057591	0.101378
RND2	17q21.31	-0.09723	0.057621	0.101422
ADAM22	7q21.12	0.097214	0.057657	0.101476
EFCAB11	14q32.11	-0.0972	0.057687	0.10152
CXCL13	4q21.1	0.0972	0.057693	0.101522
TRPV3	17p13.2	0.097189	0.057721	0.101561
PRSS48	4q31.3	0.097182	0.057738	0.101583
SOCS1	16p13.13	-0.09716	0.05779	0.101665
WDPCP	2p15	0.097151	0.05782	0.10171
HDAC5	17q21.31	-0.09715	0.05783	0.101719
SLC35F2	11q22.3	-0.09713	0.057883	0.101803
GPR161	1q24.2	0.097111	0.057922	0.101854
CCDC122	13q14.11	-0.09711	0.057922	0.101854
MATN3	2p24.1	0.097105	0.057937	0.101871
THBS3	1q22	0.097091	0.057976	0.10193
RHOV	15q15.1	0.097062	0.058051	0.102053
PDLIM3	4q35.1	0.097035	0.058119	0.102164
PITPNC1	17q24.2	0.097027	0.05814	0.102192
IARS	9q22.31	-0.09702	0.058154	0.102207
KIAA1147	7q34	0.097017	0.058167	0.10222
SYT2	1q32.1	0.097013	0.058176	0.102228
CAMK1	3p25.3	-0.09699	0.058229	0.102313
EPHA5	4q13.1-q13.2	0.096985	0.058251	0.102341
MIR600HG	9q33.3	-0.09698	0.058266	0.10236
RTL3	Xq21.1	0.096964	0.058306	0.10242
C4ORF3	4q26	0.096947	0.05835	0.102488
SLC6A19	5p15.33	0.096923	0.058411	0.102586
ACADVL	17p13.1	-0.09692	0.058416	0.102586
CGB1	19q13.33	-0.0969	0.058476	0.102682
STAU2	8q21.11	0.096857	0.058584	0.102863
RAMP2-AS1	17q21.2	-0.09684	0.058635	0.102931
GEMIN4	17p13.3	0.096837	0.058636	0.102931
CLDN17	21q21.3	0.096837	0.058638	0.102931
CACNA1B	9q34.3	0.096814	0.058698	0.103028
QTRT2	3q13.31	0.09681	0.058709	0.103029
DNM1	9q34.11	-0.09681	0.058709	0.103029
ZNF557	19p13.2	0.096799	0.058737	0.103069
DNAJC5B	8q13.1	0.096787	0.058767	0.103113
PAQR4	16p13.3	-0.09678	0.058779	0.103125
SNX11	17q21.32	-0.09678	0.058787	0.103129
ADAM5	8p11.22	-0.09674	0.058897	0.103314
FARP1	13q32.2	-0.09673	0.058905	0.103319
KHSRP	19p13.3	-0.09673	0.058924	0.103343
DDHD1	14q22.1	0.096702	0.058992	0.103453
CD99	Xp22.33 and Yp11.2	-0.09669	0.059023	0.103498
GNRHR	4q13.2	0.096687	0.059031	0.103503
MRPL3	3q22.1	-0.09667	0.059077	0.103575



PRR32	Xq25	-0.09666	0.059104	0.103614
ABHD8	19p13.11	-0.09664	0.059146	0.103678
SPAST	2p22.3	0.096607	0.059241	0.103836
NPHS2	1q25.2	0.096567	0.059349	0.104015
USP20	9q34.11	-0.09656	0.059357	0.104021
C21ORF62	21q22.11	0.096548	0.059397	0.104078
KLHDC2	14q21.3	0.096547	0.0594	0.104078
C1ORF21	1q25.3	0.096544	0.059408	0.104083
NOTCH1	9q34.3	0.096531	0.059442	0.104133
LINC01126	2p21	-0.09651	0.059493	0.104214
CELF6	15q23	0.096488	0.059556	0.10431
GATA5	20q13.33	-0.09649	0.059559	0.10431
KIF3A	5q31.1	0.096482	0.059572	0.104324
CPA6	8q13.2	0.096468	0.059611	0.104383
SNURF	15q11.2	0.096461	0.05963	0.104407
SHLD2P1	10q11.22	0.096436	0.059695	0.104512
TMEM114	16p13.2	-0.09642	0.05974	0.104582
RNPEP	1q32.1	0.096415	0.05975	0.104591
CTBP2	10q26.13	0.096286	0.060094	0.105174
SLC7A3	Xq13.1	0.096286	0.060094	0.105174
FAT2	5q33.1	0.096282	0.060105	0.105184
RHO	3q22.1	0.096219	0.060275	0.105473
ZNF684	1p34.2	-0.09621	0.060304	0.105513
CDCA2	8p21.2	0.096184	0.060369	0.105616
CLEC4M	19p13.2	0.096182	0.060373	0.105616
TTLL6	17q21.32	0.096162	0.060427	0.1057
BICDL1	12q24.23	-0.09615	0.060454	0.10574
AEBP2	12p12.3	0.096143	0.060477	0.105771
CTAGE9	6q23.2	0.096141	0.060485	0.105775
PSMA8	18q11.2	0.096136	0.060498	0.105788
NRXN3	14q24.3-q31.1	0.096127	0.060521	0.105819
GLTP	12q24.11	0.096123	0.060532	0.10583
ALDH8A1	6q23.3	-0.09609	0.060611	0.105959
NHEJ1	2q35	-0.09607	0.060666	0.106044
SLC7A5P2	16p12.2	-0.09607	0.060685	0.106069
DYRK3	1q32.1	0.09605	0.060729	0.106136
CFP	Xp11.23	0.096039	0.060759	0.10618
FIGNL2	12q13.13	0.095974	0.060933	0.106474
GNPNAT1	14q22.1	0.095937	0.061034	0.106642
LINC01366	5q35.1	0.095925	0.061068	0.10669
HMGB4	1p35.1	-0.09592	0.061073	0.10669
ATP6V1B1	2p13.3	-0.09591	0.0611	0.106729
TFCP2L1	2q14.2	0.095904	0.061124	0.106762
SLC26A9	1q32.1	0.095887	0.061168	0.10683
ZNF766	19q13.41	0.095845	0.061283	0.107021
NBN	8q21.3	0.095818	0.061358	0.107143
LECT2	5q31.1	-0.0958	0.061401	0.107209
DALRD3	3p21.31	-0.09578	0.061452	0.107287
HLTF	3q24	0.095767	0.061495	0.107344
KLHL23	2q31.1	0.095767	0.061495	0.107344
KLHL1	13q21.33	0.095758	0.06152	0.107372
PTPA	9q34.11	-0.09576	0.061521	0.107372
RFPL3S	22q12.3	-0.09575	0.061555	0.107416
NEAT1	11q13.1	-0.09574	0.061558	0.107416
GABRG3	15q12	0.095726	0.061608	0.107494
GGCX	2p11.2	0.095722	0.061617	0.107501
C1QTNF8	16p13.3	-0.09572	0.061623	0.107502
MYOZ3	5q33.1	0.095714	0.06164	0.107522

KMT2B	19q13.12	0.095695	0.061693	0.107605
MMP9	20q13.12	0.095689	0.061709	0.107624
SFTPA2	10q22.3	0.095674	0.061749	0.107684
CIITA	16p13.13	0.095664	0.061777	0.107724
SDHAP2	3q29	-0.09564	0.061839	0.107823
KBTBD13	15q22.31	0.095637	0.061851	0.107834
TBC1D1	4p14	0.095623	0.06189	0.107893
RRM2B	8q22.3	0.095579	0.062009	0.108091
LINC00906	19q12	0.095577	0.062016	0.108093
TRAPPC9	8q24.3	-0.09555	0.06209	0.108213
ZUP1	6q22.1	-0.09554	0.062107	0.108233
ADAM17	2p25.1	0.095513	0.062191	0.108368
CNIH4	1q42.11	-0.09551	0.062195	0.108368
VRK1	14q32.2	-0.09551	0.062203	0.108373
MPP3	17q21.31	-0.0955	0.062223	0.108398
FGF22	19p13.3	0.095498	0.062231	0.108402
HCG18	6p22.1	-0.09549	0.062241	0.10841
KAZN	1p36.21	-0.09547	0.062306	0.108515
MORN4	10q24.2	-0.09544	0.062383	0.108639
ACACB	12q24.11	0.09544	0.062392	0.108645
TMIGD1	17q11.2	0.095433	0.062411	0.108669
NCKIPSD	3p21.31	-0.09543	0.062428	0.108685
TLR2	4q31.3	0.095425	0.062433	0.108685
ID2B	3p14.2	-0.09542	0.062437	0.108685
DIPK1A	1p22.1	0.095412	0.062469	0.108732
SNORA79	14q31.1	-0.09538	0.062562	0.108884
PCA3	9q21.2	0.095376	0.062568	0.108885
MMAA	4q31.21	0.095347	0.062647	0.109014
FASTKD5	20p13	0.095332	0.062692	0.109081
PASD1	Xq28	-0.09532	0.06272	0.109122
HIST1H2AD	6p22.2	-0.09532	0.062732	0.109133
SERPINA9	14q32.13	0.095313	0.062742	0.10914
NEK8	17q11.2	-0.09528	0.062847	0.109314
TMED5	1p22.1	0.095259	0.062894	0.109386
MTERF4	2q37.3	0.095245	0.06293	0.109439
MED6	14q24.2	-0.09524	0.062949	0.109462
ROM1	11q12.3	-0.09517	0.063135	0.109776
CCP110	16p12.3	0.095155	0.063182	0.109848
ZNF718	4p16.3	0.095128	0.063258	0.109971
IRF1	5q31.1	-0.09511	0.063307	0.110046
SPINK5	5q32	0.095102	0.063328	0.110074
CTNNBIP1	1p36.22	-0.0951	0.06334	0.110085
NBPF9	1q21.2	0.095071	0.063415	0.110206
CDK2	12q13.2	-0.09506	0.063435	0.110231
DMRTB1	1p32.3	-0.09505	0.063466	0.110275
CCL11	17q12	0.095043	0.063495	0.110317
KRT17P5	17p11.2	-0.09503	0.063541	0.110387
CASP12	11q22.3	0.095017	0.063568	0.110425
VSNL1	2p24.2	-0.09501	0.063585	0.110443
GCM1	6p12.1	-0.095	0.063623	0.110499
COP1	1q25.1-q25.2	0.094995	0.063628	0.110499
ACTN4	19q13.2	0.094991	0.06364	0.110511
ULK4	3p22.1	-0.09498	0.063659	0.110534
TMC5	16p12.3	0.094967	0.063706	0.110606
CCDC14	3q21.1	-0.09496	0.063739	0.110653
HS3ST5	6q21-q22.1	0.094938	0.063788	0.110729
KRTAP9-9	17q21.2	-0.09492	0.063841	0.110812
NUDT18	8p21.3	-0.09491	0.063865	0.110843

ELMOD1	11q22.3	0.094906	0.063878	0.110856
MRFAP1L1	4p16.1	-0.0949	0.063901	0.110887
SLC27A4	9q34.11	-0.09488	0.06396	0.110979
NT5C1B	2p24.2	-0.09487	0.063971	0.111099
SLC19A2	1q24.2	-0.09484	0.064077	0.111163
ATG4A	Xq22.3	0.094829	0.064096	0.111187
FAM221A	7p15.3	-0.09482	0.064135	0.111239
OCLM	1q31.1	0.094813	0.06414	0.111239
RTP1	3q27.3	0.094812	0.064143	0.111239
NOX5	15q23	0.094803	0.064167	0.111272
FKRP	19q13.32	0.094784	0.064221	0.111356
CABP7	22q12.2	-0.09478	0.064235	0.111371
PLPP6	9p24.1	-0.09477	0.064254	0.111394
CS	12q13.3	0.094753	0.06431	0.11148
GMNN	6p22.3	-0.09474	0.064338	0.11152
DIAPH3	13q21.2	-0.09473	0.064369	0.111563
FAM210B	20q13.2	-0.09473	0.064378	0.11157
ZNF702P	19q13.41	0.094715	0.064416	0.111626
PHKG1	7p11.2	-0.09471	0.064434	0.111647
XPOT	12q14.2	-0.09469	0.06448	0.111717
HOOK3	8p11.21	0.094687	0.064497	0.111737
HEY2	6q22.31	0.094679	0.064519	0.111766
EME2	16p13.3	-0.09468	0.064531	0.111776
CCDC65	12q13.12	0.094638	0.064636	0.111946
AIDA	1q41	0.094636	0.06464	0.111946
COBLL1	2q24.3	0.09463	0.06466	0.111971
SEMG2	20q13.12	0.094589	0.064775	0.112161
HAND2	4q34.1	0.094554	0.064875	0.112324
WNT8B	10q24.31	-0.09455	0.064883	0.112329
GALC	14q31.3	0.094533	0.064933	0.112406
APOBEC3B	22q13.1	-0.09453	0.064955	0.112433
CLEC4D	12p13.31	0.0945	0.065028	0.112549
WNT7B	22q13.31	0.094471	0.065112	0.112685
MOB4	2q33.1	0.094447	0.06518	0.112793
LIMK1	7q11.23	-0.09441	0.065289	0.112973
MRM3	17p13.3	-0.0944	0.065312	0.113002
TMEM215	9p21.1	0.094394	0.06533	0.11302
KRT86	12q13.13	-0.09439	0.065334	0.11302
LRCH4	7q22.1	-0.09438	0.065361	0.113059
TBC1D3C	17q12	-0.09438	0.065368	0.11306
YEATS2	3q27.1	0.094372	0.065394	0.113096
KRR1	12q21.2	0.094369	0.065404	0.113103
TRIM47	17q25.1	0.094361	0.065425	0.11313
SOWAHA	5q31.1	-0.09434	0.065485	0.113224
ADGRF2	6p12.3	-0.09434	0.065498	0.113237
HSBP1L1	18q23	-0.09432	0.06554	0.113299
CTNNB1	3p22.1	0.094313	0.065565	0.113332
ZCCHC8	12q24.31	0.094311	0.06557	0.113332
TOB2P1	6p22.1	0.094279	0.065662	0.113481
SNORA66	1p22.1	-0.0942	0.065881	0.11385
BPIFA1	20q11.21	-0.0942	0.065903	0.113878
HOMER2	15q25.2	0.094188	0.065922	0.113901
FGFRL1	4p16.3	-0.09416	0.066012	0.114045
RPSAP52	12q14.3	0.094111	0.066146	0.11426
CCDC171	9p22.3	0.09411	0.066147	0.11426
FABP2	4q26	0.0941	0.066178	0.114303
GRIK1	21q21.3	0.094085	0.066222	0.11437
STRAP	12p12.3	-0.09405	0.066337	0.114558

DAB1	1p32.2	-0.09404	0.066351	0.114572
ASB16	17q21.31	-0.09403	0.066376	0.114606
FAM149A	4q35.1	0.094028	0.066386	0.114612
AMER3	2q21.1	0.094021	0.066407	0.11464
BBS10	12q21.2	-0.09401	0.066431	0.114671
PCDHGA1	5q31.3	0.093987	0.066505	0.11479
CDH23	10q22.1	0.093957	0.066593	0.114932
ERF	19q13.2	-0.09394	0.066656	0.115026
HIST1H2AG	6p22.1	-0.09393	0.06666	0.115026
TRAF7	16p13.3	-0.09392	0.066699	0.115084
RNH1	11p15.5	-0.09391	0.06674	0.115146
KRT39	17q21.2	-0.09386	0.066868	0.115347
ADCY8	8q24.22	0.093862	0.066868	0.115347
RDX	11q22.3	0.093859	0.066877	0.115352
ZC3H4	19q13.32	0.093849	0.066908	0.115395
CCL20	2q36.3	-0.09384	0.066938	0.115437
DDR1	6p21.33	0.0938	0.067052	0.115623
KLRD1	12p13.2	0.093794	0.067067	0.115639
HGFAC	4p16.3	-0.09376	0.067175	0.115806
MAGEB3	Xp21.2	-0.09376	0.067175	0.115806
PRDM4	12q23.3	0.093735	0.067242	0.115911
VPS16	20p13	-0.09373	0.067255	0.115924
RFPL4A	19q13.42	0.093717	0.067294	0.115981
C10ORF113	10p12.31	-0.0937	0.06733	0.116033
BMP10	2p13.3	0.093698	0.067349	0.116056
FIBCD1	9q34.12	0.093652	0.067483	0.116277
FOLR1	11q13.4	-0.09364	0.067528	0.116344
MCAM	11q23.3	0.093612	0.067603	0.116464
LRRC18	10q11.23	0.093601	0.067634	0.116506
CENPK	5q12.3	-0.09359	0.067661	0.116543
IQCA1	2q37.2-q37.3	0.093576	0.067708	0.116614
ZFYVE21	14q32.33	0.093552	0.067778	0.116725
ENKUR	10p12.1	0.093538	0.067821	0.116785
NRXN2	11q13.1	-0.09354	0.067825	0.116785
MS4A14	11q12.2	0.09353	0.067844	0.116808
LHX3	9q34.3	-0.09352	0.067866	0.116808
FAM153CP	5q35.3	0.093522	0.067866	0.116808
OR2D2	11p15.4	-0.09352	0.067871	0.116808
TPCN2	11q13.3	-0.09352	0.067872	0.116808
KREMEN2	16p13.3	-0.09352	0.067877	0.116808
PM20D1	1q32.1	0.093518	0.067879	0.116808
TUBAL3	10p15.1	-0.09351	0.067905	0.116843
EVI5L	19p13.2	0.093503	0.067924	0.116865
SOGA1	20q11.23	0.093489	0.067965	0.116927
EMX2OS	10q26.11	0.093474	0.068009	0.116992
PSAPL1	4p16.1	0.093471	0.068018	0.116997
HOXA11-AS	7p15.2	-0.09346	0.068053	0.117048
WFDC8	20q13.12	0.093444	0.068099	0.117115
TRIM54	2p23.3	-0.09344	0.06812	0.117142
CTTN	11q13.3	-0.09343	0.068141	0.117168
L2HGDH	14q21.3	0.093424	0.068157	0.117177
STPG2	4q22.3-q23	-0.09342	0.068157	0.117177
PRODH2	19q13.12	-0.09342	0.068175	0.117197
HCG26	6p21.33	-0.09341	0.068197	0.117225
FBXO40	3q13.33	0.0934	0.068229	0.11727
STAR	8p11.23	-0.09338	0.0683	0.117382
SYT9	11p15.4	0.093368	0.068323	0.11741
SLC35F1	6q22.2-q22.31	0.093364	0.068335	0.117421

NDUFA5	7q31.32	-0.09334	0.068398	0.117519
ARG1	6q23.2	0.093339	0.068412	0.117533
ACTBL2	5q11.2	0.093328	0.068442	0.117574
C3ORF22	3q21.3	-0.09331	0.068496	0.117657
SNAI3	16q24.2	0.093301	0.068522	0.11769
ANLN	7p14.2	0.0933	0.068527	0.11769
LOC284798	20p11.21	-0.09326	0.068634	0.117864
PDZD9	16p12.2	-0.09326	0.068644	0.117871
ZNRD1ASP	6p22.1	-0.09326	0.06865	0.117872
OLFM4	13q14.3	0.09325	0.068674	0.117902
UGT3A2	5p13.2	0.093219	0.068767	0.118042
ARL13B	3q11.1-q11.2	0.093219	0.068768	0.118042
ZCCHC24	10q22.3	0.093217	0.068773	0.118042
LRRC7	1p31.1	0.093214	0.068781	0.118046
SREK1	5q12.3	0.093201	0.068821	0.118104
PSMC6	14q22.1	-0.09318	0.068871	0.118179
LINC02693	17p11.2	0.09318	0.068885	0.118194
TSPEAR-AS2	21q22.3	-0.09317	0.068922	0.118248
UGT1A7	2q37.1	0.093157	0.068952	0.118288
FOXD2	1p33	-0.09315	0.068977	0.118321
TSPYL4	6q22.1	0.093136	0.069016	0.118379
OR6B3	2q37.3	-0.09312	0.069066	0.118453
TPP1	11p15.4	0.093112	0.069088	0.118482
CPLX1	4p16.3	-0.09309	0.069166	0.118605
MARCO	2q14.2	0.09308	0.069183	0.118618
ATXN2L	16p11.2	-0.09308	0.069185	0.118618
STK40	1p34.3	-0.09307	0.069203	0.118638
OR10K1	1q23.1	-0.09304	0.069295	0.118785
SLC9B1	4q24	-0.09304	0.069303	0.118789
UBL7	15q24.1	0.093023	0.069355	0.118869
CAPN5	11q13.5	0.092957	0.069554	0.119198
KCNJ1	11q24.3	0.092945	0.069589	0.119248
MX2	21q22.3	0.092928	0.069642	0.119329
FAM83A	8q24.13	0.092916	0.069676	0.119377
ZNF488	10q11.22	0.09289	0.069755	0.119503
CH25H	10q23.31	0.092886	0.069767	0.119513
FAM124A	13q14.3	0.092884	0.069775	0.119517
ATP5MGL	22q13.2	-0.09288	0.069792	0.119535
OARD1	6p21.1	-0.09287	0.069814	0.119562
DUSP5P1	1q42.13	0.092852	0.069871	0.119651
NCL	2q37.1	-0.09284	0.069899	0.119688
INTS3	1q21.3	0.092823	0.069959	0.11978
GJB5	1p34.3	0.092784	0.070075	0.119969
APOL1	22q12.3	0.092778	0.070096	0.119994
TMEM17	2p15	-0.09277	0.070108	0.120005
INHBE	12q13.3	-0.09277	0.070124	0.120021
NUP35	2q32.1	-0.09275	0.070175	0.120099
ATP11AUN	13q34	-0.09275	0.070183	0.120102
PLCB3	11q13.1	-0.09274	0.070223	0.120161
LRFN3	19q13.12	0.092726	0.070252	0.120199
C1QBP	17p13.2	-0.09272	0.070272	0.120223
SERINC4	15q15.3	0.092703	0.070322	0.120291
LOC284379	19q13.42	-0.0927	0.070325	0.120291
ZNF19	16q22.2	-0.0927	0.070329	0.120291
SEC31B	10q24.31	-0.09269	0.070367	0.120339
MED7	5q33.3	-0.09269	0.070369	0.120339
BORCS8-MEF2B	19p13.11	-0.09267	0.070431	0.120434
NOL11	17q24.2	-0.09266	0.070447	0.120452

SLC24A2	9p22.1-p21.3	0.092651	0.070481	0.120499
PNMT	17q12	-0.09265	0.070487	0.120499
SAFB2	19p13.3	-0.09263	0.070542	0.120582
ARF3	12q13.12	0.092618	0.070583	0.120643
CTSH	15q25.1	-0.09259	0.070668	0.120777
CCDC120	Xp11.23	-0.09257	0.070734	0.12087
SIK1	21q22.3	0.092568	0.070734	0.12087
TMOD2	15q21.2	0.092555	0.070775	0.12093
CMPK2	2p25.2	0.092526	0.070864	0.12107
OR13J1	9p13.3	-0.09251	0.070918	0.121152
GAD2	10p12.1	0.092506	0.070925	0.121154
PACIN1	6p21.31	0.092504	0.070931	0.121155
ATP6V1D	14q23.3	0.092499	0.070947	0.121172
SLCO3A1	15q26.1	0.092473	0.071025	0.121294
SLC22A5	5q31.1	-0.09246	0.071052	0.12133
VPS8	3q27.2	0.092455	0.071082	0.121371
TNFAIP8L1	19p13.3	0.092429	0.071161	0.121496
SLC39A12	10p12.33	0.0924	0.071249	0.121636
C12ORF54	12q13.11	-0.09239	0.071284	0.12168
GPR18	13q32.3	0.092388	0.071287	0.12168
DCAF8	1q23.2	0.092378	0.071318	0.121722
SPRY2	13q31.1	0.092344	0.071421	0.12188
SCO1	17p13.1	0.092344	0.071423	0.12188
CYP4F3	19p13.12	-0.09233	0.071453	0.12192
CYREN	7q33	-0.09231	0.071518	0.122022
OVCH2	11p15.4	-0.0923	0.071553	0.122072
KLK3	19q13.33	0.092298	0.071563	0.122077
HOXD10	2q31.1	0.092279	0.071622	0.122167
TNFRSF14-AS1	1p36.32	-0.09226	0.071694	0.12228
TRIM24	7q33-q34	-0.09221	0.071847	0.122532
SPOCD1	1p35.2	0.092175	0.071944	0.122686
HEBP1	12p13.1	-0.09217	0.071951	0.122688
SMTNL1	11q12.1	-0.09216	0.071978	0.122723
PLLP	16q13	0.092158	0.071996	0.122744
ANKRD30BP2	21q11.2	-0.09216	0.072004	0.122746
CLVS2	6q22.31	0.092136	0.072063	0.122837
CDC42EP2	11q13.1	0.092132	0.072078	0.122852
KCNH2	7q36.1	-0.09212	0.072102	0.122883
C10ORF62	10q24.2	-0.09212	0.072125	0.122905
CUX1	7q22.1	-0.09212	0.072128	0.122905
CYB5D1	17p13.1	0.092085	0.072224	0.123051
FOXL1	16q24.1	0.092084	0.072225	0.123051
SLC17A8	12q23.1	0.092067	0.072278	0.12313
ROPN1	3q21.1	0.092061	0.072299	0.123147
CFAP73	12q24.13	-0.09206	0.0723	0.123147
CHAF1B	21q22.12-q22.13	-0.09204	0.072371	0.123257
DRD5	4p16.1	0.092029	0.072399	0.123293
HSPB8	12q24.23	0.092024	0.072414	0.123309
EMX1	2p13.2	0.092002	0.072483	0.123412
PGC	6p21.1	-0.092	0.072487	0.123412
LOC153910	6q24.2	0.091983	0.072542	0.123495
DNAJC24	11p13	-0.09197	0.072595	0.123575
ITGAE	17p13.2	-0.09195	0.072636	0.123634
TTLL13P	15q26.1	0.091949	0.072647	0.123642
CD1B	1q23.1	0.091936	0.072687	0.12369
IQCD	12q24.13	0.091936	0.072687	0.12369
CAMK1G	1q32.2	0.091909	0.072771	0.123822
ZCCHC10	5q31.1	0.091904	0.072787	0.123838

ST8SIA3	18q21.31	0.091888	0.072838	0.123914
LINC00472	6q13	0.091885	0.072849	0.123923
HTR2B	2q37.1	0.09188	0.072863	0.123936
SLC12A3	16q13	0.091854	0.072943	0.124062
PIGH	14q24.1	-0.09185	0.072957	0.124076
SLC6A10P	16p11.2	0.091843	0.072979	0.124102
POU3F3	2q12.1	0.091835	0.073004	0.124128
IDNK	9q21.32	-0.09183	0.073006	0.124128
CARMIL2	16q22.1	0.091809	0.073084	0.124249
MT1M	16q13	0.091785	0.073162	0.12437
ZNRF4	19p13.3	0.091755	0.073255	0.124519
FOXD4L3	9q21.11	0.091753	0.073262	0.12452
IL17A	6p12.2	-0.09175	0.073274	0.124529
HAVCR1	5q33.3	0.09174	0.073304	0.124569
KCTD14	11q14.1	-0.09172	0.073359	0.124653
ZNF526	19q13.2	0.091697	0.073439	0.124779
ETV5	3q27.2	0.091662	0.07355	0.124956
HEMGN	9q22.33	0.091648	0.073591	0.125015
MTMR7	8p22	-0.09165	0.073601	0.125021
ZNF565	19q13.12	-0.09164	0.073611	0.125024
ARID3A	19p13.3	-0.09164	0.073615	0.125024
ABCD1	Xq28	-0.09162	0.07369	0.125133
LRRC2	3p21.31	-0.09162	0.073692	0.125133
HOXC11	12q13.13	-0.09161	0.073703	0.125143
ZSCAN25	7q22.1	-0.09159	0.073768	0.125241
IFT122	3q21.3-q22.1	0.091567	0.073848	0.125367
KIZ	20p11.23	-0.09155	0.073901	0.125447
DDX19B	16q22.1	-0.09154	0.073946	0.125512
GPR182	12q13.3	0.091531	0.073961	0.125527
JRK	8q24.3	-0.09153	0.073969	0.12553
CD248	11q13.2	0.09151	0.074029	0.125621
MYH14	19q13.33	0.091479	0.074126	0.125769
NDRG4	16q21	-0.09148	0.074131	0.125769
TDG	12q23.3	0.091477	0.074135	0.125769
NODAL	10q22.1	-0.09147	0.074168	0.125814
CBLC	19q13.32	-0.09146	0.074196	0.125851
SYNC	1p35.1	0.091414	0.074335	0.12606
GYG1	3q24	-0.09141	0.074337	0.12606
LINC01000	7q32.1	-0.09141	0.074338	0.12606
SPANXB1	Xq27.1	-0.09141	0.074348	0.126067
NCAN	19p13.11	0.091389	0.074412	0.126164
DCLRE1B	1p13.2	0.091364	0.074494	0.126293
KLRG1	12p13.31	0.091331	0.0746	0.126461
NPW	16p13.3	-0.09132	0.074635	0.12651
B3GLCT	13q12.3	0.09131	0.074667	0.126547
LOC440040	11p11.12	-0.09131	0.074669	0.126547
HTRA4	8p11.22	0.091307	0.074676	0.126547
HIST1H2BO	6p22.1	-0.0913	0.074682	0.126547
PHF7	3p21.1	0.091292	0.074724	0.126607
HDAC2	6q21	-0.09129	0.074744	0.12663
STAG3	7q22.1	-0.09127	0.074796	0.126708
MYADML	2p22.3	0.091263	0.074815	0.126729
EXOC3L4	14q32.32	-0.09125	0.074842	0.126764
KRT7	12q13.13	0.091227	0.074932	0.126906
TTC24	1q22	0.091207	0.074994	0.127001
UCHL5	1q31.2	0.0912	0.075017	0.127028
FOXD2-AS1	1p33	-0.09119	0.075057	0.127085
SERPINA4	14q32.13	-0.09118	0.075073	0.127101

TSPAN15	10q22.1	0.091147	0.075186	0.127282
CLEC16A	16p13.13	0.091135	0.075226	0.12734
PCF11	11q14.1	0.091125	0.075258	0.127383
ENO2	12p13.31	0.091103	0.075329	0.127484
CCDC196	14q23.3	0.091102	0.075331	0.127484
IFNA5	9p21.3	0.091092	0.075363	0.127518
ACSL4	Xq23	0.091092	0.075363	0.127518
RHOG	11p15.4	-0.09107	0.075425	0.127611
ALG10B	12q12	0.09107	0.075436	0.127619
MGAT4C	12q21.31-q21.32	0.09106	0.075466	0.127659
ZNF160	19q13.41-q13.42	0.091051	0.075498	0.127702
KCNS1	20q13.12	0.091032	0.075556	0.12779
RNF183	9q32	0.09102	0.075597	0.127848
KRT18P55	17q11.2	0.091013	0.075619	0.127875
PRAMEF4	1p36.21	-0.091	0.075647	0.127907
MYNN	3q26.2	0.091003	0.075651	0.127907
FAM98A	2p22.3	-0.091	0.075659	0.12791
NDST3	4q26	0.090994	0.075679	0.127933
OR56B1	11p15.4	0.09097	0.075758	0.128056
PDX1	13q12.2	-0.09094	0.075854	0.128207
FGF21	19q13.33	-0.09093	0.075894	0.128265
ST3GAL3	1p34.1	-0.09091	0.075943	0.128336
TBX3	12q24.21	0.090897	0.075994	0.128411
CCDC160	Xq26.2	0.090884	0.076037	0.128474
PTPN6	12p13.31	-0.09088	0.07606	0.128501
HBZ	16p13.3	0.090865	0.076096	0.128546
ERO1B	1q42.3	0.090865	0.076099	0.128546
TEX19	17q25.3	-0.09086	0.076114	0.128559
VPS50	7q21.2-q21.3	0.090852	0.07614	0.128594
KBTBD12	3q21.3	0.090823	0.076235	0.128742
THAP5	7q31.1	0.090783	0.076365	0.128951
LINC01124	2q31.1	-0.09078	0.076381	0.128968
NLRP7	19q13.42	0.090763	0.07643	0.129039
SYN3	22q12.3	-0.09076	0.076445	0.129054
BECN1	17q21.31	0.09074	0.076504	0.129142
PIP4K2C	12q13.3	0.090735	0.076521	0.12916
GBGT1	9q34.2	-0.09073	0.076532	0.129167
IL2	4q27	0.090698	0.076642	0.129343
MT1F	16q13	-0.09069	0.076664	0.129368
CKAP2	13q14.3	-0.09069	0.076677	0.12938
HPS3	3q24	0.090675	0.076717	0.129433
TAS2R19	12p13.2	-0.09067	0.076722	0.129433
AK3	9p24.1	-0.09065	0.076786	0.129531
C19ORF12	19q12	-0.09065	0.076806	0.129546
PTF1A	10p12.2	-0.09065	0.076808	0.129546
SNTB1	8q24.12	-0.09064	0.076815	0.129548
SOX21	13q32.1	0.090633	0.076852	0.129599
ADO	10q21.3	0.090602	0.076956	0.129764
LRRIQ3	1p31.1	-0.09059	0.076985	0.129801
OR10A5	11p15.4	-0.09058	0.077012	0.129836
ZNF512B	20q13.33	0.090549	0.077129	0.130022
CCDC97	19q13.2	0.090504	0.077277	0.130261
NBPF4	1p13.3	0.090464	0.077407	0.13047
SRSF8	11q21	0.090437	0.077495	0.130606
PRDX6	1q25.1	-0.0904	0.077623	0.130811
ZNF483	9q31.3	0.090382	0.077679	0.130885
SENP5	3q29	-0.09038	0.07768	0.130885
VCY	Yq11.221	-0.09038	0.077686	0.130885



CCL7	17q12	0.090376	0.077696	0.13089
PCK2	14q11.2-q12	-0.09037	0.077706	0.130896
TLL4	2q35	-0.09035	0.077772	0.130996
ZNF266	19p13.2	-0.09034	0.077805	0.13104
TPTEP1	22q11.1	0.090334	0.077836	0.131081
ODAPH	4q21.1	0.090319	0.077885	0.131154
ITIH1	3p21.1	0.09029	0.077983	0.131307
CENPI	Xq22.1	0.090278	0.078021	0.131359
HAUS6	9p22.1	-0.09028	0.078027	0.131359
DCTN2	12q13.3	-0.09026	0.078095	0.131462
DMBT1	10q26.13	0.090247	0.078123	0.131498
UBA2	19q13.11	-0.09023	0.078175	0.131576
RNF26	11q23.3	-0.09021	0.078236	0.131667
FAM181B	11q14.1	0.090199	0.078283	0.131734
SMG5	1q22	-0.0902	0.078295	0.131744
TUSC1	9p21.2	-0.09018	0.078341	0.13181
WDR89	14q23.2	0.090168	0.078386	0.131867
MICALL1	22q13.1	0.090167	0.078388	0.131867
LINC00593	15q23	0.090143	0.078468	0.13199
PTPRU	1p35.3	0.090133	0.078504	0.132038
XPNPEP1	10q25.1	0.090131	0.078509	0.132038
WNT2	7q31.2	0.090123	0.078537	0.132074
BMP1	8p21.3	0.090117	0.078557	0.132085
APOLD1	12p13.1	0.090116	0.078557	0.132085
IFT172	2p23.3	-0.0901	0.078617	0.132175
PCDH20	13q21.2	0.090096	0.078625	0.132177
TUBB2A	6p25.2	0.090094	0.078632	0.132177
OR13A1	10q11.21	0.090091	0.078643	0.132184
CKMT1B	15q15.3	0.090081	0.078674	0.132226
HS6ST3	13q32.1	0.090068	0.078718	0.132285
GIPC2	1p31.1	-0.09007	0.078722	0.132285
SLC1A1	9p24.2	0.090041	0.078808	0.132418
LINC00667	18p11.31	0.090034	0.078831	0.132446
RAB5C	17q21.2	0.090028	0.078854	0.132472
VWA5B1	1p36.12	-0.09	0.078939	0.132596
KAT7	17q21.33	0.090001	0.078943	0.132596
UMPS	3q21.2	-0.09	0.078947	0.132596
TMEM102	17p13.1	0.089976	0.079027	0.132719
OCIAD2	4p11	-0.08996	0.079093	0.132819
FAM138E	15q26.3	-0.08992	0.079213	0.133009
RIOK1	6p24.3	-0.08992	0.07922	0.13301
ITGA9	3p22.2	0.089849	0.079452	0.133388
AMZ1	7p22.3	0.089808	0.079589	0.133606
SERPINE1	7q22.1	0.089803	0.079605	0.133622
PIP5KL1	9q34.11	-0.0898	0.07963	0.133653
EMX2	10q26.11	0.089792	0.079644	0.133666
PREPL	2p21	0.089789	0.079655	0.133672
NPAP1	15q11.2	0.089768	0.079725	0.133778
PRKAG1	12q13.12	-0.08976	0.07975	0.133809
INS	11p15.5	-0.08975	0.079793	0.133871
TCEAL7	Xq22.2	0.089741	0.079814	0.133894
AATBC	21q22.3	0.089729	0.079855	0.133952
HIC2	22q11.21	-0.08972	0.079901	0.133999
KHDRBS2	6q11.1	0.089715	0.079904	0.133999
RSU1P2	10q11.21	0.089714	0.079908	0.133999
HYMAI	6q24.2	-0.08971	0.07991	0.133999
LINC00304	16q24.3	0.089695	0.07997	0.134089
TEX26	13q12.3	0.089687	0.079998	0.134125

RPLP0P2	11q12.2	-0.08968	0.080031	0.134168
TMEM50B	21q22.11	0.089665	0.08007	0.134223
SRRM5	19q13.31	-0.08966	0.080096	0.134255
NECTIN1	11q23.3	0.089652	0.080114	0.134275
TPRG1	3q28	0.089632	0.080185	0.134382
SMAP1	6q13	0.089602	0.080284	0.134536
ELOA2	18q21.1	0.089598	0.080298	0.134549
GTDC1	2q22.3	-0.08957	0.080396	0.134702
MCM5	22q12.3	-0.08954	0.080489	0.134846
KRT84	12q13.13	0.089523	0.080553	0.134942
ITGA3	17q21.33	0.089502	0.080623	0.135049
AMTN	4q13.3	0.089473	0.080724	0.135206
ASB12	Xq11.2	0.089467	0.080742	0.135225
JAKMIP1	4p16.1	0.089455	0.080783	0.135258
ITFG2	12p13.33	-0.08945	0.080787	0.135258
AGTR2	Xq23	0.089454	0.080788	0.135258
TCEAL1	Xq22.2	-0.08945	0.080789	0.135258
RERE	1p36.23	0.089438	0.080842	0.135335
TMC8	17q25.3	0.089436	0.080848	0.135335
ASIP	20q11.22	-0.08941	0.080945	0.135485
RFFL	17q12	0.089399	0.080974	0.135522
TXNDCC5	6p24.3	0.089391	0.081002	0.135558
ADAMTSL2	9q34.2	-0.08938	0.081026	0.135582
SLC24A5	15q21.1	-0.08938	0.081029	0.135582
FAM3D	3p14.2	0.089367	0.081085	0.135664
PAPSS1	4q25	0.089357	0.08112	0.13571
MKLN1	7q32.3	0.089328	0.081216	0.13586
MLLT11	1q21.3	0.08932	0.081245	0.135897
AP1G2	14q11.2	-0.08931	0.081267	0.135913
B4GALNT1	12q13.3	0.089312	0.081271	0.135913
EFEMP2	11q13.1	0.089311	0.081275	0.135913
AKR7A3	1p36.13	-0.08931	0.081294	0.135933
ZFPM1	16q24.2	-0.08929	0.081344	0.136005
NMRK1	9q21.13	-0.08927	0.081418	0.136118
FRMPD4	Xp22.2	0.089258	0.081456	0.13617
CD9	12p13.31	0.089255	0.081466	0.136176
GCG	2q24.2	0.089246	0.0815	0.136221
SEC23B	20p11.23	0.089235	0.081538	0.136273
MAGEB6	Xp21.3	-0.08923	0.081564	0.136306
FFAR3	19q13.12	0.089223	0.081576	0.136307
CCDC85C	14q32.2	0.089221	0.081583	0.136307
SLC28A1	15q25.3	-0.08922	0.081589	0.136307
SET	9q34.11	-0.08922	0.081594	0.136307
LINC00917	16q24.1	-0.08922	0.081599	0.136307
TIMM22	17p13.3	-0.0892	0.08164	0.136361
TFDP3	Xq26.2	0.089203	0.081645	0.136361
DCAF8L2	Xp21.3	-0.08919	0.081677	0.136403
CARTPT	5q13.2	0.089187	0.081701	0.136432
MON1B	16q23.1	0.089171	0.081754	0.136509
UBXN10	1p36.12	-0.08917	0.081766	0.136517
LMNB1	5q23.2	0.089158	0.081802	0.136566
NUDT11	Xp11.22	0.089148	0.081835	0.136609
FAM220A	7p22.1	-0.08911	0.081949	0.136789
TSR1	17p13.3	0.089113	0.081957	0.13679
ABHD12B	14q22.1	-0.08911	0.08198	0.136818
LBX2	2p13.1	-0.0891	0.081998	0.136836
RBMX	Xq26.3	-0.08908	0.082065	0.136937
PPY	17q21.31	0.08906	0.082137	0.137045

CSF3	17q21.1	-0.08903	0.08225	0.137223
PNLIPRP3	10q25.3	0.089025	0.082258	0.137225
ZFHX4-AS1	8q21.13	0.089022	0.08227	0.137233
KCNAB1	3q25.31	0.089019	0.08228	0.137238
FRG2C	3p12.3	-0.08901	0.082295	0.137252
GKN2	2p13.3	0.088989	0.082383	0.137388
TRHR	8q23.1	0.088986	0.082392	0.137391
ANO7	2q37.3	0.088973	0.082437	0.137443
TMEM31	Xq22.2	-0.08897	0.082443	0.137443
LYPD3	19q13.31	-0.08897	0.082444	0.137443
OR1L8	9q33.2	0.088929	0.082591	0.137676
ZSCAN31	6p22.1 6p22.3-p22.1	0.08892	0.082624	0.13772
CEACAM4	19q13.2	0.088917	0.082634	0.137725
ANKRD40CL	17q21.33	-0.08891	0.08264	0.137725
DELE1	5q31.3	-0.08891	0.082665	0.137754
OR5B3	11q12.1	-0.0889	0.082674	0.137758
PALM2	9q31.3	0.088891	0.082722	0.137826
PIAS4	19p13.3	0.088846	0.082879	0.138077
CCR10	17q21.2	0.088829	0.082938	0.138164
KLLN	10q23.31	0.088825	0.082953	0.138176
BEX1	Xq22.1 Xq22	0.088785	0.083091	0.138396
POLR3GL	1q21.1	0.088776	0.083124	0.138438
BCL2L10	15q21.2	-0.08877	0.083133	0.138442
CLEC18C	16q22.1	-0.08873	0.083297	0.138704
OLIG3	6q23.3	-0.08868	0.083443	0.138936
BDKRB1	14q32.2	0.088676	0.083472	0.138972
HLX	1q41	0.088673	0.083483	0.138978
H2AFY2	10q22.1	-0.08866	0.083514	0.139019
CRLF2	Xp22.33 and Yp11.2	0.088652	0.083556	0.139074
MBTPS2	Xp22.12	0.08865	0.083564	0.139074
GJD4	10p11.21	0.088648	0.083568	0.139074
EEF1A1P9	4q24	-0.08863	0.083616	0.139135
PDXK	21q22.3	-0.08863	0.083618	0.139135
DUSP8	11p15.5	-0.08859	0.083777	0.139388
SCARNA20	17q23.2	-0.08858	0.083801	0.139415
ZNF274	19q13.43	0.088564	0.083864	0.139509
PEX12	17q12	0.088559	0.083882	0.139528
TRIM49D2	11q14.3	0.088553	0.083903	0.139551
SERTAD3	19q13.2	-0.08853	0.083973	0.139647
PDXDC2P-NPIP14P	16q22.1	-0.08853	0.083981	0.139647
P2RX4	12q24.31	0.08853	0.083982	0.139647
GLYATL3	6p12.3	-0.08851	0.084045	0.139722
CCNA2	4q27	-0.0885	0.084072	0.139722
VN1R4	19q13.42	-0.0885	0.084076	0.139722
OR5T3	11q12.1	-0.0885	0.084076	0.139722
SPINT3	20q13.12	-0.0885	0.084076	0.139722
OR4A5	11q11	-0.0885	0.084076	0.139722
KRTAP13-3	21q22.11	-0.0885	0.084076	0.139722
TMEM252	9q21.11	-0.08849	0.084121	0.139785
C1ORF94	1p35.1	0.088472	0.084188	0.139875
RLIM	Xq13.2	0.088472	0.084189	0.139875
CRYZL1	21q22.11	0.088452	0.084257	0.139977
PRSS37	7q34	0.088446	0.084279	0.140002
PPP1R3D	20q13.33	-0.08843	0.084343	0.140085
ABCE1	4q31.21	-0.08843	0.084344	0.140085
PDE6G	17q25.3	0.088421	0.084367	0.140112
BTBD6	14q32.33	0.088398	0.084448	0.140236
HMGCLL1	6p12.1	0.088365	0.084565	0.140418

NMB	15q25.2	-0.08836	0.084576	0.140419
ATP13A4	3q29	0.088361	0.084579	0.140419
FKBP1A	20p13	-0.08834	0.084665	0.140549
MAP4K2	11q13.1	-0.08833	0.084695	0.140587
RIPPLY1	Xq22.3	-0.08832	0.084712	0.140605
STX2	12q24.33	-0.08828	0.084853	0.140827
PAPLN	14q24.2	0.088268	0.084907	0.140905
ZNF575	19q13.31	0.088263	0.084926	0.140924
C3ORF62	3p21.31	0.088252	0.084963	0.140974
ARHGAP44	17p12	0.088244	0.084994	0.141014
OR2G2	1q44	-0.08824	0.085006	0.141023
KIR3DX1	19q13.42	0.088237	0.085018	0.14103
SATB2	2q33.1	0.088217	0.085088	0.141135
CBLN3	14q12	0.088204	0.085134	0.141195
HS3ST1	4p15.33	0.088203	0.085139	0.141195
DAZL	3p24.3	0.088166	0.085271	0.141403
COL18A1	21q22.3	0.088161	0.085289	0.141421
ZNF781	19q13.12	0.08814	0.085363	0.141532
CLEC4G	19p13.2	0.088137	0.085373	0.141536
NMBR	6q24.1	0.088125	0.085417	0.141598
SMG1P1	16p12.2	0.088105	0.085487	0.141702
DNMT1	19p13.2	0.088102	0.0855	0.141712
KRTAP10-3	21q22.3	-0.08808	0.085592	0.141854
OPRD1	1p35.3	0.088065	0.085631	0.141907
OR11G2	14q11.2	-0.08804	0.085722	0.142046
PARP9	3q21.1	0.088035	0.085737	0.142058
KIF19	17q25.1	0.087996	0.085877	0.142278
TMEM211	22q11.23	0.087965	0.085989	0.142452
ARHGEF10	8p23.3	0.087933	0.086104	0.14263
IDUA	4p16.3	-0.08791	0.086188	0.142758
CDHR3	7q22.3	-0.08789	0.086242	0.142835
GHRH	20q11.23	-0.08789	0.086259	0.142852
ARL14	3q25.33	0.08787	0.086328	0.142954
CYP4Z1	1p33	-0.08787	0.086337	0.142958
NRG1	8p12	0.087865	0.086346	0.14296
SMIM10L2A	Xq26.3	-0.08785	0.086394	0.143028
CUL3	2q36.2	0.087841	0.086431	0.143078
CSNK2A1	20p13	0.08782	0.086509	0.143195
TYROBP	19q13.12	0.087812	0.086538	0.143231
INHBC	12q13.3	0.087807	0.086553	0.143245
ZNF169	9q22.32	-0.08779	0.086615	0.143335
SLC22A2	6q25.3	-0.08779	0.086624	0.143336
FIG4	6q21	0.087784	0.086637	0.143336
E2F5	8q21.2	-0.08778	0.086637	0.143336
LCLAT1	2p23.1	-0.08777	0.086674	0.143379
HP	16q22.2	0.087773	0.086677	0.143379
TEAD3	6p21.31	-0.08777	0.086695	0.143396
ZNF227	19q13.31	0.087751	0.086756	0.143485
OR52E4	11p15.4	-0.08775	0.086778	0.143498
MINDY3	10p13	0.087745	0.086778	0.143498
CCDC62	12q24.31	0.087725	0.086849	0.143592
CAMSAP3	19p13.2	-0.08773	0.086849	0.143592
PMFBP1	16q22.2	-0.08771	0.086903	0.143669
DOCK11	Xq24	0.087703	0.086931	0.143703
PLS3	Xq23	0.087693	0.086967	0.143751
MOS	8q12.1	-0.08768	0.087023	0.143832
C11ORF54	11q21	0.087663	0.087073	0.143902
SYCP2L	6p24.2	-0.08763	0.087209	0.144116

TTN	2q31.2	0.087621	0.087225	0.144128
PKNOX1	21q22.3	0.08762	0.087231	0.144128
ZNF317	19p13.2	0.087603	0.087292	0.144217
BTNL8	5q35.3	0.087585	0.087355	0.144309
DIS3	13q21.33	-0.08756	0.087441	0.144435
MAPT	17q21.31	0.08756	0.087446	0.144435
CHODL	21q21.1	0.087553	0.087474	0.14447
GPR137	11q13.1	-0.08755	0.087497	0.144489
TMEM109	11q12.2	-0.08755	0.0875	0.144489
SLC29A4	7p22.1	-0.08752	0.087599	0.144641
PROX2	14q24.3	0.087508	0.087636	0.144689
SCLT1	4q28.2	0.087498	0.087672	0.144738
ZNF749	19q13.43	0.087462	0.087804	0.144943
MT1X	16q13	-0.08741	0.087976	0.145216
LAMB4	7q31.1	0.087395	0.088049	0.145324
LILRA3	19q13.4	0.087357	0.088185	0.145536
GIPR	19q13.32	0.087334	0.08827	0.145665
LLGL2	17q25.1	-0.08733	0.088281	0.145666
TIMP4	3p25.2	-0.08733	0.088285	0.145666
BNIP5	6p21.31	-0.08733	0.088295	0.145669
TPSG1	16p13.3	0.08732	0.088321	0.145701
TMEM106C	12q13.11	-0.0873	0.088411	0.145838
POLE	12q24.33	-0.08726	0.088524	0.146004
ATAD1	10q23.31	0.087264	0.088527	0.146004
GH2	17q23.3	-0.08719	0.088808	0.146455
HPGD	4q34.1	0.087181	0.088832	0.146482
HCG4B	6p22.1	-0.08718	0.08885	0.1465
CTAGE6	7q35	0.087174	0.088858	0.146501
PI16	6p21.2	0.087159	0.088912	0.146558
MCM2	3q21.3	-0.08716	0.088913	0.146558
SBSPON	8q21.11	0.087159	0.088914	0.146558
FABP3	1p35.2	-0.08715	0.08893	0.146572
CASC2	10q26.11	-0.08715	0.088953	0.146598
APOBEC3G	22q13.1	0.087131	0.089017	0.146689
FA2H	16q23.1	0.087129	0.089024	0.146689
AKR1E2	10p15.1	-0.08713	0.08903	0.146689
MSX2	5q35.2	-0.0871	0.089112	0.146812
SP140L	2q37.1	0.087042	0.089342	0.147179
GSTA3	6p12.2	-0.08704	0.089361	0.147199
SINHCAF	12p11.21	-0.08703	0.089406	0.14726
GALNT9	12q24.33	-0.08702	0.089424	0.147277
CPXCR1	Xq21.31	-0.08701	0.089455	0.147317
VKORC1L1	7q11.21	0.087006	0.089476	0.147339
TMEM11	17p11.2	-0.087	0.089486	0.147344
ZNF439	19p13.2	-0.08699	0.089533	0.147409
BAALC-AS2	8q22.3	0.086976	0.089588	0.147486
SLC6A1	3p25.3	0.086963	0.089634	0.147551
WDR55	5q31.3	0.08696	0.089645	0.147557
TRIM45	1p13.1	-0.08695	0.08967	0.147586
OR2L1P	1q44	0.086936	0.089736	0.147683
OC90	8q24.22	-0.08693	0.089747	0.147689
MAGEC1	Xq27.2	-0.08692	0.089779	0.147729
GP6	19q13.42	0.086897	0.08988	0.14788
NUAK2	1q32.1	-0.0869	0.089886	0.14788
SPRR1B	1q21.3	0.086892	0.089897	0.147883
MIF4GD	17q25.1	-0.08689	0.089902	0.147883
ZFP36L2	2p21	0.086828	0.090138	0.148259
CPB1	3q24	0.086817	0.090178	0.148299

PTN	7q33	0.086816	0.090181	0.148299
LUC7L2	7q34	0.086815	0.090185	0.148299
HAUS1	18q21.1	-0.08681	0.090193	0.1483
TDH	8p23.1	0.086721	0.090535	0.148851
RPS27	1q21.3	-0.08665	0.090796	0.149267
MTURN	7p14.3	-0.08665	0.090815	0.149283
BMP8B	1p34.2	0.086645	0.090821	0.149283
FRMD5	15q15.3	0.086632	0.090867	0.14934
PRRT4	7q32.1	-0.08663	0.09087	0.14934
S100A16	1q21.3	0.086626	0.090891	0.149362
DERL1	8q24.13	-0.08662	0.090902	0.149368
SPATA31D1	9q21.32	-0.0866	0.090982	0.149487
CHST8	19q13.11	0.08658	0.091061	0.149604
TSIX	Xq13.2	-0.08658	0.091079	0.149611
MED21	12p11.23	0.086575	0.09108	0.149611
CRYGB	2q33.3	-0.08657	0.091104	0.149638
EXOC3L2	19q13.32	0.08655	0.091175	0.149743
FKBP7	2q31.2	0.086527	0.091262	0.149874
TRAFD1	12q24.13	0.086523	0.091278	0.149887
CFHR3	1q31.3	0.086508	0.091332	0.149964
COL23A1	5q35.3	0.086468	0.091485	0.150202
HACE1	6q16.3	0.086461	0.09151	0.150224
OR52R1	11p15.4	0.08646	0.091513	0.150224
ZNF574	19q13.2	-0.08646	0.091524	0.150229
MRE11	11q21	-0.08645	0.09155	0.150248
HAS2	8q24.13	0.08645	0.09155	0.150248
LINC02210	17q21.31	-0.08643	0.09161	0.150335
TM4SF4	3q25.1	0.086404	0.091723	0.150507
TNFAIP6	2q23.3	0.086374	0.091837	0.150681
SPINT2	19q13.2	-0.08636	0.091895	0.150764
HNF1B	17q12	0.086331	0.092	0.150924
GNRH1	8p21.2	-0.08628	0.092179	0.151183
RAB11FIP3	16p13.3	-0.08628	0.09218	0.151183
PDSS2	6q21	0.086283	0.09218	0.151183
APOBEC3C	22q13.1	0.086272	0.092223	0.15124
SNORA81	3q27.3	-0.08627	0.092241	0.151258
HLA-B	6p21.33	-0.08625	0.092295	0.151333
ADH6	4q23	0.08623	0.092382	0.151452
TICAM1	19p13.3	0.08623	0.092382	0.151452
RPS6KA6	Xq21.1	0.086215	0.09244	0.151534
NPM2	8p21.3	-0.08621	0.092452	0.151542
UTP23	8q24.11	-0.0862	0.092492	0.151582
ROBO4	11q24.2	0.086199	0.092499	0.151582
ALDH3A2	17p11.2	0.086199	0.092499	0.151582
ARL13A	Xq22.1	-0.08619	0.092521	0.151605
LCE2D	1q21.3	0.086181	0.092569	0.15166
SCARNA18	5q14.2	-0.08618	0.092569	0.15166
ALPI	2q37.1	0.086144	0.09271	0.151877
CBR4	4q32.3	-0.08614	0.092719	0.151879
COX11	17q22	-0.08612	0.092784	0.151974
BTN1A1	6p22.2	-0.08612	0.092805	0.151985
KCNV2	9p24.2	-0.08612	0.092806	0.151985
CREM	10p11.21	-0.08611	0.092824	0.152003
ADRB3	8p11.23	0.086074	0.092977	0.15224
SDHD	11q23.1	-0.08605	0.093075	0.152388
CSF2RA	Xp22.33 and Yp11.2	0.086041	0.093103	0.152411
AANAT	17q25.1	-0.08604	0.093104	0.152411
GGT6	17p13.2	0.086021	0.093178	0.15252

BRINP2	1q25.2	0.086015	0.093199	0.152541
RNGTT	6q15	0.08601	0.093218	0.152561
PRKCI	3q26.2	0.085988	0.093302	0.152686
B3GNT8	19q13.2	-0.08597	0.093378	0.152797
TRO	Xp11.21	0.085955	0.093432	0.152872
CX3CL1	16q21	0.08595	0.093449	0.152888
EFNA3	1q21.3	-0.08595	0.09346	0.152893
CETP	16q13	0.085945	0.093467	0.152893
DNAJC25	9q31.3	-0.08593	0.093523	0.152972
HAUS3	4p16.3	-0.08593	0.093532	0.152974
IVL	1q21.3	-0.08592	0.093567	0.153018
NUBP1	16p13.13	-0.08589	0.093665	0.153155
OSBPL2	20q13.33	-0.08589	0.093666	0.153155
PSMD12	17q24.2	-0.08581	0.093968	0.153637
TBX4	17q23.2	0.085797	0.094035	0.153733
IFNLR1	1p36.11	-0.08577	0.094151	0.153905
BEX2	Xq22.2	-0.08577	0.094155	0.153905
COLGALT1	19p13.11	-0.08575	0.094227	0.15401
CDK2AP1	12q24.31	0.085739	0.094258	0.154049
AVPR1B	1q32.1	0.085736	0.094273	0.154059
BPIFA4P	20q11.21	-0.08572	0.094348	0.154169
ZNF778	16q24.3	0.085686	0.094464	0.154348
PROM2	2q11.1	0.08567	0.094526	0.154435
ANGPT2	8p23.1	0.085668	0.094534	0.154436
GTSE1-DT	22q13.31	-0.08566	0.094557	0.154462
DNAJC18	5q31.2	0.085655	0.094584	0.154493
ZNF420	19q13.12	0.085642	0.094634	0.154562
CRTAP	3p22.3	-0.08563	0.09468	0.154624
SMCO4	11q21	0.085626	0.094697	0.15464
SPHK2	19q13.33	-0.08562	0.094723	0.154657
MIEF1	22q13.1	0.085619	0.094723	0.154657
B3GAT1	11q25	0.085612	0.094749	0.154687
EEF1AKMT2	10q26.13	-0.0856	0.094792	0.154744
FAM138F	19p13.3	-0.08558	0.09488	0.154875
CARD10	22q13.1	0.08557	0.094914	0.154908
SPAG5	17q11.2	-0.08557	0.094916	0.154908
ZNF709	19p13.2	-0.08556	0.094946	0.154944
DLEC1	3p22.2	0.085557	0.094964	0.154961
NOL6	9p13.3	-0.08555	0.094972	0.154963
ITGB1BP2	Xq13.1	-0.08553	0.09507	0.155103
SNORA24	4q26	-0.08553	0.095074	0.155103
SIMC1	5q35.2	0.085519	0.095111	0.155151
SLC22A17	14q11.2	0.085515	0.095128	0.155154
LOC727896	18p11.31	-0.08551	0.095129	0.155154
KCNJ16	17q24.3	0.085506	0.095162	0.155185
ZG16	16p11.2	0.085505	0.095163	0.155185
PRR23A	3q23	0.085465	0.09532	0.155428
SLC25A4	4q35.1	-0.08542	0.095476	0.15567
CACFD1	9q34.2	-0.08541	0.095548	0.155775
C11ORF87	11q22.3	0.08538	0.095651	0.155931
MYT1L	2p25.3	0.085368	0.095698	0.155994
RABL2A	2q14.1	-0.08534	0.095806	0.156157
DHX32	10q26.2	0.08533	0.095846	0.15621
GRM4	6p21.31	0.085279	0.096046	0.156523
TMEM132A	11q12.2	-0.08526	0.096118	0.156628
SNORA48	17p13.1	-0.08526	0.096129	0.156633
ABCC13	21q11.2	0.085248	0.096166	0.156681
ETHE1	19q13.31	0.085244	0.096181	0.156683

PHC2	1p35.1	-0.08524	0.096183	0.156683
NTN3	16p13.3	-0.08523	0.096228	0.156743
ZNF277	7q31.1	-0.08522	0.096294	0.156839
CCDC158	4q21.1	0.0852	0.096357	0.156927
DDX5	17q23.3	0.085196	0.096371	0.156938
JHY	11q24.1	0.085194	0.096379	0.156938
MELK	9p13.2	-0.08518	0.096424	0.156995
AGAP2-AS1	12q14.1	0.085181	0.096429	0.156995
TNIP3	4q27	0.085173	0.096459	0.157031
PNPLA2	11p15.5	-0.08516	0.096497	0.157079
USP21	1q23.3	-0.08515	0.096553	0.157157
TMEM189-UBE2V1	20q13.13	0.085141	0.096587	0.1572
AMIGO2	12q13.11	0.085135	0.09661	0.157224
MAST2	1p34.1	-0.08512	0.096679	0.157324
RNF112	17p11.2	0.085107	0.09672	0.157378
HSD52	1p32.1	-0.08509	0.096797	0.157491
FAM86B2	8p23.1	0.085078	0.096835	0.157541
MEDAG	13q12.3	0.085069	0.096869	0.157582
HSPA1B	6p21.33	-0.08505	0.096937	0.157679
ODR4	1q31.1	0.08504	0.096983	0.157731
TAS2R60	7q35	0.08504	0.096984	0.157731
LINC00336	6p21.31	-0.08504	0.096995	0.157736
POM121L2	6p22.1	0.085028	0.097031	0.157782
SPINK2	4q12	0.085026	0.097042	0.157782
DGKB	7p21.2	0.085024	0.097047	0.157782
IL11RA	9p13.3	-0.085	0.097143	0.157925
SPATC1	8q24.3	0.084942	0.097371	0.158284
VPS26B	11q25	-0.08494	0.09738	0.158285
MIER2	19p13.3	-0.08493	0.0974	0.158304
CACNA2D2	3p21.31	0.084928	0.097426	0.158332
GPT	8q24.3	0.084925	0.097437	0.158332
PPARG	3p25.2	0.084924	0.097441	0.158332
TLE2	19p13.3	-0.08488	0.097615	0.158602
CHTOP	1q21.3	-0.08485	0.097727	0.158772
CATSPERZ	11q13.1	-0.08484	0.097759	0.15881
PSME3	17q21.31	-0.08483	0.097796	0.158858
GNG10	9q31.3	-0.08483	0.097804	0.158859
CEP68	2p14	0.084824	0.09784	0.158904
ZNF391	6p22.1	0.08482	0.097854	0.158913
PCDHA2	5q31.3	0.084814	0.097878	0.15894
PRM2	16p13.13	-0.0848	0.097936	0.159014
DCST2	1q21.3	-0.0848	0.09794	0.159014
DHH	12q13.12	0.084765	0.098074	0.159219
MYL6	12q13.2	-0.08475	0.09813	0.159298
NUB1	7q36.1	-0.08474	0.098191	0.159375
LMO7	13q22.2	0.084735	0.098194	0.159375
FATE1	Xq28	-0.0847	0.098325	0.159576
DLX4	17q21.33	-0.08464	0.098554	0.159934
C16ORF46	16q23.2	-0.08463	0.098595	0.159988
ZNF219	14q11.2	-0.08462	0.098645	0.160056
ZNF594	17p13.2	0.084608	0.0987	0.160132
ARMS2	10q26.13	-0.0846	0.098746	0.160194
MAFG	17q25.3	-0.08459	0.09879	0.160252
BRD8	5q31.2	-0.08458	0.098802	0.160258
DBX2	12q12	0.08458	0.09881	0.160259
PSD	10q24.32	0.084571	0.098847	0.160298
STK24	13q32.2	-0.08457	0.09885	0.160298
GATA1	Xp11.23	0.084566	0.09887	0.160316



RNASE11	14q11.2	-0.08456	0.098879	0.160318
MXRA8	1p36.33	0.084553	0.098921	0.160373
RASSF10	11p15.3	-0.08454	0.09896	0.160421
SLC3A1	2p21	-0.08454	0.098973	0.160421
LINC00092	9q22.32	0.084539	0.098974	0.160421
LINC01002	19p13.3	-0.08453	0.099024	0.160488
ADAM29	4q34.1	0.084522	0.099045	0.160509
UNQ6494	9q22.2	-0.08452	0.099072	0.16054
PMAIP1	18q21.32	-0.0845	0.099123	0.16061
PCBD2	5q31.1	-0.08448	0.099196	0.160715
ZCWPW1	7q22.1	-0.08448	0.099208	0.160722
AGTR1	3q24	0.084466	0.099269	0.160803
PTPRD	9p24.1-p23	0.084465	0.099274	0.160803
TIAL1	10q26.11	-0.08446	0.099287	0.160811
SHOX2	3q25.32	0.08445	0.099332	0.16087
NCR2	6p21.1	0.084444	0.099358	0.1609
BGN	Xq28	0.084434	0.099398	0.160951
DUSP10	1q41	0.084421	0.099449	0.161021
IFNB1	9p21.3	-0.08438	0.099634	0.161308
CPXM2	10q26.13	0.08437	0.099654	0.161327
TNFRSF6B	20q13.33	-0.08435	0.099732	0.16144
SLC22A9	11q12.3	0.084345	0.099756	0.161465
GHRL	3p25.3	0.084334	0.099801	0.161525
H1FO	22q13.1	0.084316	0.099872	0.161627
C9ORF170	9q21.33	0.084313	0.099886	0.161637
LRP4	11p11.2	0.084306	0.099913	0.161667
CCDC13	3p22.1	0.084294	0.099963	0.161735
HSPB1P1	9q21.13	-0.08429	0.099971	0.161735
LINC00467	1q32.3	-0.08427	0.10006	0.161866
TM9SF2	13q32.3	0.084261	0.100096	0.161912
TAP1	6p21.32	-0.08425	0.100121	0.161938
LINC02203	15q11.2	0.084245	0.100161	0.16199
NEK11	3q22.1	0.084237	0.100191	0.162026
CFAP61	20p11.23	0.084234	0.100205	0.162035
LRP2	2q31.1	-0.08422	0.100256	0.162104
OR2AG1	11p15.4	-0.08418	0.100409	0.162338
UAP1L1	9q34.3	-0.08412	0.10068	0.162764
CRABP2	1q23.1	-0.08408	0.100815	0.162959
CACNG8	19q13.42	-0.08408	0.100823	0.162959
HOXB3	17q21.32	0.084081	0.100825	0.162959
UOX	1p31.1	-0.08404	0.10099	0.163213
CPT2	1p32.3	0.083991	0.10119	0.163511
MTCL1	18p11.22	0.083991	0.101191	0.163511
PGM2	4p14	0.083965	0.101296	0.163668
OTOAP1	16p12.2	-0.08396	0.101325	0.163701
EDA	Xq13.1	-0.08396	0.101338	0.163708
DECR1	8q21.3	-0.08395	0.101375	0.163756
RWDD4	4q35.1	-0.08394	0.101389	0.163765
TBC1D25	Xp11.23	-0.08393	0.101423	0.163806
C2ORF27A	2q21.2	-0.08393	0.101451	0.163838
MS4A13	11q12.2	-0.08392	0.101483	0.163872
EPYC	12q21.33	0.083918	0.101488	0.163872
CAPZA1	1p13.2	0.083902	0.101556	0.163968
MUCL3	6p21.33	0.083899	0.101565	0.16397
ZAR1L	13q13.1	-0.08388	0.101638	0.164074
SCARNA14	15q22.31	-0.08386	0.101735	0.164216
SNORA40	11q21	-0.08386	0.101742	0.164216
KHDC1L	6q13	-0.08384	0.101816	0.164314

SMG1P5	16p11.2	-0.08384	0.101819	0.164314
DIDO1	20q13.33	-0.08383	0.101836	0.164326
TPH2	12q21.1	-0.08383	0.101843	0.164326
RNFT1	17q23.1	-0.08382	0.101896	0.164398
FKTN	9q31.2	0.083781	0.102051	0.164635
LINC02433	4q32.1	-0.08378	0.102065	0.164637
CCDC178	18q12.1	0.083776	0.102069	0.164637
ATPAF1	1p33	-0.08376	0.102118	0.164703
SNX14	6q14.3	0.083754	0.102162	0.164754
HCG22	6p21.33	0.083753	0.102166	0.164754
PTPN3	9q31.3	0.083737	0.102231	0.164845
ANKLE1	19p13.11	-0.08372	0.102282	0.164915
SMCO2	12p11.23	-0.08366	0.102562	0.165326
ARSH	Xp22.33	0.083655	0.102569	0.165326
KAT14	20p11.23	-0.08365	0.10257	0.165326
TINAGL1	1p35.2	-0.08365	0.10257	0.165326
ANGPTL5	11q22.1	-0.08365	0.102609	0.165375
CFAP44	3q13.2	-0.08363	0.102661	0.165446
LRRC37A	17q21.31	-0.08363	0.102675	0.165455
MRPL44	2q36.1	-0.08363	0.102687	0.16546
ISCA1	9q21.33	-0.08362	0.102705	0.165476
PPP1R2B	5q33.3	0.08361	0.102754	0.165542
MAP6	11q13.5	0.083608	0.102762	0.165542
REEP1	2p11.2	-0.0836	0.102789	0.165572
HBQ1	16p13.3	-0.08357	0.102901	0.16574
EHBP1L1	11q13.1	0.083565	0.10294	0.165789
PCDHA10	5q31.3	0.083547	0.103017	0.165898
PLK1	16p12.2	-0.08354	0.103034	0.165912
KIF25	6q27	-0.08352	0.103135	0.166062
ALG6	1p31.3	-0.08351	0.103157	0.166085
ZFAND5	9q21.13	0.083489	0.103255	0.166228
KBTBD8	3p14.1	0.083484	0.103275	0.166248
GPR180	13q32.1	-0.08347	0.103351	0.166357
GRM6	5q35.3	0.083455	0.103396	0.166416
C17ORF80	17q25.1	-0.08343	0.103503	0.166574
LMNB2	19p13.3	-0.08342	0.103545	0.166629
PLCD4	2q35	0.083416	0.103557	0.166629
MAVS	20p13	0.083415	0.103562	0.166629
RYR3	15q13.3-q14	0.083402	0.103618	0.166706
HOXB1	17q21.32	0.083378	0.103715	0.166849
LCN10	9q34.3	0.083359	0.103795	0.166954
CD8A	2p11.2	0.083358	0.103797	0.166954
HIST1H1D	6p22.2	-0.08335	0.103818	0.166974
APOL4	22q12.3	0.083333	0.103904	0.167087
PLCH2	1p36.32	0.083333	0.103905	0.167087
RAB40A	Xq22.2	0.083314	0.103981	0.167186
PNPLA5	22q13.31	-0.08331	0.103983	0.167186
TBX21	17q21.32	0.08329	0.104081	0.167329
TMEM125	1p34.2	-0.08328	0.10412	0.167379
TTLL11	9q33.2	-0.08326	0.104225	0.167535
SLC6A11	3p25.3	0.08325	0.10425	0.167556
KIR3DL2	19q13.42	0.083249	0.104255	0.167556
SCHIP1	3q25.32-q25.33	0.083231	0.104327	0.167657
SLC26A8	6p21.31	0.08323	0.104334	0.167657
SPDL1	5q35.1	-0.08321	0.10443	0.167797
GLP1R	6p21.2	0.083205	0.104439	0.167798
ARMH3	10q24.32	0.083195	0.104479	0.167848
LOC100130264	20p11.23	0.083132	0.104741	0.168255

STH	17q21.31	-0.08313	0.10476	0.168272
DLGAP4	20q11.23	-0.08312	0.104786	0.168302
NXPB2	2q22.1	0.083097	0.104888	0.168451
COL28A1	7p21.3	-0.08308	0.104975	0.168578
SAMD4B	19q13.2	0.083066	0.105019	0.168636
VGFB	7q22.1	-0.08306	0.105043	0.16866
TRIM67	1q42.2	0.083048	0.105096	0.168718
SELE	1q24.2	0.083048	0.105096	0.168718
PIWIL1	12q24.33	-0.08304	0.105111	0.168728
ERBB4	2q34	0.08303	0.105172	0.168813
TTC5	14q11.2	0.083016	0.105228	0.16889
TMEM182	2q12.1	0.083013	0.105242	0.168898
MUSTN1	3p21.1	-0.083	0.105276	0.16893
GOLGA7	8p11.21	-0.083	0.105281	0.16893
JPT2	16p13.3	-0.083	0.105287	0.16893
ACSM6	10q23.33	0.082984	0.105364	0.169015
PARP14	3q21.1	0.082984	0.105366	0.169015
TM4SF5	17p13.2	-0.08298	0.10537	0.169015
NPHS1	19q13.12	0.082982	0.105374	0.169015
NORAD	20q11.23	-0.08296	0.105465	0.169148
TBC1D15	12q21.1	0.082949	0.105513	0.169211
MT1G	16q13	-0.08294	0.105566	0.169282
OR2Z1	19p13.2	0.082929	0.105598	0.16932
OR51E1	11p15.4	0.082918	0.105642	0.169377
GRK1	13q34	-0.0829	0.10573	0.169499
ATP2B1-AS1	12q21.33	0.082896	0.105735	0.169499
SUPT3H	6p21.1	-0.08289	0.105779	0.169556
KLK13	19q13.41	0.082883	0.105791	0.169562
TAS1R3	1p36.33	0.082876	0.105818	0.169592
NR4A1	12q13.13	0.082863	0.105874	0.169667
HIST1H2BC	6p22.2	0.082843	0.105961	0.169793
OVOL2	20p11.23	0.08283	0.106014	0.169858
TBCD	17q25.3	-0.08283	0.106024	0.169858
SDHA	5p15.33	0.082827	0.106027	0.169858
KDELR1	19q13.33	-0.08281	0.106119	0.169983
ZCCHC3	20p13	-0.0828	0.106121	0.169983
TTC13	1q42.2	0.082802	0.106134	0.16999
ACSBG1	15q25.1	0.082794	0.106165	0.170025
DLEU7	13q14.3	0.08277	0.106268	0.170176
IER3IP1	18q21.1	0.082762	0.106301	0.170216
RPL23AP32	2p16.2	-0.08275	0.106334	0.170255
SLC2A1	1p34.2	-0.08275	0.106362	0.170287
EZH1	17q21.2	-0.08274	0.106378	0.170298
UBE2B	5q31.1	-0.08274	0.106404	0.170311
SMC4	3q25.33	0.082736	0.106413	0.170311
RAP1GAP2	17p13.3	0.082734	0.106419	0.170311
GLE1	9q34.11	-0.08273	0.10642	0.170311
GAGE12D	Xp11.23	-0.08273	0.106452	0.170349
ZBED9	6p22.1	0.08272	0.10648	0.17038
CENPQ	6p12.3	-0.08271	0.106512	0.170418
NOS2	17q11.2	0.082692	0.106599	0.170543
EBLN2	3p13	0.082684	0.106633	0.170584
CLEC4C	12p13.31	0.082677	0.106663	0.170618
RHOF	12q24.31	0.082672	0.106682	0.170636
TARP	7p14.1	0.082642	0.106811	0.170827
LVRN	5q23.1	0.082638	0.10683	0.170844
HPR	16q22.2	0.08263	0.106865	0.170886
PCTP	17q22	-0.08262	0.106908	0.170941

ACAT1	11q22.3	-0.08261	0.106943	0.170985
FAM43A	3q29	-0.08261	0.106959	0.170996
GRHL1	2p25.1	0.082585	0.107055	0.171128
PRDM13	6q16.2	-0.08258	0.107059	0.171128
SUPT20HL1	Xp22.11	0.082574	0.1071	0.171168
MYL1	2q34	-0.08257	0.1071	0.171168
MEP1B	18q12.1	0.082549	0.107206	0.171323
RDH12	14q24.1	-0.08254	0.107234	0.171354
INTS8	8q22.1	-0.08254	0.107258	0.171378
LINC01098	4q34.3	-0.08253	0.107285	0.171408
TADA3	3p25.3	-0.08252	0.107315	0.171441
ADAM2	8p11.22	-0.08251	0.10736	0.1715
CIR1	2q31.1	-0.08248	0.107515	0.17173
LIPE	19q13.2	-0.08248	0.107521	0.17173
KLHL13	Xq24	0.082472	0.107538	0.171744
OR4K1	14q11.2	0.082464	0.107572	0.171771
NUDT12	5q21.2	0.082464	0.107572	0.171771
SYP	Xp11.23	-0.08244	0.107688	0.171941
ADIPOR2	12p13.33	0.082422	0.107752	0.172028
ZNF599	19q13.11	-0.08242	0.107763	0.172028
TWIST2	2q37.3	0.082418	0.107767	0.172028
SECTM1	17q25.3	0.082404	0.10783	0.172113
HCG11	6p22.2	0.082389	0.107895	0.172204
SPEM2	17p13.1	-0.08231	0.108238	0.172737
LCE6A	1q21.3	-0.0823	0.108259	0.172758
CEBPG	19q13.11	-0.08226	0.108445	0.17304
PIM3	22q13.33	-0.08223	0.108594	0.173265
FRRS1L	9q31.3	0.082223	0.108607	0.173271
C4ORF47	4q35.1	-0.0822	0.108703	0.17341
LRRRC37A2	17q21.31	-0.0822	0.108715	0.173416
ASCL1	12q23.2	-0.08218	0.108787	0.1735
COL21A1	6p12.1 6p12.3-p11.2	0.08218	0.108794	0.1735
CRSP8P	5q14.1	-0.08218	0.108794	0.1735
VCX3B	Xp22.31	-0.08216	0.108879	0.173622
SMIM3	5q33.1	0.082156	0.108898	0.173639
LHX2	9q33.3	0.082111	0.109092	0.173935
PUS10	2p16.1-p15	-0.08211	0.109114	0.173944
PANX3	11q24.2	-0.08211	0.109116	0.173944
CCL23	17q12	0.082103	0.109125	0.173946
SRPX	Xp11.4	0.082101	0.109136	0.173948
LOC145783	15q21.3	-0.08208	0.109209	0.174052
ZSWIM4	19p13.13-p13.12	0.082077	0.109236	0.174081
TAF7L	Xq22.1	-0.08206	0.1093	0.174168
CD74	5q33.1	0.082041	0.109393	0.174303
VWA1	1p36.33	-0.08203	0.109442	0.174366
TST	22q12.3	-0.08202	0.109495	0.174437
SLC35G6	17p13.1	0.081998	0.109582	0.174563
LINC01559	12p13.1	0.081991	0.10961	0.174593
CABYR	18q11.2	-0.08197	0.109716	0.174739
TCL1B	14q32.13	0.081966	0.109719	0.174739
SMARCAD1	4q22.3	0.081961	0.109743	0.174763
VCX	Xp22.31	-0.08196	0.109756	0.174769
YWHAG	7q11.23	0.081952	0.109782	0.174798
GATAD1	7q21.2	-0.08194	0.10984	0.174875
GSDMA	17q21.1	0.081934	0.10986	0.174894
DQX1	2p13.1	0.081931	0.109872	0.174899
CLU	8p21.1	0.081925	0.109899	0.174928
MS4A15	11q12.2	-0.08192	0.109911	0.174934

ZNF485	10q11.21	-0.08191	0.109942	0.174969
MEG8	14q32.2-q32.31	-0.08191	0.109959	0.174983
LINC01091	4q28.1	-0.08189	0.110058	0.175126
SETD1A	16p11.2	-0.08188	0.110082	0.17515
CYP2C9	10q23.33	0.081879	0.110098	0.175162
IRS4	Xq22.3	0.08187	0.110138	0.175212
PPIAP80	7p15.1	-0.08187	0.110154	0.175214
TRPC1	3q23	0.081866	0.110157	0.175214
MAP3K10	19q13.2	-0.08185	0.110242	0.175336
PGA4	11q12.2	0.081821	0.11035	0.175492
OR5E1P	11p15.4	-0.08181	0.110387	0.175538
DCAF17	2q31.1	0.081811	0.110397	0.175539
BPIFC	22q12.3	-0.08178	0.11055	0.17577
DEFB109A	8p23.1	-0.08175	0.110665	0.175938
SLFN14	17q12	0.081711	0.110832	0.176189
ALOX12B	17p13.1	0.081707	0.110852	0.176198
GAST	17q21.2	-0.08171	0.110855	0.176198
SYCN	19q13.2	-0.0817	0.110883	0.176228
C11ORF53	11q23.1	0.081696	0.110899	0.17624
CNTFR	9p13.3	-0.08165	0.111089	0.176528
IPW	15q11.2	0.081634	0.11117	0.176642
DCTN5	16p12.2	-0.08162	0.11123	0.176724
TBCCD1	3q27.3	0.081602	0.11131	0.176837
CUL7	6p21.1	0.081594	0.111349	0.17687
FAM131A	3q27.1	-0.08159	0.111349	0.17687
CRAT	9q34.11	0.081581	0.111402	0.17694
STRA8	7q33	-0.08158	0.111425	0.176963
TEX11	Xq13.1	0.081545	0.11156	0.177164
SNORA11D	Xp11.22	-0.08153	0.111607	0.177224
MMP26	11p15.4	0.081523	0.111659	0.177293
GALNT11	7q36.1 7q36.1	-0.08152	0.111684	0.177319
IL36G	2q14.1	-0.0815	0.111746	0.177403
LOC730101	6p12.2	-0.0815	0.111782	0.177446
ZNF479	7p11.2	-0.08149	0.111823	0.177496
HPN	19q13.11	0.081484	0.111831	0.177496
ROBO1	3p12.3	0.081477	0.111861	0.177529
PCSK7	11q23.3	0.08146	0.111936	0.177634
HOXD12	2q31.1	0.081457	0.111948	0.17764
TMEM267	5p12	-0.08144	0.112027	0.177751
TGM4	3p21.31	0.081436	0.112044	0.177764
LSMEM2	3p21.31	-0.08143	0.112091	0.177824
PNMA6A	Xq28	0.081422	0.112107	0.177834
UGT1A1	2q37.1	0.081407	0.112171	0.177922
EBF4	20p13	0.081373	0.112323	0.178149
HID1	17q25.1	0.081364	0.112363	0.17819
PDHB	3p14.3	-0.08136	0.112366	0.17819
DSG1	18q12.1	-0.08136	0.11239	0.178214
TRIM34	11p15.4	0.081327	0.112526	0.178414
PRRC2A	6p21.33	0.081307	0.112616	0.178544
KIRREL2	19q13.12	0.081302	0.112636	0.178561
ADAMTS10	19p13.2	0.081279	0.11274	0.178712
SLA2	20q11.23	0.081276	0.11275	0.178714
SYCE3	22q13.33	-0.08127	0.112784	0.178753
LTB	6p21.33	0.081267	0.112793	0.178754
ZNF746	7q36.1	-0.08126	0.112806	0.178759
SLC5A10	17p11.2	0.08122	0.113001	0.179054
OR52B4	11p15.4	0.081177	0.113193	0.179337
NR5A1	9q33.3	-0.08118	0.113197	0.179337

RASGEF1C	5q35.3	0.08116	0.11327	0.179438
TTC39C	18q11.2	-0.08113	0.113421	0.179663
PIP4P1	14q11.2	-0.08109	0.113576	0.179894
SH3TC2	5q32	0.081054	0.113742	0.180144
ADH5	4q23	-0.08104	0.113816	0.180232
IL5	5q31.1	-0.08104	0.113823	0.180232
SLC35E2B	1p36.33	-0.08104	0.113825	0.180232
PKD2L1	10q24.31	0.081021	0.113889	0.180318
CLEC12B	12p13.2	0.08101	0.113939	0.180385
GEMIN2	14q21.1	-0.081	0.113966	0.180412
PRY2	Yq11.223	0.081001	0.11398	0.180421
MANCR	10p15.1	0.080994	0.114008	0.180436
KRTAP4-8	17q21.2	-0.08099	0.114008	0.180436
UPF1	19p13.11	0.080982	0.114062	0.180508
SOGA3	6q22.33	0.080973	0.114106	0.180563
MLLT6	17q12	-0.08096	0.114142	0.180606
ZNF525	19q13.42	-0.08095	0.11419	0.180666
FOSB	19q13.32	0.080942	0.114245	0.180727
ZNF445	3p21.31	0.080941	0.114246	0.180727
CCNC	6q16.2	-0.08093	0.114293	0.180786
OR2B11	1q44	0.080927	0.11431	0.180799
OR52I1	11p15.4	0.080915	0.114362	0.180868
PPP1R2	3q29	-0.08088	0.11452	0.181103
ODAM	4q13.3	0.080878	0.114529	0.181103
MYOM3	1p36.11	-0.08085	0.114656	0.18129
PRMT2	21q22.3	0.080829	0.11475	0.181424
GSTM4	1p13.3	-0.0808	0.114886	0.181624
LRG1	19p13.3	0.080795	0.114905	0.181628
HLA-F	6p22.1	-0.08079	0.114906	0.181628
NOP14-AS1	4p16.3	-0.08076	0.115063	0.181858
BSND	1p32.3	0.080757	0.115075	0.181858
SLC11A1	2q35	0.080756	0.115079	0.181858
SMARCD3	7q36.1	-0.08075	0.115089	0.181859
AKAP11	13q14.11	0.080749	0.115114	0.181884
PPP1R3G	6p25.1	0.080716	0.115263	0.182105
SLC12A4	16q22.1	0.080707	0.1153	0.182149
TUBGCP3	13q34	-0.0807	0.115348	0.182203
RLBP1	15q26.1	0.080696	0.115352	0.182203
C2ORF16	2p23.3	0.080672	0.115462	0.182362
PPP1R21	2p16.3	0.080645	0.11558	0.182535
GPR22	7q22.3	-0.08064	0.115592	0.182539
RAB36	22q11.23	-0.08063	0.115641	0.182601
MTAP	9p21.3	-0.08063	0.115653	0.182607
RGS6	14q24.2	0.08062	0.115696	0.182661
CRISP3	6p12.3	-0.08061	0.115719	0.182682
LINC00303	1q32.1	0.080612	0.115732	0.182689
SECISBP2	9q22.2	-0.08061	0.11575	0.182702
KRTAP27-1	21q22.11	0.080606	0.11576	0.182704
DCK	4q13.3	0.080601	0.115781	0.182722
KCNMB2	3q26.32	0.080584	0.115857	0.182828
NFKB2	10q24.32	0.080581	0.115872	0.182837
SLC22A6	11q12.3	-0.08054	0.116038	0.183084
PGAM1	10q24.1	0.080531	0.1161	0.183167
LRP11	6q25.1	-0.08051	0.116202	0.183315
ZNF8	19q13.43	0.080496	0.116259	0.183339
LIMS3	2q13	0.080482	0.116324	0.183478
ID3	1p36.12	-0.08048	0.116337	0.183483
ADGRA1	10q26.3	0.080472	0.116367	0.183517

E2F7	12q21.2	0.080462	0.116414	0.183577
IZUMO1R	11q21	0.080437	0.116527	0.183741
CLDN11	3q26.2	0.080424	0.116587	0.18382
PELO	5q11.2	0.080373	0.116818	0.184169
RACGAP1P	12q12	-0.08034	0.11696	0.184356
MAGED2	Xp11.21	-0.08034	0.116961	0.184356
C1QTNF1	17q25.3	-0.08034	0.11697	0.184356
OCIAD1	4p11	-0.08034	0.116973	0.184356
POLD3	11q13.4	0.080283	0.11723	0.184746
GTF3C3	2q33.1	0.080248	0.11739	0.184984
NR1I3	1q23.3	-0.08025	0.117404	0.184992
RALB	2q14.2	0.08024	0.117428	0.185016
SLC25A31	4q28.1	-0.08022	0.117524	0.185139
CTSF	11q13.2	-0.08022	0.117525	0.185139
KRTAP4-5	17q21.2	-0.0802	0.117615	0.185266
TNNT3	11p15.5	0.080192	0.117646	0.185298
KAAG1	6p22.3	-0.08019	0.117653	0.185298
SLC7A9	19q13.11	-0.08016	0.117807	0.185525
CST13P	20p11.21	-0.08015	0.117838	0.185556
DPP9	19p13.3	-0.08015	0.117845	0.185556
NAP1L5	4q22.1 4q21-q22	0.080125	0.117957	0.185717
KCTD19	16q22.1	-0.08012	0.117976	0.185732
OR9G4	11q12.1	-0.08003	0.118394	0.186376
CLN5	13q22.3	-0.08003	0.118411	0.186388
SPATA31E1	9q22.1	0.08002	0.118438	0.186416
L3MBTL4	18p11.31	-0.07999	0.118566	0.186602
KREMEN1	22q12.1	0.079989	0.118584	0.186616
SLC51B	15q22.31	-0.07998	0.118639	0.186674
SNHG29	17p11.2	-0.07998	0.118639	0.186674
SLC22A16	6q21 6q21-q22.1	0.079974	0.118651	0.186678
PWRN2	15q11.2	-0.07994	0.11882	0.186926
PEX6	6p21.1	-0.07994	0.118828	0.186926
CNGB1	16q21	0.079913	0.118932	0.187076
LOC91450	15q24.3	-0.07991	0.118943	0.187078
LINC00608	2q35	-0.07989	0.119038	0.187213
ENOX2	Xq26.1	-0.07983	0.119309	0.187626
CBLN1	16q12.1	-0.07981	0.119389	0.187736
SLC2A9	4p16.1	-0.07981	0.119415	0.187763
CCDC38	12q23.1	0.079807	0.119426	0.187765
ZNF582	19q13.43	0.079804	0.119441	0.187773
APOH	17q24.2	-0.07979	0.119486	0.18783
LINC01226	1p35.2	-0.07979	0.119519	0.187866
USH1G	17q25.1	0.079776	0.119571	0.187934
GALNT6	12q13.13	0.07977	0.119598	0.187961
MUC21	6p21.33	-0.07976	0.119628	0.187983
FAM118B	11q24.2	0.079763	0.119631	0.187983
TAS2R30	12p13.2	-0.07975	0.119708	0.18809
GRXCR2	5q32	0.079738	0.119747	0.188136
MID1IP1	Xp11.4	-0.07972	0.119814	0.188227
TRIM9	14q22.1	0.079716	0.119852	0.188271
NSUN2	5p15.31	-0.07971	0.11987	0.188286
DBIL5P	17p13.3	0.079706	0.119897	0.188313
PCNP	3q12.3	0.079704	0.119907	0.188314
HIST1H2BH	6p22.2	-0.0797	0.119921	0.188321
POTED	21q11.2	-0.0797	0.119937	0.188331
IFNA7	9p21.3	0.079677	0.120034	0.188468
NUP98	11p15.4	0.079673	0.120049	0.188477
AP5S1	20p13	-0.07967	0.120084	0.188518

RPGR	Xp11.4	-0.07966	0.120111	0.188546
ZNF785	16p11.2	-0.07965	0.12016	0.188608
SNORA3A	11p15.4	-0.07964	0.120207	0.188654
CDK13	7p14.1	0.079639	0.120209	0.188654
ACAN	15q26.1	0.079622	0.120288	0.188762
POLN	4p16.3	-0.07962	0.120296	0.188762
PLSCR5	3q24	-0.0796	0.120393	0.188899
GPR89A	1q21.1	-0.07959	0.120415	0.188919
GP9	3q21.3	0.079587	0.120451	0.188961
KIFC1	6p21.32	-0.07958	0.120491	0.189009
GTF2IRD2B	7q11.23	0.079574	0.120514	0.189029
CCDC112	5q22.3	0.07956	0.120577	0.189107
ABTB2	11p13	0.079559	0.120582	0.189107
PYY	17q21.31	0.079539	0.120676	0.189238
KRT8	12q13.13	-0.07954	0.120692	0.189238
E2F8	11p15.1	0.079535	0.120694	0.189238
LST1	6p21.33	0.079529	0.120721	0.189266
FOXD4L5	9q21.11	0.079516	0.120786	0.189352
PSMF1	20p13	-0.07951	0.120814	0.189382
PTPRN	2q35	0.079502	0.120851	0.189418
APOBEC3H	22q13.1	0.079501	0.120856	0.189418
OR7A10	19p13.12	-0.0795	0.120876	0.189434
PPM1E	17q22	-0.07948	0.120935	0.189512
CBLN2	18q22.3	0.079478	0.120964	0.189543
UMODL1-AS1	21q22.3	0.079447	0.121108	0.189754
FOXJ1	17q25.1	-0.07944	0.121129	0.189772
TMOD1	9q22.33	-0.07944	0.12116	0.189805
PHEX	Xp22.11	0.079431	0.121182	0.189825
CBR3	21q22.12	0.079426	0.121206	0.189846
CCZ1B	7p22.1	-0.07942	0.121214	0.189846
NUDT4	12q22	0.079421	0.121229	0.189855
C2ORF49	2q12.2	-0.07942	0.121248	0.189868
NOMO1	16p13.11	0.079414	0.121265	0.18988
OTOP2	17q25.1	0.079407	0.121295	0.189912
MLN	6p21.31	0.079371	0.121467	0.190168
HMOX1	22q12.3	0.079353	0.121552	0.190286
HTR5A	7q36.2	-0.07935	0.121568	0.190296
TGM1	14q12	-0.07934	0.121616	0.190356
ZBTB24	6q21	0.079331	0.121655	0.190402
SLC16A3	17q25.3	0.079327	0.121673	0.190416
DSE	6q22.1	0.079301	0.121796	0.190593
PRSS42P	3p21.31	-0.0793	0.121812	0.190603
SLC2A7	1p36.23	0.079294	0.12183	0.190616
NUDT9P1	10q23.32	-0.07929	0.121866	0.190658
ZNF844	19p13.2	0.079275	0.121916	0.190721
OR1L6	9q33.2	0.079246	0.122053	0.19092
KCNJ11	11p15.1	-0.07924	0.122098	0.190976
FBXO36	2q36.3	-0.07922	0.12217	0.191074
C11ORF40	11p15.4	-0.07921	0.122216	0.191131
DDX1	2p24.3	-0.0792	0.122259	0.191182
PLPP4	10q26.12	0.0792	0.122273	0.191182
NAF1	4q32.2	0.079199	0.122277	0.191182
PPP1R1B	17q12	-0.07919	0.122316	0.191227
IL20RB	3q22.3	-0.07914	0.122535	0.191555
BCYRN1	2p21	-0.07913	0.122593	0.191631
ANKRD27	19q13.11	-0.07913	0.122612	0.191645
ADM	11p15.4	0.079125	0.122629	0.191657
CTNNA3	10q21.3	0.079115	0.122676	0.191715



SOWAHD	Xq24	-0.07911	0.122714	0.191759
GJA5	1q21.2	0.079103	0.122732	0.191773
MC4R	18q21.32	0.0791	0.122746	0.19178
HBE1	11p15.4	-0.07909	0.122807	0.191859
RTP4	3q27.3	0.079068	0.122899	0.191989
NPC1L1	7p13	-0.07906	0.122934	0.192028
TSPAN2	1p13.2	0.079024	0.123107	0.192283
CHMP7	8p21.3	0.079	0.123221	0.192447
VN1R5	1q44	0.078992	0.123259	0.192491
TSKU	11q13.5	-0.07899	0.123273	0.192497
UBLCP1	5q33.3	0.078987	0.123286	0.192503
GPI	19q13.11	-0.07896	0.12343	0.192714
SEC14L1P1	11p11.2	0.078949	0.123465	0.192753
OR4N2	14q11.2	-0.07894	0.123498	0.192789
COMP	19p13.11	0.078929	0.123561	0.192872
LTB4R	14q12	-0.07892	0.123599	0.19291
HNRNPA0	5q31.2	0.07892	0.123604	0.19291
ANGEL1	14q24.3	-0.07889	0.123758	0.19313
RBMS1	2q24.2	0.078886	0.123764	0.19313
TXNRD2	22q11.21	-0.07886	0.123884	0.193301
SLC16A12	10q23.31	0.078846	0.123955	0.193398
CFAP157	9q34.11	-0.07884	0.123984	0.193427
HAUS4	14q11.2	-0.07881	0.124124	0.193631
TCTN3	10q24.1	0.078791	0.124222	0.193768
ETAA1	2p14	0.078786	0.124242	0.193785
ZNF112	19q13.31	0.078761	0.124366	0.193963
GTF2A2	15q22.2	0.07875	0.124416	0.194025
OR2AK2	1q44	0.078747	0.124429	0.194031
TMEM143	19q13.33	-0.07874	0.124468	0.194069
AQP10	1q21.3	0.078738	0.124472	0.194069
VASN	16p13.3	0.078722	0.124553	0.194179
GATA6	18q11.2	0.078678	0.124761	0.194488
RHAG	6p12.3	0.078674	0.124783	0.194503
AGFG2	7q22.1	0.078672	0.12479	0.194503
ZNF578	19q13.41	0.07867	0.1248	0.194504
SHANK2	11q13.3-q13.4	0.078663	0.124835	0.194543
URI1	19q12	-0.07866	0.124849	0.194549
MBOAT7	19q13.42	-0.07865	0.124879	0.194581
TRHDE-AS1	12q21.1	0.078647	0.124912	0.194604
CTRC	1p36.21	-0.07865	0.124913	0.194604
FCN2	9q34.3	-0.07862	0.125063	0.194822
TYW5	2q33.1	-0.07861	0.125095	0.194858
KCNG3	2p21	0.078593	0.125172	0.194962
SYN1	Xp11.3-p11.23	0.07859	0.125186	0.194968
SOSTDC1	7p21.2	0.078578	0.125245	0.195045
ABCB7	Xq13.3	-0.07857	0.125299	0.1951
C1ORF100	1q44	0.078566	0.1253	0.1951
FNIP1	5q31.1	0.078549	0.125383	0.195215
LARP6	15q23	-0.07853	0.125454	0.195309
NUF2	1q23.3	-0.07852	0.125501	0.195369
SRGAP3	3p25.3	0.078514	0.12555	0.195429
RNF215	22q12.2	-0.07851	0.125571	0.195447
DCAF4L2	8q21.3	-0.07847	0.125744	0.195692
CCDC170	6q25.1	-0.07847	0.125748	0.195692
TARS2	1q21.2	0.078452	0.12585	0.195835
SYT8	11p15.5	-0.07843	0.125937	0.195955
PGA3	11q12.2	0.078432	0.125949	0.195958
FOXL2NB	3q22.3	0.078417	0.126024	0.19606

FAM53B	10q26.13	0.078396	0.126121	0.196196
GABPB1-IT1	15q21.2	0.078376	0.12622	0.196335
DLX2	2q31.1	-0.07837	0.126244	0.196357
ALX4	11p11.2	-0.07836	0.126302	0.196431
RAB15	14q23.3	-0.07834	0.126382	0.196536
ASAP1	8q24.21-q24.22	0.078341	0.126388	0.196536
USP45	6q16.2	-0.07832	0.126469	0.196646
KLHDC7B	22q13.33	0.078284	0.126668	0.19694
NTAN1	16p13.11	0.078266	0.126755	0.197059
RAC1	7p22.1	-0.07825	0.126814	0.197137
DCLRE1A	10q25.3	0.078234	0.126912	0.197273
BLID	11q24.1	0.078223	0.126964	0.197338
OLIG2	21q22.11	0.078216	0.126999	0.197367
GGTLC2	22q11.22	-0.07822	0.127002	0.197367
HPYR1	8q24.22	0.078201	0.127069	0.197456
LLGL1	17p11.2	0.078196	0.127097	0.197483
MYH16	7q22.1	0.078183	0.127161	0.197568
FBN3	19p13.2	-0.07817	0.127218	0.197642
TMEM94	17q25.1	-0.07817	0.12724	0.197655
ST3GAL6	3q12.1	0.078165	0.127247	0.197655
INIP	9q32	0.078155	0.127294	0.197714
LOC728392	17p13.2	0.078145	0.127345	0.197761
WDR19	4p14	-0.07815	0.127345	0.197761
ACLY	17q21.2	0.078137	0.127381	0.1978
KRTAP5-7	11q13.4	-0.07814	0.127389	0.1978
SNCAIP	5q23.2	0.078133	0.127406	0.19781
SRRM1	1p36.11	0.078116	0.127488	0.197922
LRRTM3	10q21.3	0.078113	0.127503	0.197931
WFDC6	20q13.12	0.078055	0.127785	0.198348
LAMA5	20q13.33	0.078054	0.127792	0.198348
CSH2	17q23.3	-0.07805	0.127813	0.198366
XRRA1	11q13.4	-0.07804	0.127849	0.198406
UBA1	Xp11.3	-0.07804	0.127876	0.198433
IL1RAPL1	Xp21.3-p21.2	0.078023	0.12794	0.198516
FLJ13224	12p11.21	-0.07801	0.127991	0.198577
CLEC4F	2p13.3	0.078011	0.127999	0.198577
MC2R	18p11.21	0.077989	0.128108	0.198713
PID1	2q36.3	0.077989	0.128111	0.198713
CA5B	Xp22.2	0.077986	0.128121	0.198713
ELAVL2	9p21.3	-0.07799	0.128126	0.198713
PATE3	11q24.2	-0.07798	0.128152	0.198738
CPB2	13q14.13	-0.07793	0.128411	0.199124
CFL1P1	10q23.31	-0.07792	0.128439	0.199152
FAM160B2	8p21.3	0.077917	0.128461	0.19917
EEPDP1	7p14.2	-0.07789	0.128585	0.199347
RAB6A	11q13.4	0.077874	0.128675	0.199471
FBXO22-AS1	15q24.2	-0.07785	0.128809	0.199664
MCOLN3	1p22.3	0.077832	0.12888	0.199755
LINC02591	1q21.1	0.077831	0.128888	0.199755
MSLNL	16p13.3	-0.07782	0.128916	0.199783
FAM74A1	9p12	-0.07782	0.128935	0.199797
LOC553137	6q21	-0.07781	0.128972	0.199839
TRIM35	8p21.2	0.07781	0.128988	0.199848
SEMA5B	3q21.1	0.077801	0.129033	0.199903
CHST1	11p11.2	0.077756	0.129256	0.200226
H2BFWT	Xq22.2	-0.07775	0.129262	0.200226
OR51G2	11p15.4	0.077751	0.12928	0.200227
ZNF177	19p13.2	-0.07775	0.129282	0.200227

NTSR1	20q13.33	0.077739	0.129339	0.200299
UBXN2A	2p23.3	0.077735	0.129361	0.200318
CXCL3	4q13.3	-0.07772	0.129421	0.200396
ADPRHL1	13q34	-0.07769	0.129578	0.20062
CALY	10q26.3	0.077689	0.129586	0.20062
SMPX	Xp22.12	-0.07769	0.129603	0.200629
GRN	17q21.31	0.077684	0.129612	0.200629
NAP1L6	Xq13.2	0.077677	0.129645	0.200665
VSX1	20p11.21	0.077656	0.12975	0.200812
FANK1	10q26.2	-0.07765	0.129796	0.200866
BATF	14q24.3	-0.07764	0.129805	0.200866
BBS7	4q27	0.077638	0.12984	0.200905
DARS	2q21.3	-0.07763	0.12986	0.200919
DSCAML1	11q23.3	0.077621	0.129922	0.201001
ZCCHC4	4p15.2	-0.07762	0.129936	0.201001
DLGAP2	8p23.3	0.077617	0.129943	0.201001
TBC1D13	9q34.11	-0.07759	0.130055	0.201147
TDGF1	3p21.31	-0.07759	0.130057	0.201147
POTEM	14q11.2	0.077581	0.130123	0.201234
HES3	1p36.31	-0.07757	0.130154	0.201267
KCNN4	19q13.31	0.077551	0.130272	0.201433
PIGM	1q23.2	0.077531	0.130369	0.201568
DLGAP5	14q22.3	0.077494	0.130557	0.201842
LINC00882	3q13.12	0.077464	0.130704	0.202054
MMP15	16q21	-0.07746	0.130719	0.202061
NOD2	16q12.1	-0.07744	0.1308	0.202164
MYH3	17p13.1	-0.07744	0.130805	0.202164
EVPLL	17p11.2	0.077433	0.130859	0.202231
KLHL40	3p22.1	-0.07742	0.130917	0.202305
CLPSL1	6p21.31	-0.07741	0.130992	0.202405
SDCBP2	20p13	0.077371	0.131169	0.202663
HOOK2	19p13.13	-0.07736	0.131239	0.202719
OR2L8	1q44	-0.07736	0.13124	0.202719
MBD3L1	19p13.2	0.077354	0.131255	0.202719
KRTAP19-8	21q22.11	0.077354	0.131255	0.202719
TEX47	7q21.13	0.077354	0.131255	0.202719
STAT5A	17q21.2	0.077347	0.13129	0.202746
TGM6	20p13	-0.07735	0.131293	0.202746
GCGR	17q25.3	-0.07733	0.131392	0.202883
ATP6V1H	8q11.23	-0.07732	0.131406	0.202888
AGPAT5	8p23.1	0.077314	0.131454	0.202948
HEATR4	14q24.3	0.077284	0.131605	0.203154
ARAP3	5q31.3	0.077283	0.131608	0.203154
POTEF	2q21.1	-0.07727	0.131665	0.203225
HNRNPU-AS1	-	-0.07726	0.131704	0.203262
PLXNB3	Xq28	0.077263	0.131709	0.203262
RETREG2	2q35	-0.07726	0.131743	0.2033
MAST3	19p13.11	0.07721	0.131977	0.203644
HLA-DOB	6p21.32	0.077177	0.132143	0.203885
CCDC183-AS1	9q34.3	-0.07717	0.132175	0.203918
L1CAM	Xq28	-0.07716	0.132218	0.20397
IRAK1BP1	6q14.1	-0.07716	0.132245	0.203995
CHRNA9	4p14	0.077132	0.132365	0.204165
SELENOV	19q13.2	-0.07713	0.132399	0.204168
SOX30	5q33.3	0.077124	0.132406	0.204168
EDARADD	1q42.3-q43	-0.07712	0.132407	0.204168
AADA2L2	3q25.1	0.077124	0.132408	0.204168
KCNIP3	2q11.1	-0.07707	0.1327	0.204603

OR9I1	11q12.1	0.077049	0.132784	0.204716
ATP6V1G2	6p21.33	0.077044	0.132809	0.204739
FIRRE	Xq26.2	-0.07703	0.132858	0.204799
MFSD11	17q25.1-q25.2	0.077028	0.132889	0.204831
FNDC9	5q33.3	0.077023	0.132918	0.204859
MARS2	2q33.1	-0.07701	0.132986	0.204949
SLC26A7	8q21.3	0.076999	0.133036	0.20501
HOXD3	2q31.1	0.076985	0.133108	0.205104
PROKR1	2p13.3	0.076981	0.133127	0.205104
JPH3	16q24.2	0.076981	0.133131	0.205104
GLRX	5q15	0.076979	0.133138	0.205104
SDHC	1q23.3	0.07697	0.133185	0.205161
RAB2B	14q11.2	0.076958	0.133246	0.205239
EGR4	2p13.2	0.076948	0.133296	0.2053
WASHC5	8q24.13	0.076941	0.133331	0.205338
PLA2G2F	1p36.12	-0.07692	0.133429	0.205473
SLC7A4	22q11.21	-0.07691	0.133495	0.205551
FZD6	8q22.3	0.076908	0.1335	0.205551
SLIT1	10q24.1	-0.0769	0.133537	0.205592
SDC3	1p35.2	0.076893	0.133572	0.20563
GOLGA6L9	15q25.2	-0.07689	0.1336	0.205658
GAS2L1P2	9q22.33	0.076867	0.133706	0.205805
C1GALT1C1L	2p21	-0.07685	0.133782	0.205907
SLC12A8	3q21.2	0.07685	0.133794	0.20591
CDKN1C	11p15.4	-0.07685	0.133805	0.205911
CYFIP2	5q33.3	0.07684	0.133843	0.205952
PSG6	19q13.31	-0.07683	0.133881	0.205995
BAIAP2-DT	17q25.3	0.076825	0.133921	0.206041
ZNF254	19p12	0.07682	0.133946	0.206044
EEF1A1	6q13	-0.07682	0.133955	0.206044
GPD1L	3p22.3	0.076817	0.133961	0.206044
REG3G	2p12	-0.07682	0.133964	0.206044
ZNF30	19q13.11	-0.0768	0.134041	0.206147
RFPL4B	6q21	0.076789	0.1341	0.206221
CRYGA	2q33.3	-0.07678	0.134128	0.206249
TRIM59	3q25.33	0.076759	0.134256	0.20643
LINC00313	21q22.3	-0.07675	0.134313	0.206502
IGLL3P	22q11.23	-0.07671	0.134482	0.206746
LINC02731	11q25	0.076698	0.134567	0.20686
TNMD	Xq22.1	-0.0767	0.134577	0.20686
PYDC2	3q28	-0.07669	0.134618	0.206907
MGC15885	15q22.2	0.076645	0.134834	0.207224
ZBED3	5q13.3	0.076642	0.134853	0.207236
RUNX2	6p21.1	0.076599	0.135071	0.207555
COL16A1	1p35.2	0.076582	0.135157	0.207668
SMIM13	6p24.2	0.07658	0.135165	0.207668
POPDC2	3q13.33	0.076572	0.135207	0.207716
EPGN	4q13.3	-0.07655	0.135308	0.207856
SAFB	19p13.3	-0.07653	0.135446	0.208052
RHCG	15q26.1	-0.07651	0.135516	0.208143
RAB7A	3q21.3	-0.0765	0.135563	0.2082
DNTT	10q24.1	0.076436	0.135905	0.208709
SGCZ	8p22	0.076427	0.13595	0.208762
PRAMEF16	1p36.21	-0.07642	0.135965	0.208768
PHOX2A	11q13.4	0.076378	0.136202	0.209117
KLK14	19q13.41	-0.07637	0.136256	0.209183
ZNF280A	22q11.22	-0.07635	0.136368	0.20934
RNF122	8p12	0.076321	0.136496	0.209519

SLC17A7	19q13.33	0.076287	0.136672	0.209774
MRPS27	5q13.2	-0.07627	0.136751	0.209879
IL9R	Xq28 and Yq12	0.076253	0.136847	0.21001
CSF2	5q31.1	-0.07625	0.136886	0.210054
TSG101	11p15.1	-0.07624	0.136903	0.210064
TENT4A	5p15.31	-0.07624	0.136918	0.210071
SLC25A34	1p36.21	0.076236	0.136934	0.210073
CEP170B	14q32.33	0.076234	0.136944	0.210073
PHYKPL	5q35.3	-0.07623	0.136951	0.210073
TM4SF1	3q25.1	0.076224	0.136996	0.210126
ID4	6p22.3	0.076215	0.137042	0.210181
ASXL3	18q12.1	0.07616	0.137329	0.210604
IDH3A	15q25.1	0.076145	0.137405	0.210706
DACH1	13q21.33	-0.07612	0.13751	0.21085
MC3R	20q13.2	-0.0761	0.137614	0.210993
C19ORF44	19p13.11	-0.0761	0.137659	0.211046
FAM83F	22q13.1	-0.07609	0.137688	0.211074
LRRC17	7q22.1	0.076073	0.137779	0.211198
XIRP2	2q24.3	0.076064	0.137824	0.211251
OLFML3	1p13.2	0.076058	0.137857	0.211286
YAP1	11q22.1	0.076053	0.137884	0.211311
MVP	16p11.2	0.076043	0.137936	0.211373
A1BG	19q13.43	-0.07601	0.138104	0.211614
TMEM50A	1p36.11	-0.07599	0.138217	0.211771
COL4A6	Xq22.3	0.075986	0.138231	0.211777
HOPX	4q12	0.075961	0.138359	0.211951
OR10X1	1q23.1	-0.07596	0.138368	0.211951
KLK7	19q13.41	-0.07596	0.138376	0.211951
SLC9C2	1q25.1	0.07593	0.138521	0.212155
HADH	4q25	-0.07593	0.13853	0.212155
TMC3	15q25.1	0.07592	0.138575	0.212207
ADAL	15q15.3	0.075906	0.138648	0.212302
ANKUB1	3q25.1	0.075889	0.138737	0.212423
DNAI1	9p13.3	-0.07587	0.138842	0.212559
MAGEA12	Xq28	-0.07587	0.138847	0.212559
RRM2	2p25.1	-0.07585	0.138952	0.212702
TMEM132E	17q12	0.075839	0.138998	0.212757
ZNF140	12q24.33	-0.07582	0.13912	0.212928
ADORA2A	22q11.23	0.075796	0.139224	0.21307
AQP8	16p12.1	0.075793	0.139237	0.213074
RAD23B	9q31.2	0.075766	0.139378	0.213274
UGT1A6	2q37.1	-0.07576	0.139437	0.213347
TRPM8	2q37.1	0.075738	0.139527	0.213469
WDR43	2p23.2	-0.07573	0.139578	0.213531
KLHL26	19p13.11	0.075724	0.139598	0.213545
ZYX	7q34	-0.07572	0.139646	0.213602
TESK2	1p34.1	0.075658	0.139945	0.21402
KCNG1	20q13.13	0.075657	0.13995	0.21402
PCNAP1	4q23	0.075657	0.139951	0.21402
MTMR1	Xq28	0.075633	0.140076	0.214195
STK3	8q22.2	-0.07561	0.140174	0.214314
LOC441666	10q11.21	0.075614	0.140176	0.214314
SNORA23	11p15.4	-0.07561	0.140213	0.214355
TMCO5A	15q14	-0.0756	0.140237	0.214366
DCDC2B	1p35.2	-0.0756	0.140242	0.214366
TMEM266	15q24.2	0.075575	0.14038	0.214561
IL1F10	2q14.1	-0.07557	0.140425	0.214613
NBPF1	1p36.13	0.075564	0.140442	0.214623

FAM43B	1p36.12	0.075548	0.140523	0.21473
RBM44	2q37.3	-0.07553	0.140608	0.214841
GLRA2	Xp22.2	-0.07553	0.140617	0.214841
MAFF	22q13.1	0.075514	0.140703	0.214956
BTN2A2	6p22.2	-0.07551	0.140734	0.214987
FAM227B	15q21.2	0.075475	0.140912	0.21524
MYF6	12q21.31	0.075473	0.140921	0.21524
TOM1L1	17q22	0.075469	0.140939	0.215252
PSME4	2p16.2	0.075462	0.140978	0.215283
CGA	6q14.3	0.075461	0.140982	0.215283
KCNJ10	1q23.2	0.075445	0.14107	0.215402
PHLDA3	1q32.1	0.07544	0.141094	0.215406
C9ORF139	9q34.3	0.07544	0.141094	0.215406
IRGM	5q33.1	0.07543	0.141146	0.215468
NME9	3q22.3	0.075424	0.141181	0.215506
MCCC1	3q27.1	-0.07542	0.141209	0.215521
LYZL4	3p22.1	-0.07542	0.141213	0.215521
HIPK4	19q13.2	0.0754	0.141306	0.215648
OR9A2	7q34	-0.0754	0.14132	0.21565
EXOC1	4q12	0.075394	0.141335	0.21565
CARMN	5q32	0.075393	0.141341	0.21565
CSRP3	11p15.1	-0.07539	0.141357	0.215659
MGAT5B	17q25.2	0.075383	0.141396	0.215703
NMT2	10p13	-0.07537	0.141482	0.215818
KRTAP10-9	21q22.3	-0.07535	0.141545	0.215884
HIST1H2BE	6p22.2	-0.07535	0.141547	0.215884
SLC31A2	9q32	0.07535	0.14157	0.215902
MYBPC3	11p11.2	-0.07531	0.14179	0.216221
FAM166A	9q34.3	-0.07531	0.141803	0.216225
ARHGEF5	7q35	0.075304	0.141816	0.216227
LOC285847	6p21.31	-0.07529	0.141871	0.216295
SUMO1P1	20q13.2	0.075287	0.141905	0.216319
TPCN1	12q24.13	0.075286	0.141908	0.216319
TMEM67	8q22.1	-0.07528	0.14196	0.216381
MGC16142	-	-0.07527	0.142009	0.216439
PAGE4	Xp11.23	-0.07526	0.142042	0.216474
NCOR1P1	20p11.1	-0.07526	0.142066	0.216485
CGB7	19q13.33	-0.07526	0.142071	0.216485
CRADD	12q22	0.075241	0.142151	0.216589
SLC6A7	5q32	-0.07523	0.142208	0.21666
CPE	4q32.3	0.075228	0.142219	0.216661
DCTD	4q35.1	-0.07522	0.142273	0.216722
BTBD11	12q23.3	0.075216	0.142281	0.216722
REEP4	8p21.3	-0.0752	0.142358	0.216823
HNRNPDL	4q21.22	-0.07518	0.14245	0.216933
RNASEH1	2p25.3	-0.07518	0.142452	0.216933
ANXA2R	5p12	0.07515	0.142632	0.217174
PWP1	12q23.3	-0.07515	0.142632	0.217174
EPB41L1	20q11.23	-0.07513	0.142727	0.217303
LINC00620	3p25.1	0.075115	0.142819	0.217425
ELOA	1p36.11	0.075108	0.142859	0.21747
EMC7	15q14	0.075085	0.142979	0.217636
CAPZA2	7q31.2	0.075068	0.143072	0.217761
KRTAP21-2	21q22.11	0.075031	0.143271	0.218046
AMH	19p13.3	0.075029	0.143281	0.218046
TSKS	19q13.33	0.075025	0.143301	0.218055
KCNK10	14q31.3	0.075024	0.143309	0.218055
MYH7	14q11.2	0.07502	0.143329	0.21807

FKBP6	7q11.23	-0.075	0.143443	0.218227
RPTN	1q21.3	0.07497	0.143593	0.218439
KIAA0319L	1p34.3	0.074952	0.143693	0.218573
EDN3	20q13.32	0.074937	0.14377	0.218675
VARS	6p21.33	-0.07493	0.143817	0.21873
HCRT	17q21.2	-0.07491	0.143926	0.218878
KIFC3	16q21	0.074896	0.143991	0.21896
OGFOD1	16q13	-0.07487	0.144158	0.219198
CYCSP52	1q23.1	0.074848	0.144248	0.219318
CPNE6	14q11.2	-0.07485	0.144266	0.219329
CHMP4C	8q21.13	-0.07484	0.144319	0.219393
NBPF22P	5q14.3	0.074748	0.144789	0.22009
CFAP65	2q35	-0.07472	0.144913	0.220262
ZNF519	18p11.21	-0.07472	0.144935	0.220278
PIGZ	3q29	0.074715	0.144967	0.220309
CFAP57	1p34.2	0.074713	0.144977	0.220309
ANGPTL4	19p13.2	0.07469	0.145103	0.220484
TAPBP	6p21.32	-0.07469	0.145123	0.220498
ZNF670	1q44	0.074674	0.145188	0.22058
PEG3-AS1	19q13.43	0.074667	0.145228	0.220624
TTY10	Yq11.223	-0.07463	0.145414	0.22089
TPI1P3	6q22.1	-0.07463	0.145433	0.220901
UCN2	3p21.31	-0.07459	0.14563	0.221185
SPRR2B	1q21.3	-0.07457	0.145729	0.221318
PLAGL1	6q24.2	0.07454	0.145911	0.221576
STAT6	12q13.3	0.074517	0.14604	0.221756
CNOT11	2q11.2	-0.07451	0.146051	0.221756
PCDHB19P	5q31.3	0.074483	0.146221	0.221998
IL36B	2q14.1	0.074479	0.146246	0.222018
HCN1	5p12	0.074474	0.14627	0.222039
ZNF662	3p22.1	0.07445	0.146401	0.222207
PTPRO	12p12.3 12p13-p12	-0.07445	0.146408	0.222207
NPAS4	11q13.2	0.074448	0.146415	0.222207
KRT26	17q21.2	0.074423	0.146546	0.22239
NKX6-2	10q26.3	0.074404	0.146655	0.222534
FTX	Xq13.2	-0.0744	0.146668	0.222534
TMEM35A	Xq22.1	0.0744	0.146674	0.222534
CRH	8q13.1	-0.07439	0.146745	0.22261
LINC00494	20q13.13	0.074387	0.146747	0.22261
TTK	6q14.1	-0.07438	0.146763	0.222618
MED18	1p35.3	-0.07438	0.146792	0.222633
APOA5	11q23.3	-0.07438	0.146795	0.222633
RNASE13	14q11.2	0.074374	0.146816	0.222647
SIAH3	13q14.13	0.074363	0.146876	0.222722
RAD51AP1	12p13.32	-0.07431	0.147173	0.223155
DGKD	2q37.1	-0.0743	0.147208	0.223174
ANKRD24	19p13.3	0.074301	0.147212	0.223174
MRGPRG-AS1	11p15.4	-0.0743	0.147219	0.223174
SLC35C1	11p11.2	0.074294	0.147252	0.223207
SLC35F4	14q22.3-q23.1	0.074286	0.147293	0.223253
INMT	7p14.3	0.074262	0.147425	0.223435
SCARNA27	6p24.3	0.074251	0.147488	0.223515
HRH3	20q13.33	-0.07424	0.147546	0.223586
LRR1	14q21.3	-0.07423	0.147615	0.223667
MYO15B	17q25.1	-0.07423	0.147622	0.223667
CCDC9B	15q15.1	0.074207	0.147728	0.223811
ATG14	14q22.3	0.074194	0.147799	0.223901
LOC641367	19p12	0.074164	0.147965	0.224136

MDC1	6p21.33	0.074151	0.148033	0.224221
SLC45A3	1q32.1	0.074143	0.148076	0.224259
PWWP3B	Xq22.3	0.074143	0.14808	0.224259
MAGEA8	Xq28	0.074094	0.148344	0.224631
LHX5	12q24.13	-0.07409	0.148356	0.224631
LINC00284	13q14.11	0.074092	0.14836	0.224631
PRCD	17q25.1	-0.07407	0.148478	0.224793
INKA1	3p21.31	-0.07406	0.148528	0.224853
ACOT9	Xp22.11	-0.07406	0.148544	0.22486
SLC9C1	3q13.2	0.074055	0.148562	0.22487
PTGES	9q34.11	-0.07405	0.148605	0.224918
UBE2R2	9p13.3	-0.07403	0.148685	0.225022
ZNF213	16p13.3	-0.074	0.148856	0.225264
RDH10	8q21.11	0.073996	0.148883	0.225288
ZNF14	19p13.11	-0.07398	0.148984	0.225423
MED17	11q21	0.073974	0.149009	0.225444
IL17D	13q12.11	-0.07396	0.14906	0.225504
CYP4V2	4q35.1-q35.2	0.073928	0.149258	0.22578
LINC02447	4p16.1	-0.07393	0.149265	0.22578
UBE2E2	3p24.3	0.073908	0.149373	0.225917
HHLA2	3q13.13	0.073907	0.149378	0.225917
NAA11	4q21.21	-0.07389	0.149471	0.22604
HNRNPH2	Xq22.1	0.073888	0.149483	0.226041
RAET1G	6q25.1	0.073879	0.149529	0.226093
PCDHGA11	5q31.3	0.073872	0.149568	0.226137
IFI44	1p31.1	0.073851	0.149688	0.2263
SOX17	8q11.23	0.073845	0.14972	0.226331
WFDC5	20q13.12	0.073839	0.149753	0.226365
ASB1	2q37.3	0.073815	0.149886	0.226549
CYP51A1	7q21.2	0.073797	0.149985	0.22668
RHCE	1p36.11	-0.0738	0.149995	0.22668
MRGPRX1	11p15.1 11	0.073768	0.150143	0.226884
CRP	1q23.2	0.073767	0.150153	0.226884
PIP	7q34	0.073748	0.150256	0.227021
THY1	11q23.3	0.07374	0.150299	0.22707
UBE4A	11q23.3	0.073734	0.150336	0.227109
DDX52	17q12	-0.07373	0.150348	0.227109
SNCB	5q35.2	0.073716	0.150432	0.227219
PPP2R2C	4p16.1	-0.07371	0.150466	0.227254
HAPLN2	1q23.1	-0.07368	0.150655	0.227522
KIAA0408	6q22.33	0.073654	0.150778	0.227691
SPATA31A3	9q21.11	-0.07365	0.150814	0.227728
OR10K2	1q23.1	0.073637	0.150873	0.2278
SYAP1	Xp22.2	-0.07362	0.150972	0.227915
DNAJC11	1p36.31	-0.07362	0.150972	0.227915
GNRHR2	1q21.1	-0.07361	0.150999	0.227938
TMEM59L	19p13.11	0.073603	0.151062	0.228016
INSL4	9p24.1	0.073598	0.15109	0.228041
C1QTNF12	1p36.33	-0.07359	0.151152	0.228118
CNDP1	18q22.3	-0.07357	0.151254	0.228255
CXORF66	Xq27.1	-0.07353	0.151465	0.228555
OTOR	20p12.1	0.073512	0.151568	0.228694
TRPV6	7q34	0.073506	0.151602	0.228727
PTH2R	2q34	0.073501	0.151632	0.228755
USP19	3p21.31	0.073489	0.151695	0.228833
MMP10	11q22.2	0.073487	0.151707	0.228834
CYP1A2	15q24.1	0.073474	0.151782	0.228931
TIGD6	5q32	0.073456	0.151884	0.229067



CAMP	3p21.31	0.073454	0.151895	0.229067
SPESP1	15q23	0.073442	0.151961	0.229149
UBE2K	4p14	0.07344	0.151974	0.229151
RNF13	3q25.1	0.073432	0.152015	0.229196
DMRT2	9p24.3	0.073423	0.152067	0.229238
TRMT6	20p12.3	-0.07342	0.152074	0.229238
PADI4	1p36.13	0.073421	0.152077	0.229238
FTHL17	Xp21.2	-0.07339	0.15224	0.229465
IL22	12q15	-0.07339	0.152261	0.22948
CA10	17q21.33-q22	0.073348	0.152487	0.229797
HTRA1	10q26.13	0.073345	0.152502	0.229797
SDHAP1	3q29	-0.07334	0.152506	0.229797
KRT76	12q13.13	-0.07334	0.152534	0.229823
FAM111B	11q12.1	0.073327	0.152607	0.229915
GP2	16p12.3	0.073321	0.152638	0.229945
FOXC1	6p25.3	0.073312	0.15269	0.230006
CRYZ	1p31.1	0.073295	0.152785	0.230131
CEACAM3	19q13.2	0.073288	0.152824	0.230169
ZFP62	5q35.3	0.073286	0.152833	0.230169
NKX2-1	14q13.3	0.07321	0.153262	0.230797
C2ORF78	2p13.1	0.073206	0.153283	0.230813
DYNC111	7q21.3	0.07319	0.153374	0.230932
SMIM19	8p11.21	-0.07318	0.153413	0.230973
MTFMT	15q22.31	0.073163	0.153528	0.231129
USP49	6p21.1	0.073157	0.153563	0.231164
RTCA	1p21.2	-0.07314	0.153647	0.231273
KRT77	12q13.13	0.073136	0.153681	0.231307
XPNPEP3	22q13.2	-0.07312	0.153747	0.231384
TM2D1	1p31.3	-0.07312	0.153755	0.231384
TMEM231	16q23.1	-0.07312	0.153783	0.231409
TLCD5	11q23.3	0.073081	0.153988	0.231699
CXCR6	3p21.31	0.073077	0.154014	0.2317
FBXO10	9p13.2	-0.07308	0.154019	0.2317
INSYN2A	10q26.2	0.073075	0.154023	0.2317
SYT5	19q13.42 11p	0.073041	0.154217	0.231975
APEX1	14q11.2	-0.07301	0.154375	0.232194
GOLGA8DP	15q11.2	-0.07299	0.154531	0.232412
TEX101	19q13.31	0.072971	0.154609	0.232512
ARSG	17q24.2	0.072949	0.154736	0.232684
TBC1D3G	17q12	-0.07294	0.154785	0.232741
POLR2J2	7q22.1	-0.07293	0.154847	0.232816
MLC1	22q13.33	0.072928	0.154858	0.232816
ATP5F1B	12q13.3	0.072916	0.154925	0.232899
TENT5D	Xq21.1	0.072912	0.154948	0.232903
NFXL1	4p12	0.072911	0.154951	0.232903
FETUB	3q27.3	0.072861	0.155233	0.23331
GPRC6A	6q22.1	0.072838	0.155368	0.233496
NAALADL2	3q26.31	0.072787	0.155656	0.23391
GTSE1	22q13.31	-0.07278	0.155711	0.233975
PARP2	14q11.2	-0.07276	0.155788	0.234074
SNX32	11q13.1	-0.07275	0.155869	0.234178
LINC00314	21q21.3	-0.07271	0.156109	0.234508
MAP2K7	19p13.2	-0.07271	0.156112	0.234508
DLX5	7q21.3	0.072695	0.156183	0.234597
AOC1	7q36.1	0.072681	0.156261	0.234696
FMO4	1q24.3	0.072677	0.156282	0.23471
C14ORF39	14q23.1	0.072659	0.156387	0.234851
CELA1	12q13.13	0.07261	0.156666	0.235252

SP7	12q13.13	0.072599	0.156731	0.235331
GTF2E2	8p12	-0.07258	0.156824	0.235453
SLC25A13	7q21.3	-0.07257	0.156888	0.235532
SAMD7	3q26.2	0.072565	0.156928	0.235562
LOC650293	4p16.1	-0.07256	0.156932	0.235562
FAM186B	12q13.12	-0.07255	0.157033	0.235682
TEX15	8p12	0.072546	0.157035	0.235682
LINC00294	11p13	0.072528	0.157135	0.235814
ACTA1	1q42.13	-0.07252	0.157207	0.235905
PRAMEF1	1p36.21	0.07251	0.157242	0.235922
CCDC88B	11q13.1	-0.07251	0.157242	0.235922
LRRC27	10q26.3	-0.07249	0.15735	0.236066
CIZ1	9q34.11	-0.07245	0.157607	0.236434
ANKRD42	11q14.1	0.072437	0.157663	0.2365
PI3	20q13.12	0.072416	0.157779	0.236657
TAC1	7q21.3	0.072404	0.15785	0.236746
CDKAL1	6p22.3	-0.07239	0.157947	0.236874
MEPE	4q22.1	-0.07238	0.158001	0.236931
TMEM192	4q32.3	-0.07238	0.158009	0.236931
INTS4P1	7q11.21	0.072367	0.158062	0.236992
CFHR4	1q31.3	-0.07236	0.158092	0.237019
ZMYM5	13q12.11	-0.07233	0.158299	0.237312
MATN1	1p35.2	-0.07232	0.158348	0.237368
POC1B	12q21.33	0.072281	0.158561	0.237669
C3ORF49	3p14.1	-0.07227	0.158598	0.237689
STAG3L1	7q11.23	0.072272	0.15861	0.237689
HTRA3	4p16.1	0.072271	0.158617	0.237689
TSPAN18	11p11.2	0.07227	0.158622	0.237689
TWISTNB	7p21.1	-0.07224	0.158775	0.237888
OR5V1	6p22.1	0.072243	0.158778	0.237888
LRRC73	6p21.1	0.072236	0.158822	0.237936
RAB6B	3q22.1	0.072227	0.158872	0.237993
RPS6KB1	17q23.1	0.072197	0.159047	0.238238
CAPS2	12q21.1-q21.2	-0.07217	0.159206	0.238458
DMPK	19q13.32	0.072131	0.159427	0.23877
TBXA2R	19p13.3	0.072109	0.159553	0.238941
KCNMB3	3q26.32	-0.0721	0.159621	0.239026
TBC1D4	13q22.2	-0.07208	0.159706	0.239136
LY6H	8q24.3	0.072072	0.159767	0.239208
SAA2	11p15.1	-0.07206	0.159811	0.239256
PCGF3	4p16.3	-0.07204	0.159935	0.239425
DAPK3	19p13.3	-0.07204	0.15995	0.239429
KCTD18	2q33.1	0.072017	0.160091	0.239621
LHFPL3-AS2	7q22.2-q22.3	0.072001	0.160184	0.239743
LLPH	12q14.3	-0.072	0.160206	0.239758
TBX10	11q13.2	-0.07199	0.160257	0.239817
CA11	19q13.33	-0.07198	0.160282	0.239837
SRP14	15q15.1	0.071977	0.160321	0.239877
SULT6B1	2p22.2	-0.07197	0.160368	0.239928
LINC00950	9p13.3	0.071963	0.160403	0.239963
DEGS1	1q42.11	0.071949	0.160483	0.240065
HLA-DRB1	6p21.32	0.071947	0.160495	0.240066
MANSC1	12p13.2	0.071928	0.16061	0.240219
RGS9BP	19q13.11	-0.07192	0.160632	0.240234
GTF3C1	16p12.1	0.07191	0.160715	0.240341
ZNF596	8p23.3	0.071868	0.160956	0.240684
COX7B2	4p12	-0.07186	0.161002	0.240734
ZNF99	19p12	0.071852	0.161051	0.240789

KISS1R	19p13.3	-0.07184	0.161144	0.240909
CITED1	Xq13.1	-0.07183	0.161155	0.240909
OR10A6	11p15.4	-0.07183	0.161173	0.240917
HSFY1P1	22q11.1	0.071779	0.161481	0.24135
SLC36A2	5q33.1	-0.07178	0.161493	0.24135
LINC02159	5q34	-0.07178	0.161498	0.24135
OR52N4	11p15.4	0.071762	0.161575	0.241446
SLURP1	8q24.3	-0.07175	0.161649	0.241538
TUBB	6p21.33	-0.07174	0.161732	0.241645
KDELR2	7p22.1	-0.07166	0.162194	0.242316
DUSP18	22q12.2	0.071649	0.16224	0.242368
AP5B1	11q13.1	0.071646	0.162259	0.242378
STXBP1	9q34.11	0.071624	0.162387	0.242551
APOL3	22q12.3	0.071617	0.162431	0.242599
CSMD3	8q23.3	0.071613	0.162451	0.242611
USP32P2	17p11.2	0.071608	0.16248	0.242636
FLJ37201	10q23.31	-0.07158	0.162618	0.242824
SELENOM	22q12.2	-0.07158	0.162652	0.242856
TFE3	Xp11.23	-0.07156	0.162789	0.243042
ZNF486	19p12	0.071546	0.162846	0.243109
TCF23	2p23.3	0.071544	0.162862	0.243115
RGS4	1q23.3	0.071515	0.163032	0.243352
CDC14B	9q22.32-q22.33	0.071501	0.16311	0.243449
FGFR3	4p16.3	-0.07148	0.163251	0.243642
RBAK	7p22.1	0.071467	0.163313	0.243716
ATXN7L3B	12q21.1	0.071462	0.163341	0.24374
LINC01959	5q31.1	-0.07143	0.163552	0.244036
ARL8B	3p26.1	0.071421	0.163587	0.24407
LOXL3	2p13.1	0.071413	0.163634	0.244122
GSDMC	8q24.21	0.071406	0.163676	0.244166
OR6C3	12q13.2	-0.07139	0.163742	0.244248
SLC38A8	16q23.3	-0.07138	0.163807	0.244326
APOE	19q13.32	0.071366	0.16391	0.244462
SAP30	4q34.1	-0.07136	0.163952	0.244506
MTMR11	1q21.2	0.071332	0.16411	0.244696
SLC22A20P	11q13.1	0.071332	0.164114	0.244696
DEDD2	19q13.2	-0.07133	0.164127	0.244696
DPH1	17p13.3	-0.07133	0.164128	0.244696
LIPN	10q23.31	0.071297	0.164316	0.244958
TCTN2	12q24.31	0.071284	0.164394	0.245055
NADK2	5p13.2	0.07125	0.164596	0.245338
GPR162	12p13.31	0.071242	0.164646	0.245394
TERB1	16q22.1	-0.07124	0.164678	0.245424
AVIL	12q14.1	0.071222	0.164767	0.24552
CEP152	15q21.1	0.071222	0.164767	0.24552
WFDC13	20q13.12	-0.07122	0.16479	0.245536
ELP3	8p21.1	0.071213	0.164821	0.245564
MCTS2P	20q11.21	-0.0712	0.164876	0.245628
RCVRN	17p13.1	0.071195	0.164924	0.245681
XYLB	3p22.2	-0.07116	0.165153	0.246
HNRNPF	10q11.21	0.071155	0.165163	0.246
SLC6A12	12p13.33	0.071151	0.165189	0.246021
CCDC15	11q24.2	0.071135	0.16528	0.246138
HS3ST6	16p13.3	0.07113	0.165312	0.246167
GTPBP2	6p21.1	-0.07111	0.165459	0.246368
KCNIP4	4p15.31-p15.2	-0.07108	0.165587	0.24654
PLSCR3	17p13.1	0.071081	0.165605	0.246548
PITPNM1	11q13.2	0.071062	0.165717	0.246697

OR52K2	11p15.4	0.071026	0.165934	0.247001
APOBEC2	6p21.1	-0.07102	0.16597	0.247037
HMGNA4	6p22.2	-0.07101	0.166049	0.247137
MERTK	2q13	0.070993	0.166129	0.247237
TYMS	18p11.32	0.070974	0.166244	0.247389
LYSMD4	15q26.3	0.070966	0.166294	0.247446
HYAL4	7q31.32	0.070958	0.16634	0.247496
SOX2	3q26.33	0.070934	0.166483	0.24769
WWC1	5q34	0.070892	0.166738	0.248051
KRT27	17q21.2	0.070845	0.167014	0.248443
FAM24A	10q26.13	-0.07081	0.167253	0.24878
STAT1	2q32.2	0.070801	0.167283	0.248807
CILP2	19p13.11	-0.0708	0.167314	0.248835
NPBWR1	8q11.23	0.070793	0.16733	0.248839
NRIP2	12p13.33	0.070766	0.167489	0.249058
PLGRKT	9p24.1	-0.07075	0.167583	0.249178
PDCD10	3q26.1	0.070709	0.167834	0.249533
OPN1SW	7q32.1	-0.0707	0.16788	0.249583
NDFIP2	13q31.1	-0.07066	0.168139	0.24995
HMHB1	5q31.3	-0.07064	0.168222	0.250055
CDH8	16q21	0.070633	0.168294	0.250143
H1FNT	12q13.11	0.070594	0.168529	0.250474
POU2F1	1q24.2	0.070586	0.168579	0.250529
ZNF672	1q44	0.07058	0.168615	0.250565
CCDC177	14q24.1	0.070561	0.168727	0.250713
FABP5P3	7q36.1	-0.07055	0.168767	0.250753
CCSER1	4q22.1	0.070522	0.168964	0.251028
ZBTB26	9q33.2	0.070518	0.168991	0.251049
PPP1R3E	14q11.2	-0.0705	0.16908	0.251144
ARMCX6	Xq22.1	-0.0705	0.169081	0.251144
TAL2	9q31.2	-0.07048	0.169222	0.251335
AMMECR1L	2q14.3	0.070477	0.169237	0.25134
SPSB1	1p36.22	0.07046	0.169339	0.251472
ANKRD65	1p36.33	0.070453	0.169384	0.25152
ZNF853	7p22.1	-0.07045	0.16942	0.251555
NKX2-4	20p11.22	-0.07041	0.169665	0.251899
ZFAND3	6p21.2	0.070402	0.169693	0.251924
ZNF101	19p13.11	-0.07039	0.169743	0.251979
CCL2	17q12	0.070388	0.169778	0.252004
ZEB1-AS1	10p11.22	0.070387	0.169786	0.252004
OR10T2	1q23.1	0.070385	0.169798	0.252004
PPP1R9B	17q21.33	-0.07034	0.170057	0.25237
OR10G2	14q11.2	0.070339	0.170074	0.252377
RBM1A1	Yq11.223	0.070311	0.17025	0.252619
C20ORF144	20q11.22	-0.0703	0.170291	0.252661
SLCO1B3	12p12.2	0.07027	0.170495	0.252945
NPY	7p15.3	0.070267	0.170516	0.252958
GLCCI1	7p21.3	0.070264	0.170535	0.252967
PRMT5	14q11.2	0.070262	0.170548	0.252967
CATSPER3	5q31.1	-0.07026	0.170566	0.252976
TRIM78P	11p15	-0.07025	0.17061	0.253021
KCNN1	19p13.11	0.070228	0.170755	0.253218
NETO1	18q22.3	0.070226	0.170768	0.253218
SLC39A10	2q32.3	0.070176	0.17107	0.253648
CCDC9	19q13.32	-0.07016	0.171163	0.253767
MYBPC1	12q23.2	0.070155	0.1712	0.253802
PCDHGB2	5q31.3	0.070136	0.171317	0.253957
DDR1G1	20p13	-0.07012	0.171385	0.254039

ESM1	5q11.2	0.070106	0.171498	0.254188
MSL1	17q21.1	0.070103	0.171517	0.254197
TRIM77	11q14.3	-0.0701	0.17153	0.254198
ABCG2	4q22.1	0.070098	0.171548	0.254205
SLC45A1	1p36.23	0.070085	0.171629	0.254307
PPCS	1p34.2	-0.07008	0.171659	0.254333
CAPN3	15q15.1	-0.07007	0.171695	0.254367
SH2D3A	19p13.3	-0.07007	0.171746	0.25441
MAGEA2	Xq28	-0.07007	0.171749	0.25441
CACNG1	17q24.2	-0.07004	0.171927	0.254655
PGLYRP3	1q21.3	0.069987	0.172228	0.255081
RYR2	1q43	0.069985	0.172243	0.255085
RIOX1	14q24.3	-0.06997	0.172346	0.255216
DEGS2	14q32.2	0.069966	0.172357	0.255216
DHRS7	14q23.1	0.069958	0.172408	0.255273
CLEC4GP1	19p13.2	-0.06995	0.172429	0.255284
MYBL1	8q13.1	-0.06995	0.172442	0.255284
C8A	1p32.2	-0.06995	0.172474	0.255313
CAPN11	6p21.1	-0.06993	0.172585	0.255458
GRHL3	1p36.11	-0.06992	0.172651	0.255538
GSTTP2	22q11.23	0.069907	0.17272	0.25562
FGF12	3q28-q29	0.069903	0.172748	0.255643
UBE2L6	11q12.1	-0.0699	0.172761	0.255644
LDLRAP1	1p36.11	-0.06988	0.172883	0.255805
PLCB1	20p12.3	0.069855	0.173045	0.256011
NIPAL4	5q33.3	0.069854	0.173047	0.256011
PKIG	20q13.12	-0.06985	0.173061	0.256012
CASTOR1	22q12.2	0.069829	0.1732	0.256199
FBXO7	22q12.3	-0.06982	0.173257	0.256265
C11ORF88	11q23.1	0.069815	0.173289	0.256292
OR56A4	11p15.4	-0.06979	0.173421	0.256468
LCN6	9q34.3	0.069762	0.173614	0.256736
EIF4A2	3q27.3	-0.06976	0.17364	0.256755
CLDND1	3q11.2	0.069751	0.173681	0.256797
HKDC1	10q22.1	-0.06973	0.173839	0.257011
EGFLAM	5p13.2-p13.1	0.069714	0.173912	0.2571
ESRRB	14q24.3	0.06966	0.17425	0.257576
PHC1	12p13.31	0.069658	0.17426	0.257576
CYP2F1	19q13.2	0.069633	0.174416	0.257788
SLC6A2	16q12.2	-0.0696	0.174606	0.25805
LOC202181	5q35.3	0.069596	0.174646	0.25809
DIAPH2	Xq21.33	0.069591	0.174677	0.258116
HSP90B1	12q23.3	0.069586	0.174707	0.258127
BRK1	3p25.3	-0.06959	0.17471	0.258127
PGLYRP1	19q13.32	-0.06958	0.174759	0.25818
DCHS2	4q31.3	0.069575	0.174774	0.258184
ANXA8L1	10q11.22	0.069572	0.174794	0.258195
NRN1	6p25.1	0.069554	0.174907	0.258335
CELSR3	3p21.31	-0.06955	0.174915	0.258335
PRB1	12p13.2	0.069543	0.174975	0.258405
CCDC54	3q13.12	0.069538	0.175007	0.258433
MROH2B	5p13.1	0.069521	0.175108	0.258562
KNTC1	12q24.31	-0.06952	0.175133	0.258571
CNTROB	17p13.1	0.069516	0.17514	0.258571
SDC1	2p24.1	-0.06951	0.175157	0.258578
CLCC1	1p13.3	0.06949	0.175302	0.258773
SEMA4C	2q11.2	0.069485	0.175337	0.258805
SARM1	17q11.2	0.069467	0.175445	0.258946

LINC00606	3p25.3	-0.06946	0.175518	0.258996
PPBPP1	4q13.3	-0.06946	0.175518	0.258996
DEFB123	20q11.21	-0.06946	0.175518	0.258996
CDK5RAP2	9q33.2	0.069442	0.175602	0.259101
RASA4CP	7p13	-0.06944	0.175624	0.259114
PSMD11	17q11.2	-0.06943	0.175654	0.259139
HASPIN	17p13.2	0.069432	0.175667	0.259139
TAS2R42	12p13.2	-0.06943	0.1757	0.259164
TMLHE	Xq28	-0.06942	0.17571	0.259164
ABCG5	2p21	0.069411	0.175797	0.259274
F2RL2	5q13.3	0.069398	0.175876	0.259357
MIR1-1HG-AS1	20q13.33	0.069398	0.175879	0.259357
THG1L	5q33.3	-0.06939	0.175931	0.259415
DGCR8	22q11.21	-0.06937	0.176075	0.259608
RASSF9	12q21.31	-0.06936	0.176116	0.25965
CA9	9p13.3	0.069351	0.176168	0.259707
KCTD8	4p13	0.069338	0.176251	0.25981
CRLF3	17q11.2	0.069333	0.176286	0.259843
RNASE10	14q11.2	-0.06933	0.176309	0.259858
LINC00626	1q24.2	0.069322	0.176349	0.259885
MID1	Xp22.2	0.069322	0.176354	0.259885
CDCP2	1p32.3	0.069303	0.176469	0.260036
GINS4	8p11.21	-0.06929	0.176576	0.260174
ZNF2	2q11.1	-0.06928	0.176628	0.260232
INCA1	17p13.2	-0.06922	0.177018	0.260786
OTC	Xp11.4	0.069212	0.17704	0.260801
A4GNT	3q22.3	0.069208	0.177064	0.260816
RGL4	22q11.23	0.069197	0.177137	0.260905
POU4F2	4q31.22	0.069194	0.177154	0.260911
MAP3K19	2q21.3	-0.06918	0.177257	0.261042
HBB	11p15.4	0.069172	0.177294	0.261078
ACOX1	17q25.1	0.06917	0.177307	0.261079
ISOC1	5q23.3	-0.06914	0.177518	0.26137
MAGEA1	Xq28	-0.06912	0.177591	0.261458
NRGN	11q24.2	-0.06912	0.177639	0.261509
FAAH2	Xp11.21	-0.06907	0.177961	0.261964
ACVR1C	2q24.1	0.069053	0.178041	0.262063
PCDHB1	5q31.3	0.06905	0.178062	0.262074
C4ORF17	4q23	-0.069	0.178348	0.262476
DEFB4A	8p23.1	-0.069	0.178388	0.262516
OR13C4	9q31.1	0.068991	0.178431	0.262556
SPAG6	10p12.2	0.068989	0.178442	0.262556
SSX3	Xp11.23	-0.06898	0.178513	0.262642
ZNF816	19q13.41	0.068945	0.178723	0.262931
ZC3H10	12q13.2	0.068934	0.178789	0.26301
LPA	6q25.3-q26	0.068931	0.178809	0.263019
PAIP2	5q31.2	-0.06892	0.17889	0.263119
XIRP1	3p22.2	0.068911	0.178938	0.263171
GRP	18q21.32	0.0689	0.179009	0.263255
MESTIT1	7q32.2	0.068883	0.179116	0.263393
CYP4A22	1p33	-0.06887	0.179185	0.263475
WDR61	15q25.1	0.068861	0.179255	0.263559
GKN1	2p13.3	-0.06885	0.179314	0.263626
CCDC114	19q13.33	-0.06884	0.179368	0.263687
GNPAT	1q42.2	0.068833	0.179432	0.263761
OBSCN	1q42.13	-0.06883	0.179447	0.263764
TTY1B	Yp11.2	-0.06882	0.179499	0.263822
RBM18	9q33.2	0.068818	0.179525	0.26384

HSPA7	1q23.3	0.068785	0.179736	0.264125
DHRS4L2	14q11.2	-0.06878	0.179756	0.264125
ENPP3	6q23.2	0.06878	0.179766	0.264125
IWS1	2q14.3	0.068776	0.179792	0.264125
RAB13	1q21.3	0.068775	0.179798	0.264125
PLA2G2A	1p36.13	0.068775	0.179798	0.264125
CLTRN	Xp22.2	-0.06875	0.179932	0.264303
TBL1X	Xp22.31-p22.2	0.068744	0.179995	0.264358
HCST	19q13.12	0.068744	0.179996	0.264358
TREM2	6p21.1	0.068732	0.18007	0.264447
H3F3A	1q42.12	-0.0687	0.180301	0.264767
HS3ST4	16p12.1	-0.06869	0.180337	0.2648
PATZ1	22q12.2	-0.06867	0.180436	0.264927
LINC00965	8p23.1	0.068671	0.18046	0.264942
SHISA7	19q13.42	0.068661	0.180521	0.265012
SPATS1	6p21.1	0.068649	0.180601	0.265104
METAP1	4q23	-0.06865	0.18061	0.265104
LOC374443	12p13.31	0.068638	0.180671	0.265175
TSNAX-DISC1	1q42.2	-0.06862	0.180803	0.265348
TMC7	16p12.3	0.068614	0.180822	0.265356
VIRMA	8q22.1	0.068594	0.180948	0.265522
NGB	14q24.3	0.068591	0.18097	0.265535
LOC644936	5q14.1	0.068586	0.180997	0.265555
ASS1	9q34.11	-0.06856	0.181177	0.265791
LINC00518	6p24.3	-0.06856	0.181187	0.265791
SLC66A2	18q23	-0.06855	0.181198	0.265791
PRXL2A	10q23.1	-0.06853	0.18136	0.266009
RPEL1	10q24.33	0.068517	0.181441	0.266102
KCNS2	8q22.2	0.068515	0.18145	0.266102
DNAJC16	1p36.21	0.068509	0.181492	0.266145
GLMN	1p22.1	-0.06845	0.181854	0.266656
IGFBPL1	9p13.1	0.068441	0.181923	0.266738
PAN3	13q12.2	-0.06843	0.182004	0.266837
ASAH2	10q11.23	0.068377	0.182339	0.267296
FGL1	8p22	0.068376	0.182343	0.267296
LMBRD1	6q13	0.06831	0.182769	0.267899
RFK	9q21.13	0.068305	0.1828	0.267907
LRRC4B	19q13.33	0.068305	0.1828	0.267907
GALNT16	14q24.1	0.068298	0.182843	0.26795
CCDC92	12q24.31	-0.06827	0.183022	0.268192
HTR3D	3q27.1	-0.06823	0.18325	0.268485
MME	3q25.2	-0.06823	0.183254	0.268485
ENPP5	6p21.1	0.068232	0.18327	0.268485
PRM1	16p13.13	-0.06823	0.183276	0.268485
TGM2	20q11.23	-0.06821	0.183423	0.268682
PWAR1	15q11.2	-0.0682	0.183449	0.2687
AASDHPPT	11q22.3	-0.06819	0.183558	0.26884
ZNF441	19p13.2	0.068182	0.183587	0.268863
MAP7D1	1p34.3	0.068176	0.18363	0.268906
AASS	7q31.32	0.068138	0.18387	0.269238
CIART	1q21.2	-0.06813	0.183933	0.26931
TTI2	8p12	0.068118	0.183999	0.269388
TRIM13	13q14.2	-0.06811	0.184074	0.269478
MT4	16q13	-0.0681	0.184141	0.269556
EHMT1	9q34.3	0.068065	0.184345	0.269835
PRAMEF10	1p36.21	-0.06806	0.184364	0.269843
VPREB1	22q11.22	0.068054	0.184413	0.269894
CHIT1	1q32.1	0.068043	0.184486	0.269982

ZNF735	7q11.21	-0.06804	0.184531	0.270028
TERF1	8q21.11	0.068023	0.184617	0.270134
CCL14	17q12	0.068001	0.184756	0.270304
RPE	2q34	-0.068	0.18476	0.270304
KIF18A	11p14.1	-0.06797	0.184961	0.270578
TMEM230	20p13-p12.3	-0.06795	0.185056	0.270697
GPSM2	1p13.3	-0.06795	0.185101	0.270743
PLAAT2	11q12.3	-0.06793	0.185231	0.270913
POLI	18q21.2	0.06789	0.18548	0.271259
TF	3q22.1	-0.06788	0.185537	0.271321
TXNDC15	5q31.1	0.067876	0.18557	0.27135
C1ORF216	1p34.3	-0.06786	0.185662	0.271465
TREML5P	6p21.1	0.067857	0.185691	0.271487
TMPRSS2	21q22.3	0.067852	0.185722	0.271513
C15ORF62	15q15.1	-0.06785	0.18576	0.271549
RBFOX3	17q25.3	-0.06781	0.185991	0.271867
KDM2B	12q24.31	-0.06777	0.186268	0.272252
SLC66A1L	3q25.32	0.067721	0.186578	0.272685
UBE2E1	3p24.2	-0.06771	0.186622	0.272711
PGRMC2	4q28.2	0.067714	0.186623	0.272711
RBPMS	8p12	0.06771	0.186649	0.272728
C1ORF210	1p34.2	0.067673	0.186892	0.273063
LINC01734	20q12	-0.06767	0.186909	0.273069
PRDM16-DT	1p36.32	-0.06766	0.186981	0.273154
UBE2Z	17q21.32	0.067631	0.187167	0.273406
RETN	19p13.2	0.067627	0.187193	0.273424
BPIFB6	20q11.21	0.067597	0.187385	0.273684
ZER1	9q34.11	0.067591	0.187425	0.273722
AMN	14q32.32	-0.06758	0.187471	0.27377
HIST1H2BN	6p22.1	-0.06757	0.18757	0.273895
BCL7A	12q24.31	-0.06756	0.187632	0.273965
EXOC7	17q25.1	-0.06756	0.187652	0.273974
KRTAP5-10	11q13.4	-0.06754	0.187777	0.274137
ZFYVE28	4p16.3	0.067531	0.187819	0.274179
ATP1A4	1q23.2	0.067515	0.187922	0.274305
IFNA1	9p21.3	0.067513	0.187933	0.274305
CERKL	2q31.3	0.067506	0.187982	0.274356
PTPRR	12q15	0.067488	0.188104	0.274514
SSX2IP	1p22.3	-0.06748	0.188147	0.274557
ATP8B3	19p13.3	0.067459	0.18829	0.274746
KCNE3	11q13.4	-0.06745	0.188346	0.274807
VN1R1	19q13.43	-0.06744	0.188389	0.27485
RGPD8	2q14.1	0.067438	0.18843	0.274878
IGF2-AS	11p15.5	-0.06744	0.188436	0.274878
SETD3	14q32.2	0.067433	0.188462	0.274896
PITX2	4q25	-0.06742	0.188531	0.274977
DUSP26	8p12	0.06741	0.188613	0.275068
SIRPA	20p13	-0.06741	0.188629	0.275068
POU4F1	13q31.1	-0.06741	0.188634	0.275068
C6ORF141	6p12.3	-0.0674	0.188683	0.275119
CEP63	3q22.2	0.067391	0.188738	0.275179
LINC01300	8q24.3	-0.06738	0.188787	0.27523
IRF5	7q32.1	-0.06737	0.18887	0.275328
FRMPD2B	10q11.22	0.067367	0.188896	0.275328
BRI3BP	12q24.31	0.067367	0.188898	0.275328
LOC100129935	19q13.2	-0.06736	0.188909	0.275328
VPS26A	10q22.1	0.06734	0.189074	0.275536
HR	8p21.3	0.067339	0.189079	0.275536



EPB41L4B	9q31.3	0.067337	0.189095	0.275539
SYT14	1q32.2	0.067324	0.189177	0.275638
NAT8	2p13.1	-0.06731	0.189284	0.275774
LHCGR	2p16.3	-0.0673	0.189316	0.2758
PRSS58	7q34	0.067265	0.18957	0.27615
CYP2C19	10q23.33	0.067263	0.189584	0.27615
PLG	6q26	0.06726	0.1896	0.276154
ZNF621	3p22.1	0.067236	0.189759	0.276366
HYKK	15q25.1	-0.06722	0.189867	0.276503
CALHM3	10q24.33	0.067209	0.189939	0.276588
PNPLA6	19p13.2	-0.0672	0.189974	0.276618
LINC01634	22q11.21	0.06718	0.190131	0.276827
B4GALT5	20q13.13	0.067123	0.190503	0.277349
CTPS2	Xp22.2	-0.06712	0.190532	0.27737
CPSF4L	17q25.1	-0.06711	0.1906	0.277449
LDHB	12p12.1	-0.0671	0.190653	0.277506
GFRA3	5q31.2	0.067085	0.190758	0.277639
PURB	7p13	0.067029	0.191128	0.278158
SLC2A14	12p13.31	0.067026	0.191145	0.278162
PLAAT4	11q12.3	-0.06698	0.191477	0.278625
SLC30A8	8q24.11	0.06696	0.191588	0.278766
SPTBN5	15q15.1	-0.06692	0.191821	0.279064
RTRAF	14q22.1	-0.06692	0.191821	0.279064
ALG13	Xq23	-0.06691	0.19192	0.279182
ASB3	2p16.2	0.066909	0.19193	0.279182
EMP3	19q13.33	0.066893	0.192033	0.27929
LRPAP1	4p16.3	-0.06689	0.192034	0.27929
CHDH	3p21.1	-0.06689	0.192046	0.27929
SYNPO2L	10q22.2	0.066874	0.19216	0.279436
FAM27E5	17p11.2	-0.06687	0.192191	0.27946
TAS2R1	5p15.31	-0.06687	0.192211	0.279469
DBN1	5q35.3	0.066853	0.192298	0.279575
GABRB1	4p12	0.066851	0.192312	0.279575
TRA2B	3q27.2	-0.06685	0.192337	0.279591
ARHGAP27P2	17q24.2	0.066841	0.192378	0.279632
CSPG5	3p21.31	0.066827	0.192473	0.279738
FZD9	7q11.23	-0.06683	0.19248	0.279738
TRIM17	1q42.13	-0.06676	0.192893	0.280319
KLK4	19q13.41	-0.06675	0.193012	0.28046
PTGR2	14q24.3	-0.06675	0.193018	0.28046
LRRC75A	17p11.2	0.066739	0.19306	0.280494
THSD1	13q14.3	0.066738	0.19307	0.280494
C2ORF42	2p13.3	-0.06673	0.193104	0.280504
NAAA	4q21.1	0.066732	0.193104	0.280504
LRRC6	8q24.22	-0.06673	0.193145	0.280542
CCDC40	17q25.3	-0.06672	0.193187	0.280582
OR56A5	11p15.4	0.066697	0.193339	0.280784
KCNV1	8q23.2	0.06669	0.193391	0.280839
ACOT13	6p22.3	-0.06668	0.193433	0.280879
OR11H1	22q11.1	-0.06667	0.193535	0.280986
OR3A4P	17p13.3	0.066668	0.193535	0.280986
OSTF1	9q21.13	0.066662	0.193574	0.281023
ACTL7B	9q31.3	-0.06666	0.193593	0.28103
PPA2	4q24	-0.0666	0.193961	0.281543
ANGPT4	20p13	0.066597	0.194014	0.281586
PTCH2	1p34.1	0.066594	0.194029	0.281586
ANKAR	2q32.2	0.066593	0.19404	0.281586
POLR3D	8p21.3	0.066592	0.194048	0.281586

NCAPG2	7q36.3	-0.06659	0.194061	0.281586
CC2D1B	1p32.3	-0.06656	0.19425	0.28184
PRINS	10p12.1	-0.06655	0.19433	0.281936
CATIP	2q35	-0.06651	0.194628	0.282348
PCP4L1	1q23.3	0.066495	0.1947	0.282432
UNC5A	5q35.2	0.066491	0.194726	0.282449
LRRC3	21q22.3	0.066474	0.19484	0.282579
CYLC2	9q31.1	-0.06647	0.194844	0.282579
SORBS1	10q24.1	0.06646	0.194932	0.282675
DRAM2	1p13.3	-0.06646	0.194939	0.282675
ETF1	5q31.2	0.066457	0.194952	0.282675
CLDN23	8p23.1	0.066444	0.195039	0.282777
FMR1	Xq27.3	-0.06644	0.195053	0.282777
PCDHGB4	5q31.3	0.06644	0.195065	0.282777
FGF20	8p22	-0.06642	0.195192	0.282941
TSSK3	1p35.1	-0.06639	0.195426	0.28326
EDN2	1p34.2	0.066384	0.195446	0.283268
CWC27	5q12.3	-0.06635	0.195662	0.283552
LUZP4	Xq23	-0.06635	0.195671	0.283552
STXBP5L	3q13.33	0.066345	0.195706	0.283584
RAB3IL1	11q12.2-q12.3	-0.06633	0.195806	0.283707
APOL5	22q12.3	0.066327	0.195831	0.283723
RAB34	17q11.2	0.066307	0.195966	0.283898
MEGF6	1p36.32	0.066298	0.196027	0.283966
RASL12	15q22.31	0.066289	0.196089	0.284016
LAMB2P1	3p21.31	0.066287	0.196098	0.284016
LHX8	1p31.1	0.066286	0.196104	0.284016
EMC1	1p36.13	0.066265	0.196247	0.284202
RABIF	1q32.1	0.066243	0.196397	0.284395
MAGEC2	Xq27.2	-0.06624	0.196408	0.284395
SLC17A2	6p22.2	-0.06624	0.196433	0.28441
SLCO4A1-AS1	20q13.33	-0.06622	0.196522	0.284519
FARP2	2q37.3	0.066222	0.196537	0.284519
KIF6	6p21.2	-0.06616	0.196957	0.285107
CACNB3	12q13.12	0.066137	0.197118	0.285319
ARHGEF25	12q13.3	0.066133	0.197145	0.285339
RABL3	3q13.33	0.066122	0.197217	0.285422
TGFBI	5q31.1	0.066117	0.197253	0.285437
ARSK	5q15	0.066116	0.197256	0.285437
ZNF75A	16p13.3	-0.06611	0.197303	0.285484
EML6	2p16.1	-0.0661	0.197341	0.285519
GUSBP2	6p22.2	0.066099	0.197371	0.285542
SLC39A8	4q24	0.066096	0.197392	0.285552
CELA3A	1p36.12	-0.06609	0.197412	0.285556
LOC642929	9q21.11	-0.06609	0.197424	0.285556
SOX7	8p23.1	0.066085	0.197467	0.285591
TEX37	2p11.2	-0.06608	0.197477	0.285591
IL31RA	5q11.2	0.066063	0.19762	0.285778
PTPRN2	7q36.3	0.066018	0.197927	0.286201
LINC00689	7q36.3	0.065998	0.198062	0.286376
SH3BP2	4p16.3	0.065986	0.198141	0.286469
FAM120AOS	9q22.31	0.065984	0.198156	0.286469
ELFN2	22q13.1	0.065949	0.198398	0.2868
MTDH	8q22.1	0.065937	0.198475	0.286891
TNFAIP2	14q32.32	0.065934	0.198495	0.286897
P3H4	17q21.2	-0.06593	0.198509	0.286898
SPTSSA	14q13.1	0.065918	0.198608	0.28702
DCX	Xq23	0.06591	0.198662	0.287077

ICMT	1p36.31	0.065897	0.198752	0.287186
ICA1	7p21.3	-0.06589	0.198808	0.287246
ZSCAN18	19q13.43	-0.06588	0.198888	0.287342
SLC46A2	9q32	0.06586	0.199	0.287483
PABPC4	1p34.3	-0.06581	0.199345	0.287953
EGFEM1P	3q26.2	0.065809	0.199354	0.287953
PRR5L	11p13-p12	0.065805	0.199376	0.287963
CHAC1	15q15.1	-0.0658	0.199414	0.287998
DLGAP1-AS1	18p11.31	-0.0658	0.199436	0.288009
FAM71F2	7q32.1	-0.06576	0.199664	0.288317
OPRM1	6q25.2	0.065758	0.1997	0.288349
SLC16A5	17q25.1	-0.06575	0.199783	0.288438
ASIC4	2q35	-0.06574	0.199791	0.288438
NMS	2q11.2	-0.06574	0.199831	0.288476
ALDOC	17q11.2	-0.06572	0.19993	0.288598
DTX3	12q13.3	0.065718	0.199976	0.288643
GULP1	2q32.1-q32.2	0.065713	0.20001	0.288671
APC2	19p13.3	0.065708	0.200041	0.288689
BBIP1	10q25.2	-0.06571	0.200051	0.288689
SAMM50	22q13.31	-0.0657	0.200066	0.28869
MAP3K14-AS1	17q21.31	0.065699	0.200104	0.288724
SLCO1B7	12p12.2	0.065685	0.200198	0.288838
LALBA	12q13.11	-0.06567	0.200337	0.289019
TEDDM1	1q25.3	0.065657	0.200392	0.289076
POM121L8P	22q11.21	0.065652	0.200426	0.289104
OR7A5	19p13.12	0.065635	0.200543	0.289252
MATK	19p13.3	0.065621	0.200641	0.289371
TTPA	8q12.3	-0.06562	0.200654	0.289371
DKFZP586I1420	7p14.3	-0.0656	0.200767	0.289514
GRIN2B	12p13.1	0.065595	0.200817	0.289564
ALOXE3	17p13.1	0.06556	0.201059	0.289892
SRSF10	1p36.11	-0.06556	0.201086	0.28991
NDUFA4L2	12q13.3	-0.06553	0.201293	0.290189
ERI2	16p12.3	0.065503	0.201454	0.290378
CAPN12	19q13.2	-0.0655	0.201454	0.290378
MAPK9	5q35.3	0.065485	0.201579	0.290538
GLT8D1	3p21.1	-0.06548	0.201605	0.290555
LIPJ	10q23.31	0.065465	0.201717	0.290694
GAB4	22q11.1	0.065448	0.201831	0.290839
CALHM6	6q22.1	0.065445	0.201852	0.290847
SLC20A1	2q14.1	0.065441	0.20188	0.290867
SESN2	1p35.3	0.065424	0.202001	0.29102
SLC6A8	Xq28	0.065393	0.20221	0.291301
ST7-AS2	7q31.2	0.065365	0.202409	0.291566
TDRD10	1q21.3	0.065345	0.202546	0.291743
SHANK3	22q13.33	0.065329	0.202657	0.291882
MELTF	3q29	0.065312	0.202777	0.292033
MYO7A	11q13.5	-0.0653	0.202847	0.292107
HNRNPM	19p13.2	0.0653	0.202857	0.292107
BFSP2	3q22.1	0.065286	0.202954	0.292225
ALDOB	9q31.1	0.065279	0.203005	0.292261
TAGLN	11q23.3	0.065278	0.203008	0.292261
TRIM46	1q22	0.065272	0.203048	0.292298
PIK3CD-AS1	1p36.22	0.065269	0.203069	0.292307
ADCK2	7q34	-0.06527	0.203086	0.29231
UBN2	7q34	0.065246	0.20323	0.292497
ARFGEF2	20q13.13	0.06524	0.203271	0.292528
ARHGAP6	Xp22.2	0.065239	0.203281	0.292528

PRR34	22q13.31	0.065222	0.203396	0.292656
ZNF248	10p11.21	-0.06522	0.203399	0.292656
CSRNP2	12q13.12	0.065204	0.20352	0.292809
FADS2	11q12.2	0.065199	0.203555	0.292838
NT5C1A	1p34.2	0.065179	0.203694	0.293
AASDH	4q12	0.065179	0.203697	0.293
M6PR	12p13.31	0.065176	0.203719	0.293011
RNASE9	14q11.2	-0.06517	0.203759	0.293048
ACP7	19q13.2	-0.06516	0.203796	0.293079
NHLH1	1q23.2	-0.06515	0.203928	0.293247
LYPD6B	2q23.2	-0.06514	0.204002	0.293334
TXNDC2	18p11.22	0.065127	0.20406	0.293395
SNORA29	6q25.3	-0.06512	0.204136	0.293484
PLOD1	1p36.22	-0.0651	0.204263	0.293646
ZNF71	19q13.43	-0.06508	0.204413	0.29384
CASC3	17q21.1	0.06506	0.204529	0.293984
ZNF84	12q24.33	-0.06506	0.204542	0.293984
KRT20	17q21.2	0.06504	0.204667	0.294142
CALB2	16q22.2	0.065035	0.204702	0.294162
C6	5p13.1	0.065033	0.20471	0.294162
CFAP221	2q14.2	0.065024	0.204776	0.294235
IGFALS	16p13.3	0.06501	0.204871	0.294341
ZNF256	19q13.43	-0.06501	0.204879	0.294341
PRRG1	Xp21.1	0.065004	0.204916	0.294373
ZFP82	19q13.12	0.064987	0.205032	0.294519
VSX2	14q24.3	0.064978	0.205101	0.294596
LINC02347	12q24.32	0.064958	0.205238	0.294772
ABCA13	7p12.3	0.064939	0.205369	0.294939
SERPINB12	18q21.33	0.064935	0.205399	0.294961
TSPAN4	11p15.5	0.064928	0.205446	0.295007
DSTN	20p12.1	0.064923	0.205479	0.295034
SNORA20	6q25.3	-0.06492	0.205528	0.295083
SCGB3A1	5q35.3	-0.06491	0.205595	0.295158
BEAN1	16q21	0.064899	0.205653	0.29522
MMP1	11q22.2	0.064895	0.205679	0.295237
C1QL1	17q21.31	-0.06487	0.205871	0.29549
ZBTB18	1q44	0.064857	0.205942	0.295571
BACE2	21q22.2-q22.3	0.064841	0.206059	0.295719
OR52H1	11p15.4	-0.06483	0.206111	0.295771
CUL2	10p11.21	0.064818	0.206216	0.295901
PLIN5	19p13.3	-0.06481	0.206304	0.296006
CCN5	20q13.12	0.0648	0.206341	0.296037
GPR146	7p22.3	0.064797	0.206364	0.29605
TEX35	1q25.2	0.064794	0.206386	0.29606
INE1	Xp11.3	-0.06477	0.206557	0.296284
NIPSNAP1	22q12.2	-0.06476	0.206632	0.29637
TPRX1	19q13.33	0.064753	0.206672	0.296407
C17ORF100	17p13.1	-0.06474	0.206788	0.296551
CHRNA2	8p21.2	-0.06472	0.206904	0.296688
CABP2	11q13.2	-0.06472	0.206913	0.296688
AMY1A	1p21.1	-0.06472	0.206929	0.29669
DPY19L1	7p14.2	0.064702	0.207036	0.296822
CENPL	1q25.1	0.064691	0.207113	0.296912
DHCR24	1p32.3	0.064671	0.207248	0.297069
HSPA8	11q24.1	0.064671	0.207253	0.297069
SBF1	22q13.33	0.064669	0.207268	0.297069
TMEM233	12q24.23	0.064664	0.207302	0.297098
MT1DP	16q13	-0.06462	0.207596	0.297498

GATA3-AS1	10p14	-0.06458	0.207881	0.297878
CLEC2A	12p13.31	-0.06458	0.207898	0.297878
ONECUT2	18q21.31	0.064578	0.207906	0.297878
CT55	Xq26.3	-0.06457	0.207953	0.297908
SRPRA	11q24.2	0.064571	0.207958	0.297908
THTPA	14q11.2	-0.06457	0.207972	0.297908
STK38	6p21.31	-0.06456	0.208001	0.297928
FUT7	9q34.3	-0.06455	0.20811	0.298043
NIPSNAP3B	9q31.1	0.064549	0.208111	0.298043
SLC6A20	3p21.31	-0.06455	0.208136	0.298043
VGLL2	6q22.1	-0.06454	0.20814	0.298043
OR2L2	1q44	-0.06451	0.208364	0.298342
HIST1H3C	6p22.2	-0.06451	0.208384	0.298349
GDF7	2p24.1	0.064501	0.208448	0.298413
MOV10	1p13.2	-0.0645	0.208458	0.298413
SIAH1	16q12.1	-0.06447	0.208684	0.298712
LOC100129534	1p36.32	0.064466	0.208697	0.298712
UBC	12q24.31	-0.06446	0.208731	0.298739
TRIM11	1q42.13	-0.06444	0.208914	0.298979
FERMT1	20p12.3	0.064419	0.20903	0.299124
VTI1A	10q25.2	0.064412	0.209083	0.299179
ADRA1D	20p13	-0.06441	0.209115	0.299203
CLSTN2	3q23	0.064405	0.209131	0.299204
TMEM30CP	3q12.1	-0.06437	0.209377	0.299535
SPHAR	1q42.13	0.064368	0.209393	0.299536
GLIS1	1p32.3	0.064364	0.209421	0.299555
AKR1C6P	10p15.1	-0.06435	0.209522	0.299679
OR51G1	11p15.4	-0.06435	0.209553	0.299693
COX7A1	19q13.12	-0.06434	0.209562	0.299693
KRT79	12q13.13	-0.06434	0.209622	0.299758
ELF4	Xq26.1	0.064326	0.209692	0.299836
LOC392196	8p23.1	0.064307	0.209823	0.300001
LTA4H	12q23.1	-0.0643	0.209842	0.300007
PANX2	22q13.33	-0.06429	0.209936	0.300121
MEIS3	19q13.32	0.064274	0.210062	0.300279
B3GNT4	12q24.31	-0.06425	0.210226	0.300492
OLIG1	21q22.11	0.06422	0.210442	0.300779
CDKL2	4q21.1	0.06421	0.210514	0.300862
LSS	21q22.3	0.064206	0.210542	0.300868
HMG2N2P46	15q21.1	0.064205	0.210549	0.300868
TMEM196	7p21.1	0.064176	0.210756	0.301142
LINC00482	17q25.3	0.064172	0.210785	0.301163
ART4	12p12.3	0.064156	0.210898	0.301303
PRAMEF6	1p36.21	0.064135	0.211049	0.301496
FXR1	3q26.33	0.064132	0.211068	0.301503
TMED3	15q25.1	0.064111	0.211218	0.30168
NGEF	2q37.1	-0.06411	0.211223	0.30168
CCDC102B	18q22.1-q22.2	0.064106	0.211254	0.301703
POM121C	7q11.23	0.064081	0.211437	0.301943
CA6	1p36.23	0.064077	0.211464	0.30196
CRB1	1q31.3	0.064073	0.211492	0.301978
RUSC1-AS1	1q22	-0.06407	0.211509	0.301981
CNIH2	11q13.2	-0.06405	0.211655	0.302162
ARPC2	2q35	0.064048	0.211667	0.302162
DTX2P1-UPK3BP1-PMS2P11	7q11.23	-0.06405	0.211681	0.302162
PDIA6	2p25.1	-0.06404	0.211704	0.302163
CCL18	17q12	0.064042	0.211712	0.302163
MYCBPAP	17q21.33	0.064023	0.211852	0.302342

ZNF510	9q22.33	0.064015	0.211904	0.302395
VN1R2	19q13.42	0.063942	0.212426	0.303117
KIAA1143	3p21.31	0.06394	0.212445	0.303123
APLN	Xq26.1	-0.06391	0.212657	0.303403
DMP1	4q22.1	-0.0639	0.212738	0.303481
FGF8	10q24.32	-0.0639	0.212742	0.303481
LTBP3	11q13.1	0.063881	0.212867	0.30362
OR5AC2	3q11.2	-0.06388	0.212869	0.30362
AGXT2	5p13.2	-0.06387	0.212941	0.303701
ZC3H6	2q14.1	0.063859	0.213023	0.303796
HLA-G	6p22.1	0.063846	0.213119	0.303911
RERGL	12p12.3	0.063822	0.213289	0.304132
CERK	22q13.31	-0.06381	0.213395	0.304263
MARK2	11q13.1	0.063803	0.213423	0.304281
PAX8	2q14.1	-0.06377	0.213675	0.304618
MS4A10	11q12.2	0.063766	0.213693	0.304621
LL22NC03-63E9.3	22q11.22	-0.06375	0.213831	0.304788
FAM71D	14q23.3	-0.06375	0.21384	0.304788
LILRA5	19q13.42	0.063722	0.214007	0.305005
ABHD10	3q13.2	-0.06371	0.214108	0.305127
ADAM7	8p21.2	-0.0637	0.214199	0.305234
ATP2C2	16q24.1	0.063687	0.21426	0.3053
ADAM11	17q21.31	-0.06368	0.214315	0.305337
KRTAP12-2	21q22.3	-0.06368	0.214316	0.305337
BPI	20q11.23	-0.06366	0.214459	0.305518
GIPC1	19p13.12	-0.06365	0.21456	0.305625
TTY13	Yq11.223	0.063645	0.214565	0.305625
CHIA	1p13.2	-0.06363	0.214707	0.305806
P2RX6	22q11.21	-0.06362	0.214745	0.305825
ATG13	11p11.2	0.063619	0.214751	0.305825
CASKIN2	17q25.1	0.063606	0.214849	0.305943
LINC00114	21q22.2	-0.0636	0.214889	0.305979
MIR4697HG	11q25	0.063592	0.214947	0.306026
TMEM92	17q21.33	0.063591	0.214953	0.306026
KCTD5	16p13.3	-0.06359	0.214991	0.306058
IL3	5q31.1	-0.06358	0.215041	0.306096
FANCD2OS	3p25.3	0.063578	0.215048	0.306096
ZNF555	19p13.3	-0.06357	0.215132	0.306194
CMYA5	5q14.1	0.063551	0.215243	0.30633
ZNF134	19q13.43	0.063539	0.215329	0.30643
CEP78	9q21.2	-0.06349	0.2157	0.30693
NTF4	19q13.33	-0.06349	0.215711	0.30693
H3F3C	12p11.21	0.063471	0.215824	0.30707
MAJIN	11q13.1	-0.06346	0.215908	0.307168
PPP1R10	6p21.33	0.063456	0.215934	0.307182
CAAP1	9p21.2	0.063441	0.216041	0.307313
KLRK1	12p13.2	0.063436	0.216076	0.307323
OR1Q1	9q33.2	-0.06344	0.216079	0.307323
RCCD1	15q26.1	-0.06343	0.216141	0.30739
HIST1H2AA	6p22.2	-0.06342	0.216222	0.307457
LINC00293	8q11.1	-0.06342	0.216222	0.307457
RHOBTB1	10q21.2	0.063414	0.216235	0.307457
GPR135	14q23.1	0.063388	0.216423	0.307702
SPATA3	2q37.1	-0.06337	0.216563	0.30788
SPANXN5	Xp11.22	-0.06336	0.21661	0.307926
BLOC1S2	10q24.31	-0.06336	0.216649	0.307959
POMT2	14q24.3	0.063344	0.216742	0.308068
SPANXN2	Xq27.3	0.063334	0.216814	0.30813

RAD51AP2	2p24.2	-0.06333	0.216816	0.30813
SNORA38B	17q24.2	-0.06332	0.216893	0.308218
FANCC	9q22.32	-0.06331	0.21697	0.308306
ZNF680	7q11.21	-0.0633	0.217067	0.308422
PCDHA11	5q31.3	0.063292	0.217123	0.30848
XKR7	20q11.21	0.063279	0.217219	0.308594
IDH1	2q34	0.063276	0.217243	0.308606
NHLH2	1p13.1	0.063265	0.21732	0.308692
LHFPL3	7q22.2-q22.3	0.063263	0.217334	0.308692
ALG11	13q14.3	-0.06325	0.217434	0.308805
RPGRIP1L	16q12.2	0.063248	0.217445	0.308805
ERG28	14q24.3	-0.06322	0.217613	0.309022
CLRN1	3q25.1	0.063219	0.217656	0.309061
HIST1H4L	6p22.1	-0.06319	0.217841	0.309302
LINC00028	20q11.21	0.063191	0.217859	0.309305
HIST1H2BJ	6p22.1	-0.06317	0.218015	0.309505
PALB2	16p12.2	-0.06316	0.218119	0.30963
NOCT	4q31.1	0.063138	0.218243	0.309785
AIFM3	22q11.21	-0.06312	0.218374	0.309948
PBOV1	6q23.3	0.063118	0.218395	0.309956
RINL	19q13.2	0.063109	0.218459	0.310025
EIF2S1	14q23.3	0.063103	0.218501	0.310063
OR2A7	7q35	0.063101	0.21852	0.310068
OPRK1	8q11.23	0.063083	0.218651	0.310232
SLC16A13	17p13.1	0.063073	0.21872	0.310297
ANKRD20A11P	21q11.2	-0.06307	0.218728	0.310297
NEIL1	15q24.2	-0.06306	0.218822	0.310409
RMC1	18q11.2	0.063044	0.218934	0.310546
SOHLH2	13q13.3	0.063033	0.219011	0.310632
CTNNA2	2p12	0.063018	0.219121	0.310766
PGF	14q24.3	-0.06301	0.21919	0.310842
SPAG1	8q22.2	0.063	0.219253	0.31091
CYP11B1	8q24.3	0.062972	0.219458	0.311178
NBEAL2	3p21.31	0.06297	0.219475	0.311181
HOXD4	2q31.1	0.062966	0.219506	0.311202
FBXO25	8p23.3	0.062959	0.219554	0.311249
CYP3A7	7q22.1	0.062953	0.219601	0.311293
PRR25	16p13.3	-0.06293	0.219756	0.311491
IPO13	1p34.1	-0.06292	0.219834	0.31158
TCP10	6q27	-0.06291	0.219929	0.311681
ARID3C	9p13.3	-0.06291	0.219939	0.311681
PER3	1p36.23	0.062905	0.219953	0.311681
ERLIN2	8p11.23	0.062855	0.22032	0.31218
TFF3	21q22.3	0.062852	0.220342	0.312183
TBC1D22B	6p21.2	-0.06285	0.220361	0.312183
SLC46A3	13q12.3	0.062848	0.220369	0.312183
CBWD1	9p24.3	-0.06283	0.220489	0.312331
DISC2	1q42.2	-0.0628	0.220701	0.31261
GGT8P	2p11.2	0.062774	0.220919	0.312896
CCAR1	10q21.3	0.062761	0.221016	0.313002
THAP10	15q23	0.062759	0.221025	0.313002
SHC2	19p13.3	0.062747	0.221117	0.31311
LINC00312	3p25.3	0.062745	0.221133	0.313111
ASPHD1	16p11.2	-0.06273	0.221246	0.313248
C16ORF78	16q12.1	-0.06272	0.221329	0.313344
DLEU2L	1p31.3	-0.06271	0.221373	0.313383
QSER1	11p13	0.062692	0.221523	0.313573
HLA-L	6p22.1	-0.06268	0.221577	0.313621

DCSTAMP	8q22.3	0.062683	0.221588	0.313621
CPA1	7q32.2	-0.06267	0.221679	0.313728
ZBTB33	Xq24	0.062662	0.221747	0.313802
OR1J4	9q33.2	-0.06263	0.221984	0.314115
SPAG17	1p12	-0.06261	0.222111	0.314273
MED20	6p21.1	-0.06261	0.222161	0.314321
ZFYVE19	15q15.1	0.062597	0.222226	0.314391
UCK2	1q24.1	-0.06259	0.222255	0.314409
C1QL4	12q13.12	-0.06257	0.222401	0.314594
KRTAP9-8	17q21.2	-0.06256	0.222488	0.314695
MUC17	7q22.1	0.062557	0.222519	0.314717
EXOG	3p22.2	-0.06255	0.222572	0.31475
DIO1	1p32.3	-0.06255	0.222574	0.31475
CTNNA1	9q31.3	-0.06254	0.222618	0.31479
GALNT18	11p15.4	-0.06254	0.222639	0.314797
OR51B5	11p15.4	-0.06253	0.222724	0.314895
FNDC8	17q12	-0.06252	0.222779	0.314951
SNAR-C3	19q13.33	0.062487	0.223041	0.315291
IKKB	8p11.21	-0.06248	0.223059	0.315291
ZNF615	19q13.41	0.062483	0.223067	0.315291
SERINC2	1p35.2	-0.06246	0.223209	0.31547
SLC30A10	1q41	0.062461	0.223234	0.315483
GRAP	17p11.2	-0.06246	0.223274	0.315518
HOXA1	7p15.2	-0.06244	0.223367	0.315626
HSD17B11	4q22.1	0.062436	0.22342	0.315679
EPB42	15q15.2	0.062433	0.223443	0.315689
TIGAR	12p13.32	0.062415	0.223574	0.315851
WIZ	19p13.12	-0.0624	0.22365	0.315937
DROSHA	5p13.3	0.062395	0.223724	0.316019
FASTKD2	2q33.3	-0.06239	0.223753	0.316038
COL9A2	1p34.2	0.062371	0.223903	0.316228
CPXM1	20p13	0.062363	0.223963	0.316289
ZNF566	19q13.12	-0.06235	0.224034	0.316362
SEMA4F	2p13.1	-0.06235	0.224046	0.316362
TMEM241	18q11.2	-0.06235	0.224078	0.316385
SERF2	15q15.3	-0.06234	0.224161	0.316481
CXORF51A	Xq27.3	-0.06233	0.224177	0.316481
DHRS7C	17p13.1	0.062329	0.224212	0.316508
LCE3E	1q21.3	-0.06232	0.224258	0.316532
EMP2	16p13.13	0.062323	0.224261	0.316532
FAM184B	4p15.32-p15.31	0.062258	0.224742	0.317189
RNASE3	14q11.2	0.062242	0.224865	0.317326
SRPK3	Xq28	-0.06224	0.224871	0.317326
APOC4	19q13.32	0.062217	0.225048	0.317553
SH2D6	2p11.2	0.062197	0.225196	0.317739
BUB3	10q26.13	-0.06219	0.225263	0.317812
TDRD7	9q22.33	0.062181	0.225321	0.317871
FGF9	13q12.11	0.062136	0.225654	0.318319
DEFA6	8p23.1	-0.06213	0.225711	0.318376
OR10H5	19p13.12	-0.06212	0.225748	0.318406
GPRC5C	17q25.1	-0.06212	0.225794	0.318449
EPHA6	3q11.2	0.062106	0.225881	0.318549
ZNF564	19p13.2	0.06209	0.225997	0.318675
ARHGEF16	1p36.32	-0.06209	0.226002	0.318675
WT1-AS	11p13	-0.06208	0.226073	0.318753
C6ORF132	6p21.1	0.062058	0.226243	0.318969
SH3BGRL3	1p36.11	-0.06204	0.226369	0.319124
SLC18B1	6q23.2	0.062035	0.22641	0.319161



ADAM15	1q21.3	-0.06203	0.226472	0.319225
C2CD4C	19p13.3	0.062012	0.226586	0.319363
CD24	6q21	0.062007	0.226619	0.319387
CPNE9	3p25.3	-0.06198	0.226846	0.319685
ZNF304	19q13.43	0.061971	0.226894	0.31973
TCF25	16q24.3	-0.06197	0.226919	0.319744
RALYL	8q21.2	0.061961	0.22697	0.319793
HNF1A-AS1	12q24.31	-0.06194	0.227154	0.320029
ZSCAN26	6p22.1	-0.06192	0.227287	0.320194
UPRT	Xq13.3	-0.06191	0.227386	0.32031
HLA-A	6p22.1	-0.06189	0.227488	0.320431
COL25A1	4q25	0.061841	0.227872	0.32095
EAPP	14q13.1	0.061826	0.227984	0.321081
GZF1	20p11.21	-0.06182	0.227997	0.321081
RNF123	3p21.31	-0.06182	0.228052	0.321136
SNORA5C	7p13	-0.06181	0.228085	0.321161
ZDHHC8P1	22q11.23	-0.06181	0.228122	0.321189
TMEM105	17q25.3	-0.0618	0.2282	0.321276
SRSF5	14q24.1	-0.06178	0.228362	0.321464
PRL	6p22.3	0.061774	0.228378	0.321464
IFIT1	10q23.31	0.061773	0.228381	0.321464
GUCA1A	6p21.1	0.061757	0.228503	0.321612
SHCBP1	16q11.2	0.061752	0.228544	0.321648
MYO16	13q33.3	0.061748	0.228574	0.32166
SMO	7q32.1	-0.06175	0.228593	0.32166
ARL6IP6	2q23.3	0.061744	0.228601	0.32166
NAT2	8p22	0.061737	0.228652	0.32171
BPESC1	3q23	-0.06173	0.228743	0.321815
CARNS1	11q13.2	-0.06172	0.228798	0.321847
DHX58	17q21.2	0.061718	0.228798	0.321847
BSN	3p21.31	0.061713	0.228837	0.321879
KIAA1549	7q34	0.061695	0.228972	0.322044
SPATA31C1	9q22.1	0.061693	0.228986	0.322044
IP6K3	6p21.31	0.061682	0.229073	0.322143
RAPGEF4-AS1	2q31.1	-0.06166	0.229205	0.322288
FOXA2	20p11.21	-0.06166	0.229208	0.322288
AADA4L4	1p36.21	0.061644	0.22936	0.32247
SORD	15q21.1	0.061642	0.22937	0.32247
VAX2	2p13.3	-0.06164	0.229422	0.322521
LINC01138	1q21.2	0.061628	0.229481	0.322582
NFIX	19p13.13	0.06161	0.229618	0.322752
CD99L2	Xq28	-0.0616	0.229713	0.322862
CKMT1A	15q15.3	0.061581	0.229835	0.32301
PIWIL3	22q11.23	0.061579	0.229851	0.32301
YIPF3	6p21.1	0.061557	0.230015	0.323216
MAP4K3	2p22.1	0.061555	0.23003	0.323216
ORAI2	7q22.1	-0.06154	0.230129	0.32332
ORC1	1p32.3	-0.06154	0.230136	0.32332
POM121	7q11.23	-0.06152	0.23027	0.323486
ARHGAP5-AS1	14q12	-0.0615	0.230441	0.323704
CYP2E1	10q26.3	-0.06149	0.230523	0.323796
LINC00598	13q14.11	0.06144	0.230906	0.324307
H2BFM	Xq22.2	-0.06144	0.230919	0.324307
NLRP14	11p15.4	0.061435	0.230942	0.324316
DYNAP	18q21.2	0.061425	0.231015	0.324397
TBX19	1q24.2	-0.06141	0.231106	0.324487
GOLGA6D	15q24.2	0.061413	0.231112	0.324487
MSH6	2p16.3	0.061407	0.231153	0.324522

TANGO6	16q22.1	-0.0614	0.231184	0.324535
ARAF	Xp11.3	-0.0614	0.231211	0.324535
RBM48	7q21.2	-0.0614	0.231212	0.324535
LINC01011	6p25.2	-0.0614	0.231227	0.324535
ATG9A	2q35	-0.06139	0.231289	0.324599
S100A5	1q21.3	-0.06138	0.231365	0.324669
BORCS7	10q24.32	0.061379	0.231371	0.324669
NGFR	17q21.33	0.061375	0.231401	0.324688
TIFA	4q25	0.061368	0.231453	0.324738
CPSF7	11q12.2	-0.06136	0.231503	0.324785
MPC1	6q27	-0.06134	0.231688	0.325022
ZNF319	16q21	0.061315	0.231854	0.325198
TRIM15	6p22.1	-0.06132	0.231857	0.325198
ZNF622	5p15.1	-0.06131	0.231862	0.325198
PIP4P2	8q21.3	-0.0613	0.231979	0.325339
NOTCH2NLA	1q21.1	0.061273	0.232176	0.325581
NUP205	7q33	0.061272	0.232184	0.325581
RPS10P7	1q32.1	-0.06124	0.232408	0.325856
XAF1	17p13.1	0.061242	0.232412	0.325856
SOX11	2p25.2	0.061223	0.232562	0.326042
CPPED1	16p13.12	-0.06122	0.232612	0.326089
UGT3A1	5p13.2	-0.06121	0.232656	0.326128
SKA1	18q21.1	-0.06119	0.232824	0.326341
PLA2G4C	19q13.33	0.061177	0.23291	0.326436
THEM4	1q21.3	-0.06118	0.232924	0.326436
ABCC8	11p15.1	0.061157	0.233062	0.326606
RAET1K	6q25.1	-0.06115	0.233111	0.326653
KCNC3	19q13.33	0.06114	0.233198	0.326751
MTFR1	8q13.1	-0.06113	0.233271	0.32683
MMP8	11q22.2	0.061119	0.233354	0.326918
RILP	17p13.3	0.061118	0.233366	0.326918
LINC00301	11q12.2	-0.06109	0.233554	0.327123
AATK	17q25.3	-0.06109	0.233563	0.327123
INSM1	20p11.23	0.061092	0.233563	0.327123
POU5F2	5q15	-0.06109	0.233577	0.327123
DMRT3	9p24.3	-0.06107	0.233741	0.327329
ADGRG7	3q12.2	-0.06105	0.233922	0.327544
EPHA10	1p34.3	0.061044	0.233927	0.327544
EPHB3	3q27.1	0.061028	0.234055	0.3277
TINAG	6p12.1	-0.06102	0.234124	0.327762
ZNF468	19q13.41	0.061018	0.234132	0.327762
CAMKK2	12q24.31	0.060999	0.234276	0.327906
C1ORF43	1q21.3	-0.061	0.234276	0.327906
OR14I1	1q44	0.060998	0.234284	0.327906
PTPRS	19p13.3	0.060984	0.234395	0.328039
CREB3L3	19p13.3	-0.06094	0.234719	0.328469
RAB40AL	Xq22.1	-0.06091	0.234935	0.328748
EARS2	16p12.2	-0.06089	0.235099	0.328955
OMG	17q11.2	0.060879	0.235197	0.329068
RASAL2-AS1	1q25.2	-0.06087	0.235262	0.329137
LINC01341	1q44	-0.06086	0.235312	0.329184
PPP3R2	9q31.1	-0.06086	0.235336	0.329195
GDF5	20q11.22	0.060825	0.235619	0.329567
HIST3H2BB	1q42.13	-0.06082	0.235687	0.32964
WRB	21q22.2	-0.0608	0.235788	0.329758
MAPKAPK2	1q32.1	0.0608	0.23581	0.329765
OR52K1	11p15.4	0.060797	0.235829	0.329769
REG1A	2p12	0.060782	0.235949	0.32989

ZNF286B	17p11.2	0.060782	0.235951	0.32989
NKIRAS1	3p24.2	-0.06078	0.235968	0.32989
SNX31	8q22.3	-0.06078	0.235981	0.32989
HOXA9	7p15.2	-0.06074	0.2363	0.330303
WDTC1	1p36.11	-0.06074	0.23631	0.330303
ACMSD	2q21.3	-0.06071	0.236513	0.330564
RHOXF1	Xq24	-0.06069	0.236627	0.330693
MYCN	2p24.3	0.060693	0.236638	0.330693
GBP1P1	1p22.2	0.060675	0.236772	0.330856
C3ORF67	3p14.2	0.060663	0.236868	0.330968
MMADHC	2q23.2	0.060659	0.2369	0.330989
NEMP1	12q13.3	-0.06063	0.237127	0.331272
OR6C65	12q13.2	-0.06063	0.237135	0.331272
CEP162	6q14.2-q14.3	-0.06062	0.2372	0.331339
TTYH3	7p22.3	0.060616	0.237235	0.331365
ZFP37	9q32	0.060601	0.237347	0.331498
SPACA1	6q15	-0.0606	0.237372	0.33151
NKX2-2	20p11.22	0.060588	0.237449	0.331595
IL11	19q13.42	-0.06058	0.237546	0.331706
WWC2-AS2	4q35.1	0.060572	0.237577	0.331727
TEKT3	17p12	0.060557	0.237693	0.331865
CCDC25	8p21.1	0.060503	0.238108	0.332421
PFKFB4	3p21.31	0.060492	0.238196	0.332522
LRRN1	3p26.2	0.060479	0.238298	0.33264
ARSD	Xp22.33	0.060464	0.23841	0.332774
ZNF474	5q23.2	0.060457	0.23847	0.332834
ALKBH1	14q24.3	-0.06045	0.238533	0.332899
ALAD	9q32	0.060422	0.238739	0.333163
THSD7B	2q22.1	0.060416	0.238786	0.333205
L3MBTL2	22q13.2	-0.06039	0.239007	0.333491
MYL10	7q22.1	-0.06038	0.239073	0.333551
LELP1	1q21.3	0.060377	0.23909	0.333551
TM6SF2	19p13.11	-0.06038	0.2391	0.333551
RBM15B	3p21.2	0.060373	0.239125	0.333562
LINC00710	10p14	-0.06032	0.239571	0.334161
RUFY3	4q13.3	-0.0603	0.239654	0.334233
PCSK9	1p32.3	0.060303	0.239667	0.334233
	2-Mar 19p13.2	-0.0603	0.239672	0.334233
CTRB2	16q23.1	-0.06027	0.239913	0.334535
KCNJ4	22q13.1	-0.06027	0.239923	0.334535
IER2	19p13.13	-0.06026	0.240022	0.33465
ZNF343	20p13	-0.06024	0.240162	0.334822
UGT2B28	4q13.2	0.060221	0.240306	0.335
C11ORF45	11q24.3	0.060214	0.24036	0.335052
GAGE2C	Xp11.23	-0.0602	0.24049	0.33521
DEFA4	8p23.1	0.060189	0.240559	0.335282
RARS2	6q15	-0.06017	0.240704	0.335461
RIPPLY2	6q14.2	-0.06017	0.240732	0.335478
ESPNP	1p36.13	-0.06016	0.240793	0.33552
DEFB132	20p13	-0.06016	0.240796	0.33552
CDAN1	15q15.2	0.060135	0.240981	0.335753
PRAMEF12	1p36.21	-0.06012	0.241106	0.335905
SPON2	4p16.3	0.060106	0.24121	0.336026
SPATA31A5	9q12	-0.0601	0.241248	0.336035
CCDC63	12q24.11	-0.0601	0.24125	0.336035
SLC38A10	17q25.3	-0.0601	0.241283	0.336057
ZNF442	19p13.2	0.060077	0.241435	0.336224
LINC00029	20q13.33	-0.06008	0.241436	0.336224

HSP90AB4P	15q21.3	-0.06006	0.241534	0.336329
ZDHHHC18	1p36.11	-0.06006	0.241545	0.336329
CIAO2A	15q22.31	0.060026	0.24184	0.336717
ZNF585A	19q13.12	0.059982	0.242184	0.337161
BHMT	5q14.1	-0.05998	0.242193	0.337161
ZNF607	19q13.12	-0.05997	0.242289	0.337271
ZNF714	19p12	0.059966	0.242308	0.337274
C12ORF66	12q14.2	-0.05996	0.242369	0.337335
HACD1	10p12.33	-0.05994	0.24248	0.337467
PATE2	11q24.2	0.059942	0.242499	0.33747
SERPINB9	6p25.2	0.059936	0.242547	0.337512
HOXC5	12q13.13	0.059914	0.24272	0.33773
LENG9	19q13.42	-0.05989	0.242943	0.338018
OR52N1	11p15.4	-0.05986	0.243163	0.338299
LCN1	9q34.3	-0.05985	0.243204	0.338333
TSLP	5q22.1	0.059844	0.243268	0.338399
FOXD4L6	9p11.2	0.059839	0.243306	0.338429
SFTPD	10q22.3	0.059832	0.243363	0.338484
DNAJB6	7q36.3	-0.05982	0.243471	0.338611
CCDC198	14q22.3	0.059806	0.243569	0.338723
KIF4B	5q33.2	0.059802	0.243602	0.338746
SNORA46	16q21	0.059788	0.243715	0.33888
IFT80	3q25.33	0.059782	0.243761	0.338919
RUSC1	1q22	0.059779	0.243786	0.338931
CCDC81	11q14.2	-0.05974	0.244112	0.33936
AXIN2	17q24.1	-0.0597	0.244394	0.339717
CATSPER2P1	15q15.3	-0.0597	0.244402	0.339717
C17ORF102	17q12	0.059684	0.24453	0.339872
ENHO	9p13.3	-0.05963	0.244982	0.340476
TSC2	16p13.3	0.059624	0.245006	0.340485
GREB1L	18q11.1-q11.2	0.059619	0.245048	0.340507
VPS37C	11q12.2	-0.05962	0.245056	0.340507
ZNF37BP	10q11.21	-0.05958	0.245332	0.340868
AP1AR	4q25	0.05957	0.245436	0.340989
OTULINL	5p15.2	-0.05956	0.245537	0.341105
LGALS12	11q12.3	0.059549	0.245602	0.341171
OAT	10q26.13	-0.05952	0.245816	0.341445
FAM219A	9p13.3	-0.05951	0.24592	0.341567
LAP3	4p15.32	0.059501	0.245985	0.341633
CCL8	17q12	0.059465	0.246273	0.342009
NAB2	12q13.3	-0.05946	0.246318	0.342026
EFCAB1	8q11.21	0.059459	0.24632	0.342026
ISCA1P1	5q12.1	-0.05945	0.246422	0.342145
PHOSPHO1	17q21.32	0.059437	0.246498	0.342227
VIL1	2q35	0.059422	0.246618	0.342369
OR2L13	1q44	0.059409	0.246718	0.342476
CA5A	16q24.2	-0.05941	0.246729	0.342476
USP5	12p13.31	-0.0594	0.24677	0.3425
PHETA1	12q24.12	-0.0594	0.246781	0.3425
ARL6	3q11.2	0.05939	0.246867	0.342596
LMF2	22q13.33	-0.05938	0.246969	0.342714
NDST4	4q26	0.059369	0.247038	0.342764
TRIM51	11q12.1	0.059369	0.247039	0.342764
ERGIC2	12p11.22	0.059341	0.247265	0.343053
FSIP1	15q14	0.059325	0.247388	0.3432
RUNDC3B	7q21.12	0.059308	0.247524	0.343365
PDIK1L	1p36.11	0.05928	0.247746	0.343631
OR10J3	1q23.2	0.05928	0.24775	0.343631

JUNB	19p13.13	0.059272	0.247808	0.343688
STRA6	15q24.1	0.059269	0.247834	0.3437
C8ORF74	8p23.1	0.05925	0.247985	0.343886
LCE2C	1q21.3	0.059247	0.248009	0.343895
ARL9	4q12	0.05923	0.248148	0.344064
MPDU1	17p13.1	0.059195	0.248424	0.344423
PPL	16p13.3	0.059191	0.248457	0.344445
KIF3C	2p23.3	0.059172	0.248609	0.344631
LINC00470	18p11.32	0.059163	0.248685	0.344712
MMP23A	1p36.33	0.059128	0.248961	0.345072
GPBAR1	2q35	0.05912	0.249028	0.345141
C1ORF127	1p36.22	-0.05907	0.249417	0.345656
HPS6	10q24.32	-0.05905	0.249612	0.345889
IFNL3	19q13.2	0.059046	0.249619	0.345889
SPATS2	12q13.12	0.059042	0.249652	0.34591
CEACAM18	19q13.41	-0.05904	0.249699	0.345951
TMEM212	3q26.31	0.059027	0.249773	0.34603
CBLL1	7q22.3	0.059004	0.24996	0.346265
SUGT1P1	9p13.3	0.059	0.249992	0.346266
OR6N1	1q23.1	0.059	0.249996	0.346266
SERBP1	1p31.3	0.058992	0.250055	0.346325
CLDN1	3q28	-0.05897	0.250234	0.346548
GML	8q24.3	-0.05897	0.250271	0.346575
HSPA6	1q23.3	0.058958	0.250334	0.346619
ZMYM3	Xq13.1	0.058956	0.250343	0.346619
MYRF-AS1	11q12.2	0.058955	0.250354	0.346619
KRT2	12q13.13	0.058949	0.250401	0.34666
PTCHD3	10p12.1	0.05892	0.250632	0.346956
TCEA2	20q13.33	-0.05889	0.250844	0.347225
GAGE12J	Xp11.23	-0.05887	0.251064	0.347506
KIR3DL3	19q13.42	0.05886	0.251117	0.347555
FXD5	19q13.12	-0.05885	0.251212	0.347662
SERTM1	13q13.3	0.058846	0.251236	0.347672
GTF3C2	2p23.3	0.058836	0.251311	0.347751
ICAM1	19p13.2	0.058833	0.251335	0.347761
NR1H2	19q13.33	0.05883	0.251363	0.347775
PPP1R3A	7q31.1	0.058825	0.251399	0.347802
THAP1	8p11.21	0.058821	0.251438	0.347831
ACTR1A	10q24.32	-0.05881	0.251499	0.347871
TAX1BP3	17p13.2	0.058813	0.251502	0.347871
FCRLB	1q23.3	0.058809	0.251531	0.347887
TGM3	20p13	0.058794	0.251657	0.348037
ZNF461	19q13.12	-0.05877	0.251813	0.348219
CCAR2	8p21.3	0.058773	0.251824	0.348219
KLB	4p14	0.058771	0.25184	0.348219
CDSN	6p21.33	-0.05875	0.251994	0.348408
AQP4	18q11.2	0.058749	0.252013	0.348409
HPS4	22q12.1	-0.05874	0.252066	0.348459
ME1	6q14.2	0.058738	0.252104	0.348461
ATP6V1C1	8q22.3	-0.05874	0.252111	0.348461
TMEM207	3q28	0.058736	0.25212	0.348461
MAGED1	Xp11.22	0.058725	0.25221	0.348544
SLC37A3	7q34	0.058721	0.25224	0.348544
THEG	19p13.3	0.058719	0.252262	0.348544
HJV	1q21.1	-0.05872	0.252266	0.348544
ZNF784	19q13.42	-0.05872	0.252267	0.348544
THRB	3p24.2	0.058699	0.252418	0.348728
SSBP3	1p32.3	0.058688	0.252508	0.34883

PRSS21	16p13.3	0.058685	0.252532	0.348838
EIF4E	4q23	-0.05868	0.252569	0.348866
MAG	19q13.12	0.05867	0.252659	0.348966
GGA2	16p12.2	-0.05867	0.252693	0.348989
HOTAIR	12q13.13	-0.05866	0.252719	0.349001
STEAP3	2q14.2	-0.05866	0.252742	0.349008
PPCDC	15q24.2	-0.05866	0.252763	0.349013
RTL8C	Xq26.3	-0.05864	0.25286	0.349108
PHF6	Xq26.2	0.058642	0.25288	0.349108
CYP2B6	19q13.2	-0.05864	0.252884	0.349108
VENTX	10q26.3	-0.05862	0.253039	0.349298
SLC25A3P1	1p32.3	-0.05861	0.253124	0.349391
MTNR1B	11q14.3	0.058601	0.253211	0.349464
OR6F1	1q44	-0.0586	0.253212	0.349464
TAS2R9	12p13.2	-0.0586	0.253236	0.349474
RFX6	6q22.1	0.05859	0.253307	0.349547
TMEM236	10p12.33	0.058573	0.253444	0.349712
PKD1L3	16q22.2	0.058569	0.253477	0.349714
CADPS	3p14.2	0.058568	0.25348	0.349714
FAM120C	Xp11.22	-0.05856	0.253524	0.34975
CHI3L1	1q32.1	0.058561	0.253543	0.349753
SLC35A4	5q31.3	0.058557	0.253571	0.349767
MSRA	8p23.1	0.058555	0.253592	0.349772
PERP	6q23.3	-0.05855	0.253624	0.349782
BSDC1	1p35.1	-0.05855	0.253641	0.349782
GPR153	1p36.31	-0.05855	0.253652	0.349782
STN1	10q24.33	0.058544	0.253676	0.349792
TFR2	7q22.1	0.058536	0.253739	0.349854
SP110	2q37.1	0.058526	0.253823	0.349926
ADAMTS4	1q23.3	0.058525	0.253834	0.349926
TDGF1P3	Xq23	-0.05852	0.253844	0.349926
DOCK6	19p13.2	-0.05851	0.253933	0.350026
PWARSN	15q11.2	0.058491	0.254106	0.35024
PTPRT	20q12-q13.11	0.058463	0.254334	0.350529
ADGB	6q24.3	-0.05845	0.254458	0.350676
HNRNPA1L2	13q14.3	-0.05844	0.254485	0.35069
PCDHA8	5q31.3	0.058415	0.254725	0.350996
ZNF793	19q13.12	0.058402	0.254832	0.35112
GHRHR	7p14.3	-0.05839	0.254896	0.351183
OGDHL	10q11.23	-0.05839	0.254919	0.351191
SLC5A2	16p11.2	-0.05838	0.255003	0.351266
ZNF114	19q13.33	-0.05838	0.255026	0.351266
BABAM2-AS1	2p23.2	-0.05838	0.255026	0.351266
MAK16	8p12	-0.05837	0.255073	0.351306
CCNT2	2q21.3	0.058356	0.255206	0.351466
TFRC	3q29	0.058348	0.255275	0.351536
SMIM32	5q31.1	0.058334	0.255388	0.351668
WBP11P1	18q12.1	0.05833	0.25542	0.351688
FAM229B	6q21	-0.05832	0.255533	0.351819
GZMM	19p13.3	0.058311	0.255577	0.351856
RGCC	13q14.11	-0.05831	0.255603	0.351866
OR5B17	11q12.1	0.058306	0.25562	0.351866
CREG1	1q24.2	0.0583	0.255666	0.351906
FIGLA	2p13.3	0.058295	0.255706	0.351936
S100A4	1q21.3	-0.05829	0.25577	0.352
SCARNA17	18q21.1	-0.05828	0.255792	0.352006
MTMR9LP	1p35.2	-0.05827	0.255923	0.352163
SLC8A2	19q13.32	-0.05827	0.255946	0.352169

SPACA4	19q13.33	0.05824	0.256152	0.352429
BTG3	21q21.1	-0.05823	0.256205	0.352477
TCTN1	12q24.11	-0.05823	0.256254	0.352521
CDHR5	11p15.5	0.058217	0.256342	0.352618
MGRN1	16p13.3	0.05821	0.2564	0.352674
SAMD11	1p36.33	0.058205	0.256443	0.352708
IL37	2q14.1	0.058187	0.256588	0.352884
RBM3	Xp11.23	-0.05815	0.256929	0.353328
GADD45B	19p13.3	-0.05813	0.257039	0.353455
BCLAF3	Xp22.12	0.058128	0.257074	0.353455
OR14A16	1q44	0.058128	0.257074	0.353455
ALOX12P2	17p13.1	0.058124	0.25711	0.353479
FOXS1	20q11.21	-0.05811	0.257243	0.353639
SNORA36A	Xq28	-0.0581	0.257265	0.353644
CARD9	9q34.3	0.058095	0.257341	0.353724
ELANE	19p13.3	0.058091	0.257372	0.353744
LINC00926	15q21.3	-0.05807	0.257512	0.353876
ATP4A	19q13.12	-0.05807	0.257512	0.353876
TNK1	17p13.1	0.058073	0.257522	0.353876
ARL6IP1	16p12.3	-0.05807	0.257556	0.353899
GLIPR2	9p13.3	0.058057	0.257652	0.354006
TREML3P	6p21.1	0.058051	0.257707	0.354057
GIP	17q21.32	-0.05801	0.258031	0.354479
FGF23	12p13.32	0.057996	0.25816	0.354632
OR2A14	7q35	-0.05799	0.258237	0.354713
UBAP1	9p13.3	0.057958	0.258471	0.35501
RUNX1-IT1	21q22.12	0.057933	0.258677	0.355269
SEC63	6q21	0.057925	0.258744	0.355333
MYEF2	15q21.1	0.057923	0.25876	0.355333
FOXI1	5q35.1	0.057917	0.258806	0.355373
P2RX5	17p13.2	-0.05791	0.258875	0.355443
PPP1R2C	Xp11.3	0.057884	0.259077	0.355696
FBXO5	6q25.2	-0.05788	0.259115	0.355723
SPRYD3	12q13.13	0.057874	0.259159	0.355759
CYP4F35P	18p11.21	-0.05786	0.259287	0.355911
COCH	14q12	-0.05786	0.259308	0.355915
LINC01184	5q23.3	-0.05785	0.259342	0.355937
DRD3	3q13.31	0.057837	0.259465	0.356082
DSCR8	21q22.13	-0.05783	0.259519	0.356132
LOC441601	11p11.12	-0.05783	0.259564	0.356169
DPPA3	12p13.31	0.057808	0.259703	0.356336
SSX8P	Xp11.22	-0.0578	0.259771	0.356405
FLCN	17p11.2	0.057795	0.259816	0.356442
HOXC9	12q13.13	0.057773	0.259991	0.356657
SNTG2	2p25.3	0.057767	0.260042	0.356683
ARMC9	2q37.1	0.057767	0.260046	0.356683
SCN2A	2q24.3	0.05776	0.260104	0.35674
SSR4P1	21q22.3	-0.05774	0.260275	0.356949
BRMS1L	14q13.2	0.057733	0.260323	0.356991
TULP4	6q25.3	0.057689	0.260692	0.357472
SYT1	12q21.2	-0.05768	0.260733	0.357504
SERINC3	20q13.12	0.057679	0.260774	0.357535
OPRPN	4q13.3	-0.05767	0.260875	0.357649
YAF2	12q12	-0.05766	0.260933	0.357694
PALM	19p13.3	0.057658	0.260943	0.357694
RELA	11q13.1	-0.05764	0.261118	0.357909
SPIN2A	Xp11.21	0.057622	0.261244	0.358057
CASK	Xp11.4	-0.05759	0.26155	0.358452

MYO1A	12q13.3	0.057581	0.261584	0.358474
C22ORF34	22q13.33	0.057579	0.261602	0.358474
SAMD1	19p13.12	-0.05757	0.261663	0.358533
HAMP	19q13.12	0.057569	0.261686	0.358539
TUBB2B	6p25.2	0.057567	0.261703	0.358539
GRK4	4p16.3	-0.05756	0.261796	0.358642
ASTN2	9q33.1	-0.05753	0.262007	0.358907
RWDD2B	21q21.3	-0.05752	0.262111	0.359025
KRT5	12q13.13	0.057515	0.262134	0.359031
C9ORF106	9q34.11	0.057497	0.26228	0.359207
ELP1	9q31.3	0.057493	0.262315	0.359211
FDPSP2	7q11.23	-0.05749	0.262325	0.359211
MPHOSPH8	13q12.11	0.05749	0.262337	0.359211
ZIM3	19q13.43	-0.05748	0.262447	0.359337
CXORF56	Xq24	-0.05747	0.2625	0.359375
TMEM217	6p21.2	0.05747	0.26251	0.359375
PLA2G12A	4q25	-0.05746	0.262616	0.359495
ARMC4	10p12.1	0.057452	0.262657	0.359526
NHLRC4	16p13.3	0.057436	0.262792	0.359686
SRF	6p21.1	0.057422	0.262904	0.359816
PIK3C2G	12p12.3	0.057406	0.263039	0.359967
SPPL2C	17q21.31	0.057405	0.263051	0.359967
ALOX12	17p13.1	0.057387	0.263199	0.360145
PRSS1	7q34	-0.05738	0.263247	0.360186
MGC16025	2q37.3	-0.05737	0.263325	0.360268
SNORA58	3q22.1	0.057367	0.263368	0.360303
NEUROD1	2q31.3	-0.05736	0.263452	0.360393
GSX2	4q12	0.057344	0.263559	0.360514
GHSR	3q26.31	0.05734	0.263589	0.360531
LINC00895	22q11.21	-0.05733	0.263642	0.360579
EN1	2q14.2	0.057323	0.263731	0.360676
RAD18	3p25.3	-0.05732	0.263778	0.360716
STAC3	12q13.3	0.057307	0.263866	0.360812
OSGIN2	8q21.3	-0.0573	0.263888	0.360817
NUDT21	16q13	0.057299	0.263929	0.360846
TRIM53AP	11q14.3	0.057297	0.263945	0.360846
MAGT1	Xq21.1	0.057295	0.263967	0.360851
TARS	5p13.3	-0.05728	0.264095	0.360991
ANGPTL8	19p13.2	-0.05728	0.264118	0.360991
COX6B2	19q13.42	-0.05728	0.264123	0.360991
PCDHA5	5q31.3	0.057261	0.264253	0.361143
SMCO3	12p12.3	-0.05724	0.26444	0.361375
ZNF204P	6p22.1	0.05722	0.264589	0.361554
LBR	1q42.12	0.057212	0.264658	0.361623
ST13	22q13.2	-0.05719	0.264847	0.361856
YPEL3	16p11.2	-0.05717	0.264971	0.361984
SLAMF9	1q23.2	0.057174	0.264977	0.361984
H3F3AP5	Xp11.22	0.057169	0.265017	0.362014
RRAGA	9p22.1	-0.05715	0.265184	0.362193
HEATR3	16q12.1	-0.05715	0.265191	0.362193
TMED6	16q22.1	-0.05715	0.265202	0.362193
IFI44L	1p31.1	0.057144	0.265231	0.362197
GALR2	17q25.1	-0.05714	0.265241	0.362197
SNORD97	11p15.4	-0.05712	0.265398	0.362387
TPGS1	19p13.3	-0.05711	0.265509	0.362501
STK26	Xq26.2	-0.05711	0.265518	0.362501
PDCD1	2q37.3	0.057097	0.265621	0.362617
MCM3AP-AS1	21q22.3	0.057093	0.265653	0.362636



SF3B3	16q22.1	-0.05707	0.265808	0.362796
GALP	19q13.43	-0.05707	0.265817	0.362796
ILF3	19p13.2	-0.05707	0.265825	0.362796
KLHL42	12p11.22	0.05707	0.265846	0.362801
PTH1R	3p21.31	0.057063	0.265911	0.362865
MSTN	2q32.2	-0.05705	0.266042	0.363018
ALDH3A1	17p11.2	0.057041	0.26609	0.36306
SLC38A11	2q24.3	-0.05703	0.266171	0.363143
MCCD1	6p21.33	-0.05703	0.266188	0.363143
NBPF6	1p13.3	0.057025	0.266228	0.363173
FOXK1	7p22.1	-0.05701	0.266313	0.363264
ZHX3	20q12	-0.05701	0.266343	0.363281
C8G	9q34.3	-0.057	0.266398	0.363332
PATE1	11q24.2	0.056997	0.266465	0.363398
MUC6	11p15.5	0.056988	0.266541	0.363476
NCOA6	20q11.22	-0.05698	0.266568	0.363488
KAT5	11q13.1	-0.05697	0.266694	0.363611
C15ORF61	15q23	-0.05697	0.266709	0.363611
HIBCH	2q32.2	-0.05697	0.266712	0.363611
ZNF589	3p21.31	-0.05695	0.266854	0.363779
C11ORF16	11p15.4	-0.05695	0.266892	0.363799
SERPINA12	14q32.13	-0.05694	0.266905	0.363799
SLC25A48	5q31.1	0.056928	0.26704	0.363956
CBLN4	20q13.2	0.056926	0.267056	0.363956
NCAPD2	12p13.31	0.056924	0.267075	0.363957
C10ORF67	10p12.2	-0.0569	0.267253	0.364175
FBRS	16p11.2	-0.0569	0.267314	0.364233
ANKRD66	6p12.3	0.056893	0.267337	0.36424
MRPL46	15q25.3	0.056883	0.267417	0.364324
RFPL3	22q12.3	0.056879	0.267457	0.364353
BEND2	Xp22.13	0.056866	0.26756	0.36447
DLK1	14q32.2	-0.05686	0.267619	0.364524
EFHC2	Xp11.3	0.056849	0.267706	0.364605
NEUROG1	5q31.1	-0.05685	0.267724	0.364605
CCKAR	4p15.2	0.056846	0.267733	0.364605
MBNL2	13q32.1	0.056833	0.267846	0.364734
FRG2B	10q26.3	-0.05683	0.267898	0.364781
NRBP1	2p23.3	0.056805	0.268074	0.364996
SPEM1	17p13.1	-0.0568	0.26813	0.365047
YWHAQ	2p25.1	-0.05679	0.268165	0.36507
SYNPR	3p14.2	0.056769	0.268383	0.365342
MYLIP	6p22.3	0.056735	0.268667	0.365703
FLT3LG	19q13.33	0.056729	0.268716	0.365745
LIMS2	2q14.3	0.056718	0.268809	0.365847
CDK11A	1p36.33	-0.0567	0.268933	0.36599
EPX	17q22	0.056701	0.268954	0.365995
CEP57	11q21	-0.0567	0.268985	0.366013
PLIN2	9p22.1	-0.05668	0.269122	0.366173
FSTL5	4q32.2	0.056651	0.269381	0.366501
WBP2	17q25.1	-0.05664	0.269432	0.366545
SYPL1	7q22.3	0.056639	0.269481	0.366587
ELOVL3	10q24.32	-0.05663	0.269574	0.366689
TMEM98	17q11.2	-0.05661	0.269711	0.36685
LOR	1q21.3	0.056609	0.269736	0.366859
SULT1E1	4q13.3	-0.0566	0.269848	0.366986
S100A11	1q21.3	-0.05658	0.269943	0.367047
SPATA9	5q15	-0.05658	0.26998	0.367047
IQCF3	3p21.2	-0.05658	0.269992	0.367047

TUBA1A	12q13.12	0.056579	0.269994	0.367047
ARHGEF33	2p22.1	-0.05658	0.270006	0.367047
IFITM2	11p15.5	-0.05658	0.27001	0.367047
GSG1L	16p12.1	0.056575	0.27002	0.367047
EGF	4q25	0.056562	0.270136	0.367159
CHERP	19p13.11	-0.05656	0.27014	0.367159
USP6NL	10p14	0.056553	0.270207	0.367226
CLDN20	6q25.3	-0.05654	0.270285	0.367306
TCEAL4	Xq22.2	-0.05654	0.270335	0.36735
C16ORF96	16p13.3	0.056536	0.270358	0.367356
WNT5B	12p13.33	0.056524	0.270456	0.367439
DNAAF1	16q24.1	-0.05652	0.270456	0.367439
PCDHA1	5q31.3	0.056513	0.270552	0.367545
YBX3	12p13.2	-0.05649	0.270774	0.367804
ATP13A2	1p36.13	-0.05649	0.270779	0.367804
PI4K2A	10q24.2	0.056475	0.270869	0.367901
TBX5	12q24.21	0.056456	0.271032	0.368097
SGK3	8q13.1	0.056452	0.271068	0.368122
RPL29P2	17p13.1	-0.05644	0.271142	0.368196
CDC42	1p36.12	0.05644	0.271173	0.368213
ZNF623	8q24.3	0.05643	0.271253	0.368298
OSCAR	19q13.42	0.056423	0.271316	0.368332
DOLPP1	9q34.11	-0.05642	0.271316	0.368332
WFIKKN1	16p13.3	0.056407	0.271448	0.368486
MSC	8q13.3	0.056396	0.271546	0.368596
STRIP2	7q32.1	-0.05639	0.271601	0.368645
PCCB	3q22.3	0.056376	0.271719	0.368773
LYZL1	10p12.1-p11.23	-0.05637	0.271732	0.368773
FAM133CP	10q21.1	0.056365	0.271805	0.368847
LLCFC1	7q34	0.056353	0.271907	0.368896
SNORA27	13q12.2	-0.05635	0.271927	0.368963
PROS1	3q11.1	0.056346	0.271974	0.369001
MOV10L1	22q13.33	0.05634	0.272021	0.36904
TRIM68	11p15.4	0.056335	0.272065	0.369075
BCAN	1q23.1	-0.05631	0.272236	0.369282
C1ORF158	1p36.21	-0.05631	0.272275	0.369309
FAM47C	Xp21.1	-0.0563	0.272378	0.369425
EXOC3L1	16q22.1	-0.05629	0.272434	0.369475
CLTCL1	22q11.21	-0.05628	0.272528	0.369578
PCDHGB1	5q31.3	0.056256	0.272734	0.369832
HDAC7	12q13.11	0.056251	0.272784	0.369875
PSKH2	8q21.3	-0.05624	0.272908	0.370001
ZNF846	19p13.2	0.056235	0.272914	0.370001
FOXB1	15q22.2	-0.05623	0.272944	0.370008
ESRP2	16q22.1	-0.05623	0.272956	0.370008
GLT6D1	9q34.3	-0.05619	0.273282	0.370404
SLED1	4q35.1	-0.05619	0.273286	0.370404
ARL8A	1q32.1	-0.05619	0.273319	0.370424
GPR179	17q12	-0.05618	0.273356	0.37045
KRTAP7-1	21q22.11	0.056173	0.273451	0.370553
MTF2	1p22.1	-0.05616	0.273597	0.370707
ARRDC3-AS1	5q14.3	-0.05615	0.273601	0.370707
APOC2	19q13.32	-0.05615	0.273647	0.370743
GNPDA2	4p12	0.056143	0.273704	0.370795
FGF7P3	9p12	-0.05614	0.27375	0.37081
GEN1	2p24.2	-0.05614	0.273752	0.37081
SCGB3A2	5q32	-0.05613	0.273795	0.370841
SIX3	2p21	0.05613	0.273812	0.370841

DEPDC5	22q12.2-q12.3	0.056118	0.273914	0.370954
SART3	12q23.3	0.05611	0.273988	0.371029
PRXL2C	9q22.33	0.056107	0.274015	0.371041
FAM149B1	10q22.2	0.056096	0.274106	0.371139
TBC1D3H	17q12	-0.05609	0.274185	0.371211
TMPRSS13	11q23.3	-0.05609	0.274196	0.371211
ORM1	9q32	-0.05607	0.274293	0.371317
ATF3	1q32.3	0.056018	0.274774	0.371943
PSG2	19q13.31	0.056006	0.274882	0.372064
FAM72B	1p11.2	-0.056	0.274908	0.372074
MMD	17q22	0.055998	0.274946	0.3721
LINC01119	2p21	-0.05599	0.275011	0.372132
LCE3C	1q21.3	0.05599	0.27502	0.372132
CARF	2q33.2	0.055989	0.275025	0.372132
SLC6A5	11p15.1	0.055975	0.275141	0.372264
OTUD3	1p36.13	-0.05596	0.275243	0.372367
NFYA	6p21.1	0.055962	0.275254	0.372367
WFDC1	16q24.1	0.055953	0.275334	0.372449
GRIN2D	19q13.33	-0.05593	0.275525	0.372682
MMP11	22q11.23	0.055913	0.27568	0.372867
OR7C2	19p13.12	0.055904	0.275755	0.372944
TSPY26P	20q11.21	0.055864	0.276096	0.373379
RTN4RL1	17p13.3	0.05586	0.276136	0.373405
DRC3	17p11.2	0.055858	0.276152	0.373405
RPF1	1p22.3	-0.05583	0.276421	0.373744
ALKAL2	2p25.3	0.05582	0.276474	0.37379
CASC15	6p22.3	-0.05581	0.276594	0.373926
NFRKB	11q24.3	-0.0558	0.276674	0.374009
DENND4B	1q21.3	0.055784	0.276789	0.374139
LGSN	6q12	0.055757	0.277022	0.374429
NEIL2	8p23.1	-0.05571	0.277402	0.374918
LINC00661	19p13.12	0.055702	0.2775	0.375024
TUBB8	10p15.3	0.05569	0.277604	0.37514
PDZK1IP1	1p33	-0.05569	0.277633	0.375153
ATP9A	20q13.2	0.055665	0.277819	0.375379
C3ORF14	3p14.2	-0.05566	0.277884	0.375442
LOC100190986	16p12.2	0.055655	0.277902	0.375442
ADARB1	21q22.3	0.055648	0.277966	0.375502
FAM182B	20p11.1	-0.05561	0.278257	0.37587
PRIMPOL	4q35.1	0.055612	0.278277	0.375872
FBXO43	8q22.2	-0.05561	0.278303	0.375879
CYP4F30P	2q21.1	0.055607	0.27832	0.375879
PRCC	1q23.1	0.055596	0.278409	0.375974
KCNA7	19q13.33	-0.05559	0.278458	0.376016
RPUSD2	15q15.1	-0.05557	0.278663	0.376266
MROH8	20q11.23	-0.05555	0.278784	0.376404
AGTPBP1	9q21.33	-0.05555	0.27884	0.376455
FOLH1	11p11.12	0.05554	0.278901	0.376512
FKBP9	7p14.3	0.055536	0.278935	0.376532
CABLES1	18q11.2	0.055525	0.279028	0.376617
FSCB	14q21.2	0.055524	0.279036	0.376617
PLPPR5	1p21.3	0.055519	0.27908	0.376638
MS4A5	11q12.2	-0.05552	0.279089	0.376638
SMCO1	3q29	0.055516	0.279108	0.376639
TPMT	6p22.3	-0.05551	0.279144	0.376662
OSTCP1	6q25.3	-0.05549	0.279351	0.376916
CPT1C	19q13.33	0.055478	0.279436	0.377004
WDR6	3p21.31	-0.05548	0.27946	0.377004

SLC9A3	5p15.33	-0.05547	0.279473	0.377004
ACOT2	14q24.3	0.055449	0.279684	0.377264
SLC17A4	6p22.2	0.05544	0.279766	0.377349
VPREB3	22q11.23 22q11	0.055424	0.279906	0.377513
DDB2	11p11.2	0.055421	0.279931	0.37752
GDF11	12q13.2	-0.05542	0.279953	0.377525
GBA	1q22	0.055408	0.280043	0.377621
SEPTIN2	2q37.3	0.0554	0.280114	0.377691
LRIT2	10q23.1	-0.05539	0.280242	0.377838
PRAMEF9	1p36.21	-0.05537	0.280374	0.377991
PLD3	19q13.2	0.055355	0.280502	0.378138
TMEM88B	1p36.33	-0.05535	0.280539	0.378162
SLC35D3	6q23.3	-0.05534	0.280607	0.378229
ACAT2	6q25.3	-0.05534	0.280671	0.378289
HOXA6	7p15.2	0.055326	0.280761	0.378385
CYB561D1	1p13.3	0.055284	0.281121	0.378844
TDRD12	19q13.11	0.055231	0.281582	0.37944
ART3	4q21.1 4p15.1-p14	0.05522	0.281682	0.379549
CRNN	1q21.3	0.055208	0.281789	0.379653
UBE2E3	2q31.3	0.055207	0.281797	0.379653
TBC1D3P1-DHX40P1	17q23.1	0.055204	0.28182	0.379659
ST14	11q24.3	-0.05519	0.28193	0.379782
BOLL	2q33.1	0.055154	0.28226	0.380201
PLD5	1q43	0.055143	0.282355	0.380303
RFX2	19p13.3	-0.05512	0.282532	0.380516
CASP3	4q35.1	0.055115	0.2826	0.380582
SMIM10	Xq26.3	0.055094	0.282783	0.380802
LINC00475	9q22.31	0.055089	0.282827	0.380836
ZNF606	19q13.43	-0.05507	0.283018	0.381068
UGT2B10	4q13.2	-0.05504	0.283271	0.381374
AMY2A	1p21.1	-0.05504	0.283284	0.381374
OR2T5	1q44	0.055034	0.283311	0.381385
GPR61	1p13.3	-0.05503	0.28338	0.381452
SLC12A5	20q13.12	-0.05502	0.283436	0.381503
SERPINB6	6p25.2	-0.055	0.283575	0.381663
ZNF275	Xq28	0.054988	0.283712	0.381823
EDN1	6p24.1	0.054969	0.28388	0.382023
ZIC1	3q24	-0.05496	0.283976	0.382126
TEKT2	1p34.3	-0.05495	0.28401	0.382146
OOSP2	11q12.1	0.05494	0.284131	0.382283
IDI1	10p15.3	0.054935	0.284175	0.382317
PCGF2	17q12	0.054927	0.284251	0.382393
MSMB	10q11.22	0.054902	0.28447	0.382662
ADAM30	1p12	0.054884	0.284624	0.382835
CHD6	20q12	0.054883	0.284636	0.382835
XAGE5	Xp11.22	-0.05488	0.284666	0.38285
ARF1	1q42.13	-0.05487	0.284765	0.382957
WDR72	15q21.3	0.054862	0.284818	0.383002
PF4V1	4q13.3	-0.05486	0.28487	0.383046
SSR3	3q25.31	0.054853	0.284898	0.383058
PPP2R2D	10q26.3	-0.05484	0.285004	0.383175
BRCC3	Xq28	-0.05484	0.285032	0.383187
SRY	Yp11.2	-0.05482	0.285144	0.383299
LRRRC71	1q23.1	-0.05482	0.285163	0.383299
HTN1	4q13.3	0.054822	0.285173	0.383299
CXCL17	19q13.2	0.054794	0.285419	0.383604
HCAR3	12q24.31	0.054788	0.285466	0.383642
HUS1	7p12.3	-0.05478	0.285527	0.383697

TLX3	5q35.1	-0.05478	0.285555	0.383709
MAD2L1BP	6p21.1	-0.05476	0.285707	0.383888
SNORA5A	7p13	-0.05475	0.285815	0.384007
GABRR2	6q15	0.054716	0.286099	0.384364
FAM138B	2q14.1	-0.05471	0.28614	0.384371
APOBEC4	1q25.3	0.054712	0.286143	0.384371
ASIC5	4q32.1	-0.0547	0.286203	0.384426
SPRY3	Xq28 and Yq12	0.054701	0.286232	0.384438
LRRC37B	17q11.2	-0.0547	0.286272	0.384467
SUGCT	7p14.1	-0.05469	0.28631	0.384493
C14ORF180	14q32.33	0.054665	0.286557	0.384798
GGNBP1	6p21.31	-0.05466	0.286607	0.38484
GOLGA2P10	15q25.2	-0.05461	0.287014	0.38536
GMFG	19q13.2	0.05461	0.287042	0.385372
USP27X-AS1	Xp11.23	-0.0546	0.287128	0.385461
MBLAC2	5q14.3	0.054595	0.287174	0.385497
PTCRA	6p21.1	0.054589	0.287222	0.385536
NBEAP1	15q11.2	0.054558	0.287499	0.385881
IMPA2	18p11.21	0.054553	0.287539	0.38591
LOC284788	20p11.21	-0.05455	0.287607	0.385976
ALDH3B2	11q13.2	-0.05452	0.287802	0.386211
GRID2	4q22.1-q22.2	0.054507	0.287951	0.386385
SSTR5	16p13.3	-0.0545	0.287987	0.386407
LINC00696	3p21.2	0.054473	0.288249	0.386733
COMMD10	5q23.1	-0.05447	0.288285	0.386755
NMUR1	2q37.1	0.05446	0.288369	0.386842
GOLGA2P5	12q23.1	-0.05445	0.288432	0.3869
FOXP4	6p21.1	-0.05444	0.288525	0.387
F2	11p11.2	-0.05443	0.288609	0.387086
UTP3	4q13.3	-0.05443	0.288663	0.387129
KIAA1107	1p22.1	0.054423	0.288692	0.387129
SDAD1	4q21.1	-0.05442	0.288699	0.387129
PCDHA9	5q31.3	-0.05439	0.289028	0.387545
AKR1D1	7q33	-0.05436	0.28926	0.387829
KPNB1	17q21.32	0.054341	0.289422	0.388021
CNPY4	7q22.1	-0.05433	0.289496	0.388095
UCKL1-AS1	20q13.33	-0.05432	0.289623	0.388238
EIF5A2	3q26.2	0.054294	0.289843	0.388504
CHD7	8q12.2	0.054291	0.289868	0.388504
ZNF33B	10q11.21	0.05429	0.289879	0.388504
ZSCAN4	19q13.43	0.054276	0.289998	0.388611
SNORA71B	20q11.23	-0.05428	0.289998	0.388611
CT45A6	Xq26.3	-0.05427	0.290069	0.388681
RRNAD1	1q23.1	-0.05426	0.290146	0.388757
SERPINA11	14q32.13	0.054236	0.290357	0.389014
KRTAP5-6	11p15.5	-0.05423	0.290411	0.38906
CNN3	1p21.3	0.054227	0.290441	0.389074
TMPRSS4	11q23.3	0.054223	0.290474	0.389092
REXO1L1P	8q21.2	0.054203	0.290653	0.389306
ZMYND12	1p34.2	0.054196	0.290717	0.389366
TBC1D28	17p11.2	-0.05419	0.290775	0.389397
GRK7	3q23	-0.05419	0.290779	0.389397
KIR2DL3	19q13.42	-0.05417	0.290954	0.389606
PRSS54	16q21	-0.05415	0.291151	0.389843
PPIL4	6q25.1	0.054141	0.291205	0.389889
LINC00599	8p23.1	0.054117	0.291421	0.390152
AVP	20p13	-0.05411	0.291499	0.39023
ZNF823	19p13.2	-0.05411	0.291518	0.39023

CHST7	Xp11.3	0.054095	0.291618	0.390281
SNORA9	7p13	-0.05409	0.291627	0.390281
ECH1	19q13.2	-0.05409	0.291628	0.390281
C3ORF79	3q25.2	0.054093	0.291634	0.390281
PHYHIP	8p21.3	0.054079	0.291755	0.390416
IDO2	8p11.21	0.054057	0.291956	0.390659
CXXC4	4q24	0.054054	0.291986	0.390673
GIN1	5q21.1	0.054049	0.292022	0.390696
GPR52	1q25.1	-0.05404	0.29215	0.39084
GPR4	19q13.32	0.054029	0.292209	0.390894
RRAS2	11p15.2	-0.05402	0.292298	0.390986
GAS2L2	17q12	0.054	0.292462	0.39118
LOC100240735	12q13.13	0.05397	0.292735	0.391519
ZDHHC17	12q21.2	0.053962	0.292804	0.391562
SEC16B	1q25.2	0.053962	0.292806	0.391562
RUNDC3A	17q21.31	-0.05395	0.292953	0.391732
GPR75	2p16.2	0.053933	0.293066	0.391857
HIF3A	19q13.32	-0.05392	0.29314	0.39193
MYO18B	22q12.1	0.053919	0.293189	0.391969
MCUB	4q25	0.053892	0.29343	0.392265
CIDEA	18p11.21 18	0.053884	0.293505	0.392333
ZNF107	7q11.21	-0.05388	0.29352	0.392333
VN1R10P	6p22.1	-0.05387	0.293637	0.392464
MOCOS	18q12.2	0.053864	0.293683	0.392498
IGF2BP1	17q21.32	-0.05385	0.293823	0.392644
EPCAM	2p21	-0.05385	0.293831	0.392644
OR52L1	11p15.4	0.053833	0.29396	0.39279
INTU	4q28.1	-0.05383	0.293998	0.392814
MLYCD	16q23.3	-0.05382	0.294121	0.392953
WDR1	4p16.1	0.053796	0.294296	0.39316
HSD17B1	17q21.2	-0.05377	0.294514	0.393426
TGFBR3	1p22.1	0.053757	0.294642	0.39357
SIRPB1	20p13	0.053755	0.294665	0.393575
RPH3A	12q24.13	0.053734	0.29485	0.393795
CCDC117	22q12.1	0.053724	0.294942	0.393892
KRT25	17q21.2	0.053682	0.295322	0.394356
ABCC12	16q12.1	-0.05368	0.295329	0.394356
PRSS57	19p13.3	-0.05367	0.295451	0.394492
OR10G9	11q24.2	0.053657	0.295545	0.394593
OR56A1	11p15.4	-0.05365	0.295636	0.394687
FAM92B	16q24.1	0.053629	0.295798	0.394878
KCNJ14	19q13.33	-0.05358	0.296199	0.395386
MEX3D	19p13.3	-0.05358	0.296254	0.395433
NEB	2q23.3	-0.05356	0.296456	0.395677
PNLIPRP1	10q25.3	-0.05354	0.296599	0.395841
FUCA1	1p36.11	0.053536	0.296633	0.39586
LIPM	10q23.31	-0.05353	0.296655	0.395863
TGM5	15q15.2	0.053516	0.296815	0.396051
ZNF534	19q13.41	-0.05351	0.296876	0.396106
C15ORF56	15q15.1	-0.05351	0.296903	0.396114
MPIG6B	6p21.33	-0.0535	0.296969	0.396177
MAGEB4	Xp21.2	0.053497	0.296989	0.396177
HSPA9	5q31.2	-0.05349	0.297096	0.396293
SCARNA15	15q25.2	-0.05348	0.297116	0.396294
DKKL1	19q13.33	0.053458	0.297341	0.396567
SNORA22	7q11.21	-0.05345	0.297382	0.396596
FTMT	5q23.1	-0.05341	0.297778	0.397079
ACE2	Xp22.2	-0.05341	0.297784	0.397079

VPS36	13q14.3	-0.0534	0.297823	0.397104
FZD10	12q24.33	-0.0534	0.29789	0.397166
PROK2	3p13	0.053389	0.297969	0.397246
GGA3	17q25.1	-0.05338	0.298075	0.397361
TMEM139	7q34	-0.05337	0.298126	0.397402
MASTL	10p12.1	-0.05337	0.298173	0.397438
SLC17A6	11p14.3	-0.05335	0.298302	0.397584
CLK4	5q35.3	-0.05334	0.298381	0.397663
PTPRQ	12q21.31	0.053334	0.298468	0.397753
DCAF12L1	Xq25	0.05332	0.298592	0.397891
SPINK7	5q32	0.05329	0.298865	0.398221
NUMA1	11q13.4	0.053288	0.29888	0.398221
CLSTN3	12p13.31	0.053272	0.299026	0.39839
OR52I2	11p15.4	-0.05326	0.299127	0.398498
JPH1	8q21.11	0.053242	0.299302	0.398705
SLC16A1	1p13.2	-0.05324	0.299333	0.39872
LINC01102	2q12.1	0.053234	0.299376	0.39875
LINC01465	12q14.1	0.053226	0.299447	0.398791
SNX29P2	16p11.2	0.053226	0.299447	0.398791
SMIM5	17q25.1	0.053223	0.29947	0.398796
PDCD4-AS1	10q25.2	0.053219	0.299508	0.398819
LRMDA	10q22.2-q22.3	-0.05321	0.299596	0.398898
COL26A1	7q22.1	-0.05321	0.299607	0.398898
NXF4	Xq22.1	-0.0532	0.299677	0.398965
EEF1AKMT3	12q14.1	-0.05319	0.299737	0.399018
RXRG	1q23.3	-0.05319	0.299792	0.399044
CMTM5	14q11.2	0.053188	0.299796	0.399044
TNFRSF10C	8p21.3	0.053155	0.300089	0.399408
DPP10	2q14.1	0.053153	0.300114	0.399414
RBM14	11q13.2	-0.05315	0.30014	0.399423
DUSP5	10q25.2	0.053126	0.30036	0.399682
SNORA64	16p13.3	0.053124	0.300376	0.399682
EPS8L3	1p13.3	-0.05312	0.300407	0.399698
TOPAZ1	3p21.31	-0.0531	0.300581	0.399903
MICAL1	6q21	-0.05308	0.300754	0.400107
RRN3	16p13.11	0.053071	0.300856	0.400216
TICAM2	5q22.3	0.053057	0.300988	0.400364
CDRT1	17p12	0.053051	0.301038	0.400404
SLC48A1	12q13.11	-0.05303	0.301222	0.400622
SNAR-G2	19q13.33	-0.05303	0.301277	0.400668
MAGEE1	Xq13.3	0.053006	0.301456	0.400858
ENDOU	12q13.11	0.053004	0.301471	0.400858
ZNF620	3p22.1	0.053003	0.301479	0.400858
FBXO42	1p36.13	-0.05298	0.3017	0.401124
SMIM15	5q12.1	0.052968	0.301802	0.401234
HAS2-AS1	8q24.13	-0.05296	0.301872	0.401301
OR1C1	1q44	0.052945	0.302013	0.401456
S100A1	1q21.3	0.052943	0.302029	0.401456
C5ORF30	5q21.1	0.052938	0.302075	0.401491
BAGE	21p11.1	0.052923	0.302215	0.401649
RFPL1	22q12.2	-0.0529	0.30238	0.401842
GPR89B	1q21.2	-0.05287	0.30267	0.402202
C20ORF173	20q11.22	0.05287	0.3027	0.402214
KBTBD2	7p14.3	0.052867	0.302726	0.402222
ATP6AP1L	5q14.2	-0.05286	0.302765	0.402247
ELP5	17p13.1	-0.05286	0.302824	0.402299
KLF10	8q22.3	0.052839	0.302984	0.402479
CLPTM1	19q13.32	0.052837	0.303	0.402479

FAM131B	7q34	-0.05283	0.303046	0.402514
ING2	4q35.1	-0.05282	0.30311	0.402572
POGLUT1	3q13.33	0.052791	0.30342	0.402957
FREM1	9p22.3	-0.05279	0.303458	0.40298
EIF5B	2q11.2	-0.05277	0.303637	0.403192
CDA	1p36.12	-0.05274	0.303871	0.403475
SPATA31D4	9q21.32	-0.05273	0.304015	0.40364
ATPAF2	17p11.2	-0.05272	0.30406	0.403674
NKX2-6	8p21.2	0.052717	0.304099	0.403698
TRAPPC3L	6q22.1	0.052706	0.304201	0.403807
NPVF	7p15.3	0.052696	0.304291	0.40389
OR8K3	11q12.1	-0.05269	0.304304	0.40389
PRPSAP2	17p11.2	0.052683	0.30441	0.40399
TUBA3E	2q21.1	-0.05268	0.30442	0.40399
CFAP53	18q21.1	-0.05268	0.30444	0.40399
C18ORF54	18q21.2	0.052664	0.304585	0.404155
PLEKHH3	17q21.2	-0.05264	0.304798	0.404377
CETN1	18p11.32	-0.05264	0.304804	0.404377
NUP188	9q34.11	0.052639	0.304812	0.404377
CLK2	1q22	-0.05261	0.305044	0.404658
SHROOM2	Xp22.2	-0.05261	0.305088	0.404689
C1ORF229	1q44	0.052603	0.305152	0.404747
EPS15L1	19p13.11	0.052589	0.305278	0.404861
ENDOV	17q25.3	0.052589	0.305278	0.404861
IRF9	14q12	0.052586	0.305304	0.404868
IL25	14q11.2	0.052562	0.305526	0.405136
NXF2B	Xq22.1	-0.05256	0.305582	0.405183
PFAS	17p13.1	0.052545	0.305681	0.405287
USP28	11q23.2	0.052534	0.305782	0.405395
MPPED1	22q13.2	0.052512	0.305987	0.40564
DNM1L	12p11.21	-0.05251	0.30601	0.405644
HOXC10	12q13.13	0.0525	0.306095	0.405729
AIF1L	9q34.12-q34.13	0.052495	0.306141	0.405764
SCAMP5	15q24.2	-0.05249	0.306187	0.405797
PROKR2	20p12.3	0.052471	0.306364	0.406006
GRM8	7q31.33	0.052466	0.306411	0.406041
IMMT	2p11.2 2	0.05246	0.306469	0.406091
ADGRG5	16q21	0.052442	0.306634	0.406274
CYP4F22	19p13.12	0.052438	0.306666	0.406274
AMELY	Yp11.2	-0.05244	0.306668	0.406274
FBXL3	13q22.3	0.052424	0.306797	0.406418
RFX1	19p13.12	0.05241	0.306925	0.406561
STX19	3q11.2	0.052397	0.307046	0.406694
POU3F2	6q16.1	0.052386	0.307148	0.406795
OTUB2	14q32.12	0.052385	0.307163	0.406795
OCSTAMP	20q13.12	-0.05236	0.307416	0.407103
RSPH1	21q22.3	-0.05233	0.307669	0.407411
TWIST1	7p21.1	0.052322	0.307741	0.407479
USP4	3p21.31	0.052314	0.307813	0.407548
TPM2	9p13.3	-0.05231	0.30786	0.407561
NCR3	6p21.33	0.052309	0.307864	0.407561
PCOLCE	7q22.1	0.052306	0.307894	0.407575
PDLIM4	5q31.1	0.052298	0.307968	0.407646
MGC27382	1p31.1	-0.05228	0.308104	0.407798
TTY16	Yp11.2	-0.05227	0.308261	0.40798
NEURL1B	5q35.1	0.052221	0.308683	0.40851
PNMA3	Xq28	0.052217	0.308716	0.408528
USP17L6P	4p16.1	-0.05221	0.308767	0.408568



DTD2	14q12	-0.05219	0.308944	0.408776
ALDH3B1	11q13.2	0.052177	0.309084	0.408934
ZSCAN9	6p22.1	-0.05217	0.309182	0.409036
DDX43	6q13	0.052162	0.309227	0.409068
SLC25A37	8p21.2	0.052159	0.30925	0.409072
SURF4	9q34.2	-0.05215	0.309344	0.409169
CRIP2	14q32.33	0.052146	0.309378	0.409174
ARRDC2	19p13.11	-0.05214	0.309388	0.409174
DCAF12L2	Xq25	0.052128	0.309537	0.409336
SULT4A1	22q13.31	0.052127	0.309552	0.409336
MAGEH1	Xp11.21	0.052102	0.309784	0.409616
CRELD1	3p25.3	-0.0521	0.309842	0.409666
CASP1	11q22.3	-0.05209	0.309868	0.409673
TRAM1	8q13.3	0.052081	0.309974	0.409787
PACRG-AS1	6q26	-0.05207	0.310035	0.40984
SEPTIN7	7p14.2	0.05207	0.310079	0.40987
SNORA13	5q22.1	0.052045	0.310317	0.410159
LOC730668	22q13.31	-0.05202	0.310545	0.410432
ZP1	11q12.2	-0.05202	0.310579	0.41045
TESC	12q24.22	-0.05201	0.310666	0.410519
LRPPRC	2p21	-0.05201	0.310672	0.410519
SF3B4	1q21.2	-0.05199	0.31081	0.410675
ATF5	19q13.33	0.051982	0.310905	0.410772
C12ORF75	12q23.3	-0.05198	0.310939	0.41079
IL20	1q32.1	-0.05197	0.310978	0.410815
PLCB4	20p12.3-p12.2	0.051966	0.311047	0.410879
MSX2P1	17q22	-0.05195	0.311185	0.411035
SLC7A6	16q22.1	-0.05193	0.311413	0.411308
ANKRD33	12q13.13	-0.05192	0.311516	0.411417
NME5	5q31.2	0.051911	0.311564	0.411453
DSC3	18q12.1	0.051894	0.311726	0.411631
TUBB7P	4q35.2	0.051892	0.311739	0.411631
RNF5P1	8p11.22	-0.05188	0.311839	0.411735
FAM71E2	19q13.42	-0.05186	0.312021	0.41193
TRIM21	11p15.4	0.051861	0.312028	0.41193
ALPG	2q37.1	0.051856	0.312077	0.411968
OMA1	1p32.2-p32.1	0.051851	0.31212	0.411998
NBPF3	1p36.12	0.051846	0.31217	0.412027
OR4M2	15q11.2	-0.05184	0.312186	0.412027
KRTAP11-1	21q22.11	0.051841	0.312218	0.412027
LONRF1	8p23.1	0.05184	0.312225	0.412027
UPP2	2q24.1	-0.05181	0.312482	0.412339
OXGR1	13q32.1	0.051807	0.312535	0.412382
TNNI1	1q32.1	0.0518	0.312599	0.41244
KLKP1	19q13.33	-0.05178	0.312752	0.412614
RAX	18q21.32	0.051769	0.312888	0.412766
ARHGAP4	Xq28	0.051757	0.312998	0.412879
LINC00705	10p15.1	0.051756	0.313015	0.412879
CD58	1p13.1	-0.05173	0.31322	0.413123
AMER1	Xq11.2	-0.05168	0.313732	0.413758
MYH6	14q11.2	-0.05168	0.313743	0.413758
CYB5R1	1q32.1	0.051664	0.313871	0.4139
NOA1	4q12	0.05165	0.314007	0.414051
NTNG2	9q34.13	0.05164	0.314098	0.414144
SDS	12q24.13	0.051625	0.314236	0.414299
TAF3	1p13.2	-0.05161	0.314377	0.414457
OR4C15	11q11	0.051594	0.31453	0.414632
POLQ	3q13.33	-0.05159	0.314615	0.414717

C17ORF78	17q12	0.05158	0.314663	0.414753
NOM1	7q36.3	-0.05158	0.314688	0.414758
TMEM164	Xq23	-0.05155	0.314931	0.415051
DND1	5q31.3	-0.05154	0.315022	0.41513
GMDS	6p25.3	0.051541	0.315032	0.41513
LINC01591	8q24.22	0.051526	0.315166	0.41528
LRRC70	5q12.1	-0.0515	0.315426	0.415594
NKX6-1	4q21.23	0.051491	0.315498	0.415655
RCN3	19q13.33	-0.05149	0.315514	0.415655
ARHGEF26	3q25.2	0.051486	0.315542	0.415666
SYT3	19q13.33	0.051462	0.315776	0.415946
FASN	17q25.3	0.051459	0.3158	0.41595
ZNF569	19q13.12	0.051449	0.315899	0.416053
CIDEC	3p25.3	0.051427	0.3161	0.41629
OVCA2	17p13.3	-0.05142	0.31613	0.416303
RUBCNL	13q14.13	-0.05142	0.316209	0.41638
PAX4	7q32.1	0.051408	0.316277	0.416442
SDHAP3	5p15.33	-0.0514	0.316311	0.416459
METTL8	2q31.1	-0.0514	0.316386	0.41653
ALPP	2q37.1	0.051385	0.316498	0.416651
PAXIP1	7q36.2	-0.05138	0.316534	0.416671
NMNAT1	1p36.22	0.051367	0.316666	0.416817
SDR16C6P	8q12.1	-0.05134	0.316953	0.417167
AMBN	4q13.3	-0.0513	0.317291	0.417585
SLC22A18AS	11p15.4	-0.05128	0.317461	0.417763
CHAF1A	19p13.3	-0.05128	0.317485	0.417763
KIAA1324L	7q21.12	0.05128	0.317489	0.417763
MAP2K6	17q24.3	0.051266	0.317617	0.417904
SCARNA8	9p22.1	-0.05125	0.317764	0.418056
OSBPL3	7p15.3	-0.05125	0.317774	0.418056
KRT6A	12q13.13	0.051235	0.317914	0.418213
ZW10	11q23.2	-0.0512	0.318265	0.418646
AMIGO3	3p21.31	-0.05119	0.318316	0.418686
MNAT1	14q23.1	-0.05118	0.318432	0.418789
ATP1A3	19q13.2	0.05118	0.318436	0.418789
MGC57346	17q21.31	-0.05117	0.318518	0.418869
CCN6	6q21	-0.05117	0.318543	0.418874
ZNF568	19q13.12	0.051156	0.318666	0.419009
DNAJC25-GNG10	9q31.3	0.05112	0.318999	0.419419
UHRF1	19p13.3	0.051105	0.319144	0.419582
TFG	3q12.2	0.051099	0.319203	0.419632
FRG2DP	16p11.1	-0.0511	0.319231	0.419641
DISP3	1p36.22	0.051089	0.319299	0.419703
ANKRD7	7q31.31	-0.05105	0.31966	0.420151
THAP9	4q21.22	-0.05105	0.319687	0.420158
POU6F2	7p14.1	-0.05104	0.319735	0.420194
KCNJ13	2q37.1	0.051028	0.319874	0.420348
CTAGE4	7q35	0.051018	0.319971	0.420449
CAP2	6p22.3	0.050996	0.320184	0.420701
LINC00671	17q21.31	-0.05099	0.320241	0.420748
TNFAIP1	17q11.2	0.050969	0.320436	0.420976
GLYAT	11q12.1	-0.05096	0.320559	0.421078
FOXE1	9q22.33	-0.05095	0.320578	0.421078
PIZO1	16q24.3	0.050952	0.320595	0.421078
ETNPPL	4q25	-0.05095	0.320597	0.421078
CNEP1R1	16q12.1	-0.05095	0.320663	0.421137
LETM2	8p11.23	0.050886	0.321224	0.421846
NFYB	12q23.3	0.050874	0.321341	0.421972

IL1RL2	2q12.1	0.050845	0.321616	0.422305
TSEN15	1q25.3	-0.05081	0.321922	0.422679
LOC6444669	18p11.21	-0.0508	0.322025	0.422764
NR2F1	5q15	0.050802	0.322028	0.422764
SMNDC1	10q25.2	-0.05079	0.322162	0.422908
RNF139	8q24.13	-0.05079	0.32218	0.422908
TRIM71	3p22.3	-0.05078	0.322221	0.422918
SPANXA2	Xq27.2	-0.05078	0.32223	0.422918
ZCCHC14	16q24.2	0.050773	0.322303	0.422986
IQCE	7p22.3	-0.05077	0.322324	0.422986
LTC4S	5q35.3	0.050768	0.322352	0.422995
TAS2R43	12p13.2	0.050752	0.322502	0.423164
HOXC6	12q13.13	0.050748	0.322543	0.42319
FOXN3-AS2	14q32.11	-0.05074	0.322636	0.423284
OTX1	2p15	0.050728	0.322731	0.423381
R3HDM1	2q21.3	0.050724	0.32277	0.423404
PTGR1	9q31.3	-0.05072	0.322836	0.423463
TBX15	1p12	0.050694	0.323054	0.423721
CDC20B	5q11.2	0.05069	0.323099	0.423738
TEX55	3q13.32	0.050688	0.323111	0.423738
CLDN5	22q11.21	0.050686	0.32313	0.423738
C2ORF83	2q36.3	-0.05067	0.32325	0.423868
STX18	4p16.3-p16.2	-0.05067	0.323323	0.423911
ZFP28	19q13.43	0.050666	0.323326	0.423911
PTPN2	18p11.21	0.050655	0.323435	0.424026
TMEM165	4q12	0.050618	0.323787	0.42446
OR8G5	11q24.2	-0.0506	0.323984	0.424691
EFCAB12	3q21.3	0.050561	0.32433	0.425117
BSPH1	19q13.33	0.050557	0.324372	0.425144
UBXN8	8p12	0.050548	0.324451	0.425219
WNT16	7q31.31	-0.05054	0.324492	0.42523
PMCHL2	5q13.2	-0.05054	0.324517	0.42523
SCARNA23	Xp22.11	-0.05054	0.324523	0.42523
SULT1A2	16p11.2	-0.05052	0.324723	0.425456
GSTM2P1	6q21	-0.05052	0.324748	0.425456
FMR1-AS1	Xq27.3	0.050516	0.324759	0.425456
POT1	7q31.33	-0.0505	0.324905	0.425619
MXI1	10q25.2	-0.05048	0.325078	0.425819
FHL3	1p34.3	-0.05048	0.325118	0.425842
CCL4	17q12	0.05044	0.325488	0.426299
PNCK	Xq28	-0.05043	0.325561	0.426367
RAB9BP1	5q21.2-q21.3	0.050408	0.325803	0.426602
LINC00908	18q23	0.050408	0.325803	0.426602
EFCC1	3q21.3	0.050407	0.325804	0.426602
AQP2	12q13.12	0.050403	0.325844	0.426626
MCM10	10p13	-0.0504	0.325881	0.426646
CCDC166	8q24.3	-0.05039	0.325933	0.426688
CDKN2B-AS1	9p21.3	0.050355	0.326307	0.427149
AP3M2	8p11.21	-0.05035	0.326371	0.427202
NKAIN2	6q22.31	-0.05035	0.32639	0.427202
LBP	20q11.23	-0.05034	0.326439	0.427238
ACTN2	1q43	0.050339	0.32646	0.427238
CNMD	13q14.3	0.050314	0.326699	0.427523
KPRP	1q21.3	-0.05029	0.326931	0.427799
DEPTOR	8q24.12	-0.05029	0.326978	0.427812
HHATL	3p22.1	0.050285	0.326985	0.427812
LINC00575	4q21.22	-0.05027	0.327124	0.427966
SMTN	22q12.2	0.050254	0.327281	0.428144

PEBP4	8p21.3	0.050248	0.327336	0.428178
FBXO9	6p12.1	-0.05025	0.32735	0.428178
PLA1A	3q13.33	0.050227	0.327538	0.428397
CASC1	12p12.1	-0.05022	0.327604	0.428454
C3ORF84	3p21.31	-0.05022	0.327649	0.428486
INVS	9q31.1	-0.0502	0.327779	0.428628
NDUFV2	18p11.22	-0.0502	0.327827	0.428662
C22ORF42	22q12.3	-0.05017	0.328057	0.428935
APOC1P1	19q13.32	0.050171	0.328082	0.428939
LNX2	13q12.2	0.050165	0.328139	0.428986
TES	7q31.2	0.05013	0.328474	0.429377
GPR39	2q21.2	-0.05013	0.328481	0.429377
ZBTB12	6p21.33	-0.05011	0.328682	0.429611
PHF23	17p13.1	0.050079	0.328971	0.429961
WDR54	2p13.1	-0.05007	0.329037	0.43002
RCHY1	4q21.1	0.050068	0.329081	0.430049
ZNF230	19q13.31	0.050063	0.329123	0.430076
PKP1	1q32.1	-0.05006	0.329169	0.430108
PDE6H	12p12.3	0.050046	0.329289	0.430237
PTCH1	9q22.32	0.050044	0.329312	0.430239
TIMELESS	12q13.3	-0.05004	0.329389	0.430312
KRT3	12q13.13	0.049999	0.329745	0.430748
ALDH1B1	9p13.1	-0.04999	0.329858	0.430868
TMEM154	4q31.3	0.049983	0.329902	0.430898
LYL1	19p13.13	0.049979	0.329942	0.430921
ANP32C	4q32.3	0.049974	0.329985	0.430949
ZNF790	19q13.12	-0.04995	0.330237	0.431203
OR2M5	1q44	0.049943	0.330287	0.431203
OR511	11q12.1	0.049943	0.330287	0.431203
OR8B12	11q24.2	0.049943	0.330287	0.431203
OR4C16	11q11	0.049943	0.330287	0.431203
CDH4	20q13.33	0.049936	0.330355	0.431264
TSC1	9q34.13	-0.04992	0.330464	0.431377
SETD9	5q11.2	-0.0499	0.330672	0.431622
MRGPRX3	11p15.1	-0.04989	0.330791	0.431748
HOMER3	19p13.11	-0.04985	0.331149	0.432187
GAPDH	12p13.31	-0.04984	0.331276	0.432326
LRAT	4q32.1	0.049834	0.331348	0.432391
TACSTD2	1p32.1	0.049823	0.331451	0.432497
LAMP2	Xq24	-0.04981	0.331626	0.432691
CSN1S1	4q13.3	-0.0498	0.331642	0.432691
ABAT	16p13.2	-0.04977	0.332	0.43313
CLCA3P	1p22.3	0.049751	0.33215	0.433296
CD3D	11q23.3	0.049742	0.332237	0.433382
PAX8-AS1	2q14.1	-0.04971	0.332587	0.43381
KANK3	19p13.2	-0.0497	0.332629	0.433837
ALG2	9q22.33	-0.04969	0.332708	0.433911
C5	9q33.2	0.049663	0.333007	0.434272
KIAA0895	7p14.2	-0.04964	0.333258	0.434573
HAND1	5q33.2	0.04962	0.333431	0.434741
INHA	2q35	-0.04962	0.333443	0.434741
USP17L9P	4p16.1	-0.04962	0.333453	0.434741
URAD	13q12.2	0.049602	0.333603	0.434909
FNDC7	1p13.3	-0.0496	0.333656	0.434949
SAGE1	Xq26.3	-0.04959	0.333718	0.435002
SNTG1	8q11.21	-0.04958	0.333802	0.435084
IRX5	16q12.2	-0.04956	0.333982	0.435289
EDAR	2q13	0.04956	0.334015	0.435304

CDHR1	10q23.1	-0.04955	0.334122	0.435415
OR6C70	12q13.2	-0.04954	0.334174	0.435455
GOLGA6A	15q24.1	0.049539	0.334215	0.435479
SLC6A6	3p25.1	0.049535	0.334256	0.435505
RASIP1	19q13.33	0.049483	0.334766	0.436141
LINC01020	5p15.32	0.049478	0.334811	0.436171
FOXM1	12p13.33	-0.04945	0.335088	0.4365
BATF3	1q32.3	-0.04945	0.335107	0.4365
TRPC2	11p15.4	0.049446	0.33513	0.436502
GK3P	4q32.3	0.049441	0.335181	0.436539
HYOU1	11q23.3	0.049434	0.335248	0.436599
RMST	12q23.1 12q21	0.049391	0.335667	0.437115
SRD5A2	2p23.1	-0.04936	0.335945	0.437449
NFKBIA	14q13.2	0.049357	0.335997	0.437488
NOC3L	10q23.33	-0.04934	0.336153	0.437663
TBCE	1q42.3	-0.04934	0.336187	0.437679
TAAR6	6q23.2	-0.04932	0.336395	0.437921
CRNKL1	20p11.23	-0.0493	0.336552	0.438071
PCBP2	12q13.13	-0.0493	0.336554	0.438071
SEC61A1	3q21.3	0.049288	0.336679	0.438205
EDNRA	4q31.22-q31.23	0.04928	0.336753	0.438273
IRF7	11p15.5	-0.04927	0.336886	0.438418
MYH2	17p13.1	0.04926	0.336955	0.438479
CYB5RL	1p32.3	0.049256	0.336996	0.438504
DAZ1	Yq11.223	0.049238	0.33717	0.438702
TBC1D22A	22q13.31	-0.04924	0.337197	0.438708
ARAP1	11q13.4	0.049215	0.337393	0.438927
DNAJB8	3q21.3	-0.04921	0.337409	0.438927
ULBP1	6q25.1	-0.04919	0.337611	0.439162
SUPT5H	19q13.2	0.049189	0.337647	0.439181
LINC00469	17q25.1	0.049179	0.337749	0.439284
ABHD14A	3p21.2	-0.04918	0.337783	0.4393
CKAP5	11p11.2	0.049133	0.338202	0.439817
DCUN1D3	16p12.3	-0.04912	0.338319	0.43994
ADAM21P1	14q24.2	0.049108	0.338449	0.440081
SP9	2q31.1	-0.04909	0.338589	0.440234
PRDM14	8q13.3	-0.04907	0.338798	0.440477
SPRR4	1q21.3	-0.04907	0.338864	0.440534
CES1P1	16q12.2	-0.04906	0.338902	0.440556
PON2	7q21.3	0.049031	0.339208	0.440924
USP2	11q23.3	-0.04899	0.339575	0.441363
RNF207	1p36.31	-0.04899	0.339611	0.441363
DPPA5	6q13	-0.04899	0.339612	0.441363
COL11A2	6p21.32	-0.04897	0.339773	0.441543
SYCP3	12q23.2	0.048963	0.339879	0.441653
RMND5A	2p11.2	0.048958	0.339928	0.441688
ZNF300	5q33.1	0.048948	0.340024	0.441784
LCE2A	1q21.3	-0.04893	0.340206	0.44198
NOXA1	9q34.3	-0.04893	0.340219	0.44198
C1QTNF4	11p11.2	-0.04889	0.340591	0.442435
TTY18	Yp11.2	0.048881	0.340685	0.442529
PYGL	14q22.1	0.048877	0.340724	0.44255
TSPOAP1	17q22	-0.04887	0.340836	0.442667
LAMTOR3	4q23	-0.04886	0.340877	0.442691
TSGA13	7q32.2	-0.04885	0.340955	0.442764
DKK4	8p11.21	-0.04883	0.341166	0.44301
SPAG16	2q34	-0.04881	0.341358	0.44323
AACSP1	5q35.3	-0.04881	0.34138	0.44323

ZNF224	19q13.31	0.048786	0.341627	0.443522
MCHR2	6q16.2	0.04877	0.341783	0.443696
HULC	6p24.3	-0.04877	0.341823	0.443718
A2ML1	12p13.31	-0.04874	0.342042	0.443974
PMCHL1	5p14.3	-0.04873	0.342164	0.444103
SSTR4	20p11.21	0.048722	0.342261	0.4442
CD7	17q25.3	0.048671	0.342769	0.444832
PRKAG3	2q35	0.048666	0.342819	0.444868
OR2A9P	7q35	0.048655	0.342923	0.444974
DGAT2L6	Xq13.1	-0.04865	0.342949	0.444978
DGKG	3q27.2-q27.3	-0.04864	0.343061	0.445095
GON7	14q32.12	-0.04864	0.343122	0.445145
ZNF549	19q13.43	0.048608	0.343392	0.445466
CRTC2	1q21.3	0.048589	0.343578	0.445679
CELA3B	1p36.12	-0.04858	0.343639	0.445718
OR52N2	11p15.4	0.048582	0.343652	0.445718
LYSMD2	15q21.2	0.048577	0.343706	0.445759
UNCX	7p22.3	0.048573	0.343744	0.445779
BCORL1	Xq26.1	0.048565	0.343818	0.445845
KPNA2	17q24.2	-0.04854	0.344055	0.446125
IFIT3	10q23.31	0.048498	0.344491	0.44666
C10ORF90	10q26.2	0.048486	0.344603	0.446778
BPGM	7q33	0.048481	0.344654	0.446814
DEPDC1	1p31.3	0.048473	0.344739	0.446896
PRTN3	19p13.3	0.048463	0.344837	0.446993
RNU12-2P	Xp11.3	0.048447	0.344993	0.447167
FBXO48	2p13.3	0.048431	0.345157	0.44735
LIPF	10q23.31	0.048428	0.345183	0.447355
GDI2	10p15.1	0.048425	0.345216	0.447369
SCAI	9q33.3	-0.04842	0.345253	0.447388
CALCA	11p15.2	-0.04842	0.345284	0.447399
CXCL9	4q21.1	0.048409	0.345377	0.447491
SKAP1	17q21.32	0.048404	0.345428	0.447528
PCDHB17P	5q31.3	0.048387	0.345599	0.447699
TFAP2A	6p24.3	0.048383	0.34563	0.447699
MT1E	16q13	0.048383	0.345635	0.447699
SOX4	6p22.3	0.048382	0.34565	0.447699
FER1L5	2q11.2	-0.04838	0.345672	0.447699
SNORD115-13	15q11.2	-0.04835	0.345916	0.447986
FBXO45	3q29	-0.04835	0.345957	0.44801
SPATA6L	9p24.2-p24.1	-0.04833	0.346135	0.448212
GMPPB	3p21.31	0.048324	0.346219	0.448292
SPEG	2q35	0.048306	0.346404	0.448482
MAEA	4p16.3	-0.04831	0.346411	0.448482
ALKBH8	11q22.3	0.048297	0.346495	0.448562
MYOG	1q32.1	-0.04829	0.346613	0.448686
PLXNA1	3q21.3	0.04827	0.346764	0.448839
HNF4A	20q13.12	-0.04827	0.346792	0.448839
ZNF324B	19q13.43	0.048267	0.346798	0.448839
DGKE	17q22	-0.04826	0.346874	0.448907
NSUN4	1p33	0.048255	0.346912	0.448928
CNBD1	8q21.3	-0.04825	0.346992	0.449003
ADIPOQ	3q27.3	0.048236	0.347107	0.449122
LCNL1	9q34.3	-0.04823	0.347203	0.449205
NUMBL	19q13.2	0.048225	0.347216	0.449205
ANO2	12p13.31	0.048219	0.347275	0.449253
SPRR2F	1q21.3	-0.04821	0.34739	0.449347
KANSL3	2q11.2	-0.04821	0.347393	0.449347

LRIT1	10q23.1	0.04819	0.347562	0.449536
TBC1D16	17q25.3	-0.04817	0.347731	0.449727
LGALS3	14q22.3	0.048156	0.347906	0.449924
CACNA1F	Xp11.23	0.048141	0.348057	0.45009
AK1	9q34.11	-0.04814	0.34809	0.450103
RNF217	6q22.31	0.048129	0.348172	0.45018
EFNA2	19p13.3	-0.04812	0.348267	0.45025
DACH2	Xq21.2	0.048119	0.348271	0.45025
LINC01777	1p36.32	-0.0481	0.348423	0.450418
KRT31	17q21.2	-0.04809	0.348569	0.450577
OR4D11	11q12.1	0.048085	0.34862	0.450615
STAT5B	17q21.2	0.048082	0.348651	0.450625
C16ORF86	16q22.1	-0.04806	0.348874	0.450864
FBXW12	3p21.31	-0.04806	0.348881	0.450864
TBPL2	14q22.3	0.048029	0.349183	0.4512
LMF1	16p13.3	-0.04803	0.349186	0.4512
PRB4	12p13.2	0.04801	0.349368	0.451406
RAPGEF4	2q31.1	-0.04797	0.349724	0.451813
ERBB2	17q12	0.047974	0.349728	0.451813
GPR151	5q32	-0.04797	0.349785	0.451857
HARS2	5q31.3	-0.04796	0.34989	0.451964
CYP26C1	10q23.33	0.047955	0.34992	0.451974
RILPL2	12q24.31	0.047948	0.349996	0.452043
CSNK1A1P1	15q14	0.047906	0.350413	0.452552
OTUD6A	Xq13.1	-0.04789	0.350564	0.452717
NADK	1p36.33	-0.04787	0.350729	0.452902
PHRF1	11p15.5	-0.04787	0.350768	0.452923
PXDC1	6p25.2	0.047861	0.350866	0.45302
SYCP1	1p13.2	-0.04786	0.350927	0.453059
SLC1A7	1p32.3	-0.04785	0.350942	0.453059
DUSP12	1q23.3	-0.04785	0.351013	0.453122
CST9	20p11.21	-0.04781	0.351397	0.453589
PACRG	6q26	-0.0478	0.351458	0.453638
APH1A	1q21.2	0.04779	0.351584	0.453772
ATG12	5q22.3	0.04778	0.351691	0.453873
NF2	22q12.2	-0.04778	0.351714	0.453873
FKSG29	13q32.3	0.047774	0.351745	0.453873
RIPOR3	20q13.13	-0.04777	0.351754	0.453873
TCERG1	5q32	-0.04776	0.351897	0.454029
ZNF330	4q31.21	-0.04775	0.35201	0.454146
GAGE2D	Xp11.23	-0.04774	0.352048	0.454166
IGFBP7	4q12	0.047738	0.352112	0.454219
HCP5	6p21.33	-0.04772	0.35226	0.454381
ZMYND8	20q13.12	-0.04771	0.352384	0.454496
RAG1	11p12	0.04771	0.352395	0.454496
CLEC3A	16q23.1	-0.0477	0.352504	0.454607
NXNL1	19p13.11	0.047692	0.352579	0.454675
KCNH7	2q24.2	0.047672	0.352776	0.454876
CT47A2	Xq24	-0.04767	0.35278	0.454876
PHGR1	15q15.1	-0.04767	0.352834	0.454916
PSMD5	9q33.2	0.047663	0.352867	0.454929
LOC100128573	19p13.2	-0.04766	0.352948	0.455005
ST13P4	13q14.2	0.047651	0.352991	0.455031
LPCAT2	16q12.2	-0.04764	0.353067	0.455099
PKD1	16p13.3	0.047636	0.353139	0.455163
ANKLE2	12q24.33	0.047628	0.353222	0.45524
ATG2A	11q13.1	-0.04762	0.353272	0.455275
CPA5	7q32.2	-0.04758	0.35375	0.455837

OR10V1	11q12.1	0.047576	0.353754	0.455837
LINC00200	10p15.3	0.04752	0.354318	0.456515
ITPK1	14q32.12	0.047519	0.354325	0.456515
CTDSP1	2q35	-0.04746	0.354939	0.457277
RARS	5q34	-0.04745	0.355055	0.457396
C20ORF204	20q13.33	-0.04744	0.355128	0.457461
SNORA5B	7p13	0.047426	0.355274	0.45762
PPP6R3	11q13.2	0.047417	0.355357	0.457693
BCL2L14	12p13.2	0.047416	0.355376	0.457693
CASP14	19p13.12	-0.04741	0.355447	0.457754
LINC00346	13q34	0.047406	0.355474	0.457759
STARD13	13q13.1-q13.2	0.047404	0.355499	0.457762
DMGDH	5q14.1	-0.04739	0.355657	0.457934
IRAK4	12q12	-0.04739	0.355678	0.457934
IGFN1	1q32.1	-0.04738	0.35572	0.457959
SPRR1A	1q21.3	0.047378	0.355758	0.457979
PDILT	16p12.3	0.047371	0.355832	0.458036
MAPK8IP1	11p11.2	-0.04737	0.355849	0.458036
BAMBI	10p12.1	-0.04737	0.355886	0.458055
NFATC2IP	16p11.2	0.047362	0.355917	0.458065
SHISA9	16p13.12	0.047358	0.355961	0.458092
SNAR-G1	19q13.33	-0.04732	0.356304	0.458504
AGPAT1	6p21.32	0.047306	0.356495	0.45872
ITLN2	1q23.3	0.047279	0.356769	0.459044
RTP5	2q37.3	0.047244	0.357124	0.459462
FGFBP3	10q23.32	0.04724	0.357163	0.459462
BDNF-AS	11p14.1	-0.04724	0.357163	0.459462
CACNG3	16p12.1	-0.04722	0.357361	0.459687
CYP2A13	19q13.2	-0.04722	0.357393	0.459694
LINC00964	8q24.13	0.047215	0.357412	0.459694
OR4C6	11q11	-0.0472	0.357549	0.459841
KRTAP10-10	21q22.3	-0.04719	0.357635	0.459922
FAM3C	7q31.31	0.047181	0.35776	0.460053
C19ORF38	19p13.2	0.047175	0.357822	0.460103
PCDHGA7	5q31.3	0.047162	0.357962	0.460253
KRTAP19-3	21q22.11	-0.04716	0.358024	0.4603
SNORD115-26	15q11.2	-0.04715	0.358049	0.4603
BCRP3	22q11.23	-0.04715	0.358068	0.4603
CYP20A1	2q33.2	-0.04714	0.358167	0.460389
TEX2	17q23.3	0.04714	0.358182	0.460389
DAZ3	Yq11.23	0.047128	0.358307	0.46052
HOXA11	7p15.2	-0.04712	0.358404	0.460615
LINC00839	10q11.21	-0.04711	0.358527	0.460743
DLGAP3	1p34.3	-0.0471	0.35856	0.460756
MIR7-3HG	19p13.3	-0.04709	0.358723	0.460936
ZNF808	19q13.41	0.047082	0.358777	0.460975
SLC29A1	6p21.1	-0.04707	0.358925	0.461137
HTR1D	1p36.12	-0.04706	0.359005	0.461185
EXOC2	6p25.3	0.047059	0.359009	0.461185
NUP160	11p11.2	0.04705	0.359099	0.461271
FAM86FP	12p13.31	-0.04702	0.359434	0.461672
ATP11A	13q34	-0.04698	0.359861	0.462191
RAB32	6q24.3	-0.04697	0.359894	0.462204
C1ORF162	1p13.2	0.046965	0.359972	0.462273
TACR3	4q24	0.046953	0.360089	0.462395
HOMER1	5q14.1	-0.04695	0.360159	0.462455
ABCA5	17q24.3	0.04694	0.360232	0.462518
SQLE	8q24.13	-0.04694	0.360271	0.462529



KLHL36	16q24.1	0.046934	0.360289	0.462529
GALNTL5	7q36.1	-0.04693	0.360309	0.462529
CELA2B	1p36.21	0.046888	0.36076	0.463078
RNF186	1p36.13	0.046848	0.361168	0.463571
OR1D2	17p13.3	0.046846	0.361192	0.463573
DLD	7q31.1	0.046816	0.361503	0.463943
TAS2R50	12p13.2	-0.0468	0.361654	0.464097
PPP1R1C	2q31.3-q32.1	0.046799	0.36167	0.464097
OR2K2	9q31.3	-0.04679	0.361772	0.464198
OR5AU1	14q11.2	0.046776	0.361911	0.464347
GLB1L3	11q25	0.046765	0.362022	0.46446
DYTN	2q33.3	-0.04674	0.362331	0.464826
GEMIN5	5q33.2	-0.04672	0.362499	0.465012
TNFRSF18	1p36.33	-0.04671	0.362552	0.46505
ST6GAL1	3q27.3	0.046711	0.362583	0.46506
NPNT	4q24	0.046707	0.362618	0.465063
BCAT2	19q13.33	-0.04671	0.362632	0.465063
UQCRRS1	19q12	-0.0467	0.362685	0.465102
OR52E8	11p15.4	-0.04669	0.362785	0.46517
KRTAP19-1	21q22.11	-0.04669	0.362785	0.46517
BIRC8	19q13.42	-0.04665	0.363176	0.465642
SF1	11q13.1	-0.04661	0.363609	0.466167
RPL3L	16p13.3	0.046602	0.363705	0.466261
BMS1P2	10q11.22	-0.04659	0.363791	0.466341
KSR1	17q11.2	0.046581	0.363918	0.466468
RAB37	17q25.1	0.046578	0.363944	0.466468
BTN3A1	6p22.2	0.046577	0.36396	0.466468
ING3	7q31.31	0.046574	0.363991	0.466478
CATSPERD	19p13.3	-0.04653	0.364442	0.467026
SLC35G1	10q23.33	-0.04652	0.364499	0.467043
EGFL6	Xp22.2	-0.04652	0.364502	0.467043
MCFD2	2p21	0.046521	0.364533	0.467052
PSTPIP2	18q21.1 tdb7990	-0.04652	0.364575	0.467077
SCARNA4	1q22	-0.04651	0.364602	0.467081
PDLIM2	8p21.3	0.046491	0.364849	0.467368
C16ORF90	16p13.3	0.046479	0.364969	0.467464
TMA16	4q32.2	-0.04648	0.364971	0.467464
C1QL2	2q14.2	0.046463	0.365133	0.467642
FMO1	1q24.3	0.046454	0.365232	0.467739
SCNN1G	16p12.2	0.046407	0.365719	0.468332
WDR73	15q25.2	-0.04637	0.366059	0.468738
C2CD2	21q22.3	0.046369	0.366103	0.468765
GPR32	19q13.33	-0.04633	0.366497	0.469239
DNAJB7	22q13.2	-0.04632	0.366656	0.469397
KLHL32	6q16.1	0.046315	0.366667	0.469397
PGM5P2	9p11.2	0.04631	0.366716	0.469424
TMEM251	14q32.12	0.046307	0.36675	0.469424
TPTE2	13q12.11	0.046306	0.366759	0.469424
ZNF331	19q13.42	0.046303	0.366788	0.469431
RHOXF2B	Xq24	-0.04629	0.366931	0.469585
NMI	2q23.3	-0.04629	0.36696	0.469591
CASP5	11q22.3	0.046275	0.36708	0.469715
PART1	5q12.1	-0.04627	0.367117	0.469732
CCND3	6p21.1	-0.04623	0.367596	0.470315
GSTT2	22q11.23	-0.04622	0.367645	0.470348
RBM41	Xq22.3	0.046217	0.367679	0.470362
MNS1	15q21.3	0.046211	0.367748	0.470419
SPDYE5	7q11.23	-0.04621	0.367789	0.470442

STON2	14q31.1	0.046175	0.368119	0.470833
SLC25A25	9q34.11	-0.04617	0.368199	0.470906
ASPRV1	2p13.3	0.046161	0.368262	0.470956
UBQLN4	1q22	0.046143	0.368449	0.471166
LOC401127	4p14	-0.04612	0.368693	0.471433
SNORA80A	21q22.11	-0.04612	0.368705	0.471433
PTPN1	20q13.13	-0.04611	0.368834	0.471568
TPGS2	18q12.2	0.04609	0.369002	0.471753
KLK2	19q13.33	-0.04608	0.369114	0.471865
DNAJC1	10p12.31	-0.04603	0.369602	0.47246
CTXN3	5q23.2	0.045991	0.370029	0.472975
OR2M3	1q44	-0.04597	0.370294	0.473275
DEFB1	8p23.1	-0.04596	0.370353	0.473275
TRABD2A	2p11.2	-0.04596	0.370356	0.473275
RADX	Xq22.3	-0.04596	0.370358	0.473275
TRIM4	7q22.1	0.045945	0.370515	0.473445
ATP23	12q14.1	-0.04593	0.37063	0.473561
FAM238A	10p12.1	0.04593	0.370663	0.473573
IDI2-AS1	10p15.3	-0.04592	0.370755	0.473661
LINC00887	3q29	-0.04591	0.370837	0.473736
ADAMTS20	12q12	0.045857	0.371434	0.474468
MPV17L	16p13.11	-0.04584	0.371599	0.474649
TRIM60	4q32.3	-0.04582	0.371867	0.47496
OASL	12q24.31	0.045797	0.372051	0.475162
ZMYM2	13q12.11	0.045795	0.372073	0.475162
GATAD2A	19p13.11	-0.04577	0.372381	0.475501
ICA1L	2q33.2	-0.04577	0.372385	0.475501
OR4M1	14q11.2	0.045762	0.372424	0.475521
NANS	9q22.33	-0.04575	0.372498	0.475584
CHFR	12q24.33	0.045737	0.37268	0.475787
EIF4A1	17p13.1	0.045728	0.372775	0.475877
REV1	2q11.2	0.045712	0.372948	0.476069
CYP4X1	1p33 1	-0.04569	0.373129	0.476268
VNN3	6q23.2	0.045688	0.373201	0.476318
MYL3	3p21.31	-0.04569	0.373215	0.476318
GAGE10	Xp11.23	-0.04566	0.373472	0.476616
CACNA2D4	12p13.33	-0.04564	0.373703	0.476879
C11ORF65	11q22.3	-0.04562	0.373869	0.477062
TTLL8	22q13.33	0.045616	0.373948	0.477131
EID2B	19q13.2	-0.04561	0.373995	0.477161
GOT1L1	8p11.23	-0.04561	0.374064	0.477219
CCL27	9p13.3	-0.0456	0.374143	0.47729
ZIC3	Xq26.3	0.045593	0.374193	0.477323
LINC00691	3p24.2	-0.04558	0.374303	0.477433
PCDHB15	5q31.3	0.045576	0.374368	0.477484
TIPIN	15q22.31	0.045567	0.374462	0.477575
VWA3A	16p12.2	-0.04556	0.374542	0.477645
C2CD2L	11q23.3	-0.04553	0.374896	0.478051
COLQ	3p25.1	-0.04552	0.374908	0.478051
SLC9B2	4q24	-0.04552	0.374951	0.478076
CFAP97D1	17q21.31	0.045508	0.375082	0.478208
DNMBP-AS1	10q24.2	-0.04551	0.375102	0.478208
TNK2	3q29	-0.04547	0.375464	0.478639
ARHGEF38	4q24	0.045451	0.375686	0.478891
COQ6	14q24.3	-0.04542	0.375994	0.479253
GPC3	Xq26.2	-0.04541	0.376136	0.479405
ANP32D	12q13.11	0.045404	0.376174	0.479422
DSCR4	21q22.13	-0.0454	0.376239	0.479475

EWSAT1	15q23	-0.04539	0.376327	0.479556
CYP4Z2P	1p33	-0.04538	0.376408	0.479629
KRTDAP	19q13.12	-0.04538	0.376445	0.479646
DLL4	15q15.1	0.045373	0.376501	0.47966
PLIN1	15q26.1	0.045373	0.376505	0.47966
ZNF501	3p21.31	0.04537	0.376538	0.479672
LRFN1	19q13.2	-0.04536	0.376596	0.479716
CXORF38	Xp11.4	0.045353	0.376719	0.479842
ZNF512	2p23.3	0.04531	0.377173	0.480389
XKR3	22q11.1	0.045302	0.377251	0.480459
MAU2	19p13.11	0.045296	0.377311	0.480504
BRD7P3	6q22.31	-0.04529	0.377348	0.480521
SLC22A10	11q12.3	-0.04527	0.377546	0.480742
N6AMT1	21q21.3	-0.04524	0.377906	0.48117
IFNG	12q15	-0.04524	0.377937	0.481179
KRT74	12q13.13	-0.04523	0.378021	0.481256
RBP7	1p36.22	-0.0452	0.378359	0.481655
CAVIN4	9q31.1	0.045191	0.378423	0.481706
DUX4L6	4q35.2	0.045188	0.378459	0.481721
LINC01551	14q12	-0.04518	0.378491	0.481731
KRT33B	17q21.2	0.045181	0.378526	0.481745
RPL10L	14q21.2	0.045172	0.378619	0.481832
ARSA	22q13.33	-0.04516	0.378699	0.481885
TADA1	1q24.1	0.045164	0.378708	0.481885
FBXO16	8p21.1	0.045158	0.378768	0.481931
HERC5	4q22.1	-0.04514	0.37894	0.482119
RXRA	9q34.2	-0.04514	0.378979	0.482138
ZNF652	17q21.32-q21.33	0.045125	0.379118	0.482284
ERICH6B	13q14.13	0.045121	0.379163	0.482311
TRIM55	8q13.1	0.045092	0.37947	0.48267
C1ORF54	1q21.2	0.045073	0.379675	0.4829
PATL2	15q21.1	0.045052	0.379894	0.483149
TXLNG	Xp22.2	0.045043	0.379984	0.483232
EVPL	17q25.1	0.045028	0.380148	0.48341
SERPIND1	22q11.21	-0.04501	0.380307	0.483582
FAM9B	Xp22.31	-0.04498	0.380608	0.483932
LZTFL1	3p21.31	-0.04498	0.380631	0.483932
IKBKE	1q32.1	0.044967	0.380789	0.484102
PPIL3	2q33.1	-0.04496	0.380873	0.484178
C5ORF64	5q12.1	-0.04495	0.380926	0.484215
NEU2	2q37.1	0.04495	0.380978	0.484228
DNAJC28	21q22.11	0.044949	0.380985	0.484228
GJA3	13q12.11	0.044942	0.381057	0.484289
NPSR1	7p14.3	0.044926	0.381224	0.48447
NXF2	Xq22.1	-0.04492	0.38133	0.484574
OTOP1	4p16.3	-0.0449	0.381523	0.484789
PITX3	10q24.32	0.044884	0.381674	0.48495
TMEM44	3q29	-0.04486	0.381922	0.485198
SNORA44	1p35.3	-0.04486	0.381941	0.485198
GMNC	3q28	0.044857	0.381961	0.485198
DONSON	21q22.11	-0.04486	0.381974	0.485198
ENSA	1q21.3	-0.04485	0.38199	0.485198
MTHFD1	14q23.3	0.044846	0.382075	0.485275
SLC66A3	2p25.1	0.044838	0.38216	0.485352
GRIN3B	19p13.3	-0.04481	0.38242	0.485651
GRB10	7p12.1	-0.0448	0.382565	0.485805
CHADL	22q13.2	-0.0448	0.382604	0.485823
SNX16	8q21.13	0.044772	0.382869	0.48613

WT1	11p13	-0.04477	0.382913	0.486144
YBEY	21q22.3	-0.04476	0.38294	0.486144
FAM209B	20q13.31	-0.04476	0.382992	0.486144
OR4D1	17q22	0.04476	0.382997	0.486144
ZNF613	19q13.41	0.044759	0.383002	0.486144
TBC1D10C	11q13.2	0.044739	0.383213	0.486368
OR5AR1	11q12.1	-0.04474	0.383227	0.486368
OR6W1P	7q34	-0.04473	0.383265	0.486385
SERPINE3	13q14.3	-0.04472	0.383406	0.486533
ODF3B	22q13.33	-0.04471	0.383483	0.486601
FBXL20	17q12	-0.04471	0.38352	0.486616
HSD17B4	5q23.1	0.044703	0.383596	0.486668
CIP2A	3q13.13	0.044702	0.383609	0.486668
CNTNAP4	16q23.1	-0.0447	0.383641	0.486678
C15ORF32	15q26.1	0.044694	0.383693	0.486707
ZNF12	7p22.1	-0.04469	0.383713	0.486707
RAB11FIP4	17q11.2	-0.04469	0.383772	0.486734
PP12613	4q27	0.044686	0.383783	0.486734
CCK	3p22.1	0.04467	0.383945	0.48691
RPL39L	3q27.3	-0.04466	0.384036	0.486993
CCDC197	14q32.12	0.04464	0.38427	0.487259
ICAM3	19p13.2	0.04463	0.384376	0.487362
ZNF703	8p11.23	-0.04462	0.384474	0.487457
HSPA14	10p13	-0.04462	0.38452	0.487484
C6ORF223	6p21.1	-0.04461	0.384564	0.487509
S100B	21q22.3	0.044545	0.385281	0.488386
PRDX3	10q26.11	-0.04454	0.385389	0.488492
TFPI2	7q21.3	0.044516	0.385593	0.48872
FUT8-AS1	14q23.3	0.044506	0.385704	0.48883
ZIC5	13q32.3	0.044503	0.385737	0.488841
APOD	3q29	0.044499	0.385777	0.488861
MLLT10	10p12.31	0.044476	0.386026	0.489145
EHD1	11q13.1	-0.04447	0.386086	0.48919
AKR1B1	7q33	0.044459	0.386208	0.489314
IGFL4	19q13.32	-0.04444	0.386395	0.48952
NRDC	1p32.3	0.044428	0.386532	0.489663
FRMD7	Xq26.2	0.044425	0.386564	0.489672
TPPP2	14q11.2	-0.04441	0.386685	0.489795
GOLT1B	12p12.1	0.04438	0.387044	0.490218
OR4C45	11p11.12	-0.04437	0.387177	0.490356
RRAD	16q22.1	-0.04435	0.387346	0.490539
NIPSNAP3A	9q31.1	-0.04433	0.38763	0.490867
COL27A1	9q32	-0.04431	0.387773	0.491012
NROB1	Xp21.2	0.04431	0.387793	0.491012
TREX1	3p21.31	-0.04431	0.387844	0.491039
FBXL21P	5q31.1	-0.0443	0.38787	0.491039
FAM234B	12p13.1	-0.0443	0.387888	0.491039
CFAP47	Xp21.1	0.04428	0.388121	0.491303
OR2T12	1q44	0.044277	0.388149	0.491308
NOXRED1	14q24.3	-0.04425	0.388468	0.491659
C15ORF54	15q14	0.044247	0.388476	0.491659
RFLNA	12q24.31	-0.04423	0.38863	0.491822
CKB	14q32.33	0.044228	0.388678	0.491853
SLC25A20	3p21.31	-0.0442	0.388937	0.492149
ZBTB40	1p36.12	0.044177	0.389228	0.492487
MROH7	1p32.3	-0.04415	0.389508	0.49281
TMEM235	17q25.3	-0.04414	0.38966	0.492971
PIM1	6p21.2	0.044133	0.389701	0.492991

SIGLECL1	19q13.41	-0.04413	0.389752	0.493024
ARL11	13q14.2	-0.0441	0.390029	0.493344
DGCR11	22q11.21	-0.04407	0.390407	0.493791
SNAP47	1q42.13	-0.04405	0.390569	0.49396
ZNF385A	12q13.13	0.04405	0.39059	0.49396
KCNQ2	20q13.33	0.044015	0.390974	0.494414
HNRNPH1	5q35.3	-0.04401	0.391054	0.494484
NEU4	2q37.3	-0.04398	0.39133	0.494802
ALDH5A1	6p22.3	-0.04398	0.391358	0.494806
CLEC11A	19q13.33	-0.04397	0.391404	0.494833
NSRP1	17q11.2	0.043952	0.391651	0.495114
KCNU1	8p11.23	0.043929	0.391892	0.495387
OR1K1	9q33.2	0.04391	0.392101	0.495598
F9	Xq27.1	-0.04391	0.392109	0.495598
PSG10P	19q13.2	0.043903	0.392172	0.495648
KRTAP2-2	17q21.2	0.043892	0.392295	0.495771
CD160	1q21.1	0.043878	0.392442	0.495927
OR2A2	7q35	-0.04387	0.392521	0.495994
LRTM1	3p14.3	0.043849	0.392762	0.496268
LINC00486	2p22.3	0.043833	0.392933	0.496453
LEF1	4q25	0.043829	0.39298	0.49648
ACACA	17q12	0.043795	0.393343	0.496907
LMNTD1	12p12.1	0.043793	0.39337	0.496911
SLC34A2	4p15.2	0.043782	0.393489	0.49703
LAD1	1q32.1	0.043774	0.393566	0.497096
CES2	16q22.1	0.04377	0.39361	0.49712
	1-Dec 9q33.1	-0.04375	0.393805	0.497334
CLRN2	4p15.32	-0.04375	0.393841	0.497342
SLC36A3	5q33.1	0.043746	0.393874	0.497342
CELA2A	1p36.21	-0.04374	0.393885	0.497342
CD5L	1q23.1	0.04371	0.394259	0.497782
ST8SIA6	10p12.33	0.043704	0.394328	0.497833
HIST1H2BD	6p22.2	-0.0437	0.394349	0.497833
INSRR	1q23.1	0.043675	0.394638	0.498167
LCE1B	1q21.3	0.043656	0.394851	0.498404
CACNG2	22q12.3	0.043637	0.395054	0.498629
STARD7-AS1	2q11.2	0.043599	0.395471	0.499124
KRT72	12q13.13	-0.04356	0.395875	0.499602
TCF15	20p13	-0.04354	0.396131	0.499894
NCCRP1	19q13.2	-0.04353	0.396174	0.499917
CXCL14	5q31.1	-0.04353	0.396257	0.499989
RNASE1	14q11.2	0.043506	0.396477	0.500235
EXOSC10	1p36.22	-0.04349	0.3966	0.50036
FXYD4	10q11.21	-0.04345	0.397058	0.500906
PLEKHO1	1q21.2	0.043446	0.397129	0.500964
FKBP1B	2p23.3	0.04344	0.39719	0.50101
OR1E1	17p13.3	0.043434	0.397254	0.501058
LINC01599	14q21.3	0.04343	0.397297	0.501082
CEP85	1p36.11	-0.04343	0.397347	0.501113
PHF21B	22q13.31	0.043413	0.397482	0.501251
TSPYL6	2p16.2	0.043407	0.397552	0.501308
C1ORF185	1p32.3	-0.04337	0.398001	0.501842
PGPEP1L	15q26.3	-0.04335	0.398123	0.501939
METTL2B	7q32.1	-0.04335	0.398128	0.501939
TAGLN2	1q23.2	-0.04335	0.39817	0.501959
CTDNEP1	17p13.1	0.043348	0.398193	0.501959
ABCA17P	16p13.3	-0.04331	0.398577	0.502411
REPS1	6q24.1	0.043302	0.398698	0.502531

LDHC	11p15.1	-0.04328	0.39889	0.502742
FAM99B	11p15.5	0.043272	0.399021	0.502875
OR10H1	19p13.12	-0.04327	0.399069	0.502905
SORCS3	10q25.1	0.043261	0.399146	0.502969
SLC25A3	12q23.1	-0.04323	0.399458	0.503332
OR1F2P	16p13.3	0.043225	0.399532	0.503392
PRPS1L1	7p21.1	-0.04321	0.399715	0.503592
TAF1B	2p25.1	0.043201	0.399802	0.503669
PAXBP1	21q22.11	-0.04319	0.399957	0.503833
OR2W1	6p22.1	0.043175	0.400082	0.503958
ACADL	2q34	0.043172	0.400114	0.503967
CCDC146	7q11.23	-0.04316	0.40023	0.504081
TTLL1	22q13.2	-0.04315	0.400319	0.504121
DNAH1	3p21.1	-0.04315	0.400324	0.504121
OR11H12	14q11.2	-0.04315	0.400337	0.504121
ATXN3L	Xp22.2	0.043149	0.400361	0.504121
CHST10	2q11.2	0.04314	0.400468	0.504223
COPS4	4q21.22	0.043132	0.400547	0.504291
ZNF382	19q13.12	0.043111	0.400781	0.504554
BST1	4p15.32	0.043096	0.400941	0.504703
SPG21	15q22.31	0.043096	0.40095	0.504703
SLC22A24	11q12.3	-0.04309	0.401014	0.504751
SLC45A4	8q24.3	-0.04308	0.401089	0.504814
LINC00298	2p25.1	0.043074	0.40119	0.504911
C11ORF24	11q13.2	0.043071	0.401216	0.504911
KRT8P41	11p15.4	0.043068	0.401249	0.504921
MFRP	11q23.3	0.043061	0.401327	0.504987
KLK10	19q13.41	0.043055	0.401397	0.505
CCDC134	22q13.2	-0.04305	0.401407	0.505
OR5AK2	11q12.1	-0.04305	0.401413	0.505
LDHA	11p15.1	-0.04303	0.401645	0.50526
OR5T1	11q12.1	-0.04297	0.402279	0.506026
CGB8	19q13.33	0.04297	0.402329	0.506047
TCEANC	Xp22.2	-0.04297	0.402346	0.506047
ONECUT3	19p13.3	0.042959	0.402445	0.506139
EEF1A2	20q13.33	-0.04295	0.402552	0.506243
ATP2B2	3p25.3	0.04293	0.402763	0.506457
SPATA8	15q26.2	0.042929	0.402773	0.506457
KRT6C	12q13.13	0.04291	0.402981	0.506682
LRRC41	1p34.1-p33	-0.04291	0.403025	0.506682
GSTCD	4q24	0.042904	0.403046	0.506682
MKNK1	1p33	-0.0429	0.403053	0.506682
CGB3	19q13.33	0.042893	0.403167	0.506792
DNAL4	22q13.1	-0.04289	0.403205	0.506809
RBM34	1q42.3	0.04288	0.403316	0.506916
LDAH	2p24.1	-0.04287	0.403394	0.506982
MSH2	2p21-p16.3	-0.04283	0.403914	0.507604
PITPNB	22q12.1	-0.04282	0.403975	0.50763
STT3A	11q24.2	0.042819	0.403985	0.50763
CEACAM21	19q13.2	0.042814	0.40404	0.507656
PRSS40A	2q21.1	0.042812	0.404056	0.507656
SRP19	5q22.2	-0.04281	0.404101	0.50768
HOXB13	17q21.32	0.042805	0.404133	0.507688
PLPBP	8p11.23	-0.0428	0.404191	0.507729
ZNF321P	19q13.41	-0.04278	0.404449	0.508021
DYNLT3	Xp11.4	0.042765	0.404581	0.508151
LRRIQ1	12q21.31	0.042763	0.404603	0.508151
PRR26	10p15.3	0.042692	0.405379	0.509095

SMYD2	1q32.3	-0.04269	0.405434	0.509127
IQCF2	3p21.2	-0.04269	0.405456	0.509127
CALM3	19q13.32	0.042665	0.405681	0.509377
TSPAN19	12q21.31	-0.04263	0.406013	0.509763
MUC12	7q22.1	0.04262	0.406172	0.50993
DDX18	2q14.1	0.042612	0.406257	0.509997
ZMAT4	8p11.21	0.042611	0.406276	0.509997
FBP2	9q22.32	0.042591	0.406488	0.510231
ZMYM6	1p34.3	0.042582	0.406594	0.510332
LRRC37BP1	17q11.2	0.042567	0.406753	0.5105
KIAA1211L	2q11.2	0.042557	0.406872	0.510617
GTF2H2	5q13.2	-0.04254	0.40701	0.510741
LOC100134868	20p11.1	-0.04254	0.407022	0.510741
CYGB	17q25.1	0.042529	0.407179	0.510906
OR2C3	1q44	0.042502	0.40747	0.511239
IDH2	15q26.1	-0.0425	0.407547	0.511304
NOXO1	16p13.3	-0.04249	0.407621	0.511364
RAB6C	2q21.1	0.042481	0.407709	0.511443
GALM	2p22.1	-0.04248	0.407737	0.511446
C1ORF131	1q42.2	-0.04247	0.407792	0.511483
KRT81	12q13.13	-0.04247	0.407874	0.511554
MEP1A	6p12.3	0.042431	0.408258	0.512004
GC	4q13.3	-0.04242	0.408343	0.512077
B9D2	19q13.2	-0.04242	0.408387	0.512101
INPP5A	10q26.3	0.042391	0.408704	0.512466
SNORA77	1q32.1	-0.04238	0.408813	0.512571
AIPL1	17p13.2	0.042377	0.408852	0.512588
PTPRCAP	11q13.2	0.042371	0.408923	0.512628
KCNF1	2p25.1	0.04237	0.408935	0.512628
TNFRSF1A	12p13.31	0.042363	0.409016	0.512697
GMPR2	14q12	0.042358	0.40907	0.512733
C19ORF57	19p13.12	0.042351	0.409149	0.512795
PRTFDC1	10p12.1	-0.04235	0.409171	0.512795
OR10G8	11q24.2	0.042327	0.409412	0.513065
LINC02593	1p36.33	-0.04231	0.409586	0.513251
OPN1LW	Xq28	-0.04227	0.410011	0.513752
OR2T8	1q44	0.042267	0.410073	0.513797
P2RX2	12q24.33	0.042257	0.410185	0.513906
AMN1	12p11.21	-0.04225	0.410222	0.51392
SOX9	17q24.3	0.042245	0.410318	0.514007
C1ORF194	1p13.3	-0.04224	0.410384	0.514058
PLA2G5	1p36.13	0.04223	0.410483	0.514149
PTPRVP	1q32.1	-0.04222	0.410649	0.514325
CHD1L	1q21.1	0.04221	0.410702	0.51436
SLC17A1	6p22.2	0.042198	0.410846	0.514476
RNF185	22q12.2	0.042198	0.410846	0.514476
NOP10	15q14	-0.04218	0.411073	0.514728
C17ORF82	17q23.2	0.042164	0.411218	0.514878
SLC22A7	6p21.1	-0.04213	0.411632	0.515364
B3GNT3	19p13.11	0.042115	0.411757	0.515487
RNF212	4p16.3	-0.04211	0.41187	0.515597
UBE2U	1p31.3	-0.0421	0.411964	0.515683
PGPEP1	19p13.11	0.042086	0.412084	0.515801
PEX1	7q21.2	-0.04208	0.412132	0.515829
SNORA15	7p11.2	-0.04208	0.412198	0.515879
NLRP11	19q13.42-q13.43	0.042068	0.412281	0.5159
TM4SF19	3q29	0.042067	0.412295	0.5159
ANXA11	10q22.3	0.042067	0.4123	0.5159

BPIFB1	20q11.21	0.042065	0.412318	0.5159
CLCF1	11q13.2	0.042061	0.41236	0.51592
ELSPBP1	19q13.33	0.042057	0.412407	0.515947
STPG1	1p36.11	0.042049	0.412501	0.51603
CREB5	7p15.1	0.042046	0.412525	0.51603
SUGP2	19p13.11	-0.04204	0.412618	0.516103
NRG3	10q23.1	0.042035	0.412656	0.516103
PNLDC1	6q25.3	-0.04203	0.412661	0.516103
OR13F1	9q31.1	0.042029	0.412719	0.516143
PIGF	2p21	-0.04202	0.412786	0.516195
TMEM170B	6p24.2	-0.04201	0.41298	0.516406
WDR24	16p13.3	-0.042	0.41309	0.516511
MCF2	Xq27.1	0.04199	0.413148	0.516551
HLA-DMA	6p21.32	0.041987	0.413182	0.516561
RNF175	4q31.3	0.041967	0.413404	0.516806
LTF	3p21.31	-0.04195	0.413557	0.516932
TEAD2	19q13.33	0.041954	0.413558	0.516932
C3ORF18	3p21.31	0.041951	0.413582	0.516932
IPO4	14q12	-0.04195	0.413652	0.516987
ARRB1	11q13.4	-0.04192	0.413944	0.517321
IL17F	6p12.2	-0.0419	0.414104	0.517488
LEP	7q32.1	0.041887	0.414295	0.517695
VPS9D1	16q24.3	-0.04188	0.414326	0.517701
RB1CC1	8q11.23	0.04185	0.414713	0.51812
CALR3	19p13.11	0.041848	0.414739	0.51812
KCTD7	7q11.21	-0.04185	0.414739	0.51812
MGST1	12p12.3	-0.04184	0.414818	0.518187
OR8A1	11q24.2	-0.04184	0.414864	0.518194
PLET1	11q23.1	0.041835	0.414876	0.518194
MBD3L5	19p13.2	0.041821	0.415042	0.518369
CRISP1	6p12.3	0.041812	0.415142	0.518462
IL23A	12q13.3	0.041792	0.415362	0.518689
GFRA4	20p13	-0.04179	0.415376	0.518689
CLDN7	17p13.1	0.041786	0.415424	0.518717
PCDHGB8P	5q31.3	0.041767	0.415635	0.518947
TP53TG3B	16p11.2	0.041764	0.415679	0.51897
CXCL1	4q13.3	-0.04176	0.415734	0.519007
TTR	18q12.1	-0.04175	0.415818	0.519075
GFRAL	6p12.1	0.041749	0.415841	0.519075
SERPINB11	18q21.33	0.041739	0.415949	0.519178
IFNL2	19q13.2	-0.04172	0.416213	0.519475
CA7	16q22.1	0.041703	0.416351	0.519615
TMEM51-AS1	1p36.21	-0.04168	0.416618	0.519916
MECP2	Xq28	0.04167	0.416722	0.520013
MAP1LC3B	16q24.2	-0.04165	0.416948	0.520217
WDR49	3q26.1	0.041649	0.416961	0.520217
MYO3B	2q31.1	0.041649	0.416964	0.520217
C15ORF41	15q14	0.04164	0.417059	0.520304
SPEF2	5p13.2	0.041637	0.417097	0.520314
PHKA1	Xq13.1	0.041635	0.417119	0.520314
DSG3	18q12.1	0.041623	0.417249	0.520444
PRRX2	9q34.11	0.04162	0.417283	0.520454
KCNAB3	17p13.1	-0.04161	0.417352	0.520474
FUT3	19p13.3	0.041613	0.417365	0.520474
SCARNA22	4p16.3	-0.04161	0.41741	0.520474
FAM225A	9q32	0.041606	0.417441	0.520474
TSGA10IP	11q13.1	0.041604	0.417464	0.520474
SOX8	16p13.3	0.041603	0.417476	0.520474



MDM1	12q15	-0.0416	0.417481	0.520474
CEACAM19	19q13.31	0.041599	0.417524	0.520495
PDHX	11p13	-0.0416	0.417553	0.520499
CDCA7L	7p15.3	-0.04157	0.417816	0.520794
COMMD2	3q25.1	0.041553	0.418041	0.521042
MAP3K8	10p11.23	-0.04152	0.418386	0.52144
PITRM1	10p15.2	0.041516	0.418446	0.521482
LRRD1	7q21.2	-0.0415	0.41863	0.52168
TMEM257	Xq27.3	0.041484	0.418809	0.52187
TXLNA	1p35.2	0.041474	0.41892	0.521961
GUSB	7q11.21	0.041473	0.418934	0.521961
DGCR10	22q11.21	0.041458	0.419099	0.522125
OSM	22q12.2	0.041457	0.419118	0.522125
HORMAD2	22q12.2	-0.04143	0.419449	0.522494
ZBTB8B	1p35.1	-0.04143	0.419466	0.522494
MIMT1	19q13.43	0.041414	0.419591	0.522616
FAM170B	10q11.23	0.041411	0.419633	0.522637
PSG11	19q13.31	-0.0414	0.419729	0.522723
ATP6AP2	Xp11.4	-0.04138	0.419931	0.522942
SLC14A2	18q12.3	0.041375	0.42003	0.523033
DAD1P1	12p12.1	-0.04137	0.420095	0.523082
NXF5	Xq22.1	-0.04136	0.420164	0.523134
FAM25BP	10q11.22	-0.04135	0.420293	0.523263
DEFB104A	8p23.1	-0.04135	0.420346	0.523297
RCOR2	11q13.1	0.041341	0.42042	0.523339
MYBPC2	19q13.33	0.041338	0.420445	0.523339
EPHX4	1p22.1	-0.04134	0.420458	0.523339
PLA2R1	2q24.2	-0.04133	0.420526	0.523391
CLDN25	11q23.2	0.041324	0.420612	0.523454
IDO1	8p11.21	0.041322	0.420629	0.523454
SLC38A7	16q21	0.041299	0.42089	0.523716
TAAR2	6q23.2	-0.0413	0.420893	0.523716
DOC2A	16p11.2	-0.04129	0.421022	0.523835
KRT28	17q21.2	0.041286	0.421041	0.523835
ACTL6B	7q22.1	0.041282	0.42108	0.523852
UPK1B	3q13.32	0.041276	0.421148	0.523894
IRGQ	19q13.31	-0.04127	0.421166	0.523894
TPI1P2	7q32.1	-0.04126	0.421353	0.524093
CYP26A1	10q23.33	-0.04125	0.421432	0.52414
BTN2A3P	6p22.2	-0.04125	0.421442	0.52414
PRR18	6q27	-0.04122	0.421743	0.524481
MAS1	6q25.3	0.041215	0.421841	0.524568
SLCO1A2	12p12.1	0.041212	0.421865	0.524568
SPOP	17q21.33	-0.0412	0.421954	0.524621
C7ORF31	7p15.3	0.041201	0.421998	0.524621
GLMP	1q22	0.0412	0.422005	0.524621
C7ORF57	7p12.3	-0.0412	0.422012	0.524621
LINC00319	21q22.3	-0.04117	0.422373	0.525036
FAM201A	9p13.1	0.041159	0.422472	0.525105
TCP11	6p21.31	-0.04116	0.422481	0.525105
HHIPL2	1q41	-0.04115	0.422537	0.525142
OR5C1	9q33.2	0.041144	0.422637	0.525234
TOMM20	1q42.3	0.04112	0.422906	0.52553
TAAR5	6q23.2	-0.04112	0.422954	0.52553
OR2M2	1q44	-0.04112	0.422954	0.52553
EDDM3A	14q11.2	0.041107	0.423059	0.525628
CALCB	11p15.2	-0.04109	0.423301	0.525896
CAPNS2	16q12.2	-0.04108	0.423368	0.525947

ETS2	21q22.2	-0.04107	0.423419	0.525978
SAMD3	6q23.1	-0.04107	0.4235	0.526045
FGF6	12p13.32	0.041053	0.423665	0.526197
SEPTIN3	22q13.2	-0.04105	0.423675	0.526197
KLK12	19q13.41	0.041024	0.423986	0.526552
CHRNA1	17p13.1	-0.04102	0.424081	0.526635
MCEMP1	19p13.2	0.041012	0.424131	0.526635
SSX1	Xp11.23	-0.04101	0.424132	0.526635
CLUH	17p13.3	-0.041	0.424288	0.526766
DHX57	2p22.1	0.040998	0.42429	0.526766
FGD3	9q22.31	0.040991	0.424367	0.526829
CDH18	5p14.3	-0.04099	0.424395	0.52683
FBXO27	19q13.2	0.040984	0.424449	0.526865
IMPG1	6q14.1	0.040973	0.424572	0.526985
DOT1L	19p13.3	0.040962	0.424687	0.527096
MAP3K20	2q31.1	-0.04096	0.424756	0.527148
SNX22	15q22.31	-0.04094	0.424909	0.527305
ZNF157	Xp11.3	0.040939	0.424953	0.527327
PAK4	19q13.2	-0.04093	0.42505	0.527416
CUL9	6p21.1	0.040903	0.425355	0.527746
CLK3	15q24.1	0.040902	0.42537	0.527746
GRK3	22q12.1	-0.0409	0.425399	0.52775
WNT4	1p36.12	-0.04089	0.425502	0.527815
SPATA7	14q31.3	-0.04089	0.425504	0.527815
	10-Mar 17q23.2	0.040885	0.425564	0.527856
CYP4A11	1p33	-0.04087	0.425717	0.528014
MYH1	17p13.1	0.040862	0.425823	0.528105
TCEANC2	1p32.3	0.04086	0.42585	0.528105
XAGE1B	Xp11.22	0.040858	0.42587	0.528105
NTS	12q21.31	-0.04085	0.425927	0.528144
OR6S1	14q11.2	0.04084	0.426079	0.528299
PRKDC	8q11.21	0.040834	0.426143	0.528346
GPATCH1	19q13.11	-0.04083	0.426234	0.5284
TRMO	9q22.33	-0.04083	0.42624	0.5284
THAP6	4q21.1	0.040819	0.426314	0.52846
NOX1	Xq22.1	0.040804	0.42648	0.528633
PHYHD1	9q34.11	0.040802	0.426511	0.528638
KRTAP10-8	21q22.3	-0.04079	0.426605	0.528722
TERF2	16q22.1	0.040787	0.426671	0.528771
FUT4	11q21	0.040752	0.427076	0.529221
TMC2	20p13	-0.04075	0.427093	0.529221
TOP1	20q12	-0.04075	0.427115	0.529221
HEPACAM	11q24.2	0.040746	0.42714	0.529221
NECAP2	1p36.13	-0.04073	0.427287	0.52937
AADACL3	1p36.21	-0.0407	0.427625	0.529756
IFNW1	9p21.3	0.040689	0.427794	0.529934
GABRA5	15q12	0.040668	0.428033	0.530196
LIPI	21q11.2	-0.04066	0.428077	0.530218
MTRR	5p15.31	0.040659	0.428128	0.530249
KRTAP21-1	21q22.11	-0.04065	0.428217	0.530326
DMAC2L	14q21.3	0.040635	0.428397	0.530467
HSPA4	5q31.1	0.040633	0.428427	0.530467
GYPB	4q31.21	0.040632	0.428435	0.530467
MRGPRD	11q13.3	-0.04063	0.428438	0.530467
RDH5	12q13.2	0.04063	0.428463	0.530467
CSAG3	Xq28	-0.04058	0.428982	0.531077
HOXD9	2q31.1	0.040555	0.429316	0.531457
IRX6	16q12.2	-0.04054	0.429486	0.531634

WDR25	14q32.2	0.040524	0.429667	0.531825
ERLIN1	10q24.31	0.040499	0.429949	0.532142
MUCL1	12q13.2	-0.04049	0.430003	0.532176
CXCL8	4q13.3	0.040491	0.430037	0.532185
HOXC8	12q13.13	0.040478	0.43019	0.532342
HPVC1	7p11.2	0.040465	0.430334	0.532469
TMEM237	2q33.1	-0.04046	0.430346	0.532469
WDFY2	13q14.3	0.040453	0.430476	0.532597
TMEM33	4p13	-0.04045	0.430513	0.53261
KRT6B	12q13.13	0.040435	0.430678	0.532781
TMEM86A	11p15.1	0.040392	0.431172	0.533359
MS4A6E	11q12.2	0.040372	0.431397	0.533577
CACNA1G	17q21.33	0.040372	0.431401	0.533577
TEKT4P2	21p11.2	0.040369	0.431432	0.533582
GTF2IRD2P1	7q11.23	0.040363	0.431501	0.533634
SPATA19	11q25	-0.04036	0.431581	0.5337
NXPH4	12q13.3	-0.04034	0.431725	0.533845
PIPSL	10q23.33	-0.04034	0.431799	0.533903
COG6	13q14.11	-0.04033	0.43189	0.533977
ZNF480	19q13.41	-0.04033	0.431912	0.533977
GJB1	Xq13.1	-0.04032	0.432	0.534054
SPINT4	20q13.12	0.040308	0.432128	0.534178
SLC39A2	14q11.2	-0.0403	0.432224	0.534264
GMPS	3q25.31	-0.04028	0.432401	0.534451
KCNJ8	12p12.1	0.040265	0.432628	0.534698
RPL13P5	12p13.31	-0.04025	0.432771	0.534841
ULK3	15q24.1	0.040246	0.432837	0.53489
NEPRO	3q13.2	-0.04024	0.432953	0.535
GPR155	2q31.1	0.040227	0.433057	0.535069
LOC391343	2p25.3	-0.04023	0.433062	0.535069
ALS2	2q33.1	0.040209	0.433268	0.535291
LOC606724	16p11.2	0.04018	0.43359	0.535655
TFAP2C	20q13.31	0.040176	0.433637	0.53568
PPP1R17	7p14.3	-0.04017	0.433665	0.535682
GTSF1	12q13.13	0.040171	0.433695	0.535685
GAL3ST1	22q12.2	-0.04015	0.433917	0.535927
TSPAN9	12p13.33-p13.32	0.040138	0.43408	0.536095
CUL4B	Xq24	0.04013	0.434166	0.536127
SMN1	5q13.2	0.040129	0.434181	0.536127
PDZK1	1q21.1	-0.04013	0.434186	0.536127
SKA2	17q22	0.040105	0.43446	0.536432
LRRC37A3	17q24.1	-0.0401	0.434499	0.536448
NRG2	5q31.2	0.040075	0.434798	0.536783
OR2L3	1q44	0.040036	0.435252	0.537311
DSPP	4q22.1	-0.04003	0.435337	0.537382
BST2	19p13.11	-0.04001	0.435559	0.537623
CES1	16q12.2	-0.04	0.43567	0.537728
LOC100192426	18p11.23	0.039997	0.4357	0.537731
ZNF350	19q13.41	-0.03999	0.435763	0.537776
GPC1	2q37.3	0.039983	0.435853	0.537854
LY6E-DT	8q24.3	0.039968	0.43603	0.53804
BTNL3	5q35.3	0.039965	0.436065	0.538049
LINC00051	8q24.3	-0.03995	0.436267	0.538265
IRAK2	3p25.3	0.039918	0.436608	0.538652
PWAR4	15q11.2	-0.03991	0.436665	0.53869
GTPBP10	7q21.13	-0.03987	0.43717	0.53928
OR5M11	11q12.1	0.039858	0.437292	0.539357
MYOM2	8p23.3	-0.03986	0.437309	0.539357

ENPEP	4q25	0.039856	0.437314	0.539357
LSR	19q13.12	-0.03984	0.437462	0.539507
OTP	5q14.1	0.039841	0.437493	0.539512
GDPD4	11q13.5	0.039836	0.437543	0.539539
TBC1D29P	17q11.2	-0.03983	0.437569	0.539539
CEP19	3q29	-0.03983	0.437614	0.539561
CASC10	10p12.31	0.039809	0.43786	0.539832
C2CD4B	15q22.2	0.039771	0.438294	0.540334
EVX2	2q31.1	0.039767	0.438346	0.540365
SHC3	9q22.1	0.039763	0.438386	0.54038
ARMCX3	Xq22.1	0.039758	0.438447	0.540422
ACTRT2	1p36.32	-0.03972	0.438858	0.540629
RBMY1A3P	Yp11.2	-0.03972	0.438858	0.540629
FAM197Y2	Yp11.2	-0.03972	0.438858	0.540629
TFAP2D	6p12.3	-0.03972	0.438858	0.540629
KRTAP20-4	21q22.11	-0.03972	0.438858	0.540629
TSPY4	Yp11.2	-0.03972	0.438858	0.540629
CBLL2	Xp22.11	-0.03972	0.438858	0.540629
DEFB107A	8p23.1	-0.03972	0.438858	0.540629
PRAMEF22	1p36.21	-0.03972	0.438858	0.540629
MORC4	Xq22.3	0.039694	0.439177	0.540989
FAM78B	1q24.1	0.039679	0.439358	0.541179
RSPH4A	6q22.1	-0.03968	0.439401	0.541198
ACOT4	14q24.3	0.039652	0.43967	0.541496
LCORL	4p15.31	0.039647	0.439721	0.541526
TASP1	20p12.1	-0.03962	0.439999	0.541835
ACOT12	5q14.1	-0.03962	0.440071	0.54189
HIST1H2BK	6p22.1	-0.03961	0.440121	0.541919
PMCH	12q23.2	-0.0396	0.440231	0.542021
PRIM1	12q13.3	-0.0396	0.440268	0.542033
HIST1H2BA	6p22.2	-0.0396	0.44032	0.542048
NEUROG2	4q25	-0.03959	0.440335	0.542048
PKN3	9q34.11	-0.03958	0.440472	0.542184
CYMP	1p13.3	-0.03957	0.440612	0.542323
S100A14	1q21.3	0.039558	0.440753	0.542451
DUPD1	10q22.2	0.039557	0.44077	0.542451
SOX18	20q13.33	-0.03955	0.440858	0.542525
PGA5	11q12.2	0.03954	0.440966	0.542626
FABP1	2p11.2	0.039532	0.441057	0.542704
ZFP57	6p22.1	0.039517	0.441222	0.542874
YPEL5	2p23.1	0.03951	0.441306	0.542943
GOLGA2P7	15q25.2	-0.03951	0.441346	0.542959
METTL9	16p12.2	-0.03949	0.441547	0.543174
DEFB119	20q11.21	0.039448	0.442025	0.543695
HIST1H1T	6p22.2	0.039448	0.442026	0.543695
IGFLR1	19q13.12	-0.03944	0.442066	0.543711
ZNF287	17p11.2	0.039436	0.442165	0.543787
RAMP2	17q21.2	-0.03943	0.442182	0.543787
IGF2BP3	7p15.3	-0.03943	0.442288	0.543884
GPR148	2q21.1	-0.03942	0.442341	0.543916
SLC16A10	6q21	-0.03941	0.442432	0.543995
PPP4R1L	20q13.32	0.039408	0.442487	0.544029
ASB4	7q21.3	-0.03938	0.442789	0.544367
COLEC10	8q24.12	0.03936	0.443049	0.544653
RDH8	19p13.2	-0.03936	0.443087	0.544667
TMEM244	6q22.33	-0.03933	0.443339	0.544943
FAM133A	Xq21.32	0.039325	0.443454	0.54505
SKP2	5p13.2	-0.03932	0.443526	0.545105

PPIAL4E	1q21.1	-0.03932	0.443561	0.545115
GGTLC1	20p11.21	-0.03931	0.443621	0.545155
ATL2	2p22.2-p22.1	-0.03929	0.443878	0.545438
GRM5	11q14.2-q14.3	0.039276	0.444023	0.545582
SRP72	4q12	0.039267	0.44413	0.545681
RSPH9	6p21.1	0.039255	0.444263	0.545783
INTS6L	Xq26.3	0.039255	0.444268	0.545783
PTCD2	5q13.2	-0.03924	0.444405	0.545918
HMMR	5q34	-0.03923	0.444515	0.54602
EDRF1	10q26.2	0.039226	0.444595	0.546085
NEUROG3	10q22.1	-0.03918	0.445114	0.546678
LRATD2	8q24.21	-0.03918	0.445133	0.546678
CCDC125	5q13.2	0.039152	0.445464	0.547017
VPS33A	12q24.31	-0.03915	0.445464	0.547017
MAL2	8q24.12	-0.03915	0.445491	0.547017
PTGER1	19p13.12	0.039129	0.445724	0.54727
SIRT4	12q24.23-q24.31	-0.03913	0.445762	0.547282
SPATA20	17q21.33	0.039113	0.445917	0.547439
PLA2G2E	1p36.13	0.039107	0.44598	0.547482
TARBP1	1q42.2	-0.0391	0.446022	0.547482
RNLS	10q23.31	0.039103	0.446034	0.547482
ASB9	Xp22.2	-0.0391	0.446095	0.547524
MCM4	8q11.21	-0.03909	0.44614	0.547545
COQ2	4q21.22-q21.23	0.039084	0.446258	0.547656
C17ORF47	17q22	-0.03908	0.446313	0.547691
RAP2A	13q32.1	0.039076	0.446348	0.5477
TMEM200A	6q23.1	0.039046	0.446694	0.548091
TMPO-AS1	12q23.1	0.039039	0.446782	0.54812
LINC01278	Xq11.1	-0.03904	0.446793	0.54812
C14ORF119	14q11.2	-0.03904	0.446799	0.54812
SLC4A1AP	2p23.3	0.03903	0.446885	0.548191
DMRTC1	Xq13.1	0.039026	0.446925	0.548201
PCDHA7	5q31.3	0.039022	0.446973	0.548201
TMC6	17q25.3	-0.03902	0.446975	0.548201
DDIT4L	4q24	0.039005	0.44717	0.548407
GAS8-AS1	16q24.3	-0.03897	0.447612	0.548915
PADI6	1p36.13	-0.03895	0.44784	0.549159
ODF3	11p15.5	0.038946	0.447866	0.549159
ZMAT1	Xq22.1	0.038937	0.447967	0.549249
OR52A5	11p15.4	0.038933	0.448017	0.549276
RTBDN	19p13.13	-0.03893	0.448045	0.549278
LYRM2	6q15	0.038925	0.448105	0.549317
CDRT15	17p12	0.038913	0.448244	0.549454
MED14	Xp11.4	0.038904	0.448348	0.54953
SMAGP	12q13.13	0.038903	0.448361	0.54953
ADAMTS14	10q22.1	0.038884	0.448582	0.549768
PLEKHS1	10q25.3	0.038874	0.448705	0.549885
MYLK3	16q11.2	0.038844	0.449053	0.550262
COPS3	17p11.2	0.038841	0.449083	0.550262
DAPL1	2q24.1	-0.03884	0.449095	0.550262
STK33	11p15.4	-0.03883	0.449223	0.550385
PDHA2	4q22.3	-0.03881	0.449458	0.550639
KIF2B	17q22	0.038793	0.449649	0.550772
OR6Q1	11q12.1	0.038793	0.449649	0.550772
ELL	19p13.11	0.038793	0.449649	0.550772
TTYH1	19q13.42	0.038786	0.44973	0.550838
AHI1	6q23.3	0.038759	0.450042	0.551185
WDR87	19q13.13	0.038754	0.450101	0.551224

VTI1B	14q24.1	-0.03875	0.45016	0.551263
HCAR1	12q24.31	-0.03874	0.450229	0.551296
XKR9	8q13.3	0.038742	0.450242	0.551296
SLCO1B1	12p12.1	0.038736	0.450312	0.551348
LOC400710	19q13.33	0.038725	0.450447	0.551479
ZNF142	2q35	0.038715	0.450563	0.551588
TUSC7	3q13.31	0.038693	0.450815	0.551853
SHCBP1L	1q25.3	0.038692	0.450835	0.551853
ZFP64	20q13.2	-0.03869	0.450881	0.551876
RAD51	15q15.1	0.038682	0.450944	0.551919
OR2B6	6p22.1	-0.03867	0.451141	0.552126
ZNF506	19p13.11	-0.03866	0.451229	0.55217
OR2J2	6p22.1	0.038658	0.451232	0.55217
PPP1R14C	6q25.1	-0.03865	0.451357	0.55229
PYDC1	16p11.2	0.038642	0.451421	0.552335
LINC00310	21q22.11	-0.0386	0.451872	0.552852
PLAA	9p21.2	0.0386	0.451902	0.552856
CCDC3	10p13	0.038557	0.452412	0.553446
FAM47E	4q21.1	-0.03855	0.452478	0.553493
GUCY2D	17p13.1	-0.03854	0.452587	0.553587
UMOD	16p12.3	-0.03854	0.452611	0.553587
GPAM	10q25.2	-0.03853	0.452749	0.553722
PRSS27	16p13.3	0.03852	0.452843	0.553804
CIB4	2p23.3	0.038515	0.452902	0.553841
CLUL1	18p11.32	0.038509	0.45298	0.553904
SLPI	20q13.12	0.038504	0.453037	0.553939
PCDH8	13q14.3	-0.0385	0.453103	0.553986
FAM90A1	12p13.31	0.038449	0.453682	0.554629
ZBTB22	6p21.32	0.038449	0.453684	0.554629
CNGA2	Xq28	-0.03844	0.453788	0.554722
CSN2	4q13.3	0.038417	0.454052	0.555011
LOC391322	22q11.23	-0.0384	0.454284	0.555259
RNASE8	14q11.2	0.038395	0.454311	0.555259
LYPLA1	8q11.23	-0.03838	0.454489	0.555443
MYT1L-AS1	2p25.3	0.038372	0.454583	0.555524
DNAJC21	5p13.2	0.038361	0.454714	0.555651
WIPF3	7p14.3	0.038337	0.454992	0.555956
HCAR2	12q24.31	0.038333	0.455045	0.555976
CTRB1	16q23.1	-0.03833	0.455064	0.555976
OR1S1	11q12.1	-0.03833	0.4551	0.555986
RPL36AL	14q21.3	-0.03829	0.455518	0.556463
PRRT2	16p11.2	0.038286	0.455599	0.556512
LINC02800	1p36.11	-0.03828	0.455614	0.556512
OR2A5	7q35	-0.03827	0.455812	0.556696
LINC00602	6q27	0.038267	0.455819	0.556696
OR12D2	6p22.1	-0.03823	0.45624	0.557118
ACTRT3	3q26.2	0.038231	0.456241	0.557118
GAL3ST3	11q13.1	0.038231	0.456249	0.557118
ASIC3	7q36.1	0.03822	0.456376	0.55724
ADIG	20q11.23	0.038209	0.456501	0.557358
RBMY2EP	Yq11.223	-0.03818	0.456859	0.557761
ANKRD26	10p12.1	0.038162	0.457065	0.557978
IL24	1q32.1	-0.03816	0.457115	0.558001
SLC5A4	22q12.3	-0.03816	0.457139	0.558001
LINC01205	3q13.13	-0.03813	0.45745	0.558347
TAF9B	Xq21.1	-0.03811	0.457663	0.558573
ZFP30	19q13.12	-0.0381	0.457798	0.558703
GDE1	16p12.3	0.038058	0.458289	0.559244

TYMP	22q13.33	0.038057	0.458297	0.559244
TUBA3C	13q12.11	0.038054	0.458332	0.559252
MB21D2	3q29	-0.03805	0.458409	0.559312
HMGB3P1	20q11.22	-0.03804	0.458477	0.559362
SLC30A3	2p23.3	-0.03802	0.458687	0.559566
PNLIP	10q25.3	-0.03802	0.458701	0.559566
GAGE2E	Xp11.23	-0.038	0.458935	0.559818
THOC2	Xq25	0.038	0.458976	0.559834
ALDH16A1	19q13.33	-0.03799	0.459073	0.559918
KIF15	3p21.31	-0.03799	0.459149	0.559952
GPR37	7q31.33	0.037985	0.459157	0.559952
RBM45	2q31.2	-0.03797	0.459289	0.56008
CHIC2	4q12	0.037951	0.459558	0.560373
CCDC168	13q33.1	0.037948	0.459591	0.560379
NEK6	9q33.3	-0.03793	0.459789	0.560586
KIF24	9p13.3	0.037918	0.459944	0.560742
DGCR2	22q11.21	0.037878	0.460414	0.56128
C1ORF112	1q24.2	-0.03787	0.460531	0.561389
TMIGD2	19p13.3	0.037848	0.460772	0.561649
ZFP91-CNTF	11q12.1	0.037837	0.460904	0.561775
RBP4	10q23.33	0.037818	0.461126	0.562011
WNK2	9q22.31	0.037816	0.461159	0.562017
NUP88	17p13.2	0.037805	0.461289	0.562142
LINC01587	4p16.2	0.037789	0.461469	0.562311
BPIFB2	20q11.21	0.037786	0.461508	0.562311
KRTAP4-1	17q21.2	0.037786	0.461512	0.562311
GUCY2F	Xq22.3-q23	-0.03774	0.462105	0.562982
SKIDA1	10p12.31	0.037735	0.462119	0.562982
GPR157	1p36.22	-0.03772	0.46226	0.563114
OR51F1	11p15.4	0.037721	0.462284	0.563114
IQCF5	3p21.2	0.037714	0.462363	0.563176
AD11	2p25.3	-0.0377	0.462541	0.563359
KHDRBS1	1p35.2	0.037666	0.46293	0.56378
CTXN1	19p13.2	-0.03767	0.462943	0.56378
C1ORF53	1q31.3	-0.03766	0.462974	0.563783
TRAF1	9q33.2	-0.03764	0.463227	0.564057
IL17RC	3p25.3 3p25.3-p24.1	-0.03763	0.463311	0.564089
ZNF200	16p13.3	-0.03763	0.463316	0.564089
RYK	3q22.2	-0.03763	0.463355	0.564089
MPO	17q22	0.03763	0.463366	0.564089
OR10G7	11q24.2	0.037618	0.463507	0.564227
PRODH	22q11.21	-0.03761	0.463604	0.564282
PSORS1C2	6p21.33	-0.03761	0.463609	0.564282
SMG8	17q22	0.037596	0.46377	0.564443
OR7E5P	11q12.1	-0.03758	0.463991	0.564679
PRAC2	17q21.32	-0.03757	0.464097	0.564773
ZFR2	19p13.3	0.037551	0.464304	0.564991
CCDC82	11q21	0.037529	0.464559	0.565266
RELB	19q13.32	0.037519	0.464679	0.565379
FAM171A1	10p13	0.037514	0.464743	0.565422
IQGAP3	1q22	0.037494	0.464987	0.565684
CUTALP	9q33.2	-0.03748	0.465126	0.565819
TRIM42	3q23	-0.03745	0.465482	0.566218
LARS2	3p21.31	-0.03744	0.465618	0.566349
OR52D1	11p15.4	0.037436	0.46567	0.566378
CAPN13	2p23.1	-0.03742	0.465841	0.566551
CELSR2	1p13.3	0.037404	0.466057	0.56678
P2RX6P	22q11.21	0.037399	0.466112	0.566812

SLC13A5	17p13.1	-0.03739	0.466242	0.566935
SCRN1	7p14.3	-0.03737	0.466432	0.567133
ACVR1B	12q13.13	0.037367	0.466497	0.567176
CCER1	12q21.33	0.037346	0.466741	0.567439
LOC440173	9q21.33	-0.03731	0.467164	0.567919
UGT1A9	2q37.1	0.037309	0.467194	0.567921
FAM86B1	8p23.1	-0.0373	0.46734	0.568064
OR4N3P	15q11.2	-0.03727	0.467617	0.568366
KCNC1	11p15.1	0.037266	0.467705	0.568439
HNRNPA3	2q31.2	-0.03726	0.467767	0.568479
SELENOF	1p22.3	-0.03722	0.468225	0.569001
LZIC	1p36.22	0.037209	0.46838	0.569145
ZMYND15	17p13.2	0.037208	0.4684	0.569145
C22ORF31	22q12.1	-0.0372	0.468521	0.569258
SLC8B1	12q24.13	0.037189	0.468624	0.569348
IL4	5q31.1	0.037186	0.468656	0.569352
MEIOC	17q21.31	-0.03717	0.46889	0.569602
PADI1	1p36.13	-0.03716	0.468931	0.569617
ADAM20	14q24.2	-0.03714	0.469157	0.569858
PRG1	19q13.31	0.037136	0.469253	0.569939
ODF2	9q34.11	-0.03712	0.469426	0.570115
GPR160	3q26.2	-0.03711	0.46956	0.570243
MBD6	12q13.3	0.037092	0.469779	0.570475
TARM1	19q13.42	0.037088	0.46983	0.570502
HNRNPA1P33	10q11.22	0.03707	0.470047	0.570731
C12ORF43	12q24.31	-0.03705	0.470236	0.570878
PRLR	5p13.2	0.037053	0.470249	0.570878
RAD21	8q24.11	0.037053	0.470254	0.570878
GLRA4	Xq22.2	0.037036	0.470454	0.571087
WSB1	17q11.1	0.037027	0.470566	0.571188
ZC3H12B	Xq11.2-q12	-0.03702	0.470596	0.571189
TEX43	5q23.2	-0.03702	0.470692	0.571271
HIRIP3	16p11.2	0.03701	0.470768	0.571328
FAM153B	5q35.2	0.036996	0.470937	0.571499
USP17L2	8p23.1	0.036969	0.471264	0.571862
REG1B	2p12	0.036961	0.471353	0.571935
LMX1B	9q33.3	0.036955	0.471422	0.571985
SELENBP1	1q21.3	-0.03694	0.471556	0.572111
GADL1	3p24.1-p23	-0.03694	0.4716	0.572131
GSC2	22q11.21	0.036935	0.471673	0.572184
TAB3	Xp21.2	0.036925	0.471786	0.572287
CUEDC1	17q22	0.036916	0.471897	0.572387
ABCC11	16q12.1	0.036897	0.472123	0.572627
ZNF804B	7q21.13	0.036887	0.47225	0.572745
MIR924HG	18q12.2-q12.3	0.036884	0.472282	0.57275
RASGRF1	15q25.1	-0.03688	0.472375	0.572828
CCDC105	19p13.12	-0.03687	0.472432	0.57284
TAAR8	6q23.2	0.03687	0.472449	0.57284
MUC15	11p14.2	-0.03687	0.472471	0.57284
CCDC151	19p13.2	-0.03686	0.472574	0.57293
NDFIP1	5q31.3	0.036852	0.47267	0.573013
RSPH6A	19q13.32	-0.03684	0.472763	0.573078
GRM2	3p21.2	0.036842	0.472781	0.573078
IFNGR1	6q23.3	0.036832	0.472901	0.573188
DPP4	2q24.2	-0.03683	0.472981	0.573247
FHDC1	4q31.3	0.036824	0.473007	0.573247
MMP23B	1p36.33	-0.03681	0.473153	0.57339
ADM5	19q13.33	-0.0368	0.473327	0.573565



AVEN	15q14	0.036793	0.473372	0.573586
EFHB	3p24.3	0.036787	0.473448	0.573643
NUP62	19q13.33	0.036771	0.473644	0.573846
RASA4	7q22.1	0.036761	0.473756	0.573946
OR51F2	11p15.4	0.036737	0.474054	0.574263
CPT1A	11q13.3	0.036735	0.474074	0.574263
OR2J3	6p22.1	0.036701	0.474484	0.574725
FABP9	8q21.13	0.036698	0.474521	0.574734
AMDHD1	12q23.1	-0.03669	0.474594	0.574787
GCFC2	2p12	-0.03669	0.474658	0.574805
SCGB1D1	11q12.3	-0.03668	0.474687	0.574805
MTMR8	Xq11.2	-0.03668	0.474694	0.574805
MAT1A	10q22.3	-0.03668	0.474771	0.574863
TRIM75P	4q32.3	-0.03667	0.47483	0.574873
AQP5	12q13.12	0.03667	0.474861	0.574873
C4ORF50	4p16.1	0.036669	0.474865	0.574873
MT1IP	16q13	-0.03665	0.475137	0.575167
CHN1	2q31.1	0.036643	0.475179	0.575184
OR52W1	11p15.4	-0.03661	0.475557	0.575606
CAPZA3	12p12.3	0.036603	0.475666	0.575693
IL36A	2q14.1	-0.0366	0.475686	0.575693
RPP14	3p14.3	0.036597	0.47574	0.575724
AURKC	19q13.43	-0.03658	0.475927	0.575915
TPTE2P6	13q12.12	-0.03657	0.476019	0.575991
CNGB3	8q21.3	0.03656	0.476179	0.57615
SLC10A4	4p11	-0.03656	0.476224	0.57617
WFDC3	20q13.12	-0.03655	0.476268	0.576188
CMBL	5p15.2	0.036545	0.476369	0.576276
ZNF490	19p13.2-p13.13	-0.03652	0.476635	0.576563
KCNA10	1p13.3	0.036505	0.476845	0.576781
C17ORF50	17q12	0.036502	0.476883	0.576793
ELOVL7	5q12.1	0.036498	0.476928	0.576812
REN	1q32.1	-0.03649	0.476983	0.576844
FBXW10	17p11.2	0.036487	0.477067	0.576911
SMIM6	17q25.1	0.036472	0.477251	0.577098
NCAPH	2q11.2	-0.03646	0.477396	0.577239
MLIP	6p12.1	0.036434	0.477709	0.577582
PPM1M	3p21.2	0.036419	0.477891	0.577768
TTC8	14q31.3	-0.03641	0.477948	0.577802
OR10W1	11q12.1	-0.03641	0.478003	0.577833
BORCS6	17p13.1	0.036405	0.478058	0.577864
METTL21C	13q33.1	0.036395	0.478181	0.577978
SOST	17q21.31	0.03638	0.478361	0.578161
SLF1	5q15	0.036375	0.478425	0.578204
RS1	Xp22.13	-0.03637	0.478467	0.57822
FAM170A	5q23.1	0.036312	0.479188	0.579056
KCNH5	14q23.2	-0.03631	0.47923	0.579072
SMU1	9p21.1	-0.03629	0.479405	0.579249
CT45A2	Xq26.3	-0.03628	0.479612	0.579454
GPR45	2q12.1	-0.03627	0.479633	0.579454
HIGD2B	15q24.1	-0.03626	0.479872	0.579707
IGFBP1	7p12.3	-0.03624	0.48001	0.57984
KLK9	19q13.41	-0.03623	0.480188	0.58002
POTEH	22q11.1	-0.03622	0.480247	0.580056
TAAR1	6q23.2	0.036211	0.48041	0.580217
PANK1	10q23.31	-0.03619	0.4806	0.580413
CABP1	12q24.31	-0.03619	0.480681	0.580475
ASCC2	22q12.2	-0.03618	0.480739	0.58051

KRTAP5-9	11q13.4	-0.03617	0.4809	0.58067
ZCCHC13	Xq13.2	0.036154	0.481103	0.580879
VGLL1	Xq26.3	0.036144	0.481215	0.58098
OR6M1	11q24.1	0.03614	0.481264	0.581004
EXOC4	7q33	-0.03612	0.481473	0.581221
PRSS55	8p23.1	-0.03612	0.481503	0.581222
GABRR1	6q15	-0.03612	0.481561	0.581231
BTF3P11	13q22.3	-0.03612	0.481569	0.581231
BCAS2	1p13.2	-0.03611	0.481622	0.581261
EML3	11q12.3	-0.0361	0.481706	0.581327
SERPINA13P	14q32.13	-0.0361	0.481765	0.581357
TTC23L	5p13.2	-0.0361	0.481791	0.581357
CALN1	7q11.22	0.036095	0.481818	0.581357
HGC6.3	6q27	-0.03609	0.481894	0.581409
SNORA14A	7q11.23	-0.03609	0.481919	0.581409
S100P	4p16.1	-0.03607	0.48214	0.581621
KNDC1	10q26.3	-0.03607	0.482173	0.581621
ANKEF1	20p12.2	0.036065	0.482182	0.581621
MCOLN1	19p13.2	-0.03603	0.482637	0.582135
KIR3DL1	19q13.42	0.036021	0.482715	0.582194
HHLA1	8q24.22	-0.03601	0.482805	0.582244
PSG8	19q13.2	-0.03601	0.482814	0.582244
PDGFB	22q13.1	0.03599	0.483096	0.582548
ZNF43	19p12	-0.03598	0.483192	0.582626
CT45A4	Xq26.3	-0.03598	0.483226	0.582626
HSD17B14	19q13.33	0.035977	0.483247	0.582626
AADAC	3q25.1	-0.03597	0.483277	0.582626
CCDC30	1p34.2	-0.03596	0.48347	0.582824
LOC440896	9p11.2	-0.03594	0.483693	0.583031
GPC5	13q31.3	0.03594	0.4837	0.583031
PPDPFL	8q11.21	-0.03592	0.483953	0.583252
SPATA31D5P	9q21.32	-0.03592	0.483956	0.583252
TCEA1	8q11.23	-0.03592	0.483976	0.583252
NRARP	9q34.3	0.035915	0.484	0.583252
ST3GAL2	16q22.1	-0.03588	0.484388	0.583684
RSU1	10p13	0.035871	0.484535	0.583826
ACTB	7p22.1	0.035869	0.484563	0.583826
DMTN	8p21.3	0.035851	0.484786	0.584059
AOX2P	2q33.1	0.035822	0.485132	0.584441
C2ORF80	2q33.3	0.03581	0.485279	0.584582
TMEM14EP	3q25.2	-0.0358	0.485422	0.58472
OR2T11	1q44	-0.03579	0.485574	0.584868
GAD1	2q31.1	-0.03571	0.486465	0.585906
TG	8q24.22	-0.0357	0.486686	0.586136
C5ORF60	5q35.3	-0.03569	0.486744	0.586171
LINC00934	12q24.23	0.035684	0.486827	0.586236
IGSF9	1q23.2	-0.03568	0.48688	0.586265
SOCS3	17q25.3	0.035666	0.487043	0.586426
BIN3-IT1	8p21.3	0.035655	0.487175	0.586549
ZG16B	16p13.3	0.035647	0.487275	0.586634
LCTL	15q22.31	0.035642	0.487339	0.586649
SLC35G3	17q12	0.035641	0.487346	0.586649
PADI3	1p36.13	0.035632	0.487453	0.586743
MMD2	7p22.1	-0.03558	0.488147	0.587542
RRAGB	Xp11.21	0.035566	0.488267	0.587632
CNTN6	3p26.3	0.035563	0.488297	0.587632
PNMA5	Xq28	0.035562	0.48831	0.587632
ZNF675	19p12	0.035555	0.488399	0.587705

FAM174A	5q21.1	0.035544	0.488539	0.587837
KRTAP26-1	21q22.11	-0.03554	0.488572	0.587842
CCDC42	17p13.1	-0.03553	0.488711	0.587973
DNALI1	1p34.3	0.035515	0.488892	0.588156
CHPF2	7q36.1	-0.03551	0.488953	0.588194
LOC100240734	12q13.13	0.035504	0.489025	0.588222
LINC00526	18p11.31	-0.0355	0.489034	0.588222
PLCZ1	12p12.3	0.035495	0.489136	0.588309
PTMS	12p13.31	-0.03548	0.489298	0.588468
KIF4A	Xq13.1	-0.03547	0.489385	0.588521
ZNF181	19q13.11	0.035472	0.489411	0.588521
TVP23A	16p13.13	-0.03547	0.48943	0.588521
ZNF697	1p12	0.035465	0.489501	0.588571
ANKRD20A4	9q13	0.035462	0.489537	0.588579
FDPS	1q22	0.035451	0.48967	0.588703
UTP15	5q13.2	-0.03544	0.48981	0.588801
ATG5	6q21	-0.03544	0.48981	0.588801
SLC39A14	8p21.3	0.035412	0.490155	0.589181
ORC2	2q33.1	-0.03539	0.490372	0.589406
C19ORF33	19q13.2	-0.03538	0.490509	0.589535
FOXH1	8q24.3	-0.03537	0.490647	0.589665
CNTFR-AS1	9p13.3	-0.03534	0.490997	0.590051
MAGEB10	Xp21.3	0.035334	0.49111	0.590151
DEFB125	20p13	-0.03533	0.491142	0.590155
STAMBPL1	10q23.31	-0.03533	0.491188	0.590174
OR4K15	14q11.2	-0.03531	0.491406	0.5904
ESRRG	1q41	-0.0353	0.491471	0.590411
ZAN	7q22.1	0.035304	0.491474	0.590411
RANBP3L	5p13.2	0.035292	0.491628	0.590561
RXFP4	1q22	-0.03529	0.491686	0.590596
ATP6V1G3	1q31.3	-0.03528	0.491819	0.59072
EN2	7q36.3	-0.03527	0.491943	0.590833
RAD1	5p13.2	-0.03526	0.49205	0.590926
PLGLA	2q12.2	0.035247	0.492172	0.591037
SSMEM1	7q32.2	-0.03524	0.492211	0.591048
OR4X2	11p11.2	0.035231	0.492378	0.591214
ZMAT2	5q31.3	-0.03522	0.492521	0.59135
CASP2	7q34	0.035201	0.492735	0.59154
SLC9A7	Xp11.3 Xp11.3	0.035201	0.492738	0.59154
IMP3	15q24.2	-0.03518	0.493032	0.591857
PATL1	11q12.1	0.035172	0.493103	0.591907
PRAMEF11	1p36.21	-0.03514	0.493512	0.592363
OTOF	2p23.3	-0.03512	0.493705	0.592558
DAD1	14q11.2	-0.0351	0.493988	0.59283
APCS	1q23.2	-0.0351	0.49399	0.59283
GLB1	3p22.3	0.035097	0.494023	0.592833
ACSM2A	16p12.3	0.035094	0.494058	0.59284
TMEM174	5q13.2	0.035071	0.494335	0.593137
WARS2	1p12	-0.03506	0.494524	0.593328
RNASE7	14q11.2	-0.03505	0.494641	0.593432
TGIF2LX	Xq21.31	0.03504	0.494724	0.593496
ECD	10q22.2	0.035037	0.494763	0.593508
ACTG1P4	1p21.1	-0.03501	0.495094	0.59387
SCGB1D2	11q12.3	0.035003	0.495184	0.593942
UNG	12q24.11	-0.035	0.495214	0.593942
FERD3L	7p21.1	0.034992	0.495317	0.59403
PTBP1	19p13.3	-0.03497	0.495556	0.594282
GABRR3	3q11.2	0.034964	0.495659	0.59437

SNN	16p13.13	0.034935	0.496024	0.594761
AADACP1	3q25.1	-0.03493	0.496045	0.594761
C8ORF58	8p21.3	0.034926	0.496135	0.594834
ZNF492	19p12	0.034913	0.496284	0.594976
ZNF155	19q13.31	0.034904	0.496406	0.595087
PPP3CC	8p21.3	0.034862	0.496917	0.595663
PHF10	6q27	-0.03485	0.497026	0.595758
PPP1CC	12q24.11	-0.03484	0.497198	0.595904
CFAP77	9q34.13	0.034839	0.497207	0.595904
C16ORF87	16q11.2	0.034825	0.497371	0.596066
TMPRSS15	21q21.1	0.034815	0.497502	0.596186
PPP1R42	8q13.1	0.034806	0.497616	0.596288
PM20D2	6q15	-0.03479	0.497856	0.596539
ANXA2P3	10q21.3	0.034783	0.497893	0.596548
NOTO	2p13.2	0.034753	0.498268	0.596962
HRNR	1q21.3	0.034717	0.498709	0.597454
IGFBP6	12q13.13	0.034709	0.498814	0.597545
SLC7A8	14q11.2	0.034704	0.498873	0.597553
SNORA1	11q21	0.034703	0.498881	0.597553
UGT2B4	4q13.3	0.034689	0.499059	0.597731
RNF135	17q11.2	0.034687	0.499089	0.597731
LGALS3BP	17q25.3	0.034682	0.499142	0.597759
DDX42	17q23.3	0.03466	0.499419	0.598055
MSMO1	4q32.3	-0.03465	0.499579	0.598211
C12ORF50	12q21.32	-0.03464	0.499711	0.598333
NF1P2	15q11.2	-0.03461	0.500016	0.598484
LOC100287704	7q11.21	-0.03461	0.500016	0.598484
OR52E6	11p15.4	-0.03461	0.500016	0.598484
OR51B6	11p15.4	-0.03461	0.500016	0.598484
POM121L12	7p12.1	-0.03461	0.500016	0.598484
TNP1	2q35	-0.03461	0.500016	0.598484
SFXN3	10q24.31	0.034589	0.500297	0.598784
TBC1D21	15q24.1	0.034559	0.500665	0.599189
ZNF883	9q32	0.034543	0.500871	0.599391
SSX6P	Xp11.23	-0.03454	0.500906	0.599391
PPIL2	22q11.21	-0.03454	0.500924	0.599391
BHLHB9	Xq22.1	0.034533	0.500994	0.599438
CEACAM8	19q13.2	0.034527	0.501066	0.59949
GABBR1	6p22.1	-0.03452	0.501178	0.599587
ADGRV1	5q14.3	0.034512	0.501249	0.599637
SRSF12	6q15	0.034492	0.501496	0.599896
TMEM185B	2q14.2	-0.03448	0.501643	0.600036
ABRAXAS1	4q21.23	-0.03448	0.501704	0.600074
RHBDF1	16p13.3	-0.03446	0.501851	0.600214
GLOD4	17p13.3	0.034439	0.502164	0.600552
KIR3DP1	19q13.42	0.034433	0.502238	0.600604
PRF1	10q22.1	-0.03442	0.502456	0.600829
C7ORF71	7p15.2	0.034397	0.502682	0.601063
CCDC140	2q36.1	-0.03438	0.502896	0.601283
RAMP3	7p13	-0.03437	0.502969	0.601312
SNTN	3p14.2	0.034373	0.50298	0.601312
ZNF610	19q13.41	0.034367	0.50305	0.601359
ACRV1	11q24.2	-0.03436	0.50311	0.601396
NEK2	1q32.3	-0.03435	0.503248	0.601524
MFAP2	1p36.13	-0.03435	0.503304	0.601556
NPFFR2	4q13.3	0.034326	0.503568	0.601835
EHMT1-IT1	9q34.3	-0.03428	0.504126	0.602456
SPDYE3	7q22.1	-0.03428	0.504147	0.602456

OR2A12	7q35	-0.03426	0.504433	0.602761
SFRP5	10q24.2	-0.0342	0.505177	0.603614
BEGAIN	14q32.2	0.034174	0.505456	0.603911
BBS9	7p14.3	0.034165	0.505569	0.60401
VEGFD	Xp22.2	-0.03415	0.505758	0.6042
MYB	6q23.3	0.034137	0.505915	0.604352
MCM6	2q21.3	-0.03411	0.506269	0.604739
NEUROD6	7p14.3	-0.0341	0.506341	0.604762
BCORP1	Yq11.222	-0.0341	0.506349	0.604762
UFSP2	4q35.1	0.034086	0.506549	0.604943
GPR6	6q21	-0.03409	0.506561	0.604943
PPFIA4	1q32.1	0.034059	0.506892	0.605303
GYS1	19q13.33	0.034056	0.50693	0.605312
MAN2C1	15q24.2	-0.03405	0.507064	0.605409
EVX1	7p15.2	0.034044	0.507072	0.605409
NKAIN4	20q13.33	0.034019	0.507389	0.605752
CRYGC	2q33.3	-0.03402	0.507431	0.605765
SPDYE4	17p13.1	0.034012	0.507477	0.605784
IFNA8	9p21.3	0.034002	0.507599	0.605893
TMEM40	3p25.2	-0.034	0.507655	0.605924
FAM183BP	7p14.1	0.033992	0.507722	0.605969
ZMYM1	1p34.3	0.03398	0.507874	0.6061
RALGPS1	9q33.3	-0.03398	0.507892	0.6061
LINC01600	6p25.2	0.033975	0.507943	0.606124
CD83	6p23	0.033966	0.508057	0.606223
PTPN20	10q11.22	0.033947	0.508293	0.606469
WBP11	12p12.3	0.033944	0.508323	0.606469
TDRD6	6p12.3	0.033938	0.508398	0.606521
TMEM79	1q22	0.033935	0.508444	0.606521
USP7	16p13.2	0.033934	0.508457	0.606521
HIST1H4H	6p22.2	-0.03393	0.50849	0.606523
PZP	12p13.31	-0.03393	0.508558	0.606568
AKAP1	17q22	-0.03389	0.509023	0.607087
MC1R	16q24.3	0.033875	0.509195	0.607256
KCNH4	17q21.2	0.033856	0.509427	0.607496
SILC1	2p25.2	0.033843	0.509594	0.607639
C2ORF70	2p23.3	-0.03384	0.509607	0.607639
MIEF2	17p11.2	-0.03383	0.509729	0.607748
TUBA3FP	22q11.21	0.033821	0.50986	0.607868
GJA4	1p34.3	-0.03382	0.509898	0.607877
HIST4H4	12p12.3	-0.03382	0.509928	0.607877
HFM1	1p22.2	0.033794	0.510209	0.608175
SERTAD1	19q13.2	-0.03379	0.510279	0.608222
SNORA69	Xq24	0.033743	0.510847	0.608864
VPS52	6p21.32	-0.03373	0.510997	0.609006
OR2A25	7q35	-0.03372	0.511104	0.609097
OR51L1	11p15.4	-0.03368	0.511601	0.609653
AP2A2	11p15.5	-0.03367	0.511728	0.609747
LINC02685	11p11.2	0.033671	0.511742	0.609747
INHBB	2q14.2	-0.03367	0.511771	0.609747
KRTAP4-11	17q21.2	-0.03366	0.511923	0.609892
CRY1	12q23.3	0.033627	0.512292	0.610295
OR52B2	11p15.4	-0.03362	0.512399	0.610386
SPIN4	Xq11.1	0.033615	0.512449	0.610409
ZNF324	19q13.43	0.033603	0.512595	0.610547
ZNF253	19p13.11	0.033585	0.512827	0.610787
ABCC5	3q27.1	-0.03358	0.512887	0.610822
MTA3	2p21	-0.03357	0.512983	0.610865

RAD50	5q31.1	0.033572	0.512984	0.610865
LOC100133050	5q21.1	0.03355	0.513261	0.611159
LINC00632	Xq27.1	0.03354	0.513393	0.61128
APOF	12q13.3	0.033501	0.513874	0.611783
FBXL18	7p22.1	-0.0335	0.513877	0.611783
KHDC3L	6q13	0.033478	0.514168	0.612094
UBFD1	16p12.2	-0.03347	0.514296	0.612181
GATA4	8p23.1	0.033467	0.514306	0.612181
GAGE4	Xp11.4-p11.2	-0.03346	0.514334	0.612181
RASGEF1A	10q11.21	-0.03346	0.514386	0.612207
MRPL42	12q22	-0.03344	0.514635	0.612467
LAPTM4A	2p24.1	0.033433	0.51473	0.612536
PCP4	21q22.2	-0.03343	0.514754	0.612536
PER4	7p21.3	0.033423	0.514856	0.612621
CALCOCO2	17q21.32	0.033414	0.514971	0.612721
ERICH1	8p23.3	0.033394	0.515225	0.612987
TRPM5	11p15.5	0.033381	0.515394	0.613152
KIR2DL4	19q13.42	0.033377	0.515446	0.613177
CRIP3	6p21.1	-0.03336	0.515592	0.613293
SCART1	10q26.3	-0.03336	0.515605	0.613293
ZBTB9	6p21.32	-0.03331	0.516253	0.614028
PABPN1L	16q24.3	-0.03331	0.516294	0.61404
TOX3	16q12.1	0.033306	0.516337	0.614055
FOXG1	14q12	-0.03329	0.516512	0.614217
LYZL2	10p11.23	-0.03329	0.516534	0.614217
VWDE	7p21.3	-0.03328	0.516635	0.614299
IL36RN	2q14.1	0.033271	0.516774	0.614429
NXNL2	9q22.1	-0.03326	0.516894	0.614528
TDRKH	1q21.3	0.03326	0.516919	0.614528
PXYLP1	3q23	0.033254	0.516994	0.61458
RGS17	6q25.2	0.033247	0.517081	0.614647
PLPPR2	19p13.2	-0.03323	0.517246	0.614792
ZNF829	19q13.12	0.033232	0.517264	0.614792
GMPR	6p22.3	0.033229	0.517306	0.614805
LOC154449	6q27	0.033199	0.517688	0.615223
LTB4R2	14q12	-0.0332	0.517722	0.615226
GABRA1	5q34	0.033191	0.517783	0.615227
FUZ	19q13.33	-0.03319	0.517811	0.615227
CEBPZ	2p22.2	0.033186	0.517844	0.615227
GAGE1	Xp11.23	-0.03319	0.517845	0.615227
ARL17B	17q21.31	0.033178	0.517945	0.61531
KCNH6	17q23.3	0.033147	0.518343	0.615746
OR4F21	8p23.3	0.033142	0.518405	0.615782
ESRG	3p14.3 3p14.3	-0.03313	0.518565	0.615937
MDM4	1q32.1	-0.03312	0.518697	0.616057
UCHL1	4p13	0.033112	0.518784	0.616124
UBA3	3p14.1	0.033078	0.519206	0.616588
TRIM39	6p22.1	-0.03307	0.519255	0.616609
BCAM	19q13.32	-0.03307	0.519339	0.616673
SAMD12	8q24.11-q24.12	0.033063	0.519396	0.616704
DPY19L2	12q14.2	0.033059	0.519454	0.616736
SLC7A1	13q12.3	-0.03302	0.520006	0.617355
C2CD4D	1q21.3	-0.03301	0.520092	0.61742
RIMS4	20q13.12	-0.033	0.520242	0.617562
MRPL35	2p11.2	0.032991	0.520311	0.617607
CDHR4	3p21.31	0.032987	0.520359	0.617628
NINJ2	12p13.33	0.032981	0.520434	0.61768
LPCAT1	5p15.33	-0.03296	0.520728	0.617992

FLJ34503	6q21	0.032951	0.520815	0.618059
C10ORF131	10q24.1	-0.03292	0.521151	0.618421
INPP5B	1p34.3	-0.03292	0.521221	0.618468
EQTN	9p21.2	-0.03285	0.522133	0.619513
KRTAP10-12	21q22.3	-0.03283	0.52235	0.619702
OR6C75	12q13.2	0.03283	0.522354	0.619702
CYP21A2	6p21.33	0.032798	0.522752	0.620136
PRPSAP1	17q25.1	-0.03279	0.522891	0.620265
TBX18	6q14.3	0.03277	0.523107	0.620484
SLC25A18	22q11.21	-0.03276	0.523298	0.620674
LIN7A	12q21.31	-0.03274	0.523431	0.620765
ANKRD2	10q24.2	0.032743	0.523452	0.620765
EAF2	3q13.33	0.032742	0.523467	0.620765
COA7	1p32.3	-0.03271	0.523853	0.621185
C17ORF77	17q25.1	-0.03269	0.524173	0.621528
TPTEP2	22q13.1	0.032641	0.524755	0.622181
LIN28A	1p36.11	0.032632	0.524858	0.622266
HERC2P4	16p11.2	0.032621	0.524998	0.622396
BFSP1	20p12.1	0.03261	0.525143	0.622495
ADAM32	8p11.22	0.032608	0.52517	0.622495
C10ORF55	10q22.2	-0.03261	0.525175	0.622495
ACKR3	2q37.3	0.032581	0.525507	0.622845
EPN3	17q21.33	-0.03258	0.525532	0.622845
ZPBP2	17q21.1	-0.03256	0.525742	0.623021
TRDN	6q22.31	-0.03256	0.525743	0.623021
TMEM260	14q22.3	-0.03256	0.525776	0.623023
TMEM88	17p13.1	-0.03255	0.525918	0.623155
PSKH1	16q22.1	-0.03253	0.526162	0.623407
ZNF416	19q13.43	0.032524	0.526241	0.623464
ZNF322	6p22.2	0.032519	0.526299	0.623495
MYMK	9q34.2	-0.03251	0.526401	0.623564
OR2AG2	11p15.4	0.03251	0.526419	0.623564
SPATA31A1	9p12	-0.0325	0.526574	0.623711
IFIT1B	10q23.31	0.03249	0.526676	0.623795
CLEC3B	3p21.31	0.032455	0.527116	0.624261
CNNM3	2q11.2	-0.03245	0.527132	0.624261
E2F3	6p22.3	0.032447	0.527217	0.624325
LEMD1	1q32.1	0.032443	0.527264	0.624343
TEKT1	17p13.1	-0.03244	0.527355	0.624414
C1ORF189	1q21.3	-0.03242	0.527528	0.624582
KRT85	12q13.13	0.032408	0.527718	0.62477
ANKRD36B	2q11.2	0.032396	0.52787	0.624913
ENOSF1	18p11.32	-0.03236	0.528315	0.625402
TMEM25	11q23.3	0.032357	0.52836	0.625419
DLAT	11q23.1	0.032338	0.528606	0.625673
PAX3	2q36.1	-0.03231	0.529021	0.626125
HLA-C	6p21.33	-0.0323	0.52905	0.626125
MDK	11p11.2	-0.03229	0.52916	0.626218
SNAPIN	1q21.3	0.032286	0.529267	0.626308
ZC3H12A	1p34.3	-0.03228	0.529325	0.626339
TCF19	6p21.33	0.032279	0.529361	0.626345
CDH16	16q22.1	-0.03226	0.52961	0.626578
LINC00160	21q22.12	0.032258	0.529624	0.626578
HELZ2	20q13.33	-0.03226	0.529652	0.626578
OR2T10	1q44	-0.03225	0.529788	0.626702
BMP15	Xp11.22	0.032215	0.530177	0.627125
PPBP	4q13.3	-0.0322	0.530413	0.627367
PLAC9	10q22.3	-0.03219	0.530504	0.627402

UROC1	3q21.3	-0.03219	0.530505	0.627402
MCM8	20p12.3	-0.03218	0.530562	0.627433
OR52N5	11p15.4	-0.03218	0.530669	0.627522
NPPC	2q37.1	0.032166	0.530806	0.627627
SELENOI	2p23.3	-0.03216	0.530821	0.627627
SPINK14	5q32	0.032149	0.531022	0.627828
PRKD2	19q13.32	0.032142	0.53111	0.627895
PLGLB2	2p11.2	0.032124	0.531344	0.628104
TFAP2E	1p34.3	-0.03212	0.531349	0.628104
GPR37L1	1q32.1	0.032116	0.53144	0.628173
ZNF235	19q13.31	0.032114	0.531471	0.628173
ITIH4	3p21.1	0.032057	0.532192	0.628989
LOC100132831	Xp11.4	-0.03205	0.532274	0.629048
DHX40	17q23.1	0.032037	0.532454	0.629224
DDX4	5q11.2	0.032031	0.532534	0.629281
PCED1B	12q13.11	0.032018	0.532702	0.629417
DVL2	17p13.1	0.032016	0.532716	0.629417
DPYS	8q22.3	0.032012	0.532767	0.629417
FAM157B	9q34.3	0.032011	0.532789	0.629417
CARD17	11q22.3	0.032009	0.532806	0.629417
STIL	1p33	0.032002	0.532906	0.629498
ADAMTS17	15q26.3	0.031995	0.532994	0.629565
SH3GL2	9p22.2	0.031985	0.533125	0.629682
ARL5C	17q12	-0.03198	0.533226	0.629764
TFIP11	22q12.1	0.031929	0.533833	0.630444
SDR9C7	12q13.3	-0.03191	0.53402	0.630628
RUSC2	9p13.3	-0.03189	0.534365	0.630999
TYR	11q14.3	-0.03187	0.534605	0.63124
AP3S1	5q22.3-q23.1	0.031867	0.534633	0.63124
PNN	14q21.1	0.031861	0.534708	0.631274
NAGS	17q21.31	-0.03186	0.534724	0.631274
R3HCC1	8p21.3	-0.03186	0.534777	0.631298
SNORA32	11q21	-0.03185	0.534816	0.631308
IFIT5	10q23.31	0.031842	0.534954	0.631433
ZAR1	4p11	-0.03183	0.535051	0.631474
CNOT10	3p22.3	0.031834	0.535052	0.631474
OR5F1	11q12.1	0.031824	0.535181	0.63154
YPEL4	11q12.1	0.031824	0.535185	0.63154
XKRX	Xq22.1	-0.03182	0.535202	0.63154
SNRNP48	6p24.3	-0.03179	0.535559	0.631923
AQP7	9p13.3	-0.03178	0.535702	0.632056
FAM83D	20q11.23	-0.03178	0.535747	0.632071
TP53TG5	20q13.12	-0.03177	0.535821	0.632122
HERPUD2	7p14.2	0.031766	0.535929	0.632207
EXT2	11p11.2	-0.03176	0.535957	0.632207
CNOT7	8p22	0.031753	0.536092	0.632329
ZNF665	19q13.42	0.03175	0.536139	0.632347
F13B	1q31.3	-0.03174	0.536228	0.632415
LMBR1	7q36.3	0.031737	0.536305	0.632469
CGB5	19q13.33	-0.03173	0.536433	0.632582
KYAT3	1p22.2	0.031718	0.536549	0.63267
MED16	19p13.3	-0.03172	0.536571	0.63267
ATP13A5	3q29	0.031712	0.536616	0.632686
EFHD1	2q37.1	0.031685	0.536969	0.633065
TAF15	17q12	-0.03165	0.537415	0.633554
SCARNA3	1q25.1	-0.03164	0.53749	0.633604
ZMIZ1-AS1	10q22.3	0.031636	0.537598	0.633694
SEPTIN14	7p11.2	-0.03162	0.537824	0.633924



DSCR10	21q22.13	-0.03161	0.537875	0.633947
ZNF165	6p22.1	-0.03161	0.537922	0.633964
AWAT2	Xq13.1	0.031602	0.53804	0.634067
CDH22	20q13.12	-0.0316	0.538102	0.634102
ITM2B	13q14.2	0.031589	0.53821	0.634192
MLF1	3q25.32	-0.03158	0.538293	0.634253
TMEM151B	6p21.1	-0.03158	0.538361	0.634295
CCDC74B	2q21.1	-0.03157	0.538434	0.634345
SUDS3	12q24.23	0.031564	0.538523	0.634412
	1-Mar 1q41	0.031547	0.538745	0.634636
MYL9	20q11.23	0.031541	0.538817	0.634664
OR2S2	9p13.3	0.03154	0.538833	0.634664
KEL	7q34	-0.03152	0.539146	0.634996
KIF3B	20q11.21	-0.03151	0.539263	0.635097
TMEM214	2p23.3	-0.03149	0.53946	0.635292
CT45A5	Xq26.3	-0.03148	0.539565	0.635378
SEMA6C	1q21.3	0.03148	0.539604	0.635387
KLF14	7q32.2	-0.03146	0.539829	0.635614
OR2D3	11p15.4	0.031426	0.540298	0.636129
OR6C4	12q13.2	-0.03142	0.540345	0.636147
ILF2	1q21.3	0.031415	0.540451	0.636234
LOC100128288	17p13.1	0.031402	0.540618	0.636393
BUB1	2q13	0.031395	0.540704	0.636457
TMC1	9q21.13	0.031389	0.540777	0.636506
DCST1	1q21.3	-0.03138	0.540901	0.636613
MAGEB18	Xp21.3	0.03137	0.541023	0.636705
FAM47B	Xp21.1	-0.03137	0.54105	0.636705
ZKSCAN4	6p22.1	0.031365	0.541084	0.636705
SLC38A6	14q23.1	-0.03136	0.541134	0.636705
CLPS	6p21.31	-0.03136	0.541137	0.636705
TTY6	Yq11.223	-0.03133	0.541498	0.637092
TEX13A	Xq22.3	-0.03131	0.541838	0.63742
CFHR5	1q31.3	-0.0313	0.541872	0.63742
LINC00442	13q12.11	-0.0313	0.541872	0.63742
UCMA	10p13	-0.03126	0.542455	0.638069
AJUBA	14q11.2	0.031251	0.542566	0.638143
STARD6	18q21.2	0.031249	0.542582	0.638143
ARGFXP2	17q11.2	-0.03124	0.542657	0.638194
ANKRD30A	10p11.21	-0.03123	0.542775	0.638289
SNRPN	15q11.2	0.031231	0.542816	0.638289
COL20A1	20q13.33	0.031229	0.542846	0.638289
LY6K	8q24.3	-0.03123	0.542866	0.638289
SMAD6	15q22.31	0.031223	0.542925	0.638321
POU3F4	Xq21.1	0.031189	0.543368	0.638804
ZIM2	19q13.43	0.031185	0.54342	0.638828
CT45A3	Xq26.3	-0.03118	0.543495	0.638879
NHLRC3	13q13.3	-0.03117	0.543559	0.638917
IQCK	16p12.3	-0.03116	0.543688	0.639019
MFN2	1p36.22	0.031162	0.54371	0.639019
YBX3P1	16p11.2	0.031158	0.543768	0.63905
MAGEA9B	Xq28	-0.03115	0.54384	0.639096
EFCAB2	1q44	0.031149	0.543877	0.639102
OCM2	7q21.3	0.031139	0.544008	0.639219
GUSBP5	4q31.21	-0.0311	0.544545	0.639797
IGFL3	19q13.32	-0.0311	0.544564	0.639797
ARHGAP27P1	17q24.1	-0.03108	0.544749	0.639977
CLCN4	Xp22.2	0.031077	0.544816	0.640018
ASB14	3p14.3	0.03107	0.544908	0.640089

UVSSA	4p16.3	-0.03106	0.545053	0.640221
GALNT14	2p23.1	0.030985	0.546008	0.641305
SNX5	20p11.23	-0.03095	0.546467	0.641808
MT1B	16q13	-0.03094	0.546645	0.641979
QRFPR	4q27	0.030899	0.547125	0.642504
TP53I11	11p11.2	0.030892	0.547216	0.642574
AHSG	3q27.3	-0.03087	0.547442	0.642801
TEX36	10q26.13	0.030868	0.547518	0.642854
NBPF11	1q21.2	0.030851	0.547741	0.643077
LGI4	19q13.12 19q13.11	-0.03084	0.547942	0.643276
ADNP	20q13.13	-0.03083	0.547984	0.643287
GPR101	Xq26.3	-0.03082	0.548127	0.643405
CACNG6	19q13.42	0.03082	0.548149	0.643405
KRTAP2-1	17q21.2	-0.03079	0.548501	0.643781
SLC25A51P1	6q12	0.030775	0.548728	0.644009
CT47A1	Xq24	0.030768	0.548828	0.644089
S100A13	1q21.3	0.030757	0.54896	0.644207
TMSB15B	Xq22.2	-0.03075	0.549109	0.644343
SERPINA6	14q32.13	-0.03073	0.549375	0.644618
MUC20	3q29	-0.0307	0.549691	0.644951
TBX6	16p11.2	-0.03069	0.549901	0.645159
CALML5	10p15.1	-0.03068	0.549951	0.64518
OR10P1	12q13.2	-0.03067	0.55008	0.645294
NLGN4Y	Yq11.221	0.030666	0.550151	0.64534
ZFAT-AS1	8q24.22	0.03066	0.55022	0.64537
FOXB2	9q21.2	-0.03066	0.550241	0.64537
KRTAP5-2	11p15.5	-0.03064	0.550465	0.645594
CYP2J2	1p32.1	-0.03062	0.550753	0.645892
FAM218A	4q32.3	0.030617	0.550784	0.645892
GPR25	1q32.1	-0.03061	0.550892	0.645981
TBL1Y	Yp11.2	-0.0306	0.551052	0.646132
CAPN1	11q13.1	-0.03059	0.551097	0.646146
GK	Xp21.2	-0.03057	0.551454	0.646526
POLR1B	2q14.1	-0.03055	0.551594	0.646653
ZNF586	19q13.43	-0.03049	0.552494	0.647671
GSTM1	1p13.3	0.030483	0.552529	0.647673
IL13	5q31.1	0.030454	0.552904	0.648075
ZDHHC23	3q13.31	-0.03045	0.553017	0.648169
NWD2	4p14	0.030432	0.553197	0.648343
RNF128	Xq22.3	-0.03043	0.553264	0.648383
LINC00938	12q12	-0.03042	0.553415	0.648523
APOL2	22q12.3	0.030398	0.55364	0.648748
ST8SIA5	18q21.1	0.030392	0.553722	0.648806
SNAR-E	19q13.32	-0.03039	0.553777	0.648825
SLC39A7	6p21.32	0.030386	0.553803	0.648825
LRRC14B	5p15.33	-0.03035	0.554263	0.649289
KPNA7	7q22.1	0.03035	0.554264	0.649289
TPD52L3	9p24.1	0.030345	0.55433	0.649328
WDR33	2q14.3	-0.03034	0.554368	0.649335
VASH2	1q32.3	0.03032	0.554663	0.649628
GANAB	11q12.3	0.030318	0.554683	0.649628
BICRA	19q13.33	-0.03029	0.555046	0.650015
TPPP	5p15.33	-0.03029	0.555088	0.650026
CDK5R2	2q35	0.030282	0.555156	0.650068
GTF2IP1	7q11.23	0.030274	0.555254	0.650145
CAMK2N2	3q27.1	0.03026	0.555438	0.650322
SPINK13	5q32	0.030249	0.555588	0.650391
ASB18	2q37.2	-0.03025	0.555591	0.650391

NEBL	10p12.31	0.030248	0.555595	0.650391
GRAMD1C	3q13.31	-0.03024	0.555699	0.650475
ARHGAP10	4q31.23	0.030234	0.555778	0.650515
ZNF35	3p21.31	-0.03023	0.555814	0.650515
LINGO3	19p13.3	0.03023	0.55583	0.650515
GSTA4	6p12.2	-0.03022	0.555952	0.65062
CDR2L	17q25.1	0.030217	0.556003	0.650641
ZNF449	Xq26.3	-0.03021	0.556067	0.650679
SEPTIN4	17q22	0.030205	0.55616	0.650737
MPP4	2q33.1	-0.0302	0.556183	0.650737
SLC25A45	11q13.1	0.030193	0.556315	0.650854
TECRL	4q13.1	-0.03018	0.556522	0.651058
HBS1L	6q23.3	-0.03017	0.556673	0.651197
LRRC3B	3p24.1	-0.03015	0.556898	0.651422
WNT7A	3p25.1	-0.0301	0.557538	0.652133
ABHD6	3p14.3	0.030096	0.557586	0.652151
EIF1AY	Yq11.223	-0.03009	0.557626	0.652159
SERPINH1	11q13.5	0.030081	0.557786	0.652309
PKD1L1	7p12.3	-0.03007	0.55795	0.652462
PVRIG	7q22.1	-0.03005	0.558128	0.652632
MAGEB1	Xp21.2	-0.03004	0.558259	0.652717
BRCA2	13q13.1	0.030044	0.558266	0.652717
PAK1	11q13.5-q14.1	-0.03003	0.558424	0.652864
SUMO4	6q25.1	0.030019	0.5586	0.653031
POTEE	2q21.1	-0.03001	0.558675	0.653081
TTC39A	1p32.3	-0.03001	0.558771	0.653155
ACSM4	12p13.31	0.02997	0.559235	0.65363
TTC38	22q13.31	-0.02997	0.559242	0.65363
SDC4P	22q12.2	-0.02997	0.559296	0.653654
PSG4	19q13.31	0.029958	0.559403	0.653741
ICAM2	17q23.3	0.029941	0.559626	0.653964
ZDHHC22	14q24.3	0.029936	0.559681	0.65399
SNORA61	1p35.3	-0.02991	0.560036	0.654299
KRT4	12q13.13	-0.02991	0.560041	0.654299
GPR87	3q25.1	0.029909	0.560044	0.654299
LINC00643	14q23.2	0.029899	0.560168	0.654406
KDM4D	11q21	-0.02988	0.560361	0.654593
TSPAN16	19p13.2	-0.02987	0.560551	0.654754
OR51S1	11p15.4	0.029869	0.560564	0.654754
PLK3	1p34.1	-0.02983	0.561056	0.655291
RBL1	20q11.23	-0.02983	0.56113	0.655334
EXO1	1q43	0.029824	0.561158	0.655334
OR4E2	14q11.2	0.0298	0.561477	0.655668
TENT5B	1p36.11	0.029792	0.561584	0.655754
DNMTIP2	1p22.1	-0.02979	0.561639	0.65578
KCNE5	Xq23	-0.02978	0.561691	0.655803
GDF2	10q11.22	-0.02978	0.561753	0.655837
ULK1	12q24.33	0.029773	0.561832	0.65589
FH	1q43	-0.02977	0.561899	0.655931
FAM187B	19q13.12	0.029743	0.562217	0.656256
PKD2L2	5q31.2	0.029739	0.562271	0.656256
ANKRD11	16q24.3	0.029739	0.562276	0.656256
CHD5	1p36.31	0.029732	0.562364	0.656321
HSPB2	11q23.1	0.029729	0.5624	0.656325
SHOC1	9q31.3	0.029723	0.562485	0.656385
GABRB2	5q34	0.0297	0.562783	0.656695
HIRA	22q11.21	-0.02966	0.563281	0.657238
IL15	4q31.21	-0.02963	0.563726	0.657719

CYP4F8	19p13.12	0.029609	0.563991	0.65799
C2ORF15	2q11.2	-0.0296	0.564041	0.658009
CT83	Xq23	-0.02957	0.564548	0.658551
LDB1	10q24.32	0.029565	0.564571	0.658551
FBXO24	7q22.1	-0.02956	0.56469	0.658652
UHRF2	9p24.1	-0.02955	0.56473	0.65866
HTR4	5q32	0.029544	0.564846	0.658757
DLX1	2q31.1	-0.02953	0.564987	0.658861
OR2C1	16p13.3	0.029532	0.565001	0.658861
IRX2	5p15.33	0.02952	0.565152	0.658998
FAM90A7P	8p23.1	-0.02951	0.565302	0.659135
NACC1	19p13.13	-0.0295	0.565366	0.659171
WNT8A	5q31.2	-0.02949	0.56556	0.659359
OR11H4	14q11.2	-0.02949	0.565602	0.659369
MPP7	10p12.1	0.029481	0.565666	0.659378
PHYHIPL	10q21.1	-0.02948	0.565692	0.659378
TP53AIP1	11q24.3	-0.02948	0.565708	0.659378
DPPA2P3	3q29	-0.02947	0.565833	0.659422
KRTAP13-4	21q22.11	-0.02947	0.565867	0.659422
GRHL2	8q22.3	0.029463	0.565908	0.659422
DNM3	1q24.3	0.029461	0.565936	0.659422
BARHL2	1p22.2	0.02946	0.565948	0.659422
SUMF1	3p26.1	0.029459	0.565967	0.659422
RPRM	2q23.3	-0.02946	0.565992	0.659422
OR2B2	6p22.1	-0.02946	0.566009	0.659422
PTK6	20q13.33	-0.02944	0.566254	0.65964
ASB10	7q36.1	0.029436	0.566262	0.65964
PSORS1C1	6p21.33	0.029431	0.566325	0.659647
RRN3P2	16p11.2	-0.02943	0.566334	0.659647
AJAP1	1p36.32	0.029426	0.566392	0.659676
SNUPN	15q24.2	0.029412	0.566584	0.65983
LAG3	12p13.31	0.02941	0.566607	0.65983
NANOGNB	12p13.31	-0.02941	0.566673	0.65983
ETFRF1	12p12.1	0.029404	0.566683	0.65983
ANXA13	8q24.13	0.029404	0.566689	0.65983
HTT	4p16.3	0.029397	0.566786	0.659904
FASTKD1	2q31.1	-0.02938	0.567041	0.660164
AARS2	6p21.1	-0.02935	0.567417	0.660543
PRAMEF8	1p36.21	-0.02935	0.567433	0.660543
DNMT3A	2p23.3	0.029339	0.567547	0.660638
TSPAN12	7q31.31	-0.02933	0.567636	0.660702
PLA2G4E	15q15.1	-0.02933	0.567708	0.660726
NYX	Xp11.4	-0.02932	0.567738	0.660726
PXMP2	12q24.33	-0.02932	0.567755	0.660726
COBL	7p12.1	0.029306	0.567988	0.660935
KRTAP4-4	17q21.2	-0.0293	0.568001	0.660935
DDX20	1p13.2	-0.0293	0.568082	0.660991
SERPINI1	3q26.1	0.029294	0.568136	0.661016
ZIC2	13q32.3	0.02929	0.568191	0.661041
CAPG	2p11.2	0.029278	0.568347	0.661163
MYL7	7p13	-0.02928	0.568362	0.661163
SEL1L2	20p12.1	0.029274	0.56841	0.661181
LYPD4	19q13.2	0.029271	0.568445	0.661183
APOBEC3F	22q13.1	0.029266	0.568506	0.661216
SPINK9	5q32	0.029263	0.568555	0.661234
HTATSF1	Xq26.3	0.029254	0.568671	0.661331
TMEM155	4q27	0.029226	0.569035	0.661716
DDX25	11q24.2	0.029223	0.569085	0.661736

PYGO2	1q21.3	0.0292	0.569377	0.662021
TMEM64	8q21.3	-0.0292	0.569397	0.662021
FAM91A1	8q24.13	0.029189	0.569534	0.662142
SLC25A16	10q21.3	0.029158	0.569941	0.662555
ZNF528	19q13.41	0.029157	0.569955	0.662555
HES7	17p13.1	-0.02915	0.569995	0.662563
VSTM2L	20q11.23	-0.02915	0.57003	0.662564
GYPA	4q31.21	-0.02914	0.570139	0.662653
PROK1	1p13.3	-0.02914	0.570224	0.662714
RFESD	5q15	-0.02913	0.570349	0.66282
ANKRD18DP	3q29	-0.02912	0.570491	0.662946
OR11L1	1q44	0.029106	0.570624	0.663063
KLHL10	17q21.2	0.029103	0.57067	0.663073
CLK2P1	7p15.3	-0.0291	0.570699	0.663073
ABI2	2q33.2	0.029083	0.57093	0.663303
PPP4R4	14q32.12-q32.13	0.029078	0.570994	0.663339
ZC3H18	16q24.2	-0.02908	0.57103	0.663342
DKK1	10q21.1	-0.02906	0.571183	0.663482
SMR3B	4q13.3	-0.02906	0.571279	0.663528
MMP3	11q22.2	0.029056	0.57129	0.663528
GSDMB	17q21.1	-0.02905	0.571369	0.663582
NPBWR2	20q13.33	0.029035	0.571566	0.663772
MASP2	1p36.22	-0.02902	0.571725	0.663918
DEFB103A	8p23.1	-0.02902	0.57183	0.664002
ZNF44	19p13.2	-0.02901	0.571877	0.664009
NFE2	12q13.13	-0.02901	0.571903	0.664009
HTR3A	11q23.2	0.029004	0.57198	0.664061
PWP2	21q22.3	-0.02899	0.572168	0.664241
OR6X1	11q24.1	0.028973	0.572396	0.664466
EID3	12q23.3	0.028956	0.572611	0.664648
FAM200A	7q22.1	-0.02895	0.572642	0.664648
TAS2R46	12p13.2	-0.02895	0.572652	0.664648
PKN1	19p13.12	-0.02894	0.572777	0.664754
RIPK4	21q22.3	-0.02894	0.572842	0.664792
GTF3C6	6q21	0.028924	0.573037	0.664979
SEMA3A	7q21.11	0.028919	0.573102	0.665016
GGT3P	22q11.21	-0.0289	0.573331	0.665243
LRTM2	12p13.33	0.028894	0.573432	0.665322
NCBP1	9q22.33	0.02889	0.573497	0.665358
ANKRD20A3	9q21.11	-0.02889	0.573558	0.665391
SULT1A1	16p11.2	-0.02887	0.573719	0.66554
SSX9P	Xp11.23	0.028858	0.573923	0.665737
PDIA4	7q36.1	-0.02885	0.57404	0.665834
GUCD1	22q11.23	-0.02884	0.574091	0.665855
OR2G3	1q44	0.028836	0.574212	0.665957
RP2	Xp11.3	0.028832	0.574265	0.66598
FRG1BP	20q11.1	-0.02882	0.574446	0.666151
XAGE2	Xp11.22	-0.02879	0.574767	0.666484
WFDC12	20q13.12	0.028791	0.574801	0.666484
KDM8	16p12.1	-0.02879	0.574853	0.666484
POLR3C	1q21.1	0.028787	0.574866	0.666484
HMGXB3	5q32	0.028779	0.574961	0.666555
COG1	17q25.1	-0.02877	0.575118	0.666699
TMEM213	7q34	0.028756	0.575268	0.666834
C6ORF58	6q22.33	0.028754	0.575302	0.666835
OR51M1	11p15.4	0.028733	0.575579	0.667118
GNG8	19q13.32	-0.02872	0.575779	0.667311
ZNF132	19q13.43	0.028714	0.575828	0.667316

UCP1	4q31.1	0.028712	0.575851	0.667316
TMEM150C	4q21.22	-0.02871	0.575911	0.667347
NUPR1	16p11.2	-0.02869	0.5761	0.667528
WDR45B	17q25.3	-0.02868	0.576263	0.667678
DDO	6q21	-0.02867	0.576409	0.667809
TDO2	4q32.1	-0.02866	0.576604	0.667996
IFNL1	19q13.2	-0.02865	0.576673	0.668037
CHMP5	9p13.3	0.028642	0.576784	0.668128
SNRNP27	2p13.3	-0.02863	0.576928	0.668255
KRTAP5-8	11q13.4	0.028629	0.576964	0.668259
HYDIN	16q22.2	0.028608	0.577237	0.668536
SLC47A2	17p11.2	0.028602	0.577323	0.668572
ACHE	7q22.1	0.028601	0.577335	0.668572
COL7A1	3p21.31	0.028559	0.577891	0.669177
QRFP	9q34.12	-0.02855	0.578006	0.669272
UCP3	11q13.4	0.028536	0.578199	0.669457
TAFA4	3p14.1	0.028485	0.57888	0.670206
MDGA2	14q21.3	0.028471	0.579071	0.670389
LINC00909	18q22.3	-0.02845	0.579308	0.670625
UTS2	1p36.23	0.028439	0.579496	0.670803
SNORA51	20p13	-0.02843	0.579635	0.670925
ACP5	19p13.2	0.028413	0.57984	0.671124
RNF40	16p11.2	-0.0284	0.580067	0.671347
PRKAB1	12q24.23	0.028388	0.580173	0.671432
SPDYE6	7q22.1	-0.02838	0.580242	0.671473
SIX2	2p21	0.02838	0.580278	0.671475
ERC2-IT1	3p14.3	0.028367	0.580452	0.671639
MIOS	7p21.3	-0.02836	0.580518	0.671675
IRX1	5p15.33	0.028346	0.580732	0.671885
RRP1B	21q22.3	-0.02833	0.580923	0.672067
NMRK2	19p13.3	-0.02832	0.581096	0.672228
ZBTB5	9p13.2	-0.02831	0.581208	0.672318
FSTL3	19p13.3	-0.02829	0.581484	0.672599
OR51I2	11p15.4	-0.02828	0.581676	0.672782
NOL9	1p36.31	0.028272	0.581721	0.672796
SNORA54	11p15.4	0.02826	0.581882	0.672939
RTL10	22q11.21	-0.02826	0.581912	0.672939
CLDN2	Xq22.3	0.028253	0.581976	0.672974
DEFB126	20p13	0.028246	0.582075	0.673049
LPCAT3	12p13.31	-0.02823	0.582312	0.673252
RRM1	11p15.4	0.028227	0.582321	0.673252
HBM	16p13.3	-0.02822	0.582351	0.673252
FRMD1	6q27	-0.02821	0.582501	0.673386
SORBS3	8p21.3	0.028207	0.582586	0.673422
MAFA	8q24.3	0.028206	0.582599	0.673422
CENPBD1	16q24.3	-0.02818	0.582949	0.673787
SOX1	13q34	0.028166	0.583138	0.673967
RND3	2q23.3	0.02816	0.583217	0.674019
GPM6B	Xp22.2	0.028141	0.583479	0.67425
HIST1H2BM	6p22.1	-0.02814	0.583484	0.67425
NLRP2	19q13.42	0.02812	0.58375	0.674519
PRR30	2p23.3	0.028115	0.583828	0.674553
FAM215A	17q21.31	0.028111	0.583873	0.674553
PHACTR2-AS1	6q24.2	-0.02811	0.58388	0.674553
ZNF625	19p13.2	0.028096	0.584078	0.674742
SLC16A8	22q13.1	0.028089	0.584173	0.674813
HPN-AS1	19q13.11-q13.12	0.028077	0.584325	0.674949
PRAMEF2	1p36.21	-0.02807	0.584443	0.675047

ZNF639	3q26.33	-0.02805	0.584629	0.675222
WBP2NL	22q13.2	-0.02804	0.584795	0.675376
FXVD7	19q13.12	-0.02802	0.585081	0.67564
SUGT1P4-STRA6LP-CCDC180	9q22.33	-0.02802	0.585091	0.67564
OR5T2	11q12.1	-0.02801	0.585203	0.675729
OR1N1	9q33.2	-0.02801	0.585288	0.675789
SRRM2-AS1	16p13.3	0.027994	0.585441	0.675916
TMEM104	17q25.1	-0.02799	0.585465	0.675916
ZNF721	4p16.3	0.027978	0.585653	0.676093
GJA10	6q15	-0.02797	0.58575	0.676167
HYAL6P	7q31.32	0.027949	0.586051	0.676444
SLC17A3	6p22.2	-0.02795	0.586058	0.676444
GLIPR1L2	12q21.2	-0.02793	0.586284	0.676666
WDR86	7q36.1	-0.02791	0.586625	0.676952
RXYLT1	12q14.2	-0.02791	0.586626	0.676952
PLEKHG7	12q22	0.027905	0.586633	0.676952
SERPINB4	18q21.33	0.027884	0.586915	0.677239
GOLGA8F	15q13.1	-0.02787	0.587047	0.677351
STRADA	17q23.3	-0.02786	0.587258	0.67754
TNRC18	7p22.1	0.027857	0.587278	0.67754
ZSWIM2	2q32.1	0.027852	0.587348	0.677564
SCGB1A1	11q12.3	-0.02785	0.587367	0.677564
TYW1B	7q11.22-q11.23	-0.02784	0.587562	0.67775
QRICH2	17q25.1	0.02783	0.587638	0.677765
RPAP2	1p22.1	-0.02783	0.587643	0.677765
CLLU1	12q22	-0.02782	0.587797	0.677904
CCL17	16q21	-0.02781	0.587852	0.677929
FAM238B	10p12.1	-0.02781	0.587908	0.677954
HOXB5	17q21.32	0.027792	0.588151	0.678196
CFAP161	15q25.1	0.027764	0.588524	0.678555
PLA2G4F	15q15.1	0.027764	0.58853	0.678555
AOPEP	9q22.32	0.027756	0.588643	0.678646
DAZ4	Yq11.23	-0.02774	0.588844	0.678839
SRARP	1p36.13	-0.02773	0.588926	0.678894
TTC9B	19q13.2	0.027717	0.589166	0.679131
NDP	Xp11.3	-0.0277	0.589434	0.679364
ACVR2B	3p22.2	-0.0277	0.589436	0.679364
REM1	20q11.21	0.027689	0.58954	0.679445
RXFP2	13q13.1	0.027656	0.589984	0.679918
IFI27	14q32.12	-0.02765	0.590041	0.679944
STIMATE	3p21.1	-0.02765	0.590125	0.680002
FAM83A-AS1	8q24.13	-0.02764	0.590253	0.68011
GFOD1	6p23	-0.0276	0.590675	0.680558
ATP2B3	Xq28	0.027577	0.591045	0.680945
OPN4	10q23.2	0.027571	0.591125	0.680982
OR1D4	17p13.3	-0.02757	0.591146	0.680982
MED29	19q13.2	0.02756	0.591272	0.681089
KCNC4	1p13.3	0.027557	0.591313	0.681096
TECTB	10q25.2	-0.02753	0.59169	0.681491
APOBEC3A	22q13.1	-0.02747	0.592548	0.682441
RAMP1	2q37.3	0.027461	0.592605	0.682467
LEXM	1p32.3	0.027457	0.592665	0.682496
MIR155HG	-	-0.02745	0.592789	0.6826
TTC17	11p12-p11.2	0.02744	0.592893	0.68268
SLC25A23	19p13.3	0.027436	0.592949	0.68268
CA13	8q21.2	-0.02743	0.592989	0.68268
OR4D6	11q12.1	0.027432	0.593004	0.68268
PLA2G2C	1p36.12	0.027429	0.59304	0.68268

INCENP	11q12.3	0.027426	0.593076	0.68268
LINC00636	3q13.12	0.027425	0.593097	0.68268
CRBN	3p26.2	-0.02741	0.593259	0.682823
MESP2	15q26.1	0.02741	0.593289	0.682823
RACGAP1	12q13.12	0.027357	0.594005	0.683608
PDIA5	3q21.1	0.027315	0.594575	0.684176
LOC728024	8p11.23	-0.02731	0.594601	0.684176
DCLK3	3p22.2	0.027313	0.594607	0.684176
PPRC1	10q24.32	0.027311	0.594636	0.684176
TRPC5	Xq23	0.027303	0.594743	0.684261
RPL22L1	3q26.2	0.02729	0.594912	0.684415
LOC283922	16q23.1	0.027283	0.595014	0.684493
GBP7	1p22.2	0.027266	0.595243	0.684718
MKRN2	3p25.2	0.027216	0.595906	0.685441
SYNGR4	19q13.33	0.027211	0.59598	0.685463
BAG6	6p21.33	0.02721	0.595994	0.685463
NETO2	16q12.1	0.027201	0.596122	0.685571
C6ORF118	6q27	0.027185	0.596337	0.68578
OR51A7	11p15.4	0.027178	0.596423	0.685799
TMEM202	15q23-q24.1	-0.02718	0.596423	0.685799
MYRIP	3p22.1	-0.02715	0.596798	0.686191
PEX2	8q21.13	-0.02713	0.597044	0.686435
S100A8	1q21.3	0.027123	0.597169	0.686539
KNSTRN	15q15.1	-0.02712	0.597271	0.686617
SFTA3	14q13.3	0.027101	0.597462	0.686797
MAFK	7p22.3	-0.02709	0.597557	0.686866
ZDHHC11	5p15.33	0.027074	0.597835	0.687146
LINC00410	13q31.3	-0.02703	0.5984	0.687757
SPAAR	9p13.3	-0.02703	0.598451	0.687776
CAMK2G	10q22.2	-0.02702	0.598533	0.68783
NKX2-5	5q35.1	0.027009	0.598718	0.687985
TBC1D3P2	17q23.2	-0.02701	0.598736	0.687985
CACNA1I	22q13.1	0.027001	0.598816	0.688034
SCRT2	20p13	0.026999	0.598848	0.688034
SBK1	16p12.1	-0.02699	0.598979	0.688145
CYB5R2	11p15.4	-0.02697	0.599241	0.688407
RNF170	8p11.21	-0.02695	0.599469	0.688629
SAMD5	6q24.3	0.02695	0.599509	0.688636
SNHG28	1q23.2	-0.02692	0.59989	0.689002
AZU1	19p13.3	0.026922	0.599897	0.689002
TM4SF20	2q36.3	-0.02692	0.599964	0.689041
IQUB	7q31.32	-0.02689	0.600384	0.689461
C20ORF141	20p13	0.026885	0.600399	0.689461
SRP14P1	12p13.31	-0.02687	0.600646	0.689705
KRTAP9-2	17q21.2	-0.02686	0.600797	0.689839
CSTB	21q22.3	0.026844	0.600948	0.689972
BEST3	12q15	0.026834	0.601084	0.690088
ZNF705A	12p13.31	-0.02683	0.601153	0.690128
SEC11C	18q21.32	0.026825	0.601202	0.690145
GUCY2EP	11q13.5	0.026809	0.60142	0.690356
MYOD1	11p15.1	-0.0268	0.601495	0.690403
PCDH19	Xq22.1	0.0268	0.601553	0.690429
FAM155B	Xq13.1	0.026795	0.601612	0.690457
PPM1N	19q13.32	-0.02679	0.601716	0.690535
MCMBP	10q26.11	0.026785	0.601749	0.690535
KRTAP13-2	21q22.11	0.026778	0.601839	0.69057
KIF17	1p36.12	0.026778	0.601848	0.69057
MAP1LC3B2	12q24.22	-0.02677	0.601968	0.690668



SFTPA1	10q22.3	0.026759	0.602105	0.690786
CCL4L1	17q12	0.026749	0.602242	0.690904
MARVELD3	16q22.2	0.026726	0.602546	0.691213
TRIB1	8q24.13	0.026669	0.603038	0.691737
SLC35G5	8p23.1	0.026679	0.603189	0.691871
GGACT	13q32.3	0.026676	0.603228	0.691876
LRP5	11q13.2	0.026666	0.603447	0.692088
SLC16A11	17p13.1	-0.02666	0.603485	0.692092
ESX1	Xq22.2	0.026633	0.603808	0.692388
NRCAM	7q31.1	0.026633	0.603813	0.692388
POM121L1P	22q11.22	0.026617	0.604035	0.692603
MLH1	3p22.2	0.026609	0.604135	0.692678
GRAMD4	22q13.31	0.026601	0.604246	0.692766
SRI	7q21.12	-0.0266	0.604313	0.692794
ARHGEF9	Xq11.1	0.026594	0.60434	0.692794
DUT	15q21.1	0.026589	0.604419	0.69284
TBX22	Xq21.1	0.026586	0.604449	0.69284
LINC01128	1p36.33	-0.02657	0.604676	0.693061
HLA-E	6p22.1	0.026555	0.604875	0.693249
WFIKN2	17q21.33	0.026513	0.605452	0.69387
ALPL	1p36.12	0.026497	0.605666	0.694076
TRPM1	15q13.3	0.026487	0.605794	0.694183
CCDC142	2p13.1	-0.02648	0.605945	0.694316
CRELD2	22q13.33	-0.02647	0.605997	0.694337
KRTAP9-4	17q21.2	0.026466	0.606081	0.694392
AQP1	7p14.3	0.02646	0.606167	0.694452
TRMT9B	8p22	0.026431	0.606557	0.694859
TIMM17A	1q32.1	0.026415	0.606783	0.695058
ZNF765	19q13.42	0.026414	0.606801	0.695058
VSIG8	1q23.2	-0.0264	0.606978	0.695221
NECAB2	16q23.3	0.02639	0.607122	0.695347
LINC01845	5q33.3	0.026384	0.607197	0.695393
SLC20A2	8p11.21	0.026332	0.607919	0.696179
PRAMEF18	1p36.21	-0.02632	0.608031	0.696268
ZNF367	9q22.32 9q22.32	0.026321	0.608065	0.696268
SLC27A1	19p13.11	0.026304	0.608288	0.696483
SLC13A4	7q33	0.026299	0.608355	0.69652
GJB7	6q14.3-q15	0.026293	0.60844	0.696549
HTR2C	Xq23	0.02629	0.608481	0.696549
NPAS1	19q13.32	-0.02629	0.608485	0.696549
TMPRSS11A	4q13.2	0.026283	0.608584	0.696608
LHX6	9q33.2	-0.02628	0.608606	0.696608
MAK	6p24.2	-0.02627	0.60873	0.69671
TSPY3	Yp11.2	0.026249	0.609042	0.696988
SPINK8	3p21.31	-0.02625	0.609042	0.696988
MARK4	19q13.32	-0.02624	0.609108	0.697023
GNB3	12p13.31	0.026223	0.609396	0.697313
ZBTB32	19q13.12	0.026199	0.609731	0.697656
CLCNKB	1p36.13	-0.02618	0.609982	0.697904
ARHGAP27	17q21.31	0.026169	0.610142	0.698011
AMMECR1	Xq23	0.026168	0.610145	0.698011
RNPC3	1p21.1	-0.02615	0.610392	0.698253
SYCP2	20q13.33	-0.02613	0.610605	0.698451
NAMPT	7q22.3	0.026132	0.610648	0.698451
LENEP	1q21.3	0.02613	0.61067	0.698451
FGF13	Xq26.3-q27.1	-0.02612	0.610807	0.698508
FAM71A	1q32.3	-0.02612	0.610807	0.698508
TCF7L1	2p11.2	-0.02612	0.610824	0.698508

IZUMO1	19q13.33	0.026115	0.610871	0.698522
DEFB131A	4p16.1	-0.0261	0.611068	0.698681
OSBPL7	17q21.32	-0.0261	0.61108	0.698681
MYCL	1p34.2	0.026065	0.611557	0.699187
SLC5A8	12q23.1-q23.2	0.02605	0.611756	0.699375
FAM110D	1p36.11	0.026046	0.611816	0.69938
SERPINE2	2q36.1	0.026045	0.611831	0.69938
OR1L4	9q33.2	-0.02604	0.611877	0.699393
ZNF326	1p22.2	0.026038	0.611931	0.699414
B3GAT2	6q13	-0.02603	0.612004	0.699458
SERPINI2	3q26.1	0.026018	0.612202	0.699645
ADAMTS19	5q23.3	-0.02598	0.61276	0.700166
DNAAF2	14q21.3	0.025976	0.612779	0.700166
BTNL9	5q35.3	0.02597	0.612858	0.700166
U2SURP	3q23	-0.02597	0.612873	0.700166
SLC25A43	Xq24	-0.02597	0.612888	0.700166
OR1N2	9q33.2	-0.02597	0.612916	0.700166
TRAF5	1q32.3	-0.02596	0.612935	0.700166
USP30	12q24.11	-0.02596	0.612938	0.700166
PANK2	20p13	-0.02595	0.613168	0.700388
SNORA50A	16q21	0.025937	0.613312	0.700513
FGD1	Xp11.22	-0.02588	0.614134	0.701412
PCGEM1	2q32.3	-0.02586	0.61442	0.701698
MYL12B	18p11.31	0.025843	0.614591	0.701854
ZNF567	19q13.12	0.025822	0.614888	0.702153
USP42	7p22.1	-0.02581	0.615084	0.702307
ZNF717	3p12.3	-0.02581	0.615093	0.702307
LOC441455	9q22.33	0.02579	0.615324	0.702515
UCN3	10p15.1	-0.02579	0.615357	0.702515
CLDN19	1p34.2	-0.02579	0.615381	0.702515
PCYOX1L	5q32	0.025777	0.615504	0.702617
C12ORF40	12q12	-0.02577	0.615564	0.702645
FOXO4	Xq13.1	0.02575	0.615863	0.702946
TRNT1	3p26.2	0.025736	0.616058	0.703128
GABBR2	9q22.33	-0.02573	0.616105	0.703142
ACER1	19p13.3	0.025727	0.616188	0.703197
PON1	7q21.3	0.025703	0.616519	0.703535
DNAJC14	12q13.2	0.025698	0.61658	0.703564
RIOK2	5q15	0.025685	0.616758	0.703726
ITPKA	15q15.1	0.025658	0.617133	0.704114
CRYGN	7q36.1	-0.02565	0.617306	0.704253
TMEM268	9q32	-0.02564	0.617325	0.704253
SLC5A5	19p13.11	0.025636	0.617431	0.704334
CDH15	16q24.3	-0.02562	0.617705	0.704605
C10ORF53	10q11.23	-0.02561	0.617739	0.704605
ASCC1	10q22.1	-0.0256	0.617954	0.704811
LOC145845	15q14	0.025589	0.61808	0.704914
TMEM225	11q24.1	0.025576	0.618256	0.705074
CABS1	4q13.3	-0.02556	0.618504	0.705317
FLG2	1q21.3	0.025555	0.61854	0.705319
MYO15A	17p11.2	-0.02555	0.618652	0.705406
C11ORF94	11p11.2	0.025542	0.618722	0.705445
ASCL4	12q23.3	0.025531	0.618873	0.705577
LCN2	9q34.11	0.02547	0.61972	0.706503
CNKS3	6q25.2	-0.02545	0.620046	0.706794
SLC35E2A	1p36.33	0.025444	0.620067	0.706794
TMEM9B	11p15.4	0.025443	0.620082	0.706794
LRRTM4	2p12	0.025436	0.620185	0.706855

PRR23C	3q23	-0.02543	0.620205	0.706855
OR52M1	11p15.4	-0.02542	0.620368	0.707
CIB2	15q25.1	0.025386	0.620869	0.707482
FAM224B	Yq11.222	-0.02538	0.620896	0.707482
SH3BP1	22q13.1	0.025382	0.62092	0.707482
LMAN1L	15q24.1	0.025381	0.620932	0.707482
HEXB	5q13.3	0.02535	0.62137	0.70794
RB1	13q14.2	0.025342	0.621474	0.708018
TKTL2	4q32.2	0.025334	0.621586	0.708105
APIP	11p13	-0.02533	0.621684	0.708177
OR13C3	9q31.1	0.02532	0.621779	0.708245
ADAM18	8p11.22	-0.02531	0.621929	0.708375
EXTL1	1p36.11	0.025297	0.622088	0.708516
FAM92A1P2	4q35.1	-0.02529	0.622212	0.708617
MISP3	19p13.12	-0.02527	0.622425	0.7088
CD40	20q13.12	-0.02527	0.622458	0.7088
ZNF876P	4p16.3	0.025269	0.622479	0.7088
OR4C3	11p11.2	-0.02526	0.622573	0.708844
LOC728989	1q21.1	0.025261	0.622588	0.708844
PACS2	14q32.33	-0.02525	0.622778	0.709021
FAM228A	2p23.3	0.025244	0.622822	0.70903
MRGPRE	11p15.4	0.02524	0.622881	0.709057
LGALS1	22q13.1	0.025232	0.622995	0.709146
OAS1	12q24.13	0.025224	0.623105	0.709231
ACOX2	3p14.3	-0.02521	0.623306	0.709387
TTC26	7q34	-0.02521	0.623312	0.709387
NPB	17q25.3	0.025199	0.623439	0.70949
SLC50A1	1q22	-0.02519	0.623526	0.709549
LMO1	11p15.4	-0.02518	0.623643	0.709642
FANCE	6p21.31	-0.02517	0.623832	0.709816
PHF14	7p21.3	0.025168	0.623873	0.709823
MANEAL	1p34.3	-0.02515	0.624158	0.710079
BRSK1	19q13.42	-0.02515	0.624169	0.710079
RNF214	11q23.3	0.025119	0.624543	0.710395
MAGEC3	Xq27.2	0.025119	0.624547	0.710395
LYZL6	17q12	-0.02512	0.624553	0.710395
SSR1	6p24.3	0.025096	0.624859	0.710703
TOMM70	3q12.2	-0.02508	0.625034	0.710862
SLN	11q22.3	-0.02508	0.625141	0.710909
BTNL2	6p21.32	0.025076	0.625147	0.710909
POGLUT2	13q33.1	-0.02507	0.625245	0.71098
WASF1	6q21	-0.02504	0.625638	0.711386
ZNF548	19q13.43	0.025035	0.625709	0.711397
VASP	19q13.32	0.025034	0.625718	0.711397
SIX1	14q23.1	0.025026	0.625837	0.711491
RPGRIP1	14q11.2	0.024998	0.626221	0.711888
CETN4P	4q27	0.024962	0.626716	0.71241
TRH	3q22.1	0.024957	0.626789	0.712453
SCCPDH	1q44	0.02495	0.626877	0.712499
ZNRF2	7p14.3	0.024949	0.626901	0.712499
ROPN1L	5p15.2	0.024942	0.626997	0.712544
GLIDR	9p12	0.024941	0.627011	0.712544
MSLN	16p13.3	-0.02493	0.627175	0.712689
CT47B1	Xq24	-0.02492	0.627259	0.712744
OR2G6	1q44	0.024896	0.627628	0.713123
MRPL42P5	15q15.1	0.024885	0.627778	0.713252
UPK3B	7q11.2	-0.02488	0.627818	0.713257
NKAIN1	1p35.2	0.024874	0.627933	0.713349

PIWIL4	11q21	-0.02487	0.627975	0.713356
HIST2H2BA	1p11.2	0.024806	0.628875	0.714338
ARSF	Xp22.33	-0.0248	0.628934	0.714345
TDRG1	6p21.2	0.0248	0.628953	0.714345
LINC00112	21q22.3	-0.02477	0.629391	0.714801
SPHK1	17q25.1	0.024762	0.629477	0.714825
SHPK	17p13.2	0.024762	0.629482	0.714825
RNF39	6p22.1	0.024742	0.629764	0.715104
ZFC3H1	12q21.1	0.024717	0.630102	0.715428
IL17C	16q24.2	-0.02472	0.630121	0.715428
ARL2BP	16q13	0.024713	0.630165	0.715437
SCN5A	3p22.2	-0.0247	0.630291	0.71554
ALKAL1	8q11.23	-0.0247	0.630346	0.715561
SHB	9p13.1	-0.02467	0.6308	0.716037
RBM5	3p21.31	-0.02465	0.630982	0.716203
NOVA2	19q13.32	0.024643	0.631125	0.716318
PRKAG2	7q36.1	0.024641	0.631155	0.716318
CD300LD	17q25.1	0.024625	0.631384	0.716537
YEATS4	12q15	-0.02462	0.631498	0.716626
FAM138D	12p13.33	-0.02461	0.631627	0.716728
SNAPC5	15q22.31	0.024605	0.631659	0.716728
ELOVL5	6p12.1	-0.0246	0.631707	0.716741
AKAIN1	18p11.31	-0.02459	0.631808	0.716815
DCTN1-AS1	2p13.1	0.024583	0.631964	0.716951
PRDM9	5p14.2	-0.02457	0.632093	0.717058
DUSP27	1q24.1	0.024555	0.632345	0.717303
HOXA7	7p15.2	0.024532	0.632668	0.717629
CRYAB	11q23.1	0.024524	0.632776	0.71771
ZNF487	10q11.21	-0.02452	0.632813	0.717711
LINC02249	15q13.2	0.024505	0.633043	0.717932
TFAM	10q21.1	0.0245	0.633119	0.717977
TNP2	16p13.13	0.024485	0.633321	0.718166
PWWP2B	10q26.3	-0.02448	0.633406	0.718221
DNAJB11	3q27.3	-0.02447	0.633496	0.718252
API5	11p12	0.024472	0.633505	0.718252
NANOG	12p13.31	0.024404	0.63445	0.719283
KAZALD1	10q24.31	0.0244	0.634506	0.719285
ODF3L1	15q24.2	0.024394	0.634581	0.719285
SYNGR3	16p13.3	-0.02439	0.634582	0.719285
OR10Z1	1q23.1	-0.02439	0.634629	0.719285
TENT4B	16q12.1	-0.02439	0.634632	0.719285
LKAAEAR1	20q13.33	-0.02439	0.634673	0.719291
RTL1	14q32.2	-0.02437	0.634936	0.71952
DPEP3	16q22.1	0.024367	0.63496	0.71952
CA4	17q23.1	0.024365	0.634982	0.71952
TRIM3	11p15.4	0.024357	0.635095	0.719597
PLIN3	19p13.3	0.024355	0.635122	0.719597
NLRP4	19q13.43	0.024339	0.635342	0.719798
PDE6C	10q23.33	0.024337	0.635372	0.719798
RNF10	12q24.31	0.024304	0.635828	0.720274
DYDC2	10q23.1	-0.02427	0.63631	0.720735
TMEM242	6q25.3	-0.02427	0.636376	0.720735
NOMO3	16p13.11	0.024265	0.636376	0.720735
TRNP1	1p36.11	-0.02426	0.636379	0.720735
TRIM49	11q14.3	0.024251	0.636568	0.720908
TTY7	Yp11.2	-0.02423	0.636862	0.721201
TAP2	6p21.32	-0.02421	0.637074	0.7214
SOX2-OT	3q26.33	0.024208	0.637174	0.721472

C4ORF51	4q31.21	0.024195	0.637348	0.721629
RIT2	18q12.3	0.02418	0.637554	0.721821
FAM53C	5q31.2	-0.02416	0.637802	0.722061
ZNF226	19q13.31	-0.02413	0.638254	0.722532
MKRN3	15q11.2	0.02412	0.638388	0.722643
LINC00207	22q13.31	0.024104	0.638623	0.722838
NEK10	3p24.1	-0.0241	0.638632	0.722838
TMEM74	8q23.1	0.024087	0.638849	0.723042
PIH1D3	Xq22.3	-0.02408	0.638892	0.72305
PCDHA13	5q31.3	0.024077	0.638994	0.723125
SIX6	14q23.1	0.024067	0.639137	0.723245
TRIM74	7q11.23	-0.02405	0.639405	0.723507
SGSM3	22q13.1	0.024024	0.639738	0.723844
PRKCD	3p21.1	0.024021	0.639774	0.723844
NUDT6	4q28.1	0.024014	0.639867	0.723908
PIGP	21q22.13	-0.02399	0.640147	0.724183
NSD2	4p16.3	0.02397	0.640483	0.724523
SYNDIG1L	14q24.3	0.023946	0.640825	0.724869
OR11H6	14q11.2	0.023936	0.640952	0.724972
RTL8B	Xq26.3	0.023914	0.641266	0.725286
CRISP2	6p12.3	0.023907	0.641366	0.725304
SSX5	Xp11.23	0.023905	0.641391	0.725304
CFAP299	4q21.21	-0.02391	0.641391	0.725304
LANCL2	7p11.2	-0.02389	0.641543	0.725435
DDI1	11q22.3	0.023883	0.641693	0.725564
FAM217A	6p25.2	0.023875	0.641805	0.72565
LINC00158	21q21.2	-0.02387	0.641864	0.725665
SLC2A4	17p13.1	-0.02387	0.641891	0.725665
MSTO2P	1q22	-0.02386	0.641999	0.725746
PMEPA1	20q13.31	0.023829	0.642447	0.726211
CRTC1	19p13.11	-0.02382	0.642579	0.72632
LRRC8D	1p22.2	-0.0238	0.642802	0.72653
MLNR	13q14.2	0.023746	0.643606	0.727398
PDGFA	7p22.3	-0.02371	0.644089	0.727899
OR2F1	7q35	0.023707	0.644151	0.727899
OR5K2	3q11.2	0.023707	0.644158	0.727899
GPR156	3q13.33	0.023695	0.644329	0.728051
LINC00588	8q12.1	-0.02369	0.644403	0.728079
DPY19L4	8q22.1	-0.02369	0.644462	0.728079
HSD3B1	1p12	0.023685	0.644463	0.728079
SEC14L2	22q12.2	-0.02368	0.644601	0.728193
AXDND1	1q25.2	0.023664	0.644758	0.72833
SSTR5-AS1	16p13.3	0.023658	0.644846	0.728389
IFI27L2	14q32.12	0.023652	0.644932	0.728425
LRRTM1	2p12	0.02365	0.64495	0.728425
FEV	2q35	0.023637	0.645138	0.72856
TBX20	7p14.2	0.023636	0.645143	0.72856
CST5	20p11.21	0.023598	0.645678	0.729123
PRKACA	19p13.12	-0.02359	0.645805	0.729225
SKINT1L	1p33	0.023579	0.645946	0.729297
RTN4R	22q11.21	-0.02358	0.645955	0.729297
TYMSOS	18p11.32	-0.02358	0.645978	0.729297
FAM71F1	7q32.1	-0.02357	0.646026	0.729311
NAT8B	2p13.1	0.02357	0.646069	0.729318
CD70	19p13.3	-0.02355	0.646374	0.729621
TMEM63C	14q24.3	0.023527	0.646673	0.729917
FAM178B	2q11.2	-0.02352	0.64677	0.729986
SLC2A6	9q34.2	0.023515	0.646844	0.730028

CHPF	2q35	-0.02351	0.646935	0.730089
CAMK2B	7p13	0.0235	0.647052	0.730178
OTOS	2q37.3	-0.0235	0.647086	0.730178
PFN1	17p13.2	-0.02349	0.647191	0.730255
COL9A1	6q13	0.023483	0.647293	0.730328
ZNF20	19p13.2	0.023473	0.647435	0.730448
OTOA	16p12.2 16p12.2	-0.02344	0.647836	0.730859
SLC31A1	9q32	0.023427	0.648068	0.73108
CDKN1B	12p13.1	-0.02341	0.64837	0.731379
SREK1IP1	5q12.3	-0.02339	0.648575	0.73157
ZBP1	20q13.31	-0.02337	0.64885	0.731838
SENP3	17p13.1	-0.02336	0.649079	0.732056
VWA8	13q14.11	-0.02335	0.64914	0.732082
SYNGAP1	6p21.32	0.023348	0.649176	0.732082
OR8D4	11q24.1	0.023339	0.649303	0.732149
AKTIP	16q12.2	-0.02334	0.649309	0.732149
SMIM21	18q23	-0.0233	0.649797	0.732632
SLC1A4	2p14	-0.0233	0.64981	0.732632
MMS22L	6q16.1	0.023294	0.649937	0.732708
KCNA4	11p14.1	-0.02329	0.64995	0.732708
SGCG	13q12.12	0.023271	0.650258	0.732975
CCL1	17q12	-0.02327	0.65026	0.732975
SAXO1	9p22.1	0.023267	0.650319	0.733
FAM13A-AS1	4q22.1	0.023264	0.650367	0.733013
NNMT	11q23.2	0.023248	0.650589	0.733156
PRSS38	1q42.13	-0.02325	0.650601	0.733156
USP6	17p13.2	0.023247	0.650604	0.733156
CDKN2A-DT	9p21.3	-0.02323	0.650835	0.733375
C12ORF74	12q22	0.023215	0.651053	0.733579
XRCC5	2q35	0.023204	0.651206	0.73371
NCAPD3	11q25	-0.0232	0.651314	0.733782
C4ORF45	4q32.1	-0.02319	0.651343	0.733782
FRMPD1	9p13.2	0.02319	0.651405	0.73381
CRHR1	17q21.31	-0.02318	0.651536	0.733917
NR2E1	6q21	-0.02315	0.651953	0.734346
WFS1	4p16.1	-0.02314	0.652043	0.734405
CDR2	16p12.2	-0.02313	0.652173	0.734446
FAM181A	14q32.12	0.023134	0.652179	0.734446
LMX1A	1q23.3	-0.02313	0.652189	0.734446
SPRR2A	1q21.3	0.02313	0.652244	0.734467
SSTR2	17q25.1	0.023115	0.652454	0.734662
TDP1	14q32.11	0.023108	0.652551	0.73473
NUDT16P1	3q22.1	-0.02309	0.652793	0.734932
ALAS2	Xp11.21	0.02309	0.652804	0.734932
SUN1	7p22.3	-0.02308	0.652935	0.735038
MEIOB	16p13.3	0.023063	0.653179	0.735259
USP10	16q24.1	0.023061	0.653204	0.735259
OR10H2	19p13.12	-0.02306	0.653244	0.735262
QPCT	2p22.2	0.023051	0.653356	0.735347
CEP104	1p36.32	0.023042	0.653483	0.735448
WDR66	12q24.31	-0.02302	0.653731	0.735686
TPP2	13q33.1	-0.02302	0.65377	0.735689
SLCO6A1	5q21.1	-0.023	0.654008	0.735915
SPANXN3	Xq27.3	-0.023	0.654126	0.736007
OR5H6	3q11.2	-0.02299	0.654183	0.736008
DYNLL2	17q22	-0.02299	0.6542	0.736008
MKRN1	7q34	0.022971	0.654479	0.73628
LINC00239	14q32.31	0.022953	0.65473	0.736521

LCE1C	1q21.3	-0.02294	0.654956	0.736734
RAB26	16p13.3	0.022898	0.655501	0.737306
LHFPL1	Xq23	0.022895	0.655551	0.73732
RGS12	4p16.3	0.022885	0.655688	0.737432
LAMC3	9q34.12	0.022868	0.655924	0.737657
OR4F6	15q26.3	-0.02285	0.656118	0.737833
CCDC172	10q25.3	-0.02282	0.656648	0.738388
CLEC1B	12p13.31-p13.2	-0.02281	0.656759	0.73847
GRIK1-AS1	21q21.3	0.022806	0.656798	0.73847
CCDC102A	16q21	-0.0228	0.656843	0.73847
DPRX	19q13.42	-0.0228	0.656896	0.73847
OTOL1	3q26.1	-0.0228	0.656905	0.73847
LINC00922	16q21	0.022788	0.657054	0.738596
KCTD4	13q14.12-q14.13	0.022781	0.65715	0.738662
MAEL	1q24.1	-0.02277	0.65734	0.738834
MARK1	1q41	-0.02276	0.657483	0.738953
FAM111A	11q12.1	0.022741	0.657714	0.739129
CCDC169	13q13.3	0.022741	0.657717	0.739129
DHX16	6p21.33	0.022739	0.65775	0.739129
CCNQP1	1q32.1	0.02273	0.65787	0.739222
BPIFA2	20q11.21	0.022715	0.658084	0.739422
ABCC1	16p13.11	0.022691	0.658421	0.739758
SIT1	9p13.3	0.022686	0.658484	0.739788
CEP295	11q21	-0.02268	0.658591	0.739866
PGAM2	7p13	0.022669	0.65873	0.739982
ZFY	Yp11.2	0.02266	0.658862	0.740087
CD200R1L	3q13.2	0.022645	0.659073	0.740284
NLRP10	11p15.4	0.022637	0.659186	0.740357
TNFRSF10B	8p21.3	0.022633	0.659244	0.740357
ZNF347	19q13.42	0.022632	0.65925	0.740357
OR7C1	19p13.12	0.022623	0.659373	0.740454
DEFA5	8p23.1	-0.02261	0.659627	0.740698
NDC80	18p11.32	0.022603	0.659666	0.7407
BBOX1	11p14.2	-0.0226	0.659744	0.740746
WDR60	7q36.3	-0.02257	0.660065	0.741066
SBF1P1	8q12.1	-0.02256	0.6602	0.741175
OR1S2	11q12.1	-0.02253	0.660658	0.741565
OR7G3	19p13.2	-0.02253	0.660658	0.741565
GPR139	16p12.3	0.022532	0.660658	0.741565
SCPEP1	17q22	-0.02252	0.660821	0.741706
ARV1	1q42.2	-0.02252	0.660866	0.741715
HSP90AB2P	4p15.33	-0.02251	0.661	0.741824
ZNF614	19q13.41	-0.0225	0.661088	0.741881
TAS2R40	7q34	-0.02249	0.661277	0.742023
BAK1	6p21.31	-0.02249	0.661289	0.742023
GRAMD1A	19q13.11	-0.02246	0.661634	0.742369
FAM151A	-	-0.02244	0.661897	0.742623
TRIM37	17q22	0.022423	0.662202	0.742922
GAGE8	Xp11	0.022411	0.662372	0.743043
CPO	2q33.3	-0.02241	0.662439	0.743043
LIPK	10q23.31	0.022404	0.662475	0.743043
GTF2H2C	5q13.2	-0.0224	0.662491	0.743043
C11ORF86	11q13.2	0.022402	0.662495	0.743043
PRLHR	10q26.11	0.022396	0.662579	0.743096
NKX6-3	8p11.21	0.022391	0.662655	0.743105
PDCL2	4q12	0.022389	0.662682	0.743105
COL18A1-AS1	21q22.3	0.022386	0.662726	0.743105
C12ORF42	12q23.2-q23.3	-0.02239	0.662735	0.743105

SPDYE2	7q22.1	0.022383	0.662772	0.743105
CASTOR3	7q22.1	-0.02236	0.663098	0.743399
C20ORF202	20p13	-0.02236	0.663108	0.743399
GRB2	17q25.1	0.02231	0.663806	0.744139
AQP4-AS1	18q11.2	0.022305	0.663877	0.744176
OPALIN	10q24.1	-0.0223	0.663977	0.744247
OR6V1	7q34	-0.02229	0.664036	0.744272
FBXW4	10q24.32	0.022271	0.664354	0.744568
CMTM2	16q21	0.022269	0.664375	0.744568
ANKRD20A20P	9q13	0.022251	0.664635	0.744818
FAM66C	12p13.31	0.022246	0.664714	0.744865
BRINP1	9q33.1	-0.02223	0.664864	0.744991
ZNF75D	Xq26.3	-0.0222	0.665299	0.745419
ITGA7	12q13.2	0.022203	0.66532	0.745419
CYTH3	7p22.1	0.022191	0.665488	0.745565
SEPTIN1	16p11.2	-0.02219	0.66557	0.745616
OR9K2	12q13.2	-0.02218	0.665637	0.745625
GNL3L	Xp11.22	0.022179	0.665652	0.745625
DCAF8L1	Xp21.3	0.022171	0.665769	0.745713
GTF2B	1p22.2	0.022158	0.665951	0.745876
PCLAF	15q22.31	0.022143	0.666168	0.746062
ZNF570	19q13.12	0.022141	0.666192	0.746062
KRTAP1-3	17q21.2	-0.02214	0.666259	0.746095
ARHGEF1	19q13.2	-0.0221	0.666781	0.746638
OR51B2	11p15.4	-0.0221	0.666825	0.746646
SNORA2B	12q13.11	-0.02209	0.666898	0.746685
MOSMO	16p12.2	0.022082	0.667028	0.74679
LINC00320	21q21.1	-0.02207	0.667231	0.746975
HTR6	1p36.13	0.022042	0.667599	0.747313
MIP	12q13.3	-0.02204	0.667619	0.747313
SAA3P	11p15.1	-0.02204	0.667645	0.747313
ZNF839	14q32.31	0.022032	0.667733	0.747367
OR5M10	11q12.1	-0.02203	0.667809	0.747367
CT45A1	Xq26.3	-0.02203	0.667816	0.747367
NAT8L	4p16.3	0.022025	0.667843	0.747367
C20ORF85	20q13.32	-0.02202	0.667964	0.747462
HBA1	16p13.3	0.021999	0.668211	0.747696
ZNF518B	4p16.1	-0.02199	0.66835	0.74781
PCAT4	4q21.21	0.021984	0.668414	0.74784
GPR62	3p21.2	-0.02196	0.668713	0.748098
STRC	15q15.3	0.02196	0.668754	0.748098
LCT	2q21.3	0.02196	0.668757	0.748098
ITIH3	3p21.1	-0.02196	0.66881	0.748115
BMP4	14q22.2	0.021944	0.668982	0.748266
KCMF1	2p11.2	-0.02194	0.669086	0.748307
CYP24A1	20q13.2	0.021937	0.669093	0.748307
AIM2	1q23.1-q23.2	0.021933	0.669141	0.748319
ACCSL	11p11.2	-0.02192	0.669307	0.748462
ACADS	12q24.31	0.021914	0.66941	0.748536
LOC645752	15q24.3	0.021901	0.669595	0.748694
PATE4	11q24.2	0.021899	0.669627	0.748694
BCO1	16q23.2	0.021885	0.669825	0.748875
TMEM107	17p13.1	-0.02185	0.670315	0.74938
GRM7	3p26.1	0.02182	0.670744	0.749818
UGT2B7	4q13.2	0.021804	0.670975	0.750035
MMP7	11q22.2	-0.02178	0.671278	0.750331
ZSCAN20	1p35.1	0.021775	0.671382	0.750406
KCNE2	21q22.11	-0.02175	0.671705	0.750725



CCDC174	3p25.1	0.021736	0.671942	0.750948
CCL16	17q12	0.021724	0.672119	0.751079
LINC00271	6q23.3	0.021722	0.672134	0.751079
LRRC34	3q26.2	0.021718	0.672196	0.751106
NAALAD2	11q14.3	0.021715	0.672245	0.751107
FAM72A	1q32.1	-0.02171	0.672272	0.751107
EIF3C	16p11.2	0.021708	0.672346	0.751148
LRP8	1p32.3	0.021657	0.673059	0.751899
GTF2A1L	2p16.3	-0.02166	0.673094	0.751899
PXDNL	8q11.22-q11.23	-0.02162	0.673574	0.752394
OR4F15	15q26.3	0.021603	0.67383	0.752638
C8ORF86	8p11.22	0.021576	0.674219	0.753031
ZNF605	12q24.33	-0.02156	0.674444	0.753239
SLC22A8	11q12.3	-0.02155	0.674581	0.753323
RETNLB	3q13.13	0.02155	0.674594	0.753323
PSG3	19q13.2	0.021543	0.674687	0.753385
SUMO3	21q22.3	-0.02153	0.674888	0.753568
LINC00662	19q11	0.021525	0.674937	0.75358
CACNG5	17q24.2	0.021521	0.674998	0.753607
C5ORF38	5p15.33	0.021486	0.675493	0.754117
AP2M1	3q27.1	-0.02147	0.675744	0.754355
SHROOM1	5q31.1	-0.02146	0.675873	0.754456
TERB2	15q21.1	-0.02143	0.676236	0.754819
DDX53	Xp22.11	-0.02141	0.676593	0.755177
FGF4	11q13.3	0.021399	0.676743	0.755302
CAPSL	5p13.2	0.021382	0.676979	0.755523
DENND2D	1p13.3-p13.2	0.021376	0.677063	0.755575
PDC	1q31.1	0.021357	0.677335	0.755835
NHEG1	6q23.3	0.021344	0.677518	0.755998
HMGGA2	12q14.3	-0.02132	0.677861	0.756339
SLC5A12	11p14.2	-0.02131	0.678009	0.756462
GABRD	1p36.33	0.021302	0.678122	0.756546
CORO6	17q11.2	-0.02129	0.678337	0.756743
AZIN1	8q22.3	0.021284	0.678386	0.756756
FGF16	Xq21.1	-0.02127	0.678526	0.75687
C1D	2p14	0.021262	0.678697	0.757018
TAS2R7	12p13.2	0.021252	0.678835	0.757123
SEPTIN9	17q25.3	0.02125	0.678869	0.757123
LRFN2	6p21.2-p21.1	0.021247	0.678904	0.757123
OR2F2	7q35	0.021241	0.678999	0.757187
NMU	4q12	-0.02123	0.679213	0.757344
HLA-H	6p22.1	-0.02123	0.679216	0.757344
HSP90B3P	1p22.1	0.021218	0.679325	0.757384
NSMCE3	15q13.1	0.021214	0.679379	0.757384
SNAR-C4	19q13.33	-0.02121	0.679391	0.757384
RBM33	7q36.3	-0.02121	0.679403	0.757384
NBPF15	1q21.1	0.021177	0.679907	0.757896
MFAP3L	4q33	0.021175	0.679938	0.757896
SFXN2	10q24.32	0.021147	0.680341	0.758303
BEST4	1p34.1	0.021139	0.680447	0.75834
CNTNAP5	2q14.3	-0.02114	0.68045	0.75834
ZNF79	9q33.3	0.021133	0.680532	0.758353
ADM2	22q13.33	-0.02113	0.680538	0.758353
TTC29	4q31.22	0.021122	0.680692	0.758483
LINC02610	2q37.3	-0.02112	0.680772	0.758511
AGAP11	10q23.2	-0.02111	0.680793	0.758511
ARC	8q24.3	0.021104	0.680945	0.758638
ADGRB2	1p35.2	0.0211	0.681007	0.758665

TRIM31	6p22.1	-0.02107	0.681384	0.759043
TADA2A	17q12	-0.02106	0.681522	0.75914
BTN2A1	6p22.2	-0.02106	0.681547	0.75914
TMEM170A	16q23.1	-0.02106	0.681602	0.759159
SH3TC1	4p16.1	0.021035	0.681941	0.759494
KRT80	12q13.13	-0.02099	0.682522	0.7601
RBMXL3	Xq23	0.020973	0.682826	0.760386
SLC26A10	12q13.3	0.020969	0.682872	0.760386
PRSS3P2	7q34	-0.02097	0.682893	0.760386
REG1CP	2p12	-0.02096	0.682954	0.760412
AGPAT3	21q22.3	0.020943	0.683252	0.760701
ACVR2A	2q22.3-q23.1	0.020927	0.683486	0.760877
TREX2	Xq28	-0.02093	0.683486	0.760877
EEF2	19p13.3	0.020904	0.68381	0.761195
KRTAP10-5	21q22.3	0.020896	0.683926	0.761282
IFT81	12q24.11	0.020883	0.684105	0.761439
THUMPD3	3p25.3	0.020879	0.68417	0.761469
BTF3L4	1p32.3	-0.02087	0.684303	0.761574
TUBBP6	7p11.2	0.020851	0.684568	0.761827
GORASP1	3p22.2	-0.02083	0.68486	0.76211
PRKCG	19q13.42	0.02082	0.685018	0.762243
DNAH10	12q24.31	-0.0208	0.685252	0.762461
OR5A1	11q12.1	-0.02079	0.68548	0.762672
NUP58	13q12.13	0.020781	0.685563	0.762723
HMG5	Xq21.1	-0.02078	0.685637	0.762763
OR2AT4	11q13.4	-0.02076	0.685873	0.762983
STMN4	8p21.2	0.020755	0.685949	0.763025
SMC1B	22q13.31	-0.02074	0.686109	0.76316
SPATA4	4q34.2	-0.02073	0.686307	0.763338
CDK5R1	17q11.2	-0.02072	0.686439	0.763443
IFI30	19p13.11	-0.02071	0.686594	0.763572
C9ORF135	9q21.12	0.02068	0.687019	0.764003
ZMPSTE24	1p34.2	0.02067	0.687162	0.764119
AMOTL2	3q22.2	0.020663	0.687266	0.764162
PSG5	19q13.31	0.020662	0.687277	0.764162
POTEG	14q11.2	0.020653	0.687401	0.764259
CRPPA	7p21.2	-0.02065	0.687504	0.764306
SRSF11	1p31.1	0.020643	0.68755	0.764306
HYLS1	11q24.2	0.020642	0.687569	0.764306
CAPZB	1p36.13	-0.02064	0.687597	0.764306
DYNC1L1	3p22.3	0.02061	0.688023	0.764737
ZC2HC1C	14q24.3	-0.0206	0.688168	0.764856
NES	1q23.1	-0.02059	0.688353	0.76502
OR8D2	11q24.2	0.020567	0.688639	0.765146
BPY2	Yq11.223	-0.02057	0.688648	0.765146
SCP2D1	20p11.23	0.020566	0.688656	0.765146
CNOT3	19q13.42	-0.02057	0.688656	0.765146
SEBOX	17q11.2	-0.02057	0.688658	0.765146
CREB3	9p13.3	-0.02055	0.688835	0.7653
RPL13AP17	7q21.11	-0.02055	0.688951	0.765387
NGF	1p13.2	-0.02054	0.689063	0.765468
FAM153A	5q35.3	0.020522	0.68929	0.765678
MMP17	12q24.33	0.020479	0.689898	0.766311
SCN1A	2q24.3	0.020473	0.689987	0.766367
PECR	2q35	-0.02046	0.690118	0.76647
ZNF880	19q13.41	-0.02046	0.690164	0.766479
PRAME	22q11.22	0.020457	0.690211	0.766489
KRBA1	7q36.1	0.020443	0.690421	0.766679

SNORA28	14q32.32	-0.02044	0.690485	0.766708
TRPM6	9q21.13	0.020401	0.691024	0.767214
C1ORF61	1q22	-0.0204	0.691097	0.767214
ZBBX	3q26.1	-0.0204	0.691105	0.767214
MYLK4	6p25.2	-0.02039	0.691124	0.767214
TRIM26	6p22.1	-0.02039	0.691132	0.767214
MIR205HG	1q32.2	0.02039	0.691182	0.767216
CHST4	16q22.2	0.020388	0.691211	0.767216
ILK	11p15.4	-0.02038	0.691321	0.767295
CER1	9p22.3	-0.02037	0.691441	0.767386
ABCA2	9q34.3	-0.02036	0.691676	0.767605
CBX1	17q21.32	-0.02034	0.691908	0.76782
SLC10A1	14q24.1	-0.02033	0.692005	0.767859
SPANXC	Xq27.2	-0.02033	0.69202	0.767859
ATF7IP2	16p13.2-p13.13	-0.02029	0.692685	0.768555
METAP2	12q22	0.020278	0.692787	0.7686
IL2RG	Xq13.1	0.020277	0.692803	0.7686
FOXI3	2p11.2	-0.02027	0.692891	0.768654
ATAD5	17q11.2	0.020258	0.693082	0.768785
GLIS3-AS1	9p24.2	0.020258	0.693085	0.768785
JARID2	6p22.3	0.020251	0.693178	0.768816
PCBP1	2p13.3	0.02025	0.69319	0.768816
ACSM2B	16p12.3	-0.02024	0.693287	0.768881
FAM110C	2p25.3	0.020235	0.693405	0.76897
OR10H4	19p13.12	-0.02021	0.693775	0.769338
CATSPER1	11q13.1	0.02019	0.694058	0.769609
VRK3	19q13.33	-0.02019	0.694119	0.769634
CFTR	7q31.2	0.020176	0.694252	0.769739
TTBK1	6p21.1	-0.02017	0.694358	0.769813
FAR2P1	2q21.1	-0.02017	0.694399	0.769816
PNP	14q11.2	0.020162	0.69446	0.769841
DPY19L2P4	7q21.13	-0.02016	0.694547	0.769895
IL17RE	3p25.3	0.020138	0.694801	0.770134
RIOX2	3q11.2	-0.02009	0.695442	0.770802
TRMT10A	4q23	0.020088	0.695529	0.770856
PLEK2	14q23.3-q24.1	0.020069	0.695793	0.771105
KRTAP2-4	17q21.2	0.020058	0.695954	0.77124
ALX3	1p13.3	-0.02006	0.695991	0.77124
OR13H1	Xq26.2	-0.02004	0.696219	0.771423
SLC39A1	1q21.3	0.020039	0.696233	0.771423
C9ORF72	9p21.2	-0.02003	0.696368	0.771529
PMVK	1q21.3	-0.02002	0.69655	0.771688
JUP	17q21.2	-0.02001	0.696658	0.771765
KCNK16	6p21.2	0.019998	0.696824	0.771906
GLB1L	2q35	0.019988	0.696968	0.772024
DBX1	11p15.1	-0.01998	0.697081	0.772106
UQCRC2	16p12.2	-0.01998	0.697151	0.772141
MT2A	16q13	-0.01994	0.697695	0.7727
SLC10A5	8q21.13	0.019922	0.697918	0.772905
RTN4RL2	11q12.1	-0.01991	0.698072	0.773032
TBATA	10q22.1	-0.01991	0.698141	0.773066
SCD	10q24.31	0.019891	0.698365	0.773271
MROH9	1q24.3	-0.01988	0.698555	0.773439
PPEF1	Xp22.13	0.019875	0.6986	0.773446
KRTAP12-3	21q22.3	0.019872	0.698641	0.773449
APOB	2p24.1	0.019867	0.698715	0.773453
GART	21q22.11	-0.01987	0.698722	0.773453
TRAPPC13	5q12.3	-0.01985	0.698937	0.773593

SCFD2	4q12	-0.01985	0.698943	0.773593
ELF3	1q32.1	0.019849	0.698965	0.773593
TTF2	1p13.1	-0.01985	0.699017	0.773609
CSTA	3q21.1	0.019825	0.699319	0.773899
SNX3	6q21	0.019814	0.699477	0.774032
NLRP8	19q13.43	0.019811	0.699523	0.774039
TYK2	19p13.2	0.019808	0.699561	0.774039
LINC00596	14q11.2	0.019801	0.699667	0.774081
C16ORF92	16p11.2	-0.0198	0.699677	0.774081
CEP290	12q21.32	0.019787	0.699859	0.774241
CFAP300	11q22.1	-0.01977	0.700077	0.774439
CCDC27	1p36.32	-0.01975	0.70033	0.774677
PLEKHM2	1p36.21	0.019747	0.70044	0.774732
SPANXN1	Xq27.3	0.019745	0.700472	0.774732
S100A9	1q21.3	0.019743	0.700496	0.774732
ZNF773	19q13.43	-0.01974	0.700574	0.774775
IGFBP2	2q35	0.019724	0.700767	0.774945
RAB9A	Xp22.2	0.019715	0.7009	0.77505
OR7G2	19p13.2	0.019696	0.701177	0.775313
ICAM5	19p13.2	0.019687	0.701303	0.77541
ALDH18A1	10q24.1	0.019667	0.701591	0.775667
STOML3	13q13.3	-0.01967	0.701613	0.775667
FAM95B1	9p11.2	-0.01966	0.701694	0.775714
IGDCC3	15q22.31	0.019643	0.701946	0.775908
LMOD2	7q31.32	-0.01964	0.701976	0.775908
ESF1	20p12.1	0.01964	0.701986	0.775908
COG3	13q14.13	-0.01963	0.702179	0.776035
RASSF4	10q11.21	-0.01963	0.702179	0.776035
LINC00326	6q23.2	0.019615	0.702353	0.776185
COMMD8	4p12	-0.0196	0.702537	0.776306
HS2ST1	1p22.3	-0.0196	0.702561	0.776306
CD63	12q13.2	-0.0196	0.702593	0.776306
TIMM21	18q22.3	0.019596	0.702617	0.776306
CNTN5	11q22.1	0.019589	0.702727	0.776385
FBXL13	7q22.1	0.019585	0.702776	0.776396
SEPTIN5	22q11.21	-0.01958	0.702845	0.776428
OR10A3	11p15.4	0.019565	0.703068	0.776633
G6PC	17q21.31	0.019551	0.703278	0.776805
EVA1C	21q22.11	0.019549	0.703302	0.776805
DPY19L2P2	7q22.1	0.019528	0.703613	0.777106
ASIC2	17q11.2-q12	-0.01952	0.703737	0.777192
SPATA41	15q26.3	0.019517	0.703769	0.777192
BSX	11q24.1	0.019501	0.703999	0.777403
MOB3C	1p33	-0.01948	0.704271	0.77766
ST6GAL2	2q12.3	0.019478	0.704334	0.777688
P3H1	1p34.2	-0.01946	0.704591	0.777929
RRBP1	20p12.1	0.019441	0.704862	0.778185
NT5DC1	6q22.1	0.019425	0.705096	0.7784
GLS	2q32.2	-0.01942	0.705146	0.778412
PLAU	10q22.2	0.019414	0.705249	0.778478
ABHD13	13q33.3	-0.01941	0.705299	0.778478
CSAG2	Xq28	-0.01941	0.705322	0.778478
ADCY10	1q24.2	0.019374	0.705837	0.778896
S100A10	1q21.3	0.019373	0.705844	0.778896
NTSR2	2p25.1	0.019373	0.705849	0.778896
GTF2E1	3q13.33	0.019373	0.705856	0.778896
KCNK4	11q13.1	0.019363	0.705991	0.779002
MT1H	16q13	0.019354	0.706127	0.779109

OR2T4	1q44	0.019325	0.706541	0.779485
TMBIM4	12q14.3	0.019325	0.706545	0.779485
ZNF295-AS1	21q22.3	0.019315	0.706683	0.77953
KDM5C	Xp11.22	-0.01931	0.706704	0.77953
DKFZP434A062	9q34.3	0.019313	0.706713	0.77953
IKZF5	10q26.13	0.019311	0.706748	0.77953
C17ORF99	17q25.3	0.019309	0.706782	0.77953
CTSZ	20q13.32	-0.01928	0.707191	0.779897
CT47A11	Xq24	-0.01928	0.707192	0.779897
HSD17B12	11p11.2	-0.01926	0.707428	0.780103
MYH8	17p13.1	0.019262	0.707457	0.780103
MMP27	11q22.2	0.019234	0.707869	0.780514
GADD45A	1p31.3	0.019227	0.707958	0.78057
CNTF	11q12.1	-0.01917	0.708857	0.781518
RAD17	5q13.2	0.019121	0.709499	0.782183
LINC00426	13q12.3	0.019111	0.709641	0.782296
SLCO5A1	8q13.3	0.019108	0.709692	0.78231
STRIP1	1p13.3	0.019092	0.709925	0.782523
NRIP3	11p15.4	-0.01908	0.710081	0.782653
TLK2	17q23.2	0.019077	0.710137	0.782671
TTC36	11q23.3	-0.01907	0.710288	0.782706
FUT5	19p13.3	0.019065	0.71031	0.782706
PRKACG	9q21.11	-0.01906	0.710318	0.782706
YPEL1	22q11.21-q11.22	0.019064	0.710325	0.782706
CRCT1	1q21.3	-0.01906	0.710418	0.782766
IL6	7p15.3	-0.01903	0.71075	0.783088
MPP2	17q21.31	0.019022	0.710934	0.783248
MCF2L	13q34	0.019013	0.711072	0.783356
CST7	20p11.21	-0.019	0.711198	0.783453
FAM210A	18p11.21	0.018966	0.711753	0.784021
LINC00937	12p13.31	-0.01896	0.711871	0.784096
PPIB	15q22.31	-0.01896	0.7119	0.784096
PGK2	6p12.3	0.01894	0.712128	0.784299
CCNG1	5q34	0.018938	0.712163	0.784299
FBXO17	19q13.2	0.01892	0.712425	0.784533
FAM182A	20p11.1	0.018918	0.712453	0.784533
CNTD2	19q13.2	-0.01891	0.712625	0.784645
ABRA	8q23.1	-0.01891	0.712633	0.784645
GUCY2C	12p12.3	0.018901	0.712691	0.784665
DHFR	5q14.1	-0.01889	0.712854	0.784783
GUCA1C	3q13.13	-0.01889	0.712877	0.784783
SNORA16A	1p35.3	-0.01887	0.713114	0.785002
GP5	3q29	0.018866	0.713209	0.785063
APBB1	11p15.4	0.018862	0.71326	0.785076
LCE1A	1q21.3	-0.01885	0.713467	0.78526
NSG1	4p16.3	0.018844	0.713523	0.785279
FAM133B	7q21.2	-0.01884	0.713623	0.785324
LINC01553	10q21.2	-0.01883	0.713681	0.785324
HIST1H4K	6p22.1	-0.01883	0.713706	0.785324
DENND6B	22q13.33	-0.01883	0.71372	0.785324
IFNA17	9p21.3	-0.01882	0.713934	0.785516
POU4F3	5q32	-0.0188	0.714122	0.785679
GSTT1	22q11.23	0.0188	0.714164	0.785682
RLN3	19p13.12	0.018797	0.714211	0.78569
KMT5A	12q24.31	0.018794	0.714249	0.78569
MAGEA10	Xq28	-0.01879	0.714322	0.785727
DMRTC1B	Xq13.1	-0.01876	0.714706	0.786088
OACYLP	18q21.32	-0.01876	0.714729	0.786088

TPRXL	3p25.1	-0.01875	0.714898	0.786231
SLC13A2	17q11.2	0.018729	0.715202	0.786522
TMEM38A	19p13.11	-0.01871	0.715495	0.786801
MMP25	16p13.3	0.018694	0.715708	0.786975
FAM9C	Xp22.2	-0.01869	0.715732	0.786975
RGS19	20q13.33	0.018687	0.715802	0.787009
TAS2R39	7q34	0.018667	0.71609	0.787283
RENBP	Xq28	-0.01864	0.716545	0.787716
KRT82	12q13.13	0.018635	0.716563	0.787716
UBE2DNL	Xq21.1	-0.01863	0.716673	0.787788
MED31	17p13.1	-0.01863	0.716708	0.787788
EFCAB13	17q21.32	-0.01862	0.716806	0.787854
GPBP1	5q11.2	0.01861	0.716933	0.787916
GALR3	22q13.1	-0.01861	0.716942	0.787916
SULT1C2	2q12.3	0.018605	0.717005	0.787943
PIP4K2B	17q12	0.0186	0.717074	0.787975
LINC01566	16p11.1	-0.0186	0.717144	0.788008
HNRNPCL3	1p36.21	-0.01859	0.717204	0.788032
C1ORF220	1q25.2	0.018581	0.717349	0.788147
CERS1	19p13.11	0.01856	0.717649	0.788434
DHRS4	14q11.2	-0.01855	0.717789	0.788544
WNT3	17q21.31-q21.32	-0.0185	0.718545	0.789298
DMD	Xp21.2-p21.1	-0.0185	0.718554	0.789298
SCMH1	1p34.2	-0.01848	0.718796	0.789448
TBC1D17	19q13.33	0.018481	0.718802	0.789448
CARMIL3	14q11.2	0.018481	0.718808	0.789448
HIST1H1A	6p22.2	-0.01847	0.718903	0.789509
RPL34-AS1	4q25	-0.01846	0.719086	0.789666
DAND5	19p13.13	-0.01844	0.719347	0.789906
SPRR2C	1q21.3	-0.01844	0.719402	0.789906
CHIAP2	1p13.2	0.018439	0.719423	0.789906
ZSCAN12	6p22.1	0.018423	0.719652	0.790115
ZNF404	19q13.31	-0.0184	0.719979	0.79043
LOC100130691	2q31.2	-0.0184	0.720029	0.790441
SNAR-I	3q28	-0.01835	0.720699	0.791134
LINC00161	21q21.3	0.018342	0.72083	0.791234
CEP55	10q23.33	0.018312	0.721266	0.791659
KRT71	12q13.13	-0.01831	0.721296	0.791659
GGT1	22q11.23	0.018304	0.721389	0.791694
APOBEC1	12p13.31	-0.0183	0.721407	0.791694
ITPK1-AS1	14q32.12	-0.0183	0.721509	0.791762
MOGAT1	2q36.1	-0.01829	0.721594	0.791812
ZFP2	5q35.3	0.018282	0.721706	0.791891
SLC11A2	12q13.12	0.018272	0.721847	0.792003
ACOT6	14q24.3	-0.01823	0.722426	0.792595
HRC	19q13.33	0.018204	0.722853	0.792984
FMO9P	1q24.1	-0.0182	0.72286	0.792984
KRT222	17q21.2	-0.01818	0.723126	0.793233
HOXD11	2q31.1	0.018176	0.723252	0.793327
RAPGEFL1	17q21.1	-0.01815	0.723613	0.79368
DDB1	11q12.2	-0.01815	0.723701	0.793733
KRTAP8-1	21q22.11	-0.01814	0.723795	0.793793
ZNF431	19p12	-0.01813	0.723997	0.79397
RBM12B-AS1	8q22.1	0.018119	0.724091	0.793987
TSG1	6q16.1	-0.01812	0.724092	0.793987
POLA1	Xp22.11-p21.3	-0.01809	0.72456	0.794451
IGLL1	22q11.23	-0.01808	0.724594	0.794451
RPS4Y1	Yp11.2	0.018073	0.724758	0.794588

FAM72D	1q21.1	-0.01805	0.725073	0.794889
HPD	12q24.31	-0.01802	0.725464	0.795275
PRR23B	3q23	-0.01801	0.725669	0.795456
BCKDHB	6q14.1	-0.01797	0.726256	0.796055
RBM22	5q33.1	-0.01794	0.726747	0.79655
OR1A2	17p13.3	0.017901	0.727279	0.79709
SNAR-F	19q13.33	-0.01789	0.727486	0.797229
HIST1H4G	6p22.2	-0.01789	0.727486	0.797229
CABP5	19q13.33	0.017878	0.727607	0.797318
CCDC83	11q14.1-q14.2	-0.01787	0.727763	0.797445
RALGAPB	20q11.23	-0.01786	0.72784	0.797447
IGSF1	Xq26.1	0.017862	0.727844	0.797447
PKD1L2	16q23.2	0.017853	0.727973	0.797502
HIGD1C	12q13.12	0.017852	0.72799	0.797502
CSAG1	Xq28	0.01785	0.728014	0.797502
INTS10	8p21.3	-0.01785	0.728057	0.797506
ALDH7A1	5q23.2	0.017842	0.728142	0.797556
XRCC6P5	Xq22.1	0.017825	0.72839	0.797783
ZBED2	3q13.13	0.017803	0.728708	0.798088
KC6	-	-0.01779	0.728866	0.798218
KNCN	1p33	-0.01778	0.729003	0.798324
FSCN2	17q25.3	-0.01777	0.729137	0.798426
HOXC12	12q13.13	-0.01775	0.729514	0.798785
PAQR3	4q21.21	-0.01774	0.729583	0.798785
DNAH7	2q32.3	-0.01774	0.729608	0.798785
IL18	11q23.1	0.017741	0.729624	0.798785
SIKE1	1p13.2	0.017697	0.730267	0.799446
NLK	17q11.2	0.017689	0.730381	0.799526
TBX2	17q23.2	-0.01768	0.73057	0.79969
PRB3	12p13.2	-0.01767	0.730719	0.799809
TAX1BP1	7p15.2	-0.01761	0.731542	0.800573
SAT1	Xp22.11	0.017609	0.731557	0.800573
TMEM123	11q22.2	0.017608	0.731564	0.800573
PPP1R14D	15q15.1	-0.01761	0.731576	0.800573
ZNF627	19p13.2	-0.01758	0.731911	0.800895
UGT1A5	2q37.1	0.01757	0.732115	0.801059
SRP68	17q25.1	0.017567	0.732166	0.801059
FLACC1	2q33.1	0.017564	0.732213	0.801059
USP26	Xq26.2	0.017563	0.732221	0.801059
DNAJA1	9p21.1	-0.01756	0.732309	0.801067
YWHAZ	8q22.3	0.017557	0.732309	0.801067
SMOC2	6q27	0.017546	0.732479	0.80121
TNFRSF19	13q12.12	-0.01749	0.733253	0.802013
PGK1	Xq21.1	-0.01747	0.733537	0.802239
CCND2	12p13.32	0.017473	0.73354	0.802239
HP1BP3	1p36.12	-0.01745	0.733834	0.802517
ATP6V0E2-AS1	7q36.1	-0.01745	0.733941	0.80259
IL13RA2	Xq23	-0.01744	0.73405	0.802666
TAS2R16	7q31.32 7q31	0.017422	0.734294	0.802845
OR4K17	14q11.2	0.017422	0.734294	0.802845
KLHL22	22q11.21	0.017418	0.734355	0.802868
ZNF69	19p13.2	-0.01741	0.734516	0.803
BRDT	1p22.1	-0.0174	0.734599	0.803047
PARP3	3p21.2	0.017398	0.734643	0.80305
CEP57L1	6q21	0.01738	0.734906	0.803295
FAM66E	8p23.1	-0.01735	0.735363	0.80375
KDM5D	Yq11.223	0.017337	0.73554	0.8039
CHP2	16p12.2	-0.01733	0.73559	0.803911

LGALS1	2p14	0.017325	0.73572	0.804009
LINC01139	1q43	0.017318	0.735814	0.804067
FAM81B	5q15	0.017314	0.735884	0.8041
GDAP1	8q21.11	0.017299	0.7361	0.804292
INSL5	1p31.3	0.017294	0.73618	0.804318
TSGA10	2q11.2	0.017292	0.736204	0.804318
CAD	2p23.3	-0.01728	0.736407	0.804496
GUSBP3	5q13.2	-0.01727	0.736493	0.804504
MT1L	16q13	0.017272	0.736495	0.804504
LCE1E	1q21.3	0.017268	0.73655	0.804521
MRGPRX4	11p15.1	0.017249	0.736827	0.80478
KLHDC8B	3p21.31	0.017245	0.73689	0.804799
WWC3	Xp22.2	0.017243	0.736925	0.804799
SH3GL3	15q25.2	0.017239	0.736981	0.804816
OR1L3	9q33.2	0.017229	0.737126	0.804926
PABPC1L2B	Xq13.2	0.017227	0.737162	0.804926
CDRT4	17p12	-0.01722	0.737251	0.804979
KRT16	17q21.2	0.017215	0.737336	0.805028
LINC00305	18q22.1	-0.01721	0.737445	0.805094
BTG4	11q23.1	-0.0172	0.737495	0.805094
VSIG10	12q24.23	-0.0172	0.737517	0.805094
ANKRD53	2p13.3	0.017173	0.737949	0.805522
LRIG1	3p14.1	0.017169	0.738017	0.805539
C1ORF74	1q32.2	-0.01717	0.738045	0.805539
FAM71B	5q33.3	-0.01716	0.738125	0.805582
RPP25	15q24.2	-0.01714	0.738406	0.805845
IFNA21	9p21.3	0.017139	0.738447	0.805846
MACO1	1p36.11 1p36.11	-0.01712	0.73877	0.806154
RAB8A	19p13.11	0.017106	0.738935	0.80629
KRTAP4-2	17q21.2	-0.01709	0.73922	0.806555
PABPC1L2A	Xq13.2	-0.01708	0.739258	0.806555
NME7	1q24.2	0.017069	0.739476	0.806742
ODF4	17p13.1	-0.01706	0.739546	0.806742
PCOLCE2	3q23	0.017064	0.739551	0.806742
MYO1H	12q24.11	0.017038	0.739942	0.807125
AOC2	17q21.31	-0.01703	0.740064	0.807214
H1FOO	3q22.1	0.017024	0.740148	0.807262
DHRS3	1p36.21	-0.017	0.740468	0.807567
PAEP	9q34.3	-0.017	0.74055	0.807612
TMEM183A	1q32.1	-0.01698	0.740718	0.807709
A2M-AS1	12p13.31	0.016985	0.74072	0.807709
RNF167	17p13.2	-0.01698	0.740819	0.807774
MAATS1	3q13.33	-0.01696	0.741072	0.808006
POTEA	8p11.1	-0.01696	0.741123	0.808017
PC	11q13.2	-0.01695	0.741261	0.808124
ITGA2B	17q21.31	-0.01694	0.741319	0.808143
IGF2BP2	3q27.2	-0.01693	0.741532	0.808332
C1ORF87	1p32.1	-0.01692	0.741646	0.808395
KCNG4	16q24.1	-0.01692	0.741671	0.808395
HBD	11p15.4	0.016909	0.741837	0.808532
PRELID2	5q32	0.016875	0.742335	0.80903
KCNJ3	2q24.1	0.016868	0.742438	0.809099
PPWD1	5q12.3	0.016845	0.742772	0.809419
CAVIN3	11p15.4	-0.01683	0.742959	0.809573
MMP19	12q13.2	0.01683	0.742994	0.809573
TXNL1	18q21.31	-0.01682	0.743127	0.809674
CASTOR2	7q11.23	-0.01679	0.743598	0.810143
GCM2	6p24.2	-0.01678	0.743802	0.810321



C17ORF97	17p13.3	0.016767	0.743927	0.810412
PGM5-AS1	9q21.11	0.01675	0.744174	0.810638
FUT9	6q16.1	-0.01673	0.744495	0.810943
SCAF1	19q13.33	-0.01672	0.744622	0.811037
SMAD5-AS1	5q31.1	-0.0167	0.744922	0.811296
OLFM2	19p13.2	0.016696	0.744968	0.811296
CLEC19A	16p12.3	-0.01669	0.745	0.811296
NLRC5	16q13	-0.01669	0.745022	0.811296
LDLRAD1	1p32.3	0.016686	0.745124	0.81136
PRKAA2	1p32.2	0.016683	0.745162	0.81136
MTHFS	15q25.1	0.016674	0.745295	0.811461
GOLGA6C	15q24.2	-0.01667	0.745379	0.811509
TTY4C	Yq11.23	0.016649	0.74566	0.811771
PI15	8q21.13	0.016636	0.745858	0.811942
MBTD1	17q21.33	0.01663	0.745952	0.811977
ACOT1	14q24.3	-0.01663	0.745971	0.811977
RESP18	2q35	0.016622	0.746063	0.812033
RUFY4	2q35	0.016616	0.74615	0.812084
HAL	12q23.1	0.016605	0.746321	0.812225
SEMA3F	3p21.31	-0.0166	0.746432	0.812302
ITIH6	Xp11.22	-0.01659	0.746593	0.81239
LRR8E	19p13.2	0.016586	0.746594	0.81239
SLC51A	3q29	0.016567	0.746873	0.81265
PTBP2	1p21.3	-0.01655	0.747183	0.812942
ATP6V0D1	16q22.1	-0.01653	0.747385	0.813118
S1PR5	19p13.2	0.016525	0.747493	0.813191
LIMD2	17q23.3	0.016521	0.747553	0.81321
ENTPD2	9q34.3	-0.01652	0.747591	0.81321
HAVCR1P1	19p12	0.016508	0.747747	0.813336
TMEM159	16p12.3	0.016489	0.74803	0.813599
DENND1C	19p13.3	0.016484	0.748097	0.813611
ZMYND10	3p21.31	-0.01648	0.748122	0.813611
HIST2H2BE	1q21.2	0.016458	0.748481	0.813957
LINC00957	7p13	0.016449	0.748615	0.814058
PPP1R26	9q34.3	0.016446	0.748666	0.814069
ANKRD22	10q23.31	-0.01642	0.749057	0.81445
ACP2	11p11.2 11p12-p11	0.016406	0.749251	0.814617
HNMT	2q22.1	-0.01637	0.749775	0.815143
USP9Y	Yq11.221	0.016349	0.750103	0.815433
LINC02145	5p15.31	0.016347	0.750123	0.815433
TM2D2	8p11.22	-0.01634	0.750267	0.815495
OR9A4	7q34	-0.01634	0.750273	0.815495
NUP210L	1q21.3	0.016335	0.750302	0.815495
	4-Mar 2q35	0.016327	0.750426	0.815584
ANXA6	5q33.1	0.016324	0.750466	0.815584
USP29	19q13.43	0.016297	0.750867	0.815976
CYP39A1	6p12.3	-0.01629	0.750981	0.816055
LRRCC1	8q21.2	0.016281	0.751105	0.816146
DRC7	16q21	0.01626	0.751411	0.816434
IMPA1	8q21.13	0.016255	0.751491	0.816476
RNF222	17p13.1	0.016242	0.751672	0.816629
LINC02112	5p15.31-p15.2	-0.01622	0.752014	0.816921
GOLGA6L10	15q25.2	0.016219	0.752022	0.816921
PHYH	10p13	-0.0162	0.752242	0.817115
CT47A6	Xq24	-0.01619	0.752507	0.817358
GJA8	1q21.2	0.016182	0.752562	0.817374
PSMD2	3q27.1	0.016169	0.752755	0.817539
ZBTB3	11q12.3	-0.01615	0.753019	0.817782

FRAT2	10q24.1	-0.01615	0.753089	0.817813
ATR	3q23	0.016118	0.753506	0.818222
TAS2R13	12p13.2	0.016104	0.753715	0.818397
HNRNPCL2	1p36.21	-0.0161	0.753764	0.818397
PRNT	20p13	0.016098	0.753815	0.818397
TEX44	2q37.1	-0.0161	0.753833	0.818397
FEZF2	3p14.2	0.016094	0.753871	0.818397
ASGR2	17p13.1	0.016083	0.754032	0.818527
SLC4A1	17q21.31	0.01608	0.75408	0.818535
ZNF205-AS1	16p13.3	0.016071	0.754206	0.818626
IFNGR2	21q22.11	0.016068	0.754255	0.818636
TMEM240	1p36.33	0.016055	0.754438	0.818766
MYEOV	11q13.3	-0.01605	0.754488	0.818766
DUSP16	12p13.2	0.01605	0.75452	0.818766
ACYP2	2p16.2	-0.01605	0.754539	0.818766
RBM24	6p22.3	-0.01602	0.754956	0.819175
GABRA6	5q34	0.016	0.755256	0.819456
ORMDL2	12q13.2	-0.01598	0.755514	0.819691
GNAS-AS1	20q13.32	-0.01597	0.7557	0.819849
ABTB1	3q21.3	-0.01596	0.755792	0.819887
C7ORF65	7p12.3	-0.01596	0.755817	0.819887
COTL1	16q24.1	-0.01596	0.75589	0.819922
P2RY2	11q13.4	0.015947	0.756042	0.820042
EIF2B2	14q24.3	-0.01594	0.756212	0.820144
ZACN	17q25.1	-0.01594	0.756218	0.820144
CACHD1	1p31.3	0.015906	0.756653	0.820571
IQCH	15q23	-0.0159	0.756732	0.820577
LOC643923	11q22.3	0.015896	0.756795	0.820577
KLHL29	2p24.1	0.015893	0.756847	0.820577
TRIM29	11q23.3	-0.01589	0.756857	0.820577
PHF8	Xp11.22	0.015892	0.756863	0.820577
ZNF384	12p13.31	-0.01588	0.757083	0.820771
HMGXB4	22q12.3	0.01584	0.757632	0.821322
CST4	20p11.21	-0.01582	0.757898	0.821565
MACC1	7p21.1	0.015807	0.758124	0.821735
RABL2B	22q13.33	0.015804	0.758168	0.821735
SYCE1	10q26.3	0.015803	0.758178	0.821735
TSPYL2	Xp11.22	-0.01579	0.758395	0.821872
TMIE	3p21.31	-0.01579	0.758426	0.821872
DNAJB1	19p13.12	-0.01579	0.758427	0.821872
ECEL1	2q37.1	-0.01576	0.758761	0.822189
VIPAS39	14q24.3	0.015735	0.75919	0.82261
IGFBP4	17q21.2	-0.01572	0.759385	0.822776
HIST2H2BF	1q21.2	0.015711	0.759543	0.822903
FAM167A-AS1	8p23.1	-0.0157	0.759744	0.823077
OR1E2	17p13.2	-0.01568	0.760049	0.823362
C10ORF88	10q26.13	0.015661	0.760282	0.82357
FLVCR1-DT	1q32.3	0.015657	0.760346	0.823595
ASCL3	11p15.4	0.015649	0.760456	0.823643
KLKB1	4q35.2	0.015648	0.760472	0.823643
OR1L1	9q33.2	0.015627	0.760788	0.82394
TMSB15A	Xq22.1	0.01562	0.760894	0.82401
INO80C	18q12.2	-0.01561	0.761094	0.824182
ZNF493	19p12	0.015594	0.761276	0.824321
TRIM41	5q35.3	0.015592	0.761305	0.824321
CCDC181	1q24.2	0.015553	0.761889	0.824909
GTPBP8	3q13.2	0.01554	0.762078	0.82507
OR6C2	12q13.2	0.015527	0.762274	0.825192

GSE1	16q24.1	-0.01552	0.762305	0.825192
PDS5B	13q13.1	0.015524	0.762315	0.825192
COQ10A	12q13.3	-0.01552	0.762417	0.825258
RAB3IP	12q15	0.01551	0.762532	0.825338
IER3	6p21.33	-0.0155	0.762609	0.825377
RABGGTA	14q12	-0.0155	0.762673	0.825389
TTY14	Yq11.222	-0.0155	0.762735	0.825389
HSPB9	17q21.2	-0.0155	0.762744	0.825389
CCND1	11q13.3	-0.01549	0.762865	0.825475
PRAMEF20	1p36.21	0.015472	0.763085	0.825668
CACNA1D	3p21.1	-0.01545	0.76346	0.825986
YIPF7	4p12	-0.01545	0.763461	0.825986
LCE5A	1q21.3	-0.01544	0.763585	0.826014
PF4	4q13.3	-0.01544	0.763603	0.826014
MAGEB2	Xp21.2	-0.01543	0.763643	0.826014
FHOD1	16q22.1	-0.01543	0.763651	0.826014
KRT12	17q21.2	-0.01543	0.763707	0.826022
INSIG1	7q36.3	-0.01543	0.763741	0.826022
FAM160A2	11p15.4	-0.01542	0.763885	0.826133
KLF15	3q21.3	0.015413	0.763975	0.826185
DEFB124	20q11.21	0.015407	0.764062	0.826196
SBSN	19q13.12	0.015404	0.764096	0.826196
C7ORF66	7q31.1	-0.0154	0.764109	0.826196
LRP2BP	4q35.1	-0.01539	0.764248	0.826302
ZNF131	5p12	0.015349	0.764918	0.826982
CLDN14	21q22.13	0.015335	0.765126	0.827163
MBD3L2	19p13.2	-0.01531	0.765435	0.827452
SLC25A12	2q31.1	-0.01531	0.765498	0.827475
KCTD16	5q31.3	-0.0153	0.765587	0.827526
OR6C68	12q13.2	-0.0153	0.765642	0.827542
WHRN	9q32	0.015282	0.76592	0.827753
PROP1	5q35.3	0.015282	0.765921	0.827753
DMBT1P1	10q26.13	0.015253	0.766346	0.828148
YJEFN3	19p13.11	-0.01525	0.766369	0.828148
OR5J2	11q12.1	-0.01524	0.766478	0.828221
FAM181A-AS1	14q32.12	-0.0152	0.767077	0.828824
CTNS	17p13.2	0.015177	0.76748	0.829215
PDYN	20p13	-0.01514	0.768052	0.829762
SERPINB10	18q22.1	-0.01514	0.768078	0.829762
PRDM11	11p11.2	0.015134	0.768111	0.829762
PAQR6	1q22	-0.01512	0.768307	0.829929
LOC646813	11p11.12	0.015099	0.768637	0.830241
TTY15	Yq11.221	-0.01509	0.768713	0.830278
SMARCAL1	2q35	-0.01509	0.768787	0.830314
ZNF410	14q24.3	0.015082	0.768887	0.830375
SERPINB3	18q21.33	-0.01508	0.768928	0.830375
GSTZ1	14q24.3	-0.01506	0.769188	0.830605
LYPD5	19q13.31	-0.01506	0.769223	0.830605
PPY2P	17q11.2	0.015054	0.76931	0.830654
SPRR2D	1q21.3	0.015049	0.769387	0.830692
UGT1A3	2q37.1	0.015042	0.769482	0.83075
MDFI	6p21.1	-0.01503	0.769701	0.830913
PTMAP11	9q22.33	0.015027	0.769715	0.830913
IFNA13	9p21.3	0.015021	0.769792	0.830929
CCRL2	3p21.31	-0.01502	0.769813	0.830929
ZNF701	19q13.41	0.015009	0.769978	0.831062
PFKL	21q22.3	0.014998	0.77014	0.831192
TMED2	12q24.31	0.014983	0.770365	0.83139

IYD	6q25.1	0.014936	0.771064	0.832099
EYA1	8q13.3	-0.01493	0.771147	0.832144
ZCCHC12	Xq24	-0.01492	0.771274	0.832236
SCN4A	17q23.3	0.014917	0.771343	0.832266
TRMT5	14q23.1	-0.01491	0.7715	0.832391
MUL1	1p36.12	-0.0149	0.771555	0.832405
SEMA3B	3p21.31	-0.01489	0.771773	0.832595
SIX5	19q13.32	0.014841	0.772476	0.833278
AADAT	4q33	0.014841	0.772489	0.833278
CYSTM1	5q31.3	-0.01484	0.772547	0.833295
LSM14A	19q13.11	0.014834	0.772591	0.833299
FBXW7	4q31.3	-0.01483	0.772704	0.833375
EXD1	15q15.1	-0.01481	0.772995	0.833628
LINC00592	12q13.13	0.014803	0.773046	0.833628
S100PBP	1p35.1	-0.0148	0.773063	0.833628
ELFN1	7p22.3	0.014779	0.77341	0.833957
GPR119	Xq26.1	0.014772	0.773504	0.834013
IQCF1	3p21.2	0.01476	0.773688	0.834167
GAK	4p16.3	0.014751	0.773821	0.834228
RMI1	9q21.32	0.014749	0.77386	0.834228
ZNF559	19p13.2	0.014748	0.773869	0.834228
OR10G4	11q24.2	0.014745	0.773918	0.834235
LHB	19q13.33	0.01474	0.773985	0.834262
WDR88	19q13.11	-0.01473	0.774191	0.83444
CABCOCO1	10q21.2	0.014723	0.774243	0.83445
A4GALT	22q13.2	0.014695	0.774659	0.834851
LINC00652	20p11.23	-0.01469	0.774697	0.834851
AVPI1	10q24.2	0.014685	0.77481	0.834927
IQCJ	3q25.32	-0.01468	0.774913	0.834993
CRYM	16p12.2	0.014673	0.774981	0.835021
SPCS3	4q34.2	0.014659	0.775199	0.835212
DENND5B	12p11.21	0.014654	0.775273	0.835246
DSCAM	21q22.2	-0.01464	0.775542	0.835411
OR51A2	11p15.4	-0.01463	0.775563	0.835411
PYROXD1	12p12.1	0.014632	0.775598	0.835411
IFNA2	9p21.3	0.01463	0.775628	0.835411
LGALS13	19q13.2	0.01463	0.775634	0.835411
RMDN1	8q21.3	-0.01461	0.775855	0.835603
SNORA2A	12q13.11	-0.01461	0.775944	0.835654
ZNF207	17q11.2	-0.0146	0.776096	0.835756
TMEM132C	12q24.32-q24.33	0.014594	0.776171	0.835756
KRT78	12q13.13	0.014593	0.776179	0.835756
XCL2	1q24.2	0.014591	0.776206	0.835756
OR10C1	6p22.1	-0.01458	0.776334	0.835849
FYB2	1p32.2	-0.01458	0.776379	0.835853
ZNF821	16q22.2	-0.01457	0.776526	0.835936
SCGB1C1	11p15.5	0.014569	0.77654	0.835936
POMC	2p23.3	0.014558	0.776712	0.836077
SPATA45	1q32.3	0.014541	0.776955	0.836294
ZNF233	19q13.31	0.014532	0.777091	0.836376
FFAR1	19q13.12	-0.01453	0.777115	0.836376
FOXR2	Xp11.21	-0.01452	0.777286	0.836464
SMG1P2	16p11.2	0.014519	0.777292	0.836464
CTH	1p31.1	-0.01452	0.777322	0.836464
TNF	6p21.33	0.014504	0.777507	0.836618
PHF1	6p21.32	0.014481	0.777858	0.836922
ALDOA	16p11.2	0.014477	0.777909	0.836922
GUCA2A	1p34.2	0.014477	0.777915	0.836922

NPTXR	22q13.1	0.014472	0.777996	0.836964
TNNT2	1q32.1	0.014467	0.77806	0.836988
MTERF1	7q21.2	-0.01446	0.778118	0.837006
GBA2	9p13.3	0.014451	0.778301	0.837158
ZNF302	19q13.11	-0.01444	0.778414	0.837234
GZMA	5q11.2	-0.01442	0.778716	0.837514
ABCC4	13q32.1	-0.01442	0.778822	0.837583
EFCAB6	22q13.2-q13.31	-0.01441	0.778906	0.837588
PDIA2	16p13.3	0.01441	0.778911	0.837588
GAGE13	Xp11.23	-0.01438	0.779318	0.837945
FAM47A	Xp21.1	-0.01438	0.779326	0.837945
ANKRD20A9P	13q11	-0.01438	0.779423	0.838004
DNAJB3	2q37.1	-0.01436	0.779681	0.838237
RAB3D	19p13.2	-0.01434	0.779894	0.838421
CRB2	9q33.3	0.014331	0.780097	0.838594
SPX	12p12.1	-0.01432	0.780278	0.83873
KRTAP1-5	17q21.2	-0.01432	0.780307	0.83873
LZTS2	10q24.31	0.014312	0.78038	0.838763
IL18BP	11q13.4	0.014308	0.780444	0.838787
MTVR2	17q22	0.014303	0.780514	0.838817
OR6A2	11p15.4	-0.0143	0.78057	0.838832
KIF20A	5q31.2	-0.01429	0.780731	0.83896
PDLIM1	10q23.33	0.014281	0.78085	0.839036
SPICE1	3q13.2	0.014278	0.780886	0.839036
LINC02396	12q13.12	-0.01427	0.781027	0.839144
ALDH1A1	9q21.13	0.014244	0.781394	0.839493
HIGD1B	17q21.31	-0.01424	0.781523	0.839586
OPN1MW	Xq28	0.014228	0.781632	0.839627
HECTD3	1p34.1	-0.01423	0.781645	0.839627
OR2T3	1q44	-0.01422	0.781756	0.839702
NOLC1	10q24.32	0.01419	0.782206	0.840139
FTSJ3	17q23.3	0.014167	0.782554	0.840468
BIK	22q13.2	-0.01415	0.782747	0.84063
TAS2R4	7q34	0.014145	0.782876	0.840724
DGCR5	22q11.21	-0.01413	0.783086	0.840904
NGLY1	3p24.2	-0.01411	0.783359	0.841153
PLEKHM1P1	17q24.1	0.014105	0.783479	0.841204
CCL5	17q12	0.014104	0.783491	0.841204
MICB	6p21.33	0.014083	0.783807	0.841479
P2RY6	11q13.4	-0.01408	0.783831	0.841479
ASPDH	19q13.33	0.014072	0.783975	0.841558
OR2T2	1q44	-0.01407	0.783989	0.841558
ASTE1	3q22.1	0.014065	0.784081	0.841612
NPL	1q25.3	0.014061	0.784133	0.841622
RAB29	1q32.1	0.014049	0.784317	0.841774
BMPER	7p14.3	0.013996	0.785106	0.842577
PIGA	Xp22.2	0.013985	0.785277	0.842715
PGBD4	15q14	0.013982	0.785326	0.842722
WLS	1p31.3	0.013977	0.785393	0.842736
GABRA4	4p12	-0.01398	0.785423	0.842736
FAM25A	10q23.2	0.013966	0.785554	0.842831
ZDHHC1	16q22.1	0.013952	0.785776	0.843024
CACNG7	19q13.42	-0.01393	0.78612	0.843348
AZIN2	1p35.1	-0.01392	0.786213	0.843402
H3F3B	17q25.1	0.013914	0.786345	0.843499
SNORA4	3q27.3	-0.0139	0.786587	0.843714
EIF4E1B	5q35.2	0.013894	0.786632	0.843716
FKBP1AP1	19q13.43	-0.01386	0.787092	0.844165

SIM1	6q16.3	-0.0138	0.788098	0.845199
LURAP1L	9p23	-0.01379	0.788252	0.845297
LRRC10	12q15	-0.01378	0.788319	0.845297
PDLIM7	5q35.3	0.01378	0.788342	0.845297
C2ORF50	2p25.1	0.013779	0.788358	0.845297
SLC26A4-AS1	7q22.3	0.01377	0.788501	0.845404
CIRBP-AS1	19p13.3	-0.01376	0.788602	0.845468
CDH24	14q11.2	-0.01374	0.788936	0.845781
CCDC71L	7q22.3	-0.01374	0.788995	0.845798
PTH	11p15.3	-0.01373	0.789095	0.84586
TMEM63A	1q42.12	-0.01372	0.789253	0.845984
OR5M3	11q12.1	0.013705	0.789468	0.846139
CWF19L2	11q22.3	0.013704	0.789482	0.846139
RIMBP2	12q24.33	0.013683	0.789808	0.846339
AOX1	2q33.1	0.013681	0.789836	0.846339
DOCK3	3p21.2	-0.01368	0.789836	0.846339
WFDC2	20q13.12	0.013681	0.789837	0.846339
CXCL10	4q21.1	-0.01367	0.790005	0.846459
OR9Q1	11q12.1	-0.01367	0.790053	0.846459
SNCG	10q23.2	-0.01366	0.790076	0.846459
ITPRIPL1	2q11.2	-0.01365	0.790309	0.846663
STOML1	15q24.1	-0.01364	0.790429	0.84671
ELOA3	18q21.1	-0.01363	0.79055	0.84671
SCGB1D4	11q12.3	0.013632	0.790564	0.84671
CSH1	17q23.3	0.013632	0.790564	0.84671
TSPY1	Yp11.2	0.013632	0.790564	0.84671
STK35	20p13	0.013619	0.790758	0.846872
ERCC5	13q33.1	0.013557	0.791692	0.847827
ADRA1B	5q33.3	-0.01354	0.792005	0.848103
TAF4B	18q11.2	-0.01353	0.792034	0.848103
SLC25A51	9p13.2-p13.1	0.01352	0.792245	0.848215
PSEN2	1q42.13	-0.01352	0.792254	0.848215
OLAH	10p13	-0.01352	0.7923	0.848215
DPY19L2P1	7p14.2	-0.01351	0.792338	0.848215
SPRR2G	1q21.3	-0.01351	0.79235	0.848215
OR6K3	1q23.1	-0.0135	0.792538	0.84837
HIST1H1C	6p22.2	-0.01345	0.793247	0.849027
GDF10	10q11.22	-0.01345	0.793251	0.849027
PRPF3	1q21.2	-0.01345	0.793279	0.849027
GYS2	12p12.1	-0.01345	0.793334	0.849041
SCGB2A2	11q12.3	0.013441	0.793434	0.849061
OPN5	6p12.3	0.013439	0.793468	0.849061
FUT6	19p13.3	0.013438	0.79348	0.849061
TNFRSF4	1p36.33	-0.01343	0.793633	0.84918
NKG7	19q13.41	0.013423	0.793706	0.849212
EMID1	22q12.2	-0.01342	0.793797	0.849263
YTHDF2	1p35.3	0.013414	0.793839	0.849263
METTL18	1q24.2	-0.01341	0.7939	0.849284
MSANTD3	9q31.1	-0.01341	0.793945	0.849287
HCRTR1	1p35.2	0.013402	0.794014	0.849314
MRPS11	15q25.3	0.0134	0.794055	0.849314
SMIM10L2B	Xq26.3	0.013396	0.794104	0.84932
HEPN1	11q24.2	-0.01339	0.794162	0.849337
SZT2	1p34.2	-0.01339	0.794272	0.849405
IL17B	5q32	-0.01338	0.79431	0.849405
WASF3	13q12.13	0.013377	0.794392	0.849446
TERF2IP	16q23.1	-0.01336	0.794673	0.849672
REG3A	2p12	-0.01336	0.794688	0.849672

CPOX	3q11.2	0.013345	0.794874	0.849801
OR13C5	9q31.1	0.013344	0.794893	0.849801
DVL3	3q27.1	0.013309	0.795421	0.85032
FSHR	2p16.3	-0.01329	0.795691	0.850564
HELT	4q35.1	-0.01328	0.795799	0.850633
BLOC1S5	6p24.3	0.013274	0.795942	0.85074
HIP1R	12q24.31	-0.01327	0.796065	0.850788
MFSD2A	1p34.2	0.013266	0.796071	0.850788
RAD21L1	20p13	-0.01324	0.796382	0.851075
DCT	13q32.1	-0.01323	0.796617	0.85128
RPS2P32	7p15.3	0.013193	0.797165	0.851821
TXNDCC9	2q11.2	-0.01319	0.797279	0.851897
ANKRD26P3	13q12.11	-0.01317	0.797468	0.852054
RIPK3	14q12	-0.01317	0.797513	0.852057
SEMA4D	9q22.2	-0.01315	0.797777	0.852293
SC5D	11q23.3-q24.1	0.013123	0.798221	0.852722
PHF20	20q11.22-q11.23	-0.01309	0.798674	0.853125
C12ORF71	12p11.23	-0.01309	0.798684	0.853125
DLX6-AS1	7q21.3	-0.01308	0.798822	0.853227
ERAP2	5q15	0.013079	0.798872	0.853235
FAM66D	8p23.1	-0.01307	0.799036	0.853334
TTL	2q14.1	-0.01307	0.79905	0.853334
ZNF322P1	9q22.33	-0.01306	0.799178	0.853403
RASL11B	4q12	-0.01306	0.799199	0.853403
OXNAD1	3p25.1-p24.3	-0.01305	0.799277	0.85344
APOA4	11q23.3	-0.01304	0.799422	0.853549
HPCA	1p35.1	0.013021	0.799747	0.853802
GUCY1B2	13q14.3	-0.01302	0.799811	0.853802
AGAP5	10q22.2	-0.01302	0.79982	0.853802
PRKY	Yp11.2	-0.01302	0.799829	0.853802
ZKSCAN7	3p21.31	0.013009	0.799928	0.853862
GNG11	7q21.3	0.012997	0.800116	0.854018
TGIF2LY	Yp11.2	0.012982	0.800334	0.854172
TMEM65	8q24.13	0.012981	0.800346	0.854172
GABARAPL3	15q26.1	0.012966	0.800586	0.854382
CSN3	4q13.3	-0.01296	0.800716	0.854447
NFIL3	9q22.31	-0.01296	0.800732	0.854447
TAC4	17q21.33	0.012922	0.801235	0.854938
HOXD13	2q31.1	0.012913	0.801375	0.855018
SNORA37	18q21.2	0.012912	0.801395	0.855018
VHLL	1q22	0.012903	0.801522	0.855107
PRLH	2q37.3	-0.01288	0.80189	0.855454
SPACA5	Xp11.23	0.012848	0.802353	0.855883
MGARP	4q31.1	0.012844	0.80241	0.855883
LINC00638	14q32.33	-0.01284	0.80242	0.855883
HOXB9	17q21.32	-0.01283	0.80259	0.855972
MAP3K7CL	21q21.3	0.012831	0.802619	0.855972
FAM217B	20q13.33	-0.01283	0.802645	0.855972
RBM26	13q31.1	0.012827	0.802675	0.855972
DDIT4	10q22.1	0.012823	0.80273	0.855985
ZNF215	11p15.4	-0.01282	0.802772	0.855985
OR8H1	11q12.1	-0.01278	0.803439	0.856651
ASF1A	6q22.31	0.01274	0.803989	0.857191
PSORS1C3	6p21.33	0.012733	0.804091	0.857255
IQCF6	3p21.2	0.012726	0.804187	0.857312
ZNF500	16p13.3	0.012719	0.804294	0.857379
CEACAM20	19q13.31	-0.01271	0.804431	0.85746
SNORA16B	1q32.3	-0.01271	0.8045	0.85746

NOS3	7q36.1	0.012704	0.804521	0.85746
FZD7	2q33.1	-0.0127	0.80454	0.85746
RNF130	5q35.3	0.0127	0.804592	0.857469
PVALEF	17q25.3	-0.01269	0.804765	0.857608
PJA1	Xq13.1	0.01267	0.80504	0.857856
MAPT-AS1	17q21.31	0.012665	0.805109	0.857884
NLRP5	19q13.43	0.012661	0.805169	0.857901
CYB561A3	11q12.2	-0.01266	0.805254	0.857947
FREM2	13q13.3	-0.01265	0.805374	0.858029
LINC00574	6q27	-0.01259	0.806179	0.858803
ZNF527	19q13.12	-0.01259	0.806186	0.858803
SPAM1	7q31.32	0.012585	0.806317	0.858896
MAPK8IP1P2	17q21.31	0.01258	0.806404	0.858943
PSD4	2q14.1	-0.01255	0.806923	0.859409
HSPA1A	6p21.33	-0.01254	0.806969	0.859409
UBTFL1	11q14.3	-0.01254	0.806969	0.859409
TSPAN10	17q25.3	-0.01253	0.807207	0.859616
WDR91	7q33	0.012507	0.807505	0.859848
C11ORF96	11p11.2	0.012506	0.807511	0.859848
ASZ1	7q31.2	0.012496	0.807662	0.859963
SALL4	20q13.2	0.012487	0.8078	0.860065
FBXL2	3p22.3	-0.01248	0.807979	0.860209
PDCD11	10q24.33	-0.01245	0.80834	0.860548
OCLNP1	5q13.2	0.01243	0.808667	0.86085
WTAP	6q25.3	0.012418	0.808847	0.860996
MCOLN2	1p22.3	-0.01241	0.809029	0.861144
ELAC2	17p12	0.012397	0.809156	0.861192
FGF7P6	9q13	-0.01239	0.809216	0.861192
OR2T35	1q44	-0.01239	0.809222	0.861192
HAO1	20p12.3	0.012391	0.809246	0.861192
RNF148	7q31.32	0.012367	0.809607	0.86153
FAM221B	9p13.3	0.012321	0.810312	0.862234
DAZ2	Yq11.223	0.012279	0.810946	0.862864
MINPP1	10q23.2	0.012269	0.811093	0.862961
CDC7	1p22.1	-0.01227	0.811124	0.862961
PPFIBP2	11p15.4	-0.01225	0.811428	0.863239
FAM234A	16p13.3	-0.01221	0.811975	0.863743
TMSB4Y	Yq11.221	-0.01221	0.812005	0.863743
OR51Q1	11p15.4	0.012207	0.812032	0.863743
CHRNE	17p13.2	-0.01219	0.81229	0.863973
CBLIF	11q12.1	0.012175	0.812506	0.864156
PBK	8p21.1	-0.01215	0.812954	0.864567
ZYG11A	1p32.3	-0.01214	0.812979	0.864567
FOLH1B	11q14.3	0.012138	0.813074	0.864623
ZSCAN1	19q13.43	0.012082	0.813915	0.86547
USHBP1	19p13.11	0.012069	0.814119	0.865642
OR5K1	3q11.2	0.012057	0.81429	0.865777
TMPRSS11B	4q13.2	-0.01205	0.814375	0.865822
CPS1-IT1	2q34	0.012044	0.814486	0.865894
HNRNPC	14q11.2	-0.01202	0.814884	0.866238
DYRK1B	19q13.2	0.012015	0.814923	0.866238
CTSL3P	9q21.33	-0.01201	0.814982	0.866238
HIST1H4F	6p22.2	0.012012	0.814983	0.866238
DENND2A	7q34	0.012	0.815158	0.866357
RGSL1	1q25.3	0.011998	0.815181	0.866357
TMEM248	7q11.21	-0.01196	0.815721	0.86686
TTC7B	14q32.11	0.011961	0.815741	0.86686
KRT34	17q21.2	0.011956	0.81582	0.866898



ANKMY2	7p21.1	0.011937	0.816106	0.867155
IFNA4	9p21.3	-0.01193	0.816253	0.867243
ZNF333	19p13.12	0.011926	0.816275	0.867243
IST1	16q22.2	-0.01192	0.816353	0.86728
CEP126	11q22.1	0.01191	0.816526	0.867418
SERHL	22q13.2	-0.0119	0.816695	0.867552
DMC1	22q13.1	0.011879	0.816985	0.867814
FASLG	1q24.3	0.01187	0.817125	0.867916
SPINK6	5q32	-0.01186	0.817327	0.868036
REEP5	5q22.2	-0.01186	0.817344	0.868036
NFAT5	16q22.1	0.011853	0.817389	0.868036
DMBX1	1p33	0.011849	0.817448	0.868036
CAGE1	6p24.3	-0.01185	0.817454	0.868036
RFX8	2q11.2	-0.01184	0.817538	0.868078
CSRP2	12q21.2	-0.01182	0.817907	0.868425
POU1F1	3p11.2	0.011813	0.81799	0.868456
DIPK1C	18q22.3	0.011811	0.818023	0.868456
HAR1A	20q13.33	0.0118	0.818192	0.868564
C19ORF54	19q13.2	-0.01179	0.818269	0.868564
PPP6C	9q33.3	-0.01179	0.818295	0.868564
KLC4	6p21.1	-0.01179	0.818334	0.868564
ZNF813	19q13.42	-0.01179	0.818342	0.868564
KRTAP4-9	17q21.2	-0.01177	0.818577	0.868767
PLCXD1	Xp22.33 and Yp11.32-p11.31	0.011766	0.818703	0.868855
DAPK2	15q22.31	0.011753	0.818901	0.86902
CBWD5	9q21.11	-0.01172	0.819448	0.869554
KRT14	17q21.2	0.011706	0.819603	0.869672
GNAT2	1p13.3	-0.0117	0.819714	0.869744
MXD4	4p16.3	-0.0117	0.819772	0.869759
ABCF1	6p21.33	0.011683	0.819958	0.86991
BCL3	19q13.32	-0.01167	0.820209	0.870075
OR2V2	5q35.3	0.011664	0.820242	0.870075
LINC01554	5q15	-0.01166	0.820243	0.870075
CLN6	15q23	-0.01165	0.820418	0.870214
SERP1	3q25.1	-0.01164	0.820643	0.870406
YY2	Xp22.12	0.011622	0.820884	0.870576
TMPRSS7	3q13.2	-0.01162	0.820929	0.870576
BMS1P4	10q22.2	-0.01162	0.820933	0.870576
MKX	10p12.1	0.011607	0.821103	0.87071
LARP7	4q25	-0.01159	0.82137	0.870947
TUBB6	18p11.21	-0.01154	0.822094	0.871669
AMD1	6q21	0.011518	0.822457	0.872007
TRIM63	1p36.11	-0.01151	0.822541	0.87205
FAM163B	9q34.2	-0.0115	0.822737	0.872212
GOLGA2P6	10p11.23	-0.0115	0.822793	0.872225
LINC01257	12q24.33	0.011472	0.823148	0.872556
GK2	4q21.21	0.011462	0.823309	0.87268
GCKR	2p23.3	0.011439	0.823657	0.873003
C10ORF95	10q24.32	0.011423	0.823893	0.873163
PCNX3	11q13.1	-0.01142	0.823896	0.873163
PAIP2B	2p13.3	0.011401	0.824232	0.873448
FANCD2	3p25.3	-0.0114	0.824252	0.873448
PKHD1	6p12.3-p12.2	0.011395	0.824316	0.87347
JUN	1p32.1	0.01139	0.824395	0.873508
RNF126P1	17q22	0.011382	0.824519	0.873593
IRF8	16q24.1	-0.01137	0.824764	0.873802
TCTEX1D4	1p34.1	-0.01136	0.824804	0.873802
ITIH2	10p14	-0.01136	0.824915	0.873863

MYL4	17q21.32	-0.01135	0.824949	0.873863
SEC22C	3p22.1	-0.01135	0.825058	0.873865
PAK5	20p12.2	0.011345	0.825079	0.873865
ZNF708	19p12	0.011344	0.825094	0.873865
TNFSF9	19p13.3	-0.01134	0.825127	0.873865
VANGL2	1q23.2	-0.01134	0.825169	0.873865
IBSP	4q22.1	0.011335	0.825226	0.873879
C10ORF71	10q11.23	-0.01133	0.825292	0.873899
TMPRSS12	12q13.12	-0.01133	0.825332	0.873899
RPL23AP64	11q23.3	0.011325	0.825382	0.873906
AQP6	12q13.12	-0.01131	0.82555	0.874038
LOC729609	Xp22.12	-0.01129	0.825959	0.874424
TMCO4	1p36.13	-0.01128	0.826014	0.874436
LINC00461	5q14.3	0.011264	0.82631	0.874703
LY6G6C	6p21.33	0.011241	0.826654	0.875021
TMEM132D	12q24.33	0.011222	0.826947	0.875261
FBXW5	9q34.3	-0.01122	0.826986	0.875261
KHDC1	6q13	0.011218	0.827012	0.875261
SGSM2	17p13.3	0.011211	0.827116	0.875325
IFNA10	9p21.3	0.011158	0.827919	0.876102
CPLX3	15q24.1	0.011157	0.827938	0.876102
SPTLC1	9q22.31	0.011143	0.828139	0.876269
SPATA22	17p13.2	0.011137	0.828234	0.876323
ECSCR	5q31.2	0.011133	0.828299	0.876346
OR1G1	17p13.3	0.011122	0.828467	0.876477
ATP6V0A2	12q24.31	0.011118	0.828522	0.876488
TRAF3IP1	2q37.3	0.011105	0.828721	0.876653
OR7D2	19p13.2	-0.01109	0.828918	0.876771
KRT17	17q21.2	0.011092	0.82892	0.876771
AMER2	13q12.13	0.011077	0.829143	0.876923
ZP4	1q43	0.011077	0.829152	0.876923
SLC2A2	3q26.2	0.011029	0.829873	0.877639
PCBP3	21q22.3	0.011025	0.829937	0.877662
IAPP	12p12.1	-0.01101	0.830189	0.877881
ADGRG1	16q21	-0.011	0.830284	0.877935
RAX2	19p13.3	0.010986	0.830524	0.878118
CAPRN2	12p11.21	-0.01098	0.830562	0.878118
ZNF556	19p13.3	0.010982	0.830588	0.878118
CST9L	20p11.21	-0.01094	0.83116	0.878676
ZNF85	19p12	-0.01092	0.831461	0.878948
TOR1A	9q34.11	0.010913	0.831641	0.879065
ZNF629	16p11.2	-0.01091	0.831671	0.879065
DCP1B	12p13.33	0.010909	0.831704	0.879065
RAB28	4p15.33	-0.01091	0.831753	0.879071
C4ORF33	4q28.2	0.010901	0.831821	0.879097
ZNF285	19q13.31	-0.01089	0.831921	0.879156
DMRTC2	19q13.2	-0.01088	0.832137	0.879338
DPPA2	3q13.13	0.010852	0.832561	0.879739
C9ORF131	9p13.3	-0.01084	0.832718	0.879859
RTCB	22q12.3	-0.01084	0.832816	0.879881
PRAMEF14	1p36.21	0.010831	0.832882	0.879881
RPS4Y2	Yq11.223	0.01083	0.832899	0.879881
STX1B	16p11.2	0.010829	0.832914	0.879881
PFN2	3q25.1	0.010825	0.832973	0.879896
HIST1H2AC	6p22.2	-0.01081	0.833229	0.88012
USP32P1	17p11.2	0.010787	0.833559	0.880422
C14ORF178	14q24.3	-0.01077	0.833861	0.880694
CD72	9p13.3	0.010739	0.834281	0.881092

KLK1	19q13.33	0.010729	0.834443	0.881172
TSPY2	Yp11.2	-0.01073	0.834445	0.881172
TTLL12	22q13.2	-0.01071	0.834695	0.88139
OR5P3	11p15.4	0.010695	0.834958	0.881621
LOC100130331	1q43	0.010677	0.835229	0.88186
SNAPC1	14q23.2	0.010655	0.835566	0.882141
ZSCAN5A	19q13.43	-0.01065	0.835583	0.882141
MISP	19p13.3	0.010628	0.835976	0.882509
MAP2K3	17p11.2	0.010625	0.836025	0.882515
TTF1	9q34.13	-0.01058	0.836703	0.883184
ALG1L2	3q22.1	-0.01057	0.83686	0.883303
THNSL2	2p11.2	0.010558	0.837034	0.88344
SLC5A9	1p33	-0.01055	0.837109	0.883473
CDC42EP5	19q13.42	0.010518	0.837653	0.884
PDK1	2q31.1	-0.0105	0.837905	0.88422
FBH1	10p15.1	0.010473	0.838325	0.884616
KCNK18	10q25.3	0.010453	0.838634	0.884895
TCHP	12q24.11	0.01044	0.838836	0.885062
TOMM40L	1q23.3	0.010413	0.839249	0.885452
HILS1	17q21.33	-0.01037	0.839914	0.886106
CENPBD1P1	19q13.43	-0.01036	0.84001	0.886161
NME8	7p14.1	0.010318	0.840687	0.886787
RSL24D1	15q21.3	0.010317	0.840708	0.886787
CNGA4	11p15.4	0.010315	0.840743	0.886787
GRAPL	17p11.2	0.010312	0.84078	0.886787
OR9G9	11q11	0.010301	0.840953	0.886922
CRLF1	19p13.11	0.01027	0.84143	0.887378
ATG3	3q13.2	0.01025	0.841732	0.88765
ITCH	20q11.22	-0.01024	0.841807	0.887683
ZNF280B	22q11.22	0.01024	0.841876	0.887688
MTRF1L	6q25.2	0.010236	0.841942	0.887688
VAMP3	1p36.23	-0.01024	0.841945	0.887688
OSR2	8q22.2	-0.01022	0.842217	0.887928
NISCH	3p21.1	-0.01019	0.842686	0.888376
ERICH6	3q25.1	0.010174	0.842882	0.888535
HES5	1p36.32	0.010144	0.843343	0.888865
ATP7B	13q14.3	0.010144	0.843346	0.888865
ACOXL	2q13	-0.01014	0.843362	0.888865
BDH1	3q29	0.010142	0.843372	0.888865
C16ORF71	16p13.3	0.010121	0.843692	0.889155
MYH15	3q13.13	0.010111	0.84385	0.889275
MEAK7	16q24.1	-0.0101	0.843946	0.88933
ZNF451	6p12.1	-0.01009	0.844239	0.889591
XPO1	2p15	0.010071	0.844462	0.889779
CPNE3	8q21.3	0.010063	0.844586	0.889864
LRRC59	17q21.33	0.010055	0.844698	0.889935
DEDD	1q23.3	0.010047	0.844816	0.890004
C1GALT1	7p22.1-p21.3	-0.01005	0.844852	0.890004
CSHL1	17q23.3	0.010023	0.845185	0.890307
KIR2DS4	19q13.42	-0.01001	0.845332	0.890415
PINK1	1p36.12	0.010008	0.84542	0.890453
JRKL	11q21	-0.01001	0.845456	0.890453
OR10AG1	11q12.1	-0.00999	0.845714	0.890677
TRHDE	12q21.1	-0.00996	0.846077	0.891013
FLJ12825	12q13.13	-0.00995	0.846257	0.891155
CHAD	17q21.33	0.009941	0.846442	0.891303
CCT8L2	22q11.1	0.009922	0.846736	0.891566
MFSD14B	9q22.32	-0.00991	0.846859	0.891648

FHOD3	18q12.2	0.009897	0.847115	0.891871
PPP2R5B	11q13.1	-0.00986	0.847604	0.892287
IFITM4P	6p22.1	0.009863	0.847636	0.892287
LINC00923	15q26.2	0.009861	0.847665	0.892287
LOC100271832	2p22.3	-0.00986	0.847688	0.892287
OR3A3	17p13.2	0.009817	0.848327	0.892913
LINC00889	Xq26.3	-0.0098	0.848606	0.893159
GRASP	12q13.13	0.009792	0.848718	0.89323
KCNQ1DN	11p15.4 11p15.5	0.009783	0.848846	0.893318
VAT1	17q21.31	0.009774	0.848991	0.893383
PLPP5	8p11.23	0.009773	0.848998	0.893383
KRTAP10-2	21q22.3	-0.00976	0.849156	0.893503
NNAT	20q11.23	0.009736	0.849571	0.893893
FLJ42393	3q27.3	0.009733	0.849617	0.893894
LINC00032	9p21.2	0.009718	0.849846	0.894065
CHAC2	2p16.2	0.009716	0.849868	0.894065
RBBP9	20p11.23	0.009712	0.849937	0.894091
HTR3B	11q23.2	-0.0097	0.850159	0.894258
APOC1	19q13.32	0.009695	0.850191	0.894258
UGT1A4	2q37.1	0.009692	0.850233	0.894258
ZSCAN5B	19q13.43	0.00969	0.850275	0.894258
DNAJC17	15q15.1	0.00968	0.850421	0.894364
TMPRSS11E	4q13.2	0.009671	0.850562	0.894466
IK	5q31.3	0.009661	0.850713	0.894578
SPDYE7P	7q11.23	0.009651	0.850861	0.894686
HCCAT5	16q22.3	0.009639	0.85105	0.894804
LYPD2	8q24.3	0.009638	0.85107	0.894804
C10ORF120	10q26.13	0.009634	0.85112	0.894804
ZNF470	19q13.43	0.009632	0.851157	0.894804
ZNF18	17p12	-0.00963	0.851197	0.894804
PCK1	20q13.31	0.00961	0.851486	0.895061
GPR17	2q14.3	0.009602	0.85162	0.895155
FAM167B	1p35.2	-0.00959	0.851761	0.895256
SLC52A1	17p13.2	0.009589	0.851817	0.895269
VWC2L	2q34-q35	0.009577	0.852004	0.895358
SPDYE1	7p13	-0.00957	0.852032	0.895358
RTL4	Xq23	-0.00957	0.852036	0.895358
LINC01312	6q23.2	-0.00956	0.852232	0.895471
REC114	15q24.1	0.009561	0.852234	0.895471
BEST1	11q12.3	-0.00956	0.85231	0.895473
DMWD	19q13.32	0.009556	0.852325	0.895473
LRRC52	1q24.1	-0.00955	0.852376	0.89548
IL20RA	6q23.3	0.009548	0.852433	0.895493
FEM1A	19p13.3	0.009512	0.852992	0.896033
CCDC173	2q31.1	0.009485	0.853403	0.896418
SLC29A3	10q22.1	-0.00948	0.853449	0.89642
C5ORF49	5p15.31	-0.00947	0.85356	0.896489
KLRC3	12p13.2	-0.00947	0.853613	0.896497
GPR150	5q15	-0.00946	0.853765	0.896608
SPTBN4	19q13.2	0.009458	0.853808	0.896608
E2F2	1p36.12	-0.00945	0.853884	0.896641
ARR3	Xq13.1	-0.00945	0.853973	0.896652
KRTAP5-11	11q13.4	0.009447	0.853984	0.896652
MTO1	6q13	0.009442	0.854055	0.896679
RAP1GDS1	4q23	0.009423	0.854354	0.896947
PSMG3-AS1	7p22.3	0.009411	0.854529	0.897083
PMS1	2q32.2	-0.00941	0.854617	0.897129
FLJ16779	20q13.33	0.009385	0.854926	0.897366

GPHA2	11q13.1	-0.00938	0.854933	0.897366
CYB5R3	22q13.2	0.009371	0.855141	0.897537
P2RY11	19p13.2	0.00936	0.855307	0.897636
TXLNGY	Yq11.222-q11.223	0.009359	0.855325	0.897636
TEX33	22q12.3	0.009355	0.855397	0.897646
CXCL6	4q13.3	-0.00935	0.855424	0.897646
VIPR1	3p22.1	0.009347	0.855506	0.897685
ALOX15	17p13.2	0.009338	0.855653	0.897793
LIPC	15q21.3	0.00933	0.855766	0.897804
SLC25A42	19p13.11	0.009329	0.855779	0.897804
DDX50	10q22.1	-0.00933	0.855799	0.897804
NBL1	1p36.13	-0.00932	0.855937	0.897902
SRRM3	7q11.23	-0.0093	0.856233	0.898166
RGS10	10q26.11	-0.00928	0.856467	0.898333
TCP10L	21q22.11	-0.00928	0.856526	0.898333
LCN15	9q34.3	0.009278	0.856569	0.898333
C3ORF20	3p25.1	0.009278	0.856572	0.898333
FOXR1	11q23.3	0.009267	0.856742	0.898448
HTN3	4q13.3	0.009263	0.8568	0.898448
CCKBR	11p15.4	0.009259	0.856859	0.898448
TCHHL1	1q21.3	0.009259	0.856861	0.898448
MORN5	9q33.2	-0.00925	0.856966	0.898511
CLRN3	10q26.2	0.009241	0.857139	0.898645
CCL3L3	17q12	-0.00924	0.857187	0.898649
ZNF879	5q35.3	0.00921	0.857613	0.899048
OR56A3	11p15.4	-0.0092	0.857745	0.899134
CXORF58	Xp22.11	0.009198	0.857785	0.899134
REEP2	5q31.2	-0.00917	0.858216	0.899539
GPR26	10q26.13	0.009149	0.858542	0.899803
INS-IGF2	11p15.5	-0.00915	0.858557	0.899803
USP31	16p12.2	-0.00913	0.858871	0.900084
OR4F29	1p36.33	-0.00912	0.859045	0.900219
ZFP42	4q35.2	-0.00911	0.85913	0.900249
VXN	8q13.1	0.009108	0.859163	0.900249
CARD16	11q22.3	0.009072	0.859711	0.900776
TCERG1L	10q26.3	0.009066	0.859807	0.900829
ADAD1	4q27	-0.00906	0.859912	0.900879
RABGEF1	7q11.21	-0.00905	0.859985	0.900879
LYG2	2q11.2	0.009052	0.860018	0.900879
OIP5	15q15.1	-0.00905	0.860034	0.900879
PLK4	4q28.1	-0.00905	0.860116	0.900918
ASB17	1p31.1	0.009029	0.860376	0.901142
TAS2R10	12p13.2	0.009023	0.860469	0.901193
PPP4R3C	Xp21.3	-0.00902	0.860531	0.901211
OR13C8	9q31.1	-0.009	0.86075	0.901342
CDY2B	Yq11.222	-0.009	0.860789	0.901342
C19ORF71	19p13.3	-0.009	0.860792	0.901342
FAM136BP	6p25.2	-0.009	0.860882	0.90139
DSC1	18q12.1	0.008992	0.860944	0.901407
RGS16	1q25.3	0.008988	0.860996	0.901415
PAX1	20p11.22	-0.00893	0.861862	0.902275
C8ORF31	8q24.3	-0.00893	0.861937	0.902294
TTY9B	Yq11.222	-0.00892	0.861971	0.902294
EPM2AIP1	3p22.2	0.008893	0.862459	0.902758
UPK3A	22q13.31	0.008887	0.862553	0.902764
SVIP	11p14.3	0.008887	0.862555	0.902764
VWC2	7p12.2	-0.00888	0.862615	0.90278
SLC46A1	17q11.2	-0.00886	0.862964	0.903068

ZNF320	19q13.41	-0.00886	0.863007	0.903068
GABRA3	Xq28	-0.00886	0.863035	0.903068
ERCC8	5q12.1	0.008851	0.863109	0.903068
GAGE2A	Xp11.23	-0.00885	0.863116	0.903068
KIAA1586	6p12.1	0.008842	0.863238	0.903146
ZBED1	Xp22.33 and Yp11.2	-0.00884	0.86328	0.903146
C9ORF85	9q21.13	0.008832	0.863389	0.903212
SPATA21	1p36.13	0.008823	0.863526	0.903309
CNN2	19p13.3	-0.00881	0.863778	0.903525
PIGC	1q24.3	0.008787	0.864085	0.903798
EIF2A	3q25.1	-0.00877	0.864286	0.903932
TRIM50	7q11.23	0.008773	0.864303	0.903932
LINC00111	21q22.3	-0.00876	0.864495	0.904085
OR2A1	7q35	-0.00875	0.864659	0.904134
SLC43A2	17p13.3	-0.00875	0.864662	0.904134
PP2D1	3p24.3	0.008748	0.864677	0.904134
SLC35B4	7q33	0.008742	0.864774	0.904189
OCEL1	19p13.11	0.00873	0.864959	0.904275
FXVD1	19q13.12	-0.00873	0.864988	0.904275
OR1B1	9q33.2	-0.00873	0.864992	0.904275
HUNK	21q22.11	0.008725	0.865038	0.904276
TRIM48	11q11	-0.00867	0.865824	0.90505
OTULIN	5p15.2	0.008663	0.865975	0.905161
UBL4B	1p13.3	-0.00866	0.866046	0.90518
C22ORF15	22q11.23	-0.00866	0.866083	0.90518
GSC	14q32.13	-0.00865	0.866216	0.905271
TUBGCP2	10q26.3	0.008633	0.86644	0.905405
SHISA4	1q32.1	-0.00863	0.866442	0.905405
LYRM7	5q23.3-q31.1	0.00863	0.86648	0.905405
BTBD18	11q12.1	-0.00863	0.866526	0.905406
PWRN1	15q11.2	-0.00862	0.866692	0.905532
FSTL4	5q31.1	-0.0086	0.866957	0.905762
ACSL5	10q25.2	-0.00859	0.867077	0.90584
SLC6A18	5p15.33	0.00858	0.867256	0.90598
MTSS2	16q22.1	-0.00858	0.867318	0.905997
POM121L9P	22q11.23	0.00854	0.867864	0.90652
XCL1	1q24.2	-0.00854	0.867933	0.906527
EIF4H	7q11.23	0.008534	0.867961	0.906527
EGOT	3p26.1	-0.00851	0.868289	0.906822
PRKX	Xp22.33	0.008463	0.869047	0.907567
CLCNKA	1p36.13	-0.00845	0.869297	0.907778
LRRC74B	22q11.21	0.008436	0.869454	0.907778
SLC25A51P4	11p15.1	-0.00844	0.869466	0.907778
TRIML2	4q35.2	0.008436	0.869466	0.907778
ZDHHC13	11p15.1	-0.00844	0.869476	0.907778
IRX4	5p15.33	0.008407	0.869909	0.908174
CIRBP	19p13.3	0.008404	0.869948	0.908174
IQSEC2	Xp11.22	-0.0084	0.869991	0.908174
HBG1	11p15.4	0.008374	0.870418	0.908572
AGA	4q34.3	-0.00836	0.870622	0.908738
COX15	10q24.2	-0.00834	0.870863	0.908936
LYSMD1	1q21.3	-0.00834	0.870903	0.908936
DNAI2	17q25.1	-0.00834	0.870973	0.908938
FNDC4	2p23.3	0.008336	0.870995	0.908938
NANOS2	19q13.32	-0.00831	0.871376	0.909282
NR2E3	15q23	-0.00831	0.871416	0.909282
GJD2	15q14	-0.00829	0.871748	0.909546
HMX2	10q26.13	-0.00828	0.871784	0.909546

HMX1	4p16.1	-0.00828	0.871805	0.909546
PRB2	12p13.2	0.008278	0.87189	0.909587
LINC00623	1p11.2	-0.00827	0.872049	0.909705
DEF6	6p21.31	0.008259	0.872178	0.909792
PTGIR	19q13.32	0.008251	0.8723	0.909872
ZNF733P	7q11.21	-0.00824	0.8724	0.909929
MVB12B	9q33.3	-0.00823	0.872554	0.91004
ARMC3	10p12.2	-0.00823	0.872597	0.91004
SFPQ	1p34.3	-0.00823	0.872683	0.910083
SPP2	2q37.1	-0.00821	0.872986	0.910351
TRPV5	7q34	-0.00819	0.873264	0.910573
TYW1	7q11.21	-0.00818	0.873331	0.910573
FAXC	6q16.2	0.008183	0.873336	0.910573
CENPE	4q24	0.008173	0.873496	0.910693
ZNF705D	8p23.1	0.008162	0.873669	0.910791
GTF2IRD2	7q11.23	-0.00816	0.873681	0.910791
MCM9	6q22.31	0.008153	0.873806	0.910875
OAZ3	1q21.3	0.008124	0.874243	0.911282
OR6B1	7q35	-0.00812	0.874319	0.911314
PAX7	1p36.13	0.008103	0.874578	0.911536
CCDC155	19q13.33	0.008094	0.874709	0.911626
KRTAP19-5	21q22.11	0.00809	0.874769	0.911641
CASP4	11q22.3	-0.00808	0.87491	0.91174
HNRNPA3P1	10q11.21	0.008057	0.875279	0.912077
C6ORF120	6q27	-0.00805	0.875373	0.912128
MAP3K14	17q21.31	-0.00803	0.875627	0.912322
KRIT1	7q21.2	0.008033	0.875651	0.912322
SSX2	Xp11.22	-0.00802	0.875771	0.912401
TEX13B	Xq22.3	0.008012	0.875972	0.912562
SNORA47	5q13.3	-0.00798	0.876401	0.912938
MRPL19	2p12	0.007982	0.876424	0.912938
TRPM3	9q21.12-q21.13	-0.00792	0.877306	0.913769
CDNF	10p13	0.007924	0.877314	0.913769
SPAG7	17p13.2	0.007912	0.877499	0.913915
PSMB11	14q11.2	0.007897	0.877737	0.914116
KIAA0930	22q13.31	-0.00788	0.878068	0.914412
DGKK	Xp11.22	-0.00784	0.878678	0.915
P4HB	17q25.3	-0.00782	0.878944	0.91523
LRRFIP2	3p22.2	0.007787	0.879424	0.915681
DLGAP1	18p11.31	-0.00777	0.879745	0.915968
ASTL	2q11.2	-0.00776	0.879807	0.915985
NUS1	6q22.1	0.007757	0.879883	0.916017
COL6A4P1	3p25.1	-0.00775	0.880006	0.916098
SLC26A3	7q22.3-q31.1	0.007707	0.880651	0.916721
TRDMT1	10p13	-0.0077	0.88077	0.916797
PNPLA7	9q34.3	0.007684	0.881012	0.916967
TMEM253	14q11.2	0.007683	0.881025	0.916967
WDR38	9q33.3	-0.00767	0.881168	0.917057
ZNF732	4p16.3	0.007671	0.881203	0.917057
FAM102A	9q34.11	0.007603	0.882249	0.918099
ADAD2	16q24.1	-0.0076	0.882361	0.918167
SFTPC	8p21.3	-0.00759	0.882446	0.918208
PTGER4P2-CDK2AP2P2	9q13	0.007587	0.882505	0.918221
GPR78	4p16.1	0.00757	0.882763	0.918442
TBC1D32	6q22.31	0.007559	0.882935	0.918573
PIGG	4p16.3	-0.00755	0.88314	0.918739
C10ORF99	10q23.1	0.007535	0.883299	0.918856
VTN	17q11.2	0.007522	0.883494	0.919012

NKTR	3p22.1	-0.00751	0.883626	0.919102
PRDM16	1p36.32	0.00751	0.883679	0.919109
NCALD	8q22.3	0.007487	0.88404	0.919394
OR5B2	11q12.1	0.007486	0.884045	0.919394
ACTG1	17q25.3	-0.00747	0.884269	0.919579
MCEE	2p13.3	0.007467	0.884342	0.919607
IL18RAP	2q12.1	0.007447	0.884651	0.919869
BLVRA	7p13	0.007445	0.884686	0.919869
OR6C1	12q13.2	0.007437	0.884813	0.919953
CCNJ	10q24.1	-0.00743	0.884911	0.920008
MAPRE3	2p23.3	0.007416	0.885123	0.920181
HBA2	16p13.3	0.007405	0.885299	0.920315
RANBP10	16q22.1	-0.0074	0.885401	0.920374
CRABP1	15q25.1	-0.00739	0.885586	0.920518
ADAM3A	8p11.22	0.007367	0.885885	0.920781
PSG9	19q13.31	-0.00736	0.885938	0.920789
RHNO1	12p13.33	0.007358	0.886017	0.920823
HSD11B2	16q22.1	0.007349	0.886156	0.92092
ACP4	19q13.33	-0.00733	0.886385	0.92111
SIAH2	3q25.1	0.007331	0.886435	0.921114
BRCA1	17q21.31	-0.00732	0.886531	0.921166
SLC7A13	8q21.3	0.00732	0.886611	0.921201
TTY2	Yp11.2	-0.00731	0.886779	0.921328
DERL2	17p13.2	-0.0073	0.886855	0.92136
SIN3B	19p13.11	-0.00729	0.887077	0.921542
OR5P2	11p15.4	-0.00728	0.887224	0.9216
ICAM4	19p13.2	-0.00728	0.887225	0.9216
RPS15AP10	1p34.1	-0.00728	0.887283	0.921613
MYBBP1A	17p13.2	-0.00727	0.887375	0.921643
KLK15	19q13.33	0.007268	0.887404	0.921643
CFHR1	1q31.3	-0.00725	0.887686	0.921873
CLDN16	3q28	-0.00725	0.887718	0.921873
CCL3L1	17q21.1	-0.00724	0.887789	0.921899
HDGFL1	6p22.3	0.007235	0.887916	0.921984
ODF1	8q22.3	0.007223	0.888096	0.922095
AHSP	16p11.2	-0.00722	0.888152	0.922095
LOC340357	8p23.1-p22	0.007219	0.888162	0.922095
TCAIM	3p21.31	-0.0072	0.888386	0.922188
DEFB118	20q11.21	-0.0072	0.888435	0.922188
IFNA14	9p21.3	-0.0072	0.888435	0.922188
OR6K6	1q23.1	0.007201	0.888435	0.922188
GJB3	1p34.3	0.00718	0.888757	0.922474
SYK	9q22.2	0.007175	0.888833	0.922492
PAF1	19q13.2	-0.00717	0.888866	0.922492
NUP210	3p25.1	-0.00717	0.888943	0.922523
ZNF649	19q13.41	-0.00715	0.889184	0.922726
PDE6A	5q32	-0.00715	0.889256	0.922752
ZNF608	5q23.2	0.007126	0.889585	0.923047
TRIML1	4q35.2	0.007103	0.88994	0.923366
ATXN10	22q13.31	-0.00709	0.890096	0.923481
ANO10	3p22.1-p21.33	-0.00708	0.890262	0.923585
LINC00113	21q21.3	0.007081	0.890289	0.923585
HECTD2-AS1	10q23.32	0.007075	0.89038	0.923632
ZNF329	19q13.43	0.007071	0.890444	0.92365
USP11	Xp11.3	0.007057	0.890653	0.923819
CYP7A1	8q12.1	0.007046	0.890828	0.923953
FAM205BP	9p13.3	-0.00703	0.891111	0.924199
MMP21	10q26.2	0.00702	0.891218	0.924223



NXT2	Xq23	-0.00702	0.891226	0.924223
GAA	17q25.3	0.00699	0.891687	0.924653
ZNF311	6p22.1	0.006979	0.891853	0.924777
LOC100268168	5q35.1	-0.00697	0.892004	0.924885
PDP1	8q22.1	-0.00696	0.892151	0.924901
ANO3	11p14.3-p14.2	0.00696	0.892153	0.924901
CDKL4	2p22.1	-0.00696	0.892157	0.924901
KCNIP4-IT1	4p15.2	-0.00694	0.892396	0.925068
LINC00597	15q24.3	0.006943	0.89241	0.925068
TSBP1	6p21.32	0.00693	0.892603	0.925219
LINC02209	8p12	-0.00692	0.892702	0.925274
HADHA	2p23.3	-0.00691	0.892854	0.925336
CDON	11q24.2	0.006914	0.892854	0.925336
FOXN4	12q24.11	0.0069	0.89307	0.925512
OR51B4	11p15.4	-0.00688	0.893347	0.925722
ANKRD20A8P	2q11.1	0.006878	0.893414	0.925722
SPRR2E	1q21.3	-0.00687	0.893498	0.925722
CYP2C8	10q23.33	0.006869	0.893541	0.925722
CHRNB3	8p11.21	0.006866	0.893588	0.925722
CDC23	5q31.2	-0.00687	0.893594	0.925722
CLIC3	9q34.3	0.006866	0.893597	0.925722
LAIR2	19q13.42	0.006855	0.893762	0.925845
NFATC4	14q12	0.006837	0.894048	0.926063
FCAMR	1q32.1	0.006835	0.894068	0.926063
PRCP	11q14.1	-0.00683	0.894111	0.926063
CXXC1	18q21.1	-0.00683	0.894181	0.926088
MED11	17p13.2	0.006822	0.89428	0.926097
YWHAE	17p13.3	-0.00682	0.894287	0.926097
NUBPL	14q12	0.006818	0.894328	0.926097
HBG2	11p15.4	0.006809	0.894468	0.926193
EPPIN	20q13.12	-0.00681	0.894535	0.926215
GPAT4	8p11.21	-0.00679	0.894751	0.926346
CRX	19q13.33	0.006791	0.894754	0.926346
PRSS23	11q14.2	0.00676	0.895229	0.92679
SLC25A52	18q12.1	-0.00675	0.895325	0.926841
RPL4	15q22.31	0.00675	0.895375	0.926845
OR5L1	11q12.1	0.006747	0.895432	0.926856
PPM1F	22q11.22	-0.00673	0.895703	0.927082
SLC22A14	3p22.2	0.006727	0.895743	0.927082
SPNS2	17p13.2	-0.00666	0.896702	0.928027
UTY	Yq11.221	0.006655	0.896845	0.928127
RHOB	2p24.1	0.006647	0.896964	0.928202
NPDC1	9q34.3	0.006633	0.89718	0.928378
P2RX3	11q12.1	-0.00662	0.89734	0.928495
OR7E24	19p13.2	-0.00661	0.897516	0.928629
CCL24	7q11.23	0.006603	0.897649	0.928719
SGK2	20q13.12	-0.0066	0.897737	0.928762
LOC100129055	10p11.1	-0.00659	0.897835	0.928816
SALL3	18q23	-0.00659	0.897899	0.928834
AGBL3	7q33	-0.00657	0.898109	0.929003
RPL7L1	6p21.1	-0.00655	0.898454	0.929312
PPP1R15A	19q13.33	0.006536	0.898677	0.929463
PCDHGA8	5q31.3	-0.00653	0.898709	0.929463
FADS1	11q12.2	0.006529	0.898783	0.929463
LAT	16p11.2	-0.00653	0.898786	0.929463
OR5B12	11q12.1	-0.00651	0.899082	0.929722
ANXA8	10q11.22	0.006504	0.899171	0.929766
CTSD	11p15.5	0.006501	0.899224	0.929772

PRMT6	1p13.3	0.006495	0.899314	0.929817
PTK2	8q24.3	0.006478	0.899573	0.930037
C8B	1p32.2	0.006469	0.899721	0.930126
ATP8B5P	9p13.3	0.006467	0.899752	0.930126
PBX2	6p21.32	0.006451	0.899984	0.930318
SYT12	11q13.2	-0.00643	0.90032	0.930603
GUF1	4p12	-0.00643	0.900353	0.930603
COX6A2	16p11.2	-0.0064	0.90083	0.931048
CCDC32	15q15.1	0.006388	0.900971	0.931145
RAB41	Xq13.1	0.006361	0.901384	0.931525
DIRC1	2q32.2	0.006345	0.90163	0.931731
ERICH5	8q22.2	-0.00634	0.901724	0.931763
TGM7	15q15.2-q15.3	-0.00634	0.901769	0.931763
SNORA75	2q37.1	0.006332	0.901825	0.931763
PAQR7	1p36.11	-0.00633	0.901847	0.931763
ZNF117	7q11.21	-0.00633	0.90192	0.93177
BCKDHA	19q13.2	0.006324	0.901947	0.93177
SLC4A3	2q35	0.006319	0.902028	0.931806
VCX2	Xp22.31	-0.00631	0.902131	0.931864
SMR3A	4q13.3	0.006276	0.902693	0.932315
TFAMP1	7p22.3	-0.00628	0.902701	0.932315
BPIFB3	20q11.21	-0.00627	0.902754	0.932315
SPANXN4	Xq27.3	0.006272	0.902754	0.932315
SMCP	1q21.3	0.006265	0.902862	0.932379
TRIP6	7q22.1	-0.00625	0.903083	0.932558
SERPINC1	1q25.1	0.006231	0.903388	0.932826
ZFP1	16q23.1	0.006212	0.903684	0.933083
FRAT1	10q24.1	0.006208	0.903747	0.9331
ANXA3	4q21.21	-0.00619	0.904092	0.933322
EPHX2	8p21.2-p21.1	-0.00618	0.904146	0.933322
NCKAP5L	12q13.12	-0.00618	0.904222	0.933322
ZNF415	19q13.42	-0.00618	0.904229	0.933322
GLUD1	10q23.2	-0.00617	0.904252	0.933322
RRN3P3	16p12.2	0.006172	0.904288	0.933322
SDR42E1	16q23.3	-0.00617	0.904328	0.933322
DYRK4	12p13.32	-0.00617	0.904335	0.933322
BCDIN3D	12q13.12	-0.00616	0.904421	0.933363
SASS6	1p21.2	-0.00615	0.904624	0.933504
FBXO15	18q22.3	0.006149	0.904651	0.933504
FAM76A	1p35.3	0.006144	0.904734	0.933541
LINC01565	3q21.3	0.006108	0.905282	0.934059
VAMP1	12p13.31	0.006098	0.905445	0.934179
GOLGA8EP	15q11.2	-0.00609	0.905598	0.934289
GABPB1-AS1	15q21.2	-0.00608	0.905691	0.934298
TOP2A	17q21.2	0.006081	0.9057	0.934298
ATP1B4	Xq24	0.00607	0.905878	0.934433
PSD2	5q31.2	-0.00605	0.906181	0.934691
PIP5K1P1	6p24.3	-0.00605	0.906222	0.934691
TTC41P	12q23.3	-0.00603	0.906561	0.934959
NPHP3-AS1	3q22.1	0.006024	0.906575	0.934959
SRPK1	6p21.31	-0.00602	0.906641	0.934979
METRNL	17q25.3	-0.00601	0.906764	0.935058
DCDC1	11p13	0.005991	0.907086	0.935329
HES1	3q29	-0.00599	0.907136	0.935329
TEPP	16q21	0.005986	0.907167	0.935329
INTS6	13q14.3	0.005973	0.907365	0.935468
SYTL1	1p36.11	-0.00597	0.907395	0.935468
CASKIN1	16p13.3	-0.00595	0.907721	0.935728

ZNF334	20q13.12	-0.00595	0.90774	0.935728
RRP15	1q41	0.00593	0.908029	0.935976
LINC02694	15q14	-0.00592	0.908227	0.936133
MX1	21q22.3	0.005912	0.908316	0.936176
RARRES2	7q36.1	-0.0059	0.908507	0.936325
SLC1A6	19p13.12	-0.00589	0.908595	0.936367
LETM1	4p16.3	0.005887	0.908698	0.936418
DMRT1	9p24.3	-0.00588	0.908737	0.936418
PACS1	11q13.1-q13.2	0.005876	0.908868	0.936504
CTSW	11q13.1	0.005852	0.90923	0.936776
GJB4	1p34.3	0.005852	0.909237	0.936776
NEUROD4	12q13.2	0.00585	0.909272	0.936776
KCNK7	11q13.1	0.005839	0.90943	0.936886
OR3A1	17p13.3	-0.00584	0.909472	0.936886
FBXO4	5p13.1	0.00583	0.909579	0.936948
KCNH3	12q13.12	0.005825	0.909655	0.936978
SLITRK1	13q31.1	0.005815	0.909811	0.937091
OR1A1	17p13.3	-0.00581	0.909926	0.937122
ATP4B	13q34	-0.00581	0.909937	0.937122
SPATA16	3q26.31	-0.0058	0.909982	0.937122
LEUTX	19q13.2	0.005791	0.910176	0.937273
SBK2	19q13.42	-0.00579	0.910233	0.937284
NPIP13	16p11.2	-0.00578	0.91034	0.937346
PAIP1	5p12	0.00577	0.910507	0.93747
PSCA	8q24.3	-0.00577	0.910572	0.937489
HTR1A	5q12.3	-0.00572	0.911203	0.93809
C3ORF33	3q25.31	-0.00569	0.911674	0.938527
SLC25A30	13q14.13	0.005683	0.911845	0.938641
ZAP70	2q11.2	-0.00568	0.911914	0.938641
EDDM3B	14q11.2	-0.00568	0.911925	0.938641
HAS1	19q13.41	0.005666	0.912103	0.938776
MUC16	19p13.2	-0.00565	0.912335	0.938965
TIMP1	Xp11.3	0.005647	0.912409	0.938994
KIAA1841	2p15	-0.00564	0.912516	0.939054
SCTR	2q14.2	0.005634	0.912598	0.939054
HDDC3	15q26.1	-0.00563	0.912609	0.939054
NPFFR1	10q22.1	0.005615	0.912899	0.939304
RGS20	8q11.23	0.005602	0.9131	0.939464
PPP1R11	6p22.1	-0.0056	0.913164	0.939481
PGLYRP4	1q21.3	-0.00559	0.913232	0.939496
PGLYRP2	19p13.12	-0.00559	0.913273	0.939496
DLX6	7q21.3	-0.00559	0.913321	0.939498
SCARNA11	12p13.31	-0.00558	0.913405	0.939536
PTPDC1	9q22.32	-0.00558	0.913457	0.939541
EPHA2	1p36.13	0.005563	0.913693	0.939736
OR6B2	2q37.3	-0.00556	0.913795	0.939773
CCDC163	1p34.1	-0.00556	0.913823	0.939773
GNRH2	20p13	-0.00554	0.914071	0.93998
INTS4	11q14.1	0.005521	0.914348	0.940206
S100A12	1q21.3	0.005519	0.914386	0.940206
FAM169B	15q26.3	-0.00548	0.914907	0.940694
DKFZP434H168	16q13	-0.00544	0.915622	0.941381
ARGFX	3q13.33	0.005433	0.915705	0.941419
UBTF	17q21.31	0.005426	0.915822	0.94149
RIPOR1	16q22.1	0.005412	0.916035	0.941661
DEFB109B	8p23.1	-0.0054	0.916149	0.941729
KCTD2	17q25.1	0.005395	0.916292	0.941758
SGO1	3p24.3	-0.00539	0.916305	0.941758

GSPT2	Xp11.22	-0.00539	0.916318	0.941758
TNNI2	11p15.5	-0.00539	0.916431	0.941821
SNORA38	6p21.33	-0.00538	0.916473	0.941821
GLRA3	4q34.1	0.005378	0.916567	0.941869
OR2T1	1q44	0.005343	0.917105	0.942325
TXNDC8	9q31.3	-0.00534	0.917105	0.942325
FNDC5	1p35.1	0.005336	0.917208	0.942367
HTR1E	6q14.3	-0.00533	0.91724	0.942367
RAB25	1q22	-0.00533	0.91729	0.94237
PRAC1	17q21.32	-0.00533	0.917359	0.942393
OR4F5	1p36.33	0.00532	0.917462	0.942424
MCCC2	5q13.2	-0.00532	0.917483	0.942424
TRIM6-TRIM34	11p15.4	-0.0053	0.917692	0.942502
SLC12A1	15q21.1	0.005303	0.917722	0.942502
LINC00905	19p13.12	-0.0053	0.917724	0.942502
ABCG4	11q23.3	0.005301	0.91775	0.942502
SEC14L4	22q12.2	-0.0053	0.917795	0.942502
TATDN2	3p25.3	-0.00529	0.917952	0.94258
ALB	4q13.3	-0.00529	0.917965	0.94258
TAS2R8	12p13.2	0.005279	0.918086	0.942657
CEP112	17q24.1	0.005262	0.918348	0.942797
ENPP1	6q23.2	-0.00526	0.918375	0.942797
FSD1L	9q31.2	0.00526	0.91838	0.942797
FCHO1	19p13.11	-0.00526	0.918412	0.942797
ZNF550	19q13.43	0.005248	0.918565	0.942906
VENTXP7	3p24.3	-0.00522	0.919064	0.943349
HOXB8	17q21.32	-0.00521	0.919091	0.943349
HRK	12q24.22	0.005195	0.919385	0.943603
ARHGAP23	17q12	0.005177	0.919673	0.943851
DNAJC6	1p31.3	-0.00516	0.919973	0.94411
LINC00235	16p13.3	-0.00515	0.920061	0.944152
UBQLNL	11p15.4	0.005137	0.920284	0.944332
GCC1	7q32.1	0.005129	0.920409	0.944412
NXPH3	17q21.33	-0.00512	0.920536	0.944487
MIR1-1HG	20q13.33	0.005118	0.920576	0.944487
PLPPR3	19p13.3	-0.00509	0.921088	0.944963
CLTB	5q35.2	-0.00508	0.921178	0.945008
DUSP3	17q21.31	0.005066	0.921378	0.945164
XIST	Xq13.2	-0.00505	0.921692	0.945438
SMCR5	-	0.005016	0.922153	0.945862
ANKRD30BL	2q21.2	-0.005	0.922429	0.946022
TMEM37	2q14.2	0.004998	0.92243	0.946022
DGKQ	4p16.3	-0.005	0.92245	0.946022
TRIM43	2q11.1	-0.00499	0.922509	0.946033
PELP1	17p13.2	0.004982	0.922684	0.946135
CST11	20p11.21	0.00498	0.922714	0.946135
EPB41L5	2q14.2	0.004978	0.92275	0.946135
OR10AD1	12q13.11	-0.00496	0.92299	0.946278
FAM76B	11q21	0.004962	0.92299	0.946278
CLDN10	13q32.1	0.00496	0.923031	0.946278
PIM2	Xp11.23	0.004953	0.92314	0.946326
WEE2	7q34	0.00495	0.923172	0.946326
ABCB1	7q21.12	-0.00494	0.923336	0.946446
DPH3	3p25.1	0.004928	0.923516	0.946582
ATAD2	8q24.13	0.004911	0.923779	0.946772
C15ORF40	15q25.2	-0.00491	0.923796	0.946772
NKAIN3	8q12.3	0.0049	0.923951	0.946882
GOLGA6B	15q24.1	0.004896	0.924014	0.946898

BAIAP3	16p13.3	-0.00489	0.924119	0.946957
SLC22A25	11q12.3	-0.00488	0.924289	0.947005
FAM74A4	9q12	0.004878	0.92429	0.947005
MORC1	3q13.13	-0.00488	0.924307	0.947005
LINC00159	21q22.11	-0.00484	0.92482	0.947481
PCARE	2p23.2	-0.00483	0.925012	0.947629
ZBTB11-AS1	3q12.3	-0.00483	0.925059	0.947629
TMEM144	4q32.1	-0.00482	0.925165	0.94769
RPTOR	17q25.3	0.004817	0.925238	0.947716
INSC	11p15.2	0.004808	0.925371	0.947803
TRARG1	17p13.3	0.004797	0.925546	0.947894
SNORA70	Xq28	0.004797	0.925554	0.947894
ADGRG4	Xq26.3	-0.00479	0.925619	0.947913
RANBP6	9p24.1	-0.00479	0.925691	0.947938
EIF1B	3p22.1	0.004746	0.926341	0.948555
MAGED4	Xp11.22	0.004732	0.926551	0.948709
LOC729603	6q25.3	-0.00473	0.926586	0.948709
DPRXP4	17q11.2	-0.00472	0.926686	0.948725
OXTR	3p25.3	0.004723	0.926698	0.948725
LPAL2	6q25.3	0.00472	0.926745	0.948725
EIF3L	22q13.1	-0.00468	0.927367	0.949314
NOBOX	7q35	0.004655	0.927744	0.949651
CHAMP1	13q34	-0.00465	0.927814	0.949675
LHFPL5	6p21.31	-0.00463	0.928081	0.9499
GZMH	14q12	-0.00461	0.928364	0.950134
IL31	12q24.31	0.004612	0.928405	0.950134
ASPG	14q32.33	0.004603	0.928547	0.95023
SNORA80E	1q22	0.004589	0.928766	0.950406
LINC00242	6q27	0.004585	0.928832	0.950416
GRSF1	4q13.3	-0.00458	0.92887	0.950416
SAMD14	17q21.33	-0.00454	0.929484	0.950995
LINC00928	15q26.1	0.004534	0.929623	0.951089
RNF41	12q13.3	0.004522	0.9298	0.951222
ZDHHC14	6q25.3	0.004505	0.93007	0.951447
LOC388242	16p11.2	-0.0045	0.930137	0.951447
OR9Q2	11q12.1	-0.0045	0.930163	0.951447
PPEF2	4q21.1	0.004485	0.930373	0.951613
POLR1A	2p11.2	0.004479	0.93047	0.95164
STRBP	9q33.3	0.004473	0.930557	0.95164
HAPLN4	19p13.11	0.004472	0.930578	0.95164
OR5H2	3q11.2	-0.00447	0.93059	0.95164
IFT74	9p21.2	-0.00446	0.930714	0.951718
RNF217-AS1	6q22.31	-0.00445	0.930951	0.951912
GNA12	7p22.3-p22.2	0.004438	0.931104	0.95202
CC2D2B	10q24.1	0.004403	0.931639	0.952519
NLRP13	19q13.43	-0.0044	0.931696	0.952528
LCN8	9q34.3	0.004388	0.93188	0.952668
GRM3	7q21.11-q21.12	-0.00438	0.931953	0.952693
PGBD1	6p22.1	0.004379	0.932017	0.952693
VMO1	17p13.2	0.004377	0.932047	0.952693
OVCH1	12p11.22	-0.00437	0.932223	0.952824
CCDC70	13q14.3	-0.00436	0.932275	0.952828
CGB2	19q13.33	-0.00435	0.93239	0.952896
CYP27B1	12q14.1	0.00435	0.932474	0.952896
H2BFXP	Xq22.2	0.004349	0.932484	0.952896
NVL	1q42.11	-0.00434	0.932649	0.953016
LRCH1	13q14.13-q14.2	0.004306	0.933141	0.95347
TFB2M	1q44	0.004299	0.933254	0.953537

RNF44	5q35.2	-0.0043	0.933308	0.953543
RBM46	4q32.1	0.004259	0.933871	0.95407
CCNE2	8q22.1	-0.00424	0.934218	0.954376
TFEB	6p21.1	-0.00422	0.934485	0.9546
MED15	22q11.21	0.004215	0.934565	0.954633
RNF133	7q31.32	-0.00421	0.93469	0.954659
SLC26A5	7q22.1	-0.0042	0.93474	0.954659
TEC	4p12-p11	0.004203	0.934748	0.954659
MYCNOS	2p24.3	0.0042	0.934796	0.954659
DUSP13	10q22.2	-0.0042	0.934829	0.954659
SHOX	Xp22.33 and Yp11.2	-0.00418	0.935081	0.954868
MED9	17p11.2	0.004163	0.935362	0.955106
C16ORF82	16p12.1	-0.00416	0.935439	0.955136
SEPTIN12	16p13.3	-0.00415	0.935533	0.955162
GABARAP	17p13.1	0.004147	0.935609	0.955162
BEX5	Xq22.1	0.004146	0.935631	0.955162
ATP6V0A1	17q21.2	-0.00414	0.935655	0.955162
ADH7	4q23	0.004113	0.936141	0.955609
SRSF1	17q22	0.004096	0.936399	0.955824
GPX3	5q33.1	0.004075	0.936729	0.956063
GSTM2	1p13.3	0.004073	0.936763	0.956063
PRMT8	12p13.32	0.004072	0.936777	0.956063
CXCL5	4q13.3	-0.00407	0.936856	0.956095
LY6D	8q24.3	0.004063	0.936919	0.956095
ATXN8OS	13q21.33	-0.00406	0.936997	0.956095
OR4C12	11p11.12	0.004054	0.937046	0.956095
CCDC18	1p22.1	0.004054	0.937046	0.956095
ZNF383	19q13.12	0.004017	0.937632	0.956643
PEX5L	3q26.33	-0.004	0.937872	0.956837
ARMCX5	Xq22.1	-0.00399	0.93798	0.956837
FAM74A3	9q21.11	0.003993	0.938005	0.956837
OR4A47	11p11.2	-0.00399	0.93804	0.956837
PAX6	11p13	0.003989	0.93806	0.956837
CTSC	11q14.2	0.003963	0.938464	0.957188
OCM	7p22.1	-0.00396	0.9385	0.957188
VAMP7	Xq28 and Yq12	0.003936	0.938878	0.957524
ZNF554	19p13.3	-0.0039	0.939398	0.958006
C21ORF62-AS1	21q22.11	-0.00389	0.939533	0.958095
ZNF764	16p11.2	0.003875	0.939822	0.958332
FMO6P	1q24.3	-0.00387	0.939861	0.958332
GPCPD1	20p12.3	0.003858	0.940096	0.958522
PSMA4	15q25.1	-0.00385	0.940242	0.958596
C5ORF46	5q32	-0.00384	0.940308	0.958596
SPO11	20q13.31	-0.00384	0.940312	0.958596
FKBP10	17q21.2	-0.00384	0.940379	0.958616
SOX3	Xq27.1	-0.00381	0.940889	0.959087
GSAP	7q11.23	-0.00379	0.941107	0.95926
SPAG11A	8p23.1	0.003777	0.941345	0.959448
CXCL11	4q21.1	0.003774	0.941387	0.959448
LCE1D	1q21.3	-0.00377	0.941529	0.959527
ZNF252P	8q24.3	-0.00376	0.94156	0.959527
RAB3A	19p13.11	0.003755	0.941682	0.959569
HBBP1	11p15.4	-0.00375	0.941697	0.959569
TBR1	2q24.2	0.00374	0.941922	0.959749
NPPB	1p36.22	0.003735	0.941996	0.959776
SERPINB13	18q21.33	-0.00372	0.942178	0.959897
PRKN	6q26	0.003721	0.942211	0.959897
NUP54	4q21.1	-0.00371	0.942331	0.959971

CLEC2L	7q34	0.003704	0.94248	0.960069
KIR2DL1	19q13.42	-0.0037	0.942525	0.960069
ACTR6	12q23.1	-0.0037	0.942572	0.960069
TAF5	10q24.33	-0.00368	0.942895	0.96035
ALDH2	12q24.12	-0.00367	0.943076	0.960485
GSTA2	6p12.2	-0.00364	0.943483	0.960851
GPX7	1p32.3	0.003597	0.94414	0.961433
KIAA1191	5q35.2	-0.0036	0.94415	0.961433
ICOSLG	21q22.3	0.003582	0.944371	0.961577
LINC00635	3q13.12	0.003581	0.944388	0.961577
MAX	14q23.3	0.003576	0.944468	0.961609
TBC1D24	16p13.3	0.003541	0.945002	0.962058
ELL3	15q15.3	0.003541	0.945005	0.962058
GCNT7	20q13.31	0.003519	0.945339	0.962349
SKP1	5q31.1	0.003512	0.945449	0.962413
PRG4	1q31.1	-0.0035	0.945619	0.962537
COX8C	14q32.12	0.003489	0.945812	0.962684
TMEM95	17p13.1	0.003471	0.946094	0.962923
GPR158-AS1	10p12.1	-0.00346	0.946258	0.96304
SHMT1	17p11.2	-0.00344	0.946547	0.963284
MAPK11	22q13.33	-0.00344	0.946594	0.963284
PRICKLE4	6p21.1	0.003402	0.947157	0.963764
NPSR1-AS1	7p14.3	0.003402	0.947162	0.963764
WTIP	19q13.11	0.003374	0.947599	0.96416
MBL2	10q21.1	0.003367	0.947699	0.964213
FAM41AY1	Yq11.222	0.003362	0.947784	0.96425
DNAAF4	15q21.3	0.003339	0.948137	0.96456
HELLS	10q23.33	-0.00333	0.948347	0.964694
TMEM121	14q32.33	-0.00332	0.948374	0.964694
FAM50B	6p25.2	-0.00332	0.948437	0.964694
SLC15A2	3q13.33	-0.00332	0.94846	0.964694
SLC22A13	3p22.2	0.003303	0.948688	0.964876
LYPD1	2q21.2	0.003292	0.94886	0.965001
ZNF92	7q11.21	0.003279	0.949072	0.965162
DIO3	14q32.31	0.003276	0.949113	0.965162
PRDM15	21q22.3	-0.00327	0.949188	0.965189
SNX12	Xq13.1	0.003266	0.949269	0.965221
SLC52A3	20p13	-0.00324	0.949626	0.965536
AFM	4q13.3	-0.00323	0.949755	0.965618
GSTT4	22q11.23	-0.00323	0.949815	0.96563
LOC285593	5q35.2	0.003216	0.950047	0.965783
MYOZ1	10q22.2	-0.00321	0.950104	0.965783
ZNF737	19p12	-0.00321	0.95011	0.965783
ZNF560	19p13.2	0.003198	0.950325	0.965952
SYT14P1	4q13.2	-0.00319	0.950452	0.966032
ZNF780B	19q13.2	-0.00317	0.950731	0.966267
NEURL4	17p13.1	-0.00314	0.951202	0.966697
CMAS	12p12.1	0.003138	0.951259	0.966705
PRR27	4q13.3	0.003128	0.951415	0.966815
KCNH8	3p24.3	0.00311	0.951683	0.967038
DNA2	10q21.3	-0.00309	0.95193	0.96724
FAM71C	12q23.1	-0.00308	0.952145	0.967397
DDX3Y	Yq11.221	-0.00308	0.952181	0.967397
NEUROD2	17q12	-0.00305	0.952645	0.967804
CDHR2	5q35.2	0.003046	0.952679	0.967804
KLRA1P	12p13.2	-0.00303	0.952927	0.968008
RBM3AP	Yp11.2	0.00302	0.953089	0.968074
OR8B8	11q24.2	-0.00302	0.953089	0.968074

MMS19	10q24.1	-0.00301	0.953263	0.968202
ZBTB45	19q13.43	-0.003	0.953403	0.968253
OR8D1	11q24.2	-0.003	0.95341	0.968253
FIP1L1	4q12	-0.00298	0.953694	0.968451
LILRP2	19q13.42	0.00298	0.953702	0.968451
EEF1DP3	13q13.1	-0.00297	0.953907	0.96861
SHH	7q36.3	-0.00296	0.954093	0.96875
FAM237A	2q33.3	-0.00294	0.954251	0.968861
HCRTR2	6p12.1	0.002938	0.954365	0.968927
RPAP3	12q13.11	0.002933	0.954432	0.968947
JMJD1C-AS1	10q21.3	0.002929	0.954492	0.968959
PLAC9P1	2q21.1	0.002918	0.954672	0.969092
CYP2A7	19q13.2	0.002914	0.954738	0.969109
RGMB	5q15	0.002888	0.955127	0.969424
OR2B3	6p22.1	-0.00289	0.955146	0.969424
TMEM209	7q32.2	0.002882	0.955234	0.969424
EML5	14q31.3	-0.00288	0.955241	0.969424
OR2H1	6p22.1	0.002872	0.955376	0.969512
PIWIL2	8p21.3	-0.00287	0.955471	0.969559
EMC4	15q14	-0.00285	0.955779	0.969822
VLDLR-AS1	9p24.2	-0.00284	0.955866	0.969862
TP53	17p13.1	0.002817	0.956236	0.970188
SOX14	3q22.3	-0.0028	0.956468	0.970374
PLAAT1	3q29	-0.00279	0.956594	0.970453
NUCB1	19q13.33	-0.00279	0.956687	0.970498
TPTE2P1	13q12.13	0.002784	0.956749	0.970512
RMDN2	2p22.2	0.00276	0.957122	0.970841
FZD3	8p21.1	0.002744	0.957376	0.971035
PARN	16p13.12	-0.00274	0.957439	0.971035
NPC2	14q24.3	-0.00273	0.957509	0.971035
BFAR	16p13.12	-0.00273	0.957546	0.971035
HNRNPH3	10q21.3	0.002729	0.957596	0.971035
EPHB1	3q22.2	0.002726	0.957643	0.971035
RNF6	13q12.13	0.002726	0.957653	0.971035
XPO4	13q12.11	0.002717	0.957787	0.971122
FRG2	4q35.2	-0.0027	0.957992	0.971281
RFWD3	16q23.1	-0.00267	0.958452	0.971697
ZBTB2	6q25.1	-0.00267	0.958555	0.971704
AFG1L	6q21	-0.00267	0.958555	0.971704
PSMG2	18p11.21	0.002661	0.958662	0.971763
TMEM158	3p21.31	0.002636	0.959043	0.9721
CST1	20p11.21	-0.00263	0.959123	0.972132
USH2A	1q41	-0.00262	0.959257	0.972219
HSFY2	Yq11.222	0.00259	0.959766	0.972685
FLJ36000	17p11.2	-0.00259	0.959829	0.9727
NAA15	4q31.1	-0.00257	0.959996	0.972804
FAM184A	6q22.31	-0.00257	0.960029	0.972804
KRTAP4-3	17q21.2	-0.00256	0.960299	0.973029
SLC9A3R2	16p13.3	-0.00254	0.96058	0.973264
SEMA6A	5q23.1	-0.00252	0.960808	0.973445
A1CF	10q11.23	0.002513	0.960958	0.973548
NQO1	16q22.1	-0.0025	0.961102	0.973645
TFPI	2q32.1	0.00249	0.961309	0.973806
ANKDD1A	15q22.31	0.002484	0.961406	0.973854
FOLR3	11q13.4	0.002474	0.961567	0.973969
BSPRY	9q32	-0.00247	0.961626	0.973979
CFHR2	1q31.3	0.002465	0.961697	0.974001
HSPB6	19q13.12	-0.00246	0.96177	0.974026



ZBED3-AS1	5q13.3	0.002446	0.962003	0.974165
LGR6	1q32.1	0.002445	0.962004	0.974165
PRRT1	6p21.32	-0.00244	0.962124	0.974237
ROBO3	11q24.2	-0.00243	0.962193	0.974258
SRR	17p13.3	-0.00242	0.962322	0.974339
GFOD2	16q22.1	-0.00242	0.962445	0.974415
POU2F3	11q23.3	0.002412	0.962522	0.974443
CALCOCO1	12q13.13	0.002396	0.962776	0.974651
MAGEF1	3q27.1	0.002372	0.963137	0.974967
WDR3	1p12	-0.00231	0.964083	0.975873
ODF2L	1p22.3	0.002309	0.96413	0.975873
INSL6	9p24.1	0.002301	0.964252	0.975947
SNORA55	1p34.3	-0.00228	0.964564	0.976214
JAK3	19p13.11	-0.00227	0.964789	0.976392
NCF4	22q12.3	-0.00222	0.965501	0.977063
PRNP	20p13	0.002207	0.965708	0.977224
GDPD1	17q22	0.002188	0.965994	0.977463
BARHL1	9q34.13	0.002162	0.966402	0.977827
ANKH	5p15.2	0.002159	0.966453	0.97783
AKT1	14q32.33	-0.00215	0.966554	0.977882
DOK7	4p16.3	0.002146	0.966651	0.977888
FABP7	6q22.31	0.002143	0.966697	0.977888
EPS8L1	19q13.42	0.002141	0.966734	0.977888
ZNF192P1	6p22.1	-0.00214	0.966781	0.977888
CCNB2	15q22.2	0.002136	0.966804	0.977888
GSG1	12p13.1	0.002133	0.966861	0.977896
ZC2HC1B	6q24.2	0.002122	0.967022	0.977963
VCP	9p13.3	-0.00212	0.967025	0.977963
WDR78	1p31.3	-0.0021	0.967339	0.978232
XRN2	20p11.22	0.002096	0.967433	0.978277
DEFB135	8p23.1	-0.00209	0.967513	0.978301
VWA5B2	3q27.1	-0.00209	0.96758	0.978301
TGIF1	18p11.31	0.002085	0.967603	0.978301
ZNF788P	19p13.2	0.002076	0.967747	0.978387
FRA10AC1	10q23.33	0.002071	0.967821	0.978387
TBXT	6q27	-0.00207	0.967835	0.978387
SATB2-AS1	2q33.1	-0.00206	0.96795	0.978454
HSD3B7	16p11.2	0.002034	0.968396	0.978855
PYGB	20p11.21	-0.00202	0.968596	0.979009
TAS2R31	12p13.2	-0.00199	0.969038	0.979375
CDRT15P1	17p12	-0.00199	0.969056	0.979375
TGS1	8q12.1	0.001973	0.969335	0.979607
GNG3	11q12.3	-0.00197	0.969401	0.979624
ID2	2p25.1	-0.00196	0.969569	0.979745
CBFB	16q22.1	0.001935	0.969934	0.980025
ADPRM	17p13.1	0.001934	0.969944	0.980025
SEH1L	18p11.21	-0.00193	0.970014	0.980044
TSPAN7	Xp11.4	-0.00193	0.970061	0.980044
GOLGA2P3Y	Yq11.23	0.001919	0.970186	0.980121
C17ORF64	17q23.2	-0.00191	0.970272	0.980141
SSX7	Xp11.22	-0.00191	0.970365	0.980141
SBDS	7q11.21	-0.00191	0.970385	0.980141
TMPRSS3	21q22.3	-0.0019	0.970402	0.980141
OR4D5	11q24.1	0.001899	0.970495	0.98015
PTH2	19q13.33	-0.00189	0.970561	0.98015
GBX1	7q36.1	0.001893	0.970579	0.98015
BRDTP1	Xq21.33	-0.00189	0.970606	0.98015
MAP10	1q42.2	0.001855	0.971176	0.980662

RAP2C	Xq26.2	0.001853	0.971211	0.980662
NPAS2	2q11.2	-0.00184	0.971365	0.980748
OR5111	11p15.4	0.001841	0.971394	0.980748
NUPR2	7p11.2	-0.00184	0.971483	0.980788
ZNF841	19q13.41	0.001826	0.971619	0.980875
KRT13	17q21.2	0.00182	0.971714	0.980875
CD8B	2p11.2	-0.00182	0.971716	0.980875
S100A7A	1q21.3	-0.00179	0.972199	0.981313
GHITM	10q23.1	-0.00177	0.972562	0.981532
KATNAL2	18q21.1	0.001763	0.972599	0.981532
C2ORF27B	2q21.2	0.001762	0.972615	0.981532
FBP1	9q22.32	-0.00176	0.972616	0.981532
KRT33A	17q21.2	0.001759	0.972661	0.981532
DYDC1	10q23.1	-0.00175	0.972731	0.981554
CDKL3	5q31.1	-0.00175	0.972873	0.981647
IRF2BP2	1q42.3	0.001727	0.973158	0.981844
IL21	4q27	-0.00173	0.97318	0.981844
USP50	15q21.2	-0.00172	0.973216	0.981844
MGC2889	3q29	-0.00171	0.973355	0.981935
GPX6	6p22.1	-0.0017	0.973625	0.982158
ZNF432	19q13.41	-0.00169	0.973703	0.982181
ZNF214	11p15.4	0.001689	0.973746	0.982181
TTC16	9q34.11	0.001678	0.97392	0.982307
FAM162B	6q22.1	-0.00167	0.97403	0.982354
LIG4	13q33.3	-0.00167	0.974064	0.982354
MBL1P	10q22.3	0.001665	0.974122	0.982362
GPC4	Xq26.2	0.001648	0.974385	0.982566
KCNJ12	17p11.2	-0.00165	0.974422	0.982566
ESPL1	12q13.13	0.001642	0.974489	0.982584
INTS9	8p21.1	-0.00164	0.974565	0.982612
R3HDM2	12q13.3	0.001631	0.974646	0.982644
OR2M4	1q44	-0.00162	0.974788	0.982717
CTAG2	Xq28	-0.00162	0.974885	0.982717
KDM4E	11q21	-0.00161	0.974908	0.982717
TMEM247	2p21	-0.00161	0.974915	0.982717
PRO0611	1p35.2	0.001605	0.975062	0.982775
ZNF716	7p11.2	0.001601	0.975122	0.982775
PRG3	11q12.1	0.0016	0.975129	0.982775
ACTRT1	Xq25	0.001595	0.975209	0.982775
EPB41	1p35.3	-0.00159	0.975218	0.982775
TAC3	12q13.3	-0.00158	0.975453	0.982963
SERAC1	6q25.3	0.00157	0.975602	0.983063
KCNC2	12q21.1	-0.00157	0.975657	0.983069
F11	4q35.2	-0.00156	0.975739	0.983102
OR10S1	11q24.1	-0.00154	0.976015	0.983331
STATH	4q13.3	0.001526	0.976284	0.983553
RHOC	1p13.2	-0.00152	0.976348	0.983568
ZNF700	19p13.2	-0.00151	0.976586	0.983757
LCE1F	1q21.3	-0.0015	0.976736	0.983859
TFAP2B	6p12.3	0.001476	0.977056	0.984133
SHROOM4	Xp11.22	-0.00147	0.977171	0.984198
ACOT11	1p32.3	0.001442	0.977582	0.984537
CCL3	17q12	-0.00144	0.977606	0.984537
ANKRA2	5q13.2	0.001436	0.977676	0.984559
DAOA	13q33.2 13q34	0.001429	0.977785	0.984618
OR52B6	11p15.4	0.001389	0.978418	0.985207
EXOC1L	4q12	-0.00138	0.9785	0.98524
ASAP1-IT1	8q24.21	-0.00134	0.979129	0.985824

SNORA25		11q21	-0.00134	0.979219	0.985864
	11-Mar	5p15.1	0.001331	0.979321	0.985918
ARG2		14q24.1	0.00131	0.979643	0.986192
HLF		17q22	-0.0013	0.979847	0.986348
C5ORF47		5q35.2	-0.00129	0.979904	0.986356
SVOPL		7q34	-0.00128	0.980073	0.986477
PLSCR2		3q24	0.001274	0.980198	0.986553
SMARCA4		19p13.2	0.001271	0.980248	0.986554
CDH7		18q22.1	-0.00126	0.980484	0.986742
SGO2		2q33.1	0.001245	0.980653	0.986862
TIGD2		4q22.1	0.001241	0.980713	0.986873
TREH		11q23.3	-0.00123	0.9809	0.987008
DNASE1L1		Xq28	0.001222	0.981008	0.987008
OXA1L		14q11.2	-0.00122	0.981038	0.987008
FEZF1		7q31.32	0.00122	0.981045	0.987008
ANXA4		2p13.3	0.001212	0.981158	0.987073
COX5A		15q24.2	-0.00121	0.981262	0.987127
NR1I2		3q13.33	-0.0012	0.981379	0.987196
OBSL1		2q35	0.001185	0.98159	0.987358
BHLHE23		20q13.33	0.00114	0.982282	0.987979
RNF34		12q24.31	-0.00114	0.982306	0.987979
CYP4F11		19p13.12	-0.00111	0.982819	0.988446
RNF227		17p13.1	0.00107	0.983369	0.988921
LY86-AS1		6p25.1	-0.00107	0.983391	0.988921
NRSN2		20p13	0.001055	0.9836	0.989072
PAGE5		Xp11.21	-0.00105	0.983639	0.989072
KLRC1		12p13.2	-0.00104	0.983785	0.989123
CEACAM16		19q13.31-q13.32	-0.00104	0.983789	0.989123
GPATCH4		1q22-q23.1	-0.00104	0.983891	0.989176
CCDC136		7q32.1	0.000992	0.984584	0.989823
C1ORF68		1q21.3	-0.00098	0.984714	0.989904
CRYBA2		2q35	0.000949	0.985257	0.9904
GPSM1		9q34.3	0.000937	0.98544	0.990535
BPIFB4		20q11.21	-0.00093	0.985548	0.990571
KRT36		17q21.2	-0.00093	0.985598	0.990571
LRATD1		2p24.3	0.000923	0.985651	0.990571
BEND7		10p13	-0.00092	0.985674	0.990571
IGF2		11p15.5	0.000917	0.985745	0.990592
MSH4		1p31.1	0.000904	0.985942	0.99072
LYPD6		2q23.2	0.000899	0.986026	0.99072
CEPT1		1p13.3	-0.0009	0.986066	0.99072
KRTAP4-12		17q21.2	-0.0009	0.98607	0.99072
CERS3		15q26.3	0.00089	0.986166	0.990767
RPL21P44		4q12	-0.00088	0.98631	0.990862
MYBPH		1q32.1	0.000867	0.986529	0.991004
UVRAG		11q13.5	0.000865	0.986551	0.991004
ZNF232		17p13.2	0.00083	0.987106	0.991513
IL9		5q31.1	0.000817	0.987307	0.991656
LIM2		19q13.41	0.000813	0.987362	0.991656
ST7L		1p13.2	0.000808	0.987441	0.991656
VCPKMT		14q21.3	-0.00081	0.987448	0.991656
TMPRSS11BNL		4q13.2	0.000796	0.987624	0.991784
LINC00452		13q34	-0.00079	0.987759	0.99186
ZNF763		19p13.2	-0.00079	0.987799	0.99186
LOC93429		19q13.32	0.000764	0.988119	0.992131
OR4N4		15q11.2	-0.00076	0.988168	0.992132
TYRO3		15q15.1	-0.00074	0.988431	0.992272
MGST3		1q24.1	-0.00074	0.988468	0.992272

KRT19	17q21.2	0.000741	0.988481	0.992272
MYOZ2	4q26	0.000739	0.98851	0.992272
BRS3	Xq26.3	-0.00074	0.988572	0.992272
C12ORF56	12q14.2	-0.00073	0.988606	0.992272
TKTL1	Xq28	-0.00073	0.988667	0.992284
CYP2B7P	19q13.2	-0.00072	0.988826	0.992351
PXT1	6p21.31	0.000718	0.988833	0.992351
PRG2	11q12.1	-0.00071	0.98901	0.992471
ZNF100	19p12	-0.0007	0.98908	0.992471
PSG1	19q13.2	0.000701	0.989101	0.992471
OR5K4	3q11.2	-0.0007	0.989168	0.992489
AGRP	16q22.1	0.000691	0.989252	0.992492
NFYC	1p34.2	-0.00069	0.989271	0.992492
PPM1H	12q14.1-q14.2	-0.00068	0.989445	0.992601
DACT2	6q27	0.000677	0.989478	0.992601
FOXL2	3q22.3	-0.00066	0.989709	0.992782
RAET1E	6q25.1	0.00065	0.989892	0.992916
MXRA7	17q25.1	0.000644	0.989987	0.992962
NCMAP	1p36.11	0.000597	0.990716	0.993644
HEATR9	17q12	-0.00059	0.990811	0.993689
MSANTD4	11q22.3	0.000585	0.99091	0.993739
ANKRD1	10q23.31	-0.00058	0.990993	0.993772
IFNK	9p21.2	-0.00057	0.991179	0.993909
CCDC110	4q35.1	0.000515	0.991988	0.994627
ARMH1	1p34.1	0.000515	0.991994	0.994627
CYP2A6	19q13.2	-0.00051	0.992059	0.994641
CCDC121	2p23.3	-0.0005	0.992302	0.994836
REXO1L6P	8q21.2	-0.00048	0.992532	0.995016
GAGE2B	Xp11.23	-0.00048	0.992589	0.995024
C9ORF50	9q34.11	0.000459	0.992859	0.995244
RNF146	6q22.33	0.000438	0.993186	0.995522
HOXB7	17q21.32	0.000405	0.993704	0.995974
PMS2P9	7q11.23	-0.0004	0.993736	0.995974
DHX38	16q22.2	0.000353	0.994511	0.996701
FBXO47	17q12 17q12	0.000323	0.994973	0.997064
DUSP11	2p13.1	-0.00032	0.994979	0.997064
DLK2	6p21.1	0.00032	0.995023	0.997064
CYTH2	19q13.33	-0.00031	0.99525	0.997225
POM121L10P	22q11.23	-0.0003	0.995344	0.997225
SIGLEC16	19q13.33	0.000296	0.995404	0.997225
OR13D1	9q31.1	0.000295	0.995414	0.997225
SEC14L3	22q12.2	0.000294	0.995432	0.997225
SCOC	4q31.1	0.000284	0.995592	0.997335
SNX10	7p15.2	-0.00027	0.995806	0.997499
NSMAF	8q12.1	0.00026	0.99596	0.997512
PSIP1	9p22.3	-0.00026	0.996003	0.997512
PRKCQ	10p15.1	0.000254	0.996053	0.997512
DUXA	19q13.43	-0.00025	0.996099	0.997512
NT5DC3	12q23.3	-0.00025	0.996174	0.997512
SARDH	9q34.2	0.000245	0.99619	0.997512
ATG7	3p25.3	-0.00024	0.996217	0.997512
ESPNL	2q37.3	-0.00024	0.996217	0.997512
PCCA	13q32.3	0.000221	0.996562	0.997807
OOEP	6q13	0.000217	0.996628	0.997824
HOXA5	7p15.2	0.000202	0.996856	0.998002
TRIM62	1p35.1	-0.00018	0.997157	0.998254
CFB	6p21.33	0.000155	0.997592	0.998633
DKFZP434L192	7p11.2	-0.00015	0.997635	0.998633

OR11A1	6p22.1	0.000145	0.997748	0.998695
CCDC185	1q41	-0.00014	0.997819	0.998715
NEK5	13q14.3	-0.00014	0.997867	0.998715
SPTBN2	11q13.2	-0.00013	0.997961	0.998758
ABCD4	14q24.3	0.000124	0.998071	0.998809
ARMC1	8q13.1	-0.00012	0.998111	0.998809
IFI6	1p35.3	0.000112	0.998262	0.998899
UGT2A1	4q13.3	-0.00011	0.998322	0.998899
DNAAF3	19q13.42	-0.00011	0.99835	0.998899
ANKRD29	18q11.2	0.000101	0.998432	0.998931
NAGK	2p13.3	8.04E-05	0.99875	0.999199
PDE8B	5q13.3	6.87E-05	0.998933	0.999332
LBX1	10q24.32	#####	0.999061	0.999411
PPP2CA	5q31.1	4.68E-05	0.999272	0.999565
ECHDC1	6q22.33	#####	0.999316	0.999565
CNPY1	7q36.3	3.67E-05	0.99943	0.999586
ARHGEF4	2q21.1	3.46E-05	0.999463	0.999586
FXD3	19q13.12	#####	0.999523	0.999586
CCDC126	7p15.3	2.98E-05	0.999537	0.999586
ZNF683	1p36.11	1.69E-05	0.999737	0.999737

**Part 4****Coexpression genes of IQGAP2 in Colorectal Adenocarcinoma**

Correlated Gene	Cytoband	Spearman	p-Value	q-Value
LIMA1	12q13.12	0.608758	4.20E-40	8.41E-36
CLINT1	5q33.3	0.597375	2.58E-38	2.59E-34
AGR2	7p21.1	0.587609	7.77E-37	5.19E-33
CREB3L1	11p11.2	0.555043	3.00E-32	1.50E-28
TMEM246	9q31.1	0.552063	7.43E-32	2.98E-28
VWA3B	2q11.2	0.550746	1.11E-31	3.70E-28
STYK1	12p13.2	0.549372	1.68E-31	4.80E-28
ETNK2	1q32.1	-0.54135	1.81E-30	4.54E-27
ERN2	16p12.2	0.54008	2.63E-30	5.85E-27
RASL10B	17q12	-0.53407	1.49E-29	2.98E-26
MLPH	2q37.3	0.530357	4.27E-29	7.78E-26
SLC41A2	12q23.3	0.529389	5.61E-29	9.37E-26
RNF125	18q12.1	0.524387	2.27E-28	3.49E-25
REG4	1p12	0.522881	3.44E-28	4.91E-25
UAP1	1q23.3	0.521528	4.98E-28	6.65E-25
CASP7	10q25.3	0.520352	6.87E-28	8.43E-25
MYL6B	12q13.2	-0.5201	7.36E-28	8.43E-25
PTK7	6p21.1	-0.51999	7.58E-28	8.43E-25
MUC2	11p15.5	0.51892	1.02E-27	1.07E-24
AHCYL2	7q32.1	0.51567	2.44E-27	2.45E-24
RAB27B	18q21.2	0.515296	2.70E-27	2.58E-24
CAMK2D	4q26	0.514986	2.94E-27	2.67E-24
TSPAN1	1p34.1	0.512305	6.01E-27	5.23E-24
AGR3	7p21.1	0.510969	8.56E-27	7.15E-24
LDLRAD3	11p13	-0.51033	1.01E-26	8.10E-24
FFAR4	10q23.33	0.510195	1.05E-26	8.10E-24
SLC17A5	6q13	0.508292	1.73E-26	1.29E-23
LARGE2	11p11.2	-0.50796	1.89E-26	1.35E-23
NKD1	16q12.1	-0.50475	4.37E-26	3.01E-23
CTSE	1q32.1	0.504487	4.68E-26	3.12E-23
CHST5	16q23.1	0.502951	6.95E-26	4.49E-23
LGR4	11p14.1	0.501357	1.05E-25	6.56E-23
ASCL2	11p15.5	-0.50112	1.11E-25	6.76E-23
MCU	10q22.1	0.497924	2.51E-25	1.48E-22
RBM47	4p14	0.494348	6.19E-25	3.54E-22
SGMS2	4q25	0.493118	8.42E-25	4.69E-22
ST6GALNAC1	17q25.1	0.492312	1.03E-24	5.57E-22
HIKESHI	11q14.2	-0.49169	1.20E-24	6.34E-22
SIAE	11q24.2	0.489155	2.25E-24	1.16E-21
SLC44A4	6p21.33	0.488325	2.76E-24	1.38E-21
SLC22A23	6p25.2	0.48761	3.29E-24	1.61E-21
CD55	1q32.2	0.487229	3.61E-24	1.72E-21
LARP6	15q23	-0.48704	3.78E-24	1.76E-21
PAPSS2	10q23.2-q23.31	0.486385	4.44E-24	2.02E-21
AKR1B10	7q33	0.485881	5.02E-24	2.23E-21
INPP1	2q32.2	0.484223	7.51E-24	3.27E-21
C4ORF19	4p14	0.48385	8.22E-24	3.50E-21
NR3C2	4q31.23	0.481816	1.34E-23	5.60E-21
PTPRH	19q13.42	0.480069	2.04E-23	8.35E-21
TC2N	14q32.12	0.479102	2.57E-23	1.03E-20
FCGBP	19q13.2	0.478981	2.65E-23	1.04E-20
KCNK1	1q42.2	0.478621	2.88E-23	1.11E-20
MRAP2	6q14.2	0.476324	4.97E-23	1.88E-20
SHROOM3	4q21.1	0.476083	5.26E-23	1.95E-20
DRD2	11q23.2	-0.47549	6.05E-23	2.20E-20

TPD52L2	20q13.33	-0.47543	6.14E-23	2.20E-20
FGD4	12p11.21	0.4748	7.12E-23	2.50E-20
SPDEF	6p21.31	0.474509	7.62E-23	2.63E-20
LSP1P4	2p11.2	-0.473	1.08E-22	3.66E-20
ZBTB7C	18q21.1	0.472951	1.10E-22	3.66E-20
CAPN5	11q13.5	0.470273	2.05E-22	6.67E-20
CYSTM1	5q31.3	0.470231	2.07E-22	6.67E-20
NKD2	5p15.33	-0.46929	2.57E-22	8.17E-20
POFUT1	20q11.21	-0.4676	3.79E-22	1.19E-19
NELFCD	20q13.32	-0.46754	3.85E-22	1.19E-19
VILL	3p22.2	0.467254	4.10E-22	1.24E-19
APCDD1	18p11.22	-0.46716	4.19E-22	1.25E-19
C4BPB	1q32.1	0.465655	5.91E-22	1.74E-19
SCIN	7p21.3	0.46506	6.77E-22	1.95E-19
STIM2	4p15.2	0.465031	6.82E-22	1.95E-19
MUC4	3q29	0.464365	7.93E-22	2.24E-19
MAP3K5	6q23.3	0.463513	9.62E-22	2.68E-19
RAE1	20q13.31	-0.46249	1.21E-21	3.33E-19
SPINDOC	11q13.1	-0.46083	1.76E-21	4.77E-19
ACBD5	10p12.1	0.460343	1.97E-21	5.25E-19
DLX3	17q21.33	-0.46015	2.05E-21	5.41E-19
F2RL1	5q13.3	0.45956	2.34E-21	6.09E-19
CYP2W1	7p22.3	-0.45904	2.63E-21	6.74E-19
SLC9A1	1p36.11	0.458993	2.66E-21	6.74E-19
ADAMTSL2	9q34.2	-0.45833	3.08E-21	7.72E-19
C2ORF72	2q37.1	0.45773	3.52E-21	8.62E-19
MS4A8	11q12.2	0.457676	3.56E-21	8.62E-19
GSKIP	14q32.2	0.457666	3.57E-21	8.62E-19
FER1L6	8q24.13	0.456772	4.35E-21	1.04E-18
C2ORF88	2q32.2	0.455372	5.93E-21	1.40E-18
NODAL	10q22.1	-0.45375	8.47E-21	1.97E-18
BLNK	10q24.1	0.453039	9.90E-21	2.28E-18
LY6G6D	6p21.33	-0.45278	1.05E-20	2.38E-18
MMP28	17q12	0.452351	1.15E-20	2.59E-18
SLC5A6	2p23.3	-0.45174	1.32E-20	2.93E-18
PDE4D	5q11.2-q12.1	0.451122	1.50E-20	3.31E-18
TP53RK	20q13.12	-0.44954	2.12E-20	4.61E-18
LIPH	3q27.2	0.448986	2.39E-20	5.15E-18
SMYD5	2p13.2	-0.44858	2.61E-20	5.56E-18
CERS5	12q13.12	-0.44852	2.64E-20	5.57E-18
PDRG1	20q11.21	-0.44816	2.85E-20	5.92E-18
DNMT3B	20q11.21	-0.44814	2.87E-20	5.92E-18
FCHO2	5q13.2	0.447972	2.97E-20	6.07E-18
F10	13q34	-0.44664	3.96E-20	8.01E-18
KLF4	9q31.2	0.445533	5.01E-20	1.00E-17
PHACTR3	20q13.32-q13.33	-0.44549	5.06E-20	1.00E-17
ATP8A1	4p13	0.44541	5.15E-20	1.01E-17
ATP8B1	18q21.31	0.444751	5.92E-20	1.15E-17
SIDT1	3q13.2	0.44433	6.48E-20	1.25E-17
ALDH1L1	3q21.3	0.443288	8.08E-20	1.54E-17
ABHD3	18q11.2	0.442366	9.82E-20	1.86E-17
ANG	14q11.2	0.441082	1.29E-19	2.39E-17
MEX3A	1q22	-0.44108	1.29E-19	2.39E-17
ETHE1	19q13.31	0.440555	1.44E-19	2.64E-17
SEC24A	5q31.1	0.440325	1.51E-19	2.75E-17
TNFRSF11A	18q21.33	0.439062	1.97E-19	3.55E-17
CCDC68	18q21.2	0.43902	1.98E-19	3.55E-17
WNT11	11q13.5	-0.43883	2.06E-19	3.66E-17

ZSWIM3	20q13.12	-0.43805	2.43E-19	4.26E-17
IFT46	11q23.3	-0.43791	2.50E-19	4.35E-17
GCNT3	15q22.2	0.437712	2.60E-19	4.50E-17
CHP1	15q15.1	0.436636	3.26E-19	5.57E-17
COMMD7	20q11.21	-0.4365	3.35E-19	5.68E-17
FAM177B	1q41	0.436073	3.66E-19	6.16E-17
SLC37A1	21q22.3	0.434936	4.63E-19	7.72E-17
PLAC8	4q21.22	0.434559	5.00E-19	8.28E-17
VSTM5	11q21	0.434511	5.05E-19	8.29E-17
PAAF1	11q13.4	-0.43414	5.45E-19	8.87E-17
CA12	15q22.2	0.433664	6.01E-19	9.65E-17
MOB3B	9p21.2	0.433653	6.02E-19	9.65E-17
DDX27	20q13.13	-0.43352	6.19E-19	9.85E-17
AAR2	20q11.23	-0.43309	6.76E-19	1.07E-16
SEMG1	20q13.12	0.433049	6.82E-19	1.07E-16
CTNBNB1	20q11.23	-0.43289	7.05E-19	1.09E-16
PRSS23	11q14.2	-0.4328	7.18E-19	1.11E-16
SCT	11p15.5	-0.43262	7.45E-19	1.13E-16
NCOA5	20q13.12	-0.43262	7.45E-19	1.13E-16
EDEM3	1q25.3	0.4324	7.79E-19	1.17E-16
PIGU	20q11.22	-0.43212	8.25E-19	1.23E-16
ZSWIM1	20q13.12	-0.43203	8.41E-19	1.25E-16
SDHA	5p15.33	0.431844	8.72E-19	1.28E-16
CEL	9q34.13	-0.43168	9.02E-19	1.32E-16
MIA3	1q41	0.431529	9.30E-19	1.34E-16
GNE	9p13.3	0.431514	9.33E-19	1.34E-16
SNHG11	20q11.23	-0.43063	1.12E-18	1.59E-16
CAB39L	13q14.2	-0.43061	1.12E-18	1.59E-16
GNAQ	9q21.2	0.430383	1.17E-18	1.66E-16
TMEM150A	2p11.2	-0.43032	1.19E-18	1.66E-16
ACTR5	20q11.23	-0.42999	1.27E-18	1.77E-16
ETFDH	4q32.1	0.429872	1.30E-18	1.80E-16
GDPD5	11q13.4-q13.5	-0.42983	1.31E-18	1.80E-16
PDXDC1	16p13.11	0.429364	1.44E-18	1.96E-16
GPR143	Xp22.2	-0.42934	1.45E-18	1.96E-16
SDR16C5	8q12.1	0.428948	1.57E-18	2.11E-16
PFDN4	20q13.2	-0.42881	1.61E-18	2.16E-16
MAB21L4	2q37.3	-0.4286	1.68E-18	2.23E-16
TSPAN13	7p21.1	0.428547	1.70E-18	2.24E-16
PMEP1	20q13.31	-0.42809	1.87E-18	2.44E-16
TFF1	21q22.3	0.427974	1.91E-18	2.49E-16
SLC2A13	12q12	0.427806	1.98E-18	2.55E-16
ATP2A3	17p13.2	0.427412	2.14E-18	2.75E-16
SLC35A3	1p21.2	0.427203	2.23E-18	2.85E-16
CA2	8q21.2	0.426993	2.33E-18	2.95E-16
ATIC	2q35	-0.42682	2.41E-18	3.04E-16
METTL6	3p25.1	-0.42674	2.45E-18	3.07E-16
PLAGL2	20q11.21	-0.42614	2.76E-18	3.44E-16
TRIM7	5q35.3	0.425848	2.93E-18	3.62E-16
PIGR	1q32.1	0.425779	2.97E-18	3.65E-16
LPCAT4	15q14	0.424733	3.66E-18	4.47E-16
ERGIC3	20q11.22	-0.42435	3.95E-18	4.79E-16
SLC2A12	6q23.2	-0.42423	4.05E-18	4.88E-16
KIAA1211	4q12	0.423853	4.36E-18	5.22E-16
BCAS1	20q13.2	0.423698	4.49E-18	5.36E-16
C10ORF82	10q25.3	-0.42357	4.61E-18	5.46E-16
TRIM40	6p22.1	0.423437	4.73E-18	5.58E-16
TSNARE1	8q24.3	-0.4231	5.06E-18	5.93E-16



TOMM34	20q13.12	-0.42278	5.39E-18	6.27E-16
PLLP	16q13	0.422687	5.49E-18	6.36E-16
NOTUM	17q25.3	-0.42248	5.73E-18	6.59E-16
TMEM92	17q21.33	0.422359	5.86E-18	6.70E-16
TTPAL	20q13.12	-0.42193	6.38E-18	7.24E-16
SEMA4G	10q24.31	0.42191	6.40E-18	7.24E-16
CAST	5q15	0.421491	6.95E-18	7.82E-16
ASXL1	20q11.21	-0.42125	7.29E-18	8.13E-16
ANXA10	4q32.3	0.421241	7.30E-18	8.13E-16
CEBPB	20q13.13	-0.42092	7.79E-18	8.58E-16
PCMTD2	20q13.33	-0.42091	7.79E-18	8.58E-16
SLC1A1	9p24.2	0.420499	8.45E-18	9.25E-16
FAS	10q23.31	0.420221	8.93E-18	9.71E-16
TJP3	19p13.3	0.420005	9.31E-18	1.01E-15
HPSE	4q21.23	0.418566	1.23E-17	1.33E-15
PANK3	5q34	0.418298	1.30E-17	1.39E-15
PLCL2	3p24.3	0.418087	1.35E-17	1.44E-15
CATSPERB	14q32.12	0.41789	1.41E-17	1.49E-15
MOCS3	20q13.13	-0.41781	1.43E-17	1.50E-15
IBTK	6q14.1	0.417795	1.43E-17	1.50E-15
DGKA	12q13.2	0.417443	1.54E-17	1.60E-15
RALY	20q11.22	-0.41675	1.76E-17	1.82E-15
SPATA18	4q12	0.416555	1.82E-17	1.88E-15
AKIRIN2	6q15	-0.41626	1.93E-17	1.98E-15
GID8	20q13.33	-0.41606	2.01E-17	2.05E-15
EIF2B4	2p23.3	-0.41584	2.10E-17	2.13E-15
BTNL8	5q35.3	0.414983	2.47E-17	2.50E-15
PCIF1	20q13.12	-0.41479	2.57E-17	2.57E-15
B3GALT5	21q22.2	0.41478	2.57E-17	2.57E-15
BCL11A	2p16.1	-0.41451	2.71E-17	2.70E-15
NCK2	2q12.2	-0.41439	2.77E-17	2.75E-15
TNFSF13	17p13.1	0.414192	2.88E-17	2.84E-15
STRA6	15q24.1	-0.41415	2.90E-17	2.85E-15
ARX	Xp21.3	0.414055	2.96E-17	2.89E-15
FAM114A1	4p14	0.413832	3.09E-17	3.00E-15
ERCC3	2q14.3	-0.41369	3.17E-17	3.07E-15
UQCC1	20q11.22	-0.41367	3.18E-17	3.07E-15
PTP4A3	8q24.3	-0.41348	3.30E-17	3.17E-15
SLC35C2	20q13.12	-0.41331	3.41E-17	3.25E-15
ROMO1	20q11.22	-0.4131	3.55E-17	3.37E-15
UGT8	4q26	0.412755	3.79E-17	3.57E-15
AGBL4	1p33	0.412752	3.80E-17	3.57E-15
LRP10	14q11.2	0.412272	4.16E-17	3.89E-15
LHFPL2	5q14.1	0.412215	4.21E-17	3.92E-15
FGFR2	10q26.13	0.411972	4.41E-17	4.09E-15
GGT7	20q11.22	-0.41188	4.48E-17	4.14E-15
PLAG1	8q12.1	-0.41172	4.62E-17	4.24E-15
ALDH6A1	14q24.3	0.411578	4.75E-17	4.34E-15
SUSD3	9q22.31	-0.41143	4.88E-17	4.44E-15
ZNF503	10q22.2	-0.41107	5.24E-17	4.75E-15
ZFYVE28	4p16.3	0.410932	5.37E-17	4.85E-15
KIAA1522	1p35.1	0.410704	5.61E-17	5.04E-15
ACBD3	1q42.12	0.410628	5.69E-17	5.09E-15
EREG	4q13.3	-0.40984	6.61E-17	5.89E-15
TLN2	15q22.2	0.409678	6.82E-17	6.04E-15
TENT5A	6q14.1	0.408677	8.24E-17	7.27E-15
PABPC1L	20q13.12	-0.40819	9.03E-17	7.93E-15
KIAA0513	16q24.1	0.408137	9.12E-17	7.98E-15

CANT1	17q25.3	0.407838	9.65E-17	8.40E-15
ZSCAN21	7q22.1	-0.40752	1.02E-16	8.88E-15
EVA1A	2p12	-0.40749	1.03E-16	8.88E-15
LSP1P5	1q21.1	-0.40747	1.03E-16	8.88E-15
ERGIC1	5q35.1	0.407234	1.08E-16	9.25E-15
GNAS	20q13.32	-0.40615	1.32E-16	1.13E-14
SMTNL2	17p13.2	-0.40611	1.34E-16	1.13E-14
QPRT	16p11.2	-0.40595	1.37E-16	1.16E-14
CMBL	5p15.2	0.405864	1.40E-16	1.18E-14
LRRC66	4q12	0.405382	1.53E-16	1.28E-14
CHRNA7	15q13.3	0.405266	1.56E-16	1.30E-14
KIF3C	2p23.3	-0.40509	1.62E-16	1.34E-14
GOLM1	9q21.33	0.404862	1.68E-16	1.39E-14
LDHD	16q23.1	0.404606	1.77E-16	1.46E-14
WDR35	2p24.1	-0.40414	1.93E-16	1.58E-14
SESN1	6q21	-0.40363	2.12E-16	1.73E-14
RTKN	2p13.1	-0.40329	2.26E-16	1.84E-14
ASPHD2	22q12.1	0.40312	2.33E-16	1.89E-14
MAP3K20	2q31.1	-0.40309	2.34E-16	1.89E-14
ZNRF3	22q12.1	-0.40276	2.49E-16	2.00E-14
ABLIM1	10q25.3	0.402085	2.82E-16	2.26E-14
CAMKV	3p21.31	-0.40175	3.00E-16	2.39E-14
TH	11p15.5	-0.40114	3.36E-16	2.67E-14
DNM2	19p13.2	0.400939	3.48E-16	2.76E-14
CHRFAM7A	15q13.2	0.400824	3.56E-16	2.81E-14
SSB	2q31.1	-0.40047	3.80E-16	2.97E-14
KRT23	17q21.2	-0.40046	3.80E-16	2.97E-14
SLC22A11	11q13.1	-0.40044	3.82E-16	2.97E-14
FA2H	16q23.1	0.400183	4.00E-16	3.11E-14
CPNE1	20q11.22	-0.39998	4.15E-16	3.21E-14
CYP2C18	10q23.33	0.399895	4.22E-16	3.25E-14
C1ORF105	1q24.3	-0.39986	4.24E-16	3.26E-14
CELP	9q34.13	-0.39962	4.44E-16	3.40E-14
LINC00589	8p12	0.399555	4.49E-16	3.42E-14
MPV17	2p23.3	-0.39868	5.27E-16	4.00E-14
TMEM61	1p32.3	0.398614	5.34E-16	4.03E-14
RASSF10	11p15.3	-0.3985	5.45E-16	4.10E-14
SYS1	20q13.12	-0.3984	5.54E-16	4.16E-14
F7	13q34	-0.39817	5.79E-16	4.33E-14
CPN1	10q24.2	-0.39785	6.14E-16	4.57E-14
IL1R2	2q11.2	0.397622	6.39E-16	4.74E-14
CES3	16q22.1	0.397582	6.44E-16	4.76E-14
CIAO1	2q11.2	-0.39715	6.96E-16	5.12E-14
GRPR	Xp22.2	-0.39697	7.20E-16	5.28E-14
GNG4	1q42.3	-0.39692	7.26E-16	5.31E-14
GALNT7	4q34.1	0.396096	8.43E-16	6.14E-14
RBP1	3q23	-0.39572	9.03E-16	6.55E-14
DPM1	20q13.13	-0.39567	9.10E-16	6.58E-14
LINC01512	6p21.1	-0.39545	9.48E-16	6.83E-14
PITPNM3	17p13.2-p13.1	0.395402	9.56E-16	6.86E-14
MUC1	1q22	0.395208	9.90E-16	7.08E-14
FUNDC2	Xq28	-0.39436	1.15E-15	8.22E-14
C1ORF226	1q23.3	0.393648	1.31E-15	9.28E-14
BRSK2	11p15.5	-0.39365	1.31E-15	9.28E-14
HECTD3	1p34.1	0.39336	1.38E-15	9.73E-14
DPEP1	16q24.3	-0.39323	1.41E-15	9.93E-14
C1ORF21	1q25.3	0.393188	1.42E-15	9.97E-14
ATP5F1E	20q13.32	-0.39308	1.45E-15	1.01E-13

C11ORF95	11q13.1	-0.39306	1.46E-15	1.01E-13
ELMO2	20q13.12	-0.39236	1.65E-15	1.14E-13
GET4	7p22.3	-0.39185	1.81E-15	1.25E-13
SEC24D	4q26	0.391762	1.84E-15	1.26E-13
MFAP2	1p36.13	-0.39158	1.90E-15	1.30E-13
LINC02418	12q24.33	-0.39125	2.01E-15	1.37E-13
CDS1	4q21.23	0.391151	2.05E-15	1.39E-13
IFT52	20q13.12	-0.3907	2.22E-15	1.51E-13
CLDN9	16p13.3	-0.39049	2.30E-15	1.56E-13
TM9SF3	10q24.1	0.390436	2.33E-15	1.57E-13
CSE1L	20q13.13	-0.39001	2.51E-15	1.69E-13
ADNP	20q13.13	-0.38987	2.57E-15	1.72E-13
CASC15	6p22.3	-0.38983	2.59E-15	1.73E-13
PRPF6	20q13.33	-0.38967	2.66E-15	1.77E-13
FANCF	11p14.3	-0.38941	2.79E-15	1.85E-13
DNTTIP1	20q13.12	-0.3894	2.79E-15	1.85E-13
FGF19	11q13.3	-0.38909	2.95E-15	1.94E-13
ARHGEF28	5q13.2	0.388624	3.20E-15	2.10E-13
ZNF775	7q36.1	-0.38861	3.21E-15	2.10E-13
PRRC1	5q23.2	0.388532	3.26E-15	2.12E-13
ZNF853	7p22.1	-0.38763	3.81E-15	2.48E-13
BAK1	6p21.31	0.387482	3.92E-15	2.54E-13
MAP4K2	11q13.1	-0.3874	3.97E-15	2.57E-13
ARHGAP23	17q12	-0.38716	4.14E-15	2.67E-13
SMIM29	6p21.31	-0.38644	4.71E-15	3.02E-13
BACE2	21q22.2-q22.3	0.386104	4.99E-15	3.19E-13
VPS53	17p13.3	0.385937	5.14E-15	3.28E-13
TRPC4AP	20q11.22	-0.38586	5.21E-15	3.31E-13
FAM217B	20q13.33	-0.38558	5.46E-15	3.46E-13
MAPRE1	20q11.21	-0.38557	5.48E-15	3.46E-13
RNF182	6p23	-0.38551	5.54E-15	3.49E-13
FNIP2	4q32.1	0.385458	5.58E-15	3.51E-13
ZNF517	8q24.3	-0.38526	5.79E-15	3.62E-13
UNC13B	9p13.3	0.384992	6.06E-15	3.77E-13
DHRS9	2q31.1	0.384992	6.06E-15	3.77E-13
RBMS1	2q24.2	-0.3849	6.16E-15	3.82E-13
SNHG17	20q11.23	-0.38468	6.40E-15	3.96E-13
LOC285074	2p11.2	-0.38453	6.57E-15	4.05E-13
NRXN3	14q24.3-q31.1	-0.3843	6.83E-15	4.20E-13
TGIF2	20q11.23	-0.38365	7.66E-15	4.69E-13
SGPP2	2q36.1	0.383159	8.33E-15	5.09E-13
DTNB	2p23.3	-0.38285	8.78E-15	5.35E-13
KRBOX4	Xp11.3	-0.38268	9.05E-15	5.49E-13
L1CAM	Xq28	-0.38261	9.16E-15	5.52E-13
SLC3A2	11q12.3	-0.38261	9.17E-15	5.52E-13
PSMA7	20q13.33	-0.3826	9.18E-15	5.52E-13
C9ORF152	9q31.3	0.382569	9.22E-15	5.53E-13
PXMP2	12q24.33	0.382544	9.26E-15	5.54E-13
GPA33	1q24.1	0.382511	9.32E-15	5.55E-13
TAS1R3	1p36.33	-0.38249	9.35E-15	5.56E-13
UCKL1	20q13.33	-0.38247	9.38E-15	5.56E-13
ADRM1	20q13.33	-0.38234	9.60E-15	5.67E-13
RTF2	20q13.31	-0.38232	9.63E-15	5.67E-13
SHROOM4	Xp11.22	-0.38219	9.85E-15	5.78E-13
TOP1MT	8q24.3	-0.38217	9.88E-15	5.79E-13
AKR7A3	1p36.13	0.382154	9.91E-15	5.79E-13
ARFGAP1	20q13.33	-0.38207	1.01E-14	5.86E-13
LYZ	12q15	0.381708	1.07E-14	6.21E-13

BARX2	11q24.3	0.381664	1.08E-14	6.24E-13
CCZ1P-OR7E38P	7q21.3	-0.3815	1.11E-14	6.40E-13
ZNF696	8q24.3	-0.3813	1.15E-14	6.61E-13
CNNM4	2q11.2	0.381046	1.20E-14	6.88E-13
CARMIL1	6p22.2	0.380681	1.28E-14	7.31E-13
TMTC2	12q21.31	0.380593	1.30E-14	7.40E-13
ADGRG6	6q24.2	0.380564	1.30E-14	7.41E-13
TFF2	21q22.3	0.380527	1.31E-14	7.44E-13
XPNPEP1	10q25.1	0.380476	1.32E-14	7.48E-13
AXIN2	17q24.1	-0.38003	1.43E-14	8.06E-13
PFKFB2	1q32.1	0.380001	1.43E-14	8.07E-13
SLC38A3	3p21.31	-0.37997	1.44E-14	8.09E-13
BMP2	20p12.3	0.379825	1.48E-14	8.27E-13
ATP2B1	12q21.33	0.379608	1.53E-14	8.56E-13
AFG3L2	18p11.21	0.3795	1.56E-14	8.70E-13
GNA11	19p13.3	0.379172	1.65E-14	9.17E-13
SORBS1	10q24.1	-0.37902	1.70E-14	9.39E-13
LY6G6E	6p21.33	-0.37877	1.77E-14	9.77E-13
PNO1	2p14	-0.37866	1.81E-14	9.93E-13
NUDT16	3q22.1	0.377574	2.17E-14	1.19E-12
VNN1	6q23.2	0.377535	2.19E-14	1.20E-12
S100P	4p16.1	0.377521	2.19E-14	1.20E-12
LOC728743	7q36.1	-0.37737	2.25E-14	1.22E-12
TMEM263	12q23.3	0.377066	2.37E-14	1.28E-12
ATRAID	2p23.3	-0.37693	2.42E-14	1.31E-12
HSD17B2	16q23.3	0.376831	2.46E-14	1.33E-12
POLR2D	2q14.3	-0.3767	2.52E-14	1.35E-12
PTGER2	14q22.1	0.376618	2.55E-14	1.37E-12
SCP2	1p32.3	0.376529	2.59E-14	1.39E-12
TTI1	20q11.23	-0.37643	2.64E-14	1.41E-12
DKC1	Xq28	-0.37621	2.74E-14	1.46E-12
MICU1	10q22.1	0.376048	2.81E-14	1.49E-12
WIF1	12q14.3	-0.37594	2.86E-14	1.52E-12
EIF4E3	3p13	0.375616	3.02E-14	1.59E-12
GALNT8	12p13.32	0.375615	3.02E-14	1.59E-12
CPEB3	10q23.32	0.375604	3.03E-14	1.59E-12
SGSM3	22q13.1	0.375569	3.05E-14	1.60E-12
SEC16A	9q34.3	0.375424	3.12E-14	1.63E-12
GMDS	6p25.3	0.375408	3.13E-14	1.63E-12
TCF7L2	10q25.2-q25.3	0.375392	3.14E-14	1.63E-12
TMEM63B	6p21.1	0.375383	3.15E-14	1.63E-12
NANS	9q22.33	0.375315	3.18E-14	1.65E-12
ATP1B1	1q24.2	0.375082	3.31E-14	1.71E-12
CES1	16q12.2	-0.37498	3.37E-14	1.73E-12
TIA1	2p13.3	-0.37473	3.51E-14	1.80E-12
RSPH1	21q22.3	0.374544	3.62E-14	1.86E-12
PKP2	12p11.21	0.374359	3.74E-14	1.91E-12
ARFGEF3	6q23.3-q24.1	0.37422	3.83E-14	1.95E-12
R3HDML	20q13.12	-0.37418	3.85E-14	1.96E-12
SNX21	20q13.12	-0.37398	3.99E-14	2.02E-12
SUPT7L	2p23.3	-0.37396	4.00E-14	2.02E-12
SPINK4	9p13.3	0.37382	4.09E-14	2.06E-12
ARHGEF19	1p36.13	-0.37368	4.19E-14	2.11E-12
JAK2	9p24.1	0.37366	4.20E-14	2.11E-12
CSTF1	20q13.2-q13.31	-0.3736	4.25E-14	2.13E-12
DUSP4	8p12	0.373561	4.27E-14	2.13E-12
TAOK3	12q24.23	0.373542	4.29E-14	2.14E-12
EIF6	20q11.22	-0.3731	4.62E-14	2.29E-12

SPTLC2	14q24.3	0.373044	4.66E-14	2.31E-12
OSER1	20q13.12	-0.37296	4.72E-14	2.34E-12
NPEPL1	20q13.32	-0.37274	4.90E-14	2.42E-12
GPAT3	4q21.23	0.372146	5.41E-14	2.66E-12
ABI2	2q33.2	-0.37189	5.65E-14	2.77E-12
ITM2C	2q37.1	0.371765	5.77E-14	2.82E-12
TTLL6	17q21.32	0.371611	5.92E-14	2.89E-12
DARS	2q21.3	-0.37154	5.99E-14	2.92E-12
MOSPD1	Xq26.3	-0.37138	6.15E-14	2.99E-12
MINK1	17p13.2	0.371271	6.26E-14	3.04E-12
GFI1	1p22.1	0.371212	6.32E-14	3.06E-12
RIOK3	18q11.2	0.371198	6.34E-14	3.06E-12
YTHDF1	20q13.33	-0.37093	6.63E-14	3.19E-12
UTP14A	Xq26.1	-0.37079	6.78E-14	3.25E-12
EPB41L5	2q14.2	-0.37078	6.79E-14	3.25E-12
NXPH3	17q21.33	-0.37077	6.80E-14	3.25E-12
NSMCE1	16p12.1	-0.37057	7.04E-14	3.36E-12
NRAP	10q25.3	0.370396	7.24E-14	3.44E-12
DYNLRB1	20q11.22	-0.37035	7.29E-14	3.46E-12
SEMA3A	7q21.11	-0.37032	7.33E-14	3.47E-12
MRGBP	20q13.33	-0.37017	7.52E-14	3.55E-12
MYO1A	12q13.3	0.369943	7.80E-14	3.68E-12
C6ORF15	6p21.33	-0.36989	7.88E-14	3.70E-12
COMMD5	8q24.3	-0.3697	8.12E-14	3.81E-12
WWOX	16q23.1-q23.2	-0.36923	8.78E-14	4.11E-12
SLC6A6	3p25.1	-0.36915	8.89E-14	4.15E-12
ORC3	6q15	-0.36907	9.01E-14	4.20E-12
SLC9A2	2q12.1	0.368672	9.63E-14	4.47E-12
MCRIP1	17q25.3	-0.3685	9.90E-14	4.59E-12
RNF114	20q13.13	-0.36835	1.02E-13	4.70E-12
CDK5RAP1	20q11.21	-0.36832	1.02E-13	4.71E-12
KCNT1	9q34.3	-0.36812	1.05E-13	4.85E-12
RNASE4	14q11.2	0.368114	1.06E-13	4.85E-12
STX16	20q13.32	-0.36796	1.08E-13	4.96E-12
RNF25	2q35	-0.36786	1.10E-13	5.03E-12
GALNT12	9q22.33	0.367781	1.11E-13	5.09E-12
ZZEF1	17p13.2	0.367748	1.12E-13	5.10E-12
COPS8	2q37.3	-0.36747	1.17E-13	5.33E-12
DCAF13	8q22.3	-0.36693	1.28E-13	5.81E-12
DHX35	20q11.23-q12	-0.36685	1.30E-13	5.87E-12
TMEM216	11q12.2	-0.36663	1.35E-13	6.07E-12
TCF7	5q31.1	-0.36637	1.40E-13	6.32E-12
IKZF2	2q34	0.366288	1.42E-13	6.39E-12
AKNAD1	1p13.3	-0.36622	1.44E-13	6.45E-12
RIPK1	6p25.2	0.365882	1.52E-13	6.80E-12
F3	1p21.3	0.365729	1.56E-13	6.96E-12
UBA2	19q13.11	-0.36567	1.57E-13	7.00E-12
SLC4A4	4q13.3	0.365568	1.60E-13	7.11E-12
FABP2	4q26	0.365422	1.64E-13	7.27E-12
EPDR1	7p14.1	-0.36498	1.76E-13	7.79E-12
TCEA2	20q13.33	-0.36493	1.78E-13	7.83E-12
RBM39	20q11.22	-0.36416	2.01E-13	8.86E-12
HSF1	8q24.3	-0.36413	2.02E-13	8.88E-12
CORO2A	9q22.33	0.364096	2.03E-13	8.91E-12
COPG1	3q21.3	0.364047	2.05E-13	8.97E-12
RPS21	20q13.33	-0.36403	2.06E-13	8.97E-12
FADS3	11q12.2	-0.36383	2.12E-13	9.24E-12
E2F6	2p25.1	-0.36371	2.17E-13	9.39E-12

GALM	2p22.1	0.363706	2.17E-13	9.39E-12
LY6G6F	6p21.33	-0.36353	2.23E-13	9.64E-12
FRMD3	9q21.32	0.363352	2.29E-13	9.88E-12
GPN1	2p23.3	-0.36334	2.30E-13	9.88E-12
RNF19B	1p35.1	0.363339	2.30E-13	9.88E-12
BCL10	1p22.3	0.363263	2.33E-13	9.98E-12
NFE2	12q13.13	-0.36322	2.35E-13	1.00E-11
RAB26	16p13.3	0.363007	2.43E-13	1.04E-11
UGT1A1	2q37.1	0.362972	2.44E-13	1.04E-11
SLC35A1	6q15	0.362961	2.44E-13	1.04E-11
ARMC2	6q21	-0.36279	2.51E-13	1.07E-11
KBTBD11	8p23.3	0.362508	2.63E-13	1.11E-11
ACOT8	20q13.12	-0.36249	2.64E-13	1.11E-11
LRRIQ4	3q26.2	0.362153	2.78E-13	1.17E-11
PCDH1	5q31.3	0.36201	2.85E-13	1.20E-11
LRRC43	12q24.31	-0.36196	2.87E-13	1.21E-11
GTF2IRD1	7q11.23	-0.36195	2.88E-13	1.21E-11
GLTP	12q24.11	0.361612	3.04E-13	1.27E-11
METTL5	2q31.1	-0.36119	3.25E-13	1.36E-11
LINC01101	2q14.2	-0.36096	3.37E-13	1.40E-11
APLF	2p13.3	-0.36075	3.49E-13	1.45E-11
ABHD1	2p23.3	-0.36074	3.50E-13	1.45E-11
C8ORF33	8q24.3	-0.3607	3.52E-13	1.46E-11
MANBAL	20q11.23	-0.36043	3.67E-13	1.52E-11
PLS1	3q23	0.360384	3.70E-13	1.52E-11
BDH1	3q29	0.359851	4.03E-13	1.66E-11
PRMT3	11p15.1	-0.35983	4.04E-13	1.66E-11
NT5C3B	17q21.2	-0.35964	4.17E-13	1.71E-11
CNN3	1p21.3	-0.35958	4.21E-13	1.72E-11
PGGT1B	5q22.3	0.359459	4.29E-13	1.75E-11
DNMT3A	2p23.3	-0.35929	4.40E-13	1.79E-11
DEGS2	14q32.2	0.35918	4.48E-13	1.82E-11
C8G	9q34.3	0.358929	4.67E-13	1.89E-11
EIF2S2	20q11.22	-0.35883	4.74E-13	1.92E-11
ZGPAT	20q13.33	-0.35874	4.81E-13	1.94E-11
TRMT112	11q13.1	-0.35865	4.88E-13	1.97E-11
PSPH	7p11.2	-0.35855	4.95E-13	1.99E-11
SMIM14	4p14	0.358457	5.03E-13	2.02E-11
CDKN1C	11p15.4	-0.35841	5.07E-13	2.03E-11
RASGRF1	15q25.1	-0.3584	5.08E-13	2.03E-11
UBE2V1	20q13.13	-0.3582	5.24E-13	2.09E-11
SRRD	22q12.1	-0.35816	5.27E-13	2.10E-11
SEMA4C	2q11.2	-0.35815	5.29E-13	2.10E-11
POU5F1B	8q24.21	-0.35775	5.63E-13	2.23E-11
CCL28	5p12	0.357744	5.63E-13	2.23E-11
SCAND1	20q11.23	-0.35773	5.64E-13	2.23E-11
TRIM36	5q22.3	0.35762	5.74E-13	2.26E-11
MARVELD3	16q22.2	0.357561	5.80E-13	2.28E-11
STS	Xp22.31	0.35734	6.01E-13	2.36E-11
PFKP	10p15.2	0.357305	6.04E-13	2.37E-11
XDH	2p23.1	0.35727	6.07E-13	2.38E-11
ALDOB	9q31.1	0.357233	6.11E-13	2.38E-11
FARP1	13q32.2	-0.35722	6.12E-13	2.39E-11
CKM	19q13.32	-0.3572	6.14E-13	2.39E-11
MAPK8IP1	11p11.2	-0.35716	6.18E-13	2.40E-11
LSM14B	20q13.33	-0.35713	6.20E-13	2.40E-11
ARID3A	19p13.3	-0.35709	6.24E-13	2.41E-11
SOX4	6p22.3	-0.3567	6.64E-13	2.56E-11

WASHC3	12q23.2	-0.35665	6.70E-13	2.58E-11
LOC100129034	9q33.3	0.356446	6.92E-13	2.66E-11
RHBDL2	1p34.3	0.356145	7.25E-13	2.78E-11
KLK1	19q13.33	0.356099	7.31E-13	2.80E-11
KCNK6	19q13.2	0.355937	7.49E-13	2.86E-11
MYRF	11q12.2	0.355919	7.52E-13	2.87E-11
SEMA4B	15q26.1	0.355908	7.53E-13	2.87E-11
HSDL1	16q24.1	-0.35574	7.73E-13	2.94E-11
CSNK2A2	16q21	-0.3557	7.78E-13	2.95E-11
DOCK5	8p21.2	0.355625	7.87E-13	2.98E-11
CAPN2	1q41	0.355529	7.99E-13	3.02E-11
FJX1	11p13	-0.35545	8.10E-13	3.05E-11
PRSS12	4q26	0.355334	8.24E-13	3.10E-11
DQX1	2p13.1	0.355293	8.29E-13	3.12E-11
GGH	8q12.3	-0.35516	8.47E-13	3.18E-11
CYP24A1	20q13.2	-0.35498	8.71E-13	3.26E-11
SLC39A8	4q24	0.354683	9.13E-13	3.41E-11
APOLD1	12p13.1	-0.35438	9.57E-13	3.57E-11
MUC17	7q22.1	0.354326	9.65E-13	3.59E-11
FEM1C	5q22.3	0.354258	9.76E-13	3.63E-11
RALBP1	18p11.22	0.354155	9.92E-13	3.67E-11
NCBP2	3q29	-0.35414	9.94E-13	3.67E-11
GCH1	14q22.2	0.35414	9.94E-13	3.67E-11
ZNF202	11q24.1	-0.35391	1.03E-12	3.80E-11
RP9	7p14.3	-0.35389	1.03E-12	3.81E-11
CAMTA2	17p13.2	0.353868	1.04E-12	3.81E-11
CDK5R1	17q11.2	-0.35382	1.04E-12	3.83E-11
TSR2	Xp11.22	-0.3538	1.05E-12	3.84E-11
AP1G1	16q22.2	0.353723	1.06E-12	3.88E-11
EHHADH	3q27.2	0.353607	1.08E-12	3.94E-11
NES	1q23.1	-0.3533	1.13E-12	4.13E-11
MBOAT1	6p22.3	0.353259	1.14E-12	4.15E-11
ARL2	11q13.1	-0.35319	1.15E-12	4.19E-11
SH3RF1	4q32.3-q33	0.353106	1.17E-12	4.23E-11
BBS10	12q21.2	-0.3529	1.21E-12	4.36E-11
WNT6	2q35	-0.35278	1.23E-12	4.43E-11
MYO18A	17q11.2	0.35271	1.24E-12	4.47E-11
SNTB1	8q24.12	-0.35271	1.24E-12	4.47E-11
MYEF2	15q21.1	-0.3526	1.26E-12	4.54E-11
KRT80	12q13.13	-0.35246	1.29E-12	4.63E-11
FITM2	20q13.12	-0.35224	1.34E-12	4.78E-11
APC	5q22.2	0.352053	1.38E-12	4.91E-11
SALL4	20q13.2	-0.35205	1.38E-12	4.91E-11
AMMECR1L	2q14.3	-0.35199	1.39E-12	4.94E-11
FAM107B	10p13	0.351978	1.39E-12	4.94E-11
MUC5B	11p15.5	0.351942	1.40E-12	4.96E-11
TBCB	19q13.12	-0.35185	1.42E-12	5.02E-11
CD81	11p15.5	-0.35165	1.47E-12	5.18E-11
COPS6	7q22.1	-0.35154	1.49E-12	5.25E-11
SI	3q26.1	0.351473	1.51E-12	5.30E-11
ASAP2	2p25.1 2p24	0.351385	1.53E-12	5.36E-11
CDC42EP5	19q13.42	0.351287	1.55E-12	5.44E-11
SMPDL3A	6q22.31	0.351141	1.59E-12	5.55E-11
CERS4	19p13.2	-0.35102	1.62E-12	5.65E-11
MRPL23-AS1	11p15.5	-0.35101	1.62E-12	5.65E-11
ADTRP	6p24.1	0.3509	1.65E-12	5.73E-11
PALD1	10q22.1	-0.35078	1.68E-12	5.83E-11
FAM71E1	19q13.33	-0.35067	1.70E-12	5.92E-11

VIT	2p22.2	0.350302	1.81E-12	6.26E-11
CHMP4B	20q11.22	-0.35026	1.82E-12	6.29E-11
ZNF2	2q11.1	-0.3502	1.83E-12	6.33E-11
SRPX2	Xq22.1	-0.35002	1.89E-12	6.50E-11
SLC13A3	20q13.12	-0.34987	1.93E-12	6.64E-11
GBGT1	9q34.2	-0.34977	1.96E-12	6.73E-11
ARHGAP26	5q31.3	0.349732	1.97E-12	6.76E-11
RAP1GAP	1p36.12	0.349675	1.99E-12	6.81E-11
DPF2	11q13.1	-0.34957	2.02E-12	6.91E-11
ZNF74	22q11.21	-0.34954	2.03E-12	6.92E-11
MAGI3	1p13.2	0.349507	2.04E-12	6.95E-11
USP11	Xp11.3	-0.34948	2.05E-12	6.97E-11
SLC30A7	1p21.2	0.349249	2.12E-12	7.21E-11
TNNC2	20q13.12	-0.34887	2.25E-12	7.63E-11
ACTL10	20q11.22	-0.34879	2.28E-12	7.71E-11
DOP1B	21q22.12	0.348665	2.32E-12	7.85E-11
SLC35C1	11p11.2	0.348573	2.36E-12	7.94E-11
USP39	2p11.2	-0.34847	2.40E-12	8.06E-11
BHLHE41	12p12.1	0.34846	2.40E-12	8.06E-11
CPSF3	2p25.1	-0.3483	2.46E-12	8.25E-11
HK2	2p12	0.347961	2.59E-12	8.67E-11
ANKK1	11q23.2	-0.34776	2.67E-12	8.93E-11
GMEB2	20q13.33	-0.34773	2.68E-12	8.95E-11
HDAC2	6q21	-0.34761	2.73E-12	9.10E-11
GOLPH3L	1q21.3	0.34753	2.76E-12	9.20E-11
RETSAT	2p11.2	0.347496	2.78E-12	9.23E-11
CDH26	20q13.33	-0.34737	2.84E-12	9.40E-11
HYAL1	3p21.31	0.347145	2.93E-12	9.71E-11
SMCO4	11q21	0.347038	2.98E-12	9.85E-11
WDCP	2p23.3	-0.347	3.00E-12	9.90E-11
ALDH3A2	17p11.2	0.346824	3.08E-12	1.01E-10
MFSD2A	1p34.2	0.346728	3.13E-12	1.03E-10
SEC1P	19q13.33	0.346533	3.22E-12	1.06E-10
VPS4B	18q21.33	0.346465	3.25E-12	1.07E-10
ASRGL1	11q12.3	0.346439	3.27E-12	1.07E-10
MAOA	Xp11.3	0.346299	3.34E-12	1.09E-10
FUT3	19p13.3	0.346177	3.40E-12	1.11E-10
GAS2	11p14.3	-0.34592	3.53E-12	1.15E-10
RHPN1-AS1	8q24.3	-0.34592	3.53E-12	1.15E-10
RCN1	11p13	-0.34581	3.59E-12	1.17E-10
TNFRSF19	13q12.12	-0.34576	3.62E-12	1.17E-10
RNF145	5q33.3	0.345756	3.62E-12	1.17E-10
TMC5	16p12.3	0.345717	3.65E-12	1.18E-10
SH3RF2	5q32	0.345493	3.77E-12	1.22E-10
ACADS	12q24.31	0.345357	3.85E-12	1.24E-10
FAM83E	19q13.33	0.345228	3.93E-12	1.26E-10
LRRC73	6p21.1	0.344931	4.11E-12	1.32E-10
HEATR5A	14q12	0.344889	4.13E-12	1.32E-10
LXN	3q25.32	0.344704	4.25E-12	1.36E-10
GBP3	1p22.2	0.344604	4.32E-12	1.38E-10
SNTA1	20q11.21	-0.34459	4.32E-12	1.38E-10
SLK	10q24.33-q25.1	0.34449	4.39E-12	1.40E-10
SLAIN2	4p11	0.344343	4.49E-12	1.43E-10
LOC646762	7p14.3	-0.34426	4.54E-12	1.44E-10
NAP1L4	11p15.4	-0.3442	4.59E-12	1.45E-10
EML2	19q13.32	0.344029	4.71E-12	1.49E-10
RBIS	8q21.2	-0.34372	4.93E-12	1.56E-10
SELENOH	11q12.1	-0.34368	4.96E-12	1.57E-10



MIA2	14q13.2	0.343436	5.15E-12	1.62E-10
SCGB2A1	11q12.3	0.343166	5.36E-12	1.69E-10
MOGAT2	11q13.5	0.34314	5.38E-12	1.69E-10
RGN	Xp11.3	-0.34276	5.70E-12	1.79E-10
KDEL3	22q13.1	0.342748	5.71E-12	1.79E-10
MED30	8q24.11	-0.34223	6.18E-12	1.93E-10
CCT6A	7p11.2	-0.34222	6.18E-12	1.93E-10
CASP10	2q33.1	0.342202	6.20E-12	1.93E-10
TENT5C	1p12	0.342138	6.26E-12	1.95E-10
B3GNT6	11q13.5	0.342103	6.29E-12	1.95E-10
RP9P	7p14.3	-0.34173	6.65E-12	2.06E-10
GNA14	9q21.2	0.341718	6.66E-12	2.06E-10
TPD52	8q21.13	0.341707	6.68E-12	2.06E-10
MEMO1	2p22.3	-0.34169	6.70E-12	2.07E-10
SMCHD1	18p11.32	0.341584	6.80E-12	2.10E-10
AMACR	5p13.2	-0.34155	6.84E-12	2.10E-10
SPIN3	Xp11.21	-0.34153	6.85E-12	2.10E-10
PGBD1	6p22.1	-0.34136	7.04E-12	2.16E-10
CALML3	10p15.1	-0.34129	7.11E-12	2.18E-10
ZNF195	11p15.4	-0.34121	7.19E-12	2.20E-10
SLC2A4RG	20q13.33	-0.34112	7.29E-12	2.22E-10
APMAP	20p11.21	-0.34112	7.29E-12	2.22E-10
GTF3C5	9q34.13	-0.34109	7.33E-12	2.23E-10
PCP4	21q22.2	-0.34089	7.55E-12	2.29E-10
INHBB	2q14.2	-0.34043	8.08E-12	2.45E-10
MAP3K6	1p36.11	0.340381	8.14E-12	2.47E-10
NFS1	20q11.22	-0.34031	8.23E-12	2.49E-10
DENND2D	1p13.3-p13.2	0.340296	8.24E-12	2.49E-10
CBX1	17q21.32	-0.34021	8.35E-12	2.52E-10
MPC1	6q27	0.340053	8.55E-12	2.57E-10
EDEM2	20q11.22	-0.33997	8.65E-12	2.60E-10
ARFGAP3	22q13.2	0.339443	9.36E-12	2.81E-10
MDM2	12q15	0.339386	9.44E-12	2.83E-10
SGMS1	10q11.23	0.339386	9.44E-12	2.83E-10
PDZK1IP1	1p33	0.339228	9.66E-12	2.89E-10
ZC3HC1	7q32.2	-0.33907	9.90E-12	2.95E-10
AK7	14q32.2	0.338976	1.00E-11	2.99E-10
POLR2G	11q12.3	-0.3389	1.02E-11	3.02E-10
GLS	2q32.2	-0.33879	1.03E-11	3.07E-10
SOCS6	18q22.2	0.33876	1.04E-11	3.07E-10
SUCLG2	3p14.1	0.338562	1.07E-11	3.16E-10
BCS1L	2q35	-0.33854	1.07E-11	3.16E-10
ALPG	2q37.1	0.338386	1.09E-11	3.23E-10
HAS2-AS1	8q24.13	-0.33838	1.10E-11	3.23E-10
S100A14	1q21.3	0.338295	1.11E-11	3.27E-10
PACSIN2	22q13.2	0.33807	1.15E-11	3.37E-10
ABCD3	1p21.3	0.338046	1.15E-11	3.38E-10
ZNF707	8q24.3	-0.33802	1.16E-11	3.39E-10
IL17REL	22q13.33	0.337975	1.16E-11	3.41E-10
RBMX2	Xq26.1	-0.3377	1.21E-11	3.54E-10
SMO	7q32.1	-0.33757	1.24E-11	3.61E-10
TMEM185A	Xq28	-0.33723	1.30E-11	3.79E-10
PLCG1	20q12	-0.33718	1.31E-11	3.81E-10
LPIN2	18p11.31	0.337131	1.32E-11	3.83E-10
RNF113A	Xq24	-0.3371	1.32E-11	3.84E-10
ZNF251	8q24.3	-0.33706	1.33E-11	3.86E-10
LRRC26	9q34.3	0.336929	1.36E-11	3.93E-10
SERPINA1	14q32.13	0.336874	1.37E-11	3.96E-10

LRG1	19p13.3	0.336773	1.39E-11	4.01E-10
CCDC84	11q23.3	-0.33665	1.42E-11	4.08E-10
THADA	2p21	-0.33653	1.44E-11	4.14E-10
LRP3	19q13.11	-0.3365	1.45E-11	4.16E-10
GALNT5	2q24.1	0.336421	1.46E-11	4.20E-10
PLCH1	3q25.31	0.336257	1.50E-11	4.29E-10
FRMD4B	3p14.1	0.336184	1.51E-11	4.33E-10
MAPK3	16p11.2	0.33617	1.52E-11	4.34E-10
SEMG2	20q13.12	0.336022	1.55E-11	4.43E-10
TSPAN15	10q22.1	0.335822	1.60E-11	4.55E-10
NSMCE2	8q24.13	-0.33579	1.61E-11	4.57E-10
GPT	8q24.3	0.335745	1.62E-11	4.59E-10
CXCL16	17p13.2	0.335502	1.67E-11	4.75E-10
HOGA1	10q24.2	-0.33539	1.70E-11	4.82E-10
SLC2A8	9q33.3	-0.33519	1.75E-11	4.96E-10
RILP	17p13.3	0.335129	1.77E-11	4.99E-10
NORAD	20q11.23	-0.3351	1.78E-11	5.01E-10
SNAI1	20q13.13	-0.33507	1.78E-11	5.02E-10
MEST	7q32.2	-0.33496	1.81E-11	5.10E-10
NUFIP1	13q14.12	-0.33492	1.82E-11	5.12E-10
TSPAN8	12q21.1	0.334915	1.82E-11	5.12E-10
SHROOM2	Xp22.2	-0.33463	1.90E-11	5.33E-10
SERPINB6	6p25.2	0.33452	1.93E-11	5.41E-10
AHCY	20q11.22	-0.3345	1.94E-11	5.41E-10
ABHD17C	15q25.1	0.334458	1.95E-11	5.44E-10
ADGRF1	6p12.3 6	0.334437	1.96E-11	5.45E-10
SPPL2A	15q21.2	0.334286	2.00E-11	5.56E-10
SLCO3A1	15q26.1	-0.33428	2.00E-11	5.56E-10
CPT2	1p32.3	0.334193	2.03E-11	5.62E-10
PIP5K1B	9q21.11	0.334179	2.03E-11	5.63E-10
AP3B1	5q14.1	0.33409	2.06E-11	5.69E-10
MTUS1	8p22	0.333923	2.11E-11	5.82E-10
RPP40	6p25.1	-0.33384	2.13E-11	5.88E-10
EVI5L	19p13.2	0.333696	2.18E-11	6.00E-10
XKR9	8q13.3	0.33365	2.19E-11	6.04E-10
ABCC3	17q21.33	0.333638	2.20E-11	6.04E-10
NDUFS2	1q23.3	0.33348	2.25E-11	6.17E-10
GPD2	2q24.1	0.333464	2.25E-11	6.18E-10
MME	3q25.2	-0.33336	2.29E-11	6.26E-10
SH3BGRL3	1p36.11	0.333292	2.31E-11	6.31E-10
CAPN9	1q42.2	0.333143	2.36E-11	6.44E-10
CHD6	20q12	-0.33314	2.36E-11	6.44E-10
MSANTD4	11q22.3	-0.33313	2.36E-11	6.44E-10
SIPA1L2	1q42.2	0.333077	2.38E-11	6.48E-10
CHRM1	11q12.3	0.332751	2.50E-11	6.78E-10
RHEB	7q36.1	-0.33275	2.50E-11	6.78E-10
AS3MT	10q24.32	-0.33271	2.52E-11	6.81E-10
NXPE2	11q23.2-q23.3	0.332673	2.53E-11	6.83E-10
FOXP1	3p13	0.3325	2.59E-11	7.00E-10
GDA	9q21.13	0.332207	2.71E-11	7.29E-10
PPM1H	12q14.1-q14.2	-0.33218	2.72E-11	7.31E-10
KRT40	17q21.2	-0.33203	2.78E-11	7.46E-10
DAPK1	9q21.33	0.332015	2.78E-11	7.47E-10
THYN1	11q25	-0.33196	2.80E-11	7.52E-10
XBP1	22q12.1 22q12	0.331877	2.84E-11	7.60E-10
NXT1	20p11.21	-0.33178	2.88E-11	7.69E-10
DNAJC22	12q13.12	0.331758	2.89E-11	7.71E-10
ORAI2	7q22.1	-0.33167	2.92E-11	7.79E-10

GTF3A	13q12.2	-0.33162	2.95E-11	7.85E-10
TLCD3A	17p13.3	0.331558	2.97E-11	7.90E-10
MPDU1	17p13.1	0.331512	2.99E-11	7.94E-10
SQOR	15q21.1	0.331442	3.02E-11	8.02E-10
PLA2G10	16p13.12	0.331398	3.04E-11	8.06E-10
JADE3	Xp11.3	-0.33138	3.05E-11	8.06E-10
CRYBG3	3q11.2	0.331352	3.06E-11	8.09E-10
ENGASE	17q25.3	-0.33108	3.18E-11	8.40E-10
NXF3	Xq22.1	0.330998	3.22E-11	8.48E-10
CALM3	19q13.32	0.330994	3.22E-11	8.48E-10
NOSTRIN	2q24.3	0.330912	3.26E-11	8.57E-10
LCN12	9q34.3	-0.33089	3.27E-11	8.58E-10
TMPRSS13	11q23.3	-0.33075	3.34E-11	8.75E-10
AREG	4q13.3	-0.33073	3.35E-11	8.77E-10
CDCP1	3p21.31	0.330689	3.37E-11	8.81E-10
MFSD1	3q25.32	0.330676	3.37E-11	8.81E-10
SCRN1	7p14.3	-0.33056	3.43E-11	8.94E-10
ANKRD13B	17q11.2	-0.33056	3.43E-11	8.94E-10
ABCB11	2q31.1	0.330521	3.45E-11	8.97E-10
LARP1B	4q28.2	0.330481	3.47E-11	9.01E-10
ANKRD49	11q21	-0.33002	3.71E-11	9.62E-10
CPLX2	5q35.2	-0.33001	3.72E-11	9.63E-10
PDLIM5	4q22.3	0.329929	3.76E-11	9.72E-10
PLA2G12B	10q22.1	-0.32992	3.76E-11	9.72E-10
ZNF572	8q24.13	-0.32981	3.82E-11	9.86E-10
PCSK7	11q23.3	0.329757	3.85E-11	9.93E-10
TNFRSF14-AS1	1p36.32	0.329675	3.90E-11	1.00E-09
CKMT1B	15q15.3	0.329621	3.93E-11	1.01E-09
LAS1L	Xq12	-0.32952	3.98E-11	1.02E-09
BCO1	16q23.2	0.329481	4.01E-11	1.03E-09
IGF2-AS	11p15.5	-0.32948	4.01E-11	1.03E-09
SIDT2	11q23.3	0.329295	4.11E-11	1.05E-09
MYO1C	17p13.3	0.329161	4.19E-11	1.07E-09
MTG2	20q13.33	-0.3291	4.23E-11	1.08E-09
WDR55	5q31.3	0.329086	4.24E-11	1.08E-09
VSIG2	11q24.2	0.329045	4.26E-11	1.09E-09
ANTXR2	4q21.21	0.32891	4.35E-11	1.10E-09
LONRF3	Xq24	0.328877	4.37E-11	1.11E-09
ZNF503-AS2	10q22.2	-0.32878	4.43E-11	1.12E-09
ZDHHC4	7p22.1	-0.32876	4.45E-11	1.13E-09
TCP11L2	12q23.3	0.32872	4.47E-11	1.13E-09
SLC25A48	5q31.1	0.328544	4.58E-11	1.16E-09
RNASEL	1q25.3	0.328495	4.61E-11	1.16E-09
SRD5A3	4q12	0.32849	4.62E-11	1.16E-09
MAP7D2	Xp22.12	-0.32844	4.65E-11	1.17E-09
TMEM253	14q11.2	0.328412	4.67E-11	1.17E-09
DIAPH1	5q31.3	0.328372	4.70E-11	1.18E-09
GBX2	2q37.2	-0.32836	4.71E-11	1.18E-09
PHF20	20q11.22-q11.23	-0.32835	4.71E-11	1.18E-09
CFAP74	1p36.33	-0.32816	4.84E-11	1.21E-09
KCNMB4	12q15	-0.32812	4.87E-11	1.22E-09
PPP4R1	18p11.22	0.328087	4.89E-11	1.22E-09
WDR74	11q12.3	-0.32786	5.05E-11	1.26E-09
GPSM2	1p13.3	-0.32758	5.25E-11	1.31E-09
PAFAH2	1p36.11	0.327582	5.25E-11	1.31E-09
DHX34	19q13.32	-0.32756	5.27E-11	1.31E-09
TMEM171	5q13.2	0.327107	5.62E-11	1.39E-09
ZNF273	7q11.21	-0.32708	5.65E-11	1.40E-09

FAAP24	19q13.11	-0.32705	5.67E-11	1.40E-09
KCTD1	18q11.2	0.326796	5.88E-11	1.45E-09
UGDH	4p14	0.326795	5.88E-11	1.45E-09
KRT83	12q13.13	-0.32669	5.97E-11	1.47E-09
C2ORF49	2q12.2	-0.32666	5.99E-11	1.47E-09
LOC145783	15q21.3	-0.32662	6.03E-11	1.48E-09
ABCG8	2p21	0.326498	6.13E-11	1.50E-09
WDR44	Xq24	0.326444	6.18E-11	1.51E-09
FBXO2	1p36.22	-0.32641	6.21E-11	1.52E-09
MAGED2	Xp11.21	-0.32637	6.24E-11	1.53E-09
BLVRB	19q13.2	0.326353	6.26E-11	1.53E-09
TOR1B	9q34.11	0.326274	6.33E-11	1.54E-09
PIP4P2	8q21.3	-0.32619	6.40E-11	1.56E-09
CAPN10	2q37.3	-0.32617	6.42E-11	1.56E-09
AFAP1L2	10q25.3	0.326004	6.57E-11	1.60E-09
ACER3	11q13.5	0.326004	6.57E-11	1.60E-09
S100A16	1q21.3	0.325957	6.62E-11	1.60E-09
ATP5F1A	18q21.1	0.325872	6.70E-11	1.62E-09
SETDB2	13q14.2	-0.32572	6.84E-11	1.66E-09
CHST6	16q23.1	0.325553	7.01E-11	1.69E-09
TADA2B	4p16.1	0.325546	7.01E-11	1.69E-09
NOD2	16q12.1	-0.32547	7.09E-11	1.71E-09
FZD5	2q33.3	0.325327	7.23E-11	1.74E-09
GLRX	5q15	0.325203	7.36E-11	1.77E-09
RBM4	11q13.2	-0.325	7.58E-11	1.82E-09
SLC7A10	19q13.11	-0.32497	7.61E-11	1.83E-09
CBX3	7p15.2	-0.3249	7.69E-11	1.84E-09
NSUN5	7q11.23	-0.32485	7.74E-11	1.85E-09
BAG3	10q26.11	0.324805	7.79E-11	1.86E-09
FOXA1	14q21.1	0.324608	8.01E-11	1.91E-09
DAPP1	4q23	0.324576	8.04E-11	1.92E-09
TIMM17B	Xp11.23	-0.32449	8.15E-11	1.94E-09
CHST13	3q21.3	-0.32447	8.16E-11	1.94E-09
ELAVL2	9p21.3	-0.32447	8.17E-11	1.94E-09
RPS6KA1	1p36.11	0.324448	8.19E-11	1.94E-09
LRRRC61	7q36.1	-0.32441	8.24E-11	1.95E-09
CASP5	11q22.3	0.324307	8.35E-11	1.98E-09
AKAP5	14q23.3	0.32428	8.38E-11	1.98E-09
TMED10	14q24.3	0.324258	8.41E-11	1.99E-09
SCAMP2	15q24.1	0.324074	8.63E-11	2.04E-09
DYRK1B	19q13.2	-0.32406	8.65E-11	2.04E-09
FAM102B	1p13.3	0.323889	8.86E-11	2.08E-09
PLEKHA8P1	12q12	-0.32361	9.21E-11	2.17E-09
CYHR1	8q24.3	-0.32357	9.27E-11	2.18E-09
PMS2P1	7q22.1	-0.32356	9.28E-11	2.18E-09
GDF11	12q13.2	-0.32346	9.40E-11	2.20E-09
CDKN2C	1p32.3	0.323421	9.46E-11	2.21E-09
RNF43	17q22	-0.32324	9.71E-11	2.27E-09
TRIM16L	17p11.2	0.323206	9.75E-11	2.28E-09
GRINA	8q24.3	-0.32319	9.78E-11	2.28E-09
GJB5	1p34.3	0.32313	9.85E-11	2.29E-09
LAGE3	Xq28	-0.3231	9.89E-11	2.30E-09
HID1	17q25.1	0.322938	1.01E-10	2.35E-09
VAV3	1p13.3	-0.32291	1.02E-10	2.36E-09
NEU1	6p21.33	-0.32282	1.03E-10	2.39E-09
KCNK9	8q24.3	-0.32268	1.05E-10	2.43E-09
HIPK1	1p13.2	0.322566	1.07E-10	2.47E-09
ZPR1	11q23.3	-0.32243	1.09E-10	2.51E-09

BBS5	2q31.1	-0.32242	1.09E-10	2.51E-09
RNF219	13q31.1	-0.32241	1.09E-10	2.51E-09
MAP1LC3A	20q11.22	-0.3224	1.09E-10	2.51E-09
NSMCE3	15q13.1	-0.32237	1.10E-10	2.52E-09
HUNK	21q22.11	-0.3223	1.11E-10	2.54E-09
KLHL31	6p12.1	-0.32225	1.11E-10	2.56E-09
RNPEP	1q32.1	0.322226	1.12E-10	2.56E-09
HABP4	9q22.32	-0.32199	1.16E-10	2.65E-09
	2-Mar 1q41	0.321846	1.18E-10	2.70E-09
UMODL1	21q22.3	-0.3218	1.19E-10	2.71E-09
CYP3A5	7q22.1	0.321687	1.21E-10	2.75E-09
SLC25A26	3p14.1	-0.32156	1.23E-10	2.79E-09
C11ORF74	11p12	-0.32155	1.23E-10	2.80E-09
PIN4P1	15q15.3	-0.32143	1.25E-10	2.84E-09
GAREM1	18q12.1	0.321355	1.26E-10	2.87E-09
NKPD1	19q13.32	-0.32133	1.27E-10	2.87E-09
LINC01550	14q32.2	0.321258	1.28E-10	2.90E-09
COL4A3BP	5q13.3	0.321226	1.29E-10	2.91E-09
DUS4L	7q22.3	-0.32119	1.29E-10	2.92E-09
TMCC3	12q22	0.321104	1.31E-10	2.95E-09
TRAK1	3p22.1	0.320637	1.39E-10	3.15E-09
AQP3	9p13.3	0.320625	1.40E-10	3.15E-09
UBE2C	20q13.12	-0.32053	1.42E-10	3.19E-09
CAPN8	1q41	0.32051	1.42E-10	3.19E-09
SRSF6	20q13.11	-0.32043	1.44E-10	3.22E-09
LGALS4	19q13.2	0.320283	1.47E-10	3.29E-09
TRIM16	17p12	0.320109	1.50E-10	3.36E-09
KLF3	4p14	0.319957	1.53E-10	3.43E-09
SMIM1	1p36.32	-0.31981	1.56E-10	3.50E-09
PCBP4	3p21.2	-0.31977	1.57E-10	3.51E-09
CKAP4	12q23.3	0.319571	1.62E-10	3.61E-09
SEC14L4	22q12.2	-0.31954	1.62E-10	3.62E-09
HAP1	17q21.2	-0.31937	1.66E-10	3.70E-09
TMEM229B	14q24.1	0.319344	1.67E-10	3.71E-09
TAF4	20q13.33	-0.31931	1.68E-10	3.72E-09
TMEM173	5q31.2	0.31915	1.71E-10	3.80E-09
MGLL	3q21.3	0.319104	1.72E-10	3.82E-09
TLE6	19p13.3	0.319088	1.73E-10	3.82E-09
TIPARP	3q25.31	0.319078	1.73E-10	3.83E-09
LTBP4	19q13.2	0.318754	1.81E-10	4.00E-09
ZFP64	20q13.2	-0.31866	1.83E-10	4.05E-09
NUCB2	11p15.1	0.318644	1.84E-10	4.05E-09
LMAN2L	2q11.2	-0.31858	1.85E-10	4.08E-09
BCL2L1	20q11.21	-0.31848	1.88E-10	4.13E-09
PIN4	Xq13.1	-0.31843	1.89E-10	4.15E-09
SHISA4	1q32.1	-0.31838	1.91E-10	4.18E-09
RNASEH2B	13q14.3	-0.31823	1.95E-10	4.26E-09
DHDDS	1p36.11	0.318215	1.95E-10	4.27E-09
TMEM189	20q13.13	-0.31821	1.95E-10	4.27E-09
RPIA	2p11.2	-0.31816	1.96E-10	4.29E-09
ALDH9A1	1q24.1	0.317939	2.02E-10	4.42E-09
CEP250	20q11.22	-0.31789	2.04E-10	4.44E-09
TYW5	2q33.1	-0.31783	2.05E-10	4.47E-09
ISM2	14q24.3	-0.31775	2.08E-10	4.52E-09
XG	Xp22.33	-0.31759	2.12E-10	4.61E-09
ALPI	2q37.1	0.317544	2.14E-10	4.64E-09
STK4	20q13.12	-0.31752	2.14E-10	4.64E-09
AGFG2	7q22.1	0.317523	2.14E-10	4.64E-09

YWHAQ	2p25.1	-0.31745	2.17E-10	4.68E-09
HM13	20q11.21	-0.31744	2.17E-10	4.69E-09
OGDHL	10q11.23	-0.31714	2.26E-10	4.88E-09
VEGFB	11q13.1	-0.31698	2.31E-10	4.98E-09
COLCA2	11q23.1	0.316806	2.36E-10	5.09E-09
SYT13	11p11.2	0.316709	2.40E-10	5.16E-09
ST3GAL4	11q24.2	0.316287	2.54E-10	5.46E-09
RAB27A	15q21.3	0.316238	2.56E-10	5.49E-09
RPL36A	Xq22.1	-0.31621	2.57E-10	5.50E-09
RCOR1	14q32.31-q32.32	0.316122	2.60E-10	5.56E-09
SH2D1B	1q23.3	0.316111	2.60E-10	5.56E-09
GJC3	7q22.1	-0.31606	2.62E-10	5.60E-09
MAPRE2	18q12.1-q12.2	0.316031	2.63E-10	5.61E-09
TNK1	17p13.1	0.315976	2.65E-10	5.65E-09
MVP	16p11.2	0.315965	2.65E-10	5.65E-09
DGKQ	4p16.3	0.315922	2.67E-10	5.68E-09
KHDRBS3	8q24.23	-0.3159	2.68E-10	5.69E-09
TMEM132A	11q12.2	-0.31583	2.70E-10	5.74E-09
DTWD2	5q23.1	0.315743	2.73E-10	5.80E-09
ZSWIM6	5q12.1	0.315709	2.75E-10	5.82E-09
RAPGEF4	2q31.1	-0.31567	2.76E-10	5.84E-09
ACO2	22q13.2	0.31565	2.77E-10	5.86E-09
YAP1	11q22.1	-0.31563	2.78E-10	5.86E-09
SLC6A4	17q11.2	-0.3154	2.86E-10	6.05E-09
ZNF182	Xp11.23	-0.31532	2.90E-10	6.11E-09
ACPP	3q22.1	0.315183	2.95E-10	6.21E-09
C6ORF136	6p21.33	0.315176	2.95E-10	6.21E-09
TMEM30B	14q23.1	0.315039	3.01E-10	6.32E-09
NOS2	17q11.2	0.314968	3.04E-10	6.38E-09
PTDSS2	11p15.5	-0.31493	3.05E-10	6.41E-09
UBE3D	6q14.1	-0.31487	3.08E-10	6.45E-09
KITLG	12q21.32	0.314742	3.13E-10	6.56E-09
ETFBKMT	12p11.21	0.314595	3.20E-10	6.68E-09
GEMIN6	2p22.1	-0.31459	3.20E-10	6.68E-09
HILPDA	7q32.1	-0.31452	3.23E-10	6.74E-09
B4GALNT2	17q21.32	0.31444	3.26E-10	6.80E-09
GDAP1L1	20q13.12	-0.31432	3.32E-10	6.91E-09
CTNNB1	3p22.1	-0.3143	3.32E-10	6.91E-09
TRIM14	9q22.33	0.314201	3.37E-10	7.01E-09
EMX1	2p13.2	0.313955	3.49E-10	7.23E-09
SF3B6	2p23.3	-0.31372	3.60E-10	7.46E-09
REP15	12p11.22	0.313649	3.63E-10	7.52E-09
ZADH2	18q22.3	0.313587	3.66E-10	7.58E-09
GTF3C3	2q33.1	-0.31352	3.70E-10	7.64E-09
RPS7	2p25.3	-0.3134	3.76E-10	7.76E-09
FLNB	3p14.3	0.313394	3.76E-10	7.76E-09
AASDHPPT	11q22.3	-0.31338	3.77E-10	7.76E-09
FAM226B	Xq13.1	-0.3133	3.81E-10	7.84E-09
FOXA3	19q13.32	0.313295	3.81E-10	7.84E-09
RNF141	11p15.4 11p15	0.313264	3.83E-10	7.86E-09
ADCY9	16p13.3	0.313241	3.84E-10	7.88E-09
LTO1	11q13.3	-0.31322	3.85E-10	7.90E-09
P2RY1	3q25.2	0.313199	3.86E-10	7.91E-09
LRRC29	16q22.1	-0.31309	3.92E-10	8.02E-09
PTGER4	5p13.1	0.312997	3.97E-10	8.11E-09
CDKN1B	12p13.1	-0.31295	4.00E-10	8.16E-09
UTP23	8q24.11	-0.31288	4.03E-10	8.22E-09
PHYHIPL	10q21.1	-0.31284	4.05E-10	8.26E-09

CAMKMT	2p21	-0.31281	4.07E-10	8.28E-09
CHCHD7	8q12.1	-0.31266	4.15E-10	8.44E-09
CCDC149	4p15.2	0.312508	4.24E-10	8.61E-09
NDEL1	17p13.1	0.312387	4.31E-10	8.74E-09
MUC13	3q21.2	0.31235	4.33E-10	8.78E-09
C1GALT1C1L	2p21	-0.31234	4.33E-10	8.78E-09
RND2	17q21.31	-0.31233	4.34E-10	8.79E-09
BCAP31	Xq28	-0.31232	4.35E-10	8.79E-09
ADGRG1	16q21	-0.31223	4.40E-10	8.89E-09
NUDCD1	8q23.1	-0.31221	4.41E-10	8.89E-09
PPP1R13B	14q32.33	0.31221	4.41E-10	8.89E-09
SSBP4	19p13.11	-0.312	4.54E-10	9.14E-09
TSPAN3	15q24.3	0.31198	4.55E-10	9.15E-09
STARD5	15q25.1	0.311833	4.64E-10	9.31E-09
ZDHHC7	16q24.1	0.311833	4.64E-10	9.31E-09
PAH	12q23.2	-0.31182	4.65E-10	9.32E-09
OGFR	20q13.33	-0.31176	4.69E-10	9.38E-09
CCDC85B	11q13.1	-0.31173	4.70E-10	9.41E-09
LPAR5	12p13.31	0.311723	4.71E-10	9.41E-09
SAR1B	5q31.1	0.311705	4.72E-10	9.43E-09
ABCG5	2p21	0.311686	4.73E-10	9.44E-09
PLAAT2	11q12.3	0.311627	4.77E-10	9.51E-09
CLCA3P	1p22.3	0.311606	4.78E-10	9.53E-09
IMPA2	18p11.21	0.311593	4.79E-10	9.53E-09
NIFK	2q14.3	-0.31156	4.81E-10	9.56E-09
SLC52A2	8q24.3	-0.31148	4.87E-10	9.66E-09
ZNF71	19q13.43	-0.31146	4.88E-10	9.67E-09
ABCC13	21q11.2	0.311416	4.91E-10	9.72E-09
ZNF563	19p13.2	-0.31137	4.94E-10	9.78E-09
VAPA	18p11.22	0.311317	4.97E-10	9.83E-09
GNPNAT1	14q22.1	0.311293	4.99E-10	9.85E-09
KAT2B	3p24.3	0.311177	5.07E-10	1.00E-08
MEGF11	15q22.31	-0.31116	5.08E-10	1.00E-08
DMD	Xp21.2-p21.1	-0.31114	5.10E-10	1.00E-08
TBC1D10A	22q12.2	0.311045	5.16E-10	1.01E-08
SLC10A7	4q31.22	0.310846	5.30E-10	1.04E-08
TBC1D2	9q22.33	0.310809	5.32E-10	1.05E-08
CPEB2	4p15.32	0.310804	5.33E-10	1.05E-08
MYH7B	20q11.22	-0.31078	5.34E-10	1.05E-08
DMBT1	10q26.13	0.310765	5.36E-10	1.05E-08
LETM1	4p16.3	0.310673	5.42E-10	1.06E-08
KRT38	17q21.2	-0.31065	5.44E-10	1.06E-08
QSOX1	1q25.2	0.310644	5.44E-10	1.06E-08
RAMP2-AS1	17q21.2	-0.31064	5.44E-10	1.06E-08
GBF1	10q24.32	0.310588	5.48E-10	1.07E-08
NONO	Xq13.1	-0.31052	5.54E-10	1.08E-08
IGF2	11p15.5	-0.31036	5.65E-10	1.10E-08
C4BPA	1q32.2	0.310336	5.67E-10	1.10E-08
SERPINB1	6p25.2	0.310039	5.90E-10	1.15E-08
ENOX2	Xq26.1	-0.31002	5.92E-10	1.15E-08
KIAA0040	1q25.1	0.309984	5.94E-10	1.15E-08
AHCYL1	1p13.3	0.309947	5.97E-10	1.16E-08
HEPHL1	11q21	-0.30984	6.06E-10	1.17E-08
ANKRD27	19q13.11	-0.30983	6.07E-10	1.17E-08
GCSAM	3q13.2	0.309802	6.09E-10	1.18E-08
GNB1L	22q11.21	-0.30978	6.10E-10	1.18E-08
TCN1	11q12.1	0.309755	6.13E-10	1.18E-08
ELF5	11p13	-0.30973	6.15E-10	1.18E-08

GOT1	10q24.2	0.309629	6.23E-10	1.20E-08
COLCA1	11q23.1	0.309587	6.27E-10	1.20E-08
IPO8	12p11.21	0.309434	6.40E-10	1.23E-08
ZMYND15	17p13.2	0.309309	6.50E-10	1.25E-08
PUS7	7q22.3	-0.30904	6.74E-10	1.29E-08
NFKB1	4q24	0.308982	6.79E-10	1.30E-08
COIL	17q22	-0.30888	6.88E-10	1.32E-08
RASEF	9q21.32	0.308833	6.93E-10	1.32E-08
PRDM8	4q21.21	0.308809	6.95E-10	1.33E-08
STAU1	20q13.13	-0.30856	7.19E-10	1.37E-08
WSB2	12q24.23	0.308508	7.23E-10	1.38E-08
ENTPD8	9q34.3	0.308499	7.24E-10	1.38E-08
FAM189A2	9q21.12	0.308449	7.29E-10	1.38E-08
GAK	4p16.3	0.308445	7.29E-10	1.38E-08
STARD3	17q12	-0.30836	7.38E-10	1.40E-08
WWP2	16q22.1	0.30828	7.46E-10	1.41E-08
MYL3	3p21.31	-0.30818	7.55E-10	1.43E-08
NOD1	7p14.3	-0.30817	7.57E-10	1.43E-08
SMOC2	6q27	-0.3081	7.64E-10	1.44E-08
ZMYND8	20q13.12	-0.30804	7.69E-10	1.45E-08
C7ORF26	7p22.1	-0.30799	7.74E-10	1.46E-08
ARF6	14q21.3	0.30798	7.76E-10	1.46E-08
RPRD1B	20q11.23	-0.30794	7.80E-10	1.47E-08
IGF2BP1	17q21.32	-0.3079	7.84E-10	1.47E-08
PIAS2	18q21.1	0.307877	7.86E-10	1.48E-08
TTC22	1p32.3	0.307867	7.88E-10	1.48E-08
TCEA3	1p36.12	0.307547	8.22E-10	1.54E-08
MTHFR	1p36.22	0.30754	8.22E-10	1.54E-08
ZNF280C	Xq26.1	-0.30754	8.23E-10	1.54E-08
AHR	7p21.1	0.307457	8.31E-10	1.55E-08
PVT1	8q24.21	-0.30745	8.32E-10	1.55E-08
SERPINA10	14q32.13	-0.30726	8.53E-10	1.59E-08
TOX	8q12.1	0.307248	8.55E-10	1.59E-08
GJA9	1p34.3	0.307147	8.66E-10	1.61E-08
BTNL9	5q35.3	0.307138	8.67E-10	1.61E-08
SH2D4A	8p21.3	0.306825	9.04E-10	1.68E-08
APAF1	12q23.1	0.306701	9.18E-10	1.71E-08
NEURL2	20q13.12	-0.30665	9.25E-10	1.72E-08
PPARGC1A	4p15.2	0.306573	9.34E-10	1.73E-08
COL9A3	20q13.33	-0.30651	9.42E-10	1.75E-08
TTC39B	9p22.3	0.306289	9.70E-10	1.79E-08
SNHG15	7p13	-0.30619	9.82E-10	1.82E-08
PRDX5	11q13.1	-0.30618	9.84E-10	1.82E-08
ITGB7	12q13.13	0.306114	9.92E-10	1.83E-08
RPH3AL	17p13.3	0.306045	1.00E-09	1.85E-08
CXCL17	19q13.2	0.306026	1.00E-09	1.85E-08
PATZ1	22q12.2	-0.306	1.01E-09	1.85E-08
POLG2	17q23.3	-0.30599	1.01E-09	1.86E-08
TMBIM6	12q13.12	0.305765	1.04E-09	1.91E-08
GSDMB	17q21.1	0.305693	1.05E-09	1.93E-08
RBP3	10q11.22	0.305622	1.06E-09	1.94E-08
LINC00623	1p11.2	-0.30553	1.07E-09	1.96E-08
HSF2BP	21q22.3	-0.30551	1.07E-09	1.97E-08
OLFML3	1p13.2	-0.30547	1.08E-09	1.97E-08
TSPEAR	21q22.3	-0.30538	1.09E-09	2.00E-08
ZNF34	8q24.3	-0.30534	1.10E-09	2.01E-08
DNAH2	17p13.1	0.305322	1.10E-09	2.01E-08
ZSCAN25	7q22.1	-0.3053	1.10E-09	2.01E-08



EXOSC5	19q13.2	-0.30529	1.11E-09	2.01E-08
KCNA6	12p13.32	0.305141	1.13E-09	2.05E-08
EFNA4	1q21.3	-0.30507	1.14E-09	2.07E-08
TTC9B	19q13.2	0.304787	1.18E-09	2.14E-08
ZBTB7B	1q21.3	0.304545	1.22E-09	2.21E-08
BCL2L15	1p13.2	0.304521	1.22E-09	2.22E-08
DAP	5p15.2	0.304426	1.24E-09	2.24E-08
ANKRD13D	11q13.2	-0.30437	1.25E-09	2.26E-08
TMEM185B	2q14.2	-0.30424	1.27E-09	2.29E-08
ZFP41	8q24.3	-0.30392	1.32E-09	2.39E-08
RNF148	7q31.32	0.303874	1.33E-09	2.40E-08
ZNF786	7q36.1	-0.30375	1.35E-09	2.44E-08
CMSS1	3q12.1	-0.30371	1.36E-09	2.45E-08
PPP1R35	7q22.1	-0.3037	1.36E-09	2.45E-08
NAT9	17q25.1	-0.30369	1.36E-09	2.45E-08
NR6A1	9q33.3	-0.30355	1.39E-09	2.49E-08
CLNS1A	11q14.1	-0.30345	1.41E-09	2.52E-08
ONECUT3	19p13.3	0.303407	1.41E-09	2.53E-08
FUT6	19p13.3	0.303295	1.43E-09	2.57E-08
TPRKB	2p13.1	-0.30329	1.44E-09	2.57E-08
CRIP1	14q32.33	0.303179	1.46E-09	2.60E-08
CPM	12q15	0.303143	1.46E-09	2.61E-08
CILP2	19p13.11	-0.3031	1.47E-09	2.63E-08
IRF2	4q35.1	0.303072	1.48E-09	2.63E-08
VPS13D	1p36.22-p36.21	0.302997	1.49E-09	2.66E-08
RHOQ	2p21	-0.30297	1.50E-09	2.66E-08
VAPB	20q13.32	-0.30284	1.52E-09	2.71E-08
ANKHD1-EIF4EBP3	5q31.3	0.302777	1.53E-09	2.73E-08
PHF14	7p21.3	-0.30272	1.55E-09	2.75E-08
PRKRIP1	7q22.1	-0.30271	1.55E-09	2.75E-08
ALAS1	3p21.2	0.302678	1.55E-09	2.75E-08
RNF216P1	7p22.1	-0.30254	1.58E-09	2.80E-08
KIF13B	8p12	0.30254	1.58E-09	2.80E-08
MYORG	9p13.3	0.30246	1.60E-09	2.83E-08
BRD7	16q12.1	-0.30245	1.60E-09	2.83E-08
LACTB	15q22.2	0.302382	1.62E-09	2.85E-08
ACTR3C	7q36.1	-0.30235	1.62E-09	2.86E-08
ZNF3	7q22.1	-0.30207	1.68E-09	2.96E-08
DUOX2	15q21.1	0.302001	1.70E-09	2.99E-08
POU2AF1	11q23.1	0.301994	1.70E-09	2.99E-08
TMEM150C	4q21.22	-0.30194	1.71E-09	3.00E-08
TOR4A	9q34.3	0.301894	1.72E-09	3.02E-08
ATG4B	2q37.3	-0.30189	1.72E-09	3.02E-08
TTC25	17q21.2	-0.30179	1.74E-09	3.06E-08
PCID2	13q34	-0.30175	1.75E-09	3.07E-08
CWF19L2	11q22.3	-0.30141	1.83E-09	3.20E-08
CRK	17p13.3	0.301341	1.85E-09	3.23E-08
KLHL41	2q31.1	-0.30132	1.85E-09	3.23E-08
PIK3C2B	1q32.1	0.301199	1.88E-09	3.28E-08
ZNF133	20p11.23	-0.30116	1.89E-09	3.30E-08
PQBP1	Xp11.23	-0.30106	1.92E-09	3.34E-08
FKBP10	17q21.2	-0.30096	1.94E-09	3.38E-08
FBXO17	19q13.2	-0.30092	1.95E-09	3.39E-08
PRPF40B	12q13.12	-0.30083	1.97E-09	3.43E-08
TES	7q31.2	-0.30083	1.97E-09	3.43E-08
GBA2	9p13.3	0.3008	1.98E-09	3.44E-08
CEP112	17q24.1	-0.30068	2.01E-09	3.49E-08
PDCD5	19q13.11	-0.30067	2.02E-09	3.49E-08

DDX60L	4q32.3	0.300654	2.02E-09	3.49E-08
FGF18	5q35.1	-0.30064	2.02E-09	3.50E-08
PPIE	1p34.2	-0.30057	2.04E-09	3.53E-08
SOGA3	6q22.33	-0.30055	2.05E-09	3.53E-08
ADH6	4q23	0.300527	2.05E-09	3.54E-08
BTNL3	5q35.3	0.300491	2.06E-09	3.55E-08
TPMT	6p22.3	0.300457	2.07E-09	3.56E-08
SHISA6	17p12	-0.30046	2.07E-09	3.56E-08
TNFRSF12A	16p13.3	-0.30032	2.11E-09	3.62E-08
TAZ	Xq28	-0.30027	2.12E-09	3.64E-08
DLG5-AS1	10q22.3	-0.30023	2.13E-09	3.66E-08
GMPPB	3p21.31	0.300211	2.14E-09	3.66E-08
CES1P1	16q12.2	-0.30021	2.14E-09	3.66E-08
RPN2	20q11.23	-0.30015	2.15E-09	3.68E-08
EZR	6q25.3	0.300116	2.16E-09	3.70E-08
DPY30	2p22.3	-0.29993	2.22E-09	3.78E-08
TAF13	1p13.3	0.299895	2.23E-09	3.80E-08
SLC39A2	14q11.2	-0.29983	2.25E-09	3.83E-08
YWHAB	20q13.12	-0.29976	2.26E-09	3.86E-08
MAMSTR	19q13.33	-0.29974	2.27E-09	3.86E-08
TMEM54	1p35.1	0.299728	2.27E-09	3.87E-08
ZNF335	20q13.12	-0.29972	2.28E-09	3.87E-08
SLC6A8	Xq28	0.299628	2.30E-09	3.91E-08
HSF2	6q22.31	-0.29961	2.31E-09	3.92E-08
CETN2	Xq28	-0.2995	2.34E-09	3.97E-08
CLMN	14q32.13	0.299388	2.38E-09	4.02E-08
FAM200A	7q22.1	-0.29936	2.38E-09	4.03E-08
HPS4	22q12.1	-0.29918	2.44E-09	4.12E-08
C1ORF210	1p34.2	0.299181	2.44E-09	4.12E-08
PAX5	9p13.2	0.29904	2.48E-09	4.19E-08
AGBL5	2p23.3	-0.299	2.50E-09	4.21E-08
	3-Mar 5q23.2	0.298921	2.52E-09	4.25E-08
TSPYL2	Xp11.22	-0.29884	2.55E-09	4.29E-08
LZTS3	20p13	-0.2988	2.56E-09	4.31E-08
ZDHHC9	Xq26.1	-0.29875	2.58E-09	4.33E-08
NUMB	14q24.2-q24.3	0.298669	2.60E-09	4.37E-08
HOMER3	19p13.11	-0.29862	2.62E-09	4.40E-08
RNF216	7p22.1	-0.29859	2.63E-09	4.41E-08
C1ORF115	1q41	0.298544	2.65E-09	4.43E-08
IQGAP1	15q26.1	0.298541	2.65E-09	4.43E-08
PPP1R3D	20q13.33	-0.2985	2.66E-09	4.45E-08
NCOR1	17p12-p11.2	0.298499	2.66E-09	4.45E-08
TSPAN6	Xq22.1	-0.29845	2.68E-09	4.47E-08
ANXA9	1q21.3	-0.2984	2.70E-09	4.50E-08
ACVR2B	3p22.2	-0.29839	2.70E-09	4.50E-08
PPARA	22q13.31	0.298346	2.71E-09	4.52E-08
XPO5	6p21.1	-0.29808	2.81E-09	4.67E-08
E2F2	1p36.12	0.298016	2.83E-09	4.71E-08
CCDC167	6p21.2	-0.29798	2.84E-09	4.72E-08
RNF4	4p16.3	0.297975	2.85E-09	4.72E-08
PPARGC1B	5q32	0.297952	2.85E-09	4.73E-08
H2AFJ	12p12.3	-0.29785	2.89E-09	4.79E-08
WASHC2A	10q11.23	0.297842	2.89E-09	4.79E-08
SPATA33	16q24.3	-0.29784	2.90E-09	4.79E-08
NR4A2	2q24.1	0.297808	2.91E-09	4.80E-08
MACC1	7p21.1	-0.29771	2.94E-09	4.86E-08
TNFAIP8	5q23.1	0.29767	2.96E-09	4.88E-08
FOXQ1	6p25.3	-0.29756	3.00E-09	4.95E-08

MPHOSPH10	2p13.3	-0.29755	3.00E-09	4.95E-08
PACSIN3	11p11.2	-0.2974	3.06E-09	5.04E-08
CEP68	2p14	-0.2972	3.14E-09	5.17E-08
LSM8	7q31.31	-0.29713	3.17E-09	5.20E-08
DACH1	13q21.33	-0.29708	3.19E-09	5.23E-08
GABRP	5q35.1	0.297081	3.19E-09	5.23E-08
KRT37	17q21.2	-0.29707	3.19E-09	5.23E-08
STK17B	2q32.3	0.297071	3.19E-09	5.23E-08
EDEM1	3p26.1	0.296964	3.24E-09	5.30E-08
CIDEC	3p25.3	0.29695	3.24E-09	5.30E-08
SSBP2	5q14.1	0.296869	3.28E-09	5.35E-08
VPS72	1q21.3	-0.29683	3.29E-09	5.37E-08
FAM86C1	11q13.4	-0.2968	3.30E-09	5.38E-08
SETD7	4q31.1	0.296802	3.30E-09	5.38E-08
CTNNA2	2p12	-0.29672	3.34E-09	5.43E-08
NKAP	Xq24	-0.29666	3.36E-09	5.47E-08
C2ORF15	2q11.2	-0.29665	3.37E-09	5.48E-08
ZMIZ2	7p13	-0.29663	3.37E-09	5.48E-08
GIPR	19q13.32	0.296583	3.40E-09	5.51E-08
SLC19A3	2q36.3	-0.29654	3.42E-09	5.53E-08
FAM122C	Xq26.3	-0.29654	3.42E-09	5.53E-08
ZNF7	8q24.3	-0.29653	3.42E-09	5.53E-08
PLA2G15	16q22.1	-0.29651	3.43E-09	5.55E-08
IFRD1	7q31.1	-0.29645	3.46E-09	5.59E-08
CASC4	15q15.3	0.296379	3.49E-09	5.63E-08
LYRM4	6p25.1	-0.29636	3.49E-09	5.64E-08
FAM120A	9q22.31	0.29635	3.50E-09	5.64E-08
ZNF830	17q12	-0.29627	3.54E-09	5.70E-08
STXBP5	6q24.3	0.296201	3.56E-09	5.74E-08
FAM192A	16q13	-0.29617	3.58E-09	5.75E-08
ZNF250	8q24.3	-0.29608	3.62E-09	5.82E-08
ASS1	9q34.11	0.295952	3.68E-09	5.91E-08
TMOD3	15q21.2	0.295939	3.69E-09	5.91E-08
TM9SF4	20q11.21	-0.29592	3.69E-09	5.92E-08
TTC27	2p22.3	-0.29582	3.74E-09	5.99E-08
BANF1	11q13.1	-0.2958	3.75E-09	6.01E-08
MARVELD2	5q13.2	0.295731	3.78E-09	6.05E-08
GCM1	6p12.1	-0.2956	3.84E-09	6.14E-08
NPTX2	7q22.1	-0.29558	3.86E-09	6.16E-08
FAM160A1	4q31.3	0.295542	3.87E-09	6.18E-08
SMARCAL1	2q35	-0.29553	3.88E-09	6.19E-08
MYL12A	18p11.31	0.295518	3.89E-09	6.19E-08
DGAT2	11q13.5	-0.29546	3.91E-09	6.23E-08
WDR92	2p14	-0.29542	3.94E-09	6.26E-08
GALNT3	2q24.3	0.295343	3.97E-09	6.32E-08
SLC4A1AP	2p23.3	-0.29529	4.00E-09	6.36E-08
TEAD2	19q13.33	-0.29526	4.01E-09	6.37E-08
TSPY26P	20q11.21	-0.29511	4.09E-09	6.48E-08
GDPGP1	15q26.1	0.295112	4.09E-09	6.48E-08
FGF3	11q13.3	-0.29508	4.11E-09	6.50E-08
SLC7A5	16q24.2	-0.29499	4.15E-09	6.56E-08
NECAP1	12p13.31	0.294992	4.15E-09	6.56E-08
KCTD9	8p21.2	0.294931	4.19E-09	6.61E-08
TMEM255B	13q34	-0.29486	4.22E-09	6.66E-08
CTPS2	Xp22.2	-0.29485	4.23E-09	6.66E-08
SYTL2	11q14.1	0.294846	4.23E-09	6.67E-08
SIPA1L3	19q13.13-q13.2	0.294838	4.23E-09	6.67E-08
MPP1	Xq28	-0.29478	4.27E-09	6.71E-08

CLDN7	17p13.1	0.294774	4.27E-09	6.71E-08
HSPA12A	10q25.3	-0.29477	4.27E-09	6.71E-08
NBPF7	1p12	0.294762	4.27E-09	6.71E-08
ZDHHC3	3p21.31	0.294737	4.29E-09	6.73E-08
HK1	10q22.1	0.294609	4.36E-09	6.83E-08
RELCH	18q21.33	0.294595	4.37E-09	6.84E-08
DGLUCY	14q32.11	0.294486	4.43E-09	6.93E-08
SDCBP2	20p13	0.294444	4.45E-09	6.96E-08
ATP5F1B	12q13.3	0.294409	4.47E-09	6.98E-08
TRMT61A	14q32.33	-0.29439	4.48E-09	7.00E-08
ATOH1	4q22.2	0.294374	4.49E-09	7.00E-08
SERPINB8	18q22.1	0.294205	4.59E-09	7.15E-08
FRS3	6p21.1	-0.29384	4.80E-09	7.47E-08
RELL1	4p14	0.293833	4.80E-09	7.48E-08
REEP1	2p11.2	-0.29383	4.81E-09	7.48E-08
TCFL5	20q13.33	-0.29376	4.85E-09	7.54E-08
AOAH	7p14.2	-0.29374	4.86E-09	7.55E-08
ZNF599	19q13.11	-0.29371	4.88E-09	7.57E-08
FOXO3	6q21	-0.29347	5.03E-09	7.79E-08
GBA3	4p15.2	0.293443	5.05E-09	7.81E-08
FEZF1	7q31.32	0.293419	5.06E-09	7.83E-08
COLEC11	2p25.3	-0.2934	5.08E-09	7.85E-08
GALNT1	18q12.2	0.293343	5.11E-09	7.89E-08
GALNTL6	4q34.1	0.293285	5.15E-09	7.95E-08
ANKRD46	8q22.3	-0.29323	5.18E-09	7.99E-08
PLTP	20q13.12	-0.29321	5.20E-09	8.01E-08
SLC25A14	Xq26.1	-0.29321	5.20E-09	8.01E-08
LINC00261	20p11.21	0.293182	5.21E-09	8.02E-08
DSC2	18q12.1	0.293091	5.27E-09	8.11E-08
FUT8	14q23.3	0.293033	5.31E-09	8.16E-08
ZNF570	19q13.12	-0.29294	5.37E-09	8.25E-08
TM7SF2	11q13.1	-0.29286	5.43E-09	8.32E-08
PPP1R2	3q29	-0.29286	5.43E-09	8.32E-08
PCDH19	Xq22.1	-0.29281	5.46E-09	8.36E-08
MIA2	14q21.1	0.292775	5.48E-09	8.40E-08
VPS37B	12q24.31	0.292732	5.51E-09	8.44E-08
WBP1	2p13.1	-0.29268	5.55E-09	8.49E-08
C2CD4A	15q22.2	0.292606	5.60E-09	8.56E-08
ZBTB2	6q25.1	-0.29249	5.68E-09	8.67E-08
LGALS3	14q22.3	0.292449	5.71E-09	8.71E-08
TCEAL4	Xq22.2	-0.29243	5.72E-09	8.72E-08
PJKK	2q31.2	-0.29242	5.73E-09	8.73E-08
SYNJ2BP	14q24.2	0.292409	5.74E-09	8.74E-08
XRCC5	2q35	-0.29234	5.79E-09	8.81E-08
AVPI1	10q24.2	0.292252	5.85E-09	8.90E-08
STC2	5q35.2	-0.29218	5.91E-09	8.97E-08
SLC6A14	Xq23	0.292094	5.97E-09	9.06E-08
NT5E	6q14.3	0.292067	5.99E-09	9.08E-08
SLC6A7	5q32	0.29206	6.00E-09	9.08E-08
SLC31A1	9q32	0.291948	6.08E-09	9.20E-08
CCT4	2p15	-0.29189	6.12E-09	9.26E-08
AKR7L	1p36.13 1p35-p36.1	0.291879	6.13E-09	9.27E-08
STX12	1p35.3	0.29182	6.18E-09	9.33E-08
ANGEL1	14q24.3	-0.29182	6.18E-09	9.33E-08
INSR	19p13.2	0.291783	6.21E-09	9.36E-08
ANO7	2q37.3	0.291759	6.22E-09	9.38E-08
MTMR10	15q13.3	0.29173	6.25E-09	9.41E-08
AP5Z1	7p22.1	-0.29169	6.28E-09	9.44E-08

ABHD12	20p11.21	-0.29163	6.32E-09	9.51E-08
FAH	15q25.1	-0.29152	6.42E-09	9.64E-08
TBPL1	6q23.2	-0.29151	6.42E-09	9.64E-08
TM4SF4	3q25.1	0.291489	6.44E-09	9.66E-08
CLCN7	16p13.3	-0.29147	6.45E-09	9.67E-08
GZMB	14q12	-0.29145	6.47E-09	9.70E-08
MUC6	11p15.5	0.291414	6.50E-09	9.73E-08
ATP9A	20q13.2	-0.29139	6.52E-09	9.75E-08
ZBTB10	8q21.13	-0.29119	6.68E-09	9.99E-08
WDR75	2q32.2	-0.29098	6.86E-09	1.02E-07
ARHGEF16	1p36.32	0.290829	6.99E-09	1.04E-07
DLST	14q24.3	0.29077	7.04E-09	1.05E-07
MEP1B	18q12.1	0.290654	7.14E-09	1.06E-07
PIP4K2B	17q12	-0.29061	7.18E-09	1.07E-07
WDR53	3q29	-0.29049	7.29E-09	1.08E-07
GOLGA3	12q24.33	0.290489	7.29E-09	1.08E-07
NCKAP5L	12q13.12	-0.29046	7.31E-09	1.09E-07
CES2	16q22.1	0.290343	7.42E-09	1.10E-07
POLR2C	16q21	-0.29025	7.51E-09	1.11E-07
MTERF3	8q22.1	-0.29003	7.71E-09	1.14E-07
DPY19L4	8q22.1	-0.28991	7.83E-09	1.16E-07
ROPN1B	3q21.2	0.289831	7.91E-09	1.17E-07
DPF3	14q24.2	0.289652	8.08E-09	1.19E-07
NOL10	2p25.1	-0.28965	8.08E-09	1.19E-07
INAVA	1q32.1	0.289637	8.10E-09	1.19E-07
METTL22	16p13.2	-0.28964	8.10E-09	1.19E-07
PREB	2p23.3	-0.28963	8.10E-09	1.19E-07
JOSD1	22q13.1	0.289563	8.17E-09	1.20E-07
CLSTN2	3q23	-0.28956	8.18E-09	1.20E-07
TFAP4	16p13.3	-0.28953	8.21E-09	1.21E-07
WTIP	19q13.11	-0.28942	8.31E-09	1.22E-07
ITLN1	1q23.3	0.289322	8.42E-09	1.24E-07
PXN	12q24.23	0.289264	8.48E-09	1.24E-07
IRF6	1q32.2	0.289261	8.48E-09	1.24E-07
MAGEA11	Xq28	-0.28918	8.57E-09	1.26E-07
ANKRD19P	9q22.31	-0.28913	8.62E-09	1.26E-07
NDUFAF7	2p22.2	-0.2891	8.66E-09	1.27E-07
COX19	7p22.3	-0.28909	8.67E-09	1.27E-07
TSN	2q14.3	-0.28902	8.73E-09	1.28E-07
CCT7	2p13.2	-0.28886	8.91E-09	1.30E-07
PACC1	1q32.3	-0.28865	9.14E-09	1.33E-07
SERPINA7	Xq22.3	-0.2886	9.20E-09	1.34E-07
KRT15	17q21.2	-0.28855	9.26E-09	1.35E-07
C7ORF50	7p22.3	-0.28851	9.30E-09	1.36E-07
ZNF440	19p13.2	0.288486	9.33E-09	1.36E-07
ADSL	22q13.1	-0.28849	9.33E-09	1.36E-07
TAF6	7q22.1	-0.28848	9.34E-09	1.36E-07
TFF3	21q22.3	0.288408	9.42E-09	1.37E-07
SLC18B1	6q23.2	0.288338	9.50E-09	1.38E-07
ISY1	3q21.3	-0.28834	9.50E-09	1.38E-07
MED20	6p21.1	-0.28832	9.52E-09	1.38E-07
ANKRD13C	1p31.1	0.288299	9.55E-09	1.38E-07
GTDC1	2q22.3	-0.28828	9.57E-09	1.38E-07
PRR19	19q13.2	-0.28817	9.70E-09	1.40E-07
PXMP4	20q11.22	-0.28813	9.75E-09	1.41E-07
CDKN1A	6p21.2	0.287939	9.98E-09	1.44E-07
BPNT1	1q41	0.287933	9.99E-09	1.44E-07
CHST14	15q15.1	-0.28792	1.00E-08	1.44E-07

PLA2G2A	1p36.13	0.287892	1.00E-08	1.44E-07
PIPOX	17q11.2	-0.28789	1.00E-08	1.44E-07
GSR	8p12	0.287885	1.00E-08	1.44E-07
HEPACAM2	7q21.2	0.287882	1.00E-08	1.44E-07
SMAD2	18q21.1	0.287853	1.01E-08	1.45E-07
TLE2	19p13.3	-0.28765	1.03E-08	1.48E-07
WNT10A	2q35	-0.28765	1.03E-08	1.48E-07
CENPP	9q22.31	-0.28762	1.04E-08	1.49E-07
LRRC49	15q23	-0.28762	1.04E-08	1.49E-07
TATDN1	8q24.13	-0.28757	1.04E-08	1.49E-07
PRAF2	Xp11.23	-0.28746	1.06E-08	1.51E-07
CLCA4	1p22.3	0.287416	1.06E-08	1.52E-07
GPC2	7q22.1	-0.28739	1.07E-08	1.52E-07
ZC3H8	2q14.1	-0.28727	1.08E-08	1.55E-07
MTHFD1L	6q25.1	-0.28725	1.09E-08	1.55E-07
DLX4	17q21.33	-0.28694	1.13E-08	1.61E-07
TUBB3	16q24.3	-0.28683	1.14E-08	1.63E-07
GDF10	10q11.22	-0.28672	1.16E-08	1.65E-07
ABAT	16p13.2	-0.2867	1.16E-08	1.65E-07
ASPSCR1	17q25.3	-0.28651	1.19E-08	1.69E-07
ZNF461	19q13.12	-0.28637	1.21E-08	1.72E-07
CEMIP2	9q21.13	0.286302	1.22E-08	1.73E-07
SLC25A36	3q23	-0.28628	1.22E-08	1.73E-07
XK	Xp21.1	0.286179	1.24E-08	1.75E-07
C11ORF58	11p15.2	-0.28616	1.24E-08	1.76E-07
WIPI2	7p22.1	-0.28606	1.25E-08	1.78E-07
COL2A1	12q13.11	-0.28604	1.26E-08	1.78E-07
C9ORF43	9q32	-0.28599	1.27E-08	1.79E-07
BCAM	19q13.32	-0.28597	1.27E-08	1.79E-07
CDC42SE2	5q31.1	0.28589	1.28E-08	1.81E-07
PTPRO	12p12.3 12p13-p12	-0.28585	1.29E-08	1.82E-07
NIP7	16q22.1	-0.28569	1.31E-08	1.85E-07
DUSP28	2q37.3	-0.28568	1.31E-08	1.85E-07
ZIC2	13q32.3	0.285638	1.32E-08	1.86E-07
IER5	1q25.3	0.285576	1.33E-08	1.87E-07
NIBAN2	9q34.11	0.285542	1.34E-08	1.88E-07
CAP1	1p34.2	0.28553	1.34E-08	1.88E-07
C3ORF70	3q27.2	0.285509	1.34E-08	1.88E-07
HSPBAP1	3q21.1	-0.2854	1.36E-08	1.91E-07
SFT2D3	2q14.3	-0.28535	1.37E-08	1.92E-07
RNF152	18q21.33	0.285348	1.37E-08	1.92E-07
MED10	5p15.31	-0.28534	1.37E-08	1.92E-07
HSPE1	2q33.1	-0.28533	1.37E-08	1.92E-07
CCDC102A	16q21	-0.28503	1.42E-08	1.99E-07
NNT	5p12	0.284918	1.44E-08	2.01E-07
TXK	4p12	0.284856	1.45E-08	2.03E-07
YIPF5	5q31.3	0.284856	1.45E-08	2.03E-07
RABEPK	9q33.3	-0.28482	1.46E-08	2.03E-07
HSD17B11	4q22.1	0.284686	1.48E-08	2.07E-07
PUS10	2p16.1-p15	-0.28463	1.49E-08	2.08E-07
SSTR5-AS1	16p13.3	0.284617	1.50E-08	2.08E-07
PLCE1	10q23.33	0.284577	1.50E-08	2.09E-07
HOXD11	2q31.1	-0.28439	1.54E-08	2.14E-07
DHRS2	14q11.2	-0.28438	1.54E-08	2.14E-07
CLDN18	3q22.3	0.284343	1.55E-08	2.14E-07
FAM228B	2p23.3	-0.28434	1.55E-08	2.14E-07
LINC00930	15q26.1	0.284337	1.55E-08	2.14E-07
LRRN4	20p12.3	-0.2843	1.55E-08	2.15E-07

ARHGAP32	11q24.3	0.284231	1.57E-08	2.17E-07
CDK4	12q14.1	-0.28423	1.57E-08	2.17E-07
HSPH1	13q12.3	-0.28421	1.57E-08	2.17E-07
TLR3	4q35.1	0.284013	1.61E-08	2.22E-07
AKAP8L	19p13.12	-0.28391	1.63E-08	2.25E-07
UTP6	17q11.2	-0.28388	1.64E-08	2.25E-07
SP1	12q13.13	0.283752	1.66E-08	2.29E-07
RBP2	3q23	-0.28371	1.67E-08	2.30E-07
CENPBD1	16q24.3	-0.28358	1.70E-08	2.33E-07
MRE11	11q21	-0.28351	1.71E-08	2.35E-07
GSS	20q11.22	-0.28349	1.71E-08	2.35E-07
SERPINI1	3q26.1	-0.28344	1.72E-08	2.37E-07
RUBCNL	13q14.13	-0.28341	1.73E-08	2.37E-07
ZNF358	19p13.2	-0.28331	1.75E-08	2.40E-07
IL1RN	2q14.1	0.283302	1.75E-08	2.40E-07
ZSCAN2	15q25.2	-0.28326	1.76E-08	2.41E-07
CA14	1q21.2	0.283226	1.77E-08	2.42E-07
RYK	3q22.2	-0.28317	1.78E-08	2.43E-07
SPACA3	17q11.2	-0.28311	1.79E-08	2.45E-07
SEM1	7q21.3	-0.28305	1.81E-08	2.47E-07
CBFA2T2	20q11.21-q11.22	-0.28298	1.82E-08	2.49E-07
ZNF252P-AS1	8q24.3	-0.28291	1.84E-08	2.51E-07
SLC35A4	5q31.3	0.282775	1.87E-08	2.54E-07
SLC39A7	6p21.32	0.282768	1.87E-08	2.54E-07
SLC30A2	1p36.11	-0.28272	1.88E-08	2.56E-07
PEX16	11p11.2	-0.28271	1.88E-08	2.56E-07
PAX9	14q13.3	0.282683	1.89E-08	2.57E-07
LITAF	16p13.13	0.282609	1.90E-08	2.59E-07
STK36	2q35	-0.28256	1.92E-08	2.60E-07
CCDC85C	14q32.2	0.282336	1.97E-08	2.67E-07
TMPRSS2	21q22.3	0.282295	1.98E-08	2.68E-07
TVP23B	17p11.2	0.282246	1.99E-08	2.69E-07
PPP3CA	4q24	0.282076	2.03E-08	2.75E-07
CARS2	13q34	-0.28203	2.04E-08	2.76E-07
DZANK1	20p11.23	-0.282	2.05E-08	2.77E-07
POLR2K	8q22.2	-0.28197	2.06E-08	2.78E-07
NIT2	3q12.2	-0.28196	2.06E-08	2.78E-07
USPL1	13q12.3	-0.28188	2.08E-08	2.80E-07
RBBP8NL	20q13.33	-0.28178	2.10E-08	2.84E-07
SECTM1	17q25.3	0.281588	2.15E-08	2.90E-07
CKMT2	5q14.1	-0.28159	2.15E-08	2.90E-07
ZFP91	11q12.1	0.281574	2.16E-08	2.90E-07
NPTXR	22q13.1	-0.28155	2.16E-08	2.91E-07
TPM2	9p13.3	-0.28154	2.16E-08	2.91E-07
CCDC50	3q28	-0.28147	2.18E-08	2.93E-07
LCN2	9q34.11	0.281413	2.20E-08	2.95E-07
DDAH1	1p22.3	0.281223	2.25E-08	3.01E-07
HSPA4L	4q28.1	0.281028	2.30E-08	3.08E-07
CALML4	15q23	0.28096	2.32E-08	3.11E-07
CCT6P1	7q11.21	-0.28093	2.33E-08	3.12E-07
SLC29A1	6p21.1	-0.28093	2.33E-08	3.12E-07
LRP11	6q25.1	-0.28084	2.35E-08	3.14E-07
PRKAR1B	7p22.3	-0.28065	2.41E-08	3.21E-07
AGK	7q34	-0.28064	2.41E-08	3.21E-07
MRPL48	11q13.4	-0.28062	2.42E-08	3.22E-07
IVNS1ABP	1q25.3	0.280604	2.42E-08	3.23E-07
CPA4	7q32.2	-0.28056	2.43E-08	3.24E-07
SLC25A24	1p13.3	0.280473	2.46E-08	3.27E-07

OSBPL7	17q21.32	0.280399	2.48E-08	3.30E-07
NFU1	2p13.3	-0.28036	2.49E-08	3.31E-07
PLXNB2	22q13.33	0.280352	2.49E-08	3.31E-07
VENTX	10q26.3	-0.28027	2.52E-08	3.34E-07
SNRPB2	20p12.1	-0.28026	2.52E-08	3.35E-07
C18ORF25	18q21.1	0.280167	2.55E-08	3.38E-07
CLCN3	4q33	0.280112	2.57E-08	3.40E-07
NAT14	19q13.42	-0.28006	2.58E-08	3.42E-07
VMA21	Xq28	-0.27999	2.61E-08	3.45E-07
SDC4	20q13.12	-0.27998	2.61E-08	3.45E-07
SUPT20H	13q13.3	-0.27992	2.63E-08	3.47E-07
DGUOK	2p13.1	-0.27989	2.63E-08	3.48E-07
TEP1	14q11.2	0.279859	2.65E-08	3.49E-07
CWC15	11q21	-0.27978	2.67E-08	3.52E-07
FOXO3B	17p11.2	-0.27976	2.68E-08	3.53E-07
PDE4DIP	1q21.2	0.27973	2.69E-08	3.54E-07
BCL3	19q13.32	0.279718	2.69E-08	3.54E-07
ZNF212	7q36.1	-0.2797	2.70E-08	3.54E-07
PRKRA	2q31.2	-0.27966	2.71E-08	3.56E-07
ATP11B	3q26.33	0.279642	2.71E-08	3.56E-07
SSTR1	14q21.1	0.279577	2.74E-08	3.59E-07
GUCD1	22q11.23	0.279562	2.74E-08	3.59E-07
UPF3A	13q34	-0.27949	2.76E-08	3.62E-07
ANO9	11p15.5	-0.27941	2.79E-08	3.65E-07
SPATA25	20q13.12	-0.27941	2.79E-08	3.65E-07
FUT2	19q13.33	0.279381	2.80E-08	3.66E-07
AKR7A2	1p36.13	0.279353	2.81E-08	3.67E-07
SLITRK6	13q31.1	0.279258	2.84E-08	3.71E-07
KLRG2	7q34	-0.27908	2.90E-08	3.79E-07
LINC00653	20p11.23	-0.27902	2.92E-08	3.81E-07
PLD1	3q26.31	0.279013	2.92E-08	3.81E-07
GRAMD1A	19q13.11	-0.27899	2.93E-08	3.82E-07
HNF1A	12q24.31	-0.27896	2.94E-08	3.83E-07
CLDN12	7q21.13	0.278944	2.95E-08	3.84E-07
UGT1A10	2q37.1	0.27886	2.98E-08	3.87E-07
C2ORF42	2p13.3	-0.27885	2.98E-08	3.88E-07
AUP1	2p13.1	-0.27873	3.02E-08	3.93E-07
ZFAS1	20q13.13	-0.27865	3.05E-08	3.96E-07
CDC42EP2	11q13.1	0.278637	3.06E-08	3.97E-07
SMPD3	16q22.1	0.278633	3.06E-08	3.97E-07
PPT2	6p21.32	-0.2786	3.07E-08	3.98E-07
TRIM15	6p22.1	0.27856	3.09E-08	3.99E-07
REPIN1	7q36.1	-0.27852	3.10E-08	4.01E-07
FCGRT	19q13.33	-0.2785	3.11E-08	4.02E-07
ACO1	9p21.1	0.278475	3.12E-08	4.03E-07
SPAG4	20q11.22	-0.27832	3.17E-08	4.10E-07
NCOA4	10q11.22	0.278278	3.19E-08	4.12E-07
TSSC4	11p15.5	-0.27824	3.20E-08	4.13E-07
MCTP2	15q26.2	0.278233	3.21E-08	4.13E-07
C12ORF73	12q23.3	-0.27799	3.30E-08	4.25E-07
FGD1	Xp11.22	-0.27781	3.37E-08	4.34E-07
PERP	6q23.3	-0.27777	3.39E-08	4.35E-07
AIP	11q13.2	-0.27768	3.42E-08	4.40E-07
DDX52	17q12	-0.27765	3.43E-08	4.41E-07
ADAM17	2p25.1	-0.27759	3.46E-08	4.44E-07
GPS1	17q25.3	-0.27754	3.48E-08	4.47E-07
TMED7	5q22.3	0.277529	3.48E-08	4.47E-07
GRK3	22q12.1	-0.27752	3.49E-08	4.47E-07



AKR1B15	7q33	0.277511	3.49E-08	4.47E-07
HOXD1	2q31.1	0.277468	3.51E-08	4.49E-07
MAFG-DT	17q25.3	-0.27746	3.51E-08	4.49E-07
SYT7	11q12.2	-0.27745	3.52E-08	4.49E-07
ELOVL7	5q12.1	0.277312	3.57E-08	4.56E-07
ALKBH3	11p11.2	-0.27731	3.58E-08	4.56E-07
TPK1	7q35	0.277275	3.59E-08	4.58E-07
PMFBP1	16q22.2	-0.27719	3.63E-08	4.62E-07
ARFRP1	20q13.33	-0.27715	3.64E-08	4.64E-07
VMAC	19p13.3	-0.27714	3.65E-08	4.65E-07
PRKAA1	5p13.1	0.277102	3.66E-08	4.66E-07
KRAS	12p12.1	0.277064	3.68E-08	4.68E-07
STPG1	1p36.11	0.276993	3.71E-08	4.72E-07
SLC27A2	15q21.2	0.276904	3.75E-08	4.76E-07
CTSV	9q22.33	-0.27686	3.77E-08	4.78E-07
CDC42EP1	22q13.1	0.276848	3.77E-08	4.79E-07
STX18	4p16.3-p16.2	0.276824	3.78E-08	4.80E-07
PPP2CB	8p12	0.276795	3.80E-08	4.81E-07
DNAH14	1q42.12	-0.27638	3.99E-08	5.04E-07
PRSS50	3p21.31	-0.27635	4.00E-08	5.06E-07
NXPE1	11q23.2	0.276299	4.03E-08	5.09E-07
CTBS	1p22.3	0.276241	4.05E-08	5.12E-07
FREM2	13q13.3	-0.27617	4.09E-08	5.16E-07
CCDC125	5q13.2	0.276166	4.09E-08	5.16E-07
NBDY	Xp11.21	-0.27603	4.16E-08	5.24E-07
MEN1	11q13.1	-0.27602	4.16E-08	5.24E-07
TMEM198	2q35	-0.27597	4.18E-08	5.27E-07
ST6GAL2	2q12.3	-0.27594	4.20E-08	5.28E-07
ZNF674	Xp11.3	-0.27591	4.21E-08	5.30E-07
SLC45A2	5p13.2	-0.27586	4.24E-08	5.32E-07
NAA10	Xq28	-0.27585	4.24E-08	5.33E-07
COA5	2q11.2	-0.27566	4.34E-08	5.44E-07
SPACA6	19q13.41	-0.27564	4.35E-08	5.45E-07
SNORA71E	20q11.23	-0.27559	4.37E-08	5.48E-07
ACAD11	3q22.1	-0.27556	4.39E-08	5.50E-07
UBE2G1	17p13.2	0.275555	4.39E-08	5.50E-07
AMER1	Xq11.2	-0.27554	4.40E-08	5.51E-07
RIMKLA	1p34.2	0.275484	4.43E-08	5.54E-07
YES1	18p11.32	0.275303	4.52E-08	5.65E-07
RREB1	6p24.3	0.275302	4.52E-08	5.65E-07
DSN1	20q11.23	-0.27529	4.53E-08	5.65E-07
BIRC7	20q13.33	-0.27521	4.57E-08	5.70E-07
NEPRO	3q13.2	-0.27515	4.60E-08	5.74E-07
ARSJ	4q26	0.275112	4.62E-08	5.76E-07
HULC	6p24.3	-0.27511	4.62E-08	5.76E-07
OASL	12q24.31	0.275008	4.68E-08	5.82E-07
DIDO1	20q13.33	-0.27499	4.69E-08	5.83E-07
MYOF	10q23.33	0.274906	4.74E-08	5.89E-07
OIT3	10q22.1	-0.27484	4.77E-08	5.92E-07
PLA2G4A	1q31.1	0.274842	4.77E-08	5.92E-07
MYPN	10q21.3	0.274822	4.78E-08	5.93E-07
IFT57	3q13.12-q13.13	-0.27474	4.83E-08	5.99E-07
COPS7B	2q37.1	-0.27472	4.84E-08	6.00E-07
CEP164	11q23.3	-0.27459	4.91E-08	6.09E-07
HAS2	8q24.13	-0.27454	4.94E-08	6.12E-07
DRAP1	11q13.1	-0.27448	4.97E-08	6.15E-07
COL17A1	10q25.1	0.274447	5.00E-08	6.17E-07
TRPV6	7q34	0.274445	5.00E-08	6.17E-07

EFNA5	5q21.3	0.274405	5.02E-08	6.20E-07
LINC01622	6p25.3	-0.27436	5.05E-08	6.23E-07
NAPG	18p11.22	0.274341	5.06E-08	6.24E-07
FHL2	2q12.2	0.274338	5.06E-08	6.24E-07
ADK	10q22.2 10q11-q24	-0.2743	5.08E-08	6.26E-07
KBTBD6	13q14.11	-0.27428	5.09E-08	6.27E-07
ERP27	12p12.3	-0.27423	5.12E-08	6.30E-07
PIK3AP1	10q24.1	0.274215	5.13E-08	6.31E-07
AIRE	21q22.3	-0.27421	5.14E-08	6.31E-07
SGPP1	14q23.2	0.27416	5.17E-08	6.34E-07
MITD1	2q11.2	-0.27416	5.17E-08	6.34E-07
ISM1	20p12.1	-0.27412	5.19E-08	6.36E-07
SLC27A4	9q34.11	0.274094	5.20E-08	6.38E-07
PSTPIP2	18q21.1 tdb7990	-0.27409	5.21E-08	6.38E-07
CNP	17q21.2	-0.27396	5.28E-08	6.47E-07
ARL16	17q25.3	-0.27393	5.31E-08	6.49E-07
PLEKHA6	1q32.1	0.273921	5.31E-08	6.49E-07
SHANK2	11q13.3-q13.4	-0.27386	5.35E-08	6.54E-07
POLR1D	13q12.2	-0.27369	5.45E-08	6.66E-07
GTF2F2	13q14.12-q14.13	-0.27359	5.52E-08	6.73E-07
SERPINB5	18q21.33	0.273569	5.53E-08	6.75E-07
ERAP1	5q15	0.273553	5.54E-08	6.75E-07
COQ2	4q21.22-q21.23	0.273538	5.55E-08	6.76E-07
TIGD7	16p13.3	-0.27348	5.59E-08	6.80E-07
COG7	16p12.2	0.273368	5.66E-08	6.89E-07
NAT1	8p22	0.27335	5.67E-08	6.90E-07
RARRES1	3q25.32	0.273348	5.67E-08	6.90E-07
RALGAPB	20q11.23	-0.27328	5.72E-08	6.94E-07
FECH	18q21.31	0.273247	5.74E-08	6.97E-07
CPNE9	3p25.3	-0.2731	5.84E-08	7.08E-07
SS18L1	20q13.33	-0.27309	5.84E-08	7.09E-07
OSGEPL1	2q32.2	-0.27306	5.86E-08	7.10E-07
PPP1R14A	19q13.2	-0.273	5.91E-08	7.16E-07
ZNF606	19q13.43	-0.27294	5.95E-08	7.20E-07
CCDC92	12q24.31	-0.27294	5.95E-08	7.20E-07
IPO5	13q32.2	-0.27278	6.06E-08	7.32E-07
PRR14L	22q12.2	0.272733	6.09E-08	7.36E-07
ALDH3B1	11q13.2	0.272678	6.13E-08	7.40E-07
SMC5	9q21.12	0.272618	6.17E-08	7.45E-07
FAM86C2P	11q13.2	-0.27258	6.20E-08	7.48E-07
FLJ16779	20q13.33	-0.27257	6.21E-08	7.48E-07
TP53I13	17q11.2	-0.27256	6.21E-08	7.48E-07
PEX10	1p36.32	-0.27252	6.25E-08	7.52E-07
COX10	17p12	0.272512	6.25E-08	7.52E-07
USP40	2q37.1	-0.27249	6.27E-08	7.53E-07
TRIP11	14q32.12	0.272372	6.35E-08	7.63E-07
PI4K2B	4p15.2	0.27237	6.35E-08	7.63E-07
FAM83C	20q11.22	-0.27236	6.36E-08	7.64E-07
RNASEH2C	11q13.1	-0.27233	6.38E-08	7.66E-07
EPHA4	2q36.1	0.272277	6.42E-08	7.70E-07
FAM214B	9p13.3	0.272242	6.45E-08	7.72E-07
SAMD9L	7q21.2	0.272212	6.47E-08	7.75E-07
ZNF280A	22q11.22	-0.2721	6.55E-08	7.84E-07
IVL	1q21.3	-0.2721	6.55E-08	7.84E-07
RRP9	3p21.2	-0.27205	6.59E-08	7.88E-07
TFAP2A	6p24.3	0.272045	6.59E-08	7.88E-07
CHST10	2q11.2	-0.27198	6.64E-08	7.93E-07
LYST	1q42.3	0.27197	6.65E-08	7.93E-07

ADAM28	8p21.2	0.271923	6.69E-08	7.97E-07
ZCCHC2	18q21.33	0.271893	6.71E-08	8.00E-07
ACADSB	10q26.13	0.271722	6.84E-08	8.15E-07
RIMS3	1p34.2	0.271702	6.86E-08	8.16E-07
DNAAF3	19q13.42	0.271695	6.87E-08	8.17E-07
CDK5	7q36.1	-0.27167	6.89E-08	8.18E-07
PM20D2	6q15	-0.27161	6.94E-08	8.24E-07
DENND1B	1q31.3	0.271598	6.94E-08	8.24E-07
PLEKHB2	2q21.1	0.271582	6.96E-08	8.25E-07
TUT1	11q12.3	-0.27157	6.96E-08	8.26E-07
KCTD3	1q41	0.271524	7.00E-08	8.30E-07
FAM81A	15q22.2	0.271519	7.01E-08	8.30E-07
EYA1	8q13.3	-0.27145	7.06E-08	8.36E-07
STAMBP	2p13.1	-0.27141	7.09E-08	8.38E-07
BRD3OS	9q34.2	-0.27141	7.09E-08	8.38E-07
BCL2L14	12p13.2	0.271338	7.15E-08	8.45E-07
SMARCE1	17q21.2	-0.27128	7.20E-08	8.50E-07
PROSER2	10p14	-0.27124	7.23E-08	8.54E-07
VPS26C	21q22.13	0.271124	7.33E-08	8.65E-07
DHRS12	13q14.3	-0.27104	7.41E-08	8.73E-07
CBR3	21q22.12	0.270974	7.46E-08	8.79E-07
PSEN1	14q24.2	0.27089	7.53E-08	8.87E-07
MYT1	20q13.33	-0.27087	7.55E-08	8.88E-07
ZFP30	19q13.12	-0.27069	7.71E-08	9.07E-07
FCAMR	1q32.1	0.270655	7.74E-08	9.09E-07
LAPTM4B	8q22.1	-0.27063	7.76E-08	9.12E-07
KDM3B	5q31.2	0.270554	7.83E-08	9.19E-07
NCS1	9q34.11	-0.27042	7.94E-08	9.32E-07
TAF1B	2p25.1	-0.27037	7.99E-08	9.37E-07
FOSL2	2p23.2	0.270337	8.02E-08	9.40E-07
ASB1	2q37.3	-0.27033	8.03E-08	9.40E-07
DNAJC2	7q22.1	-0.2702	8.15E-08	9.54E-07
GOLGA4	3p22.2	0.270105	8.24E-08	9.64E-07
LGALS9	17q11.2	0.270051	8.29E-08	9.69E-07
SLC7A11	4q28.3	0.270031	8.31E-08	9.71E-07
CYP3A4	7q22.1	0.269991	8.35E-08	9.75E-07
VDR	12q13.11	0.269936	8.40E-08	9.80E-07
ZNF419	19q13.43	-0.26992	8.42E-08	9.82E-07
PGAP2	11p15.4	-0.26991	8.43E-08	9.82E-07
NUTF2	16q22.1	-0.26985	8.48E-08	9.88E-07
NECAB3	20q11.22	-0.2698	8.53E-08	9.93E-07
OSGIN2	8q21.3	-0.26972	8.61E-08	1.00E-06
ATP13A4	3q29	0.269668	8.66E-08	1.01E-06
INSL4	9p24.1	0.269563	8.76E-08	1.02E-06
SRSF12	6q15	-0.26955	8.78E-08	1.02E-06
ANKFY1	17p13.2	0.269536	8.79E-08	1.02E-06
C3ORF14	3p14.2	-0.2695	8.83E-08	1.02E-06
SULT1C2	2q12.3	0.26945	8.88E-08	1.03E-06
C11ORF53	11q23.1	0.269402	8.93E-08	1.03E-06
PCSK1N	Xp11.23	-0.26936	8.97E-08	1.04E-06
UCHL3	13q22.2	-0.26935	8.98E-08	1.04E-06
RPL30	8q22.2	-0.2693	9.03E-08	1.05E-06
FOXD4	9p24.3	0.269146	9.19E-08	1.06E-06
HIF1A	14q23.2	0.269116	9.22E-08	1.07E-06
SLC66A2	18q23	0.269114	9.22E-08	1.07E-06
MTBP	8q24.12	-0.26905	9.29E-08	1.07E-06
FMR1	Xq27.3	-0.26902	9.32E-08	1.08E-06
CSRNP2	12q13.12	-0.26899	9.36E-08	1.08E-06

ATP5F1EP2	13q12.2	-0.26896	9.39E-08	1.08E-06
BUD31	7q22.1	-0.26882	9.53E-08	1.10E-06
IL34	16q22.1	-0.26881	9.55E-08	1.10E-06
GHDC	17q21.2	-0.26888	9.55E-08	1.10E-06
LINC01816	2p13.3	-0.26878	9.58E-08	1.10E-06
PCYT1B	Xp22.11	-0.26872	9.65E-08	1.11E-06
TPM3	1q21.3	0.268652	9.72E-08	1.12E-06
ELOC	8q21.11	-0.26861	9.76E-08	1.12E-06
PMS2	7p22.1	-0.26861	9.77E-08	1.12E-06
NRXN2	11q13.1	-0.26836	1.00E-07	1.15E-06
CHCHD10	22q11.23	0.268343	1.01E-07	1.15E-06
SUPT3H	6p21.1	-0.26834	1.01E-07	1.15E-06
RAB11FIP2	10q26.11	-0.26821	1.02E-07	1.17E-06
NUDT1	7p22.3	-0.26818	1.02E-07	1.17E-06
KAT2A	17q21.2	-0.26817	1.03E-07	1.17E-06
LTBP3	11q13.1	-0.26813	1.03E-07	1.18E-06
HOXD10	2q31.1	-0.26804	1.04E-07	1.19E-06
ARF5	7q32.1	-0.26803	1.04E-07	1.19E-06
CBFA2T3	16q24.3	0.26801	1.05E-07	1.19E-06
GOLGB1	3q13.33	0.267979	1.05E-07	1.20E-06
SYN3	22q12.3	-0.26791	1.06E-07	1.20E-06
KLRC1	12p13.2	0.267864	1.06E-07	1.21E-06
PROX1	1q32.3	-0.26786	1.06E-07	1.21E-06
ADAM15	1q21.3	0.267856	1.06E-07	1.21E-06
COMMD6	13q22.2	-0.26772	1.08E-07	1.23E-06
MYBPHL	1p13.3	-0.26771	1.08E-07	1.23E-06
HDAC5	17q21.31	-0.2677	1.08E-07	1.23E-06
JKAMP	14q23.1	0.267503	1.11E-07	1.26E-06
FAM3D	3p14.2	0.267501	1.11E-07	1.26E-06
KRT31	17q21.2	-0.26741	1.12E-07	1.27E-06
STK25	2q37.3	-0.26741	1.12E-07	1.27E-06
PMS2CL	7p22.1	-0.26735	1.13E-07	1.27E-06
TSEN2	3p25.2	-0.26723	1.14E-07	1.29E-06
NRGN	11q24.2	0.267002	1.17E-07	1.32E-06
COL9A2	1p34.2	0.266963	1.18E-07	1.33E-06
KIF13A	6p22.3	0.26694	1.18E-07	1.33E-06
TCP10L2	6q27	-0.26693	1.18E-07	1.33E-06
BRAT1	7p22.3	-0.26691	1.18E-07	1.33E-06
RAB5IF	20q11.23	-0.26688	1.19E-07	1.34E-06
HTR1D	1p36.12	0.266842	1.19E-07	1.34E-06
ENY2	8q23.1	-0.26684	1.19E-07	1.34E-06
DNAJC24	11p13	-0.26681	1.20E-07	1.35E-06
DPH6	15q14	-0.2668	1.20E-07	1.35E-06
ARHGEF25	12q13.3	-0.26677	1.20E-07	1.35E-06
CCDC186	10q25.3	0.266693	1.21E-07	1.36E-06
DCUN1D5	11q22.3	-0.26668	1.22E-07	1.36E-06
PUS3	11q24.2	-0.26657	1.23E-07	1.38E-06
TDGF1	3p21.31	-0.26649	1.24E-07	1.39E-06
NT5C2	10q24.32-q24.33	0.266476	1.24E-07	1.39E-06
CDC42BPB	14q32.32	0.266473	1.24E-07	1.39E-06
CYTH1	17q25.3	0.266439	1.25E-07	1.40E-06
RASGRP1	15q14	0.266438	1.25E-07	1.40E-06
GOLGA8CP	15q11.2	-0.2663	1.27E-07	1.42E-06
TIPARP-AS1	3q25.31	-0.26616	1.29E-07	1.44E-06
STARD3NL	7p14.1	-0.26604	1.31E-07	1.46E-06
TOR1AIP2	1q25.2	0.26596	1.32E-07	1.47E-06
PTPN1	20q13.13	-0.26591	1.33E-07	1.48E-06
EXPH5	11q22.3	0.265863	1.33E-07	1.49E-06

AP1M1	19p13.11	-0.26586	1.33E-07	1.49E-06
MBP	18q23	0.265826	1.34E-07	1.49E-06
SSC4D	7q11.23	-0.26573	1.35E-07	1.51E-06
FGFR4	5q35.2	-0.2657	1.36E-07	1.51E-06
KRTAP3-2	17q21.2	-0.26567	1.36E-07	1.51E-06
SERPIND1	22q11.21	-0.26561	1.37E-07	1.52E-06
IMMP2L	7q31.1	-0.26556	1.38E-07	1.53E-06
MMD	17q22	-0.26553	1.38E-07	1.54E-06
CPSF4	7q22.1	-0.26548	1.39E-07	1.54E-06
RUSC2	9p13.3	-0.26537	1.41E-07	1.56E-06
NR1H4	12q23.1	0.265361	1.41E-07	1.56E-06
FAM122B	Xq26.3	-0.26534	1.41E-07	1.56E-06
SPOUT1	9q34.11	-0.26531	1.42E-07	1.57E-06
HYAL2	3p21.31	-0.26531	1.42E-07	1.57E-06
SLC30A9	4p13	0.265231	1.43E-07	1.58E-06
IFFO2	1p36.13	-0.26521	1.43E-07	1.58E-06
VAV2	9q34.2	-0.2652	1.44E-07	1.59E-06
DDX18	2q14.1	-0.26504	1.46E-07	1.61E-06
KCNK17	6p21.2	-0.26495	1.47E-07	1.63E-06
ITCH	20q11.22	-0.26494	1.48E-07	1.63E-06
SPATA5	4q28.1	0.26493	1.48E-07	1.63E-06
ANXA6	5q33.1	-0.26489	1.48E-07	1.64E-06
ZBED5	11p15.4	-0.26487	1.49E-07	1.64E-06
PTRH2	17q23.1	-0.26486	1.49E-07	1.64E-06
APOBR	16p12.1	0.264788	1.50E-07	1.65E-06
ABT1	6p22.2	-0.26479	1.50E-07	1.65E-06
MMP11	22q11.23	-0.26477	1.51E-07	1.65E-06
SMAP2	1p34.2	0.26476	1.51E-07	1.65E-06
BAIAP2L2	22q13.1	0.264757	1.51E-07	1.65E-06
NAT10	11p13	-0.26475	1.51E-07	1.66E-06
DLL3	19q13.2	-0.26466	1.52E-07	1.67E-06
PWWP3B	Xq22.3	-0.26464	1.53E-07	1.67E-06
FLII	17p11.2	0.264589	1.54E-07	1.68E-06
ZNF48	16p11.2	-0.26457	1.54E-07	1.68E-06
COPRS	17q11.2	-0.26455	1.54E-07	1.69E-06
KIF1B	1p36.22	0.264465	1.56E-07	1.70E-06
VRK3	19q13.33	0.264461	1.56E-07	1.70E-06
NINL	20p11.21	-0.26442	1.57E-07	1.71E-06
SLC24A5	15q21.1	-0.26439	1.57E-07	1.71E-06
DYRK2	12q15	0.264333	1.58E-07	1.72E-06
ATXN7L2	1p13.3	-0.26416	1.61E-07	1.76E-06
EEF1D	8q24.3	-0.26412	1.62E-07	1.76E-06
RIPK2	8q21.3	-0.26411	1.62E-07	1.77E-06
RPF2	6q21	-0.26408	1.62E-07	1.77E-06
MIR4435-2HG	2q13	-0.26397	1.65E-07	1.79E-06
HSFX2	Xq28	-0.26395	1.65E-07	1.79E-06
KRT32	17q21.2	-0.26395	1.65E-07	1.79E-06
MEA1	6p21.1	-0.26382	1.67E-07	1.82E-06
SCAP	3p21.31	-0.2638	1.68E-07	1.82E-06
ITPR3	6p21.31	0.263724	1.69E-07	1.84E-06
ZIC5	13q32.3	0.263702	1.70E-07	1.84E-06
SAMD10	20q13.33	-0.26348	1.74E-07	1.88E-06
UNC119	17q11.2	-0.26346	1.74E-07	1.89E-06
CDIPTOSP	16p11.2	-0.26346	1.74E-07	1.89E-06
SLC10A3	Xq28	-0.26345	1.74E-07	1.89E-06
PLEKHM1	17q21.31	0.263403	1.75E-07	1.90E-06
SLC49A4	3q21.1	0.26338	1.76E-07	1.90E-06
TTC7B	14q32.11	-0.26338	1.76E-07	1.90E-06

ALKBH6	19q13.12	-0.26316	1.80E-07	1.95E-06
ABCF2	7q36.1	-0.26311	1.81E-07	1.95E-06
ZNHIT3	17q12	-0.26307	1.82E-07	1.96E-06
PLS3	Xq23	-0.26288	1.86E-07	2.00E-06
NOS1AP	1q23.3	0.262859	1.86E-07	2.01E-06
LRRC2	3p21.31	-0.26285	1.86E-07	2.01E-06
LMNA	1q22	0.262845	1.86E-07	2.01E-06
PCGF1	2p13.1	-0.26278	1.88E-07	2.02E-06
CKMT1A	15q15.3	0.262757	1.88E-07	2.03E-06
CYTOR	2p11.2	-0.26269	1.90E-07	2.04E-06
C18ORF32	18q21.1	0.262661	1.90E-07	2.04E-06
BIN1	2q14.3	-0.26257	1.92E-07	2.06E-06
CTSS	1q21.3	0.262556	1.93E-07	2.07E-06
EFL1	15q25.2	0.262539	1.93E-07	2.07E-06
RUNDC3A	17q21.31	-0.2625	1.94E-07	2.08E-06
MYO5C	15q21.2	0.262414	1.96E-07	2.10E-06
RASL11B	4q12	-0.26236	1.97E-07	2.11E-06
RAB14	9q33.2	0.262282	1.98E-07	2.12E-06
B4GALNT4	11p15.5	-0.26226	1.99E-07	2.13E-06
FOS	14q24.3	0.262226	2.00E-07	2.14E-06
EIF3H	8q23.3-q24.11	-0.26222	2.00E-07	2.14E-06
ZNF623	8q24.3	-0.26221	2.00E-07	2.14E-06
MZF1-AS1	19q13.43	0.26219	2.00E-07	2.14E-06
AQP7P3	9q21.11	-0.26218	2.01E-07	2.14E-06
CACNG4	17q24.2	-0.26215	2.01E-07	2.15E-06
ASAP1	8q24.21-q24.22	-0.26212	2.02E-07	2.15E-06
LINC00899	22q13.31	-0.26197	2.06E-07	2.19E-06
CHKA	11q13.2	-0.26193	2.06E-07	2.20E-06
KIN	10p14	-0.26184	2.08E-07	2.22E-06
PDAP1	7q22.1	-0.26183	2.09E-07	2.22E-06
ZSCAN12	6p22.1	-0.26177	2.10E-07	2.23E-06
IKBKG	Xq28	-0.26177	2.10E-07	2.23E-06
SLC25A23	19p13.3	0.261725	2.11E-07	2.24E-06
ZKSCAN7	3p21.31	-0.26172	2.11E-07	2.24E-06
RIPPLY3	21q22.13	-0.26157	2.15E-07	2.28E-06
RPL39	Xq24	-0.2614	2.19E-07	2.32E-06
TDGF1P3	Xq23	-0.26135	2.20E-07	2.33E-06
DUSP15	20q11.21	-0.26135	2.20E-07	2.33E-06
VSIR	10q22.1	0.261238	2.23E-07	2.36E-06
EPB41L4A	5q22.1-q22.2	0.261237	2.23E-07	2.36E-06
INF2	14q32.33	0.261228	2.23E-07	2.36E-06
DTX3	12q13.3	-0.2612	2.24E-07	2.36E-06
FAM104B	Xp11.21	-0.26119	2.24E-07	2.37E-06
ARL11	13q14.2	-0.26118	2.24E-07	2.37E-06
MBNL3	Xq26.2	0.261124	2.25E-07	2.38E-06
KDM4D	11q21	-0.26106	2.27E-07	2.39E-06
SP3	2q31.1	-0.26106	2.27E-07	2.39E-06
CEP70	3q22.3	0.261033	2.28E-07	2.40E-06
RNF138	18q12.1	0.261026	2.28E-07	2.40E-06
TJAP1	6p21.1	-0.26101	2.28E-07	2.40E-06
CUL1	7q36.1	-0.26091	2.31E-07	2.43E-06
USO1	4q21.1	0.260896	2.31E-07	2.43E-06
MPPE1	18p11.21	0.260863	2.32E-07	2.44E-06
GSTM4	1p13.3	0.260814	2.33E-07	2.45E-06
LRRC74A	14q24.3	-0.26077	2.34E-07	2.46E-06
TET2	4q24	0.260749	2.35E-07	2.47E-06
CAPS	19p13.3	-0.26072	2.36E-07	2.47E-06
WDSUB1	2q24.2	-0.26067	2.37E-07	2.48E-06

RRN3P2	16p11.2	-0.26066	2.37E-07	2.48E-06
AIG1	6q24.2	-0.26062	2.38E-07	2.50E-06
KNOP1	16p12.3	-0.26056	2.40E-07	2.51E-06
CREB3L2	7q33	0.260507	2.41E-07	2.52E-06
NUDT6	4q28.1	0.260488	2.42E-07	2.53E-06
CRYAB	11q23.1	-0.2604	2.44E-07	2.55E-06
LPGAT1	1q32.3	0.260384	2.45E-07	2.55E-06
FAM227A	22q13.1	-0.26037	2.45E-07	2.56E-06
PPM1A	14q23.1	0.260366	2.45E-07	2.56E-06
LTV1	6q24.2	-0.26035	2.46E-07	2.56E-06
TRAF5	1q32.3	-0.2603	2.47E-07	2.57E-06
DOCK8	9p24.3	0.260267	2.48E-07	2.58E-06
UBTD1	10q24.1-q24.2	-0.26022	2.49E-07	2.59E-06
WDR7	18q21.31	0.26018	2.50E-07	2.60E-06
OTC	Xp11.4	0.260089	2.53E-07	2.63E-06
LINC00520	14q22.3	0.260054	2.54E-07	2.64E-06
UPF3B	Xq24	-0.26004	2.54E-07	2.64E-06
NCOA6	20q11.22	-0.25999	2.55E-07	2.65E-06
RABGAP1L	1q25.1	0.259916	2.57E-07	2.67E-06
SMOX	20p13	-0.25984	2.60E-07	2.69E-06
USP6NL	10p14	-0.25984	2.60E-07	2.69E-06
HDGFL3	15q25.2	-0.25984	2.60E-07	2.69E-06
APBB1	11p15.4	-0.25979	2.61E-07	2.70E-06
NDRG4	16q21	-0.25978	2.61E-07	2.70E-06
DUSP14	17q12	-0.25977	2.62E-07	2.71E-06
SLC16A14	2q36.3	0.25975	2.62E-07	2.71E-06
MYO7B	2q14.3	0.259735	2.63E-07	2.71E-06
CTTNBP2	7q31.31	-0.25971	2.63E-07	2.72E-06
NADK	1p36.33	0.259694	2.64E-07	2.72E-06
SMAD1	4q31.21	0.259683	2.64E-07	2.72E-06
NUDT14	14q32.33	-0.25968	2.64E-07	2.72E-06
SLC28A2	15q21.1	0.259634	2.66E-07	2.74E-06
PTDSS1	8q22.1	-0.25958	2.67E-07	2.75E-06
WFDC10A	20q13.12	-0.25956	2.68E-07	2.76E-06
SLC38A9	5q11.2	-0.25956	2.68E-07	2.76E-06
IFNAR1	21q22.11	0.259556	2.68E-07	2.76E-06
MYOM3	1p36.11	-0.25953	2.69E-07	2.76E-06
ARAP1	11q13.4	-0.25937	2.73E-07	2.81E-06
ZNF577	19q13.41	-0.25921	2.78E-07	2.86E-06
ZNF662	3p22.1	-0.25918	2.79E-07	2.86E-06
TIMM8A	Xq22.1	-0.25918	2.79E-07	2.86E-06
SLC45A1	1p36.23	-0.25918	2.79E-07	2.86E-06
PGS1	17q25.3	-0.25917	2.79E-07	2.86E-06
ZNF530	19q13.43	-0.25913	2.81E-07	2.88E-06
CBX8	17q25.3	-0.25908	2.82E-07	2.89E-06
GOLGA8G	15q13.1	-0.25904	2.83E-07	2.90E-06
EGLN3	14q13.1	0.259031	2.84E-07	2.90E-06
LINC02591	1q21.1	-0.25896	2.86E-07	2.92E-06
EXOSC4	8q24.3	-0.25896	2.86E-07	2.92E-06
DHFR	5q14.1	0.258919	2.87E-07	2.93E-06
TUBG2	17q21.2	-0.25889	2.88E-07	2.94E-06
ZFP28	19q13.43	-0.25887	2.89E-07	2.94E-06
GPC1	2q37.3	-0.25867	2.95E-07	3.01E-06
VSIG1	Xq22.3	0.258634	2.96E-07	3.02E-06
TSEN54	17q25.1	-0.25863	2.96E-07	3.02E-06
MYL9	20q11.23	-0.25855	2.99E-07	3.04E-06
ABCA10	17q24.3	0.25855	2.99E-07	3.04E-06
FLVCR2	14q24.3	0.258532	2.99E-07	3.05E-06

CTSH	15q25.1	-0.25848	3.01E-07	3.06E-06
GTF2H1	11p15.1	-0.25845	3.02E-07	3.07E-06
ORMDL1	2q32.2	-0.25844	3.02E-07	3.07E-06
SEC23IP	10q26.11-q26.12	0.258443	3.02E-07	3.07E-06
RORC	1q21.3	0.258441	3.02E-07	3.07E-06
HERC3	4q22.1	0.258362	3.05E-07	3.09E-06
SRPK3	Xq28	-0.25832	3.07E-07	3.11E-06
NREP	5q22.1	-0.25828	3.08E-07	3.12E-06
CYP2C9	10q23.33	0.25826	3.08E-07	3.12E-06
CLDN1	3q28	-0.25824	3.09E-07	3.13E-06
PRELID2	5q32	0.258232	3.09E-07	3.13E-06
MBOAT2	2p25.1	0.258219	3.10E-07	3.13E-06
E2F5	8q21.2	-0.25812	3.13E-07	3.17E-06
NFE2L3	7p15.2	-0.25805	3.15E-07	3.19E-06
CEP95	17q23.3	-0.25802	3.17E-07	3.20E-06
GPR179	17q12	-0.25799	3.18E-07	3.20E-06
CXORF40B	Xq28	-0.25798	3.18E-07	3.21E-06
PISD	22q12.2	-0.25797	3.18E-07	3.21E-06
TRIM38	6p22.2	0.257938	3.19E-07	3.22E-06
REEP2	5q31.2	-0.25793	3.20E-07	3.22E-06
SETMAR	3p26.1	-0.25792	3.20E-07	3.22E-06
LDLR	19p13.2	0.257887	3.21E-07	3.23E-06
SLC44A2	19p13.2	0.257849	3.23E-07	3.24E-06
CEP41	7q32.2	-0.25779	3.25E-07	3.26E-06
TMEM9	1q32.1	-0.25777	3.25E-07	3.27E-06
SEC22B	1p12	0.25775	3.26E-07	3.27E-06
C16ORF74	16q24.1	-0.25773	3.27E-07	3.28E-06
DNASE1	16p13.3	-0.25773	3.27E-07	3.28E-06
PUF60	8q24.3	-0.25769	3.28E-07	3.29E-06
ZNF691	1p34.2	-0.25768	3.28E-07	3.29E-06
B4GALT5	20q13.13	-0.25768	3.29E-07	3.29E-06
GPR19	12p13.1	-0.25765	3.30E-07	3.30E-06
PPP6R1	19q13.42	0.25763	3.30E-07	3.30E-06
NBL1	1p36.13	0.257619	3.31E-07	3.31E-06
SHISA9	16p13.12	-0.2576	3.31E-07	3.31E-06
ZC3H12D	6q25.1	0.25756	3.33E-07	3.32E-06
DDX56	7p13	-0.25756	3.33E-07	3.32E-06
FAM220A	7p22.1	-0.25752	3.34E-07	3.34E-06
TDRKH	1q21.3	-0.25752	3.34E-07	3.34E-06
C15ORF48	15q21.1	0.257512	3.35E-07	3.34E-06
LIMS2	2q14.3	-0.25749	3.35E-07	3.34E-06
RASSF6	4q13.3	0.257422	3.38E-07	3.36E-06
SPATA31A1	9p12	-0.25737	3.40E-07	3.38E-06
BCAR1	16q23.1	0.257288	3.43E-07	3.41E-06
ZDHHC8	22q11.21	-0.25727	3.43E-07	3.41E-06
KHK	2p23.3	-0.25711	3.49E-07	3.47E-06
HMGN2P46	15q21.1	0.25694	3.56E-07	3.54E-06
HAR1B	20q13.33	0.256903	3.57E-07	3.55E-06
FAM83A	8q24.13	0.256828	3.60E-07	3.58E-06
PRELID3B	20q13.32	-0.25682	3.61E-07	3.58E-06
CYB5D2	17p13.2	0.256808	3.61E-07	3.58E-06
RB1CC1	8q11.23	-0.25681	3.61E-07	3.58E-06
SMIM10	Xq26.3	-0.25677	3.63E-07	3.59E-06
VASH2	1q32.3	-0.25646	3.75E-07	3.71E-06
FUCA1	1p36.11	0.256439	3.76E-07	3.72E-06
NME4	16p13.3	-0.25636	3.79E-07	3.75E-06
BORCS6	17p13.1	0.256248	3.84E-07	3.79E-06
GTF2E1	3q13.33	-0.25614	3.88E-07	3.83E-06



ENDOD1	11q21	0.25603	3.93E-07	3.88E-06
LRRC37A3	17q24.1	-0.25602	3.93E-07	3.88E-06
MRPL53	2p13.1	-0.256	3.94E-07	3.89E-06
AHNAK	11q12.3	0.25599	3.94E-07	3.89E-06
TXNDC16	14q22.1	0.25594	3.97E-07	3.91E-06
USF3	3q13.2	0.255894	3.99E-07	3.93E-06
CRABP2	1q23.1	-0.25587	4.00E-07	3.93E-06
SNHG32	6p21.33	-0.25581	4.02E-07	3.96E-06
PTPN18	2q21.1	0.255671	4.08E-07	4.02E-06
HSD11B1L	19p13.3	-0.25566	4.09E-07	4.02E-06
SEPTIN7	7p14.2	-0.25565	4.09E-07	4.02E-06
MAP2K4	17p12	0.255625	4.10E-07	4.03E-06
ACKR4	3q22.1	0.255611	4.11E-07	4.03E-06
TMEM35A	Xq22.1	-0.25559	4.12E-07	4.04E-06
FOXD4L1	2q14.1	0.255538	4.14E-07	4.06E-06
DDX60	4q32.3	0.255515	4.15E-07	4.07E-06
PHLDB3	19q13.31	-0.25548	4.17E-07	4.08E-06
CLIC5	6p21.1	0.255464	4.17E-07	4.09E-06
MRPS17	7p11.2	-0.25545	4.18E-07	4.09E-06
MECOM	3q26.2	0.255435	4.19E-07	4.10E-06
TRMT61B	2p23.2	-0.25537	4.22E-07	4.12E-06
ADCY6	12q13.12	0.255361	4.22E-07	4.12E-06
LINC00482	17q25.3	0.255174	4.31E-07	4.21E-06
ATP6V1C2	-	-0.25516	4.31E-07	4.21E-06
KYNU	2q22.2	0.25515	4.32E-07	4.21E-06
SNX24	5q23.2	0.255133	4.32E-07	4.22E-06
GUSBP4	6p11.2	-0.25501	4.38E-07	4.27E-06
TIMMDC1	3q13.33	-0.25494	4.42E-07	4.30E-06
RPS6KA5	14q32.11	0.254887	4.44E-07	4.33E-06
HCAR1	12q24.31	-0.25488	4.44E-07	4.33E-06
PTP4A1	6q12	0.254786	4.49E-07	4.37E-06
HDAC8	Xq13.1	-0.25478	4.49E-07	4.37E-06
VWCE	11q12.2	-0.25478	4.49E-07	4.37E-06
ST6GALNAC6	9q34.11	0.254769	4.50E-07	4.37E-06
NINJ1	9q22.31	-0.25474	4.51E-07	4.38E-06
OXLD1	17q25.3	-0.25472	4.52E-07	4.39E-06
VANGL2	1q23.2	-0.2547	4.53E-07	4.40E-06
EPHA10	1p34.3	0.254583	4.59E-07	4.45E-06
MATN3	2p24.1	-0.25456	4.60E-07	4.46E-06
HFE	6p22.2	0.25453	4.61E-07	4.47E-06
GDPD3	16p11.2	0.254476	4.64E-07	4.49E-06
MGAT3	22q13.1	0.254425	4.67E-07	4.52E-06
MRPS23	17q22	-0.25433	4.72E-07	4.56E-06
TMEM181	6q25.3	0.254202	4.78E-07	4.62E-06
MPLKIP	7p14.1	-0.25419	4.79E-07	4.63E-06
ADAM9	8p11.22	0.254178	4.79E-07	4.63E-06
DDAH2	6p21.33	-0.25413	4.81E-07	4.65E-06
RUSC1	1q22	0.254101	4.83E-07	4.66E-06
NAT8B	2p13.1	0.253973	4.90E-07	4.72E-06
CCDC90B	11q14.1	-0.25382	4.98E-07	4.80E-06
UXS1	2q12.2	-0.25374	5.02E-07	4.84E-06
ANO1	11q13.3	0.253686	5.05E-07	4.86E-06
NAALADL1	11q13.1	-0.25362	5.09E-07	4.90E-06
SEC13	3p25.3	0.253597	5.10E-07	4.91E-06
POLR2A	17p13.1	0.253571	5.11E-07	4.92E-06
SEPSECS	4p15.2	0.253563	5.12E-07	4.92E-06
CCDC136	7q32.1	-0.25355	5.12E-07	4.92E-06
IGSF22	11p15.1	-0.25354	5.13E-07	4.92E-06

ZNF608	5q23.2	-0.25353	5.13E-07	4.93E-06
ME3	11q14.2	-0.25351	5.14E-07	4.94E-06
TMEM167A	5q14.2	0.25351	5.15E-07	4.94E-06
BAG1	9p13.3	0.253444	5.18E-07	4.97E-06
HDHD2	18q21.1	0.253443	5.18E-07	4.97E-06
ZNF541	19q13.33	-0.25341	5.20E-07	4.98E-06
SLC40A1	2q32.2	0.253373	5.22E-07	5.00E-06
SLC46A3	13q12.3	0.253328	5.25E-07	5.02E-06
SLC19A2	1q24.2	-0.25332	5.25E-07	5.02E-06
IL10RB	21q22.11	0.253291	5.27E-07	5.03E-06
CTNNA1	5q31.2	0.253289	5.27E-07	5.03E-06
OCEL1	19p13.11	0.253253	5.29E-07	5.05E-06
AKAP13	15q25.3	0.253232	5.30E-07	5.06E-06
CD82	11p11.2	0.253223	5.30E-07	5.06E-06
CIB1	15q26.1	0.253211	5.31E-07	5.07E-06
LYPD5	19q13.31	0.253163	5.34E-07	5.09E-06
EMD	Xq28	-0.25303	5.41E-07	5.16E-06
C19ORF12	19q12	-0.25298	5.44E-07	5.18E-06
MORC3	21q22.12	0.252949	5.46E-07	5.20E-06
MMP15	16q21	0.252898	5.49E-07	5.22E-06
CCPG1	15q21.3	0.25285	5.52E-07	5.25E-06
FBXL20	17q12	-0.25284	5.52E-07	5.25E-06
TOM1L2	17p11.2	0.252817	5.54E-07	5.26E-06
NANOS3	19p13.12	-0.25273	5.59E-07	5.31E-06
ZPBP	7p12.2	-0.25267	5.62E-07	5.34E-06
PUM2	2p24.1	-0.2526	5.67E-07	5.37E-06
NCBP3	17p13.2	0.252599	5.67E-07	5.38E-06
RRS1	8q13.1	-0.25259	5.67E-07	5.38E-06
TYMS	18p11.32	0.252567	5.69E-07	5.39E-06
NCKAP5	2q21.2	-0.25248	5.74E-07	5.43E-06
MIR17HG	13q31.3	-0.25244	5.77E-07	5.46E-06
PPP1R36	14q23.3	0.252431	5.77E-07	5.46E-06
RNF146	6q22.33	-0.25243	5.77E-07	5.46E-06
NPHP1	2q13	-0.25239	5.80E-07	5.48E-06
LINC00662	19q11	-0.25238	5.80E-07	5.48E-06
PNPT1	2p16.1	-0.25234	5.83E-07	5.50E-06
AJUBA	14q11.2	-0.25233	5.83E-07	5.50E-06
ATG4A	Xq22.3	0.252329	5.83E-07	5.50E-06
ZNF575	19q13.31	0.252318	5.84E-07	5.51E-06
CCNO	5q11.2	0.252311	5.84E-07	5.51E-06
TNFSF10	3q26.31	0.252292	5.86E-07	5.52E-06
RBM38	20q13.31	-0.25216	5.94E-07	5.59E-06
TRAPPC8	18q12.1	0.252153	5.94E-07	5.59E-06
LIN7B	19q13.33	-0.25213	5.96E-07	5.60E-06
FRRS1	1p21.2	0.252084	5.99E-07	5.63E-06
ESPN	1p36.31	-0.25207	5.99E-07	5.63E-06
TOMM6	6p21.1	-0.252	6.04E-07	5.67E-06
TMEM176A	7q36.1	-0.25196	6.06E-07	5.69E-06
ARHGAP39	8q24.3	-0.25195	6.07E-07	5.70E-06
ZBTB33	Xq24	-0.25193	6.08E-07	5.71E-06
STAT3	17q21.2	0.251855	6.13E-07	5.75E-06
METTL8	2q31.1	-0.25185	6.14E-07	5.75E-06
PDCL3	2q11.2	-0.25181	6.16E-07	5.77E-06
PRSS16	6p22.1	0.251791	6.18E-07	5.78E-06
NDUFC2	11q14.1	-0.25176	6.20E-07	5.80E-06
ARL14EP	11p14.1	-0.25176	6.20E-07	5.80E-06
TXNDC11	16p13.13	0.251723	6.22E-07	5.81E-06
DHX57	2p22.1	-0.25172	6.22E-07	5.81E-06

EIF2AK3	2p11.2	0.251615	6.29E-07	5.88E-06
ENTPD7	10q24.2	0.251443	6.41E-07	5.98E-06
MPP5	14q23.3	0.251335	6.48E-07	6.05E-06
ZBTB7A	19p13.3	0.251328	6.49E-07	6.05E-06
FN1	2q35	-0.25126	6.53E-07	6.09E-06
EDNRA	4q31.22-q31.23	-0.25125	6.54E-07	6.10E-06
OXCT1	5p13.1	0.251228	6.55E-07	6.11E-06
MAGEE1	Xq13.3	-0.25122	6.56E-07	6.11E-06
AMZ2P1	17q24.1	-0.25109	6.65E-07	6.19E-06
SUGCT	7p14.1	-0.25108	6.66E-07	6.19E-06
ZNF302	19q13.11	-0.25105	6.68E-07	6.21E-06
ITPK1	14q32.12	0.251028	6.69E-07	6.22E-06
MALSU1	7p15.3	-0.25086	6.81E-07	6.33E-06
SYNE4	19q13.12	-0.25075	6.89E-07	6.40E-06
FUZ	19q13.33	-0.25073	6.91E-07	6.41E-06
MAN2A1	5q21.3	0.250675	6.95E-07	6.45E-06
ANAPC11	17q25.3	-0.25065	6.96E-07	6.46E-06
ITGA9	3p22.2	-0.25062	6.99E-07	6.48E-06
PRCP	11q14.1	-0.25061	7.00E-07	6.48E-06
EPRS	1q41	0.250486	7.09E-07	6.56E-06
RSL1D1	16p13.13	-0.25045	7.11E-07	6.58E-06
NIPAL1	4p12	0.250403	7.15E-07	6.61E-06
TMEM125	1p34.2	0.250319	7.21E-07	6.67E-06
TPX2	20q11.21	-0.25031	7.22E-07	6.67E-06
KLF5	13q22.1	0.250281	7.24E-07	6.69E-06
MRM2	7p22.3	-0.25012	7.37E-07	6.80E-06
MFN2	1p36.22	0.250084	7.39E-07	6.82E-06
DSCC1	8q24.12	-0.25006	7.42E-07	6.84E-06
FKBP7	2q31.2	-0.25005	7.42E-07	6.85E-06
TMEM99	17q21.2	-0.25001	7.45E-07	6.87E-06
HIGD1B	17q21.31	-0.24994	7.51E-07	6.91E-06
YTHDC2	5q22.2	0.249927	7.52E-07	6.92E-06
ABCA11P	4p16.3	-0.24992	7.52E-07	6.92E-06
TULP1	6p21.31	-0.24988	7.55E-07	6.95E-06
BABAM2	2p23.2	-0.24988	7.55E-07	6.95E-06
KRTAP1-1	17q21.2	-0.24983	7.59E-07	6.98E-06
TP53I11	11p11.2	0.249791	7.63E-07	7.01E-06
SS18L2	3p22.1	-0.24973	7.68E-07	7.05E-06
FBXO44	1p36.22	-0.24973	7.68E-07	7.05E-06
ZNF12	7p22.1	-0.24972	7.68E-07	7.05E-06
XPOT	12q14.2	-0.2497	7.69E-07	7.06E-06
CRYAA	21q22.3	-0.24969	7.71E-07	7.06E-06
SCN5A	3p22.2	-0.24957	7.81E-07	7.15E-06
TGFBI	5q31.1	-0.24951	7.85E-07	7.19E-06
AQP10	1q21.3	0.249472	7.88E-07	7.21E-06
ARL1	12q23.2	0.24947	7.89E-07	7.21E-06
PPM1L	3q25.33-q26.1	0.249424	7.92E-07	7.25E-06
BHLHB9	Xq22.1	-0.24939	7.95E-07	7.27E-06
NMNAT3	3q23	-0.24937	7.97E-07	7.28E-06
ATP9B	18q23	0.249361	7.98E-07	7.28E-06
DMXL1	5q23.1	0.249352	7.98E-07	7.29E-06
TSSK6	19p13.11	-0.24935	7.99E-07	7.29E-06
SMPD4	2q21.1	-0.2493	8.02E-07	7.32E-06
CHCHD6	3q21.3	-0.24929	8.03E-07	7.32E-06
PADI2	1p36.13	0.249288	8.04E-07	7.32E-06
CUL4B	Xq24	-0.24921	8.11E-07	7.38E-06
FBXO27	19q13.2	-0.24915	8.16E-07	7.42E-06
RGL2	6p21.32	-0.24914	8.17E-07	7.43E-06

C5ORF30	5q21.1	0.249092	8.20E-07	7.46E-06
CERK	22q13.31	-0.24909	8.21E-07	7.46E-06
PKN2	1p22.2	0.249055	8.24E-07	7.48E-06
ME2	18q21.2	0.24895	8.33E-07	7.56E-06
ENOSF1	18p11.32	0.248917	8.36E-07	7.59E-06
ALOX5	10q11.21	0.248895	8.38E-07	7.60E-06
MEAF6	1p34.3	-0.24884	8.42E-07	7.64E-06
GPRIN3	4q22.1	0.248839	8.42E-07	7.64E-06
NMUR2	5q33.1	0.24876	8.49E-07	7.70E-06
SPEG	2q35	-0.24875	8.50E-07	7.70E-06
TRMT10A	4q23	0.248653	8.59E-07	7.78E-06
COPB2	3q23	0.248604	8.63E-07	7.81E-06
MR11	19p13.13	-0.2486	8.64E-07	7.81E-06
PCED1A	20p13	-0.24856	8.67E-07	7.84E-06
PIM3	22q13.33	0.24856	8.67E-07	7.84E-06
LOC728024	8p11.23	-0.24854	8.69E-07	7.85E-06
PROC	2q14.3	-0.24852	8.71E-07	7.86E-06
GRAP	17p11.2	-0.24849	8.73E-07	7.88E-06
FTX	Xq13.2	-0.2484	8.82E-07	7.95E-06
KDM5B	1q32.1	0.248387	8.83E-07	7.96E-06
FER1L4	20q11.22	-0.24837	8.85E-07	7.97E-06
PTF1A	10p12.2	-0.24835	8.86E-07	7.98E-06
MED11	17p13.2	0.248348	8.87E-07	7.99E-06
LRRC20	10q22.1	-0.24829	8.92E-07	8.03E-06
EEF1AKMT1	13q12.11	-0.24825	8.96E-07	8.06E-06
FAXC	6q16.2	-0.24819	9.02E-07	8.11E-06
TBP	6q27	-0.24818	9.02E-07	8.11E-06
ZNF738	19p12	-0.24818	9.02E-07	8.11E-06
TEX261	2p13.3	-0.24815	9.05E-07	8.13E-06
PLCB3	11q13.1	0.248101	9.10E-07	8.17E-06
ELMSAN1	14q24.3	0.248069	9.13E-07	8.19E-06
C19ORF53	19p13.13	-0.24807	9.13E-07	8.19E-06
CALCA	11p15.2	-0.24803	9.16E-07	8.21E-06
DOCK8-AS1	9p24.3	0.248027	9.17E-07	8.22E-06
GATA6	18q11.2	0.248	9.20E-07	8.23E-06
TRIM10	6p22.1	0.248	9.20E-07	8.23E-06
RNPS1	16p13.3	-0.24797	9.22E-07	8.25E-06
UQCRFS1	19q12	0.247935	9.26E-07	8.28E-06
ANKLE1	19p13.11	-0.24792	9.27E-07	8.29E-06
ZNF610	19q13.41	-0.24791	9.28E-07	8.29E-06
NXF1	11q12.3	-0.24791	9.28E-07	8.29E-06
INPP5J	22q12.2	-0.24782	9.37E-07	8.37E-06
CCDC115	2q21.1	-0.24779	9.40E-07	8.39E-06
EXOC3L4	14q32.32	0.247754	9.43E-07	8.42E-06
DPH7	9q34.3	-0.2477	9.48E-07	8.46E-06
ZMYM3	Xq13.1	-0.24764	9.55E-07	8.51E-06
ERMARD	6q27	-0.24758	9.61E-07	8.56E-06
TCEAL1	Xq22.2	-0.24756	9.63E-07	8.57E-06
USP18	22q11.21	0.247554	9.63E-07	8.57E-06
GLOD4	17p13.3	0.247492	9.69E-07	8.63E-06
MYBL2	20q13.12	-0.24748	9.70E-07	8.63E-06
COX7A1	19q13.12	-0.24744	9.75E-07	8.67E-06
RNF181	2p11.2	-0.24742	9.77E-07	8.68E-06
MYO1E	15q22.2	0.247384	9.80E-07	8.71E-06
UNC50	2q11.2	-0.24732	9.87E-07	8.76E-06
NKRF	Xq24	-0.2473	9.89E-07	8.78E-06
DNAJC28	21q22.11	0.247252	9.94E-07	8.82E-06
OSBP	11q12.1	0.247241	9.95E-07	8.82E-06

HS1BP3	2p24.1	-0.24724	9.95E-07	8.82E-06
HSPB6	19q13.12	-0.24721	9.98E-07	8.84E-06
UBE2D3	4q24	0.24721	9.98E-07	8.84E-06
TMEM41A	3q27.2	-0.2472	9.99E-07	8.84E-06
ZNF337	20p11.21	-0.24713	1.01E-06	8.90E-06
TMEM50B	21q22.11	0.247112	1.01E-06	8.92E-06
PLEKHH1	14q24.1	0.247066	1.01E-06	8.95E-06
MAST3	19p13.11	0.247065	1.01E-06	8.95E-06
H1FX-AS1	3q21.3	-0.24703	1.02E-06	8.98E-06
RGS9BP	19q13.11	-0.24701	1.02E-06	8.99E-06
FOLR1	11q13.4	-0.247	1.02E-06	9.00E-06
ATP2A2	12q24.11	0.246932	1.03E-06	9.06E-06
LFNG	7p22.3	-0.24688	1.03E-06	9.11E-06
ALKBH5	17p11.2 17p11.2	0.246824	1.04E-06	9.15E-06
MCL1	1q21.2	0.24682	1.04E-06	9.15E-06
PLCD3	17q21.31	0.246779	1.04E-06	9.19E-06
ORC2	2q33.1	-0.24678	1.04E-06	9.19E-06
CMPK1	1p33	0.246737	1.05E-06	9.22E-06
ME1	6q14.2	0.246663	1.06E-06	9.29E-06
TMEM220	17p13.1	0.246626	1.06E-06	9.32E-06
SYTL1	1p36.11	0.246609	1.06E-06	9.33E-06
SNCAIP	5q23.2	-0.24657	1.07E-06	9.37E-06
TTLL9	20q11.21	-0.24654	1.07E-06	9.39E-06
DSG2	18q12.1	0.246538	1.07E-06	9.39E-06
ZDHHC22	14q24.3	-0.24652	1.07E-06	9.40E-06
ABHD2	15q26.1	0.246489	1.08E-06	9.43E-06
SUMO1	2q33.1	-0.24643	1.08E-06	9.48E-06
LAMP2	Xq24	-0.24642	1.08E-06	9.48E-06
GAN	16q23.2	0.246223	1.11E-06	9.68E-06
RUVBL1	3q21.3	-0.24619	1.11E-06	9.70E-06
SLC50A1	1q22	0.24612	1.12E-06	9.77E-06
NMNAT1	1p36.22	0.246075	1.12E-06	9.82E-06
FMO5	1q21.1	0.245985	1.13E-06	9.90E-06
FAM89B	11q13.1	-0.24591	1.14E-06	9.98E-06
SLC35D1	1p31.3	0.245901	1.14E-06	9.98E-06
MTNR1A	4q35.2	0.24587	1.15E-06	1.00E-05
EIF1AD	11q13.1	-0.24578	1.16E-06	1.01E-05
TBC1D16	17q25.3	-0.24575	1.16E-06	1.01E-05
KPNA6	1p35.2	0.245745	1.16E-06	1.01E-05
ZNF569	19q13.12	-0.24568	1.17E-06	1.02E-05
CHN2	7p14.3	-0.24558	1.18E-06	1.03E-05
WDR5B	3q21.1	-0.24556	1.18E-06	1.03E-05
S100A2	1q21.3	-0.24554	1.19E-06	1.03E-05
EEF2KMT	16p13.3	-0.24553	1.19E-06	1.03E-05
PMS2P3	7q11.23	-0.24548	1.19E-06	1.04E-05
TVP23C	17p12	0.245474	1.19E-06	1.04E-05
LRRC14	8q24.3	-0.24541	1.20E-06	1.04E-05
AMELX	Xp22.2	-0.24537	1.21E-06	1.05E-05
RAPGEF3	12q13.11	0.245331	1.21E-06	1.05E-05
SMG8	17q22	-0.24532	1.21E-06	1.05E-05
FBXW10	17p11.2	0.245292	1.22E-06	1.06E-05
NIPAL3	1p36.11	0.245266	1.22E-06	1.06E-05
ZNF470	19q13.43	-0.24522	1.23E-06	1.06E-05
KCNIP3	2q11.1	-0.24521	1.23E-06	1.06E-05
TUBB2A	6p25.2	0.245211	1.23E-06	1.06E-05
TMEM43	3p25.1	-0.24515	1.24E-06	1.07E-05
FDX2	19p13.2	-0.24514	1.24E-06	1.07E-05
NARS	18q21.31	0.245093	1.24E-06	1.07E-05

USP53	4q26	0.245074	1.24E-06	1.08E-05
NDUFV2	18p11.22	0.245061	1.25E-06	1.08E-05
L3MBTL1	20q13.12	-0.24505	1.25E-06	1.08E-05
G3BP2	4q21.1	0.24502	1.25E-06	1.08E-05
NAP1L1	12q21.2	-0.24498	1.26E-06	1.08E-05
MLLT11	1q21.3	-0.24498	1.26E-06	1.08E-05
CDC42EP4	17q25.1	0.244927	1.26E-06	1.09E-05
ISG20	15q26.1	0.244858	1.27E-06	1.10E-05
RLN2	9p24.1	-0.24484	1.28E-06	1.10E-05
SRL	16p13.3	0.24483	1.28E-06	1.10E-05
BCL7C	16p11.2	-0.24481	1.28E-06	1.10E-05
CPNE7	16q24.3	-0.24476	1.29E-06	1.11E-05
ADRA1D	20p13	-0.24474	1.29E-06	1.11E-05
USP36	17q25.3	-0.2447	1.29E-06	1.11E-05
SSBP1	7q34	-0.24464	1.30E-06	1.12E-05
PTER	10p13	0.244545	1.31E-06	1.13E-05
NDUFAF6	8q22.1	-0.24452	1.32E-06	1.13E-05
PITPNA	17p13.3	0.244483	1.32E-06	1.13E-05
ATP6V0D1	16q22.1	0.244459	1.33E-06	1.14E-05
SLC9A8	20q13.13	-0.24444	1.33E-06	1.14E-05
NPFFR1	10q22.1	-0.24441	1.33E-06	1.14E-05
THUMPD3-AS1	3p25.3	-0.2444	1.33E-06	1.14E-05
CCK	3p22.1	0.244287	1.35E-06	1.16E-05
MECP2	Xq28	-0.24428	1.35E-06	1.16E-05
TUBA1A	12q13.12	-0.24425	1.35E-06	1.16E-05
DDX10	11q22.3	-0.24422	1.36E-06	1.16E-05
TMEM249	8q24.3	-0.24415	1.37E-06	1.17E-05
CDC16	13q34	-0.24414	1.37E-06	1.17E-05
GALNS	16q24.3	-0.24407	1.38E-06	1.18E-05
CTDP1	18q23	0.244057	1.38E-06	1.18E-05
SEC24B	4q25	0.244044	1.38E-06	1.18E-05
SLC9A4	2q12.1	0.244002	1.39E-06	1.18E-05
ARMCX6	Xq22.1	-0.24399	1.39E-06	1.19E-05
CST6	11q13.1	-0.2439	1.40E-06	1.20E-05
MIER3	5q11.2	0.243861	1.41E-06	1.20E-05
B3GALT1	2q24.3	0.243823	1.42E-06	1.20E-05
PRRG4	11p13	0.243755	1.43E-06	1.21E-05
TNFSF9	19p13.3	0.243728	1.43E-06	1.22E-05
B4GALT4	3q13.32	0.243701	1.43E-06	1.22E-05
ELL2	5q15	0.243678	1.44E-06	1.22E-05
LINC00312	3p25.3	-0.24365	1.44E-06	1.22E-05
EXOC6	10q23.33	0.243538	1.46E-06	1.24E-05
DLG3	Xq13.1	0.243471	1.47E-06	1.25E-05
SREBF1	17p11.2	0.243402	1.48E-06	1.25E-05
KALRN	3q21.1-q21.2	0.243349	1.49E-06	1.26E-05
WRNIP1	6p25.2	-0.24331	1.49E-06	1.26E-05
BEST2	19p13.13	0.243298	1.49E-06	1.27E-05
WDR12	2q33.2	-0.24323	1.50E-06	1.27E-05
DEF8	16q24.3	-0.24317	1.51E-06	1.28E-05
LOC652276	16p13.3	-0.24315	1.52E-06	1.28E-05
GOLGA7B	10q24.2	-0.24305	1.53E-06	1.30E-05
RHOD	11q13.2	-0.243	1.54E-06	1.30E-05
C19ORF18	19q13.43	-0.2428	1.57E-06	1.33E-05
FHOD3	18q12.2	-0.24267	1.59E-06	1.34E-05
KRTAP3-3	17q21.2	-0.24267	1.59E-06	1.34E-05
LRRFIP1	2q37.3	0.242649	1.60E-06	1.35E-05
IGFL4	19q13.32	-0.24258	1.61E-06	1.35E-05
ARHGAP21	10p12.1 10p12.3	0.242445	1.63E-06	1.37E-05

COMT	22q11.21	-0.24242	1.63E-06	1.38E-05
GAS2L1	22q12.2	0.242399	1.64E-06	1.38E-05
TCF7L1	2p11.2	-0.24238	1.64E-06	1.38E-05
GOLGA8B	15q14	-0.24235	1.64E-06	1.38E-05
ARMC10	7q22.1	-0.24235	1.65E-06	1.38E-05
ENKUR	10p12.1	0.242321	1.65E-06	1.39E-05
BRSK1	19q13.42	-0.24231	1.65E-06	1.39E-05
FAM45A	10q26.11	0.242246	1.66E-06	1.40E-05
RBM28	7q32.1	-0.24221	1.67E-06	1.40E-05
SLC6A10P	16p11.2	0.24221	1.67E-06	1.40E-05
KLF7	2q33.3	-0.24213	1.68E-06	1.41E-05
PTCD3	2p11.2	-0.24213	1.68E-06	1.41E-05
LRRC59	17q21.33	0.242113	1.68E-06	1.41E-05
WBP4	13q14.11	-0.24211	1.69E-06	1.41E-05
KRT35	17q21.2	-0.24208	1.69E-06	1.42E-05
NR5A2	1q32.1	0.242021	1.70E-06	1.42E-05
RBBP8	18q11.2	0.241994	1.71E-06	1.43E-05
GGT6	17p13.2	0.241984	1.71E-06	1.43E-05
EFCAB7	1p31.3	-0.2419	1.72E-06	1.44E-05
ZNF880	19q13.41	-0.2419	1.72E-06	1.44E-05
AP4M1	7q22.1	-0.24187	1.73E-06	1.44E-05
ARVCF	22q11.21	-0.24185	1.73E-06	1.45E-05
NFE2L3P2	17q21.32	-0.24182	1.74E-06	1.45E-05
FBXW5	9q34.3	0.241796	1.74E-06	1.45E-05
PLEKHA4	19q13.33	-0.24179	1.74E-06	1.45E-05
HIPK2	7q34	0.241766	1.75E-06	1.46E-05
ALDH3A1	17p11.2	0.241744	1.75E-06	1.46E-05
SYN1	Xp11.3-p11.23	-0.24172	1.75E-06	1.46E-05
COPS5	8q13.1	-0.24169	1.76E-06	1.47E-05
PHLPP1	18q21.33	0.241686	1.76E-06	1.47E-05
ASNS	7q21.3	-0.24166	1.76E-06	1.47E-05
MED9	17p11.2	0.241651	1.77E-06	1.47E-05
GCK	7p13	-0.24163	1.77E-06	1.47E-05
SPATC1L	21q22.3	-0.24162	1.77E-06	1.47E-05
PLAC1	Xq26.3	-0.24159	1.78E-06	1.48E-05
RDX	11q22.3	-0.24149	1.80E-06	1.49E-05
ITGB4	17q25.1	0.241412	1.81E-06	1.50E-05
CD2BP2	16p11.2	-0.24141	1.81E-06	1.50E-05
SPAST	2p22.3	-0.24138	1.82E-06	1.51E-05
ACSM1	16p12.3	0.241244	1.84E-06	1.53E-05
CCDC106	19q13.42	-0.24124	1.84E-06	1.53E-05
PAIP1	5p12	-0.24114	1.86E-06	1.54E-05
POLR2F	22q13.1	-0.24109	1.87E-06	1.55E-05
IKZF3	17q12-q21.1	0.241055	1.88E-06	1.55E-05
INO80B	2p13.1	-0.24104	1.88E-06	1.55E-05
PDCD6IP	3p22.3	0.240959	1.89E-06	1.57E-05
ZNF43	19p12	-0.24088	1.91E-06	1.58E-05
TET1	10q21.3	-0.24083	1.92E-06	1.59E-05
VIL1	2q35	-0.24083	1.92E-06	1.59E-05
CDK8	13q12.13	-0.24079	1.93E-06	1.59E-05
AP5M1	14q22.3	0.240773	1.93E-06	1.59E-05
POLR3F	20p11.23	-0.24077	1.93E-06	1.59E-05
CLOCK	4q12	0.240751	1.93E-06	1.60E-05
TNFRSF13C	22q13.2	0.240732	1.94E-06	1.60E-05
GPM6B	Xp22.2	-0.2407	1.94E-06	1.60E-05
SULT1A3	16p11.2	0.240699	1.94E-06	1.60E-05
GAL	11q13.2	-0.24069	1.95E-06	1.60E-05
MAEA	4p16.3	0.240682	1.95E-06	1.60E-05

HINFP	11q23.3	-0.24067	1.95E-06	1.60E-05
INSM1	20p11.23	0.240528	1.98E-06	1.63E-05
VSTM2B	19q12	-0.24049	1.98E-06	1.63E-05
MOCOS	18q12.2	0.240452	1.99E-06	1.64E-05
KRT17	17q21.2	-0.24045	1.99E-06	1.64E-05
CADPS2	7q31.32	0.240427	2.00E-06	1.64E-05
HGH1	8q24.3	-0.24042	2.00E-06	1.64E-05
PNMA2	8p21.2	0.240397	2.00E-06	1.64E-05
ZNF566	19q13.12	-0.2403	2.02E-06	1.66E-05
MMAA	4q31.21	0.240272	2.03E-06	1.66E-05
MLX	17q21.2	0.240156	2.05E-06	1.68E-05
GYG1	3q24	-0.24015	2.06E-06	1.68E-05
TXNDCC9	2q11.2	-0.24003	2.08E-06	1.70E-05
ZNF558	19p13.2	-0.24002	2.08E-06	1.70E-05
CDHR2	5q35.2	0.239935	2.10E-06	1.72E-05
SYNJ1	21q22.11	0.239871	2.11E-06	1.73E-05
PDLIM4	5q31.1	-0.23984	2.12E-06	1.73E-05
GOLGA6L6	15q11.2	-0.2398	2.13E-06	1.74E-05
ICAM3	19p13.2	0.239707	2.15E-06	1.75E-05
GYG2	Xp22.33	-0.2397	2.15E-06	1.75E-05
CLP1	11q12.1	-0.23968	2.15E-06	1.76E-05
SHMT1	17p11.2	0.239669	2.16E-06	1.76E-05
ANPEP	15q26.1	0.239603	2.17E-06	1.77E-05
C11ORF1	11q23.1	-0.23957	2.18E-06	1.78E-05
CLASP1	2q14.2-q14.3	-0.23954	2.18E-06	1.78E-05
CCDC82	11q21	-0.23953	2.19E-06	1.78E-05
GFPT1	2p13.3	0.239479	2.20E-06	1.79E-05
WWC1	5q34	0.239437	2.21E-06	1.80E-05
STMN3	20q13.33	-0.23938	2.22E-06	1.81E-05
FBXL16	16p13.3	0.239379	2.22E-06	1.81E-05
C20ORF204	20q13.33	-0.23935	2.23E-06	1.81E-05
PALM3	19p13.12	-0.2393	2.24E-06	1.82E-05
FSTL4	5q31.1	-0.23918	2.26E-06	1.84E-05
KCTD17	22q12.3	-0.23917	2.27E-06	1.84E-05
TRIB2	2p24.3	0.239146	2.27E-06	1.84E-05
PCCB	3q22.3	0.239142	2.27E-06	1.84E-05
AK1	9q34.11	0.239017	2.30E-06	1.87E-05
WASF3	13q12.13	-0.23899	2.31E-06	1.87E-05
APOL6	22q12.3	0.238983	2.31E-06	1.87E-05
RAB5B	12q13.2	0.238862	2.34E-06	1.89E-05
ANKS4B	16p12.2	0.238847	2.34E-06	1.90E-05
RHOT1	17q11.2	-0.23883	2.35E-06	1.90E-05
FTL	19q13.33	-0.2388	2.35E-06	1.90E-05
MRPS31	13q14.11	-0.23879	2.35E-06	1.90E-05
SIAH1	16q12.1	-0.23877	2.36E-06	1.91E-05
ADGRF3	2p23.3	-0.23876	2.36E-06	1.91E-05
FAM47E	4q21.1	0.238716	2.37E-06	1.92E-05
SPATA2	20q13.13	-0.23869	2.38E-06	1.92E-05
NPDC1	9q34.3	0.238691	2.38E-06	1.92E-05
PLIN2	9p22.1	-0.23866	2.39E-06	1.92E-05
PMS1	2q32.2	-0.23863	2.39E-06	1.93E-05
MMP17	12q24.33	-0.23862	2.40E-06	1.93E-05
FHL3	1p34.3	-0.23856	2.41E-06	1.94E-05
CRPPA	7p21.2	-0.23854	2.42E-06	1.94E-05
TIGD5	8q24.3	-0.23852	2.42E-06	1.95E-05
PDE4C	19p13.11	0.238445	2.44E-06	1.96E-05
ATL3	11q13.1	0.238311	2.47E-06	1.99E-05
MICALL2	7p22.3	0.238298	2.47E-06	1.99E-05



IL18	11q23.1	0.238262	2.48E-06	2.00E-05
CA8	8q12.1	0.238257	2.48E-06	2.00E-05
TRIM24	7q33-q34	-0.23825	2.49E-06	2.00E-05
GPR55	2q37.1	0.238234	2.49E-06	2.00E-05
SNAPC5	15q22.31	-0.23822	2.49E-06	2.00E-05
BCAR3	1p22.1	0.238215	2.49E-06	2.00E-05
ATP6V1F	7q32.1	-0.23807	2.53E-06	2.03E-05
RAD51D	17q12	-0.23806	2.53E-06	2.03E-05
LAMA1	18p11.31	0.238058	2.53E-06	2.03E-05
ZNF529	19q13.12	-0.23804	2.54E-06	2.03E-05
TSPAN2	1p13.2	-0.2379	2.57E-06	2.06E-05
ST13	22q13.2	-0.23785	2.59E-06	2.07E-05
RASAL1	12q24.13	0.237846	2.59E-06	2.07E-05
CEP170B	14q32.33	0.237836	2.59E-06	2.07E-05
CD3EAP	19q13.32	-0.23771	2.62E-06	2.10E-05
SLC25A37	8p21.2	0.237684	2.63E-06	2.10E-05
PBX2	6p21.32	-0.23767	2.63E-06	2.10E-05
PAG1	8q21.13	0.237648	2.64E-06	2.11E-05
KRT75	12q13.13	-0.23763	2.64E-06	2.11E-05
MCTS1	Xq24	-0.23763	2.64E-06	2.11E-05
PGM3	6q14.1	0.237629	2.64E-06	2.11E-05
E2F3	6p22.3	-0.23759	2.66E-06	2.12E-05
LYSMD3	5q14.3	0.237428	2.70E-06	2.15E-05
SLC7A6OS	16q22.1	-0.23742	2.70E-06	2.15E-05
BYSL	6p21.1	-0.23739	2.71E-06	2.16E-05
ZSCAN18	19q13.43	-0.23738	2.71E-06	2.16E-05
LUZP1	1p36.12	0.237355	2.72E-06	2.16E-05
CLTB	5q35.2	0.237318	2.73E-06	2.17E-05
ELMOD3	2p11.2	-0.23729	2.74E-06	2.17E-05
CASP3	4q35.1	0.237186	2.76E-06	2.20E-05
	8-Mar 10q11.21-q11.22	0.23716	2.77E-06	2.20E-05
MAGEC1	Xq27.2	-0.23716	2.77E-06	2.20E-05
ABCD1	Xq28	-0.23715	2.77E-06	2.20E-05
KCNQ1OT1	11p15.5	-0.23714	2.78E-06	2.20E-05
CCR9	3p21.31	0.237079	2.79E-06	2.21E-05
SLC2A9	4p16.1	-0.23706	2.80E-06	2.22E-05
RAB3B	1p32.3	0.237046	2.80E-06	2.22E-05
GABRE	Xq28	-0.23702	2.81E-06	2.22E-05
THOC6	16p13.3	-0.23698	2.82E-06	2.23E-05
ZBTB49	4p16.3	-0.23698	2.82E-06	2.23E-05
NRARP	9q34.3	0.236974	2.82E-06	2.23E-05
ITGA3	17q21.33	0.236846	2.86E-06	2.26E-05
ACP1	2p25.3	-0.23681	2.87E-06	2.27E-05
LGR5	12q21.1	-0.2368	2.87E-06	2.27E-05
OTUD6B	8q21.3	-0.23674	2.89E-06	2.28E-05
MRPL30	2q11.2	-0.23664	2.92E-06	2.30E-05
BMP7	20q13.31	-0.23661	2.93E-06	2.31E-05
SNHG6	8q13.1 8q13	-0.23645	2.97E-06	2.34E-05
TMEM40	3p25.2	-0.23639	2.99E-06	2.36E-05
ZCCHC24	10q22.3	-0.23636	3.00E-06	2.36E-05
CNDP2	18q22.3	0.236357	3.00E-06	2.36E-05
ADCY3	2p23.3	-0.23631	3.01E-06	2.37E-05
ABHD5	3p21.33	0.23627	3.03E-06	2.38E-05
PEX12	17q12	-0.23624	3.04E-06	2.39E-05
DRGX	10q11.23	0.236237	3.04E-06	2.39E-05
SLC6A20	3p21.31	0.236195	3.05E-06	2.40E-05
ZNF319	16q21	-0.23619	3.05E-06	2.40E-05
MYLK2	20q11.21	-0.23613	3.07E-06	2.41E-05

TYSND1	10q22.1	-0.23612	3.07E-06	2.41E-05
UBXN1	11q12.3	-0.23608	3.08E-06	2.42E-05
ELL3	15q15.3	0.236038	3.10E-06	2.43E-05
TNIP1	5q33.1	0.236008	3.11E-06	2.44E-05
CNBD2	20q11.23	-0.23594	3.13E-06	2.45E-05
KCNQ4	1p34.2	0.235937	3.13E-06	2.45E-05
EVI5	1p22.1	0.235934	3.13E-06	2.45E-05
ZNF362	1p35.1	-0.23591	3.14E-06	2.46E-05
E2F4	16q22.1	-0.23588	3.15E-06	2.46E-05
EVI2B	17q11.2	0.235877	3.15E-06	2.46E-05
SCNM1	1q21.3	-0.23586	3.15E-06	2.47E-05
C17ORF80	17q25.1	-0.23585	3.16E-06	2.47E-05
HSD17B10	Xp11.22	-0.23581	3.17E-06	2.48E-05
ABCC4	13q32.1	-0.23581	3.17E-06	2.48E-05
PGRMC2	4q28.2	0.235777	3.18E-06	2.48E-05
NAT16	7q22.1	-0.23575	3.19E-06	2.49E-05
SINHCAF	12p11.21	-0.23571	3.20E-06	2.50E-05
NARS2	11q14.1	-0.23571	3.20E-06	2.50E-05
HGD	3q13.33	0.23567	3.21E-06	2.50E-05
RXRA	9q34.2	0.23566	3.22E-06	2.51E-05
MSL3P1	2q37.1	-0.23562	3.23E-06	2.51E-05
ARIH2OS	3p21.31	-0.23556	3.25E-06	2.53E-05
RER1	1p36.32	0.23555	3.25E-06	2.53E-05
DCHS2	4q31.3	-0.23552	3.26E-06	2.54E-05
HOXD9	2q31.1	-0.23552	3.26E-06	2.54E-05
IMPACT	18q11.2	0.235501	3.27E-06	2.54E-05
CALCOCO2	17q21.32	0.235493	3.27E-06	2.54E-05
AK4	1p31.3	-0.23548	3.27E-06	2.54E-05
ETAA1	2p14	-0.23548	3.27E-06	2.54E-05
SULT1C3	2q12.3	0.23546	3.28E-06	2.55E-05
CCDC86	11q12.2	-0.23543	3.29E-06	2.55E-05
GNPTAB	12q23.2	0.235406	3.30E-06	2.56E-05
KAT8	16p11.2	-0.23537	3.31E-06	2.57E-05
LOC148709	1q32.1	-0.23536	3.31E-06	2.57E-05
ADAT2	6q24.2	-0.23534	3.32E-06	2.57E-05
TRIQQ	8q22.1	0.235311	3.33E-06	2.58E-05
ASB8	12q13.11	0.23531	3.33E-06	2.58E-05
SLC38A11	2q24.3	-0.23525	3.35E-06	2.59E-05
RFX6	6q22.1	0.23518	3.37E-06	2.61E-05
ERI1	8p23.1	0.235134	3.39E-06	2.62E-05
STK38L	12p11.23	-0.23508	3.41E-06	2.63E-05
MB	22q12.3	0.235067	3.41E-06	2.63E-05
SHARPIN	8q24.3	-0.23495	3.45E-06	2.66E-05
JARID2	6p22.3	-0.23494	3.45E-06	2.66E-05
MTF1	1p34.3	0.234885	3.47E-06	2.68E-05
SLC15A1	13q32.2-q32.3	-0.23483	3.49E-06	2.69E-05
PAN3	13q12.2	-0.23478	3.51E-06	2.70E-05
CYP20A1	2q33.2	-0.23477	3.51E-06	2.71E-05
ACER2	9p22.1	0.234742	3.52E-06	2.71E-05
LMX1A	1q23.3	-0.23474	3.52E-06	2.71E-05
NDRG3	20q11.23	-0.23473	3.52E-06	2.71E-05
AGGF1	5q13.3	0.234687	3.54E-06	2.72E-05
SNRPG	2p13.3	-0.23464	3.55E-06	2.74E-05
OTUB1	11q13.1	-0.23461	3.56E-06	2.74E-05
PLB1	2p23.2	-0.23461	3.57E-06	2.74E-05
KLK3	19q13.33	0.234601	3.57E-06	2.74E-05
TLCD1	17q11.2	-0.23457	3.58E-06	2.75E-05
ZKSCAN5	7q22.1	-0.23456	3.58E-06	2.75E-05

PAPOLG	2p16.1	-0.2345	3.60E-06	2.77E-05
CCRL2	3p21.31	0.234491	3.61E-06	2.77E-05
OXT	20p13	-0.23449	3.61E-06	2.77E-05
PRDM11	11p11.2	-0.23444	3.62E-06	2.78E-05
NDUFAF3	3p21.31	-0.23432	3.67E-06	2.81E-05
CARM1	19p13.2	-0.23432	3.67E-06	2.81E-05
SEPTIN2	2q37.3	-0.23424	3.70E-06	2.83E-05
DGKZ	11p11.2	-0.23421	3.71E-06	2.84E-05
ALG10B	12q12	-0.23413	3.74E-06	2.86E-05
RABEP2	16p11.2	-0.23405	3.77E-06	2.88E-05
CEACAM7	19q13.2	0.233985	3.79E-06	2.90E-05
C8ORF31	8q24.3	-0.23396	3.80E-06	2.90E-05
PPP1R2B	5q33.3	-0.23393	3.81E-06	2.91E-05
SPTBN5	15q15.1	-0.2339	3.82E-06	2.92E-05
CPNE5	6p21.2	0.23385	3.84E-06	2.93E-05
LDB1	10q24.32	-0.23385	3.84E-06	2.93E-05
ANK1	8p11.21	0.233838	3.85E-06	2.94E-05
TPT1-AS1	13q14.13	-0.2338	3.86E-06	2.95E-05
MUCL3	6p21.33	0.233784	3.87E-06	2.95E-05
IZUMO2	19q13.33	-0.2337	3.90E-06	2.97E-05
FUT7	9q34.3	-0.2337	3.90E-06	2.97E-05
REM1	20q11.21	-0.23364	3.92E-06	2.99E-05
UBE2E1	3p24.2	-0.23361	3.93E-06	2.99E-05
SDCBP	8q12.1	0.233606	3.93E-06	2.99E-05
SSR1	6p24.3	0.233592	3.94E-06	3.00E-05
SGCB	4q12	0.233577	3.95E-06	3.00E-05
TLE4	9q21.31	0.233532	3.96E-06	3.01E-05
CMTM7	3p22.3	-0.23351	3.97E-06	3.02E-05
C2CD2L	11q23.3	0.23346	3.99E-06	3.03E-05
NOL4L	20q11.21	-0.23346	3.99E-06	3.03E-05
GNL1	6p21.33	-0.2334	4.01E-06	3.05E-05
PYCR3	8q24.3	-0.2334	4.01E-06	3.05E-05
GPX7	1p32.3	-0.23338	4.02E-06	3.05E-05
MAPKAP1	9q33.3	-0.23337	4.02E-06	3.05E-05
CGN	1q21.3	0.23332	4.05E-06	3.07E-05
HDDC2	6q22.31	-0.23331	4.05E-06	3.07E-05
MFSD6	2q32.2	0.233279	4.06E-06	3.08E-05
ZC3H3	8q24.3	-0.23309	4.14E-06	3.13E-05
DLGAP4	20q11.23	-0.23308	4.14E-06	3.13E-05
TRIB3	20p13	-0.23303	4.16E-06	3.15E-05
RIC8B	12q23.3	0.232978	4.18E-06	3.16E-05
PPP1R14B	11q13.1	-0.23293	4.20E-06	3.18E-05
OLA1	2q31.1	-0.2329	4.21E-06	3.18E-05
GZF1	20p11.21	-0.23286	4.23E-06	3.20E-05
MGST3	1q24.1	0.232846	4.24E-06	3.20E-05
PAFAH1B3	19q13.2	-0.23267	4.31E-06	3.25E-05
DUOXA2	15q21.1	0.232658	4.32E-06	3.26E-05
EIF3B	7p22.3	-0.23265	4.32E-06	3.26E-05
RRN3P1	16p12.2	-0.23256	4.36E-06	3.29E-05
SCRIB	8q24.3	-0.23253	4.37E-06	3.29E-05
GK3P	4q32.3	0.232514	4.38E-06	3.30E-05
ZNF174	16p13.3	-0.23244	4.41E-06	3.32E-05
DYNC111	7q21.3	-0.23243	4.41E-06	3.32E-05
TARBP1	1q42.2	-0.2324	4.42E-06	3.33E-05
TMEM138	11q12.2	-0.2324	4.42E-06	3.33E-05
OBP2B	9q34.2	-0.23238	4.43E-06	3.33E-05
LGI4	19q13.12 19q13.11	-0.23232	4.46E-06	3.35E-05
SARAF	8p12	0.232308	4.47E-06	3.36E-05

MAPK14	6p21.31	-0.2323	4.47E-06	3.36E-05
RPS6KL1	14q24.3	-0.23229	4.47E-06	3.36E-05
THSD1P1	13q14.3	-0.23229	4.47E-06	3.36E-05
PI4KA	22q11.21	0.232277	4.48E-06	3.36E-05
USP27X	Xp11.23	-0.23222	4.50E-06	3.38E-05
PGRMC1	Xq24	-0.23222	4.51E-06	3.38E-05
TMEM144	4q32.1	0.232165	4.53E-06	3.39E-05
C20ORF203	20q11.21	-0.23216	4.53E-06	3.39E-05
THOC7	3p14.1	-0.23213	4.54E-06	3.40E-05
FAM149A	4q35.1	0.232122	4.55E-06	3.40E-05
RAB3A	19p13.11	0.232099	4.56E-06	3.41E-05
ZNF92	7q11.21	-0.23207	4.57E-06	3.42E-05
ABO	9q34.2	0.232067	4.57E-06	3.42E-05
FZD10	12q24.33	-0.23206	4.58E-06	3.42E-05
C10ORF12	10q24.1	0.232032	4.59E-06	3.43E-05
TMEM131	2q11.2	0.23181	4.69E-06	3.50E-05
PSMD14	2q24.2	-0.23178	4.70E-06	3.51E-05
NDP	Xp11.3	-0.23178	4.70E-06	3.51E-05
CYTIP	2q24.1	0.231767	4.71E-06	3.51E-05
SEL1L	14q31.1	0.231671	4.75E-06	3.54E-05
TCTE3	6q27	-0.2316	4.78E-06	3.57E-05
NUDCD3	7p13	-0.23158	4.79E-06	3.57E-05
RTL8B	Xq26.3	-0.23149	4.83E-06	3.60E-05
KPNA3	13q14.2	-0.23145	4.85E-06	3.62E-05
VKORC1	16p11.2	-0.23141	4.87E-06	3.63E-05
CCDC138	2q13	-0.23137	4.89E-06	3.64E-05
ZNF189	9q31.1	0.231345	4.90E-06	3.65E-05
CATSPER2P1	15q15.3	-0.23134	4.90E-06	3.65E-05
WDR70	5p13.2	-0.23134	4.91E-06	3.65E-05
ANKRD45	1q25.1	0.231319	4.92E-06	3.65E-05
UBAC2	13q32.3	-0.23121	4.97E-06	3.69E-05
CCNQ	Xq28	-0.2312	4.97E-06	3.69E-05
ZC3H15	2q32.1	-0.23114	5.00E-06	3.71E-05
BSN	3p21.31	-0.23113	5.00E-06	3.71E-05
CHD7	8q12.2	-0.23111	5.02E-06	3.72E-05
GJB2	13q12.11	0.231064	5.04E-06	3.74E-05
TTC39A	1p32.3	0.231037	5.05E-06	3.74E-05
TUBE1	6q21	-0.23102	5.06E-06	3.75E-05
ING5	2q37.3	-0.23096	5.09E-06	3.77E-05
TSPOAP1	17q22	-0.23094	5.10E-06	3.77E-05
USP43	17p13.1	0.230937	5.10E-06	3.77E-05
UXT	Xp11.23	-0.23093	5.10E-06	3.77E-05
CNTD2	19q13.2	0.23087	5.13E-06	3.80E-05
ASPH	8q12.3	0.230826	5.16E-06	3.81E-05
RSPO4	20p13	-0.23077	5.18E-06	3.83E-05
C1ORF109	1p34.3	-0.23071	5.21E-06	3.85E-05
NSDHL	Xq28	-0.23067	5.23E-06	3.86E-05
ZBTB8A	1p35.1	0.230649	5.24E-06	3.87E-05
IP6K2	3p21.31	-0.23064	5.25E-06	3.87E-05
HAUS7	Xq28	-0.2306	5.27E-06	3.89E-05
MLLT6	17q12	-0.23056	5.29E-06	3.90E-05
TTC19	17p12	0.230532	5.30E-06	3.91E-05
CLRN3	10q26.2	0.23048	5.33E-06	3.93E-05
TXNIP	1q21.1	0.230431	5.36E-06	3.94E-05
ZKSCAN2	16p12.1	-0.2304	5.37E-06	3.95E-05
TMEM59	1p32.3	0.230378	5.38E-06	3.96E-05
GP5M1	9q34.3	-0.23035	5.40E-06	3.97E-05
ASNSD1	2q32.2	-0.23022	5.46E-06	4.02E-05

CTU2	16q24.3	-0.23017	5.49E-06	4.04E-05
TRAF3IP2	6q21	0.230155	5.50E-06	4.04E-05
C15ORF56	15q15.1	-0.23015	5.50E-06	4.04E-05
ABCC2	10q24.2	-0.23014	5.51E-06	4.05E-05
APOBEC4	1q25.3	0.230069	5.55E-06	4.07E-05
UBXN8	8p12	0.230025	5.57E-06	4.09E-05
LINC00323	21q22.2	0.230003	5.58E-06	4.09E-05
PROSER1	13q13.3	-0.22994	5.62E-06	4.12E-05
L3HYPDH	14q23.1	-0.22988	5.65E-06	4.14E-05
CITED2	6q24.1	0.229763	5.71E-06	4.19E-05
CALCB	11p15.2	-0.22973	5.73E-06	4.20E-05
PHOSPHO2	2q31.1	-0.22966	5.77E-06	4.22E-05
C10ORF62	10q24.2	-0.22965	5.78E-06	4.23E-05
NUP107	12q15	-0.22963	5.78E-06	4.23E-05
SLC7A6	16q22.1	-0.22962	5.79E-06	4.24E-05
POLR3E	16p12.2	-0.2296	5.80E-06	4.24E-05
DCAF4	14q24.2	-0.2296	5.80E-06	4.24E-05
PSMA1	11p15.2	-0.22958	5.81E-06	4.25E-05
PEA15	1q23.2	-0.22958	5.81E-06	4.25E-05
C12ORF76	12q24.11	-0.22956	5.82E-06	4.25E-05
TUBD1	17q23.1	-0.22952	5.85E-06	4.27E-05
MYO7A	11q13.5	-0.22948	5.87E-06	4.28E-05
KLF9	9q21.12	0.229424	5.90E-06	4.30E-05
ANKH	5p15.2	-0.22942	5.90E-06	4.30E-05
CACHD1	1p31.3	-0.22937	5.93E-06	4.32E-05
TIMM50	19q13.2	-0.22936	5.93E-06	4.32E-05
RPRM	2q23.3	-0.22935	5.95E-06	4.33E-05
SCAMP1	5q14.1	0.229216	6.02E-06	4.38E-05
RPP30	10q23.31	-0.22913	6.07E-06	4.42E-05
PRPF3	1q21.2	-0.22909	6.09E-06	4.43E-05
GNPDA1	5q31.3	-0.22907	6.10E-06	4.44E-05
TMEM30A	6q14.1	0.229064	6.11E-06	4.44E-05
TAPBP	6p21.32	0.229041	6.12E-06	4.45E-05
SCARB1	12q24.31	-0.22902	6.14E-06	4.46E-05
KLHDC8B	3p21.31	-0.22901	6.14E-06	4.46E-05
DUOX1	15q21.1	0.229011	6.14E-06	4.46E-05
WDR43	2p23.2	-0.22891	6.20E-06	4.50E-05
IAH1	2p25.1	-0.2289	6.20E-06	4.50E-05
P4HB	17q25.3	0.228855	6.23E-06	4.52E-05
EIF3E	8q23.1	-0.22882	6.25E-06	4.53E-05
C2ORF68	2p11.2	-0.22876	6.29E-06	4.55E-05
MAP6	11q13.5	-0.22876	6.29E-06	4.55E-05
BREA2	8q24.3	-0.22871	6.32E-06	4.57E-05
GIT1	17q11.2	-0.22869	6.33E-06	4.58E-05
LBH	2p23.1	-0.22868	6.34E-06	4.59E-05
CCNJ	10q24.1	-0.22867	6.34E-06	4.59E-05
DNAJC1	10p12.31	0.228671	6.34E-06	4.59E-05
POLR2J	7q22.1	-0.2286	6.39E-06	4.62E-05
BOP1	8q24.3	-0.22858	6.40E-06	4.62E-05
SLC22A4	5q31.1	-0.22858	6.40E-06	4.62E-05
ARAP2	4p14	0.228503	6.44E-06	4.65E-05
POGLUT2	13q33.1	-0.22846	6.47E-06	4.67E-05
EEPD1	7p14.2	-0.22844	6.49E-06	4.68E-05
TYMSOS	18p11.32	0.228381	6.52E-06	4.70E-05
RPL23AP7	2q14.1	-0.22837	6.53E-06	4.70E-05
SWSAP1	19p13.2	-0.22836	6.54E-06	4.71E-05
ADH1C	4q23	0.228318	6.56E-06	4.73E-05
BROX	1q41	0.228282	6.58E-06	4.74E-05

FGF7P3	9p12	-0.22827	6.59E-06	4.74E-05
ALOXE3	17p13.1	0.228239	6.61E-06	4.76E-05
ST3GAL3	1p34.1	-0.22822	6.62E-06	4.76E-05
NRF1	7q32.2	-0.22812	6.69E-06	4.81E-05
ABHD16B	20q13.33	-0.2281	6.70E-06	4.81E-05
ZNF875	19q13.12	-0.228	6.76E-06	4.86E-05
IFNLR1	1p36.11	-0.22797	6.78E-06	4.87E-05
SYTL4	Xq22.1	0.227958	6.79E-06	4.88E-05
POMGNT1	1p34.1	-0.22791	6.82E-06	4.90E-05
ECEL1	2q37.1	-0.22788	6.84E-06	4.91E-05
GLIS3	9p24.2	0.227841	6.87E-06	4.92E-05
JCHAIN	4q13.3	0.227837	6.87E-06	4.92E-05
CCNG2	4q21.1	0.227757	6.92E-06	4.96E-05
CBLN1	16q12.1	-0.22775	6.92E-06	4.96E-05
NDUFB11	Xp11.3	-0.22774	6.93E-06	4.96E-05
PSMG1	21q22.2	-0.22768	6.97E-06	4.99E-05
PHKA2	Xp22.13	-0.22766	6.99E-06	5.00E-05
CC2D2A	4p15.32	-0.22763	7.00E-06	5.01E-05
NAALADL2	3q26.31	-0.2276	7.03E-06	5.03E-05
ZNF26	12q24.33	-0.22757	7.05E-06	5.04E-05
MRNIP	5q35.3	-0.22756	7.05E-06	5.04E-05
UGT2B15	4q13.2	0.227532	7.07E-06	5.05E-05
FAM151B	5q14.1	0.227505	7.09E-06	5.06E-05
NRSN2	20p13	-0.22743	7.14E-06	5.10E-05
LEXM	1p32.3	0.227415	7.15E-06	5.10E-05
RPL37A	2q35	-0.22738	7.17E-06	5.12E-05
TTC14	3q26.33	-0.22735	7.19E-06	5.13E-05
MFSD4A-AS1	1q32.1	0.227348	7.20E-06	5.13E-05
XPNPEP2	Xq26.1	-0.22733	7.21E-06	5.14E-05
TCN2	22q12.2	0.227252	7.26E-06	5.17E-05
TCF19	6p21.33	0.227232	7.28E-06	5.18E-05
TATDN2	3p25.3	-0.22723	7.28E-06	5.18E-05
RPS3	11q13.4	-0.22719	7.30E-06	5.20E-05
FAM83B	6p12.1	0.227177	7.31E-06	5.20E-05
CSNK1A1	5q32	0.227152	7.33E-06	5.21E-05
RAB11FIP3	16p13.3	-0.22709	7.37E-06	5.24E-05
SAMD7	3q26.2	0.227054	7.40E-06	5.26E-05
FAM177A1	14q13.2	0.227022	7.42E-06	5.27E-05
DNAH17	17q25.3	-0.22696	7.46E-06	5.30E-05
AMOTL2	3q22.2	-0.22694	7.48E-06	5.31E-05
IQCG	3q29	0.226907	7.50E-06	5.33E-05
RGCC	13q14.11	-0.22689	7.52E-06	5.33E-05
GRIN3A	9q31.1	0.226871	7.53E-06	5.34E-05
FAM45BP	Xq26.1	0.226832	7.56E-06	5.36E-05
POLD3	11q13.4	0.226808	7.57E-06	5.37E-05
TSEN34	19q13.42	-0.22679	7.59E-06	5.38E-05
TPSG1	16p13.3	0.226765	7.61E-06	5.39E-05
ELOVL5	6p12.1	-0.22675	7.62E-06	5.39E-05
SAMD9	7q21.2	0.226688	7.66E-06	5.42E-05
CMTR1	6p21.2	-0.22668	7.67E-06	5.42E-05
HMGCR	5q13.3	0.226541	7.77E-06	5.49E-05
NEURL1	10q24.33	0.226541	7.77E-06	5.49E-05
CLCA1	1p22.3	0.226506	7.79E-06	5.51E-05
CDCA7	2q31.1	-0.2265	7.80E-06	5.51E-05
DND1	5q31.3	0.226459	7.83E-06	5.53E-05
PAQR7	1p36.11	-0.2264	7.87E-06	5.56E-05
C20ORF27	20p13	-0.22633	7.93E-06	5.59E-05
WDR33	2q14.3	-0.22632	7.94E-06	5.60E-05

ACTR3B	7q36.1-q36.2	-0.2263	7.95E-06	5.61E-05
GMEB1	1p35.3	0.226273	7.97E-06	5.62E-05
DNPEP	2q35	-0.22626	7.98E-06	5.62E-05
SULT1B1	4q13.3	0.226163	8.05E-06	5.67E-05
PLEKHB1	11q13.4	-0.22615	8.06E-06	5.68E-05
ZFP1	16q23.1	-0.22613	8.07E-06	5.68E-05
APOC2	19q13.32	-0.22609	8.11E-06	5.71E-05
CASP1	11q22.3	0.226077	8.12E-06	5.71E-05
DUSP6	12q21.33	0.226069	8.12E-06	5.71E-05
TEX30	13q33.1	-0.22606	8.13E-06	5.71E-05
AGL	1p21.2	0.226052	8.14E-06	5.72E-05
SFXN2	10q24.32	0.226017	8.16E-06	5.73E-05
LUC7L	16p13.3	-0.22601	8.17E-06	5.74E-05
FUNDC1	Xp11.3	-0.226	8.18E-06	5.74E-05
C11ORF68	11q13.1	-0.22595	8.21E-06	5.76E-05
SOGA1	20q11.23	-0.22592	8.24E-06	5.78E-05
CEP192	18p11.21	0.225912	8.25E-06	5.78E-05
PDCD2	6q27	-0.22589	8.27E-06	5.79E-05
RPL23	17q12	-0.22588	8.27E-06	5.80E-05
IPCEF1	6q25.2	0.225875	8.27E-06	5.80E-05
LINC00174	7q11.21	-0.22587	8.28E-06	5.80E-05
CAD	2p23.3	-0.22585	8.29E-06	5.80E-05
BNIP3	10q26.3	-0.22585	8.29E-06	5.80E-05
SWAP70	11p15.4	0.225825	8.31E-06	5.82E-05
SLC26A10	12q13.3	-0.22582	8.32E-06	5.82E-05
NEK3	13q14.3	-0.22578	8.35E-06	5.84E-05
DYM	18q21.1	0.225741	8.38E-06	5.86E-05
FCMR	1q32.1	0.225689	8.42E-06	5.88E-05
RAB3IL1	11q12.2-q12.3	-0.22564	8.46E-06	5.91E-05
LRRC14B	5p15.33	-0.2256	8.49E-06	5.93E-05
DHX32	10q26.2	0.22548	8.59E-06	5.99E-05
TMF1	3p14.1	0.225456	8.61E-06	6.00E-05
SAYSD1	6p21.2	-0.22543	8.63E-06	6.02E-05
MRPL40	22q11.21	-0.22542	8.64E-06	6.02E-05
CD244	1q23.3	0.225415	8.64E-06	6.02E-05
CD2AP	6p12.3	0.225365	8.68E-06	6.05E-05
SLC1A4	2p14	-0.22536	8.69E-06	6.05E-05
NOL8	9q22.31	-0.22531	8.72E-06	6.07E-05
ASAP3	1p36.12	0.225293	8.74E-06	6.08E-05
NEBL	10p12.31	-0.22526	8.77E-06	6.10E-05
RBM48	7q21.2	-0.22525	8.78E-06	6.11E-05
SERINC4	15q15.3	0.22521	8.81E-06	6.12E-05
GPR83	11q21	-0.2252	8.82E-06	6.13E-05
PFN4	2p23.3	-0.22518	8.83E-06	6.14E-05
AGPAT4	6q26	0.225178	8.84E-06	6.14E-05
C9ORF129	9q22.31	0.225141	8.87E-06	6.16E-05
PFN2	3q25.1	-0.22514	8.87E-06	6.16E-05
GCC2	2q12.3	0.225107	8.90E-06	6.17E-05
CS	12q13.3	0.225107	8.90E-06	6.17E-05
RPL31	2q11.2	-0.22509	8.91E-06	6.18E-05
UBL4A	Xq28	-0.22503	8.96E-06	6.21E-05
SCO1	17p13.1	0.224943	9.03E-06	6.26E-05
BTN3A1	6p22.2	0.224934	9.04E-06	6.26E-05
PTK2	8q24.3	-0.22493	9.04E-06	6.26E-05
FUNDC2P2	2p11.2	-0.22492	9.05E-06	6.27E-05
CRACR2A	12p13.32	0.224861	9.10E-06	6.30E-05
MIIP	1p36.22	-0.22481	9.15E-06	6.32E-05
SLC22A17	14q11.2	-0.22478	9.17E-06	6.34E-05

GP2	16p12.3	0.224775	9.18E-06	6.34E-05
WWC2	4q35.1	-0.22477	9.18E-06	6.34E-05
GEMIN4	17p13.3	0.224756	9.20E-06	6.35E-05
SERPINH1	11q13.5	-0.22474	9.21E-06	6.36E-05
LZTS2	10q24.31	-0.22472	9.23E-06	6.37E-05
ILKAP	2q37.3	-0.22467	9.27E-06	6.39E-05
NR2C2AP	19p13.11	-0.22463	9.31E-06	6.42E-05
APH1B	15q22.2	-0.2245	9.42E-06	6.50E-05
PDLIM1	10q23.33	0.224475	9.44E-06	6.51E-05
RSPH14	22q11.22-q11.23	-0.22442	9.49E-06	6.54E-05
WDPCP	2p15	-0.22442	9.49E-06	6.54E-05
RAVER2	1p31.3	0.224414	9.50E-06	6.54E-05
VPS54	2p15-p14	-0.22429	9.60E-06	6.61E-05
FAM8A1	6p22.3	0.224268	9.63E-06	6.62E-05
DDX1	2p24.3	-0.22426	9.64E-06	6.63E-05
RAP1B	12q15	0.224245	9.65E-06	6.63E-05
PI3	20q13.12	0.224245	9.65E-06	6.63E-05
OBSL1	2q35	-0.22423	9.66E-06	6.64E-05
TRMT6	20p12.3	-0.22415	9.74E-06	6.69E-05
GRAMD4	22q13.31	0.224126	9.75E-06	6.70E-05
KIF6	6p21.2	-0.22409	9.79E-06	6.72E-05
POT1	7q31.33	-0.22407	9.81E-06	6.73E-05
CNPY3	6p21.1	-0.22404	9.83E-06	6.74E-05
RPS27L	15q22.2	0.224039	9.83E-06	6.74E-05
PTPRE	10q26.2	0.224016	9.86E-06	6.75E-05
ZNF438	10p11.23	0.224012	9.86E-06	6.76E-05
AP2B1	17q12	0.224001	9.87E-06	6.76E-05
DMBX1	1p33	0.223976	9.89E-06	6.77E-05
ASPN	9q22.31	-0.22396	9.91E-06	6.78E-05
KLB	4p14	0.223949	9.92E-06	6.79E-05
CABYR	18q11.2	-0.22393	9.93E-06	6.79E-05
ZCCHC3	20p13	-0.22391	9.96E-06	6.81E-05
PFKL	21q22.3	0.223898	9.97E-06	6.81E-05
HS6ST1	2q14.3	-0.22389	9.98E-06	6.82E-05
RAB22A	20q13.32	-0.22387	9.99E-06	6.82E-05
PRSS45P	3p21.31	-0.22383	1.00E-05	6.85E-05
HOXA2	7p15.2	-0.22382	1.00E-05	6.85E-05
MMUT	6p12.3	0.223797	1.01E-05	6.86E-05
RAB35	12q24.23	0.223794	1.01E-05	6.86E-05
HMGB3	Xq28	-0.22375	1.01E-05	6.89E-05
ZNRD1	6p22.1	-0.22368	1.02E-05	6.93E-05
NUP42	7p15.3	-0.22363	1.02E-05	6.96E-05
KCNH3	12q13.12	-0.2236	1.02E-05	6.98E-05
RHCG	15q26.1	-0.22357	1.03E-05	7.00E-05
CDKL1	14q21.3	0.223563	1.03E-05	7.00E-05
TEPSIN	17q25.3	-0.22353	1.03E-05	7.02E-05
ZNF512B	20q13.33	-0.22353	1.03E-05	7.02E-05
ANKS3	16p13.3	-0.22352	1.03E-05	7.02E-05
SLC45A3	1q32.1	0.223449	1.04E-05	7.07E-05
HIST4H4	12p12.3	-0.22342	1.04E-05	7.08E-05
RMC1	18q11.2	0.223418	1.04E-05	7.08E-05
BCORL1	Xq26.1	-0.2234	1.04E-05	7.09E-05
NDUFA9	12p13.32	0.223346	1.05E-05	7.12E-05
TSPAN14	10q23.1	0.223342	1.05E-05	7.12E-05
GPR155	2q31.1	-0.22333	1.05E-05	7.13E-05
PRAP1	10q26.3	-0.22332	1.05E-05	7.13E-05
ZMAT5	22q12.2	-0.22331	1.05E-05	7.14E-05
CACNA1D	3p21.1	-0.22326	1.06E-05	7.17E-05



CPSF1	8q24.3	-0.22325	1.06E-05	7.17E-05
CRYM-AS1	16p12.2	-0.22323	1.06E-05	7.18E-05
RCN3	19q13.33	-0.22316	1.07E-05	7.23E-05
OTUB2	14q32.12	0.223133	1.07E-05	7.25E-05
NAT8	2p13.1	0.223111	1.07E-05	7.26E-05
MAF1	8q24.3	-0.22305	1.08E-05	7.30E-05
MLLT10	10p12.31	-0.22304	1.08E-05	7.30E-05
KIR3DL2	19q13.42	0.22298	1.09E-05	7.34E-05
SLC25A32	8q22.3	-0.22296	1.09E-05	7.35E-05
ANXA2P2	9p13.3	0.222938	1.09E-05	7.36E-05
AGAP2	12q14.1	0.222934	1.09E-05	7.36E-05
LINC00324	17p13.1	0.222905	1.09E-05	7.38E-05
INPP5K	17p13.3	0.222882	1.10E-05	7.39E-05
WASH8P	12p13.33	-0.22285	1.10E-05	7.42E-05
SUMO1P3	1q23.2	-0.22278	1.11E-05	7.46E-05
C8ORF44	8q13.1	-0.22278	1.11E-05	7.46E-05
ASB3	2p16.2	-0.22274	1.11E-05	7.48E-05
PPP2R3B	Xp22.33 and Yp11.31	-0.22272	1.11E-05	7.49E-05
C7ORF25	7p14.1	-0.22271	1.11E-05	7.50E-05
RRAGB	Xp11.21	-0.22264	1.12E-05	7.55E-05
KDM1A	1p36.12	-0.22259	1.13E-05	7.58E-05
FAM162A	3q21.1	0.222553	1.13E-05	7.60E-05
NME1	17q21.33	-0.22253	1.13E-05	7.62E-05
PIGS	17q11.2	0.222516	1.13E-05	7.62E-05
AFDN-DT	6q27	-0.2225	1.14E-05	7.63E-05
PAFAH1B1	17p13.3	0.222396	1.15E-05	7.70E-05
ESPNL	2q37.3	-0.22231	1.16E-05	7.76E-05
DMXL2	15q21.2	0.222276	1.16E-05	7.78E-05
SPTSSB	3q26.1	0.222274	1.16E-05	7.78E-05
ZNF263	16p13.3	-0.22227	1.16E-05	7.78E-05
EGLN1	1q42.2	0.222247	1.16E-05	7.80E-05
PABPC4	1p34.3	-0.22224	1.16E-05	7.80E-05
ZNF107	7q11.21	-0.22223	1.16E-05	7.80E-05
B2M	15q21.1	0.222225	1.16E-05	7.81E-05
PKLR	1q22	-0.22221	1.17E-05	7.82E-05
CAPN3	15q15.1	-0.2222	1.17E-05	7.82E-05
CNOT6L	4q21.1	0.222196	1.17E-05	7.82E-05
B3GNT7	2q37.1 2q37.1	0.22213	1.18E-05	7.86E-05
NOP58	2q33.1	-0.22202	1.19E-05	7.94E-05
SURF2	9q34.2	-0.22201	1.19E-05	7.95E-05
MAP2K1	15q22.31	0.22198	1.19E-05	7.97E-05
AQP7P1	9q13	-0.22196	1.19E-05	7.98E-05
TMEM102	17p13.1	0.221881	1.20E-05	8.03E-05
HPGD	4q34.1	0.221868	1.20E-05	8.04E-05
LINC01018	5p15.31	-0.22185	1.21E-05	8.05E-05
BIRC3	11q22.2	0.22178	1.21E-05	8.10E-05
BAP1	3p21.1	-0.22175	1.22E-05	8.12E-05
PARM1	4q13.3	0.221697	1.22E-05	8.16E-05
C2ORF27A	2q21.2	-0.22163	1.23E-05	8.21E-05
BTN3A2	6p22.2	0.221611	1.23E-05	8.22E-05
JAKMIP3	10q26.3	0.221608	1.23E-05	8.22E-05
TMSB15B	Xq22.2	-0.22161	1.23E-05	8.22E-05
SCARNA12	12p13.31	-0.22153	1.24E-05	8.27E-05
ZNF681	19p12	-0.22153	1.24E-05	8.27E-05
TIGD1	2q37.1	-0.22152	1.24E-05	8.27E-05
ZNF345	19q13.12	-0.2215	1.25E-05	8.29E-05
STIP1	11q13.1	-0.22149	1.25E-05	8.29E-05
SLC36A4	11q21	0.221441	1.25E-05	8.33E-05

MAML3	4q31.1	0.221439	1.25E-05	8.33E-05
SBNO2	19p13.3	0.221433	1.25E-05	8.33E-05
ATP2C2	16q24.1	0.221431	1.25E-05	8.33E-05
HMG20B	19p13.3	0.221416	1.26E-05	8.34E-05
PVR	19q13.31	-0.2214	1.26E-05	8.35E-05
ABCD4	14q24.3	0.221344	1.26E-05	8.39E-05
TMTC4	13q32.3	-0.22132	1.27E-05	8.40E-05
BGLAP	1q22	-0.22132	1.27E-05	8.40E-05
CTU1	19q13.41	-0.22131	1.27E-05	8.41E-05
RCE1	11q13.2	-0.22129	1.27E-05	8.42E-05
THAP8	19q13.12	-0.22123	1.28E-05	8.46E-05
AKAP3	12p13.32	0.221215	1.28E-05	8.47E-05
EIF2B1	12q24.31	-0.22121	1.28E-05	8.47E-05
ZNF443	19p13.2	-0.22119	1.28E-05	8.48E-05
MLKL	16q23.1	0.221155	1.29E-05	8.51E-05
METAP1D	2q31.1	-0.22115	1.29E-05	8.51E-05
TMEM176B	7q36.1	-0.22113	1.29E-05	8.52E-05
CRCP	7q11.21	-0.22112	1.29E-05	8.52E-05
CD101	1p13.1	0.221061	1.30E-05	8.57E-05
ZC4H2	Xq11.2	-0.22099	1.31E-05	8.63E-05
NUTM1	15q14	0.220938	1.31E-05	8.66E-05
STX1A	7q11.23	-0.22091	1.32E-05	8.68E-05
SV2A	1q21.2	-0.2209	1.32E-05	8.69E-05
SLC39A10	2q32.3	-0.22086	1.32E-05	8.71E-05
MYO5B	18q21.1	0.220814	1.33E-05	8.75E-05
KIAA1324	1p13.3	0.220807	1.33E-05	8.75E-05
CXORF40A	Xq28	-0.22079	1.33E-05	8.77E-05
PRMT7	16q22.1	-0.22078	1.33E-05	8.77E-05
NANP	20p11.21	-0.22077	1.33E-05	8.77E-05
SCML1	Xp22.13	-0.22069	1.34E-05	8.84E-05
DTNA	18q12.1	-0.22068	1.34E-05	8.85E-05
NIPSNAP2	7p11.2	-0.22063	1.35E-05	8.88E-05
RHEBL1	12q13.12	-0.22061	1.35E-05	8.89E-05
MRPL13	8q24.12	-0.22055	1.36E-05	8.94E-05
ZNF502	3p21.31	-0.22055	1.36E-05	8.94E-05
NUP93	16q13	-0.22043	1.38E-05	9.04E-05
SERTAD4	1q32.2	0.22034	1.39E-05	9.11E-05
ITPA	20p13	-0.22033	1.39E-05	9.12E-05
COQ4	9q34.11	0.220323	1.39E-05	9.12E-05
CMTM3	16q22.1	-0.22032	1.39E-05	9.12E-05
ARL14	3q25.33	0.220208	1.40E-05	9.21E-05
CLPB	11q13.4	-0.22008	1.42E-05	9.31E-05
PLPP5	8p11.23	0.220057	1.42E-05	9.33E-05
UBA7	3p21.31	0.22005	1.42E-05	9.33E-05
GNA15	19p13.3	0.220022	1.43E-05	9.35E-05
DNAJC19	3q26.33	-0.21999	1.43E-05	9.38E-05
ADNP2	18q23	0.219986	1.43E-05	9.38E-05
KNL1	15q15.1	0.219971	1.43E-05	9.39E-05
SEPTIN7P2	7p12.3	-0.21995	1.44E-05	9.40E-05
IARS2	1q41	0.219939	1.44E-05	9.41E-05
BOD1	5q35.2	-0.21986	1.45E-05	9.47E-05
HLA-E	6p22.1	0.21981	1.46E-05	9.52E-05
HDLBP	2q37.3	0.219782	1.46E-05	9.54E-05
SOX13	1q32.1	0.219777	1.46E-05	9.54E-05
DNAJC11	1p36.31	0.219752	1.46E-05	9.56E-05
ZBTB39	12q13.3	-0.2197	1.47E-05	9.60E-05
ATP6AP2	Xp11.4	-0.21969	1.47E-05	9.60E-05
FNTA	8p11.21	-0.21961	1.48E-05	9.68E-05

SLC28A3	9q21.32-q21.33	0.219599	1.48E-05	9.68E-05
PPP1R15B	1q32.1	0.219572	1.49E-05	9.70E-05
CNPY4	7q22.1	-0.21955	1.49E-05	9.72E-05
RAPGEF4-AS1	2q31.1	-0.21954	1.49E-05	9.72E-05
GOLGA1	9q33.3	0.219539	1.49E-05	9.72E-05
LYN	8q12.1	0.219527	1.49E-05	9.73E-05
ACE	17q23.3	0.219478	1.50E-05	9.77E-05
MSMB	10q11.22	0.219401	1.51E-05	9.83E-05
LINC00999	10p11.1	-0.21938	1.51E-05	9.85E-05
RHOF	12q24.31	0.219312	1.52E-05	9.91E-05
OFD1	Xp22.2	-0.21926	1.53E-05	9.95E-05
TACC1	8p11.22	0.21924	1.53E-05	9.97E-05
KANSL2	12q13.11	-0.21924	1.53E-05	9.97E-05
HSP90AB1	6p21.1	-0.21922	1.54E-05	9.98E-05
ABCC1	16p13.11	-0.21919	1.54E-05	0.000100084
ST20	15q25.1	-0.21914	1.55E-05	0.000100445
PRR3	6p21.33	-0.21914	1.55E-05	0.000100462
SYCE1L	16q23.1	-0.21913	1.55E-05	0.000100462
BDKRB1	14q32.2	0.219075	1.56E-05	0.000100973
GRSF1	4q13.3	0.219066	1.56E-05	0.000101024
GPALPP1	13q14.12	-0.21902	1.57E-05	0.00010145
RNF217	6q22.31	-0.21897	1.57E-05	0.000101816
ZUP1	6q22.1	-0.21893	1.58E-05	0.000102228
GUSBP1	5p14.3	-0.21891	1.58E-05	0.000102322
PTGFRN	1p13.1	0.218851	1.59E-05	0.000102861
KIF3B	20q11.21	-0.21884	1.59E-05	0.000102961
PTAR1	9q21.12	0.218795	1.60E-05	0.00010332
MINDY4	7p14.3	-0.21876	1.60E-05	0.00010359
CCNB1IP1	14q11.2	-0.21875	1.61E-05	0.000103699
CABLES2	20q13.33	-0.21866	1.62E-05	0.000104523
VRTN	14q24.3	0.2186	1.63E-05	0.00010505
SMARCC1	3p21.31	-0.21858	1.63E-05	0.000105196
FAU	11q13.1	-0.21857	1.63E-05	0.000105251
NEDD9	6p24.2	0.218568	1.63E-05	0.000105256
FAM83G	17p11.2	0.218562	1.63E-05	0.000105272
GCNT4	5q13.3	0.218553	1.63E-05	0.000105328
PRDM13	6q16.2	-0.21846	1.65E-05	0.000106236
TMEM254-AS1	10q22.3	-0.21844	1.65E-05	0.000106329
FAM120C	Xp11.22	-0.21834	1.67E-05	0.000107286
EFHD1	2q37.1	-0.21831	1.67E-05	0.000107572
KIF11	10q23.33	0.218239	1.68E-05	0.000108216
ST5	11p15.4	0.218198	1.69E-05	0.000108568
WDR37	10p15.3	0.218197	1.69E-05	0.000108568
RSPH10B2	7p22.1	-0.21818	1.69E-05	0.00010866
GATD1	11p15.5	-0.21818	1.69E-05	0.00010866
AGTR1	3q24	-0.21814	1.70E-05	0.000109055
TMEM199	17q11.2	-0.21809	1.71E-05	0.00010952
MTCP1	Xq28	-0.21807	1.71E-05	0.000109605
RNFT1	17q23.1	-0.21803	1.71E-05	0.000110036
JMJD4	1q42.13	-0.21798	1.72E-05	0.000110448
GRIN1	9q34.3	0.217929	1.73E-05	0.000110966
CCNT2	2q21.3	-0.2179	1.73E-05	0.000111227
ODAM	4q13.3	-0.21789	1.74E-05	0.000111317
FH	1q43	0.217873	1.74E-05	0.000111422
TSC22D1	13q14.11	-0.21783	1.74E-05	0.00011178
SPANXB1	Xq27.1	-0.2178	1.75E-05	0.000112062
GBA	1q22	0.217775	1.75E-05	0.000112317
C7ORF13	7q36.3	-0.21774	1.76E-05	0.000112599

OR4C6	11q11	-0.21772	1.76E-05	0.000112798
MBD2	18q21.2	0.21768	1.77E-05	0.000113181
RDH14	2p24.2	-0.21763	1.78E-05	0.000113635
MTUS2	13q12.3	0.217629	1.78E-05	0.000113635
PRODH	22q11.21	0.217608	1.78E-05	0.000113806
RPUSD4	11q24.2	-0.21761	1.78E-05	0.000113806
PIK3CB	3q22.3	0.217455	1.81E-05	0.000115312
CBWD2	2q14.1	-0.21745	1.81E-05	0.000115312
MSRA	8p23.1	0.217433	1.81E-05	0.000115501
MIER1	1p31.3	0.217372	1.82E-05	0.000116108
C2CD4B	15q22.2	0.217357	1.82E-05	0.000116219
TAF10	11p15.4	-0.21735	1.82E-05	0.000116243
LRRTM1	2p12	-0.21732	1.83E-05	0.000116507
ZNF672	1q44	0.217275	1.84E-05	0.000116978
PDCD2L	19q13.11	-0.21725	1.84E-05	0.000117259
C3ORF52	3q13.2	0.217218	1.85E-05	0.000117516
TFG	3q12.2	0.217153	1.86E-05	0.000118167
SRCIN1	17q12	-0.21706	1.87E-05	0.000119136
NPHS2	1q25.2	0.217031	1.88E-05	0.000119416
TUB	11p15.4	-0.21702	1.88E-05	0.00011947
MAPKAPK3	3p21.2	-0.21698	1.88E-05	0.000119844
KTN1-AS1	14q22.3	-0.21694	1.89E-05	0.000120235
TAT	16q22.2	0.216918	1.90E-05	0.000120485
KRT7	12q13.13	0.216913	1.90E-05	0.000120504
ZSWIM4	19p13.13-p13.12	-0.21683	1.91E-05	0.000121384
LSM7	19p13.3	-0.21679	1.92E-05	0.000121779
IMPDH1	7q32.1	-0.21677	1.92E-05	0.000121959
CHCHD2	7p11.2	-0.21676	1.92E-05	0.000122056
NOTCH1	9q34.3	-0.21668	1.94E-05	0.000122891
ZNF449	Xq26.3	-0.21668	1.94E-05	0.000122891
SLC22A3	6q25.3	-0.21662	1.95E-05	0.000123482
KAT6B	10q22.2	0.216604	1.95E-05	0.000123613
TNRC6B	22q13.1	0.216601	1.95E-05	0.000123613
SNAI3	16q24.2	0.216594	1.95E-05	0.000123654
FTSJ1	Xp11.23	-0.21646	1.98E-05	0.000125107
ZNF24	18q12.2	0.216364	1.99E-05	0.000126174
COPA	1q23.2	0.21629	2.01E-05	0.000126974
FLNA	Xq28	-0.21625	2.01E-05	0.00012734
TADA3	3p25.3	-0.21624	2.02E-05	0.000127526
REM2	14q11.2	-0.21623	2.02E-05	0.000127567
RILPL1	12q24.31	-0.21621	2.02E-05	0.000127673
MCMDC2	8q13.1	-0.21621	2.02E-05	0.000127673
ACAP2	3q29	0.216155	2.03E-05	0.00012829
KLHL42	12p11.22	-0.21612	2.04E-05	0.000128669
ERLIN1	10q24.31	0.216093	2.04E-05	0.000128937
OST4	2p23.3	-0.21605	2.05E-05	0.000129444
RECQL5	17q25.1	-0.21603	2.05E-05	0.000129549
SDR42E1	16q23.3	-0.21601	2.06E-05	0.000129735
YAF2	12q12	-0.21598	2.06E-05	0.000130081
CDC123	10p14-p13	-0.21594	2.07E-05	0.000130447
CDKN2AIPNL	5q31.1	-0.21594	2.07E-05	0.000130447
TSPAN18	11p11.2	-0.21593	2.07E-05	0.000130609
ACOT9	Xp22.11	-0.21582	2.09E-05	0.000131763
KCNJ3	2q24.1	0.21582	2.09E-05	0.000131781
SFXN1	5q35.2	0.215758	2.11E-05	0.000132478
DNAJA3	16p13.3	-0.21574	2.11E-05	0.000132606
HILS1	17q21.33	-0.21573	2.11E-05	0.000132719
NIF3L1	2q33.1	-0.21573	2.11E-05	0.000132719

PPA2	4q24	0.215688	2.12E-05	0.000133144
COMP	19p13.11	-0.21568	2.12E-05	0.000133191
ATP2C1	3q22.1	0.215648	2.13E-05	0.00013354
KIF26B	1q44	-0.21564	2.13E-05	0.000133648
SEPTIN5	22q11.21	-0.21557	2.14E-05	0.000134446
ABCA7	19p13.3	0.215559	2.14E-05	0.000134449
ANO8	19p13.11	0.215506	2.15E-05	0.000135097
SCD	10q24.31	-0.21549	2.16E-05	0.00013524
GSE1	16q24.1	-0.21546	2.16E-05	0.000135521
USP14	18p11.32	0.215436	2.17E-05	0.000135821
KRTAP3-1	17q21.2	-0.21543	2.17E-05	0.000135889
ZNF282	7q36.1	-0.2154	2.17E-05	0.000136141
GRB7	17q12	-0.21531	2.19E-05	0.000137198
FAM222A-AS1	12q24.11	-0.21529	2.20E-05	0.000137399
CCDC89	11q14.1	-0.21528	2.20E-05	0.000137493
EXT2	11p11.2	-0.21528	2.20E-05	0.000137493
KIR2DL4	19q13.42	0.215259	2.20E-05	0.000137706
FAM229B	6q21	-0.21524	2.21E-05	0.000137844
SPIRE1	18p11.21	0.215227	2.21E-05	0.000137977
IER3IP1	18q21.1	0.215226	2.21E-05	0.000137977
NPAS1	19q13.32	0.215159	2.22E-05	0.000138767
CCDC34	11p14.1	-0.21512	2.23E-05	0.000139192
REEP3	10q21.3	0.215105	2.23E-05	0.000139365
G6PC2	2q31.1	0.215091	2.24E-05	0.000139495
NUTM2A-AS1	10q23.2	-0.21508	2.24E-05	0.000139618
EXOSC8	13q13.3	-0.21505	2.24E-05	0.000139899
SYTL5	Xp11.4	0.215031	2.25E-05	0.00014011
SPIB	19q13.33	0.215011	2.25E-05	0.000140324
LINC02433	4q32.1	-0.21499	2.26E-05	0.000140484
MPP6	7p15.3	-0.21499	2.26E-05	0.000140528
USE1	19p13.11	-0.21496	2.26E-05	0.000140794
ARHGAP12	10p11.22	0.214951	2.26E-05	0.000140914
ZNF287	17p11.2	-0.21493	2.27E-05	0.000141086
ADGRF2	6p12.3	-0.21492	2.27E-05	0.000141275
NFATC2IP	16p11.2	0.214881	2.28E-05	0.000141671
NACAD	7p13	-0.21486	2.28E-05	0.000141921
C1QTNF3	5p13.2	-0.21484	2.29E-05	0.000142072
C12ORF49	12q24.22	0.214833	2.29E-05	0.000142148
TNFRSF25	1p36.31	-0.21473	2.31E-05	0.000143451
TFDP2	3q23	-0.21471	2.31E-05	0.0001436
MED4	13q14.2	-0.21471	2.31E-05	0.000143606
SAC3D1	11q13.1	-0.21466	2.32E-05	0.000144153
ADRA2C	4p16.3	-0.21464	2.33E-05	0.000144362
CASZ1	1p36.22	0.214635	2.33E-05	0.000144421
SSTR5	16p13.3	0.214587	2.34E-05	0.000144991
DNAAF5	7p22.3	-0.21458	2.34E-05	0.000144991
RHOB	2p24.1	-0.21458	2.34E-05	0.000145051
CCDC121	2p23.3	-0.21457	2.34E-05	0.000145051
UBE2D4	7p13	-0.21455	2.35E-05	0.000145294
DCUN1D2	13q34	-0.21453	2.35E-05	0.000145527
LSM14A	19q13.11	-0.21453	2.35E-05	0.000145527
TMEM106C	12q13.11	0.214511	2.36E-05	0.000145687
ZMYM5	13q12.11	-0.21449	2.36E-05	0.000145971
NAA20	20p11.23	-0.21445	2.37E-05	0.000146335
HADH	4q25	0.214431	2.37E-05	0.000146593
LMO4	1p22.3	0.214412	2.38E-05	0.000146799
FBXO8	4q34.1	0.214393	2.38E-05	0.000147009
STARD4	5q22.1	0.214381	2.38E-05	0.000147114

TAF1D	11q21	-0.21437	2.39E-05	0.000147234
TMEM260	14q22.3	-0.21436	2.39E-05	0.000147234
GABPB1	15q21.2	-0.21436	2.39E-05	0.000147234
GCNA	Xq13.1	-0.21433	2.39E-05	0.000147615
NKAPP1	Xq24	-0.21431	2.40E-05	0.00014783
ORC4	2q23.1	-0.21429	2.40E-05	0.000148009
CEBPZ	2p22.2	-0.21426	2.41E-05	0.00014842
CRTAP	3p22.3	-0.21422	2.42E-05	0.000148815
COX15	10q24.2	0.21422	2.42E-05	0.000148815
SUZ12P1	17q11.2	-0.21422	2.42E-05	0.000148815
MYC	8q24.21	-0.21419	2.42E-05	0.000149138
METR1	16p13.3	0.214169	2.43E-05	0.00014938
TPST2	22q12.1	-0.21407	2.45E-05	0.000150658
E2F1	20q11.22	-0.21402	2.46E-05	0.000151351
KRT36	17q21.2	-0.21396	2.47E-05	0.00015202
CHMP2B	3p11.2	0.213949	2.48E-05	0.000152169
CD247	1q24.2	0.213865	2.50E-05	0.000153263
FBRSL1	12q24.33	-0.21386	2.50E-05	0.00015332
TRAM1L1	4q26	-0.21383	2.50E-05	0.00015359
ACKR3	2q37.3	-0.21381	2.51E-05	0.000153882
SOSTDC1	7p21.2	-0.21378	2.52E-05	0.000154303
SLC2A2	3q26.2	0.213746	2.52E-05	0.000154671
ENAH	1q42.12	-0.21369	2.54E-05	0.000155445
METTL4	18p11.32	0.213674	2.54E-05	0.000155567
NABP2	12q13.3	-0.21367	2.54E-05	0.000155607
SNRPB	20p13	-0.21366	2.54E-05	0.000155649
KCND3	1p13.2	0.213658	2.54E-05	0.000155649
EXOSC1	10q24.1	-0.21364	2.55E-05	0.000155802
TOX2	20q13.12	0.213442	2.59E-05	0.000158588
NECTIN4	1q23.3	0.213433	2.59E-05	0.000158667
WNT5B	12p13.33	-0.2134	2.60E-05	0.000159144
GOLGA2	9q34.11	0.213386	2.61E-05	0.000159239
GOLGA6L1	15q11.2	-0.21338	2.61E-05	0.000159325
DUSP18	22q12.2	-0.21337	2.61E-05	0.000159325
SMARCD1	12q13.12	-0.21334	2.62E-05	0.00015969
TRIP6	7q22.1	-0.21334	2.62E-05	0.000159743
LANCL3	Xp21.1	0.213326	2.62E-05	0.000159793
CAPZB	1p36.13	0.213326	2.62E-05	0.000159793
TIFA	4q25	0.213302	2.63E-05	0.000160085
PHGDH	1p12	-0.21329	2.63E-05	0.000160168
FFAR2	19q13.12	0.213256	2.64E-05	0.000160648
MST1R	3p21.31	0.213248	2.64E-05	0.000160711
POLR1A	2p11.2	-0.21324	2.64E-05	0.000160804
SLC6A2	16q12.2	-0.21322	2.65E-05	0.000161063
SLC39A4	8q24.3	-0.21318	2.65E-05	0.00016147
ZNF629	16p11.2	-0.21318	2.65E-05	0.00016147
SS18	18q11.2	0.213132	2.67E-05	0.000162138
CTSZ	20q13.32	-0.21302	2.69E-05	0.000163738
RNF138P1	5q11.2	0.213012	2.69E-05	0.000163781
DNAJC16	1p36.21	0.212954	2.71E-05	0.000164586
HNF4G	8q21.13	0.212913	2.72E-05	0.000165127
RGS19	20q13.33	-0.21291	2.72E-05	0.00016513
ZNF532	18q21.32	-0.2129	2.72E-05	0.00016523
JPX	Xq13.2	-0.2129	2.72E-05	0.00016523
NEO1	15q24.1	0.212865	2.73E-05	0.000165636
CDKAL1	6p22.3	-0.21286	2.73E-05	0.000165659
UTP4	16q22.1	-0.21279	2.75E-05	0.000166611
PPP4R3B	2p16.1	-0.21277	2.75E-05	0.000166947

CLDN11	3q26.2	-0.2127	2.77E-05	0.000167899
FCRLB	1q23.3	-0.21264	2.78E-05	0.000168736
HSPB8	12q24.23	-0.2126	2.79E-05	0.000169272
APOH	17q24.2	-0.21259	2.80E-05	0.000169376
TRPM4	19q13.33	0.212583	2.80E-05	0.000169376
P3H4	17q21.2	-0.21258	2.80E-05	0.000169376
FAM41C	1p36.33	-0.21258	2.80E-05	0.000169376
H2AFY2	10q22.1	-0.21254	2.81E-05	0.000169925
TMEM243	7q21.12	-0.21254	2.81E-05	0.000169925
CLDN6	16p13.3	-0.21252	2.81E-05	0.000170098
ZG16B	16p13.3	0.212507	2.82E-05	0.000170281
PFDN2	1q23.3	-0.21249	2.82E-05	0.000170513
PAXIP1-AS1	7q36.2	-0.21247	2.83E-05	0.0001708
POLH	6p21.1	0.212413	2.84E-05	0.000171525
DIS3L2	2q37.1	-0.21241	2.84E-05	0.000171525
AKNA	9q32	0.212268	2.88E-05	0.00017367
PCSK6	15q26.3	0.21226	2.88E-05	0.000173731
SLC16A3	17q25.3	0.212255	2.88E-05	0.000173751
SPERT	13q14.13	-0.2122	2.89E-05	0.000174492
CNOT11	2q11.2	-0.21217	2.90E-05	0.000174928
SPDYA	2p23.2	-0.21216	2.91E-05	0.000175073
TRMT10B	9p13.2	-0.21215	2.91E-05	0.000175118
ECI2	6p25.2	0.21215	2.91E-05	0.000175118
TBCEL	11q23.3	-0.21214	2.91E-05	0.000175246
POU4F1	13q31.1	-0.21212	2.92E-05	0.00017546
FAM53B	10q26.13	0.212071	2.93E-05	0.000176187
GK	Xp21.2	0.211984	2.95E-05	0.000177504
METTL1	12q14.1	-0.21197	2.96E-05	0.000177721
PRDM10	11q24.3	0.211913	2.97E-05	0.000178517
SCNN1A	12p13.31	0.211855	2.99E-05	0.000179382
FGF20	8p22	-0.2118	3.00E-05	0.000180229
TRAIP	3p21.31	-0.21178	3.00E-05	0.000180419
FXVD6	11q23.3	-0.21174	3.02E-05	0.000181078
RFXANK	19p13.11	-0.21165	3.04E-05	0.000182523
LPO	17q22	-0.21163	3.04E-05	0.000182647
RCL1	9p24.1	-0.21163	3.05E-05	0.000182703
GABRA3	Xq28	-0.21158	3.06E-05	0.000183489
FCHSD1	5q31.3	-0.21155	3.07E-05	0.000183775
KCTD16	5q31.3	-0.21155	3.07E-05	0.000183775
PIGT	20q13.12	-0.21154	3.07E-05	0.000183876
GJC1	17q21.31	-0.21153	3.07E-05	0.00018409
LRRC8B	1p22.2	0.21147	3.09E-05	0.000184911
CHORDC1	11q14.3	-0.21147	3.09E-05	0.000184911
USP35	11q14.1	-0.21132	3.13E-05	0.000187241
PGBD5	1q42.13	-0.21129	3.14E-05	0.000187798
ZNF75A	16p13.3	-0.21126	3.15E-05	0.000188132
SMUG1	12q13.13	-0.21124	3.15E-05	0.000188466
PHYKPL	5q35.3	0.211127	3.18E-05	0.000190274
TPTE2P3	13q14.3	-0.2111	3.19E-05	0.000190692
HADHB	2p23.3	0.211096	3.19E-05	0.000190696
HSPD1	2q33.1	-0.21108	3.20E-05	0.000190943
TAGLN	11q23.3	-0.21096	3.23E-05	0.000192909
GNL3	3p21.1	-0.21088	3.25E-05	0.000194212
CREBZF	11q14.1	-0.21087	3.26E-05	0.000194212
AMIGO2	12q13.11	-0.21084	3.27E-05	0.000194796
SNRPD2	19q13.32	-0.21082	3.27E-05	0.000195067
NABP1	2q32.3	-0.21081	3.28E-05	0.00019522
CMC4	Xq28	-0.21079	3.28E-05	0.000195366

REXO4	9q34.2	-0.21076	3.29E-05	0.000195972
TBC1D4	13q22.2	-0.21073	3.30E-05	0.000196276
DVL3	3q27.1	-0.21073	3.30E-05	0.000196276
SLC12A9	7q22.1	-0.21072	3.30E-05	0.000196407
TUSC2	3p21.31	-0.21067	3.32E-05	0.000197274
NGDN	14q11.2	-0.21064	3.32E-05	0.000197618
HHIPL1	14q32.2	-0.21064	3.32E-05	0.000197618
CCZ1B	7p22.1	-0.21063	3.33E-05	0.00019778
PLCXD1	Xp22.33 and Yp11.32-p11.31	0.210608	3.33E-05	0.000198063
SYNGR4	19q13.33	0.210596	3.34E-05	0.000198194
CIDEB	14q12	0.210591	3.34E-05	0.000198194
PPDPF	20q13.33	-0.21059	3.34E-05	0.000198194
LSM10	1p34.3	-0.21055	3.35E-05	0.000198777
ARMCX5	Xq22.1	-0.21053	3.35E-05	0.000199059
TBC1D14	4p16.1	0.210464	3.38E-05	0.000200233
FUT1	19q13.33	-0.21044	3.38E-05	0.000200505
KLHL2	4q32.3	0.210442	3.38E-05	0.000200505
DACT3	19q13.32	-0.21044	3.38E-05	0.000200522
LINC00469	17q25.1	0.210428	3.39E-05	0.000200631
FRK	6q22.1	0.210425	3.39E-05	0.000200631
AAMDC	11q14.1	-0.21041	3.39E-05	0.000200746
STK33	11p15.4	-0.21041	3.39E-05	0.00020075
SCHIP1	3q25.32-q25.33	-0.2104	3.39E-05	0.00020086
MMP24	20q11.22	-0.21037	3.40E-05	0.000201276
ZNF471	19q13.43	-0.21032	3.42E-05	0.000202175
SMARCD2	17q23.3	-0.21031	3.42E-05	0.000202284
MAGEH1	Xp11.21	-0.21031	3.42E-05	0.000202297
ALPP	2q37.1	0.210263	3.44E-05	0.000203023
TRIM71	3p22.3	-0.21018	3.46E-05	0.000204437
EDA	Xq13.1	-0.21016	3.47E-05	0.000204795
CHID1	11p15.5	-0.21015	3.47E-05	0.000204795
FBXL6	8q24.3	-0.21012	3.48E-05	0.000205252
RNF144B	6p22.3	0.210122	3.48E-05	0.000205252
LOC153684	5p12	0.210023	3.51E-05	0.000206942
POGLUT1	3q13.33	-0.21002	3.51E-05	0.000206942
NKAPD1	11q23.1	-0.21001	3.51E-05	0.000207116
SETD6	16q21	-0.20999	3.52E-05	0.000207439
NHLRC2	10q25.3	0.209979	3.52E-05	0.000207535
ATF4	22q13.1	-0.20994	3.53E-05	0.0002082
CDX2	13q12.2	-0.20988	3.55E-05	0.000209263
RERG	12p12.3	-0.20986	3.56E-05	0.000209494
SOD1	21q22.11	0.209853	3.56E-05	0.00020961
PSMD13	11p15.5	-0.20982	3.57E-05	0.000210167
DIP2A	21q22.3	0.209812	3.57E-05	0.000210232
CST1	20p11.21	-0.20979	3.58E-05	0.000210536
KRT10	17q21.2	-0.20975	3.59E-05	0.000211266
MT1E	16q13	0.209727	3.60E-05	0.000211593
C4ORF33	4q28.2	0.209725	3.60E-05	0.000211593
SH2D5	1p36.12	-0.20972	3.60E-05	0.00021169
CTAGE10P	13q14.2	0.209713	3.61E-05	0.00021169
PRKCQ	10p15.1	-0.2097	3.61E-05	0.000211923
RPL21	13q12.2	-0.20968	3.61E-05	0.000212079
KRT74	12q13.13	-0.20968	3.62E-05	0.000212079
GALNT18	11p15.4	-0.20968	3.62E-05	0.000212088
ESRRG	1q41	-0.20966	3.62E-05	0.00021228
UCA1	19p13.12	-0.20964	3.63E-05	0.000212649
RBM15B	3p21.2	-0.20964	3.63E-05	0.000212671
SLC22A12	11q13.1	-0.20963	3.63E-05	0.000212801



SPON1	11p15.2	0.2096	3.64E-05	0.000213246
SLC17A8	12q23.1	0.209596	3.64E-05	0.000213251
LINC00339	1p36.12	-0.20957	3.65E-05	0.000213765
TMPRSS4	11q23.3	0.20952	3.67E-05	0.000214547
ZNF285	19q13.31	-0.20951	3.67E-05	0.000214601
UGT1A8	2q37.1	0.20945	3.69E-05	0.000215725
EML1	14q32.2	-0.20945	3.69E-05	0.000215725
FBN3	19p13.2	-0.20943	3.69E-05	0.000215907
DAG1	3p21.31	0.209423	3.70E-05	0.000216059
ZNF134	19q13.43	-0.20931	3.73E-05	0.000218082
MOGS	2p13.1	-0.20931	3.74E-05	0.000218121
NTNG2	9q34.13	-0.2093	3.74E-05	0.000218121
THAP11	16q22.1	-0.2093	3.74E-05	0.000218121
GRIN2C	17q25.1	-0.20929	3.74E-05	0.000218228
STARD7-AS1	2q11.2	-0.20929	3.74E-05	0.000218228
CYP17A1	10q24.32	-0.20925	3.76E-05	0.000218978
NPTN	15q24.1	0.209228	3.76E-05	0.000219275
JUN	1p32.1	-0.20916	3.78E-05	0.000220509
RPS25	11q23.3	-0.20916	3.79E-05	0.000220509
TRMT12	8q24.13	-0.20915	3.79E-05	0.00022052
EPOP	17q12	-0.20915	3.79E-05	0.000220559
NXPH1	7p21.3	-0.20914	3.79E-05	0.000220691
HOXA4	7p15.2	-0.20911	3.80E-05	0.000221146
SMIM15	5q12.1	0.209093	3.81E-05	0.000221427
CCNG1	5q34	0.208976	3.85E-05	0.000223596
F11R	1q23.3	0.208975	3.85E-05	0.000223596
TCP10	6q27	-0.20886	3.89E-05	0.000225878
AMZ2	17q24.2	-0.20885	3.89E-05	0.000225913
MYL12B	18p11.31	0.208843	3.89E-05	0.000225979
EVA1B	1p34.3	-0.20884	3.89E-05	0.000226028
WNT3	17q21.31-q21.32	-0.20883	3.90E-05	0.000226175
SUGT1	13q14.3	-0.20882	3.90E-05	0.000226203
ITGB1BP1	2p25.1	-0.20876	3.92E-05	0.00022745
USP38	4q31.21	0.208749	3.92E-05	0.000227514
ARF4	3p14.3	0.208695	3.94E-05	0.000228517
SERP2	13q14.11	-0.20868	3.95E-05	0.000228684
WDR17	4q34.2	-0.20866	3.95E-05	0.000229172
SNHG1	11q12.3	-0.20864	3.96E-05	0.000229449
GSPT2	Xp11.22	-0.20863	3.96E-05	0.000229585
MFF	2q36.3	-0.20859	3.98E-05	0.00023033
PALM	19p13.3	-0.20855	3.99E-05	0.00023113
TRPC1	3q23	-0.20847	4.02E-05	0.000232538
CEP76	18p11.21	0.208451	4.03E-05	0.000232894
PEX26	22q11.21	0.208447	4.03E-05	0.000232923
MAN1A2	1p12	0.208377	4.05E-05	0.000234266
PWWP2B	10q26.3	0.208353	4.06E-05	0.000234696
ZBTB9	6p21.32	-0.20834	4.06E-05	0.00023487
RAB8A	19p13.11	0.208324	4.07E-05	0.000235159
ZKSCAN4	6p22.1	-0.20829	4.08E-05	0.000235815
SYCP2	20q13.33	-0.20827	4.09E-05	0.000236046
HNRNPDL	4q21.22	-0.20824	4.10E-05	0.000236706
C1ORF61	1q22	-0.20821	4.11E-05	0.000237267
PGM1	1p31.3	0.208204	4.11E-05	0.000237289
LSM5	7p14.3	-0.20818	4.12E-05	0.000237666
GLUD1	10q23.2	0.208176	4.12E-05	0.000237712
PJA1	Xq13.1	-0.20817	4.12E-05	0.000237712
SEC61A1	3q21.3	0.208139	4.14E-05	0.000238352
RLN1	9p24.1	-0.20813	4.14E-05	0.000238381

POLR2I	19q13.12	-0.20812	4.14E-05	0.000238572
DCAF12L2	Xq25	-0.20808	4.16E-05	0.000239306
ACSL6	5q31.1	-0.20807	4.16E-05	0.000239496
ABCA5	17q24.3	0.20803	4.18E-05	0.000240267
NUDT8	11q13.2	0.207981	4.19E-05	0.000241244
CTAGE1	18q11.2	0.207968	4.20E-05	0.000241431
GP9	3q21.3	0.20796	4.20E-05	0.000241538
WDR76	15q15.3	0.207925	4.21E-05	0.000242198
STRAP	12p12.3	-0.2079	4.22E-05	0.000242637
ZNF177	19p13.2	-0.20787	4.23E-05	0.000243162
ANKRD52	12q13.3	0.20784	4.25E-05	0.000243785
PHF7	3p21.1	0.207832	4.25E-05	0.000243893
TTC32	2p24.1	-0.20774	4.28E-05	0.000245625
SLCO2B1	11q13.4	0.207744	4.28E-05	0.000245625
SLC35D3	6q23.3	-0.20773	4.28E-05	0.000245743
VEGFA	6p21.1	-0.20771	4.29E-05	0.00024616
PLXNB1	3p21.31	-0.20771	4.30E-05	0.000246232
GLUD2	Xq24	0.207684	4.30E-05	0.000246621
TOR2A	9q34.11	0.207681	4.31E-05	0.000246621
LGALS2	22q13.1	0.207676	4.31E-05	0.00024666
PRICKLE2	3p14.1	-0.20767	4.31E-05	0.000246673
PGF	14q24.3	-0.20765	4.32E-05	0.000247043
CCKBR	11p15.4	-0.20762	4.33E-05	0.000247656
GGACT	13q32.3	0.207584	4.34E-05	0.000248353
CDC34	19p13.3	-0.20756	4.35E-05	0.000248741
ZNF829	19q13.12	-0.20756	4.35E-05	0.000248808
CRYBG1	6q21	0.207535	4.36E-05	0.00024919
ETV3	1q23.1	0.207492	4.38E-05	0.000250051
ANXA11	10q22.3	0.207441	4.40E-05	0.000251084
ABCA3	16p13.3	0.207432	4.40E-05	0.000251204
RECQL	12p12.1	-0.20742	4.40E-05	0.000251352
ADRB1	10q25.3	0.207419	4.40E-05	0.000251352
DYNC1LI1	3p22.3	-0.2074	4.41E-05	0.000251797
WASF2	1p36.11	0.207377	4.42E-05	0.00025212
RTL8C	Xq26.3	-0.20737	4.42E-05	0.000252143
NCBP2AS2	3q29	-0.20737	4.42E-05	0.00025224
PTPRD	9p24.1-p23	-0.20735	4.43E-05	0.000252423
SNURF	15q11.2	-0.20733	4.44E-05	0.000252852
LRMDA	10q22.2-q22.3	-0.20727	4.46E-05	0.000254206
ZNF550	19q13.43	-0.20726	4.46E-05	0.000254206
AP4B1	1p13.2	0.207234	4.48E-05	0.000254691
CSNK1G3	5q23.2	0.207233	4.48E-05	0.000254691
IRF2BP2	1q42.3	-0.20723	4.48E-05	0.000254691
LGMN	14q32.12	0.207208	4.49E-05	0.000255046
IBA57	1q42.13	0.207208	4.49E-05	0.000255046
ADAM10	15q21.3	0.20716	4.50E-05	0.000256011
RAPH1	2q33.2	0.207158	4.50E-05	0.000256011
TG	8q24.22	-0.20712	4.52E-05	0.000256831
RNF183	9q32	0.207114	4.52E-05	0.000256831
RWDD3	1p21.3	-0.20711	4.52E-05	0.000256854
TCAP	17q12	-0.20708	4.53E-05	0.000257391
RBMX	Xq26.3	-0.20705	4.55E-05	0.00025809
SCYL2	12q23.1	0.207039	4.55E-05	0.000258224
PUS1	12q24.33	-0.20701	4.56E-05	0.000258714
SLC39A5	12q13.3	-0.207	4.57E-05	0.000258998
NDC80	18p11.32	0.206974	4.58E-05	0.00025946
ZNF674-AS1	Xp11.3	-0.20694	4.59E-05	0.00026004
VWDE	7p21.3	-0.20693	4.59E-05	0.000260253

GRIN2D	19q13.33	0.20692	4.60E-05	0.000260445
IL20RA	6q23.3	-0.20691	4.60E-05	0.000260511
WASH3P	15q26.3	-0.20691	4.60E-05	0.000260511
LOC150776	2q21.1	-0.20686	4.62E-05	0.000261536
CLHC1	2p16.1	-0.20683	4.63E-05	0.000262106
GAPDHS	19q13.12	-0.20682	4.64E-05	0.000262254
TMEM254	10q22.3	0.206789	4.65E-05	0.000262968
EIF3A	10q26.11	0.206786	4.65E-05	0.000262968
ZNF350	19q13.41	-0.20676	4.66E-05	0.000263457
TRIT1	1p34.2	-0.20672	4.68E-05	0.000264327
FXR1	3q26.33	-0.20672	4.68E-05	0.000264327
ROR1	1p31.3	0.206708	4.68E-05	0.000264442
MERTK	2q13	-0.20663	4.72E-05	0.000266134
MATN2	8q22.1-q22.2	0.206625	4.72E-05	0.000266134
PNPLA7	9q34.3	0.20662	4.72E-05	0.000266134
ENTPD4	8p21.3	0.206619	4.72E-05	0.000266134
CYP2C19	10q23.33	0.206618	4.72E-05	0.000266134
OCLN	5q13.2	0.206609	4.72E-05	0.000266274
RPP21	6p22.1	-0.2066	4.73E-05	0.000266382
SERPINF2	17p13.3	-0.20659	4.73E-05	0.000266456
ZNF451	6p12.1	-0.20657	4.74E-05	0.000266891
VXN	8q13.1	-0.20654	4.75E-05	0.000267584
PHLPP2	16q22.2	0.206519	4.76E-05	0.000267964
AP3S1	5q22.3-q23.1	0.206433	4.80E-05	0.000269883
CCND1	11q13.3	-0.20637	4.82E-05	0.000271173
NADK2	5p13.2	0.206371	4.82E-05	0.000271173
TECPR1	7q21.3	0.206341	4.83E-05	0.000271808
TFE3	Xp11.23	-0.20633	4.84E-05	0.000271918
GPRC5D	12p13.1	0.206303	4.85E-05	0.000272554
MCUB	4q25	0.206251	4.87E-05	0.000273685
CDC42BPG	11q13.1	0.206226	4.88E-05	0.000274152
RSBN1	1p13.2	0.206225	4.88E-05	0.000274152
OMD	9q22.31	-0.20621	4.89E-05	0.000274441
TMEM47	Xp21.1	-0.20621	4.89E-05	0.000274441
SP6	17q21.32	-0.20619	4.90E-05	0.000274761
HIF3A	19q13.32	-0.20615	4.91E-05	0.000275532
SCNN1G	16p12.2	-0.20614	4.92E-05	0.000275768
EMP2	16p13.13	0.206134	4.92E-05	0.000275858
LGALS8	1q43	0.206124	4.93E-05	0.000276022
INTS1	7p22.3	-0.20608	4.94E-05	0.000276883
RPS20	8q12.1	-0.20607	4.95E-05	0.000277119
BHLHA15	7q21.3	0.206009	4.97E-05	0.00027853
IGDCC3	15q22.31	-0.206	4.98E-05	0.000278665
CUL4A	13q34	-0.20593	5.01E-05	0.000280156
DAPK2	15q22.31	-0.20591	5.02E-05	0.000280727
ZNF627	19p13.2	-0.20589	5.03E-05	0.000281172
RAB18	10p12.1	0.20585	5.04E-05	0.000281978
ZBED8	5q33.3	-0.2058	5.07E-05	0.000283218
SLC16A13	17p13.1	0.205777	5.07E-05	0.000283585
PLEKHG5	1p36.31	-0.20577	5.08E-05	0.000283748
ABCA12	2q35	0.205758	5.08E-05	0.000283892
SPIN2B	Xp11.21	-0.20574	5.09E-05	0.000284168
NAE1	16q22.1	-0.20574	5.09E-05	0.000284178
FLAD1	1q21.3	-0.20573	5.10E-05	0.000284351
HOXA3	7p15.2	-0.20573	5.10E-05	0.000284351
UBR7	14q32.12	0.205718	5.10E-05	0.000284472
VIRMA	8q22.1	-0.2057	5.11E-05	0.000284725
CST4	20p11.21	-0.2057	5.11E-05	0.000284725

VNN2	6q23.2	0.205693	5.11E-05	0.000284845
PGAM1	10q24.1	0.205684	5.12E-05	0.000284999
RAP1A	1p13.2	0.205669	5.12E-05	0.000285289
C3ORF18	3p21.31	-0.20565	5.13E-05	0.000285759
HES6	2q37.3	-0.20563	5.14E-05	0.000286003
CLK1	2q33.1	-0.20562	5.14E-05	0.000286267
IQCB1	3q13.33 3q21.1	-0.20561	5.15E-05	0.000286407
WDR25	14q32.2	0.205607	5.15E-05	0.000286407
COA4	11q13.4	-0.20555	5.18E-05	0.000287855
NPRL3	16p13.3	-0.20551	5.19E-05	0.000288709
ABCC10	6p21.1	-0.2055	5.20E-05	0.000288917
VASP	19q13.32	0.205408	5.24E-05	0.000291035
OMA1	1p32.2-p32.1	0.205401	5.24E-05	0.000291121
SPDYC	11q13.1	-0.20537	5.26E-05	0.000291754
SLC22A16	6q21 6q21-q22.1	-0.20537	5.26E-05	0.000291754
XPO1	2p15	-0.20532	5.28E-05	0.000292854
PHYHD1	9q34.11	-0.20531	5.28E-05	0.000293018
TRMT11	6q22.32	-0.2053	5.29E-05	0.00029313
C11ORF86	11q13.2	0.205266	5.30E-05	0.000294036
LAMTOR1	11q13.4	-0.20525	5.31E-05	0.000294351
SPTLC3	20p12.1	0.205223	5.32E-05	0.000294947
AXDND1	1q25.2	0.205165	5.35E-05	0.000296345
HTRA2	2p13.1	-0.20514	5.36E-05	0.000296726
ASIC1	12q13.12	-0.20514	5.36E-05	0.000296726
ZSCAN26	6p22.1	-0.20505	5.40E-05	0.000298956
PARD6B	20q13.13	-0.20497	5.44E-05	0.000300935
PAK1IP1	6p24.2	-0.20496	5.44E-05	0.000301002
TWISTNB	7p21.1	-0.20496	5.44E-05	0.000301002
S100G	Xp22.2	0.204959	5.44E-05	0.000301023
ZNF407	18q22.3	0.204956	5.45E-05	0.000301025
SLC37A4	11q23.3	-0.20493	5.46E-05	0.000301653
RASAL2-AS1	1q25.2	-0.20492	5.46E-05	0.00030182
VDAC2	10q22.2	0.204893	5.48E-05	0.0003024
ENTPD3	3p22.1	0.204886	5.48E-05	0.000302505
HAND2	4q34.1	-0.20486	5.49E-05	0.000303175
MTERF1	7q21.2	-0.20484	5.50E-05	0.000303429
PSMB1	6q27	-0.20482	5.51E-05	0.000303843
VSNL1	2p24.2	-0.2048	5.52E-05	0.000304354
CPA6	8q13.2	-0.20475	5.54E-05	0.000305502
IMMP1L	11p13	-0.20474	5.55E-05	0.000305665
SNN	16p13.13	-0.20474	5.55E-05	0.000305665
RUNDC1	17q21.31	0.204712	5.56E-05	0.000306365
AFF1	4q21.3-q22.1	0.20466	5.59E-05	0.000307666
URI1	19q12	-0.20465	5.59E-05	0.000307723
MAPK1	22q11.22	0.204626	5.60E-05	0.00030837
ZNF793	19q13.12	-0.20462	5.60E-05	0.000308464
BORCS5	12p13.2	-0.20461	5.61E-05	0.00030855
ALG8	11q14.1	-0.2046	5.61E-05	0.000308806
PPP1R1A	12q13.2	-0.2046	5.62E-05	0.000308806
CTDNEP1	17p13.1	0.204576	5.63E-05	0.000309283
HSPB7	1p36.13	-0.20451	5.66E-05	0.000310928
CSNK1E	22q13.1	-0.20448	5.67E-05	0.000311668
GDF9	5q31.1	-0.20448	5.67E-05	0.000311668
LINC00910	17q21.31	-0.20439	5.72E-05	0.000313873
DYNLRB2	16q23.2	-0.20439	5.72E-05	0.000313873
TASP1	20p12.1	-0.20437	5.73E-05	0.000314342
KLF14	7q32.2	-0.20436	5.73E-05	0.000314342
DHX36	3q25.2	-0.20435	5.74E-05	0.000314702

PLCB1	20p12.3	-0.20434	5.74E-05	0.00031479
CARD16	11q22.3	0.204313	5.75E-05	0.000315439
NME2P1	12q24.23	-0.2043	5.76E-05	0.000315771
CREB5	7p15.1	-0.20427	5.77E-05	0.000316364
NUGGC	8p21.1	0.204247	5.79E-05	0.000316953
PDE5A	4q26	0.204165	5.83E-05	0.000319105
TEX11	Xq13.1	0.204147	5.84E-05	0.000319509
PRPF19	11q12.2	-0.20412	5.85E-05	0.00032014
PFN1	17p13.2	0.204076	5.87E-05	0.000321272
MMD2	7p22.1	-0.20405	5.89E-05	0.000321969
TLCD5	11q23.3	-0.20404	5.89E-05	0.000322007
SLC22A18AS	11p15.4	0.20404	5.89E-05	0.000322007
IL1A	2q14.1	0.203915	5.95E-05	0.000325354
HMX1	4p16.1	-0.20391	5.96E-05	0.000325464
MSI1	12q24.31	-0.20389	5.97E-05	0.000325835
CHMP4C	8q21.13	-0.20389	5.97E-05	0.000325835
ACVR1	2q24.1	-0.20388	5.97E-05	0.000325973
KANK1	9p24.3	-0.20387	5.97E-05	0.000326112
USP48	1p36.12	0.203866	5.98E-05	0.000326181
LOC727896	18p11.31	-0.20385	5.99E-05	0.000326533
SLC25A40	7q21.12	0.203819	6.00E-05	0.000327314
CCNB3	Xp11.22	0.20374	6.04E-05	0.000329435
ANKRD30BP2	21q11.2	-0.20365	6.09E-05	0.000331884
DYRK1A	21q22.13	0.203556	6.14E-05	0.000334475
SMPX	Xp22.12	-0.20351	6.16E-05	0.000335664
PABPC3	13q12.13	-0.2035	6.17E-05	0.000335957
LAP3	4p15.32	0.203488	6.17E-05	0.000336131
GNS	12q14.3	0.203477	6.18E-05	0.000336353
POLR2J4	7p13	-0.20346	6.19E-05	0.000336818
MAPKAPK5	12q24.12-q24.13	-0.20345	6.19E-05	0.000336818
NBEAL1	2q33.2	0.20343	6.20E-05	0.00033743
NHSL1	6q24.1	0.203426	6.21E-05	0.00033745
GNA13	17q24.1	0.203403	6.22E-05	0.000338007
SRM	1p36.22	-0.20339	6.23E-05	0.000338442
C5ORF46	5q32	-0.20332	6.26E-05	0.000340091
FAM53A	4p16.3	-0.2033	6.27E-05	0.000340576
LINC00654	20p12.3	-0.2033	6.27E-05	0.000340627
NOXA1	9q34.3	0.203275	6.29E-05	0.000341258
FBXL2	3p22.3	-0.20327	6.29E-05	0.00034134
HIP1R	12q24.31	0.203232	6.31E-05	0.000342324
TJP2	9q21.11	0.203189	6.33E-05	0.000343479
SLC25A44	1q22	0.203185	6.33E-05	0.000343493
LUC7L3	17q21.33	-0.20318	6.34E-05	0.000343695
TPCN1	12q24.13	0.203101	6.38E-05	0.00034577
ANAPC7	12q24.11	-0.20308	6.39E-05	0.000346115
NUP50	22q13.31	0.203083	6.39E-05	0.000346115
MXRA7	17q25.1	-0.20308	6.39E-05	0.000346242
CUEDC2	10q24.32	-0.20303	6.42E-05	0.000347423
RRN3	16p13.11	-0.20303	6.42E-05	0.000347501
ZNF680	7q11.21	-0.20301	6.43E-05	0.000347801
TAF9B	Xq21.1	-0.20297	6.45E-05	0.000349069
KIAA1586	6p12.1	-0.20295	6.46E-05	0.000349498
MRPL45	17q12	-0.20294	6.47E-05	0.000349576
CXORF56	Xq24	-0.20294	6.47E-05	0.000349635
SLC8A2	19q13.32	-0.20287	6.51E-05	0.000351536
RPL8	8q24.3	-0.20287	6.51E-05	0.000351585
IQC�	19p13.11	0.202859	6.51E-05	0.000351711
ZNF813	19q13.42	-0.20284	6.52E-05	0.000352291

BCAS3	17q23.2	-0.20282	6.53E-05	0.000352624
RARRES2	7q36.1	-0.20281	6.54E-05	0.000352783
DNAJC6	1p31.3	-0.20279	6.55E-05	0.000353375
EXOSC7	3p21.31	-0.20276	6.57E-05	0.000354229
DCAF17	2q31.1	-0.20272	6.59E-05	0.000355323
SCUBE3	6p21.31	-0.20272	6.59E-05	0.000355323
LOC728613	5p15.33	-0.20271	6.60E-05	0.000355473
IRAK1BP1	6q14.1	-0.20271	6.60E-05	0.000355473
PRR14	16p11.2	-0.2027	6.60E-05	0.00035565
PPT1	1p34.2	-0.20263	6.64E-05	0.000357598
TCAF2	7q35	0.202625	6.64E-05	0.000357598
TATDN3	1q32.3	0.202603	6.65E-05	0.000358175
ZNF581	19q13.42	-0.20253	6.70E-05	0.000360327
HEXB	5q13.3	0.202526	6.70E-05	0.000360327
CTSF	11q13.2	-0.2025	6.71E-05	0.000361052
RAB19	7q34	0.202448	6.74E-05	0.000362511
WHAMM	15q25.2	0.202436	6.75E-05	0.000362791
ANKRD12	18p11.22	0.202431	6.75E-05	0.000362845
TBXAS1	7q34	0.202411	6.76E-05	0.000363377
C1ORF56	1q21.3	-0.20241	6.77E-05	0.000363425
CBR1	21q22.12	0.202354	6.80E-05	0.00036492
CYP2A7	19q13.2	0.202336	6.81E-05	0.00036539
ORC6	16q11.2	-0.2023	6.83E-05	0.000366469
HOXA10	7p15.2	-0.20225	6.86E-05	0.000367815
RHOC	1p13.2	0.202197	6.89E-05	0.000369407
NECTIN3	3q13.13	0.202191	6.89E-05	0.000369483
NRK	Xq22.3	-0.20215	6.91E-05	0.000370551
SFXN5	2p13.2	-0.2021	6.95E-05	0.00037222
LRRC23	12p13.31	-0.20209	6.95E-05	0.000372276
MAD1L1	7p22.3	-0.20209	6.95E-05	0.000372285
CA11	19q13.33	-0.20208	6.96E-05	0.000372518
SDHAF2	11q12.2	-0.20202	6.99E-05	0.000374429
LINC00265	7p14.1	-0.202	7.00E-05	0.000374676
TLL2	10q24.1	0.201983	7.01E-05	0.000375257
ZNF501	3p21.31	-0.20198	7.02E-05	0.000375389
MAN2B2	4p16.1	0.201939	7.04E-05	0.00037643
PEAK1	15q24.3	0.20191	7.06E-05	0.000377255
EXD3	9q34.3	0.201902	7.06E-05	0.000377401
LPIN3	20q12	-0.20189	7.07E-05	0.000377767
HERPUD1	16q13	0.201882	7.07E-05	0.000377845
RPL13	16q24.3 17p11.2	-0.20188	7.08E-05	0.000377957
DAZAP2	12q13.13	0.201871	7.08E-05	0.000377968
A2M-AS1	12p13.31	-0.20187	7.08E-05	0.000377968
MC1R	16q24.3	-0.20186	7.08E-05	0.00037806
SART1	11q13.1	-0.20185	7.09E-05	0.000378289
VPS51	11q13.1	-0.20183	7.10E-05	0.000378876
DSCR9	21q22.13	-0.20179	7.13E-05	0.000380072
KATNA1	6q25.1	-0.20173	7.16E-05	0.000381758
KLF13	15q13.3	0.201715	7.17E-05	0.000382312
PRSS53	16p11.2	-0.20171	7.18E-05	0.000382468
POPDC2	3q13.33	-0.20169	7.19E-05	0.000382838
TRIOBP	22q13.1	0.201654	7.21E-05	0.000383976
PDIK1L	1p36.11	0.201633	7.22E-05	0.00038455
ARHGEF2	1q22	0.20161	7.24E-05	0.000385174
KRT39	17q21.2	-0.2016	7.24E-05	0.000385404
AQP7	9p13.3	0.201592	7.25E-05	0.000385557
DYNC1I2	2q31.1	-0.20148	7.32E-05	0.000389243
NOP56	20p13	-0.20145	7.34E-05	0.000389988

SNF8	17q21.32	-0.20143	7.35E-05	0.000390599
CSTL1	20p11.21	-0.2014	7.37E-05	0.000391426
LIMK1	7q11.23	-0.20138	7.38E-05	0.000392144
HSD52	1p32.1	-0.20133	7.41E-05	0.000393659
DDR1	6p21.33	0.201303	7.43E-05	0.000394331
UVRAG	11q13.5	-0.20129	7.44E-05	0.000394762
CMIP	16q23.2-q23.3	0.201279	7.44E-05	0.00039493
HMGB1P1	20q13.31	-0.20127	7.45E-05	0.000395247
CHMP1B	18p11.21	0.201262	7.45E-05	0.000395279
FOXD1	5q13.2	0.201238	7.47E-05	0.000395937
ZNF547	19q13.43	-0.20124	7.47E-05	0.000395937
TBC1D25	Xp11.23	-0.20121	7.48E-05	0.00039655
UBTF	17q21.31	-0.2012	7.49E-05	0.000396975
NPSR1	7p14.3	0.201195	7.49E-05	0.000396975
RBM26	13q31.1	-0.20117	7.51E-05	0.000397796
MAPK6	15q21.2	0.201161	7.52E-05	0.0003979
ATP6V1C1	8q22.3	-0.20114	7.53E-05	0.000398653
SLC35E1	19p13.11	0.20113	7.54E-05	0.000398749
SP140	2q37.1	0.20112	7.54E-05	0.000398962
PRKAA2	1p32.2	-0.20111	7.55E-05	0.000399174
PRR15	7p14.3	-0.20111	7.55E-05	0.000399199
DCTN5	16p12.2	-0.20108	7.57E-05	0.000400013
ATP13A2	1p36.13	0.20105	7.59E-05	0.0004009
AMH	19p13.3	0.201038	7.59E-05	0.000401207
MYLIP	6p22.3	-0.20099	7.63E-05	0.000402863
BID	22q11.21	-0.20098	7.63E-05	0.000403063
CEACAM3	19q13.2	0.200968	7.64E-05	0.000403267
CCDC9B	15q15.1	-0.20095	7.65E-05	0.000403763
TRAM2	6p12.2	0.200933	7.66E-05	0.000404226
ZNF630	Xp11.23	-0.20088	7.70E-05	0.000406062
TMEM183A	1q32.1	0.200828	7.73E-05	0.000407603
TPRA1	3q21.3	-0.20081	7.74E-05	0.000408115
SEH1L	18p11.21	0.200791	7.75E-05	0.000408635
SNHG20	17q25.2	-0.20076	7.77E-05	0.000409651
ADCY10P1	6p21.1	-0.20075	7.78E-05	0.000409835
WNT7A	3p25.1	-0.20074	7.79E-05	0.000410119
LINC00638	14q32.33	-0.2007	7.81E-05	0.000411301
TMEM67	8q22.1	-0.20068	7.83E-05	0.000412089
H19	11p15.5	-0.20064	7.85E-05	0.000413058
ILK	11p15.4	-0.20062	7.86E-05	0.000413733
LYPD1	2q21.2	-0.2006	7.88E-05	0.000414312
LOC644669	18p11.21	-0.20059	7.89E-05	0.000414653
STRIP2	7q32.1	0.200555	7.91E-05	0.000415714
FAM53C	5q31.2	-0.2005	7.95E-05	0.00041759
CTDSPL	3p22.2	0.200464	7.97E-05	0.000418688
ITIH3	3p21.1	-0.20043	7.99E-05	0.000419801
KCTD12	13q22.3	0.200395	8.02E-05	0.000420893
TMEM126B	11q14.1	-0.20038	8.02E-05	0.000421253
PTK2B	8p21.2	0.200366	8.04E-05	0.000421705
MAPK8	10q11.22	0.200338	8.05E-05	0.000422592
ZNF682	19p12	-0.20024	8.12E-05	0.00042604
DDX49	19p13.11	-0.20023	8.13E-05	0.000426112
ANKRD65	1p36.33	-0.20021	8.14E-05	0.000426908
ZMYND12	1p34.2	0.200171	8.17E-05	0.000428097
UBE2I	16p13.3	-0.20016	8.17E-05	0.000428233
AMT	3p21.31	-0.20015	8.18E-05	0.00042877
DHX40	17q23.1	-0.20011	8.21E-05	0.000429981
KIF1C	17p13.2	0.200102	8.22E-05	0.000430124

CST5	20p11.21	-0.20009	8.22E-05	0.000430233
NAGA	22q13.2	0.200093	8.22E-05	0.000430233
PTGDR	14q22.1	0.200059	8.24E-05	0.000431345
TTLL2	6q27	-0.20002	8.27E-05	0.000432461
MAFF	22q13.1	0.199988	8.29E-05	0.000433586
IQGAP3	1q22	0.199987	8.29E-05	0.000433586
RFT1	3p21.1	-0.19998	8.30E-05	0.000433808
LRFN2	6p21.2-p21.1	-0.19995	8.32E-05	0.00043461
GLIS1	1p32.3	-0.19995	8.32E-05	0.00043461
CDC42	1p36.12	0.199947	8.32E-05	0.00043461
ZNF579	19q13.42	-0.19992	8.34E-05	0.00043548
WDR66	12q24.31	-0.19992	8.34E-05	0.00043548
RFESD	5q15	0.199887	8.36E-05	0.000436425
BTBD6	14q32.33	0.199843	8.39E-05	0.00043794
FGFBP1	4p15.32	0.199821	8.41E-05	0.000438646
LOC143188	10q25.2	-0.19971	8.49E-05	0.000442605
PDP1	8q22.1	-0.19968	8.51E-05	0.000443717
SOAT2	12q13.13	-0.19967	8.52E-05	0.000443949
TRANK1	3p22.2	0.199664	8.52E-05	0.000443949
MRPL33	2p23.2	-0.19964	8.54E-05	0.000444848
ANKRD36BP1	1q24.2	0.199581	8.58E-05	0.000446816
HSBP1L1	18q23	0.199518	8.63E-05	0.000449057
FAM43B	1p36.12	-0.19951	8.63E-05	0.000449214
FAM216A	12q24.11	-0.19949	8.64E-05	0.000449692
METTL2B	7q32.1	-0.19949	8.64E-05	0.000449692
ICMT	1p36.31	0.199441	8.68E-05	0.000451494
EPB41L1	20q11.23	-0.19941	8.70E-05	0.000452496
ZBTB8B	1p35.1	-0.19937	8.74E-05	0.000454108
MEGF9	9q33.2	0.199329	8.76E-05	0.000455349
GDPD2	Xq13.1	0.19927	8.81E-05	0.000457502
WDR46	6p21.32	-0.19925	8.82E-05	0.000458203
NUDT11	Xp11.22	-0.19924	8.83E-05	0.000458575
S1PR4	19p13.3	0.199217	8.85E-05	0.00045915
SPRED1	15q14	0.199192	8.86E-05	0.000459987
TIGD4	4q31.3	-0.19911	8.93E-05	0.000463158
DMTF1	7q21.12	-0.1991	8.93E-05	0.000463158
METTL14	4q26	0.199074	8.95E-05	0.000464165
HEY2	6q22.31	-0.19907	8.95E-05	0.000464165
ACSM3	16p12.3	0.199067	8.96E-05	0.000464203
TTC7A	2p21	0.199046	8.97E-05	0.000464862
RGL1	1q25.3	-0.19904	8.97E-05	0.000464862
MYDGF	19p13.3	0.199041	8.98E-05	0.000464867
SUGP1	19p13.11	-0.19903	8.98E-05	0.000465097
CAPN14	2p23.1	0.199003	9.00E-05	0.000466086
ENO3	17p13.2	-0.19899	9.02E-05	0.000466643
FAHD2B	2q11.2	-0.19898	9.02E-05	0.000466654
ANKRD1	10q23.31	-0.19898	9.02E-05	0.000466654
GATAD1	7q21.2	-0.19897	9.03E-05	0.000466799
CCDC60	12q24.23	0.198892	9.09E-05	0.000469784
TMEM106A	17q21.31	0.198882	9.10E-05	0.000470065
OTUD1	10p12.2	0.198865	9.11E-05	0.000470626
SMG5	1q22	-0.19885	9.12E-05	0.000471188
HMGA2	12q14.3	-0.19884	9.13E-05	0.000471488
ASCC1	10q22.1	-0.19883	9.14E-05	0.000471755
MAP3K7	6q15	-0.19878	9.18E-05	0.000473639
LPAL2	6q25.3	-0.19875	9.20E-05	0.00047451
CFAP20	16q21	-0.19875	9.20E-05	0.00047451
C2ORF76	2q14.2	-0.19871	9.22E-05	0.000475769



SLC47A2	17p11.2	0.198685	9.25E-05	0.000476746
CFD	19p13.3	0.19864	9.28E-05	0.000478392
TRMT2B	Xq22.1	-0.19864	9.28E-05	0.000478415
GLG1	16q23.1	0.198631	9.29E-05	0.000478506
ELOVL6	4q25	0.198613	9.30E-05	0.000479102
DBX1	11p15.1	-0.1986	9.31E-05	0.000479413
UBFD1	16p12.2	-0.19856	9.34E-05	0.000481062
CYP2B6	19q13.2	-0.19852	9.37E-05	0.000482458
FRG1BP	20q11.1	-0.19848	9.41E-05	0.000483988
ZNF280B	22q11.22	-0.19846	9.42E-05	0.000484548
PTCH1	9q22.32	-0.19843	9.44E-05	0.000485573
ZRSR2	Xp22.2	-0.19843	9.44E-05	0.000485573
ZNF737	19p12	-0.19842	9.45E-05	0.000485969
INPPL1	11q13.4	-0.19841	9.46E-05	0.000486235
ZNF708	19p12	-0.19839	9.47E-05	0.000486762
TNIK	3q26.2-q26.31	0.198375	9.49E-05	0.00048729
LAMA5	20q13.33	-0.19837	9.49E-05	0.000487496
TAMM41	3p25.2	-0.19833	9.53E-05	0.000488981
RBM42	19q13.12	-0.19832	9.53E-05	0.000488981
CHN1	2q31.1	-0.19831	9.54E-05	0.000489371
PPP2R5A	1q32.3	0.198307	9.54E-05	0.000489412
LRRC52-AS1	1q23.3-q24.1	-0.19829	9.55E-05	0.000489777
GTF3C2	2p23.3	-0.19827	9.57E-05	0.000490631
LINC00552	13q34	-0.19825	9.59E-05	0.000491409
CPNE6	14q11.2	-0.19824	9.59E-05	0.000491692
CA13	8q21.2	0.19823	9.60E-05	0.00049192
GDI1	Xq28	-0.19817	9.65E-05	0.000494347
TLR6	4p14	0.19815	9.67E-05	0.000494946
LINGO4	1q21.3	0.198098	9.71E-05	0.000496941
PLA2G5	1p36.13	-0.19804	9.76E-05	0.000499283
OSBPL2	20q13.33	-0.19803	9.76E-05	0.000499495
TBC1D15	12q21.1	0.198017	9.77E-05	0.000499929
MIR99AHG	21q21.1	-0.19801	9.78E-05	0.000500204
C11ORF24	11q13.2	0.197981	9.80E-05	0.000501128
FRMD4A	10p13	-0.19796	9.82E-05	0.000501868
UBL5	19p13.2	-0.19793	9.84E-05	0.000502787
PLA2G4E	15q15.1	-0.19793	9.84E-05	0.000502787
BRI3BP	12q24.31	0.197923	9.85E-05	0.00050306
PEX11A	15q26.1	0.197898	9.87E-05	0.000503963
HIST1H2AE	6p22.2	-0.19787	9.89E-05	0.000504896
PPIP5K2	5q21.1	0.197844	9.91E-05	0.000505956
TREML2	6p21.1	-0.19783	9.93E-05	0.000506426
SSR4	Xq28	-0.19778	9.97E-05	0.000508444
PGAM4	Xq21.1	0.197754	9.99E-05	0.000509348
ZNF620	3p22.1	-0.19773	0.0001	0.000510157
CIR1	2q31.1	-0.1977	0.0001	0.000511297
HMSD	18q22.1	0.197683	0.0001	0.000511966
NAA16	13q14.11	-0.19763	0.000101	0.000513984
DENND5A	11p15.4	-0.19762	0.000101	0.000514191
IL6R	1q21.3	0.197589	0.000101	0.000515563
CCDC22	Xp11.23	-0.19758	0.000101	0.000515827
ACD	16q22.1	-0.19756	0.000101	0.000516375
NUP35	2q32.1	-0.19755	0.000102	0.000516823
KLRB1	12p13.31	0.197492	0.000102	0.000519188
RDH5	12q13.2	0.197488	0.000102	0.000519202
HARBI1	11p11.2	-0.19749	0.000102	0.000519202
KCNJ8	12p12.1	-0.19746	0.000102	0.000520198
LRIF1	1p13.3	-0.19745	0.000102	0.000520292

SLIT1	10q24.1	-0.19745	0.000102	0.000520292
UNKL	16p13.3	-0.19744	0.000102	0.000520487
GRAP2	22q13.1	0.197419	0.000103	0.000521415
C17ORF75	17q11.2	-0.19741	0.000103	0.000521826
GPD1L	3p22.3	0.1974	0.000103	0.000521944
GPR15	3q11.2	0.197394	0.000103	0.000522066
RTL8A	Xq26.3	-0.19737	0.000103	0.000522998
ITGA2	5q11.2	0.197294	0.000104	0.000526147
SMAD4	18q21.2	0.197289	0.000104	0.000526239
UBE2J1	6q15	0.197284	0.000104	0.000526302
MRPS28	8q21.13	-0.19727	0.000104	0.000526973
PLGRKT	9p24.1	0.197227	0.000104	0.000528518
KDM6B	17p13.1	0.197209	0.000104	0.000529192
SMURF2	17q23.3-q24.1	-0.1972	0.000105	0.000529444
CXORF49B	Xq13.1	-0.19719	0.000105	0.000529521
CTNNBIP1	1p36.22	0.197143	0.000105	0.000531644
SKIDA1	10p12.31	-0.19712	0.000105	0.000532421
HOXA1	7p15.2	-0.1971	0.000105	0.000533412
ESPNP	1p36.13	-0.19709	0.000105	0.000533469
IRAK1	Xq28	-0.19708	0.000106	0.000533771
ACTR8	3p21.1	-0.19708	0.000106	0.000533771
MGME1	20p11.23	-0.19706	0.000106	0.000534717
STX19	3q11.2	0.197045	0.000106	0.000535029
CCND3	6p21.1	0.197039	0.000106	0.000535169
POMP	13q12.3	-0.19703	0.000106	0.000535329
ASIC3	7q36.1	0.197005	0.000106	0.000536384
UGGT2	13q32.1	-0.197	0.000106	0.000536448
GPR17	2q14.3	-0.197	0.000106	0.000536448
IL18R1	2q12.1	0.196981	0.000106	0.000536936
LEO1	15q21.2	0.19698	0.000106	0.000536936
TARP	7p14.1	0.19697	0.000107	0.000537247
XKRX	Xq22.1	-0.19696	0.000107	0.000537638
KDELR2	7p22.1	0.19695	0.000107	0.000537856
TBKBP1	17q21.32	-0.19693	0.000107	0.000538771
ARL6IP6	2q23.3	-0.19692	0.000107	0.000538845
GTPBP1	22q13.1	0.196913	0.000107	0.000538892
FOXD4L6	9p11.2	0.196912	0.000107	0.000538892
BEGAIN	14q32.2	0.196912	0.000107	0.000538892
TRAPPC2B	19q13.43	-0.1969	0.000107	0.000539202
HOOK3	8p11.21	-0.1969	0.000107	0.000539354
MYOZ3	5q33.1	-0.19685	0.000108	0.000541171
THRAP3	1p34.3	0.196822	0.000108	0.000542362
ZC3H12C	11q22.3	0.196798	0.000108	0.000543263
TCIM	8p11.21	0.196795	0.000108	0.000543263
ANXA13	8q24.13	0.196765	0.000108	0.000544486
NAV3	12q21.2	-0.19669	0.000109	0.000547731
DMWD	19q13.32	-0.19668	0.000109	0.000548065
HIST2H4A	1q21.2	-0.19663	0.00011	0.000550105
AVEN	15q14	-0.19663	0.00011	0.000550105
PEX5	12p13.31	-0.19661	0.00011	0.000550854
CDC42BPA	1q42.13	0.196598	0.00011	0.000551184
CDH2	18q12.1	-0.19658	0.00011	0.000551895
TFPT	19q13.42	-0.19655	0.00011	0.000552913
CHST4	16q22.2	0.196551	0.00011	0.000552913
PRR26	10p15.3	0.196541	0.00011	0.000553252
FAM3A	Xq28	-0.19652	0.000111	0.000553848
LINC01558	6q27	-0.19652	0.000111	0.000553955
NEDD4	15q21.3	-0.19652	0.000111	0.000553963

BNIP3L	8p21.2	0.196503	0.000111	0.000554403
FXVD1	19q13.12	-0.19646	0.000111	0.000556424
ATPAF2	17p11.2	0.196445	0.000111	0.0005568
PTCD1	7q22.1	-0.19644	0.000111	0.000556908
HSD17B13	4q22.1	0.196398	0.000112	0.000558658
OLFM2	19p13.2	-0.19637	0.000112	0.000559621
HNRNPF	10q11.21	0.196369	0.000112	0.00055969
C19ORF73	19q13.33	-0.19635	0.000112	0.000560263
CLSPN	1p34.3	0.196318	0.000112	0.00056176
BAMBI	10p12.1	-0.19622	0.000113	0.000566226
N4BP2	4p14	0.196103	0.000114	0.000571482
HTR7P1	12p13.1	-0.19609	0.000115	0.000571956
LRRC19	9p21.2	0.196064	0.000115	0.000573067
CXCR4	2q22.1	0.196054	0.000115	0.00057338
PPP1R3C	10q23.32	-0.196	0.000115	0.000575621
PLEK2	14q23.3-q24.1	0.195992	0.000115	0.000576006
MPP2	17q21.31	-0.19594	0.000116	0.000578471
CLTCL1	22q11.21	-0.19592	0.000116	0.000579031
ABHD11-AS1	7q11.23	0.195919	0.000116	0.000579031
TAPT1	4p15.32	0.1959	0.000116	0.00057978
UFSP1	7q22.1	-0.1959	0.000116	0.00057978
LGALS9C	17p11.2	0.19587	0.000117	0.000580932
ANKRD13A	12q24.11	0.195866	0.000117	0.000580982
ZFYVE9	1p32.3	0.1958	0.000117	0.000584002
PPHLN1	12q12	-0.19576	0.000118	0.000585641
HIST1H2BG	6p22.2	-0.19573	0.000118	0.000587067
MRPL57	13q12.11	-0.19572	0.000118	0.00058716
IL16	15q25.1	0.195721	0.000118	0.000587179
ZNF614	19q13.41	-0.19571	0.000118	0.000587634
RABEP1	17p13.2	0.195673	0.000119	0.00058921
ECHS1	10q26.3	0.195665	0.000119	0.000589427
MFSD4A	1q32.1	0.195663	0.000119	0.000589427
HAUS5	19q13.12	-0.19565	0.000119	0.000589737
LDLRAP1	1p36.11	0.19565	0.000119	0.000589737
DOT1L	19p13.3	0.195622	0.000119	0.000590964
OGT	Xq13.1	-0.1956	0.000119	0.000592089
CYS1	2p25.1	-0.19559	0.000119	0.000592245
SNX25	4q35.1	-0.19557	0.00012	0.000593247
BDKRB2	14q32.2	0.195542	0.00012	0.000594156
ZNF562	19p13.2	0.195541	0.00012	0.000594156
GSDMA	17q21.1	0.195514	0.00012	0.000595329
RNF170	8p11.21	-0.19549	0.00012	0.000596319
NEURL3	2q11.2	-0.19549	0.00012	0.000596319
SNAP29	22q11.21	0.195479	0.00012	0.000596566
TRA2A	7p15.3	-0.19545	0.000121	0.000598048
DDX55	12q24.31	-0.19544	0.000121	0.000598248
DSG1	18q12.1	-0.19543	0.000121	0.000598463
DNAJC5	20q13.33	-0.19543	0.000121	0.000598616
PIK3R3	1p34.1	0.1954	0.000121	0.000599681
SEPHS1	10p13	-0.19539	0.000121	0.00060023
ANXA2	15q22.2	0.195343	0.000122	0.000602187
LOC100272217	9q34.11	-0.19529	0.000122	0.000604788
ANP32E	1q21.2	0.195267	0.000123	0.000605533
WDR45	Xp11.23	-0.19527	0.000123	0.000605533
MEPCE	7q22.1	-0.19524	0.000123	0.000606674
LINC-PINT	7q32.3	-0.19517	0.000124	0.000610135
PCDHGC3	5q31.3	-0.19512	0.000124	0.00061244
COPS9	2q37.3	-0.1951	0.000124	0.000613453

GATC	12q24.31	-0.19506	0.000125	0.000615239
OTOF	2p23.3	-0.19502	0.000125	0.000616619
SMIM26	20p11.23	-0.19502	0.000125	0.000616619
DBNDD2	20q13.12	-0.195	0.000125	0.000617834
SEC24C	10q22.2	0.194987	0.000125	0.000618126
MB21D2	3q29	-0.19496	0.000126	0.00061955
PNPLA3	22q13.31	0.194944	0.000126	0.000619927
NHEG1	6q23.3	-0.19494	0.000126	0.000619927
PPEF1	Xp22.13	-0.19489	0.000126	0.000622357
SLC52A1	17p13.2	0.194884	0.000126	0.000622592
HNF4A	20q13.12	-0.19486	0.000127	0.000623654
BAAT	9q31.1	-0.19485	0.000127	0.000623989
ZNF488	10q11.22	0.194831	0.000127	0.000624761
IRAK4	12q12	-0.19483	0.000127	0.000624761
HAND1	5q33.2	-0.1948	0.000127	0.000626162
PTPRN	2q35	-0.1948	0.000127	0.000626162
YME1L1	10p12.1	0.194767	0.000128	0.000627465
TLE1	9q21.32	0.194713	0.000128	0.000630069
KCNK10	14q31.3	0.19469	0.000128	0.000631091
RHOA	3p21.31	0.194598	0.000129	0.000635697
XRN2	20p11.22	-0.1946	0.000129	0.000635697
RASA4CP	7p13	0.194586	0.00013	0.000635954
FAM118B	11q24.2	0.194584	0.00013	0.000635954
FADS1	11q12.2	-0.19455	0.00013	0.000637539
TMEM121	14q32.33	-0.19454	0.00013	0.000637718
IPW	15q11.2	-0.19453	0.00013	0.000638389
DRC1	2p23.3	-0.19451	0.00013	0.000639263
TBC1D8	2q11.2	0.194505	0.00013	0.000639263
HHLA2	3q13.13	0.194478	0.000131	0.000640509
LPCAT1	5p15.33	0.194475	0.000131	0.000640543
BAG4	8p11.23	0.194472	0.000131	0.000640554
KLHL7	7p15.3	-0.19441	0.000131	0.000643727
GP5	3q29	-0.19428	0.000133	0.000650121
CD27-AS1	12p13.31	-0.19426	0.000133	0.000651393
SPG7	16q24.3	-0.19425	0.000133	0.000651679
GRID2IP	7p22.1	-0.1942	0.000134	0.000653981
PABPC1	8q22.3	-0.19419	0.000134	0.000654583
RASL12	15q22.31	-0.19418	0.000134	0.000654744
TMEM200B	1p35.3	-0.19412	0.000134	0.000657591
FAM210B	20q13.2	-0.1941	0.000135	0.000658616
UGT2B7	4q13.2	0.194085	0.000135	0.0006594
PEAR1	1q23.1	0.194073	0.000135	0.000659862
CCDC137	17q25.3	-0.19407	0.000135	0.000659945
ASH2L	8p11.23	0.194066	0.000135	0.000659945
NGFR	17q21.33	-0.19406	0.000135	0.000660141
PPP1R1B	17q12	0.194014	0.000136	0.000662397
RUFY1	5q35.3	0.19401	0.000136	0.000662432
TBCC	6p21.1	-0.19401	0.000136	0.000662513
RPS27A	2p16.1	-0.19397	0.000136	0.000664347
RELL2	5q31.3	-0.19393	0.000137	0.00066615
MIR22HG	17p13.3	0.193928	0.000137	0.000666232
TMBIM1	2q35	0.193901	0.000137	0.000667538
SLPI	20q13.12	0.193852	0.000138	0.000670016
VPS13A	9q21.2	0.193733	0.000139	0.000676353
GXYLT2	3p13	-0.19371	0.000139	0.000677489
GMFB	14q22.2	0.193682	0.000139	0.000678851
DISP2	15q15.1	0.193655	0.00014	0.000680144
FLJ25758	19p13.2	-0.19361	0.00014	0.000682711

CD44	11p13	0.193587	0.00014	0.000683584
WDR83	19p13.13	-0.19354	0.000141	0.000686189
CATSPER1	11q13.1	-0.19349	0.000142	0.000688498
POLR2J3	7q22.1	-0.19348	0.000142	0.000689033
DNAJA2	16q11.2	-0.19343	0.000142	0.000691839
SLC39A9	14q24.1	0.193339	0.000143	0.000696606
IFITM1	11p15.5	-0.19333	0.000143	0.000696862
GRB14	2q24.3	-0.19328	0.000144	0.000699394
PHF8	Xp11.22	-0.19328	0.000144	0.000699394
HAVCR1P1	19p12	-0.19326	0.000144	0.000700164
FRMPD2	10q11.22	0.193241	0.000144	0.000701277
TXLNB	6q24.1	-0.19324	0.000145	0.00070137
SEPHS1P1	7q11.21	-0.1932	0.000145	0.000703359
JHY	11q24.1	-0.19319	0.000145	0.000703558
PRKCA	17q24.2	0.193141	0.000146	0.00070629
IL7	8q21.13	0.193106	0.000146	0.000708137
FBL	19q13.2	-0.1931	0.000146	0.000708274
WWC3	Xp22.2	-0.19308	0.000146	0.000709089
CCDC73	11p13	-0.19306	0.000147	0.000710004
SIN3B	19p13.11	-0.19306	0.000147	0.000710056
CIB2	15q25.1	-0.19306	0.000147	0.000710056
ANKRD16	10p15.1	-0.19304	0.000147	0.000710638
TMPRSS6	22q12.3	-0.19294	0.000148	0.000716463
PLEKHA8	7p14.3	-0.19292	0.000148	0.000717186
ATM	11q22.3	-0.19292	0.000148	0.000717186
PGM2	4p14	0.192915	0.000148	0.000717412
MFS14C	9q22.33	-0.1929	0.000149	0.000718292
CD3E	11q23.3	0.192879	0.000149	0.000719175
METRNL	17q25.3	0.192826	0.000149	0.000722057
ANXA2R	5p12	0.192801	0.00015	0.000723327
NUDT16L1	16p13.3	-0.19277	0.00015	0.000725267
TYRP1	9p23	-0.19274	0.00015	0.000726614
SH3BP4	2q37.2	-0.19268	0.000151	0.000729642
AFF4	5q31.1	0.192678	0.000151	0.000729797
HLCS	21q22.13	0.192676	0.000151	0.000729797
TRAPPC9	8q24.3	-0.19262	0.000152	0.000732961
MFRP	11q23.3	-0.19261	0.000152	0.000733064
HOXB6	17q21.32	0.192577	0.000152	0.000735143
PDE7A	8q13.1	-0.19257	0.000153	0.00073531
DDIT4L	4q24	-0.19254	0.000153	0.000737106
COX20	1q44	-0.19248	0.000154	0.00074014
ZNF142	2q35	-0.19247	0.000154	0.000740887
ZNF649	19q13.41	-0.19245	0.000154	0.000741763
CGB5	19q13.33	-0.19239	0.000155	0.000745454
CDH8	16q21	-0.19235	0.000155	0.000747636
GHITM	10q23.1	0.192319	0.000156	0.000748995
PRKAR2B	7q22.3	0.192318	0.000156	0.000748995
ORC5	7q22.1-q22.2	-0.19231	0.000156	0.00074901
MLLT3	9p21.3	-0.19229	0.000156	0.000750402
SLC30A5	5q13.1-q13.2	0.192275	0.000156	0.000751094
C12ORF57	12p13.31	0.192257	0.000156	0.000751937
HMBX1	8p21.1-p12	0.192255	0.000156	0.000751937
TNFRSF17	16p13.13	0.192217	0.000157	0.000753868
ZNF518B	4p16.1	-0.19221	0.000157	0.000753868
FAM136A	2p13.3	-0.19221	0.000157	0.000753868
SPSB4	3q23	-0.19219	0.000157	0.000754888
HRNR	1q21.3	-0.19219	0.000157	0.000754967
ACTL6A	3q26.33	-0.19214	0.000158	0.000757684

SLC5A3	21q22.11	0.19211	0.000158	0.000759446
PPP1R11	6p22.1	0.192075	0.000159	0.000761437
C19ORF44	19p13.11	-0.19207	0.000159	0.000761848
HTRA3	4p16.1	-0.19205	0.000159	0.000762351
LRRC37B	17q11.2	-0.19202	0.000159	0.000763965
TWINK	10q24.31	-0.19193	0.000161	0.0007699
CCR6	6q27	0.19192	0.000161	0.000770022
ESCO2	8p21.1	0.191897	0.000161	0.000771291
ZNF773	19q13.43	-0.19181	0.000162	0.000776727
MT3	16q13	-0.19178	0.000162	0.000777977
ARPIN	15q26.1	0.191779	0.000163	0.000778
RAB23	6p12.1-p11.2	-0.19178	0.000163	0.000778
TEAD4	12p13.33	-0.19177	0.000163	0.000778
PKNOX1	21q22.3	0.191757	0.000163	0.000778918
CEACAM20	19q13.31	0.191747	0.000163	0.000779356
TTC26	7q34	-0.19173	0.000163	0.00078
C19ORF38	19p13.2	0.191713	0.000163	0.000781082
TRAT1	3q13.13	0.1917	0.000164	0.000781705
RDH12	14q24.1	-0.19166	0.000164	0.000783835
ZNF23	16q22.2	-0.19166	0.000164	0.000783835
OCA2	15q12-q13.1	-0.19166	0.000164	0.000783966
MKS1	17q22	-0.19165	0.000164	0.000784097
HAND2-AS1	4q34.1	-0.19159	0.000165	0.000787216
STAT5B	17q21.2	-0.19159	0.000165	0.000787216
SHC4	15q21.1	-0.19159	0.000165	0.000787216
CPEB4	5q35.2	0.191589	0.000165	0.000787216
PDS5A	4p14	0.191576	0.000165	0.000787858
EPC2	2q23.1	-0.19156	0.000165	0.000788719
TNFAIP8L3	15q21.2	-0.19153	0.000166	0.000790224
FKBP9	7p14.3	-0.19153	0.000166	0.000790224
HAR1A	20q13.33	0.191511	0.000166	0.000791118
WDR20	14q32.31	0.191509	0.000166	0.000791118
VWA5A	11q24.2	0.191495	0.000166	0.000791831
ALPK1	4q25	0.191426	0.000167	0.000796041
FUT4	11q21	0.191396	0.000168	0.000797775
CPS1	2q34	0.191381	0.000168	0.000798535
KLHL23	2q31.1	-0.19137	0.000168	0.000798899
TEX45	19p13.2	-0.19135	0.000168	0.000799895
TP53BP1	15q15.3	-0.19135	0.000168	0.000799898
FGGY	1p32.1	-0.19135	0.000168	0.000800026
DENR	12q24.31	-0.19134	0.000168	0.000800112
WWC2-AS2	4q35.1	-0.19133	0.000168	0.000800037
GYS1	19q13.33	0.19132	0.000169	0.000801141
SVBP	1p34.2	-0.19126	0.000169	0.00080446
CHRND	2q37.1	-0.19126	0.000169	0.00080446
HMGB1	13q12.3	-0.19126	0.000169	0.00080446
FAM178B	2q11.2	-0.19125	0.00017	0.00080472
IFITM3	11p15.5	-0.19117	0.000171	0.00080981
ZP2	16p12.3-p12.2	-0.19116	0.000171	0.000810306
HCG18	6p22.1	-0.19109	0.000172	0.000814519
SPINK5	5q32	0.191065	0.000172	0.000816005
CARD6	5p13.1	0.191061	0.000172	0.000816005
DNAJB2	2q35	-0.19106	0.000172	0.000816005
IGFBP7	4q12	-0.19104	0.000172	0.000816968
UCHL1	4p13	-0.19104	0.000172	0.000816968
OR10Q1	11q12.1	0.190991	0.000173	0.000819957
GDF5	20q11.22	-0.19095	0.000174	0.000822612
SNX17	2p23.3	-0.19094	0.000174	0.000822612

PSMD7	16q23.1	-0.19093	0.000174	0.000823154
NME7	1q24.2	-0.19091	0.000174	0.000824775
SMTN	22q12.2	-0.19087	0.000175	0.000826896
PAM16	16p13.3	-0.19086	0.000175	0.000827213
CPPED1	16p13.12	-0.19084	0.000175	0.000828599
GS1-124K5.11	7q11.21	-0.19082	0.000176	0.000829759
TIMM10	11q12.1	-0.19079	0.000176	0.000831792
ZNF235	19q13.31	-0.19078	0.000176	0.000831882
DCHS1	11p15.4	-0.19077	0.000176	0.000832731
AHSA2P	2p15	-0.19073	0.000177	0.000834613
PDZD11	Xq13.1	-0.19073	0.000177	0.000835005
CES5A	16q12.2	-0.1907	0.000177	0.000836244
C8ORF82	8q24.3	-0.19069	0.000177	0.000836695
EIF2AK1	7p22.1	-0.19067	0.000178	0.000838023
CSDC2	22q13.2	-0.19064	0.000178	0.000839815
TREX1	3p21.31	0.19062	0.000178	0.000841048
CLUH	17p13.3	0.190594	0.000179	0.000842629
ATXN7L3	17q21.31	-0.19059	0.000179	0.000842669
IGFALS	16p13.3	0.190587	0.000179	0.000842669
AATF	17q12	-0.19058	0.000179	0.00084328
LINC02731	11q25	-0.19055	0.000179	0.000844452
TNNT1	19q13.42	0.190547	0.000179	0.000844824
SDF4	1p36.33	0.190541	0.000179	0.000845019
SMARCA2	9p24.3	0.190532	0.00018	0.000845319
YDJC	22q11.21	-0.19053	0.00018	0.000845319
LRMP	12p12.1	0.190472	0.00018	0.000849063
SNRNP200	2q11.2	-0.19039	0.000182	0.000854699
TBC1D5	3p24.3	-0.19035	0.000182	0.000856996
NTF3	12p13.31	0.190334	0.000182	0.000857837
EIF4EBP3	5q31.3	-0.19033	0.000183	0.000858197
MYO6	6q14.1	0.190313	0.000183	0.000858909
ANO2	12p13.31	0.190216	0.000184	0.00086534
PCP4L1	1q23.3	-0.19019	0.000185	0.000866916
PPP1R14C	6q25.1	-0.19018	0.000185	0.000867096
CRYBB3	22q11.23	-0.19016	0.000185	0.000868862
EPS15	1p32.3	0.190153	0.000185	0.000868862
ABHD18	4q28.2	0.190123	0.000186	0.000870791
PPP1R7	2q37.3	-0.19011	0.000186	0.000871333
RNF217-AS1	6q22.31	-0.19011	0.000186	0.00087147
TMEM17	2p15	-0.19009	0.000186	0.000872614
RBM6	3p21.31	-0.19005	0.000187	0.00087497
MXRA8	1p36.33	-0.19001	0.000187	0.000877708
KRT2	12q13.13	0.189966	0.000188	0.000880471
STK31	7p15.3	-0.18994	0.000188	0.000881784
RNF8	6p21.2	-0.18994	0.000188	0.00088217
TECTA	11q23.3	-0.18992	0.000189	0.000883421
SNRPC	6p21.31	-0.18988	0.000189	0.000885647
SIX2	2p21	-0.18985	0.00019	0.000887461
C15ORF62	15q15.1	-0.18984	0.00019	0.000887905
MEX3D	19p13.3	-0.1898	0.00019	0.000890787
CDH9	5p14.1	-0.18979	0.000191	0.000891322
AGAP3	7q36.1	-0.18978	0.000191	0.000891322
PSMB3	17q12	-0.18978	0.000191	0.000891322
NARF	17q25.3	-0.18977	0.000191	0.000891684
SDF2	17q11.2	-0.18977	0.000191	0.000891684
NFYB	12q23.3	-0.18976	0.000191	0.000891995
TUBGCP2	10q26.3	0.189722	0.000192	0.000894767
VBP1	Xq28	-0.18971	0.000192	0.000895538

MAP4K3	2p22.1	-0.18963	0.000193	0.000900813
ANKRD23	2q11.2	-0.18961	0.000193	0.00090246
DTX1	12q24.13	0.189593	0.000194	0.000903138
HECTD2-AS1	10q23.32	-0.18956	0.000194	0.000905302
TMSB15A	Xq22.1	-0.18955	0.000194	0.00090608
TMEM223	11q12.3	-0.18953	0.000195	0.000907148
CDADC1	13q14.2	-0.1895	0.000195	0.000909249
SCLT1	4q28.2	0.189459	0.000196	0.000911791
BUD23	7q11.23	-0.18945	0.000196	0.000911937
CYP2D7	22q13.2	-0.18944	0.000196	0.000912519
DCAKD	17q21.31	-0.18939	0.000197	0.000915977
TMEM25	11q23.3	-0.18936	0.000197	0.000917853
ORAI3	16p11.2	-0.18935	0.000197	0.000918668
FBXL12	19p13.2	-0.18926	0.000199	0.000925111
LRRIQ3	1p31.1	-0.18922	0.000199	0.000927975
SAMD5	6q24.3	0.189196	0.0002	0.000929203
LIG3	17q12	-0.18919	0.0002	0.000929203
METTL21A	2q33.3	-0.18918	0.0002	0.000929947
KIAA0586	14q23.1	0.189125	0.000201	0.00093388
EIF3F	11p15.4	-0.18912	0.000201	0.000934078
TRIM6	11p15.4	-0.18911	0.000201	0.000934307
HASPIN	17p13.2	0.189108	0.000201	0.000934415
TSPO	22q13.2	0.189106	0.000201	0.000934415
RECK	9p13.3	-0.1891	0.000201	0.00093474
L3MBTL4	18p11.31	-0.18909	0.000201	0.000935168
METTL7A	12q13.12	0.189087	0.000201	0.000935168
FAM50A	Xq28	-0.18905	0.000202	0.000937618
TTLL4	2q35	-0.18905	0.000202	0.000937624
BET1P1	7q36.1	-0.18897	0.000203	0.000943391
KLK11	19q13.41	0.188945	0.000204	0.000944845
ITFG2	12p13.33	-0.18894	0.000204	0.000945315
CYB5D1	17p13.1	0.188916	0.000204	0.000946611
SFTPA2	10q22.3	0.188897	0.000205	0.000947755
FOXS1	20q11.21	-0.18888	0.000205	0.000949095
WDR77	1p13.2	-0.18886	0.000205	0.000950137
WDR26	1q42.11-q42.12	0.188815	0.000206	0.00095327
FAM135B	8q24.23	0.18881	0.000206	0.00095327
NFAT5	16q22.1	-0.18881	0.000206	0.00095327
TWIST1	7p21.1	-0.18877	0.000207	0.000955721
BCL2L10	15q21.2	-0.18877	0.000207	0.000955721
PPFIA4	1q32.1	-0.18876	0.000207	0.000956062
MKI67	10q26.2	0.188756	0.000207	0.000956452
SYDE1	19p13.12	-0.1887	0.000208	0.00096013
NME2	17q21.33	-0.18869	0.000208	0.000960627
AP1B1	22q12.2	0.188677	0.000208	0.00096173
CRYGS	3q27.3	-0.18867	0.000208	0.000962212
ALKBH4	7q22.1	-0.18865	0.000209	0.000963481
SOCS5	2p21	-0.18862	0.000209	0.000965786
MANBA	4q24	0.18861	0.000209	0.000965958
SULT1A2	16p11.2	0.188585	0.00021	0.000967626
OLFML2A	9q33.3	-0.18858	0.00021	0.000968095
ZMYM2	13q12.11	-0.1885	0.000211	0.000973782
ADAM6	14q32.33	0.188496	0.000211	0.000973839
ZNF205	16p13.3	-0.18846	0.000212	0.000976317
CYB561D2	3p21.31	0.188344	0.000214	0.000985107
CHUK	10q24.31	0.18834	0.000214	0.000985165
HBA2	16p13.3	0.188312	0.000214	0.000987133
TLR5	1q41	0.188229	0.000216	0.000993362



AFP	4q13.3	-0.18822	0.000216	0.000994111
ATAT1	6p21.33	-0.18817	0.000217	0.000997797
UQCRC2	16p12.2	0.188164	0.000217	0.000997797
BCDIN3D-AS1	12q13.12	-0.18814	0.000217	0.000999465
CHAC2	2p16.2	0.188133	0.000217	0.0009996
TCF3	19p13.3	-0.18813	0.000217	0.0009996
KANSL3	2q11.2	-0.18812	0.000218	0.001000625
IFITM5	11p15.5	-0.18802	0.000219	0.001008274
G6PC3	17q21.31	-0.18794	0.000221	0.001014062
AOC1	7q36.1	0.187939	0.000221	0.001014062
ARHGEF37	5q32	0.187934	0.000221	0.001014207
ETV3L	1q23.1	0.187849	0.000222	0.001020743
ATG2B	14q32.2	0.187843	0.000222	0.001021002
RASSF8	12p12.1	-0.18784	0.000222	0.0010212
AXIN1	16p13.3	-0.18779	0.000223	0.001024727
LSMEM1	7q31.1	-0.18777	0.000224	0.001026141
UPK2	11q23.3	-0.18775	0.000224	0.001027908
MPPED2	11p14.1	-0.1877	0.000225	0.001031386
KRT85	12q13.13	-0.18768	0.000225	0.00103289
BTBD2	19p13.3	-0.18767	0.000225	0.001032967
TRPM3	9q21.12-q21.13	-0.18767	0.000225	0.001032967
SLC22A1	6q25.3	-0.18762	0.000226	0.001037013
THUMPD2	2p22.1 2p22-p21	-0.18758	0.000227	0.001039771
ROM1	11q12.3	-0.18757	0.000227	0.001039981
PSMC2	7q22.1	-0.18757	0.000227	0.001039981
CRYM	16p12.2	0.18756	0.000227	0.001040905
DDX50	10q22.1	-0.18752	0.000228	0.001044177
EHF	11p13	0.187509	0.000228	0.001044628
HBEGF	5q31.3	0.187491	0.000229	0.001045874
STUM	1q42.12	-0.18746	0.000229	0.00104848
PTPMT1	11p11.2	-0.18743	0.00023	0.001050785
NLE1	17q12	-0.18742	0.00023	0.001051362
ZNF654	3p11.1	0.187392	0.00023	0.001053061
IGBP1	Xq13.1	-0.18737	0.000231	0.001054637
NOL11	17q24.2	-0.18736	0.000231	0.001055235
KLF3-AS1	4p14	-0.18735	0.000231	0.001056065
LRRC4	7q32.1	-0.18734	0.000231	0.001056538
SERPINA3	14q32.13	0.187327	0.000231	0.001057226
LYRM1	16p12.3	-0.18732	0.000232	0.001057735
DUS3L	19p13.3	-0.1873	0.000232	0.001059104
MSH4	1p31.1	0.187285	0.000232	0.001060024
GASK1A	3p22.1	-0.18727	0.000233	0.001060949
GNGT1	7q21.3	-0.18726	0.000233	0.001061438
AQP5	12q13.12	0.187259	0.000233	0.001061438
NFATC2	20q13.2	-0.18725	0.000233	0.001061891
SMIM4	3p21.1	-0.18723	0.000233	0.001063696
FHOD1	16q22.1	0.187219	0.000233	0.001064029
GLB1L	2q35	-0.1872	0.000234	0.001065333
RND1	12q13.12	0.187187	0.000234	0.001066269
TTC13	1q42.2	0.187164	0.000234	0.001067892
HGS	17q25.3	-0.18715	0.000235	0.001068597
SFRP4	7p14.1	-0.18715	0.000235	0.001068597
ACTA2	10q23.31	-0.18713	0.000235	0.001069888
DAB2IP	9q33.2	0.187117	0.000235	0.001070685
DBT	1p21.2	0.187117	0.000235	0.001070685
CRELD2	22q13.33	0.187069	0.000236	0.001074425
ST6GALNAC2	17q25.1	0.187051	0.000237	0.001075741
KMT2E-AS1	7q22.3	-0.18702	0.000237	0.001078423

FRYL	4p11	0.18701	0.000237	0.001078687
NEK10	3p24.1	-0.187	0.000237	0.00107893
SLC10A4	4p11	-0.187	0.000237	0.00107893
RNASEH1	2p25.3	-0.18694	0.000239	0.001084136
HYPM	Xp11.4	-0.18693	0.000239	0.001084483
CD3G	11q23.3	0.186923	0.000239	0.001084812
TAPT1-AS1	4p15.32	-0.18692	0.000239	0.001084825
TOP1P1	1q24.3	-0.18691	0.000239	0.001085824
ZNF93	19p12	-0.18689	0.000239	0.001086512
CCDC81	11q14.2	-0.18688	0.00024	0.001087429
PDLIM3	4q35.1	-0.18686	0.00024	0.001088538
FOXC2	16q24.1	-0.18686	0.00024	0.001088538
EPAS1	2p21	0.18685	0.00024	0.001089323
SNRPE	1q32.1	-0.18685	0.00024	0.001089352
FBXO11	2p16.3	-0.18684	0.000241	0.001089914
RDH13	19q13.42	0.186805	0.000241	0.001092445
RYBP	3p13	0.186792	0.000241	0.001093321
SGPL1	10q22.1	0.186759	0.000242	0.001095896
STAU2	8q21.11	-0.18674	0.000242	0.001097311
MN1	22q12.1	-0.18671	0.000243	0.001099265
ZNF660	3p21.31	-0.18671	0.000243	0.001099513
ADORA2A-AS1	22q11.23	-0.18669	0.000243	0.001101098
KCNK7	11q13.1	0.186669	0.000244	0.001102376
TIMP3	22q12.3	-0.18665	0.000244	0.001103729
MALL	2q13	0.186646	0.000244	0.001103729
GLRA2	Xp22.2	-0.18664	0.000244	0.001103729
MYRF-AS1	11q12.2	0.186595	0.000245	0.001107749
AP3B2	15q25.2	-0.18657	0.000246	0.001109551
SARDH	9q34.2	-0.18655	0.000246	0.001110913
CCDC160	Xq26.2	0.186549	0.000246	0.001110913
GABRR1	6q15	-0.18655	0.000246	0.001110913
PLEKHG1	6q25.1	0.186543	0.000246	0.001111068
FOXJ2	12p13.31	0.186532	0.000246	0.001111715
TRPA1	8q21.11	0.186489	0.000247	0.00111519
NDN	15q11.2	-0.18644	0.000248	0.001118908
VAMP2	17p13.1	0.186438	0.000248	0.001119146
COG2	1q42.2	0.186425	0.000248	0.001120024
ASAH1	8p22	0.186385	0.000249	0.001123356
VIPR1	3p22.1	0.186375	0.000249	0.001123972
SOX11	2p25.2	-0.18637	0.00025	0.00112426
CRIP1	2p21	-0.18635	0.00025	0.00112549
FXD2	11q23.3	-0.18627	0.000252	0.001132825
SLC16A9	10q21.2	0.186258	0.000252	0.001133204
ADIPOR1	1q32.1	0.186253	0.000252	0.001133425
PKIG	20q13.12	-0.18624	0.000252	0.001134542
S100A6	1q21.3	0.186217	0.000253	0.001136119
HSPB2	11q23.1	-0.1862	0.000253	0.001137392
TSPYL4	6q22.1	-0.18614	0.000254	0.001142287
ZFAND1	8q21.13	-0.18607	0.000255	0.001148764
DYRK4	12p13.32	0.186048	0.000256	0.001150081
EHMT2	6p21.33	-0.18605	0.000256	0.001150081
SLC25A3	12q23.1	0.186024	0.000256	0.001151755
SLC25A21	14q13.3	0.185986	0.000257	0.001154915
FAM234B	12p13.1	-0.18597	0.000257	0.001156267
METTL26	16p13.3	-0.18597	0.000258	0.001156267
NME6	3p21.31	-0.18589	0.000259	0.001162923
CD96	3q13.13-q13.2	0.185883	0.000259	0.001163258
TMEM91	19q13.2	-0.18586	0.00026	0.001164696

SPACA4	19q13.33	0.185836	0.00026	0.001166732
WFDC12	20q13.12	0.185836	0.00026	0.001166732
SRRM2-AS1	16p13.3	0.185832	0.00026	0.001166795
DAGLB	7p22.1	-0.18582	0.000261	0.001167916
HRH1	3p25.3	0.185799	0.000261	0.0011693
KDELR1	19q13.33	0.185793	0.000261	0.001169607
RPL38	17q25.1	-0.18578	0.000261	0.001170582
GAMT	19p13.3	-0.18577	0.000261	0.001171144
KBTBD2	7p14.3	-0.18574	0.000262	0.001173673
RAMP2	17q21.2	-0.18571	0.000263	0.001176354
RPS15A	16p12.3	-0.18566	0.000264	0.001180703
SLC12A8	3q21.2	0.185612	0.000265	0.00118456
KRIT1	7q21.2	-0.1856	0.000265	0.001185559
PKP1	1q32.1	-0.1856	0.000265	0.001185559
DNASE2B	1p31.1-p22.3	0.185564	0.000266	0.00118821
PRR7	5q35.3	-0.18551	0.000267	0.001192775
COA1	7p13	-0.1855	0.000267	0.001193747
MCM3AP	21q22.3	0.185481	0.000267	0.001195121
TMX1	14q22.1	0.185452	0.000268	0.001197577
CLCN1	7q34	0.185438	0.000268	0.001198564
PPME1	11q13.4	-0.18543	0.000268	0.001199087
GPR153	1p36.31	-0.18542	0.000269	0.001199363
PUM3	9p24.2	-0.18542	0.000269	0.001199618
MLEC	12q24.31	0.185414	0.000269	0.001199665
SON	21q22.11	0.185412	0.000269	0.001199665
DUS1L	17q25.3	-0.18538	0.00027	0.001202126
IGFBPL1	9p13.1	-0.18538	0.00027	0.001202126
KRT9	17q21.2	0.185291	0.000271	0.001210218
SYP	Xp11.23	-0.18526	0.000272	0.001212553
USP42	7p22.1	-0.18522	0.000273	0.001216222
MBOAT4	8p12	0.185192	0.000273	0.001218736
SLC39A13	11p11.2	-0.18514	0.000274	0.001222828
NSUN5P2	7q11.23	-0.18514	0.000275	0.001222828
EPN3	17q21.33	0.185139	0.000275	0.001222903
CNN1	19p13.2	-0.18512	0.000275	0.001224185
TKTL2	4q32.2	0.185113	0.000275	0.001224877
PRMT9	4q31.23	0.185099	0.000275	0.001225839
TK2	16q21	0.185096	0.000276	0.001225839
ID4	6p22.3	-0.18509	0.000276	0.001225839
PRPF18	10p13	0.185053	0.000276	0.001229504
APPL2	12q23.3	0.185045	0.000277	0.00122995
JADE1	4q28.2	0.185035	0.000277	0.001230684
PLXNA2	1q32.2	0.185019	0.000277	0.001231859
NUP160	11p11.2	-0.185	0.000278	0.001233285
PCAT18	18q11.2	0.184988	0.000278	0.001233715
ZNF677	19q13.42	-0.18499	0.000278	0.001233715
SNRPN	15q11.2	-0.18499	0.000278	0.001233715
TAF6L	11q12.3	-0.18499	0.000278	0.001233715
SLC24A2	9p22.1-p21.3	-0.18495	0.000279	0.001237247
IGF2BP2	3q27.2	-0.18489	0.00028	0.00124186
STMP1	7q33	-0.18489	0.00028	0.00124186
SLAMF6	1q23.2-q23.3	0.184887	0.00028	0.001242123
STAG2	Xq25	-0.18486	0.000281	0.001244235
GK5	3q23	0.18485	0.000281	0.001245122
P3H2	3q28	0.184831	0.000281	0.001246634
CTH	1p31.1	0.184823	0.000281	0.001247169
CABCOC1	10q21.2	-0.18479	0.000282	0.001249845
DTD1	20p11.23	-0.18479	0.000282	0.001250054

LMLN	3q29	0.18478	0.000282	0.001250454
ANXA2P1	4q31.3	0.184768	0.000283	0.00125142
G6PD	Xq28	-0.18471	0.000284	0.001256455
MRPL10	17q21.32	-0.18469	0.000284	0.001258756
CHRN2	1q21.3	-0.18467	0.000285	0.001260425
LCOR	10q24.1	0.184664	0.000285	0.001260425
UBA3	3p14.1	-0.18464	0.000285	0.001261908
PTP4A2	1p35.2	0.184643	0.000285	0.001261908
ONECUT2	18q21.31	0.184571	0.000287	0.001268629
LENG9	19q13.42	0.184547	0.000287	0.001270718
HYAL3	3p21.31	-0.18451	0.000288	0.001274168
PEX3	6q24.2	-0.1845	0.000289	0.001275182
ARFGAP2	11p11.2	-0.18449	0.000289	0.001275186
UHMK1	1q23.3	0.184459	0.000289	0.001278276
PTGER4P2-CDK2AP2P2	9q13	-0.18441	0.000291	0.001283271
TFR2	7q22.1	0.184378	0.000291	0.001285715
TEAD1	11p15.3	-0.18435	0.000292	0.00128828
ETFA	15q24.2-q24.3	0.184291	0.000293	0.001293576
RXYLT1	12q14.2	-0.18429	0.000293	0.001293576
KPNA5	6q22.1	-0.18425	0.000294	0.001296911
PIFO	1p13.2	-0.18425	0.000294	0.001297274
OTOP3	17q25.1	0.184237	0.000294	0.001298088
EFCAB10	7q22.3	-0.18422	0.000295	0.001299943
P2RY10	Xq21.1	0.184187	0.000296	0.001302629
FBXO41	2p13.2	-0.18417	0.000296	0.001303949
ACVRL1	12q13.13	0.184166	0.000296	0.001303949
SLC25A4	4q35.1	0.184165	0.000296	0.001303949
SHKBP1	19q13.2	-0.18415	0.000296	0.00130466
TMEM229A	7q31.32	0.184141	0.000297	0.001305774
MTM1	Xq28	0.184138	0.000297	0.001305778
CA7	16q22.1	0.184135	0.000297	0.001305835
TIAM1	21q22.11	0.184077	0.000298	0.001311425
TMLHE	Xq28	-0.18406	0.000298	0.001312314
EPYC	12q21.33	-0.18405	0.000299	0.001314039
PNMA8B	19q13.32	-0.18403	0.000299	0.001315011
AK5	1p31.1	-0.18401	0.0003	0.00131676
LAIR2	19q13.42	0.183983	0.0003	0.001319439
RHPN1	8q24.3	-0.18398	0.0003	0.001319594
SUV39H1	Xp11.23	-0.18395	0.000301	0.001322091
WHAMMP3	15q11.2	-0.18393	0.000302	0.00132428
FMNL2	2q23.3	-0.18392	0.000302	0.001325137
CDK11B	1p36.33	0.183907	0.000302	0.001325815
RBFOX3	17q25.3	-0.18388	0.000303	0.001328633
EFEMP2	11q13.1	-0.18383	0.000304	0.001333444
TBCE	1q42.3	-0.18381	0.000304	0.001334565
STK3	8q22.2	-0.18381	0.000304	0.001334565
PTGDR2	11q12.2	0.18379	0.000305	0.001336322
POLR1B	2q14.1	-0.18378	0.000305	0.001336928
SCEL	13q22.3	0.183774	0.000305	0.001337075
SMAD6	15q22.31	-0.18377	0.000305	0.001337075
SALL2	14q11.2	-0.18372	0.000307	0.00134258
PSMD10	Xq22.3	-0.18372	0.000307	0.00134258
ZMIZ1	10q22.3	0.183709	0.000307	0.001342933
GOSR2	17q21.32	-0.18369	0.000307	0.001344533
NFIC	19p13.3	0.183674	0.000308	0.001346024
KIF19	17q25.1	0.183649	0.000308	0.001348251
FOPNL	16p13.11	-0.18362	0.000309	0.001350645
IRS2	13q34	0.183617	0.000309	0.001351067

BPI	20q11.23	-0.18359	0.000309	0.001353211
FBXO34	14q22.3	0.18359	0.00031	0.001353211
PTPRF	1p34.2	0.183573	0.00031	0.001354689
UPRT	Xq13.3	-0.18356	0.00031	0.001355359
DTYMK	2q37.3	-0.18354	0.000311	0.001357289
CRY2	11p11.2	-0.18354	0.000311	0.001357578
SLC6A3	5p15.33	-0.18353	0.000311	0.001357969
HYMAI	6q24.2	-0.18341	0.000314	0.001370444
PROM1	4p15.32	0.183388	0.000314	0.00137231
TRIM3	11p15.4	0.183335	0.000316	0.001377657
BCAT2	19q13.33	0.183315	0.000316	0.001379502
ATP6V1B2	8p21.3	0.183295	0.000317	0.001381326
TMED1	19p13.2	-0.18328	0.000317	0.001383016
REG1A	2p12	0.183162	0.00032	0.001394873
PENK	8q12.1	-0.18312	0.000321	0.001399234
DGKI	7q33	-0.18312	0.000321	0.001399234
NKX3-2	4p15.33	-0.18311	0.000321	0.001399347
HDAC11	3p25.1	-0.18307	0.000322	0.00140344
SMOC1	14q24.2	-0.18306	0.000322	0.001404504
CD7	17q25.3	0.183039	0.000323	0.001406313
PSMA2	7p14.1	-0.18302	0.000323	0.001407791
C5ORF34	5p12	-0.18302	0.000323	0.001407791
CNBP	3q21.3	-0.18302	0.000323	0.001407791
PLXDC1	17q12	-0.18295	0.000325	0.001414808
ZFP69B	1p34.2	-0.18294	0.000325	0.001415599
DOK1	2p13.1	-0.18292	0.000326	0.001417629
CEBPA	19q13.11	-0.18291	0.000326	0.001417629
ZNF567	19q13.12	-0.1829	0.000326	0.001418655
SYT14	1q32.2	-0.18289	0.000327	0.001419985
MCTS2P	20q11.21	-0.18284	0.000328	0.001425318
BCR	22q11.23	0.182806	0.000329	0.00142819
RFNG	17q25.3	-0.18277	0.00033	0.001431725
ARMC6	19p13.11	-0.18277	0.00033	0.001431725
ESR2	14q23.2-q23.3	0.18276	0.00033	0.001432395
ZNF232	17p13.2	0.18275	0.00033	0.001433185
GPR171	3q25.1	0.18274	0.00033	0.001433933
UTS2	1p36.23	0.182736	0.000331	0.001434057
MAP9	4q32.1	-0.18266	0.000332	0.001442191
LINC01003	7q36.1	-0.18263	0.000333	0.001444736
ZNF767P	7q36.1	-0.18262	0.000333	0.001445639
COX4I2	20q11.21	-0.18261	0.000334	0.001446359
MCOLN1	19p13.2	0.182601	0.000334	0.001447422
ADAM19	5q33.3	-0.18259	0.000334	0.001447897
ZSCAN32	16p13.3	-0.18254	0.000336	0.001453516
MIDN	19p13.3	0.182532	0.000336	0.001454184
ZNF77	19p13.3	-0.18251	0.000336	0.001456422
PIAS1	15q23	0.182487	0.000337	0.001458524
TSNAXIP1	16q22.1	-0.1824	0.000339	0.001467657
TNPO2	19p13.13	-0.18239	0.000339	0.001468113
ASB9	Xp22.2	-0.18239	0.000339	0.001468113
SBK1	16p12.1	-0.18237	0.00034	0.00146995
MAGOH	1p32.3	-0.18237	0.00034	0.001469996
FIZ1	19q13.42	-0.18236	0.00034	0.001470623
SPINK2	4q12	0.182352	0.00034	0.001471501
ARIH2	3p21.31	-0.18234	0.000341	0.001472048
MEIS3	19q13.32	-0.18228	0.000342	0.001478483
ATF6	1q23.3	0.182265	0.000343	0.001480284
MCRS1	12q13.12	-0.18226	0.000343	0.001480915

HCG11	6p22.2	-0.18224	0.000343	0.001482059
CDC73	1q31.2	0.18223	0.000344	0.001483301
HEBP1	12p13.1	-0.18221	0.000344	0.001484541
UBASH3A	21q22.3	0.182214	0.000344	0.001484541
GRAMD1B	11q24.1	0.182208	0.000344	0.001484882
EMC10	19q13.33	-0.18218	0.000345	0.001487277
MTHFSD	16q24.1	-0.18215	0.000346	0.001491073
ATP6V1D	14q23.3	0.182138	0.000346	0.00149169
GATA5	20q13.33	-0.18214	0.000346	0.00149169
LHPP	10q26.13	0.182097	0.000347	0.001495932
RAB6A	11q13.4	-0.18207	0.000348	0.001498738
MSANTD2	11q24.2	-0.18205	0.000348	0.001500177
MCM7	7q22.1	-0.18205	0.000348	0.001500263
SMCR8	17p11.2	0.182007	0.00035	0.001504956
SPIN1	9q22.1	-0.182	0.00035	0.001505152
WNT4	1p36.12	0.18199	0.00035	0.001506215
TIMM21	18q22.3	0.181977	0.00035	0.001507427
RAI1	17p11.2	0.181945	0.000351	0.001510799
TP63	3q28	0.181914	0.000352	0.001514026
ADAMTS16	5p15.32	-0.18191	0.000352	0.00151446
TESMIN	11q13.3	-0.1819	0.000352	0.001515444
TMEM74	8q23.1	-0.18189	0.000353	0.001516198
INSC	11p15.2	0.181779	0.000356	0.001528366
MOV10L1	22q13.33	-0.18173	0.000357	0.001533329
SMYD2	1q32.3	-0.18169	0.000358	0.001538585
HSPB11	1p32.3	-0.18167	0.000359	0.001540428
NBPF15	1q21.1	-0.18166	0.000359	0.001540653
DCAF6	1q24.2	0.181659	0.000359	0.001540778
RPL27A	11p15.4	-0.18165	0.000359	0.001541004
CPXM2	10q26.13	-0.18161	0.00036	0.001546246
MFHAS1	8p23.1	0.181587	0.000361	0.00154825
SERINC3	20q13.12	-0.18154	0.000362	0.001553923
NAB2	12q13.3	-0.18152	0.000363	0.001555171
SLC2A1	1p34.2	-0.1815	0.000363	0.001558028
MYO1H	12q24.11	-0.18149	0.000364	0.001558795
IDH3A	15q25.1	0.181469	0.000364	0.001560531
PTPN4	2q14.2	-0.18143	0.000365	0.001565321
PRKD1	14q12	-0.18139	0.000366	0.001569636
CAND1	12q14.3-q15	0.181378	0.000367	0.001570381
ANK3	10q21.2	0.181363	0.000367	0.001571847
RNASE7	14q11.2	0.181336	0.000368	0.001574573
LGALS14	19q13.2	-0.18133	0.000368	0.001574573
RFX4	12q23.3	0.181324	0.000368	0.001575584
PTTG1IP	21q22.3	0.181312	0.000369	0.00157664
PER3	1p36.23	0.181284	0.000369	0.001579612
TOP1P2	22q11.23	-0.18128	0.000369	0.001579767
SGSM1	22q11.23	0.181256	0.00037	0.001582355
TARBP2	12q13.13	-0.18123	0.000371	0.001585649
DEXI	16p13.13	-0.18122	0.000371	0.00158588
GCSAML	1q44	0.181205	0.000372	0.001587517
ADGRF4	6p12.3	-0.18118	0.000372	0.001589988
KIRREL3	11q24.2	0.181164	0.000373	0.001591834
RBL1	20q11.23	-0.18115	0.000373	0.001592669
SPAG17	1p12	-0.18113	0.000374	0.001595712
GCA	2q24.2	-0.18111	0.000374	0.001597602
IL23R	1p31.3	0.181077	0.000375	0.001600985
SDHB	1p36.13	0.181046	0.000376	0.001604465
GPATCH1	19q13.11	-0.18103	0.000377	0.001606276

ARRB1	11q13.4	0.181013	0.000377	0.0016078
HNRNPAB	5q35.3	0.181009	0.000377	0.001607905
AGT	1q42.2	-0.18099	0.000378	0.001609903
APC2	19p13.3	0.180987	0.000378	0.001609903
TOP3A	17p11.2	0.180964	0.000378	0.001612433
OBP2A	9q34.3	-0.18092	0.00038	0.001616978
ZNF169	9q22.32	0.180914	0.00038	0.001617832
IKZF1	7p12.2	0.1809	0.00038	0.001619222
RPL10	Xq28	-0.18087	0.000381	0.001622428
RFC3	13q13.2	-0.18081	0.000383	0.001629336
NSMAF	8q12.1	-0.1808	0.000383	0.001629726
EXTL2	1p21.2	-0.1808	0.000383	0.001629726
FUBP1	1p31.1	0.1808	0.000383	0.001629726
FMR1NB	Xq27.3-q28	-0.1808	0.000383	0.001629726
JRK	8q24.3	-0.18075	0.000385	0.001635496
SIRPG	20p13	0.180741	0.000385	0.001636109
MRPL49	11q13.1	-0.18073	0.000385	0.001637635
DCAF11	14q12	0.18071	0.000386	0.001639213
SNORD116-4	15q11.2	-0.18069	0.000386	0.001640982
ADH1A	4q23	0.18069	0.000386	0.001640982
CDKN2A	9p21.3	-0.18069	0.000386	0.001640982
TUBB1	20q13.32	-0.18065	0.000387	0.001644952
CALM2	2p21	0.180596	0.000389	0.001651491
DNAJC15	13q14.11	-0.18059	0.000389	0.001651491
DPT	1q24.2	-0.18058	0.00039	0.001652678
TEX14	17q22	-0.18058	0.00039	0.001652678
POLR3B	12q23.3	0.180577	0.00039	0.001652678
UGCG	9q31.3	0.180561	0.00039	0.00165438
MAT2B	5q34	0.18052	0.000391	0.001659165
MINDY1	1q21.3	0.180508	0.000392	0.001660329
FBXL19	16p11.2	-0.18046	0.000393	0.001666218
PFDN5	12q13.13	-0.18045	0.000394	0.001666898
HDAC7	12q13.11	-0.18045	0.000394	0.001666898
C7ORF31	7p15.3	-0.18039	0.000395	0.001674282
U2SURP	3q23	-0.18038	0.000396	0.001675047
CA1	8q21.2	0.180373	0.000396	0.001675249
TNIP3	4q27	0.180335	0.000397	0.001679726
TSSC2	11p15.4	-0.18031	0.000398	0.001682135
LINC01278	Xq11.1	-0.18031	0.000398	0.001682385
CD151	11p15.5	-0.18031	0.000398	0.001682385
TMEM156	4p14	0.180295	0.000398	0.001683361
ARMCX1	Xq22.1	-0.18028	0.000399	0.00168505
MTRF1	13q14.11	-0.18028	0.000399	0.00168505
RNF38	9p13.2	-0.18026	0.000399	0.001686342
MGP	12p12.3	-0.18024	0.0004	0.001689451
METTL23	17q25.1	-0.18021	0.000401	0.001691821
POP7	7q22.1	-0.18021	0.000401	0.001692511
TBCK	4q24	-0.18018	0.000401	0.001695299
PRKCG	19q13.42	0.180172	0.000402	0.001696202
ZNF746	7q36.1	-0.18017	0.000402	0.001696655
NDUFAF8	17q25.3	-0.18012	0.000403	0.001702468
MED27	9q34.13	-0.18011	0.000404	0.001702636
LPIN1	2p25.1	0.180099	0.000404	0.001704246
HBA1	16p13.3	0.180084	0.000404	0.001705811
ZNF510	9q22.33	-0.18007	0.000405	0.001706748
TRIM54	2p23.3	-0.18003	0.000406	0.001711694
ZNF528	19q13.41	-0.18003	0.000406	0.001711759
DCUN1D3	16p12.3	-0.18002	0.000406	0.00171243

HES2	1p36.31	0.180003	0.000407	0.001714523
PPP1R9B	17q21.33	-0.17998	0.000408	0.001717568
IGLON5	19q13.41	-0.17996	0.000408	0.001719961
APEX2	Xp11.21	-0.17994	0.000409	0.00172107
PLD2	17p13.2	0.179941	0.000409	0.00172107
SELENOM	22q12.2	-0.17994	0.000409	0.001721352
NCOA3	20q13.12	-0.17993	0.000409	0.001722279
	1-Dec 9q33.1	-0.1799	0.00041	0.001724726
ZNF137P	19q13.41	-0.17987	0.000411	0.001728486
LRRC17	7q22.1	-0.17987	0.000411	0.001728486
OSTF1	9q21.13	0.179866	0.000411	0.001728714
THAP12	11q13.5	-0.17984	0.000412	0.001731838
FUT10	8p12	0.179825	0.000412	0.001733249
GCSH	16q23.2	-0.17982	0.000413	0.001733618
MLN	6p21.31	0.179779	0.000414	0.001738651
CLPSL2	6p21.31	-0.17971	0.000416	0.00174682
HYAL4	7q31.32	0.179629	0.000419	0.001757682
ATG9B	7q36.1	-0.17962	0.000419	0.001757906
TREX2	Xq28	-0.1796	0.00042	0.001760199
PSD3	8p22	0.1796	0.00042	0.001760199
ZNF713	7p11.2	-0.1796	0.00042	0.001760199
ARFGEF2	20q13.13	-0.17959	0.00042	0.001760802
ADRA2A	10q25.2	0.179572	0.00042	0.001763036
HABP2	10q25.3	0.179551	0.000421	0.001765408
ATP6AP1	Xq28	-0.17952	0.000422	0.001769406
SLC16A7	12q14.1	0.179516	0.000422	0.001769406
SYT3	19q13.33	-0.1795	0.000423	0.00177104
GALNT16	14q24.1	-0.1795	0.000423	0.00177104
CBLC	19q13.32	0.179479	0.000423	0.001773184
FXVD7	19q13.12	-0.17945	0.000424	0.001777056
KIAA1210	Xq24	-0.17944	0.000425	0.001777472
FUS	16p11.2	-0.17941	0.000426	0.001780978
OC90	8q24.22	-0.17939	0.000426	0.001783233
COMMD1	2p15	-0.17936	0.000427	0.001786977
N4BP2L2-IT2	13q13.1	-0.17936	0.000427	0.001786977
RGMB	5q15	-0.17934	0.000428	0.001789184
GOLGA5	14q32.12	0.179313	0.000429	0.001792526
ULK4P2	15q13.2	0.179303	0.000429	0.001793414
ANKRD40	17q21.33	-0.17928	0.00043	0.001795995
RAI2	Xp22.13	-0.17926	0.000431	0.001799057
ABHD17B	9q21.13	0.179199	0.000432	0.001806421
SPG11	15q21.1	0.179187	0.000433	0.001807656
KIAA1614	1q25.3	-0.17918	0.000433	0.001807747
SPATA6	1p33	0.179123	0.000435	0.001815645
GPX4	19p13.3	-0.17911	0.000435	0.001817421
AURKA	20q13.2	-0.1791	0.000436	0.001817421
SLC25A27	6p12.3	-0.1791	0.000436	0.001817421
PGBD4	15q14	-0.17907	0.000437	0.001821849
KLHL28	14q21.2	0.179064	0.000437	0.001821849
PLEKHA7	11p15.2-p15.1	0.179061	0.000437	0.001821882
SOX12	20p13	-0.17902	0.000438	0.001826464
C4ORF36	4q21.3	0.178998	0.000439	0.001829717
CLSTN3	12p13.31	-0.17899	0.000439	0.001830239
GLDC	9p24.1	-0.17899	0.000439	0.001830239
AZIN1	8q22.3	-0.17899	0.000439	0.001830239
MORC2	22q12.2	-0.17896	0.00044	0.001833296
C1ORF52	1p22.3	-0.17895	0.000441	0.001835082
ISLR2	15q24.1	-0.17894	0.000441	0.001835235



TMEM45B	11q24.3	0.178915	0.000442	0.001838339
AKR1A1	1p34.1	0.178912	0.000442	0.001838339
FBXL5	4p15.32	0.178911	0.000442	0.001838339
ALDH16A1	19q13.33	0.178867	0.000443	0.001843798
ZNF423	16q12.1	-0.17887	0.000443	0.001843798
DIO3	14q32.31	-0.17886	0.000444	0.001844277
BZW2	7p21.1	-0.17884	0.000444	0.001846613
RTP3	3p21.31	-0.1788	0.000445	0.001850868
DLL4	15q15.1	-0.1788	0.000445	0.001850868
POLG	15q26.1	0.17879	0.000446	0.001852459
TEDC1	14q32.33	0.178763	0.000447	0.001855761
CD68	17p13.1	0.178734	0.000448	0.001859459
EMC2	8q23.1	-0.17873	0.000448	0.001859705
FAM163B	9q34.2	-0.17872	0.000448	0.001860142
CELF3	1q21.3	-0.17872	0.000448	0.001860142
NDUFS7	19p13.3	0.178708	0.000449	0.001861585
SHLD1	20p12.3	-0.1787	0.000449	0.001862102
MKX	10p12.1	-0.17868	0.00045	0.0018648
SLC25A12	2q31.1	-0.17866	0.00045	0.001866662
GCC1	7q32.1	-0.17866	0.00045	0.001866698
WDYHV1	8q24.13	-0.17865	0.000451	0.001867759
GLCE	15q23	-0.1786	0.000452	0.001874959
PRKAG2	7q36.1	0.178591	0.000453	0.001875267
ARHGAP19	10q24.1	0.178548	0.000454	0.001880882
GGCT	7p14.3	-0.17854	0.000454	0.001881132
WASHC2C	10q11.22	0.178529	0.000455	0.001882779
SHC3	9q22.1	-0.17852	0.000455	0.00188413
OXNAD1	3p25.1-p24.3	0.178472	0.000457	0.001890099
TSTA3	8q24.3	0.178455	0.000457	0.00189215
RIDA	8q22.2	-0.17842	0.000458	0.001896252
THEMIS	6q22.33	0.178383	0.00046	0.001901589
PPTC7	12q24.11	0.178349	0.000461	0.001906003
LDHAL6B	15q22.2	0.178346	0.000461	0.001906003
FAM83D	20q11.23	-0.17833	0.000462	0.001908336
KRT8P41	11p15.4	0.17832	0.000462	0.001908988
TNFRSF1A	12p13.31	0.178283	0.000463	0.001913895
FXD3	19q13.12	0.178258	0.000464	0.001917052
KRTAP2-1	17q21.2	-0.17825	0.000464	0.001918162
AGPAT4-IT1	6q26	0.178223	0.000465	0.001921305
CCDC47	17q23.3	0.178204	0.000466	0.001923664
NKX2-2	20p11.22	0.178173	0.000467	0.001927401
AKAP12	6q25.1	-0.17817	0.000467	0.001927401
MSRB1	16p13.3	-0.17812	0.000469	0.001934719
LIN54	4q21.22	0.178108	0.000469	0.00193591
CSTB	21q22.3	0.17805	0.000471	0.001943915
TENT4B	16q12.1	-0.17801	0.000473	0.001949194
DDB2	11p11.2	0.178008	0.000473	0.001949194
TGM2	20q11.23	-0.178	0.000473	0.001950268
DPP4	2q24.2	0.177928	0.000476	0.001960125
ITSN1	21q22.11	0.177922	0.000476	0.001960557
CMTM4	16q21-q22.1	0.177917	0.000476	0.001961022
DNAJB14	4q23	0.177849	0.000478	0.001970549
TNS3	7p12.3	-0.17784	0.000479	0.001971823
LIN37	19q13.12	-0.17783	0.000479	0.001972498
RCHY1	4q21.1	0.177814	0.00048	0.001974536
NKIRAS2	17q21.2	-0.17776	0.000482	0.001982433
RCBTB1	13q14.2	-0.17775	0.000482	0.001982441
RPLP2	11p15.5	-0.17764	0.000486	0.001999376

ARF1	1q42.13	0.177633	0.000486	0.001999704
S100A5	1q21.3	0.177609	0.000487	0.00200293
SUSD5	3p22.3	-0.17761	0.000487	0.00200293
LGALS1	22q13.1	-0.17759	0.000488	0.002005452
CFAP126	1q23.3	0.177575	0.000488	0.002006775
ZNF473	19q13.33	-0.17755	0.000489	0.002010369
FNDC11	20q13.33	-0.17754	0.000489	0.002010501
LYZL4	3p22.1	0.177516	0.000491	0.002014355
LCAT	16q22.1	-0.17747	0.000492	0.002021201
TEX101	19q13.31	0.177451	0.000493	0.002023225
OSR2	8q22.2	0.177433	0.000494	0.002025537
S100A10	1q21.3	0.177422	0.000494	0.002026846
FAR2	12p11.22	0.177402	0.000495	0.002029457
RPLP0P2	11q12.2	-0.17739	0.000495	0.002030425
SLC2A14	12p13.31	-0.17739	0.000495	0.002030425
PIGN	18q21.33	0.177387	0.000495	0.002030425
GTF2H5	6q25.3	-0.17737	0.000496	0.002032194
TRAPPC12	2p25.3	-0.17731	0.000498	0.002040925
SLC27A3	1q21.3	0.177296	0.000499	0.002043062
IFI27L1	14q32.12	0.177285	0.000499	0.002043644
PNMA6A	Xq28	-0.17728	0.000499	0.002043644
CYP4F12	19p13.12	0.177284	0.000499	0.002043644
CLNK	4p16.1	0.177279	0.000499	0.002043898
MRPS27	5q13.2	0.177236	0.000501	0.002050094
ZNF260	19q13.12	-0.17722	0.000502	0.002052437
CCDC170	6q25.1	-0.17717	0.000503	0.002059375
NECTIN2	19q13.32	0.177167	0.000503	0.002059375
HEPH	Xq12	0.177145	0.000504	0.002062232
SMIM30	7q31.1	-0.17714	0.000504	0.002062232
GFM2	5q13.3	0.177074	0.000507	0.002072377
OR10A4	11p15.4	-0.17706	0.000508	0.002074814
ADPRH	3q13.33	-0.17704	0.000508	0.002077114
INTS8	8q22.1	-0.17703	0.000509	0.002077688
ZDHHC19	3q29	-0.17703	0.000509	0.002078047
TNS4	17q21.2	0.176999	0.00051	0.002081836
MRPS35	12p11.22	0.176988	0.00051	0.002083212
RAD54B	8q22.1	-0.17698	0.00051	0.002083421
KSR2	12q24.22-q24.23	0.176965	0.000511	0.002085967
PFDN6	6p21.32	-0.17692	0.000513	0.002091704
WASH7P	1p36.33	-0.17692	0.000513	0.002091704
FCRL4	1q23.1	0.176878	0.000514	0.002098155
OVOL2	20p11.23	0.176841	0.000516	0.002103539
TMEM234	1p35.2	-0.17683	0.000516	0.0021054
TRIM13	13q14.2	-0.17681	0.000517	0.002107744
RNF215	22q12.2	-0.17681	0.000517	0.002107744
ZNF595	4p16.3	-0.17679	0.000518	0.002108886
MAP4K1	19q13.2	0.176791	0.000518	0.002108886
LINC01011	6p25.2	0.17679	0.000518	0.002108886
ISLR	15q24.1	-0.17677	0.000518	0.00211092
FILIP1L	3q12.1	-0.17677	0.000519	0.002111301
ZCCHC17	1p35.2	-0.17675	0.000519	0.002113879
MYADML2	17q25.3	-0.17673	0.00052	0.002115886
SLC2A10	20q13.12	0.17672	0.00052	0.002117756
ZSCAN9	6p22.1	-0.17671	0.000521	0.00211946
GABPB2	1q21.3	0.176679	0.000522	0.002123245
RGP1	9p13.3	0.176677	0.000522	0.002123245
GZMA	5q11.2	0.176672	0.000522	0.002123594
NLRC5	16q13	0.176661	0.000523	0.002124861

BMT2	7q31.1	-0.17663	0.000524	0.002129493
PDCL3P4	3q12.3	-0.17662	0.000524	0.002129493
PMS2P2	7q11.23	-0.17662	0.000524	0.002129493
SLC22A18	11p15.4	0.176621	0.000524	0.002129493
NCL	2q37.1	-0.17661	0.000525	0.002130661
MEIS1	2p14	-0.17661	0.000525	0.002130705
CAPS2	12q21.1-q21.2	-0.1766	0.000525	0.002131156
MRPS26	20p13	-0.1766	0.000525	0.002131783
MAGEA4	Xq28	-0.17657	0.000526	0.002135095
CD177	19q13.31	0.176551	0.000527	0.002137943
CAPZA1	1p13.2	0.176535	0.000528	0.00213988
PLAGL1	6q24.2	-0.17653	0.000528	0.00213988
BMF	15q15.1	-0.17652	0.000528	0.002141703
PPIP5K1	15q15.3	0.176495	0.000529	0.002145207
JPH3	16q24.2	-0.17647	0.00053	0.002148591
TMC4	19q13.42	0.176459	0.000531	0.002150008
CXXC5	5q31.2	-0.17646	0.000531	0.002150008
TMEM130	7q22.1	-0.17643	0.000532	0.002153108
UQCRC1	3p21.31	0.176387	0.000533	0.002160146
ZNF534	19q13.41	-0.17637	0.000534	0.002161775
CNOT6	5q35.3	0.176311	0.000536	0.002171275
OVOL1	11q13.1	-0.17631	0.000537	0.002171275
FAM126B	2q33.1	0.176303	0.000537	0.002171875
CD164	6q21	0.176277	0.000538	0.002175702
ARHGEF33	2p22.1	-0.17626	0.000538	0.002177334
MS4A1	11q12.2	0.176259	0.000539	0.002177663
ANKDD1A	15q22.31	-0.17625	0.000539	0.002178446
CMYA5	5q14.1	-0.17624	0.000539	0.002178828
LMAN1	18q21.32	0.176243	0.000539	0.002178828
NSUN6	10p12.31	-0.17624	0.000539	0.002178828
MIR100HG	11q24.1	-0.17623	0.00054	0.002179954
ACBD6	1q25.2-q25.3	-0.17623	0.00054	0.002180453
LMBRD2	5p13.2	0.176213	0.00054	0.002181305
PPIC	5q23.2	0.176212	0.00054	0.002181305
DUBR	3q13.12	-0.17621	0.00054	0.002181305
MAZ	16p11.2	-0.1762	0.000541	0.002182556
RECQL4	8q24.3	-0.17619	0.000541	0.002184152
CRTAM	11q24.1	0.176187	0.000541	0.002184152
IFNGR1	6q23.3	0.176145	0.000543	0.002190473
SMC2	9q31.1	0.176074	0.000546	0.002201476
SLC6A1	3p25.3	-0.17604	0.000547	0.00220633
PTPRT	20q12-q13.11	-0.17599	0.000549	0.002214186
ARSE	Xp22.33	-0.17596	0.00055	0.00221779
CARF	2q33.2	-0.17596	0.00055	0.00221779
APOBEC3C	22q13.1	-0.17594	0.000551	0.002221267
SQLE	8q24.13	-0.17593	0.000552	0.002221987
HS3ST1	4p15.33	0.175901	0.000553	0.002226817
MORN3	12q24.31	-0.17587	0.000554	0.002231244
MAGED4	Xp11.22	-0.17587	0.000554	0.002231244
PLPP3	1p32.2	-0.1758	0.000557	0.00224165
ESD	13q14.2	-0.17578	0.000558	0.00224484
FIBP	11q13.1	-0.17574	0.00056	0.002251362
CIITA	16p13.13	0.175722	0.00056	0.00225374
LCA5	6q14.1	-0.17569	0.000562	0.002258956
POLR3GL	1q21.1	0.175655	0.000563	0.002263897
SDK2	17q25.1	0.175637	0.000564	0.00226654
MBTD1	17q21.33	-0.17561	0.000565	0.002270303
NPY6R	5q31.2	0.175574	0.000567	0.002276194

TBRG4	7p13	-0.17555	0.000568	0.002280348
MOCS1	6p21.2	-0.17552	0.000569	0.002283588
LRRC75B	22q11.23	-0.17549	0.00057	0.002289776
DLX5	7q21.3	-0.17548	0.00057	0.002289817
ALDOA	16p11.2	0.175459	0.000571	0.002293264
VOPP1	7p11.2	-0.17542	0.000573	0.002299149
PPM1F	22q11.22	-0.17537	0.000575	0.002306878
CPSF7	11q12.2	-0.17535	0.000576	0.002310961
TRABD	22q13.33	0.175311	0.000578	0.00231652
BRIX1	5p13.2	-0.17528	0.000579	0.002320655
POLR1C	6p21.1	-0.17527	0.000579	0.002322916
EPG5	18q12.3-q21.1	0.175245	0.000581	0.002326545
MTCH2	11p11.2	-0.17524	0.000581	0.002326898
CD63	12q13.2	0.175235	0.000581	0.002326898
EFHC2	Xp11.3	0.175235	0.000581	0.002326898
ZNF665	19q13.42	-0.17521	0.000582	0.002329808
FCER2	19p13.2	0.175189	0.000583	0.00233373
TTC38	22q13.31	0.175163	0.000584	0.00233784
CLEC2L	7q34	-0.17514	0.000585	0.002341687
FGL1	8p22	0.17513	0.000585	0.002342536
ATAD3C	1p36.33	-0.17512	0.000586	0.002343041
KCNG3	2p21	0.175115	0.000586	0.002344274
SATB2	2q33.1	-0.17511	0.000586	0.002344316
BBS7	4q27	0.175105	0.000587	0.00234502
TBC1D1	4p14	0.175098	0.000587	0.002345704
ZFP36	19q13.2	0.175086	0.000587	0.002347394
IGF1R	15q26.3	-0.17502	0.00059	0.002358176
EGF	4q25	0.175018	0.00059	0.002358176
NXF2	Xq22.1	-0.17499	0.000592	0.002362997
BFSP1	20p12.1	-0.17498	0.000592	0.002363655
SESN2	1p35.3	0.174974	0.000592	0.002364382
RBM4B	11q13.2	-0.17496	0.000593	0.002366121
ZNF549	19q13.43	-0.17495	0.000593	0.002367374
PRPF8	17p13.3	0.174902	0.000595	0.002375615
RPUSD1	16p13.3	-0.17489	0.000596	0.002376873
CD40LG	Xq26.3	0.174848	0.000598	0.002383553
CD79A	19q13.2	0.174847	0.000598	0.002383553
PPP2R2D	10q26.3	0.174845	0.000598	0.002383553
ACR	22q13.33	-0.17483	0.000599	0.002386006
HEYL	1p34.2	-0.17482	0.000599	0.002387172
CENPJ	13q12.12-q12.13	-0.17477	0.000601	0.002394643
GRM8	7q31.33	-0.17476	0.000601	0.002395839
NEB	2q23.3	-0.17475	0.000602	0.002398392
DRG1	22q12.2	-0.17469	0.000604	0.002407265
SCN4A	17q23.3	-0.17469	0.000605	0.002407493
GUCY1B1	4q32.1	-0.1746	0.000609	0.00242242
LHFPL6	13q13.3-q14.11	-0.17456	0.00061	0.00242957
BHLHE40	3p26.1	0.174555	0.000611	0.002430201
HIGD1A	3p22.1	0.174539	0.000611	0.00243204
NDUFS4	5q11.2	0.174539	0.000611	0.00243204
NEUROD2	17q12	0.174512	0.000613	0.002436422
RANBP6	9p24.1	-0.17449	0.000614	0.002440081
CAND2	3p25.2	-0.17445	0.000615	0.002446467
POU6F2	7p14.1	-0.17444	0.000616	0.002447686
PHF10	6q27	-0.17444	0.000616	0.002447699
KRT34	17q21.2	-0.17442	0.000617	0.002450775
PLAAT4	11q12.3	0.174404	0.000618	0.002452803
IL1B	2q14.1	0.174363	0.000619	0.002459724

POLI	18q21.2	-0.17432	0.000621	0.002466664
GPRASP2	Xq22.1	-0.17432	0.000621	0.002467031
ATP5PB	1p13.2	0.174303	0.000622	0.002469075
LY9	1q23.3	0.174276	0.000623	0.002473498
HSPB3	5q11.2	-0.17426	0.000624	0.00247509
CLU	8p21.1	-0.17426	0.000624	0.002475761
MFGE8	15q26.1	-0.17423	0.000625	0.002480431
DUSP11	2p13.1	-0.17417	0.000628	0.002490291
TBC1D32	6q22.31	-0.17415	0.000629	0.002494279
SLC4A3	2q35	-0.17413	0.00063	0.002497759
FXR2	17p13.1	0.174112	0.000631	0.002499867
C9ORF24	9p13.3	0.174105	0.000631	0.002500741
TAS2R5	7q34	-0.17409	0.000632	0.002503108
ZNF347	19q13.42	-0.17407	0.000633	0.002506668
HYDIN	16q22.2	-0.17406	0.000633	0.002508126
KXD1	19p13.11	-0.17403	0.000635	0.002512244
BEND4	4p13	0.174024	0.000635	0.002512417
ITK	5q33.3	0.174023	0.000635	0.002512417
FADS2	11q12.2	-0.17402	0.000635	0.002512417
MOSPD3	7q22.1	-0.17402	0.000635	0.002513069
EEF1A2	20q13.33	-0.17399	0.000637	0.002517234
SLC17A4	6p22.2	0.173988	0.000637	0.002517234
LCMT1	16p12.1	-0.17398	0.000637	0.002518954
PHF11	13q14.2	-0.17397	0.000637	0.00251933
EMG1	12p13.31	-0.17392	0.00064	0.002528295
DMRTC1B	Xq13.1	-0.17387	0.000642	0.002537343
ESCO1	18q11.2	0.173823	0.000644	0.002545351
TFCP2	12q13.12-q13.13	-0.17374	0.000648	0.002559472
WDR41	5q13.3-q14.1	0.173726	0.000649	0.002562393
DEPDC1	1p31.3	0.173702	0.00065	0.002566326
WDR5	9q34.2	-0.1737	0.00065	0.002566466
ABHD10	3q13.2	0.173679	0.000651	0.002569373
SH3BP2	4p16.3	0.173678	0.000651	0.002569373
NPIPA1	16p13.11	-0.17367	0.000652	0.00257012
NOSIP	19q13.33	-0.17366	0.000652	0.00257111
ZNF480	19q13.41	-0.17365	0.000652	0.002572464
ZNF506	19p13.11	-0.17359	0.000655	0.00258339
ILRUN	6p21.31	0.173568	0.000656	0.002587556
GUCA2B	1p34.2	0.173524	0.000659	0.002595373
TMEM65	8q24.13	-0.17351	0.000659	0.002597826
LOC100126784	11p15.1	-0.17348	0.000661	0.002601859
SMIM10L2A	Xq26.3	-0.17348	0.000661	0.002602133
RFTN2	2q33.1	-0.17347	0.000661	0.002603708
C5ORF22	5p13.3	0.173466	0.000661	0.002603832
TCEAL7	Xq22.2	-0.17345	0.000662	0.00260598
MUC21	6p21.33	-0.17345	0.000662	0.002606258
CHRAC1	8q24.3	-0.17341	0.000664	0.002613565
NGF	1p13.2	-0.17338	0.000666	0.00261838
FCRL3	1q23.1	0.173373	0.000666	0.002619058
CYB5B	16q22.1	-0.17336	0.000667	0.002620552
DLG4	17p13.1	-0.17336	0.000667	0.002620552
RNF212	4p16.3	-0.17333	0.000668	0.002625928
SCFD1	14q12	0.173314	0.000669	0.002628259
GPR161	1q24.2	-0.17328	0.000671	0.002635115
TNFRSF14	1p36.32	0.17322	0.000673	0.002645228
ACSS2	20q11.22	0.173211	0.000674	0.002646412
CLEC11A	19q13.33	-0.17318	0.000675	0.002652086
SUSD1	9q31.3-q32	-0.17317	0.000676	0.002652856

KDM2B	12q24.31	-0.17316	0.000676	0.002655125
ZNF582	19q13.43	-0.17311	0.000679	0.002663823
MRPS33	7q34	-0.17307	0.000681	0.002671584
CBLB	3q13.11	0.173058	0.000681	0.002673072
TBC1D31	8q24.13	-0.17305	0.000682	0.002673867
ZNF790	19q13.12	-0.17305	0.000682	0.002673867
TNFSF15	9q32	0.173042	0.000682	0.002674561
ZNF446	19q13.43	-0.17303	0.000683	0.002677141
MMP23B	1p36.33	-0.17301	0.000684	0.002679092
NSD1	5q35.3	0.172989	0.000685	0.002683277
FAM27C	9q13	0.172944	0.000687	0.002691551
SMARCD3	7q36.1	-0.17293	0.000688	0.002693389
CEP97	3q12.3	0.172926	0.000688	0.002694002
BLK	8p23.1	0.172918	0.000688	0.002695079
SLC25A11	17p13.2	0.172879	0.00069	0.00270218
ENOX1	13q14.11	-0.17288	0.00069	0.00270218
LIN7A	12q21.31	-0.17286	0.000691	0.002704517
HSD3B7	16p11.2	0.172812	0.000694	0.002713806
RASD1	17p11.2	0.172802	0.000694	0.002715401
TOB1	17q21.33	0.172766	0.000696	0.002721893
SFTA2	6p21.33	-0.17264	0.000702	0.002746018
LGALS9B	17p11.2	0.172634	0.000703	0.002747004
KIAA0355	19q13.11	-0.17263	0.000703	0.002747015
RNF166	16q24.2-q24.3	-0.17263	0.000703	0.002747015
PGGHG	11p15.5	-0.17262	0.000704	0.002748628
ROCK1	18q11.1	0.172566	0.000706	0.002758556
RCAN1	21q22.12	0.172557	0.000707	0.00275983
TFAM	10q21.1	-0.17252	0.000708	0.002766074
MORC4	Xq22.3	0.172492	0.00071	0.002771854
CLDN2	Xq22.3	0.172478	0.000711	0.002774087
CASK	Xp11.4	-0.17247	0.000711	0.002774544
SPTBN1	2p16.2	0.172455	0.000712	0.002777561
SMIM11A	21q22.11-q22.12	-0.17244	0.000713	0.002780059
IGFBP4	17q21.2	-0.17242	0.000714	0.002783236
ZNHIT6	1p22.3	-0.17242	0.000714	0.002783236
SPSB3	16p13.3	-0.17241	0.000714	0.002783607
LOC374443	12p13.31	-0.1724	0.000715	0.002785282
TMEM160	19q13.32	-0.1724	0.000715	0.002785569
ZNF415	19q13.42	-0.17238	0.000716	0.002789338
NFYA	6p21.1	-0.17235	0.000717	0.002794944
BBS12	4q27	0.172312	0.000719	0.002801698
TWF1	12q12	0.172309	0.000719	0.002801722
ADIPOR2	12p13.33	0.172258	0.000722	0.002811562
PDE3A	12p12.2	-0.17225	0.000723	0.002812946
EFCAB8	20q11.21	-0.17224	0.000723	0.002813461
LRIG3	12q14.1	0.172222	0.000724	0.002817258
ATP10D	4p12	0.172217	0.000724	0.00281781
HS2ST1	1p22.3	-0.1722	0.000725	0.002819771
TNFRSF13B	17p11.2	0.172195	0.000725	0.002821191
ZNRD2	11q13.1	-0.17214	0.000728	0.002832253
PDE1A	2q32.1	-0.17212	0.00073	0.002836392
POLB	8p11.21	-0.17211	0.00073	0.002836751
SETX	9q34.13	0.172108	0.00073	0.002836751
LOXL3	2p13.1	-0.17209	0.000731	0.002839344
NACC1	19p13.13	0.172077	0.000732	0.00284216
PTGES2-AS1	9q34.11	-0.17207	0.000732	0.00284285
SNPH	20p13	0.17205	0.000733	0.002846422
ARHGEF10	8p23.3	0.172012	0.000735	0.002853915

ELF1	13q14.11	-0.17198	0.000737	0.002859845
MAMLD1	Xq28	0.171977	0.000737	0.002859845
GRP	18q21.32	-0.17196	0.000738	0.002862983
PWARSN	15q11.2	-0.17195	0.000738	0.002864402
NFIB	9p23-p22.3	0.171938	0.000739	0.002865748
RRP8	11p15.4	-0.17194	0.000739	0.002865748
POC1B	12q21.33	0.171925	0.00074	0.002867651
RAX	18q21.32	-0.17192	0.00074	0.002867651
ZSCAN20	1p35.1	-0.17191	0.000741	0.002870608
STN1	10q24.33	0.171876	0.000742	0.002875924
PJA2	5q21.3	0.171876	0.000742	0.002875924
CCDC88C	14q32.11-q32.12	0.171873	0.000743	0.002875924
PHETA1	12q24.12	0.171842	0.000744	0.00288187
CORO6	17q11.2	-0.17183	0.000745	0.002884283
ADGRD1	12q24.33	-0.1718	0.000746	0.002889157
NOL7	6p23	-0.17179	0.000747	0.002891886
MAPK8IP1P2	17q21.31	-0.17174	0.00075	0.00289992
GABPB1-AS1	15q21.2	-0.17174	0.00075	0.00289992
PHC1	12p13.31	-0.17171	0.000751	0.002906378
TNNI3	19q13.42	-0.17171	0.000752	0.002906378
ATOX1	5q33.1	-0.17169	0.000752	0.002909088
WFDC10B	20q13.12	-0.17169	0.000753	0.00290912
PNPLA4	Xp22.31	-0.17167	0.000753	0.002911452
DDN	12q13.12	-0.17162	0.000756	0.002921327
LSAMP	3q13.31	-0.17162	0.000756	0.002921763
CDH16	16q22.1	0.171611	0.000757	0.002923033
MPV17L	16p13.11	-0.17158	0.000758	0.002928822
CADM1	11q23.3	-0.17157	0.000759	0.002930676
SPARC	5q33.1	-0.17156	0.00076	0.002932527
LARGE1	22q12.3	0.171529	0.000761	0.002938261
ECPAS	9q31.3	0.17149	0.000763	0.002945928
CDRT4	17p12	0.171435	0.000766	0.002956967
ARMC12	6p21.31	-0.17143	0.000767	0.002958399
TMEM161B	5q14.3	0.171422	0.000767	0.002958632
THSD7B	2q22.1	-0.17142	0.000767	0.002958779
THY1	11q23.3	-0.1714	0.000769	0.002962691
ST13P4	13q14.2	-0.17139	0.000769	0.002962903
CORIN	4p12	-0.17139	0.000769	0.002962906
RHOV	15q15.1	0.171387	0.000769	0.00296342
NALCN	13q32.3-q33.1	-0.17138	0.00077	0.002964859
NRBP1	2p23.3	-0.17137	0.00077	0.002964859
C6ORF223	6p21.1	-0.17137	0.00077	0.002965118
CD28	2q33.2	0.171312	0.000773	0.002977099
ZC3H12A	1p34.3	0.171292	0.000774	0.002980831
EPM2AIP1	3p22.2	-0.17126	0.000776	0.002987533
ZNF365	10q21.2	-0.17125	0.000777	0.002988345
GLIS2	16p13.3	-0.17123	0.000778	0.00299189
CAMSAP2	1q32.1	-0.17123	0.000778	0.00299189
EIPR1	2p25.3	-0.17122	0.000778	0.002992709
WARS	14q32.2	0.171215	0.000779	0.0029939
RCC1L	7q11.23	-0.1712	0.00078	0.002997185
ZG16	16p11.2	0.171165	0.000782	0.003003744
MMP20	11q22.2	-0.17114	0.000783	0.003008041
DBI	2q14.2	-0.17114	0.000783	0.003008505
ARHGEF17	11q13.4	-0.1711	0.000785	0.003016666
WASL	7q31.32	0.171071	0.000787	0.003021662
STRN3	14q12	0.171067	0.000787	0.00302202
IL2RB	22q12.3	0.17105	0.000788	0.003025239

ERO1A	14q22.1	0.171045	0.000788	0.003025738
PPM1E	17q22	-0.17099	0.000792	0.003037631
MVB12A	19p13.11	-0.17097	0.000792	0.003040049
IL4R	16p12.1	0.170968	0.000793	0.003040833
LINC00052	15q25.3	-0.17095	0.000794	0.003044352
ZNF668	16p11.2	-0.17092	0.000795	0.003049863
ATP5CKMT	5p15.2	-0.1709	0.000796	0.003052525
TMED2	12q24.31	0.170904	0.000796	0.003052525
ZNF831	20q13.32	0.170855	0.000799	0.003062723
SAXO2	15q25.2	0.170822	0.000801	0.003069278
URAHP	16q24.3	-0.17082	0.000801	0.00306988
TMEM168	7q31.1	0.170781	0.000803	0.003077339
PACS1	11q13.1-q13.2	-0.17072	0.000807	0.003089469
SLC35F1	6q22.2-q22.31	-0.17072	0.000807	0.003089469
PROCA1	17q11.2	-0.17071	0.000807	0.003090156
TTC30A	2q31.2	-0.17068	0.000809	0.003096582
MSRB3	12q14.3	-0.17067	0.00081	0.003099826
SERF1A	5q13.2	-0.17065	0.000811	0.003102017
CXXC4	4q24	-0.17062	0.000813	0.003108365
ARRDC5	19p13.3	0.17062	0.000813	0.003108365
DNAJA4	15q25.1	0.170609	0.000813	0.003110091
ZNF568	19q13.12	-0.17046	0.000822	0.003143473
ZNF439	19p13.2	-0.17046	0.000822	0.003143473
PMPCB	7q22.1	-0.17043	0.000824	0.003148466
LMOD3	3p14.1	-0.17042	0.000825	0.003150364
BTN3A3	6p22.2	0.170413	0.000825	0.003151207
RAB34	17q11.2	-0.17039	0.000826	0.003155821
ITGBL1	13q33.1	-0.17034	0.000829	0.00316655
CSTF3	11p13	-0.17031	0.000831	0.003171968
BCL2	18q21.33	0.170311	0.000831	0.003172001
POMK	8p11.21	0.1703	0.000832	0.003173994
ITPRID1	7p14.3	0.170287	0.000832	0.003176222
S1PR3	9q22.1	-0.17028	0.000833	0.003176855
KIAA0319	6p22.3	0.170223	0.000836	0.003189664
SAP18	13q12.11	-0.17018	0.000839	0.003198215
MAPK13	6p21.31	-0.17018	0.000839	0.003198215
TTI2	8p12	0.170163	0.00084	0.003201607
LMO3	12p12.3	-0.17015	0.000841	0.003204228
ZNF514	2q11.1	-0.1701	0.000844	0.003214295
LILRP2	19q13.42	0.170055	0.000846	0.003224658
ENPEP	4q25	-0.17004	0.000848	0.003228178
ULK4P3	15q13.2	0.170009	0.000849	0.003233511
METTL15	11p14.1	0.170008	0.000849	0.003233511
LAMTOR4	7q22.1	-0.17001	0.000849	0.003233511
CUX1	7q22.1	-0.17	0.00085	0.003235091
MTHFD1	14q23.3	0.169984	0.000851	0.00323747
CMTM1	16q21	0.169933	0.000854	0.003248602
SUSD6	14q24.1	0.169928	0.000854	0.003249139
ARMCX3	Xq22.1	-0.16992	0.000855	0.003250475
ZNF474	5q23.2	-0.1699	0.000856	0.003254426
BLZF1	1q24.2	0.169897	0.000856	0.003254426
PBLD	10q21.3	0.169886	0.000857	0.003256395
TMEM240	1p36.33	-0.16988	0.000857	0.003258136
ZNF585A	19q13.12	-0.16987	0.000858	0.003258356
LAYN	11q23.1	-0.16987	0.000858	0.003258356
QTRT1	19p13.2	-0.16985	0.000859	0.003262158
KLHL4	Xq21.31	-0.16985	0.000859	0.003262316
PTPN22	1p13.2	0.169836	0.00086	0.00326434



YLPM1	14q24.3	0.169826	0.00086	0.003266141
CUL3	2q36.2	-0.16982	0.000861	0.003266141
KLC3	19q13.32	-0.16982	0.000861	0.003266141
RNF121	11q13.4	-0.16982	0.000861	0.003266141
DONSON	21q22.11	0.169798	0.000862	0.003270204
IER5L	9q34.11	-0.16979	0.000863	0.003271096
NMU	4q12	0.169728	0.000866	0.00328535
PRSS30P	16p13.3	-0.16966	0.000871	0.003300497
ZFYVE21	14q32.33	0.169646	0.000872	0.003303546
SUGT1P3	13q14.11	-0.16956	0.000877	0.003323656
ZC3H18	16q24.2	-0.16956	0.000877	0.003323656
CNTNAP5	2q14.3	-0.16955	0.000878	0.003325408
EEF1G	11q12.3	-0.16954	0.000878	0.003326746
CD22	19q13.12	0.169526	0.000879	0.003328779
SLC41A3	3q21.2-q21.3	-0.16951	0.00088	0.003331991
SSR3	3q25.31	0.169507	0.00088	0.003332078
ITGB8	7p21.1	-0.16948	0.000882	0.003338886
PDE4B	1p31.3	0.169453	0.000884	0.003343546
ZBED6CL	7q36.1	-0.16945	0.000884	0.003344456
SNORD116-28	15q11.2	-0.16944	0.000885	0.003345584
ACBD7	10p13	-0.16942	0.000885	0.00334844
BLOC1S1	12q13.2	0.169353	0.00089	0.003365038
CALM1	14q32.11	0.169321	0.000892	0.003372218
ESRP2	16q22.1	0.169306	0.000893	0.003375054
PAX4	7q32.1	0.169295	0.000894	0.003377131
ZMAT4	8p11.21	-0.16928	0.000895	0.003379431
RAP1GAP2	17p13.3	0.169265	0.000896	0.003383107
ALKAL1	8q11.23	-0.16926	0.000896	0.00338365
KIF14	1q32.1	0.169257	0.000896	0.00338365
PTPN13	4q21.3	0.169224	0.000898	0.003391022
DOCK6	19p13.2	-0.16921	0.000899	0.003392831
OPCML	11q25	-0.16921	0.000899	0.003393142
TMEM107	17p13.1	0.169193	0.0009	0.003396555
PIBF1	13q21.33-q22.1	-0.16918	0.000901	0.003398054
MAP1A	15q15.3	-0.16916	0.000902	0.003402268
GPX2	14q23.3	-0.16916	0.000903	0.003403508
LINC01257	12q24.33	-0.16911	0.000906	0.003415347
GATD3A	21q22.3	0.169048	0.00091	0.003428747
SLC9B2	4q24	-0.16904	0.00091	0.003430837
OGN	9q22.31	-0.16903	0.000911	0.003432593
MGC16142	-	-0.16901	0.000912	0.00343576
PYHIN1	1q23.1	0.169	0.000913	0.003437629
GIGYF1	7q22.1	-0.169	0.000913	0.003437629
COPG2	7q32.2	-0.169	0.000913	0.003437721
PDGFC	4q32.1	-0.16899	0.000914	0.00343892
POLM	7p13	-0.16896	0.000915	0.003444026
CD69	12p13.31	0.168958	0.000915	0.0034444
PIK3C3	18q12.3	0.168956	0.000916	0.0034444
DNASE1L3	3p14.3	0.168955	0.000916	0.0034444
LOXL4	10q24.2	-0.16893	0.000917	0.003449945
CTSD	11p15.5	0.168925	0.000918	0.003450461
JAK1	1p31.3	0.168913	0.000918	0.003452723
GPR82	Xp11.4	0.1689	0.000919	0.003455243
PIP	7q34	0.168898	0.000919	0.003455243
CLECL1	12p13.31	0.16889	0.00092	0.003456411
SLC25A15	13q14.11	-0.16888	0.000921	0.003459346
CLIC4	1p36.11	-0.16885	0.000923	0.003465754
SLC4A10	2q24.2	0.168804	0.000926	0.003475669

EIF3CL	16p12.1	-0.16879	0.000927	0.003479296
CENPT	16q22.1	-0.16878	0.000927	0.003479603
CIRBP-AS1	19p13.3	0.16878	0.000927	0.003479613
TAAR1	6q23.2	0.168744	0.00093	0.003488068
MTF2	1p22.1	-0.16872	0.000931	0.003492769
LAX1	1q32.1	0.168718	0.000931	0.003492769
HSD3B2	1p12	0.168717	0.000931	0.003492769
CCZ1	7p22.1	-0.16867	0.000934	0.003503858
CD163L1	12p13.31	0.168522	0.000944	0.003540063
CADM4	19q13.31	-0.16848	0.000947	0.00354905
ZNF706	8q22.3	-0.16847	0.000948	0.003551318
FCRL5	1q23.1	0.168459	0.000949	0.003554112
MTIF3	13q12.2	-0.16842	0.000951	0.003563476
RAPGEFL1	17q21.1	0.168372	0.000954	0.003574647
PDIA5	3q21.1	0.168359	0.000955	0.003576972
KLHL26	19p13.11	0.168358	0.000955	0.003576972
DUSP9	Xq28	-0.16835	0.000956	0.003579515
SCG5	15q13.3	0.168328	0.000957	0.003583238
ZNF343	20p13	-0.16825	0.000963	0.003603152
ELK1	Xp11.23	-0.16822	0.000965	0.003608866
ELFN1	7p22.3	-0.1682	0.000966	0.003614311
HERC5	4q22.1	-0.16819	0.000967	0.003615736
ARMC5	16p11.2	-0.16818	0.000968	0.003618927
DPYSL2	8p21.2	0.16817	0.000968	0.003619467
NEUROD1	2q31.3	-0.16816	0.000969	0.003620624
UBXN2A	2p23.3	-0.1681	0.000973	0.003636775
UBASH3B	11q24.1	0.168061	0.000976	0.003645028
MRPL18	6q25.3	-0.16806	0.000976	0.003645028
FSTL5	4q32.2	-0.16805	0.000976	0.003646001
CD180	5q12.3	0.168046	0.000977	0.003647097
MORN5	9q33.2	-0.16804	0.000977	0.003647097
ZNF788P	19p13.2	-0.16803	0.000978	0.003649058
SRP54	14q13.2	0.168029	0.000978	0.003649058
STAM2	2q23.3	0.168029	0.000978	0.003649058
PDK3	Xp22.11	-0.16803	0.000978	0.003649058
STAR	8p11.23	0.168008	0.000979	0.003652648
TM4SF20	2q36.3	0.168007	0.000979	0.003652648
LINC01555	1p22.3	-0.168	0.00098	0.003654986
CALHM5	6q22.1	-0.16797	0.000982	0.003661559
GPCPD1	20p12.3	-0.16795	0.000983	0.003664619
BEX2	Xq22.2	-0.16792	0.000986	0.003673154
C19ORF57	19p13.12	0.167894	0.000987	0.003678591
FAM66C	12p13.31	-0.16789	0.000988	0.003680205
KIF1A	2q37.3	-0.16787	0.000989	0.003683728
MAPK1IP1L	14q22.3	0.167859	0.00099	0.003685797
NFATC4	14q12	-0.16785	0.00099	0.003686966
CPD	17q11.2	0.16781	0.000993	0.003697138
HFM1	1p22.2	-0.16779	0.000994	0.003700699
CASC3	17q21.1	-0.16779	0.000995	0.0037014
HEY1	8q21.13	-0.16777	0.000996	0.00370623
PANX1	11q21	-0.16776	0.000996	0.00370623
SLC18A1	8p21.3	0.167714	0.001	0.003718922
MTLN	2q13	-0.16771	0.001	0.003719044
PDIA6	2p25.1	-0.1677	0.001001	0.003721866
CCNE1	19q12	-0.16769	0.001002	0.00372435
CCDC24	1p34.1	-0.16765	0.001004	0.003732741
ST3GAL2	16q22.1	-0.16755	0.001012	0.003758497
MYLK4	6p25.2	-0.16754	0.001013	0.003761656

WHAMMP2	15q13.1	-0.16752	0.001014	0.00376454
DCK	4q13.3	0.167498	0.001015	0.003770489
CLEC2A	12p13.31	-0.1675	0.001016	0.003770489
RNASE1	14q11.2	0.167448	0.001019	0.003781771
PPP1R16B	20q11.23	0.167448	0.001019	0.003781771
RGS13	1q31.2	0.167393	0.001023	0.003795714
TGFB2	1q41	-0.16733	0.001027	0.003811415
TPRG1L	1p36.32	0.167326	0.001028	0.003812389
PLEKHS1	10q25.3	0.167323	0.001028	0.003812494
SGIP1	1p31.3	-0.1673	0.00103	0.003819175
TAF5L	1q42.13	0.167293	0.00103	0.003819198
LPP	3q27.3-q28	0.167279	0.001031	0.003821604
RARS2	6q15	-0.16728	0.001031	0.003821604
MOSMO	16p12.2	-0.16728	0.001031	0.003821604
NICN1	3p21.31	-0.16723	0.001035	0.003833163
PITX2	4q25	-0.1672	0.001037	0.003839045
CD160	1q21.1	0.167203	0.001037	0.003839045
NCR1	19q13.42	0.167201	0.001037	0.003839045
GDAP1	8q21.11	-0.16718	0.001039	0.003844782
VSTM2L	20q11.23	-0.16716	0.00104	0.003847623
CD27	12p13.31	0.167162	0.00104	0.003847623
SEMA3B	3p21.31	0.167145	0.001041	0.003851344
PLXNA3	Xq28	-0.16714	0.001041	0.003851344
HOXC6	12q13.13	0.167131	0.001042	0.003853605
RPLP1	15q23	-0.16713	0.001042	0.003853605
CXCR3	Xq13.1	-0.16712	0.001043	0.003854406
CEP89	19q13.11	-0.16712	0.001043	0.003854406
NT5DC3	12q23.3	0.167055	0.001048	0.003871574
CRYBA2	2q35	0.167028	0.00105	0.003878427
DTL	1q32.3	0.167021	0.00105	0.003879434
INS-IGF2	11p15.5	-0.16699	0.001052	0.003887366
ZNF513	2p23.3	-0.16696	0.001055	0.00389504
CPE	4q32.3	-0.16695	0.001055	0.003895917
RNF168	3q29	0.1669	0.001059	0.003909696
ASL	7q11.21	0.166894	0.00106	0.003910694
MCUR1	6p23	-0.16689	0.00106	0.003910804
CDCA2	8p21.2	0.166874	0.001061	0.003914709
QRSL1	6q21	-0.16685	0.001063	0.003921649
EIF1AX	Xp22.12	-0.16678	0.001068	0.003938493
FCRL2	1q23.1	0.16677	0.001069	0.003940803
APBA1	9q21.12	0.16677	0.001069	0.003940803
ZSCAN10	16p13.3	-0.16676	0.001069	0.003941024
HECTD1	14q12	0.166764	0.001069	0.003941024
THEM6	8q24.3	-0.16676	0.00107	0.003942329
ATP6V1A	3q13.31	0.16673	0.001072	0.003948775
PRPS1	Xq22.3	-0.16673	0.001072	0.003949005
UBR2	6p21.1	0.166695	0.001075	0.003957258
GLA	Xq22.1	-0.16668	0.001075	0.003959588
RNF139	8q24.13	-0.16668	0.001076	0.003960119
PPM1N	19q13.32	0.166674	0.001076	0.0039604
DLL1	6q27	0.166673	0.001076	0.0039604
RANBP1	22q11.21	-0.16666	0.001077	0.003962528
RPL23P8	7p21.1	-0.16666	0.001077	0.003962528
COL9A1	6q13	-0.16666	0.001077	0.003962528
STT3B	3p23	-0.16664	0.001078	0.003965951
ADD1	4p16.3	0.166635	0.001079	0.003967384
TMEM121B	22q11.1	0.166602	0.001082	0.003975846
TCF25	16q24.3	0.166599	0.001082	0.003975846

HOPX	4q12	-0.16659	0.001083	0.003978848
MRPS36	5q13.2	0.166561	0.001085	0.003985047
TWIST2	2q37.3	-0.16654	0.001086	0.003989437
OGFOD1	16q13	-0.16654	0.001086	0.003989437
PDGFB	22q13.1	-0.16653	0.001087	0.003990577
PLOD3	7q22.1	-0.16653	0.001087	0.003991173
TXNRD3NB	3q21.3	-0.16649	0.00109	0.004001323
PHKG2	16p11.2	-0.16648	0.001091	0.004004161
PRIM2	6p11.2	-0.16647	0.001091	0.004004269
SPIRE2	16q24.3	-0.16647	0.001091	0.004004269
CD1B	1q23.1	0.166465	0.001092	0.004005441
SEMA4F	2p13.1	-0.16642	0.001095	0.004016324
EXOC8	1q42.2	0.166385	0.001098	0.004026471
SNX16	8q21.13	-0.16636	0.0011	0.004033165
PRTG	15q21.3	-0.16635	0.001101	0.00403401
DNAJB6	7q36.3	-0.16635	0.001101	0.004034554
PDF	16q22.1	-0.16631	0.001104	0.004044437
CEP85L	6q22.31	0.166266	0.001107	0.00405673
SRPK1	6p21.31	-0.16626	0.001108	0.004057645
RIMBP3	22q11.21	0.166245	0.001109	0.004061246
GVINP1	11p15.4	0.166233	0.00111	0.00406299
PNMA8A	19q13.32	-0.16623	0.00111	0.00406299
LEMD2	6p21.31	-0.16619	0.001113	0.004074072
DYNLL2	17q22	-0.16619	0.001113	0.004074072
MTA3	2p21	-0.16612	0.001119	0.004094165
EOMES	3p24.1	0.16608	0.001122	0.004103857
NDNF	4q27	0.166058	0.001124	0.004109507
CST3	20p11.21	-0.16604	0.001125	0.004112603
B4GALT1	9p21.1	0.16599	0.001129	0.004126852
CITED1	Xq13.1	0.16599	0.001129	0.004126852
OTUD5	Xp11.23	-0.16598	0.001129	0.004127813
INO80C	18q12.2	0.165965	0.001131	0.004132446
TNFRSF10D	8p21.3	0.165911	0.001135	0.004147076
LINC01106	2q13	-0.16591	0.001135	0.004147076
SNX12	Xq13.1	-0.16587	0.001138	0.004156139
SH3BGRL2	6q14.1	0.165873	0.001138	0.004156139
TRAPPC6A	19q13.32	-0.16585	0.00114	0.004161462
TCP1	6q25.3	-0.16584	0.001141	0.004164091
TIGD3	11q13.1	-0.16578	0.001146	0.004180367
RRAGA	9p22.1	-0.16577	0.001147	0.004184712
DCBLD2	3q12.1 3	-0.16574	0.001149	0.00419032
PPP2R2A	8p21.2	0.165739	0.001149	0.004190946
PRELP	1q32.1	-0.16573	0.00115	0.00419195
TLK2	17q23.2	-0.16573	0.00115	0.004192892
NFRKB	11q24.3	-0.16571	0.001152	0.004197942
CUTC	10q24.2	-0.16566	0.001155	0.004210028
HDAC6	Xp11.23	-0.16565	0.001156	0.004214111
TICAM1	19p13.3	0.165611	0.001159	0.004223857
NOS1	12q24.22	-0.16559	0.001161	0.00422857
MAP3K21	1q42.2	0.165533	0.001166	0.00424545
ZNF16	8q24.3	-0.16549	0.001169	0.004256573
LOH12CR2	12p13.2	-0.16548	0.00117	0.004261017
SPATA31A3	9q21.11	-0.16547	0.001171	0.004261158
FAAP20	1p36.33	-0.16543	0.001174	0.004272591
KCNK5	6p21.2	-0.16543	0.001174	0.004272779
BORA	13q21.33	-0.16542	0.001175	0.004275537
EBPL	13q14.2	-0.16541	0.001176	0.00427804
IRF3	19q13.33	-0.1654	0.001177	0.004280094

SHLD2P3	10q11.22	0.165374	0.001179	0.004285948
CEACAM21	19q13.2	-0.16536	0.00118	0.004290386
DNM3	1q24.3	-0.16534	0.001182	0.004295548
CRLF1	19p13.11	-0.16533	0.001182	0.004296211
MRTO4	1p36.13	-0.16532	0.001184	0.004300189
FIS1	7q22.1	-0.16531	0.001184	0.004300508
KIR3DL3	19q13.42	0.165252	0.001189	0.004317927
TMED4	7p13	-0.16521	0.001193	0.004331036
TTC9C	11q12.3	-0.16518	0.001195	0.004337801
IDH3G	Xq28	-0.16515	0.001197	0.004345359
KCTD10	12q24.11	-0.16515	0.001198	0.004345843
MDS2	1p36.11	-0.16515	0.001198	0.004345843
PAK5	20p12.2	-0.1651	0.001201	0.00435868
DHRS1	14q12	0.16506	0.001205	0.004370328
GUSBP5	4q31.21	-0.16505	0.001205	0.004371219
LRRC36	16q22.1	-0.16505	0.001206	0.004372118
GPR174	Xq21.1	0.165041	0.001206	0.00437402
TSPEAR-AS2	21q22.3	-0.165	0.00121	0.004386037
FBXO28	1q42.11	0.164974	0.001212	0.004392722
CD209	19p13.2	0.164945	0.001215	0.004400763
LRP12	8q22.3	-0.16488	0.00122	0.004420199
CTAG1B	Xq28	-0.16481	0.001226	0.004441311
RAB25	1q22	0.164806	0.001226	0.004441311
DNAH7	2q32.3	0.164767	0.00123	0.004452564
UBE2E2	3p24.3	-0.16473	0.001232	0.004461844
PANK4	1p36.32	0.164728	0.001233	0.004462976
ACADVL	17p13.1	0.164696	0.001236	0.004472205
NCK1	3q22.3	0.164656	0.001239	0.004483869
DDIAS	11q14.1	-0.16465	0.00124	0.004484871
NUDT4	12q22	-0.16465	0.00124	0.00448527
CHRNA7	2q37.1	-0.16464	0.00124	0.004485548
LIF	22q12.2	0.164551	0.001248	0.004513277
TSPAN9	12p13.33-p13.32	-0.16452	0.001251	0.004521922
MRM1	17q12	-0.16451	0.001252	0.004523545
NPSR1-AS1	7p14.3	0.164502	0.001253	0.004526212
ZNF354C	5q35.3	-0.16448	0.001255	0.004533511
CCT3	1q22	-0.16446	0.001256	0.004536597
ZFX4-AS1	8q21.13	-0.16446	0.001256	0.004536597
NDUFB9	8q24.13	-0.16445	0.001257	0.004537957
TMEM53	1p34.1	0.164452	0.001257	0.004537957
RPS19	19q13.2	-0.16444	0.001258	0.004540057
TTC28-AS1	22q12.1	-0.16444	0.001258	0.004541412
SEPTIN4	17q22	-0.16441	0.00126	0.004547593
DHRS7C	17p13.1	0.164359	0.001265	0.004564252
ZNF14	19p13.11	-0.16435	0.001266	0.004565297
ARMC1	8q13.1	-0.16435	0.001266	0.004566863
RFLNA	12q24.31	0.16431	0.001269	0.004577109
AKIP1	11p15.4	-0.16429	0.001271	0.004583608
SMARCA1	Xq25-q26.1	-0.16426	0.001274	0.004590802
HSD17B7P2	10p11.1	-0.16423	0.001276	0.004599929
IRF4	6p25.3	0.16422	0.001277	0.0046024
KCNMB3	3q26.32	-0.16422	0.001278	0.00460329
TBX10	11q13.2	-0.16414	0.001284	0.004626011
EF3	14q11.2	-0.1641	0.001288	0.004639164
HMGB4	1p35.1	-0.16408	0.00129	0.004643892
CCDC71L	7q22.3	-0.16398	0.001299	0.004675844
AMER3	2q21.1	-0.16397	0.001299	0.004675844
FANK1	10q26.2	0.163974	0.001299	0.004675844

UCKL1-AS1	20q13.33	-0.16397	0.0013	0.00467605
FNBP4	11p11.2	-0.16394	0.001302	0.004683934
OTX1	2p15	0.163902	0.001306	0.004696699
LOC154761	7q35	0.163891	0.001307	0.004699459
ABL2	1q25.2	-0.16386	0.00131	0.004708923
PTAFR	1p35.3	0.163837	0.001312	0.004715312
ELOVL1	1p34.2	0.163784	0.001316	0.00473178
TAF1C	16q24.1	-0.16373	0.001321	0.004747556
FCRLA	1q23.3	0.163716	0.001323	0.004751832
IL22RA1	1p36.11	-0.16372	0.001323	0.004751832
NXPE4	11q23.2	0.163641	0.00133	0.00477495
PSMD6	3p14.1	-0.16364	0.00133	0.00477495
FOCAD	9p21.3	-0.16362	0.001331	0.004779712
BTBD7	14q32.12	0.163605	0.001333	0.004784835
THRB	3p24.2	-0.16359	0.001334	0.004787242
NDRG2	14q11.2	0.163591	0.001334	0.004787242
PDZD4	Xq28	-0.16359	0.001334	0.004787242
NAA80	3p21.31	-0.16358	0.001335	0.004787242
FAM114A2	5q33.2	0.163583	0.001335	0.004787242
ZNF546	19q13.2	-0.16358	0.001335	0.004787242
CDIP1	16p13.3	-0.16356	0.001337	0.004795083
NPC1L1	7p13	-0.16355	0.001338	0.004796683
DUOXA1	15q21.1	0.163497	0.001343	0.004812719
FAM167A	8p23.1	0.163474	0.001345	0.004819752
TENT2	5q14.1	0.163455	0.001347	0.004825201
YPEL4	11q12.1	-0.16344	0.001348	0.004828083
PRUNE2	9q21.2	0.163407	0.001351	0.004839569
C16ORF86	16q22.1	-0.16336	0.001356	0.00485513
STK39	2q24.3	0.163352	0.001356	0.004856069
EFCAB2	1q44	-0.16334	0.001358	0.004859172
POLR1E	9p13.2	-0.16332	0.001359	0.0048643
ABR	17p13.3	0.163293	0.001362	0.004872631
PRSS55	8p23.1	-0.16329	0.001362	0.004872631
MRPL11	11q13.2	-0.16328	0.001363	0.004874533
CATSPERZ	11q13.1	0.163282	0.001363	0.004874533
ZNF84	12q24.33	-0.16328	0.001364	0.004875658
TPTE2P6	13q12.12	-0.16327	0.001364	0.004875658
MEI1	22q13.2	0.163235	0.001367	0.004887327
RPS4X	Xq13.1	-0.16323	0.001368	0.004887327
ZNF445	3p21.31	-0.16323	0.001368	0.004887761
AGXT	2q37.3	-0.16322	0.001369	0.004890347
KLHL3	5q31.2	-0.16318	0.001373	0.004903319
MAPK7	17p11.2	0.163157	0.001375	0.00490973
CCDC6	10q21.2	0.163148	0.001376	0.004910968
AP3S2	15q26.1	0.163148	0.001376	0.004910968
NSD2	4p16.3	0.163115	0.001379	0.004921331
PPARD	6p21.31	0.163101	0.00138	0.004925058
APOBEC3B	22q13.1	-0.16307	0.001383	0.004933397
STX2	12q24.33	-0.16307	0.001383	0.004933397
MED6	14q24.2	-0.16306	0.001384	0.004934862
FAM92A	8q22.1	-0.16304	0.001386	0.004942923
MRPL36	5p15.33	-0.16303	0.001387	0.004945124
TNFRSF10A	8p21.3	0.163016	0.001388	0.004948794
EXOC4	7q33	-0.163	0.001389	0.004952173
LOC100133920	2q11.1	-0.16298	0.001392	0.004959442
CACUL1	10q26.11	0.162947	0.001395	0.004969539
LEPROTL1	8p12	0.162945	0.001395	0.004969539
PCM1	8p22	0.162939	0.001396	0.004970719

AREL1	14q24.3	0.162924	0.001397	0.004974997
CGREF1	2p23.3	-0.16292	0.001398	0.00497603
KLHL21	1p36.31	-0.16291	0.001399	0.004978393
AFMID	17q25.3	-0.1629	0.001399	0.004978837
C9ORF50	9q34.11	-0.1629	0.001399	0.004979462
ZNF141	4p16.3	-0.16287	0.001402	0.00498874
PLEKHA3	2q31.2	-0.16283	0.001406	0.005001846
NKAIN4	20q13.33	-0.16279	0.00141	0.005014323
REEP4	8p21.3	0.162734	0.001415	0.005033146
PRSS33	16p13.3	-0.16272	0.001417	0.005036388
ITGAL	16p11.2	0.162712	0.001418	0.005039116
FAM49B	8q24.21	-0.1627	0.001419	0.005043298
AGBL1	15q25.3	0.162692	0.00142	0.005044372
TMEM60	7q11.23	-0.16268	0.001421	0.005048307
USP46	4q12	0.162672	0.001422	0.00504943
TMEM258	11q12.2	-0.16266	0.001423	0.005052723
CYP4F22	19p13.12	0.162647	0.001424	0.005056415
MAN2C1	15q24.2	-0.16264	0.001425	0.005057518
DNAJC30	7q11.23	-0.16264	0.001425	0.005057518
CMTM6	3p22.3	0.162622	0.001426	0.00506209
SNORA5C	7p13	-0.1626	0.001428	0.005067911
SETD1A	16p11.2	-0.16258	0.00143	0.005073646
GLUL	1q25.3	0.162568	0.001432	0.005078531
ASF1A	6q22.31	-0.16255	0.001433	0.005082744
GP1BA	17p13.2	0.162544	0.001434	0.005084852
HYKK	15q25.1	-0.16254	0.001435	0.005085984
EDAR	2q13	-0.16252	0.001436	0.005090655
MXD1	2p13.3	0.162484	0.00144	0.005103401
RTP4	3q27.3	0.162477	0.001441	0.005104989
TRHDE	12q21.1	0.162466	0.001442	0.005107724
BTBD17	17q25.1	0.162457	0.001443	0.005109001
TTC30B	2q31.2	-0.16246	0.001443	0.005109001
FZD7	2q33.1	-0.16245	0.001443	0.005109005
EGFL6	Xp22.2	-0.16245	0.001443	0.005110293
DLX2	2q31.1	-0.16244	0.001444	0.005111899
PTEN	10q23.31	0.162434	0.001445	0.005113551
AHSA1	14q24.3	-0.16242	0.001447	0.0051184
KAT7	17q21.33	-0.16242	0.001447	0.0051184
CDS2	20p12.3	-0.16241	0.001447	0.005118404
RBCK1	20p13	-0.1624	0.001449	0.005123481
EXTL1	1p36.11	-0.16239	0.001449	0.005124467
ERAS	Xp11.23	-0.16238	0.00145	0.00512593
ADAMTS15	11q24.3	0.162363	0.001452	0.005132384
OAS2	12q24.13	0.162338	0.001454	0.005139286
MTX2	2q31.1	-0.16234	0.001455	0.005139286
SERAC1	6q25.3	0.162335	0.001455	0.005139286
ZNF330	4q31.21	0.162329	0.001455	0.00514043
SPTY2D1	11p15.1	0.162306	0.001458	0.005147961
RCN2	15q24.3	-0.16228	0.001461	0.005157195
YPEL5	2p23.1	-0.16227	0.001461	0.005157195
PALM2-AKAP2	9q31.3	-0.16227	0.001461	0.005157195
LYAR	4p16.3	-0.16227	0.001461	0.005157195
INPP5E	9q34.3	-0.16224	0.001464	0.005165511
NPHP3	3q22.1	-0.16223	0.001465	0.005169104
NIPAL4	5q33.3	-0.16222	0.001467	0.005173069
ARL4D	17q21.31	-0.16219	0.001469	0.005180959
TMEM169	2q35	-0.16217	0.001471	0.005188044
ZNF414	19p13.2	-0.16215	0.001474	0.005194993

VAMP3	1p36.23	0.162082	0.00148	0.005217179
VPREB3	22q11.23 22q11	0.16208	0.00148	0.005217179
SEPTIN11	4q21.1	0.161997	0.001489	0.005246011
PPP1R3F	Xp11.23	-0.16199	0.00149	0.00524772
IL17D	13q12.11	-0.16198	0.00149	0.005249429
ASGR1	17p13.1	-0.16195	0.001494	0.005258976
THBS4	5q14.1	-0.16195	0.001494	0.005258976
ACADM	1p31.1	0.161943	0.001494	0.005260995
LRFN3	19q13.12	0.161889	0.0015	0.00527934
GCLC	6p12.1	-0.16187	0.001502	0.005284037
F8A1	Xq28	-0.16187	0.001502	0.005284037
SUPT4H1	17q22	-0.16187	0.001502	0.005284037
S100A3	1q21.3	-0.16187	0.001502	0.005284037
TNFRSF6B	20q13.33	0.161847	0.001504	0.005290122
IGFN1	1q32.1	-0.16182	0.001507	0.005298062
POF1B	Xq21.1	0.161814	0.001508	0.005299826
PIGW	17q12	-0.16181	0.001508	0.005299826
XPO4	13q12.11	-0.16181	0.001508	0.005299826
EBAG9	8q23.2	-0.16171	0.001518	0.005333827
CEBPA-DT	19q13.11	-0.16168	0.001522	0.005344871
YEATS2	3q27.1	-0.16168	0.001522	0.005344871
NUBPL	14q12	-0.16167	0.001522	0.005344871
TMEM230	20p13-p12.3	-0.16167	0.001522	0.005344871
ENTR1	9q34.3	-0.16167	0.001523	0.005344871
RASSF4	10q11.21	-0.16164	0.001525	0.005354014
DIS3	13q21.33	-0.16162	0.001528	0.005362383
GSDME	7p15.3	-0.16161	0.001528	0.005362627
ITGB1BP2	Xq13.1	-0.16158	0.001532	0.005373309
CABIN1	22q11.23	0.16158	0.001532	0.005373309
DNAJC12	10q21.3	0.161569	0.001533	0.005376322
CD164L2	1p36.11	0.161527	0.001538	0.005390197
FGF13	Xq26.3-q27.1	-0.16153	0.001538	0.005390197
PCK1	20q13.31	0.161522	0.001538	0.00539108
FLJ23867	1q25.2	0.161507	0.00154	0.005395373
PLK3	1p34.1	0.161496	0.001541	0.005398795
BORCS7	10q24.32	0.161492	0.001541	0.005399122
UGT1A9	2q37.1	0.161467	0.001544	0.005407568
DIPK1B	9q34.3	-0.16144	0.001547	0.005416955
BTF3L4	1p32.3	-0.16142	0.001549	0.005423579
TUBGCP3	13q34	-0.16135	0.001556	0.005447799
NOTCH3	19p13.12	-0.16135	0.001557	0.005448448
KRT222	17q21.2	-0.16131	0.001561	0.005460891
GPX1	3p21.31	-0.16131	0.001561	0.005460891
RASSF3	12q14.2	0.161296	0.001562	0.005464271
ART5	11p15.4	-0.16128	0.001563	0.00546833
ARL4A	7p21.3	-0.16128	0.001564	0.005468867
ATP4A	19q13.12	-0.16121	0.001571	0.005491737
HIC2	22q11.21	-0.16121	0.001571	0.005492411
TAS2R20	12p13.2	-0.16121	0.001572	0.005492411
ZFP37	9q32	-0.16121	0.001572	0.005492411
GALK2	15q21.1-q21.2	0.161177	0.001575	0.005500673
STXBP1	9q34.11	0.161177	0.001575	0.005500673
FUT8-AS1	14q23.3	0.161176	0.001575	0.005500673
REG1B	2p12	0.161133	0.001579	0.005515642
BLOC1S3	19q13.32	-0.16113	0.00158	0.005517353
IGF2BP2-AS1	3q27.2	-0.16112	0.001581	0.005519213
PGBD2	1q44	0.161109	0.001582	0.005521749
IGBP1P1	14q13.2	-0.16105	0.001589	0.005543424



CLSTN1	1p36.22	0.160993	0.001595	0.005563652
DNAJC3	13q32.1	0.16097	0.001597	0.005571337
JAM3	11q25	-0.16097	0.001598	0.005571838
POLR2H	3q27.1	-0.16096	0.001598	0.005573646
TANC2	17q23.2-q23.3	0.160954	0.001599	0.005574556
SHLD2P1	10q11.22	0.160902	0.001605	0.005593561
YAE1	7p14.1	-0.1609	0.001605	0.005594474
LIX1	5q15	-0.16089	0.001606	0.005595042
LRRC1	6p12.1	0.160861	0.001609	0.005606152
GRAMD2A	15q23	-0.16085	0.001611	0.005610684
GAS2L2	17q12	0.160824	0.001613	0.005618333
HTRA1	10q26.13	-0.1608	0.001616	0.005626514
HACD2	3q21.1	0.16077	0.001619	0.005637003
SELENOT	3q25.1	0.160767	0.001619	0.005637262
PLEKHG4	16q22.1	-0.16075	0.001621	0.005643549
PTPRCAP	11q13.2	0.160737	0.001623	0.005646871
EPHA3	3p11.1	-0.16072	0.001624	0.005651184
NDUFS1	2q33.3	0.160711	0.001626	0.005654921
GOLGA8DP	15q11.2	-0.16069	0.001628	0.005661988
ABRAXAS2	10q26.13	0.160687	0.001628	0.005661988
NPY2R	4q32.1	0.160667	0.00163	0.005669005
RALGAPA1	14q13.2	0.16066	0.001631	0.005670556
PPP1R21	2p16.3	-0.16061	0.001637	0.005689787
SLC35B3	6p24.3	0.160605	0.001637	0.005689787
TRIM65	17q25.1	-0.16057	0.001642	0.005703971
KLF6	10p15.2	0.160546	0.001644	0.005710664
TXNDC17	17p13.1	0.160539	0.001645	0.005712598
ITPKA	15q15.1	0.160518	0.001647	0.005719802
MS4A15	11q12.2	-0.16049	0.001651	0.005730788
ENPP3	6q23.2	-0.16044	0.001656	0.005748003
CRISPLD1	8q21.13	-0.16043	0.001657	0.005751714
FEZ1	11q24.2	-0.1604	0.00166	0.005760226
PPM1D	17q23.2	0.160401	0.00166	0.005760239
MSANTD1	4p16.3	-0.1604	0.001661	0.005760883
FIBIN	11p14.2	-0.16036	0.001665	0.005774945
DECR2	16p13.3	-0.16036	0.001665	0.005774945
CATSPERG	19q13.2	0.160328	0.001668	0.005784986
C2ORF81	2p13.1	-0.1603	0.001671	0.00579399
TOMM40L	1q23.3	0.160253	0.001677	0.005812314
KCNH2	7q36.1	-0.16016	0.001687	0.005847742
RPL23AP32	2p16.2	-0.16016	0.001688	0.005848865
FGFRL1	4p16.3	-0.16014	0.00169	0.005853319
ZNF76	6p21.31	-0.16013	0.00169	0.005855126
ANKRD30B	18p11.21	0.160132	0.001691	0.005855284
WDR27	6q27	-0.16011	0.001693	0.005861565
DUSP22	6p25.3	-0.1601	0.001695	0.005866714
TMEM59L	19p13.11	-0.16006	0.0017	0.005881912
HIP1	7q11.23	-0.16005	0.0017	0.005881912
RTL5	Xq13.1	-0.16005	0.0017	0.00588248
PLA2G4C	19q13.33	-0.16002	0.001703	0.005892259
GSN	9q33.2	0.160021	0.001704	0.005892259
SLC4A5	2p13.1	0.160008	0.001705	0.005896572
TPP2	13q33.1	-0.15999	0.001707	0.005902265
GEMIN7	19q13.32	-0.15995	0.001712	0.005917461
LINC02210	17q21.31	-0.15995	0.001712	0.005917461
MON1A	3p21.31	-0.15994	0.001713	0.005917752
ELF3	1q32.1	0.159941	0.001713	0.005917752
PBOV1	6q23.3	0.15994	0.001713	0.005917752

RPS6KA6	Xq21.1	-0.15993	0.001714	0.005920787
MYLPF	16p11.2	-0.15992	0.001715	0.005920787
ZC2HC1A	8q21.13	-0.15992	0.001715	0.005920787
GPRC6A	6q22.1	0.159918	0.001715	0.005920787
UBR5	8q22.3	-0.15992	0.001716	0.005920787
NTN4	12q22	0.159917	0.001716	0.005920787
TIAF1	17q11.2	0.159911	0.001716	0.005922011
LZTS1	8p21.3	-0.1599	0.001718	0.005925568
CBFB	16q22.1	-0.15988	0.00172	0.005932411
PMS2P5	7q11.23	-0.15987	0.001721	0.005934243
C9ORF116	9q34.3	0.159853	0.001723	0.005941025
CCDC8	19q13.32	-0.15985	0.001723	0.005941025
SRBD1	2p21	0.159846	0.001724	0.005941907
EXOC7	17q25.1	-0.15984	0.001724	0.005942876
LOC388242	16p11.2	0.159833	0.001725	0.005945248
STK10	5q35.1	0.15983	0.001726	0.005945248
ARL5A	2q23.3	-0.15981	0.001728	0.005951505
FANCC	9q22.32	0.159806	0.001728	0.005952823
FOXL2NB	3q22.3	0.1598	0.001729	0.005954246
SLC22A25	11q12.3	0.159795	0.00173	0.005955596
YOD1	1q32.1	0.159784	0.001731	0.005958775
MED12	Xq13.1	-0.15977	0.001733	0.00596296
TMPPE	3p22.3	0.159768	0.001733	0.005963365
RNF133	7q31.32	0.159743	0.001736	0.005972081
CD6	11q12.2	0.159724	0.001738	0.00597875
EPS8L1	19q13.42	0.159722	0.001738	0.005978859
LDHB	12p12.1	-0.15971	0.00174	0.005982099
ZNF322	6p22.2	-0.15969	0.001742	0.005990223
ZNF271P	18q12.2	0.159683	0.001743	0.005991368
SLC1A7	1p32.3	-0.15967	0.001745	0.005997153
CRBN	3p26.2	-0.15966	0.001745	0.005997347
TMEM132C	12q24.32-q24.33	-0.15965	0.001746	0.006000148
PPIA	7p13	-0.15964	0.001748	0.006004634
GADD45GIP1	19p13.13	-0.15959	0.001754	0.006023862
FSD1L	9q31.2	-0.15958	0.001755	0.006025503
SCARF2	22q11.21	-0.15958	0.001756	0.006027542
RPL24	3q12.3	-0.15957	0.001756	0.006027737
CAP2	6p22.3	-0.15956	0.001757	0.006031987
PARS2	1p32.3	-0.15956	0.001758	0.006031987
YKT6	7p13	-0.15954	0.00176	0.006037801
SLF1	5q15	0.159472	0.001768	0.006065017
DIRAS2	9q22.2	-0.15947	0.001768	0.006065186
DENND6B	22q13.33	0.159456	0.00177	0.006069468
CATSPER2	15q15.3	-0.15945	0.00177	0.006070102
MED17	11q21	-0.15944	0.001772	0.006073745
SLC30A3	2p23.3	-0.15943	0.001773	0.006075894
PIK3C2G	12p12.3	0.15939	0.001778	0.00609243
C16ORF54	16p11.2	0.15935	0.001783	0.006107289
CNEP1R1	16q12.1	-0.15935	0.001783	0.006107289
MCEE	2p13.3	0.15934	0.001784	0.006109883
PRXL2B	1p36.32	0.159328	0.001785	0.006113299
STX3	11q12.1	-0.15933	0.001785	0.006113299
C6ORF226	6p21.1	-0.15931	0.001788	0.006120696
RIC8A	11p15.5	-0.15928	0.001791	0.00612908
SLC25A46	5q22.1	0.159275	0.001792	0.006131684
NDUFB2-AS1	7q34	-0.15924	0.001796	0.006143647
GALNT11	7q36.1 7q36.1	-0.15923	0.001797	0.006148937
CDH17	8q22.1	0.159197	0.001801	0.006160666

NDRG1	8q24.22	0.159158	0.001806	0.006174698
TP53AIP1	11q24.3	0.159157	0.001806	0.006174698
MROH8	20q11.23	-0.15916	0.001806	0.006174698
BRMS1	11q13.2	-0.15912	0.001811	0.006190153
CFAP58	10q25.1	0.159113	0.001811	0.006190585
SSNA1	9q34.3	-0.1591	0.001813	0.00619415
PLXNB3	Xq28	-0.15904	0.00182	0.006218574
GPBP1L1	1p34.1	0.159035	0.001821	0.006219768
CDIPT	16p11.2	-0.159	0.001825	0.00623189
RAB24	5q35.3	-0.15899	0.001826	0.006235076
COX7C	5q14.3	0.158989	0.001827	0.006235822
LOC440040	11p11.12	-0.15899	0.001827	0.006236272
SCAF11	12q12	0.158942	0.001832	0.006252729
NOB1	16q22.1	-0.15894	0.001832	0.006252729
APOB	2p24.1	-0.15892	0.001835	0.006261965
KCNE4	2q36.1	-0.15889	0.001839	0.00627386
MCCC2	5q13.2	0.158884	0.00184	0.00627386
PFKFB3	10p15.1	0.158877	0.00184	0.006275519
IL23A	12q13.3	-0.15886	0.001842	0.006279773
TMEM101	17q21.31	-0.15886	0.001842	0.006279773
NDUFC1	4q31.1	0.15886	0.001843	0.006279773
MED29	19q13.2	-0.15881	0.001849	0.006301671
MAP2	2q34	-0.1588	0.00185	0.006304434
TINAG	6p12.1	-0.15878	0.001853	0.006310689
SBDSP1	7q11.23	-0.15877	0.001853	0.00631229
BTG1	12q21.33	0.158757	0.001855	0.006317759
RPL35	9q33.3	-0.15871	0.001861	0.006335923
TST	22q12.3	0.158703	0.001862	0.00633753
ALDH4A1	1p36.13	-0.1587	0.001862	0.00633753
BHMT2	5q14.1	-0.15869	0.001864	0.006342566
TEKT5	16p13.13	-0.1586	0.001875	0.006378627
ENTPD6	20p11.21	-0.1586	0.001876	0.006380399
RELA	11q13.1	-0.15858	0.001877	0.00638331
CXCR6	3p21.31	0.158584	0.001877	0.00638331
TMCC1	3q22.1	-0.15858	0.001878	0.006383981
SHISA5	3p21.31	-0.15855	0.001881	0.00639408
SH3GL1	19p13.3	-0.15854	0.001882	0.006397528
NSUN5P1	7q11.23	-0.15853	0.001884	0.00640107
ZFR	5p13.3	-0.15852	0.001886	0.006406837
AGBL2	11p11.2	-0.15851	0.001886	0.006408092
YPEL1	22q11.21-q11.22	-0.15851	0.001887	0.006408092
ELN	7q11.23	-0.15845	0.001894	0.006431324
FAM160A2	11p15.4	0.158433	0.001896	0.006438512
TTC28	22q12.1	-0.15836	0.001905	0.006466446
KLF10	8q22.3	-0.15836	0.001905	0.006466446
BNIP2	15q22.2	-0.15836	0.001906	0.006467313
HSD17B6	12q13.3	-0.15833	0.001909	0.006478842
CRNKL1	20p11.23	-0.15829	0.001914	0.006493203
PYCR2	1q42.12	-0.15827	0.001917	0.006503083
PCNT	21q22.3	0.15826	0.001918	0.006505832
ASCC3	6q16.3	0.158257	0.001919	0.006506234
GPR18	13q32.3	0.158219	0.001924	0.006521482
SYT1	12q21.2	-0.15819	0.001927	0.006531511
LOC155060	7q36.1	-0.15817	0.001929	0.006539084
PSG11	19q13.31	-0.15815	0.001932	0.006547309
GALNT4	12q21.33	0.158056	0.001945	0.006587746
SCO2	22q13.33	0.158056	0.001945	0.006587746
BRCC3	Xq28	-0.15802	0.001949	0.006602706

FAM161A	2p15	-0.15801	0.00195	0.006605018
GM2A	5q33.1	0.157978	0.001955	0.006618773
MZB1	5q31.2	0.157952	0.001958	0.006629098
GNAS-AS1	20q13.32	-0.15792	0.001963	0.006643551
HPR	16q22.2	0.157914	0.001963	0.006644096
EPST11	13q14.11	-0.15788	0.001967	0.006654779
CNIH3	1q42.12	-0.15788	0.001967	0.006654779
CERCAM	9q34.11	-0.15786	0.001971	0.006666227
SP140L	2q37.1	0.157845	0.001972	0.006670288
INO80E	16p11.2	-0.1578	0.001979	0.006690717
CCDC25	8p21.1	0.157785	0.00198	0.006694696
CCDC58	3q21.1	-0.15778	0.001981	0.006696555
FGF21	19q13.33	-0.15773	0.001988	0.006717899
AMELY	Yp11.2	-0.15772	0.001989	0.006721725
PURA	5q31.3	0.157714	0.00199	0.006722141
ZNF454	5q35.3	-0.15769	0.001994	0.006733718
SPECC1	17p11.2	0.157671	0.001995	0.00673915
MON2	12q14.1	0.157664	0.001996	0.006740085
NR0B2	1p36.11	-0.15766	0.001996	0.006740085
ULBP1	6q25.1	-0.15766	0.001997	0.006741659
DBF4B	17q21.31 17q21	-0.15765	0.001998	0.006742006
CCDC122	13q14.11	-0.15765	0.001998	0.006742006
ANKRD17	4q13.3	0.157647	0.001999	0.006743199
OLAH	10p13	-0.1576	0.002005	0.006764589
OIP5-AS1	15q15.1	0.157574	0.002008	0.006773789
PRORS1P	2p16.1	-0.15755	0.002012	0.006783418
C2CD5	12p12.1	0.157543	0.002013	0.006785646
TMEM204	16p13.3	-0.15753	0.002014	0.006787712
CAMK4	5q22.1	0.157533	0.002014	0.006787712
PINK1	1p36.12	0.157517	0.002016	0.006793837
ARL10	5q35.2	-0.15749	0.002019	0.006803936
TEX35	1q25.2	0.15747	0.002022	0.006813033
DHRSX	Xp22.33 and Yp11.2	-0.15746	0.002024	0.006815939
RAPSN	11p11.2	-0.15743	0.002028	0.006830382
ERAL1	17q11.2	-0.1574	0.002032	0.006842106
CNTN3	3p12.3	0.157386	0.002034	0.006845699
VAX1	10q25.3	-0.15739	0.002034	0.006845699
RAB8B	15q22.2	0.157376	0.002035	0.006848786
LUZP4	Xq23	-0.15732	0.002042	0.006871236
OAZ2	15q22.31	-0.15732	0.002043	0.006871612
PTH1R	3p21.31	-0.15731	0.002044	0.006876416
GNAI3	1p13.3	0.1573	0.002045	0.00687898
PSMG2	18p11.21	0.157254	0.002052	0.006899291
C1ORF216	1p34.3	-0.15725	0.002053	0.006900306
NMT1	17q21.31	-0.15724	0.002053	0.006900306
ZDHHC14	6q25.3	0.157242	0.002053	0.006900306
FERMT2	14q22.1	-0.15724	0.002054	0.006900306
HSD11B2	16q22.1	0.157225	0.002056	0.006906878
PREP	6q21	0.157213	0.002057	0.006910976
CYP27A1	2q35	-0.15719	0.002061	0.006920835
LINC01548	21q22.11	-0.15715	0.002066	0.006937162
TAB3	Xp21.2	-0.15714	0.002068	0.00694152
SRRM5	19q13.31	-0.15714	0.002068	0.00694152
TM2D3	15q26.3	-0.15712	0.00207	0.006948327
CBS	21q22.3	-0.1571	0.002074	0.006958434
CAB39	2q37.1	0.157089	0.002074	0.006960263
TSGA10	2q11.2	-0.15708	0.002076	0.00696469
EPN2	17p11.2	0.157048	0.00208	0.006976819

MBD1	18q21.1	0.157044	0.002081	0.006977552
C10ORF88	10q26.13	-0.157	0.002087	0.006998727
LZIC	1p36.22	0.156992	0.002088	0.006999562
EPHX2	8p21.2-p21.1	0.156973	0.002091	0.007007225
LOC100130691	2q31.2	-0.15695	0.002094	0.007016337
GSTP1	11q13.2	-0.15695	0.002094	0.007016337
GIN51	20p11.21	-0.15694	0.002096	0.007020426
ULBP2	6q25.1	0.156935	0.002096	0.007020426
TNPO1	5q13.2	0.156927	0.002097	0.007022707
MGC57346	17q21.31	-0.15692	0.002097	0.007022707
GRAMD1C	3q13.31	0.156877	0.002104	0.007044006
PPIH	1p34.2	-0.15686	0.002107	0.007051309
BANK1	4q24	0.156849	0.002108	0.007054774
CLDN10	13q32.1	-0.15683	0.00211	0.007059947
AVL9	7p14.3	-0.15683	0.00211	0.007059947
CXCR5	11q23.3	0.156778	0.002118	0.007083194
TGM6	20p13	-0.15678	0.002118	0.007083194
TGFB3	14q24.3	-0.15678	0.002118	0.007083194
NOA1	4q12	0.156767	0.002119	0.007086069
ANAPC1	2q13	-0.15675	0.002121	0.00709128
RMND5A	2p11.2	-0.15671	0.002127	0.007109916
ST7-AS1	7q31.2	-0.15668	0.002131	0.007122207
RGS4	1q23.3	-0.15667	0.002133	0.007125164
RMND1	6q25.1	-0.15666	0.002134	0.007128972
ARF3	12q13.12	0.15663	0.002139	0.007143813
ESYT3	3q22.3	-0.15652	0.002154	0.007192478
PRPF40A	2q23.3	-0.15652	0.002154	0.007192478
OS9	12q13.3-q14.1	0.156502	0.002157	0.007200451
FGF14	13q33.1	-0.1565	0.002157	0.007200451
PKIB	6q22.31	0.156464	0.002163	0.007217096
ADGRG7	3q12.2	0.156455	0.002164	0.007219982
DXO	6p21.33	-0.15644	0.002166	0.007224221
MUCL1	12q13.2	-0.15644	0.002166	0.007224221
ITM2A	Xq21.1	0.156413	0.00217	0.007236551
HOXD12	2q31.1	-0.15639	0.002173	0.007244301
MIB2	1p36.33	0.156368	0.002176	0.007255776
KMT5A	12q24.31	0.156358	0.002178	0.00725954
GUSB	7q11.21	0.156345	0.00218	0.007264352
FAM86B2	8p23.1	0.156306	0.002185	0.007282257
CALD1	7q33	-0.1563	0.002186	0.007283227
EXT1	8q24.11	0.156274	0.00219	0.007295441
SERTAD2	2p14	0.156271	0.00219	0.007295581
EWSAT1	15q23	-0.15622	0.002197	0.007317274
CLDN15	7q22.1	-0.15616	0.002206	0.007344969
ZNF733P	7q11.21	-0.15615	0.002208	0.007350489
PLPP4	10q26.12	-0.15615	0.002208	0.00735056
TSEN15	1q25.3	-0.15605	0.002223	0.007396278
RGMA	15q26.1	-0.15603	0.002225	0.007403912
TAC3	12q13.3	0.155993	0.002231	0.007422094
HIBCH	2q32.2	0.155991	0.002231	0.007422094
MLXIPL	7q11.23	-0.15599	0.002232	0.007422094
KRT20	17q21.2	0.155978	0.002233	0.007426258
ZNF883	9q32	-0.15594	0.002239	0.007443497
GPR142	17q25.1	0.155936	0.00224	0.007443747
EMC4	15q14	-0.15593	0.00224	0.007443747
SDHD	11q23.1	0.155932	0.00224	0.007443785
PPP1R1C	2q31.3-q32.1	-0.15593	0.002241	0.007444179
PTPN2	18p11.21	0.155926	0.002241	0.007444179

UGT2B11	4q13.2	0.15591	0.002243	0.007451048
AKTIP	16q12.2	-0.15591	0.002244	0.007451259
KDM3A	2p11.2	-0.1559	0.002246	0.007455757
LRFN1	19q13.2	-0.15589	0.002247	0.00745781
OTOP2	17q25.1	0.15585	0.002252	0.007475443
KARS	16q23.1	-0.15584	0.002254	0.007479352
PSORS1C1	6p21.33	0.155836	0.002254	0.007479352
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FDXR	17q25.1	0.155821	0.002257	0.007485252
RPE	2q34	-0.15577	0.002264	0.007508494
EFHC1	6p12.2	-0.15577	0.002265	0.007508494
C2CD4C	19p13.3	0.155766	0.002265	0.007508628
GAS1	9q21.33	-0.15575	0.002267	0.007513599
GSTM3	1p13.3	-0.15575	0.002268	0.007514722
ZNHIT1	7q22.1	-0.15574	0.002268	0.007514722
JPH2	20q13.12	-0.15574	0.002269	0.007514722
TGFB11I	16p11.2	-0.15574	0.002269	0.007514722
ODC1	2p25.1	-0.15573	0.002271	0.007520648
ABCC9	12p12.1	-0.15569	0.002276	0.007535902
FKBP1A	20p13	-0.15567	0.002279	0.007544418
CDK5R2	2q35	-0.15566	0.002282	0.007552395
NIPSNAP3B	9q31.1	-0.15565	0.002282	0.007553299
BACE1	11q23.3	-0.15564	0.002284	0.007557648
ECM2	9q22.31	-0.1556	0.00229	0.007576417
BCAS4	20q13.13	-0.15556	0.002296	0.00759512
ARHGAP9	12q13.3	0.155554	0.002297	0.00759689
SGCE	7q21.3	-0.15555	0.002297	0.007597255
CLASP2	3p22.3	-0.15554	0.002298	0.007598959
COL10A1	6q22.1	-0.15554	0.002299	0.007598959
USP51	Xp11.21	-0.15554	0.002299	0.007599709
GRIK5	19q13.2	-0.15553	0.0023	0.007600383
MTURN	7p14.3	-0.15553	0.0023	0.007600383
POP4	19q12	-0.15553	0.002301	0.007602263
SURF4	9q34.2	0.155518	0.002302	0.007605224
PRPS1L1	7p21.1	-0.1555	0.002304	0.007610731
KRBA1	7q36.1	-0.1555	0.002305	0.007612378
ARNTL	11p15.3	0.155481	0.002308	0.007619853
MRPL9	1q21.3	-0.15545	0.002312	0.007632901
DCAF4L2	8q21.3	-0.15543	0.002315	0.007639817
DLX6-AS1	7q21.3	-0.15543	0.002315	0.007639817
MATN1	1p35.2	-0.15543	0.002316	0.007639817
TTC24	1q22	0.155427	0.002316	0.007640767
ANKRD26	10p12.1	-0.15542	0.002317	0.007643481
ZNF426	19p13.2	-0.15541	0.002319	0.007644976
EFCAB1	8q11.21	-0.15541	0.002319	0.007644976
MICALCL	11p15.3	0.155409	0.002319	0.007644976
LOC441666	10q11.21	-0.15541	0.002319	0.007644992
THNSL2	2p11.2	-0.1554	0.002321	0.007647995
SLC8B1	12q24.13	0.155371	0.002325	0.007660221
CYP39A1	6p12.3	-0.15535	0.002328	0.00766902
CTCF	16q22.1	0.155349	0.002328	0.00766902
ZNF391	6p22.1	-0.15534	0.002329	0.007670373
HDX	Xq21.1	-0.15534	0.00233	0.007670678
FCN3	1p36.11	-0.15534	0.00233	0.007670901
USP16	21q21.3	0.155313	0.002334	0.007681738
ZYX	7q34	-0.15531	0.002334	0.007683202
BICD2	9q22.31	-0.1553	0.002336	0.007686085
RRP7BP	22q13.2	-0.15528	0.002338	0.007692572

VWA1	1p36.33	-0.15527	0.002341	0.007700048
UBR1	15q15.2	0.155253	0.002343	0.007706218
EIF5AL1	10q22.3	0.155243	0.002344	0.007709875
PCBP1	2p13.3	-0.15518	0.002354	0.007740836
MBOAT7	19q13.42	0.155154	0.002358	0.007752972
GPA1	8q24.3	-0.15513	0.002362	0.007763363
EFCAB14	1p33	0.155127	0.002363	0.007764071
ATP6V1H	8q11.23	-0.15508	0.002369	0.007784404
CKAP2L	2q14.1	0.155074	0.002371	0.007788537
APCDD1L	20q13.32	-0.15505	0.002375	0.00780165
RPL26L1	5q35.1	-0.15502	0.002379	0.007811459
RHOH	4p14	0.155022	0.002379	0.007811459
FAM214A	15q21.2-q21.3	0.154964	0.002388	0.007839839
PDZD7	10q24.31	-0.15494	0.002392	0.007852838
RCBTB2	13q14.2	-0.1549	0.002397	0.007868194
N4BP2L2	13q13.1	-0.1549	0.002398	0.007868194
OR10P1	12q13.2	0.154887	0.0024	0.007874494
CLCNKB	1p36.13	-0.15488	0.002402	0.007876925
OSBPL1A	18q11.2	0.154878	0.002402	0.007876925
DLEU7	13q14.3	-0.15487	0.002402	0.007877175
P4HA3	11q13.4	-0.15485	0.002405	0.007885449
ADGRE4P	19p13.2	0.154854	0.002405	0.007885449
SRC	20q11.23	-0.15476	0.00242	0.007932517
TAGLN2	1q23.2	0.154656	0.002437	0.007986056
NLRP9	19q13.42	0.154643	0.002439	0.007991805
KCTD7	7q11.21	-0.15462	0.002442	0.008001303
C20ORF96	20p13	-0.1546	0.002446	0.0080125
USP31	16p12.2	-0.15455	0.002453	0.00803473
CCDC112	5q22.3	0.154543	0.002455	0.008038755
GARS	7p14.3	-0.15453	0.002456	0.008042328
IGFL1	19q13.32	-0.1545	0.002461	0.008057187
SORCS3	10q25.1	-0.15445	0.00247	0.008083564
PEPD	19q13.11	-0.15444	0.002472	0.008088405
LMBR1	7q36.3	-0.15438	0.002482	0.008119129
EFNA2	19p13.3	0.154376	0.002482	0.008119408
ZNF785	16p11.2	-0.15437	0.002483	0.008120375
APTX	9p21.1	-0.15435	0.002486	0.008128225
KCTD18	2q33.1	-0.15432	0.002492	0.008146657
CRMP1	4p16.2	-0.15429	0.002496	0.00815838
PAM	5q21.1	-0.15429	0.002496	0.00815838
SPRYD3	12q13.13	0.154266	0.0025	0.008170298
TPD52L1	6q22.31	-0.15426	0.002501	0.008170695
KIAA1109	4q27	0.154252	0.002502	0.008175128
CGB3	19q13.33	-0.15421	0.002509	0.008195708
OPTN	10p13	0.154176	0.002515	0.008213611
N4BP3	5q35.3	0.154156	0.002518	0.008222818
CDR2L	17q25.1	0.154148	0.002519	0.008225653
EXOSC3	9p13.2	-0.15414	0.00252	0.008227792
LCT	2q21.3	-0.15413	0.002523	0.008233296
BVES	6q21	-0.15405	0.002536	0.00827576
NFKBIE	6p21.1	-0.15405	0.002536	0.00827576
OGDH	7p13	0.154031	0.002539	0.008282112
SHCBP1	16q11.2	0.154027	0.00254	0.008283326
LY6E	8q24.3	-0.15401	0.002542	0.008288871
PNP	14q11.2	0.153984	0.002547	0.008303652
CD2	1p13.1	0.153908	0.002559	0.008343802
ANGEL2	1q32.3	-0.15389	0.002562	0.008349849
CDRT1	17p12	0.153888	0.002563	0.008352013

ABCG2	4q22.1	0.153877	0.002565	0.008356712
PLN	6q22.31	-0.15386	0.002568	0.008366128
NOX4	11q14.3	-0.15384	0.002571	0.008374901
MGAT1	5q35.3	0.153834	0.002572	0.008375896
THBS2	6q27	-0.15381	0.002576	0.008387157
SMG6	17p13.3	0.153808	0.002576	0.008387446
SERINC2	1p35.2	0.153805	0.002577	0.008387853
PNPLA2	11p15.5	0.153788	0.00258	0.008395938
FOXK2	17q25.3	-0.15372	0.002591	0.008432692
SRSF10	1p36.11	-0.15366	0.002601	0.008463163
ADCY2	5p15.31	-0.15364	0.002604	0.00847189
DAPL1	2q24.1	-0.15362	0.002608	0.008483529
EDC3	15q24.1	-0.15361	0.002609	0.008484651
MAB21L2	4q31.3	-0.15359	0.002613	0.008496517
C14ORF93	14q11.2	-0.15358	0.002615	0.008502548
FAM241A	4q25	0.153555	0.002619	0.008513604
PPP4R3A	14q32.12	0.153538	0.002622	0.008521558
KIAA1841	2p15	-0.15351	0.002626	0.008533769
CFL2	14q13.1	-0.15351	0.002627	0.008533769
LINC01096	4p15.33	-0.15349	0.00263	0.008544938
RAB11FIP1	8p11.23	0.15348	0.002632	0.008548637
GNA12	7p22.3-p22.2	-0.15346	0.002635	0.008557703
RPL31P11	1q23.3	-0.15342	0.002643	0.008580499
KIAA1671	22q11.23	0.153371	0.002651	0.008605171
DHRS4	14q11.2	0.153367	0.002651	0.00860583
SLC39A3	19p13.3	-0.15331	0.002661	0.008635409
EPS8L3	1p13.3	0.153295	0.002664	0.008643587
SPON2	4p16.3	-0.15327	0.002668	0.008655293
CEP55	10q23.33	0.153249	0.002672	0.008666649
TCEANC	Xp22.2	-0.15324	0.002674	0.008671078
ALX1	12q21.31	-0.15323	0.002675	0.008673414
GSTT2	22q11.23	-0.15322	0.002677	0.008677886
CTCFL	20q13.31	-0.1532	0.00268	0.008686953
NIT1	1q23.3	0.153188	0.002683	0.008694566
EFTUD2	17q21.31	-0.15313	0.002692	0.008724542
KCNA3	1p13.3	0.153015	0.002713	0.008790195
MRPS24	7p13	-0.15298	0.002719	0.00880868
FAM155B	Xq13.1	-0.15297	0.002721	0.008812232
RNF214	11q23.3	-0.15296	0.002722	0.00881539
DBIL5P	17p13.3	0.152931	0.002728	0.008832565
ANKRD10	13q34	-0.15293	0.002728	0.008832993
MYL10	7q22.1	-0.15289	0.002735	0.008852145
MTA1	14q32.33	-0.15283	0.002746	0.008887056
MLXIP	12q24.31	0.152824	0.002747	0.008888605
EFCAB12	3q21.3	0.152751	0.00276	0.008929179
PTPRN2	7q36.3	0.152739	0.002762	0.008934474
KLHL15	Xp22.11	-0.15272	0.002765	0.008942407
PPAN	19p13.2	-0.15271	0.002767	0.008946842
PMAIP1	18q21.32	-0.1527	0.00277	0.008955536
KCNAB2	1p36.31	-0.15268	0.002772	0.008960901
RAB30	11q14.1	-0.15268	0.002773	0.008960901
TMEM186	16p13.2	-0.15268	0.002773	0.008960901
PDHA1	Xp22.12	-0.15268	0.002773	0.008960901
CYP4V2	4q35.1-q35.2	0.152664	0.002775	0.008966724
TPSAB1	16p13.3	0.152651	0.002778	0.008972675
GFRA3	5q31.2	-0.15263	0.002781	0.008982805
RABL2A	2q14.1	-0.15263	0.002782	0.008984213
RPL29	3p21.2	-0.15261	0.002786	0.008994197



ADA	20q13.12	-0.15259	0.00279	0.009005561
CDK3	17q25.1	-0.15258	0.00279	0.009005561
CD3D	11q23.3	0.152578	0.002791	0.009005561
STAP1	4q13.2	0.152578	0.002791	0.009005561
GPRC5A	12p13.1	0.152561	0.002794	0.009014121
MMP12	11q22.2	0.152536	0.002799	0.009027161
CORO2B	15q23	-0.15253	0.0028	0.009030122
RSU1P2	10q11.21	0.152487	0.002808	0.009052631
DMPK	19q13.32	-0.15248	0.002808	0.009053859
TRNP1	1p36.11	0.152441	0.002816	0.009077081
HIBADH	7p15.2	-0.15241	0.002821	0.009091477
TNS1	2q35	-0.15239	0.002825	0.009101883
SCML2	Xp22.13	-0.15239	0.002825	0.009101883
ZNF331	19q13.42	-0.15238	0.002826	0.009104418
LRBA	4q31.3	0.152382	0.002827	0.009104418
PRC1	15q26.1	0.152375	0.002828	0.009107148
RNF6	13q12.13	-0.15237	0.00283	0.009110769
MIB1	18q11.2	0.152342	0.002834	0.009122724
HIVEP3	1p34.2	0.152341	0.002834	0.009122724
CASQ1	1q23.2	-0.15233	0.002836	0.009126651
PLEKHA2	8p11.22	-0.15231	0.00284	0.009136732
TIGIT	3q13.31	0.152289	0.002844	0.009149039
LINC00479	21q22.3	-0.15229	0.002844	0.009149802
ODR4	1q31.1	0.15228	0.002846	0.009151396
CCNI	4q21.1	0.152278	0.002846	0.009151396
LAD1	1q32.1	0.152227	0.002855	0.009180221
ALG3	3q27.1	-0.15222	0.002856	0.009181052
AMPD1	1p13.2	0.152183	0.002864	0.009203607
WIPF2	17q21.2	0.152173	0.002865	0.009207585
SRRM1	1p36.11	0.152171	0.002866	0.009207777
CYP3A43	7q22.1	-0.15212	0.002875	0.009234766
STYXL1	7q11.23	-0.15209	0.002882	0.009255508
GBP2	1p22.2	0.152065	0.002885	0.00926628
RNF208	9q34.3	-0.15204	0.002889	0.009277511
DIABLO	12q24.31	-0.15203	0.002893	0.009287212
NUDT7	16q23.1	-0.15202	0.002894	0.009288181
RPL32	3p25.2	-0.15201	0.002895	0.009292515
SNAP23	15q15.1-q15.2	0.151997	0.002898	0.009299829
TPBG	6q14.1	0.151988	0.0029	0.009304039
PTPRC	1q31.3-q32.1	0.151972	0.002903	0.009312269
RTL10	22q11.21	-0.15193	0.00291	0.009333349
RANBP3L	5p13.2	-0.15193	0.002911	0.009334192
PMVK	1q21.3	0.151913	0.002914	0.009342849
ELAC1	18q21.2	0.151899	0.002917	0.009350324
CD52	1p36.11	0.151885	0.002919	0.009357293
RDH10	8q21.11	0.151875	0.002921	0.00936068
TUT7	9q21.33	0.151874	0.002921	0.00936068
FAM9C	Xp22.2	-0.15187	0.002923	0.009363349
HIST1H4J	6p22.1	-0.15186	0.002924	0.009367908
ITPRIPL1	2q11.2	-0.15185	0.002925	0.009368175
COX6B2	19q13.42	0.151851	0.002926	0.009368632
PSG1	19q13.2	-0.15184	0.002928	0.009374424
KLHL38	8q24.13	-0.15184	0.002928	0.009374424
KLF17	1p34.1	-0.1518	0.002935	0.009395471
GON7	14q32.12	0.151781	0.002939	0.009404939
KIF24	9p13.3	0.151778	0.002939	0.009405268
PPP1R9A	7q21.3	0.151733	0.002948	0.009431137
ABCB7	Xq13.3	-0.15171	0.002952	0.009441438

CD46	1q32.2	-0.1517	0.002954	0.0094461
SCARB2	4q21.1	0.151701	0.002954	0.00944643
HMGCL	1p36.11	0.151691	0.002956	0.00945057
UHRF1	19p13.3	0.151687	0.002957	0.009451689
AMN	14q32.32	0.151644	0.002965	0.009476355
KLHL5	4p14	-0.15164	0.002966	0.009479584
GPR137B	1q42.3	0.151608	0.002972	0.009494547
HMCN1	1q25.3-q31.1	-0.15161	0.002972	0.009494547
ALG6	1p31.3	0.151601	0.002973	0.009496797
MLH1	3p22.2	-0.1516	0.002974	0.009497658
PART1	5q12.1	-0.15159	0.002976	0.009502812
SSC5D	19q13.42	-0.15158	0.002977	0.009502812
NACC2	9q34.3	0.151559	0.002981	0.009516355
PAIP2	5q31.2	-0.1515	0.002992	0.009549126
CBLL1	7q22.3	-0.1515	0.002993	0.009550247
ASB4	7q21.3	-0.1515	0.002993	0.009550247
XAGE2	Xp11.22	-0.15146	0.002999	0.009568447
ZNF106	15q15.1	0.151454	0.003002	0.009573698
ZBTB24	6q21	-0.15144	0.003004	0.009579085
COBLL1	2q24.3	-0.15137	0.003018	0.009622528
RNF41	12q13.3	-0.15137	0.003018	0.009622528
MYBPC1	12q23.2	0.151355	0.003021	0.009628715
ETV4	17q21.31	-0.15132	0.003028	0.009650208
ABHD4	14q11.2	0.151278	0.003036	0.009673326
ACVR1B	12q13.13	-0.15127	0.003037	0.009676215
SERHL2	22q13.2	-0.15126	0.003039	0.009680033
IWS1	2q14.3	-0.15125	0.003041	0.009686156
FRAT1	10q24.1	0.151202	0.003051	0.009714602
ZBTB12	6p21.33	-0.1512	0.003052	0.009717098
ACSL1	4q35.1	0.151191	0.003053	0.009718651
RPS9	19q13.42	-0.15115	0.003062	0.009744752
TMEM170B	6p24.2	-0.15109	0.003073	0.009778498
TRMU	22q13.31	-0.15107	0.003078	0.009792395
SHLD2	10q23.2	0.151054	0.00308	0.009798436
CYP1B1-AS1	2p22.2	0.151044	0.003082	0.009802889
CLTC	17q23.1	0.151029	0.003085	0.009810936
FZD6	8q22.3	-0.15102	0.003086	0.009814269
TMEM14B	6p24.2	-0.151	0.00309	0.009823586
PGD	1p36.22	0.150982	0.003094	0.009836042
TRO	Xp11.21	-0.15098	0.003095	0.009836115
RFC2	7q11.23	-0.15094	0.003102	0.009857314
FYB1	5p13.1	0.150918	0.003107	0.009871857
CFAP73	12q24.13	0.150914	0.003108	0.009871867
VAC14	16q22.1-q22.2	-0.15091	0.003108	0.009871867
UQCR10	22q12.2	0.150899	0.003111	0.00987932
CD1E	1q23.1	0.150887	0.003113	0.009885643
RPUSD2	15q15.1	-0.15085	0.003121	0.009908074
PGM5P2	9p11.2	-0.1508	0.003131	0.009939806
FMC1	7q34	-0.15079	0.003132	0.009941027
LRWD1	7q22.1	-0.15077	0.003138	0.009956507
WFIKKN2	17q21.33	-0.15073	0.003146	0.009980332
KCTD5	16p13.3	0.150704	0.00315	0.009991609
TRPM8	2q37.1	-0.1507	0.00315	0.009991609
TMEM123	11q22.2	-0.1507	0.003151	0.009992101
LRRIQ1	12q21.31	-0.15066	0.00316	0.010018751
ZMYND10	3p21.31	0.150623	0.003166	0.010038185
C1QTNF12	1p36.33	0.150615	0.003168	0.010041992
KAT14	20p11.23	-0.15059	0.003172	0.010053127

FASTKD2	2q33.3	-0.15059	0.003173	0.010053127
DUSP16	12p13.2	-0.15057	0.003178	0.010069181
SEMA7A	15q24.1	-0.15053	0.003186	0.010091248
DBF4	7q21.12	-0.15052	0.003187	0.010091679
VRK2	2p16.1	-0.15052	0.003187	0.010091679
FAM30A	14q32.33	0.150505	0.00319	0.010102133
CPXM1	20p13	-0.15049	0.003194	0.010109229
BPIFA1	20q11.21	-0.15049	0.003194	0.010109229
PGA4	11q12.2	0.150454	0.003201	0.010130312
CLN5	13q22.3	-0.15045	0.003202	0.010133237
IL12RB1	19p13.11	0.15044	0.003204	0.010135971
ALDH2	12q24.12	0.150429	0.003206	0.010141924
CDK13	7p14.1	-0.15042	0.003207	0.010144459
PHF6	Xq26.2	-0.15042	0.003208	0.010144459
SLC5A11	16p12.1	-0.15041	0.003209	0.010146693
DDX51	12q24.33	-0.15037	0.003218	0.010172643
MYO1D	17q11.2	0.150359	0.00322	0.010179317
CLEC17A	19p13.12	0.150332	0.003226	0.010195402
SND1	7q32.1	-0.15033	0.003227	0.010195772
ATXN2L	16p11.2	-0.15032	0.003228	0.010199366
WDR83OS	19p13.13	-0.15027	0.003238	0.010229582
RUNX1	21q22.12	-0.15027	0.003239	0.010230507
SULT4A1	22q13.31	-0.15026	0.00324	0.010231634
BTD	3p25.1	0.150244	0.003244	0.010243082
OLMALINC	10q24.31	-0.1502	0.003254	0.010271858
EIF5A	17p13.1	0.15019	0.003255	0.010275193
ZNF214	11p15.4	-0.15016	0.003261	0.010290715
ADCK5	8q24.3	-0.15014	0.003266	0.010305628
MGST1	12p12.3	0.150137	0.003267	0.010305628
EED	11q14.2	-0.15012	0.00327	0.010314228
PCGF2	17q12	-0.15009	0.003277	0.010336207
CCT5	5p15.2	-0.15006	0.003283	0.010352064
C10ORF67	10p12.2	-0.15006	0.003283	0.010352064
GLIPR1L1	12q21.2	-0.15005	0.003285	0.010355996
ARRDC4	15q26.2	0.150031	0.003289	0.010365458
CCNL2	1p36.33	-0.15003	0.003289	0.010365682
NFKBIZ	3q12.3	0.150011	0.003293	0.01037547
TDP2	6p22.3	0.150008	0.003294	0.010376265
MAGEF1	3q27.1	-0.15	0.003296	0.010382918
POLA1	Xp22.11-p21.3	-0.14997	0.003302	0.010399588
EYA4	6q23.2	-0.14996	0.003305	0.010405648
GTF2A1	14q31.1	0.149951	0.003306	0.010407625
C16ORF87	16q11.2	-0.14994	0.003309	0.01041616
PURB	7p13	-0.14993	0.00331	0.010416672
PKD2	4q22.1	-0.14992	0.003312	0.010421055
WFDC13	20q13.12	-0.14991	0.003314	0.010427455
CYTH3	7p22.1	-0.14988	0.003321	0.01044648
TEDC2	16p13.3	-0.14985	0.003326	0.010463241
HSP90AB2P	4p15.33	-0.14983	0.003332	0.010478364
SEC14L3	22q12.2	0.1498	0.003338	0.010495005
KIF7	15q26.1	-0.14978	0.003343	0.010509047
HS3ST4	16p12.1	-0.14977	0.003343	0.010509762
MRM3	17p13.3	0.14976	0.003346	0.010517161
PROB1	5q31.2	0.149747	0.003349	0.01052433
PRR4	12p13.2	-0.14973	0.003352	0.010532661
PAGE1	Xp11.23	-0.14972	0.003355	0.010540886
PLCB4	20p12.3-p12.2	-0.1497	0.00336	0.01055224
LOC256880	4q23	-0.14969	0.00336	0.010552506

RPL7	8q21.11	-0.14968	0.003363	0.010561111
TSPAN5	4q23	-0.14966	0.003367	0.010571792
TAF5	22q13.32	-0.14965	0.003369	0.010575799
DNAJB5	9p13.3	-0.14965	0.003371	0.010579371
ZFP82	19q13.12	-0.14963	0.003373	0.010585124
SHPK	17p13.2	0.149604	0.00338	0.010604123
RTP5	2q37.3	0.149586	0.003383	0.010614139
LRRFIP2	3p22.2	0.149579	0.003385	0.010617407
TRMT1	19p13.13	-0.14957	0.003386	0.010620118
FAM161B	14q24.3	0.149564	0.003388	0.010624287
PTBP2	1p21.3	-0.14955	0.003391	0.010631225
PHF21A	11p11.2	-0.14955	0.003392	0.010633799
ADAL	15q15.3	-0.14954	0.003393	0.010634756
CAVIN1	17q21.2	-0.14954	0.003394	0.010636163
PRMT6	1p13.3	-0.14952	0.003399	0.010648315
LRRC31	3q26.2	0.149514	0.003399	0.010648315
TAF3	1p13.2	-0.1495	0.003401	0.010653127
ATRX	Xq21.1	-0.14949	0.003404	0.010660188
SIGLEC12	19q13.41	0.149488	0.003405	0.01066066
SLC22A2	6q25.3	-0.14947	0.003408	0.010669334
LOC730668	22q13.31	-0.14944	0.003415	0.010691145
TMPO	12q23.1	0.149412	0.003421	0.010707884
SNAPC2	19p13.2	0.149378	0.003429	0.010729139
ZNF571	19q13.12	-0.14938	0.003429	0.010729523
ANKRD40CL	17q21.33	0.149368	0.003431	0.010732996
XXYLT1	3q29	-0.14934	0.003438	0.010751791
SMCO3	12p12.3	-0.14933	0.003439	0.010754041
KANSL1	17q21.31	-0.1493	0.003446	0.010773953
SLA2	20q11.23	0.149296	0.003447	0.010775372
LINC00240	6p22.2	-0.14927	0.003453	0.010792475
THOC5	22q12.2	-0.14927	0.003453	0.010793139
NUMA1	11q13.4	-0.14925	0.003457	0.010802255
GNAI1	7q21.11	0.149232	0.003461	0.010811737
AKR1E2	10p15.1	-0.14923	0.003461	0.010811737
SDC2	8q22.1	-0.1492	0.003469	0.010833651
COL25A1	4q25	-0.14917	0.003474	0.010847573
GATAD2A	19p13.11	0.149171	0.003474	0.010847642
DHCR24	1p32.3	0.149128	0.003484	0.010875845
DAPK3	19p13.3	-0.14912	0.003486	0.01088115
GSTA1	6p12.2	0.149113	0.003487	0.010882969
ZNF254	19p12	-0.14908	0.003494	0.010901909
SLC35G2	3q22.3	-0.14904	0.003503	0.010928502
SH2D6	2p11.2	0.149038	0.003504	0.010929862
LETM2	8p11.23	0.149029	0.003506	0.010934382
RPL19	17q12	-0.14901	0.00351	0.010945633
CTAGE11P	13q22.2	0.149	0.003512	0.010950813
ADGRE5	19p13.12	0.148985	0.003516	0.010959755
C1ORF112	1q24.2	-0.14898	0.003517	0.010962397
RANBP2	2q13	0.148967	0.00352	0.010968941
RPL32P3	3q21.3	-0.14895	0.003523	0.010978941
NBPF11	1q21.2	-0.14894	0.003526	0.010984442
COL27A1	9q32	-0.14893	0.003527	0.010986189
C2ORF73	2p16.2	0.148932	0.003527	0.010986627
GRHL2	8q22.3	-0.14891	0.003532	0.010996596
SLC6A12	12p13.33	0.148913	0.003532	0.010996596
COPS3	17p11.2	0.148883	0.003538	0.011015298
RPL22L1	3q26.2	0.148864	0.003543	0.011026844
PADI1	1p36.13	-0.14885	0.003546	0.011035384

LOC646999	7p14.1	-0.14884	0.003548	0.011039396
TBC1D12	10q23.33	0.148838	0.003549	0.011040403
ZNF721	4p16.3	0.148829	0.003551	0.011043764
GEMIN8	Xp22.2	-0.14883	0.003551	0.011043764
NSUN3	3q11.2	0.148824	0.003552	0.01104476
SERPINA6	14q32.13	-0.14882	0.003553	0.011047158
FAM219A	9p13.3	-0.14881	0.003556	0.011054171
TTC12	11q23.2	-0.14878	0.003561	0.011068627
LINC01138	1q21.2	-0.14878	0.003562	0.011068968
DSE	6q22.1	-0.14876	0.003565	0.01107911
CAMTA1	1p36.31-p36.23	-0.14874	0.00357	0.011091323
PHKG1	7p11.2	-0.1487	0.003579	0.011117005
ZNF100	19p12	-0.14868	0.003585	0.011133907
PXDNL	8q11.22-q11.23	-0.14867	0.003586	0.011133907
ZNF768	16p11.2	-0.14867	0.003586	0.011133907
AK9	6q21	-0.14866	0.003588	0.011139176
RPP38	10p13	-0.14861	0.003601	0.011177052
P2RY11	19p13.2	0.148593	0.003604	0.011185538
EDN1	6p24.1	-0.14858	0.003607	0.011193584
CCDC190	1q23.3	0.148566	0.00361	0.011201012
GCNT1	9q21.13	0.148564	0.003611	0.011201116
DOC2B	17p13.3	0.148527	0.003619	0.011225463
ZNF727	7q11.21	-0.14848	0.003629	0.011255024
PLAC9	10q22.3	-0.14845	0.003636	0.01127504
PBK	8p21.1	0.148444	0.003638	0.011279405
ACE2	Xp22.2	-0.14843	0.003642	0.011289245
PIK3CG	7q22.3	0.148424	0.003643	0.011289245
REV1	2q11.2	-0.14842	0.003643	0.011289245
GHRH	20q11.23	-0.14841	0.003645	0.011293492
DCTN6	8p12	0.14839	0.003651	0.01130901
VANGL1	1p13.1	0.148383	0.003652	0.011312503
CPA3	3q24	0.148375	0.003654	0.011316525
LOC100132287	1p36.33	-0.14834	0.003662	0.01133786
PGA3	11q12.2	0.14834	0.003662	0.01133786
FNDC4	2p23.3	-0.14833	0.003665	0.011343941
CCDC183	9q34.3	-0.14832	0.003666	0.01134729
ARMH3	10q24.32	0.148311	0.003669	0.011353578
ZNF526	19q13.2	-0.14823	0.003688	0.011409567
TESPA1	12q13.2	0.148227	0.003689	0.011410394
TLR10	4p14	0.14822	0.00369	0.011413975
PDLIM7	5q35.3	-0.14819	0.003697	0.011434065
AP1AR	4q25	0.148169	0.003702	0.01144694
PRICKLE1	12q12	-0.14816	0.003703	0.011448913
POSTN	13q13.3	-0.14814	0.003709	0.01146508
TMEM182	2q12.1	-0.14812	0.003712	0.011473769
ZNF252P	8q24.3	-0.14808	0.003723	0.01150436
PCDHB12	5q31.3	-0.14807	0.003726	0.011510564
LNPEP	5q15	0.148064	0.003727	0.01151271
SCARNA9L	Xp22.12	-0.14806	0.003728	0.011514682
TPSB2	16p13.3	0.148051	0.00373	0.011517722
PPM1K	4q22.1	0.14805	0.00373	0.011517722
TMUB1	7q36.1	-0.14804	0.003733	0.011526134
TRIM28	19q13.43	-0.14802	0.003738	0.011537376
TGFBR1	9q22.33	-0.14801	0.00374	0.011542504
NRP2	2q33.3	-0.148	0.003741	0.011543656
NAXE	1q22	-0.148	0.003741	0.011543656
CFAP57	1p34.2	0.147977	0.003747	0.011560221
SLAMF7	1q23.3	0.147945	0.003755	0.011581602

TUBB2B	6p25.2	-0.14794	0.003757	0.011585246
RBM12	20q11.22	-0.14793	0.003759	0.011589532
TNN	1q25.1	-0.14792	0.003761	0.011594473
CEP63	3q22.2	-0.14792	0.003761	0.011594473
CLCA2	1p22.3	0.147885	0.003769	0.011616661
PKDREJ	22q13.31	0.147821	0.003784	0.011661998
SPOCK1	5q31.2	-0.14777	0.003796	0.011694949
TSPAN10	17q25.3	-0.14777	0.003797	0.011696872
C8ORF48	8p22	-0.14774	0.003804	0.011717185
HRAS	11p15.5	-0.14773	0.003806	0.011721027
ACSS3	12q21.31	-0.14769	0.003815	0.011748
LINC01184	5q23.3	-0.14768	0.003819	0.011756462
MOB3A	19p13.3	0.147676	0.003819	0.01175657
FGF10	5p12	-0.14763	0.00383	0.01178813
CD1D	1q23.1	0.147616	0.003834	0.011797383
MBNL1	3q25.1-q25.2	0.147612	0.003835	0.011798772
CRYZL1	21q22.11	0.147593	0.003839	0.011810573
CDC14B	9q22.32-q22.33	0.147591	0.00384	0.011810681
GIMAP2	7q36.1	0.147586	0.003841	0.011812393
RBBP7	Xp22.2	-0.14758	0.003842	0.011815227
RGR	10q23.1	-0.14758	0.003843	0.011815548
RBPMS2	15q22.31	-0.14757	0.003845	0.011817109
SMIM12	1p34.3	0.147568	0.003845	0.011817109
SLC9A3R1	17q25.1	0.147568	0.003845	0.011817109
SIK1	21q22.3	0.147515	0.003858	0.011854461
SCARNA7	3q25.33	-0.14749	0.003865	0.011873363
LOC284798	20p11.21	-0.14748	0.003868	0.011879764
ZC3H12B	Xq11.2-q12	-0.14746	0.003872	0.011890362
MBTPS2	Xp22.12	-0.14742	0.00388	0.011914841
KDM5C	Xp11.22	-0.14739	0.003889	0.011939096
MIPOL1	14q13.3-q21.1	0.147385	0.00389	0.011939096
PYM1	12q13.2	0.147385	0.00389	0.011939096
RHBDF1	16p13.3	-0.14735	0.003898	0.011962524
MCFD2	2p21	-0.14732	0.003907	0.011987779
CKLF	16q21	0.14731	0.003908	0.011990165
HHEX	10q23.33	0.147304	0.00391	0.011992551
GLOD5	Xp11.23	-0.14728	0.003915	0.012006633
TMOD2	15q21.2	-0.14726	0.00392	0.012020742
KATNAL1	13q12.3	-0.14726	0.003921	0.012022808
CHMP7	8p21.3	0.147254	0.003922	0.012023572
CNTROB	17p13.1	0.147251	0.003923	0.012023685
C6ORF58	6q22.33	0.147242	0.003925	0.012028565
ZNF542P	19q13.43	-0.14721	0.003933	0.01205218
ADAR	1q21.3	0.147182	0.00394	0.012070502
SLC10A2	13q33.1	0.14717	0.003943	0.012077858
	4-Mar 2q35	-0.14716	0.003946	0.012086625
MRPS9	2q12.1	-0.14715	0.003947	0.012087959
KIF12	9q32	-0.14715	0.003948	0.012087959
TMEM42	3p21.31	-0.14714	0.003949	0.01208971
RPL14	3p22.1	-0.14714	0.003951	0.012091374
TCAM1P	17q23.3	-0.14714	0.003951	0.012091374
MRPS15	1p34.3	-0.14709	0.003962	0.012122483
IFRD2	3p21.31	-0.14709	0.003964	0.012126535
NEUROG3	10q22.1	0.147081	0.003965	0.012128407
ALKBH8	11q22.3	-0.14708	0.003965	0.012128407
GCN1	12q24.23	0.147006	0.003984	0.012182602
PAGE2B	Xp11.21	-0.147	0.003986	0.012188104
CPT1C	19q13.33	-0.14698	0.00399	0.012196676

AKAP4	Xp11.22	-0.14695	0.003997	0.012217881
TDRD7	9q22.33	0.146918	0.004006	0.012242656
POGK	1q24.1	-0.14687	0.004019	0.012280708
RBM33	7q36.3	-0.14681	0.004033	0.012323192
SCAND2P	15q25.2	-0.14678	0.00404	0.012340126
CNPY2	12q13.3	-0.14678	0.004041	0.012342145
PPP1R12B	1q32.1	0.146776	0.004042	0.012342145
ZNF789	7q22.1	-0.14677	0.004042	0.012342145
ZNF717	3p12.3	-0.14674	0.004051	0.01236778
FMN1	15q13.3	0.146725	0.004055	0.012374441
PCDH10	4q28.3	-0.14672	0.004055	0.012374441
XRRA1	11q13.4	-0.14671	0.004058	0.012382165
NXF5	Xq22.1	-0.14671	0.004058	0.012382466
LMX1B	9q33.3	-0.1467	0.00406	0.012385386
C1ORF116	1q32.1	0.146693	0.004063	0.012391381
DLX6	7q21.3	-0.14668	0.004066	0.012400036
DPY19L2P2	7q22.1	-0.14666	0.004072	0.012414857
RBM12B	8q22.1	-0.14665	0.004074	0.01242187
KLRC4	12p13.2	0.14663	0.004079	0.012431954
MEG3	14q32.2	-0.14663	0.00408	0.012431954
TUBAL3	10p15.1	0.146627	0.00408	0.012431954
MAGEL2	15q11.2	-0.14662	0.004081	0.012432871
PCYOX1L	5q32	0.146605	0.004085	0.012444856
DPM2	9q34.11	-0.1466	0.004086	0.012444899
ATP5MG	11q23.3	-0.14659	0.004089	0.012452407
NIPAL2	8q22.2	0.146585	0.00409	0.012453491
PILRB	7q22.1	-0.14658	0.00409	0.012453491
UNK	17q25.1	-0.14658	0.004091	0.012454362
ZNF277	7q31.1	-0.14657	0.004094	0.012461799
ANKZF1	2q35	-0.14655	0.004098	0.012471334
VLDLR-AS1	9p24.2	-0.14653	0.004103	0.012485367
RASA1	5q14.3	0.146476	0.004118	0.012529037
BCKDHA	19q13.2	0.146471	0.00412	0.01253068
BEST1	11q12.3	-0.14645	0.004124	0.012542285
ST6GAL1	3q27.3	-0.14644	0.004128	0.012553911
DUT	15q21.1	-0.14642	0.004132	0.012564018
LNX1	4q12	0.146399	0.004138	0.012580061
TRAPPC11	4q35.1	0.146387	0.004141	0.012587643
NPAS2	2q11.2	-0.14638	0.004143	0.012591837
SF3B2	11q13.1	-0.14637	0.004146	0.01259722
SDHAF4	6q13	-0.14637	0.004147	0.012598872
RPS13	11p15.1	-0.14636	0.004148	0.012600524
RNF227	17p13.1	0.146315	0.00416	0.012634289
ZNF165	6p22.1	0.146298	0.004164	0.012645985
PLEKHG2	19q13.2	-0.14629	0.004167	0.012650663
SPOP	17q21.33	-0.14629	0.004167	0.012650663
ZNF709	19p13.2	-0.14628	0.00417	0.012658114
SOX8	16p13.3	0.146219	0.004185	0.012699102
SYNM	15q26.3	-0.14622	0.004185	0.012699102
ZNF256	19q13.43	-0.14622	0.004186	0.012699102
COL8A2	1p34.3	-0.14621	0.004187	0.012700254
UQCC3	11q12.3	-0.14621	0.004188	0.01270209
ATRIP	3p21.31	-0.14619	0.004191	0.012710765
MRPL15	8q11.23	-0.14618	0.004194	0.012716537
ATG4C	1p31.3	0.146178	0.004196	0.012720428
NFKB2	10q24.32	0.146172	0.004197	0.012721027
IL15	4q31.21	0.146172	0.004197	0.012721027
SLC16A1	1p13.2	0.146164	0.0042	0.012725776

TOB2	22q13.2	0.14616	0.004201	0.012727103
CYP1A1	15q24.1	0.14615	0.004203	0.012732577
GTPBP4	10p15.3	-0.14615	0.004204	0.012733826
CLN8	8p23.3	0.146144	0.004205	0.012733826
CCL5	17q12	0.14614	0.004206	0.012735155
CSMD2	1p35.1	-0.14612	0.004211	0.012747752
DNM1P35	15q24.2	-0.14612	0.004211	0.012747752
USP37	2q35	-0.1461	0.004216	0.012758131
CCDC120	Xp11.23	-0.1461	0.004216	0.012758131
ANGPT1	8q23.1	-0.14609	0.004219	0.012764055
C2	6p21.33	-0.14609	0.004219	0.012764055
FAM174B	15q26.1	0.146068	0.004225	0.012778437
LINGO3	19p13.3	-0.14606	0.004226	0.012781703
NECAB1	8q21.3	-0.14604	0.004232	0.012797861
NUP37	12q23.2	-0.14602	0.004238	0.012814437
LDLRAD2	1p36.12	-0.14601	0.004241	0.012817801
TMEM68	8q12.1	-0.14601	0.004241	0.012817801
JTB	1q21.3	0.145895	0.004271	0.012905881
ETV5	3q27.2	0.145868	0.004278	0.012925438
PGLS	19p13.11	-0.14586	0.00428	0.012929736
MAGI1	3p14.1	0.145854	0.004282	0.012932259
STON1	2p16.3	-0.14585	0.004282	0.012932259
RPUSD3	3p25.3	-0.14583	0.004287	0.012945768
EIF3M	11p13	-0.14583	0.004288	0.012947118
C1ORF127	1p36.22	-0.14582	0.00429	0.012950941
ZNF333	19p13.12	-0.14582	0.004291	0.012951558
CRB3	19p13.3	0.1458	0.004296	0.012964737
CD226	18q22.2	0.145787	0.004299	0.012973159
GEMIN5	5q33.2	-0.14578	0.004302	0.012980113
LINC00467	1q32.3	0.145774	0.004303	0.012980113
CCDC154	16p13.3	-0.14577	0.004304	0.012981342
PRDX4	Xp22.11	-0.14577	0.004305	0.012982126
URB1-AS1	21q22.11	-0.14573	0.004313	0.013005024
DPH3P1	20q13.33	-0.14573	0.004314	0.013005024
CDK10	16q24.3	-0.14573	0.004314	0.013005024
LEMD3	12q14.3	-0.14572	0.004318	0.013012156
LINC01600	6p25.2	-0.14572	0.004318	0.013012156
NELFE	6p21.33	-0.14569	0.004324	0.013028483
CPB2	13q14.13	-0.14568	0.004329	0.013041014
MCM8	20p12.3	-0.14567	0.004332	0.013047293
CCL15	17q12	0.145648	0.004337	0.013061085
MRV1	11p15.4	-0.14564	0.00434	0.013067003
ING1	13q34	-0.14562	0.004344	0.013076042
TRIM31	6p22.1	0.145622	0.004344	0.013076042
CERS1	19p13.11	-0.14558	0.004355	0.013108659
MNT	17p13.3	0.145547	0.004364	0.013133232
BGN	Xq28	-0.14553	0.004369	0.013146577
DTX3L	3q21.1	0.145523	0.004371	0.013149358
CARMN	5q32	-0.14551	0.004374	0.013156364
ARL6IP5	3p14.1	0.145508	0.004375	0.013157391
IL6ST	5q11.2	0.145493	0.004379	0.01316701
NSRP1	17q11.2	-0.14549	0.004379	0.01316701
ROBO1	3p12.3	-0.14548	0.004383	0.013176508
XRCC2	7q36.1	-0.14547	0.004385	0.01317859
CTNND1	11q12.1	0.145454	0.00439	0.0131918
ANKRD6	6q15	-0.14541	0.004401	0.013222887
MTMR1	Xq28	-0.14537	0.004411	0.013253165
ECD	10q22.2	-0.14537	0.004414	0.013258097



SYNPR	3p14.2	-0.14533	0.004422	0.013282006
AKT2	19q13.2	-0.14532	0.004425	0.013289471
CUTALP	9q33.2	-0.14532	0.004427	0.01329317
B4GALT6	18q12.1	0.145288	0.004435	0.013312857
SLC30A4	15q21.1 15q21.1	0.145288	0.004435	0.013312857
ITPKC	19q13.2	-0.14528	0.004437	0.013314853
PCOLCE	7q22.1	-0.14528	0.004437	0.013314853
METTL21EP	13q33.1	-0.14528	0.004439	0.013314853
SASH3	Xq26.1	0.145276	0.004439	0.013314853
ATP5PO	21q22.11	0.145214	0.004456	0.013363888
CCDC74B	2q21.1	-0.14521	0.004457	0.01336564
INKA2	1p13.2	0.145194	0.004461	0.013376327
MAP3K12	12q13.13	-0.14517	0.004469	0.013397421
PWP1	12q23.3	-0.14516	0.004471	0.013403477
SEL1L3	4p15.2	0.145141	0.004476	0.013414736
LENG1	19q13.42	-0.14513	0.004478	0.013418467
DACT2	6q27	-0.14512	0.004481	0.013426548
DLGAP5	14q22.3	0.145068	0.004496	0.013469246
ZCCHC14	16q24.2	-0.14504	0.004504	0.013490644
ZNF420	19q13.12	-0.14503	0.004506	0.013496017
ZNF146	19q13.12	-0.14503	0.004508	0.013499408
WASHC5	8q24.13	-0.14502	0.00451	0.0135028
MT4	16q13	-0.14501	0.004513	0.01351094
FMN2	1q43	-0.14498	0.004521	0.01353161
SH2D1A	Xq25	0.144929	0.004535	0.013572169
RTBDN	19p13.13	0.144925	0.004536	0.013572912
UBN2	7q34	-0.14492	0.004538	0.013575855
CDAN1	15q15.2	-0.14491	0.004539	0.013577962
SIRT3	11p15.5	-0.14491	0.00454	0.013577962
S100A4	1q21.3	-0.14488	0.00455	0.013605868
C1GALT1C1	Xq24	-0.14485	0.004557	0.013624004
MS4A2	11q12.1	0.144841	0.00456	0.013631574
TCP11L1	11p13	0.144839	0.00456	0.013631574
SLC5A10	17p11.2	0.144831	0.004563	0.013636475
TRIM59	3q25.33	-0.14481	0.00457	0.013654807
MAP1B	5q13.2	-0.14478	0.004577	0.013674826
RWDD1	6q22.1	-0.14476	0.004582	0.013688479
PRL	6p22.3	-0.14473	0.00459	0.013711234
KLHL10	17q21.2	-0.14473	0.004592	0.01371265
USP7	16p13.2	-0.14472	0.004594	0.013714658
CUL7	6p21.1	-0.14472	0.004594	0.013714658
DKKL1	19q13.33	-0.14471	0.004598	0.013724342
MAP3K7CL	21q21.3	-0.1447	0.004601	0.013729557
PIH1D2	11q23.1	-0.1447	0.004601	0.013729557
EXD1	15q15.1	-0.14468	0.004604	0.013738093
FAM83A-AS1	8q24.13	0.144669	0.004609	0.013749329
CD19	16p11.2	0.144656	0.004612	0.013758216
SSTR3	22q13.1	0.144652	0.004614	0.013759752
MGC12916	17p12	0.14461	0.004625	0.013793101
ABCC5	3q27.1	-0.14459	0.004633	0.013812513
LSG1	3q29	-0.14457	0.004636	0.013821316
LRRN4CL	11q12.3	-0.14457	0.004638	0.013825152
SLF2	10q24.31	0.144562	0.004639	0.013826225
DIRC1	2q32.2	-0.14453	0.004647	0.013847579
TSPAN33	7q32.1	-0.14453	0.004649	0.013850863
ZNF492	19p12	-0.14453	0.00465	0.013851494
PACRG	6q26	-0.1445	0.004656	0.01386775
NSF	17q21.31	0.144501	0.004657	0.01386775

PHF2P1	13q12.11	-0.14449	0.00466	0.013874558
ZNF90	19p12	-0.14449	0.004661	0.013876741
PLSCR4	3q24	0.144482	0.004662	0.013878373
AHRR	5p15.33	0.144453	0.004671	0.013901459
RNFT2	12q24.22	-0.14444	0.004675	0.013911766
SRSF7	2p22.1	-0.14444	0.004676	0.013911766
F13A1	6p25.1	-0.14442	0.004679	0.013919516
KRT33A	17q21.2	-0.1444	0.004687	0.013940186
CGNL1	15q21.3	-0.14439	0.00469	0.013949128
ZNF404	19q13.31	-0.14437	0.004693	0.013956154
SH3PXD2B	5q35.1	-0.14437	0.004695	0.013958725
KRTAP10-11	21q22.3	-0.14436	0.004697	0.013963504
CCDC12	3p21.31	-0.14433	0.004707	0.013990401
RTCB	22q12.3	0.144323	0.004708	0.013990401
STBD1	4q21.1	0.144323	0.004708	0.013990401
ZNF300P1	5q33.1	-0.14431	0.004712	0.013999488
SNX32	11q13.1	-0.14428	0.00472	0.014019634
LCK	1p35.2	0.144262	0.004726	0.014037096
B3GNT5	3q27.1	0.144239	0.004733	0.014054435
TRIM8	10q24.32	0.144165	0.004755	0.014116942
SNORA8	11q21	-0.14409	0.004776	0.014177625
CCDC59	12q21.31	-0.14409	0.004777	0.014180421
RBAK	7p22.1	-0.14407	0.004782	0.014192639
CSRNP1	3p22.2	0.144064	0.004784	0.014196568
MMP13	11q22.2	-0.14402	0.004798	0.014235139
MTMR2	11q21	-0.14401	0.004802	0.014244094
DENND4A	15q22.31	0.143989	0.004807	0.01425674
TRIM72	16p11.2	0.14398	0.004809	0.014261992
LCORL	4p15.31	0.143959	0.004815	0.01427865
CTAGE15	7q35	0.143946	0.004819	0.014288282
SPOPL	2q22.1	0.143937	0.004822	0.01429357
1-Mar	1q41	0.143925	0.004826	0.014302648
DKK2	4q25	-0.14389	0.004835	0.014328805
IL1RL1	2q12.1	0.143849	0.004848	0.014363381
IL10RA	11q23.3	0.143846	0.004849	0.014363381
COQ9	16q21	0.143846	0.004849	0.014363381
RPP38-DT	10p13	-0.14382	0.004857	0.014385028
C11ORF87	11q22.3	-0.14382	0.004858	0.014385028
LY6G5C	6p21.33	-0.14381	0.004858	0.014385028
PCYOX1	2p13.3	-0.14381	0.004861	0.014390151
FAR2P1	2q21.1	-0.14376	0.004875	0.014428965
TBC1D8B	Xq22.3	0.143739	0.004881	0.014445335
NACA2	17q23.2	-0.14373	0.004883	0.014448151
STIL	1p33	0.143731	0.004883	0.014448151
CACNB2	10p12.33-p12.31	0.143707	0.004891	0.014468051
TMEM252	9q21.11	-0.1437	0.004893	0.01447185
SCN3B	11q24.1	-0.1437	0.004894	0.01447185
RGL4	22q11.23	0.143695	0.004894	0.01447185
SOHLH1	9q34.3	-0.14369	0.004895	0.014472221
FAHD2CP	2q11.2	-0.14368	0.0049	0.014484795
MAP3K9	14q24.2	0.143658	0.004906	0.014498592
RFX8	2q11.2	-0.14365	0.004909	0.014507608
LUM	12q21.33	-0.14363	0.004913	0.014517758
GHRLOS	3p25.3	-0.14362	0.004916	0.014524079
HIST2H2BF	1q21.2	-0.14361	0.004919	0.014531261
TXNDC12	1p32.3	-0.14361	0.00492	0.014531313
ERI3	1p34.1	-0.14361	0.004921	0.014531313
SLC31A2	9q32	0.143596	0.004924	0.014538795

PHF20L1	8q24.22	-0.14357	0.004931	0.014556107
TMPRSS11E	4q13.2	-0.14357	0.004932	0.014557276
GREB1L	18q11.1-q11.2	-0.14356	0.004935	0.014565106
TAF11	6p21.31	-0.14355	0.004938	0.014571073
SPAG16	2q34	-0.14351	0.00495	0.014604263
DENND1C	19p13.3	0.143502	0.004953	0.014610612
P3H1	1p34.2	-0.14349	0.004956	0.014616396
C15ORF41	15q14	-0.14345	0.004968	0.014650066
TOP1	20q12	-0.14343	0.004976	0.014670189
TAF2	8q24.12	-0.14343	0.004976	0.014670189
RPL12	9q33.3	-0.14341	0.004981	0.014681619
TRMT13	1p21.2	-0.14341	0.004981	0.014681983
NEU3	11q13.4	-0.14335	0.005	0.014731875
KCNJ11	11p15.1	-0.14335	0.005	0.014731875
ZNF648	1q25.3	0.143344	0.005001	0.014731875
CCAR1	10q21.3	-0.14334	0.005001	0.014731875
APOL2	22q12.3	0.143333	0.005005	0.014739036
NR1H3	11p11.2	-0.14333	0.005005	0.014739036
NHLRC4	16p13.3	-0.14331	0.005011	0.014752353
UBE2K	4p14	0.14331	0.005012	0.014753417
PHF23	17p13.1	0.14329	0.005018	0.014769199
GABPB1-IT1	15q21.2	-0.14327	0.005025	0.014787147
ZDHHC17	12q21.2	-0.14326	0.005027	0.014790838
GZMM	19p13.3	0.143255	0.005029	0.014794557
ZDHHC24	11q13.2	-0.14322	0.005039	0.014824057
GPR108	19p13.3	0.143212	0.005042	0.014828932
CARTPT	5q13.2	-0.14321	0.005044	0.014832561
PDCD7	15q22.31	-0.14319	0.005049	0.014844568
MAGEA3	Xq28	-0.14319	0.00505	0.014845333
PCOLCE2	3q23	-0.14318	0.005052	0.014851768
ANAPC13	3q22.2	-0.14315	0.005062	0.014877283
SRSF2	17q25.1	-0.14311	0.005074	0.014909909
PTGER3	1p31.1	-0.14311	0.005075	0.014910084
ENTPD5	14q24.3	0.143101	0.005076	0.014912819
FTCD	21q22.3	-0.14309	0.005079	0.014918691
C1ORF220	1q25.2	-0.14309	0.005081	0.014921427
HLF	17q22	-0.14307	0.005086	0.014935413
FBLIM1	1p36.21	0.143045	0.005094	0.014955514
DPP8	15q22.31	0.143036	0.005097	0.014961811
TIMM17A	1q32.1	0.143018	0.005102	0.014975816
SH3D19	4q31.3	0.143003	0.005107	0.014987254
ZNF154	19q13.43	-0.14298	0.005113	0.015003049
RGS5	1q23.3	-0.14298	0.005114	0.015003049
SAMD11	1p36.33	-0.14295	0.005123	0.015027117
ZNF334	20q13.12	-0.14295	0.005123	0.015027117
LRRC8A	9q34.11	0.142945	0.005125	0.015030326
ZNF160	19q13.41-q13.42	-0.14293	0.005129	0.01503923
TAC1	7q21.3	-0.14293	0.00513	0.015040697
CLN3	16p12.1	0.1429	0.005139	0.015065196
PRG4	1q31.1	-0.1429	0.005141	0.015067206
NRBP2	8q24.3	-0.14288	0.005144	0.015074298
COPZ2	17q21.32	-0.14286	0.005152	0.015096138
CWC25	17q12	-0.14286	0.005153	0.015096138
VWA5B1	1p36.12	-0.14285	0.005156	0.015104374
GPC3	Xq26.2	0.142822	0.005164	0.015123787
ZIC4	3q24	-0.14281	0.005167	0.015130449
TNFAIP6	2q23.3	-0.1428	0.005171	0.015140296
LOC100133331	1p36.33	-0.14277	0.005181	0.015168242

LIPM	10q23.31	-0.14276	0.005183	0.01517167
PCDHB18P	5q31.3	-0.14276	0.005185	0.015174123
RIOK1	6p24.3	-0.14272	0.005196	0.015205201
PPP2R5E	14q23.2	0.142704	0.005201	0.015217297
ERC2	3p14.3	-0.14269	0.005205	0.015226688
COL22A1	8q24.23-q24.3	-0.14261	0.00523	0.015297788
NLRC3	16p13.3	0.142582	0.00524	0.015324919
PLSCR3	17p13.1	-0.14252	0.00526	0.015381469
ALOX15B	17p13.1	0.142507	0.005264	0.015390529
SPDYE3	7q22.1	-0.14246	0.005279	0.015432095
SCARNA16	17q25.2	-0.14246	0.005281	0.015434853
CHD3	17p13.1	0.142452	0.005282	0.015436318
MGMT	10q26.3	-0.14244	0.005285	0.015441984
ERF	19q13.2	-0.14242	0.005292	0.015460122
CCDC153	11q23.3	-0.14242	0.005293	0.015460122
SEC61A2	10p14	-0.14237	0.005308	0.015502545
RHEX	1q32.1	0.14231	0.005328	0.015559367
EML3	11q12.3	-0.1423	0.00533	0.01556252
PRR34	22q13.31	-0.14229	0.005336	0.015576973
ADAP2	17q11.2	0.142272	0.00534	0.015588673
TMPRSS3	21q22.3	0.142239	0.005351	0.015615242
ANXA3	4q21.21	-0.14224	0.005352	0.015615242
NPR3	5p13.3	-0.14224	0.005352	0.015615242
ANKAR	2q32.2	-0.1422	0.005364	0.015646827
LDAH	2p24.1	-0.14219	0.005369	0.015659368
RETNLB	3q13.13	0.142176	0.005372	0.015665949
SOAT1	1q25.2	0.142157	0.005378	0.015682372
GABRA1	5q34	-0.14215	0.005381	0.01568769
PTGS2	1q31.1	0.142141	0.005383	0.015693043
MAPK15	-	-0.14213	0.005386	0.015699713
PKD2L1	10q24.31	0.142121	0.00539	0.015707085
BTBD9	6p21.2	0.142111	0.005393	0.015714519
IRS1	2q36.3	0.142107	0.005394	0.015716056
B3GALT4	6p21.32	0.142068	0.005407	0.015750928
BLOC1S4	4p16.1	-0.14207	0.005408	0.01575153
KRTAP5-1	11p15.5	-0.14205	0.005413	0.015761815
MAP2K3	17p11.2	0.142049	0.005414	0.015761815
PLCH2	1p36.32	0.142048	0.005414	0.015761815
LSS	21q22.3	0.142041	0.005416	0.015764136
INVS	9q31.1	-0.14204	0.005417	0.015764136
PDE11A	2q31.2	0.142038	0.005417	0.015764136
ZNF618	9q32	0.142026	0.005421	0.015773125
MAGEB6	Xp21.3	-0.14199	0.005433	0.015806653
MKNK2	19p13.3	0.141976	0.005438	0.015816594
PARP10	8q24.3	-0.14197	0.005439	0.015819275
MFNG	22q13.1	0.14196	0.005443	0.015827558
RPGR	Xp11.4	-0.14194	0.005449	0.015843737
E2F8	11p15.1	0.141932	0.005452	0.01585037
COMMD2	3q25.1	-0.14192	0.005458	0.015860717
CUEDC1	17q22	-0.14191	0.005458	0.015860717
ZBED1	Xp22.33 and Yp11.2	-0.14191	0.005458	0.015860717
PLK2	5q11.2	0.141895	0.005464	0.01587651
KISS1	1q32.1	-0.14189	0.005467	0.015882346
CRAT	9q34.11	0.141864	0.005475	0.015902302
PIP4K2C	12q13.3	0.141851	0.005479	0.015912501
SLC12A4	16q22.1	-0.14184	0.005483	0.015919786
NBEAP1	15q11.2	-0.14183	0.005485	0.015923533
MRGPRF	11q13.3	-0.14182	0.00549	0.01593687

CEACAM1	19q13.2	0.14181	0.005493	0.015942912
AP1S2	Xp22.2	-0.14177	0.005506	0.015978228
VPS37A	8p22	0.141756	0.005511	0.015990774
MPHOSPH6	16q23.3	-0.14175	0.005514	0.015995342
NPAS4	11q13.2	-0.14174	0.005515	0.015995342
SNRK	3p22.1	0.141744	0.005515	0.015995342
LARS	5q32	-0.14172	0.005522	0.016012512
IDE	10q23.33	0.141704	0.005528	0.016029489
ATL2	2p22.2-p22.1	-0.1417	0.005531	0.016033884
GUCY1A1	4q32.1	-0.14168	0.005535	0.016045629
BUD13	11q23.3	-0.14162	0.005557	0.016106093
ARID5A	2q11.2	-0.14161	0.005559	0.016107084
KIAA1549L	11p13	0.141613	0.005559	0.016107084
NUBP2	16p13.3	-0.14158	0.005569	0.016133794
TIMM8B	11q23.1	-0.14156	0.005578	0.016157012
PLEKHO2	15q22.31	-0.14152	0.00559	0.016188078
EPHB2	1p36.12	-0.14152	0.00559	0.016188078
RARA	17q21.2	-0.14152	0.005592	0.016191234
ZNF621	3p22.1	-0.1415	0.005597	0.016202241
VCL	10q22.2	0.141495	0.005599	0.016205601
THRA	17q21.1	-0.14149	0.005601	0.016205601
OR1L6	9q33.2	0.14149	0.005601	0.016205601
GADL1	3p24.1-p23	-0.14149	0.005601	0.016205601
LRRC10B	11q12.2	-0.14148	0.005603	0.016207573
ZFP36L1	14q24.1	-0.14147	0.005608	0.016218059
APBA3	19p13.3	-0.14147	0.005608	0.016218059
MCPH1	8p23.1	0.141454	0.005613	0.016230562
C5ORF15	5q31.1	0.141445	0.005616	0.016236917
PCMT1	6q25.1	-0.14144	0.005619	0.016243488
RAP2B	3q25.2	0.141431	0.005621	0.016246451
ZCCHC18	Xq22.2	-0.1414	0.005633	0.016278109
GABRD	1p36.33	-0.14139	0.005636	0.01628469
MGST2	4q31.1	0.141364	0.005644	0.016304905
PLD5	1q43	-0.14136	0.005645	0.016306913
RRP15	1q41	-0.14133	0.005655	0.016334083
SUMF2	7p11.2	-0.14133	0.005657	0.016336429
RPA3	7p21.3	-0.14129	0.005669	0.016368452
NUP85	17q25.1	-0.14126	0.005679	0.016395821
NTM	11q25	-0.14123	0.00569	0.016425465
RIPK3	14q12	0.141226	0.005691	0.016425465
RAET1E	6q25.1	0.1412	0.0057	0.016449249
LTBP1	2p22.3	-0.14113	0.005724	0.016515827
TM7SF3	12p11.23	0.141121	0.005728	0.016521609
PARL	3q27.1	-0.14112	0.005728	0.016521609
MT1M	16q13	0.141116	0.005729	0.016521609
KCMF1	2p11.2	-0.14112	0.005729	0.016521609
ACTC1	15q14	-0.14109	0.005739	0.01654774
RABAC1	19q13.2	0.141053	0.005751	0.016579652
ZNF548	19q13.43	-0.14103	0.00576	0.016601265
GPR3	1p36.11	0.141027	0.00576	0.016601265
MORN2	2p22.1	-0.14101	0.005766	0.016614679
BCHE	3q26.1	-0.14099	0.005775	0.016638284
C2ORF16	2p23.3	-0.14097	0.00578	0.016651067
FGF5	4q21.21	-0.14097	0.005782	0.016652946
FBLN1	22q13.31	-0.14095	0.005787	0.016662772
STAT4	2q32.2-q32.3	0.14095	0.005787	0.016662772
PNISR	6q16.2	-0.14095	0.005787	0.016662772
KRT1	12q13.13	0.140923	0.005797	0.0166847

OXTR	3p25.3	-0.14092	0.005797	0.0166847
ADM	11p15.4	0.140912	0.0058	0.016692955
LINC02716	11p11.2	0.140896	0.005806	0.016704878
FAM218A	4q32.3	-0.1409	0.005806	0.016704878
DEPDC5	22q12.2-q12.3	0.140887	0.005809	0.016711205
RAB11A	15q22.31	0.140884	0.00581	0.016711205
GOLGA8A	15q14	-0.14086	0.00582	0.016737555
PIGM	1q23.2	-0.14085	0.005822	0.016739947
SNHG5	6q14.3	-0.14084	0.005826	0.016749972
TMEM177	2q14.2	-0.1408	0.005838	0.016782274
FXD4	10q11.21	0.140799	0.00584	0.016785403
HSD17B7	1q23.3	-0.14079	0.005842	0.016789256
SF3A1	22q12.2	0.14078	0.005847	0.016800619
SLC28A1	15q25.3	-0.14076	0.005855	0.01682064
LIN28B	6q16.3-q21	-0.14074	0.005861	0.016832775
ADAM33	20p13	-0.14074	0.005861	0.016832775
TMEM237	2q33.1	-0.14074	0.005862	0.016832775
SAE1	19q13.32	-0.14073	0.005866	0.016843726
SAP30BP	17q25.1	-0.14071	0.005871	0.016853807
RNF180	5q12.3	-0.14071	0.005873	0.016857093
GLRB	4q32.1	-0.14069	0.00588	0.016875741
CYFIP1	15q11.2	0.14062	0.005904	0.016941493
CASKIN2	17q25.1	-0.14061	0.005907	0.016947217
OXGR1	13q32.1	-0.14059	0.005914	0.016964733
CKAP2	13q14.3	-0.14058	0.005919	0.016978748
UBAC1	9q34.3	0.140556	0.005927	0.016997294
SF1	11q13.1	-0.1405	0.005947	0.017053935
TRERF1	6p21.1	0.140434	0.00597	0.017117857
LINC02035	3q21.1	0.14036	0.005997	0.017192034
DRD1	5q35.2	-0.14033	0.006008	0.017219814
MYOZ1	10q22.2	-0.14033	0.006009	0.017221292
LOC100134368	16p13.3	-0.14031	0.006015	0.017234792
CYB561	17q23.3	0.140271	0.00603	0.01727522
SHB	9p13.1	0.140241	0.00604	0.017303254
PPIAL4G	1q21.2	-0.14023	0.006043	0.017307835
HRK	12q24.22	0.140232	0.006044	0.01730808
GPR157	1p36.22	-0.14023	0.006046	0.017312219
RALGAPA2	20p11.23	0.140222	0.006047	0.017313112
CD99L2	Xq28	-0.1402	0.006055	0.017333333
ISYNA1	19p13.11	-0.14019	0.006057	0.017337822
C8ORF76	8q24.13	-0.14017	0.006067	0.017361218
DUSP5	10q25.2	0.140151	0.006073	0.017378331
MGAT4A	2q11.2	0.140145	0.006075	0.017381932
HSPA5	9q33.3	0.140064	0.006105	0.017463681
TACC3	4p16.3	0.140025	0.006119	0.017502187
LHX6	9q33.2	-0.14001	0.006124	0.01751443
TPO	2p25.3	0.13998	0.006136	0.017545419
ABCB9	12q24.31	-0.13997	0.00614	0.017554167
EIF3J	15q21.1	-0.13996	0.006143	0.017559619
MIOS	7p21.3	-0.13994	0.006151	0.017581002
TTYH1	19q13.42	-0.13993	0.006155	0.017588214
CTF1	16p11.2	-0.13992	0.006158	0.017595568
SRRM3	7q11.23	-0.1399	0.006166	0.017616078
RBM19	12q24.13-q24.21	-0.13988	0.006174	0.017635011
DTNBP1	6p22.3	-0.13987	0.006175	0.017636377
FSD1	19p13.3	-0.13985	0.006186	0.017662816
UBE2QL1	5p15.31	-0.13985	0.006186	0.017662816
RLIM	Xq13.2	-0.13984	0.006188	0.017666749

SPTBN2	11q13.2	-0.13981	0.006198	0.01769064
AOX1	2q33.1	-0.13981	0.006198	0.01769064
PHRF1	11p15.5	-0.1398	0.006202	0.017698543
WASH5P	19p13.3	-0.13979	0.006206	0.017707244
LNX2	13q12.2	-0.13979	0.006208	0.017711365
NXF2B	Xq22.1	-0.13978	0.006211	0.017715595
MMP16	8q21.3	-0.13977	0.006214	0.017721249
PLPPR3	19p13.3	-0.13977	0.006216	0.017722349
SFRP2	4q31.3	-0.13977	0.006216	0.017722349
HSH2D	19p13.11	0.139758	0.006218	0.017727629
KIF5A	12q13.3	-0.13976	0.006219	0.017728062
CTAGE4	7q35	0.13975	0.006221	0.01773006
DPYSL5	2p23.3	-0.13975	0.006222	0.01773006
SPIDR	8q11.21	-0.13973	0.006229	0.017746437
RPL13P5	12p13.31	-0.13973	0.006231	0.017748044
MYO15A	17p11.2	-0.13972	0.006232	0.017748044
CARMIL2	16q22.1	-0.13972	0.006232	0.017748044
DERL3	22q11.23	0.139715	0.006235	0.017753784
APOL1	22q12.3	0.13971	0.006236	0.017755851
DDX5	17q23.3	-0.13971	0.006237	0.017756312
SLC25A34	1p36.21	0.139654	0.006257	0.017811024
PER2	2q37.3	0.13965	0.006259	0.017811958
WDR93	15q26.1	-0.13965	0.00626	0.017811958
S1PR5	19p13.2	-0.13965	0.00626	0.017811958
CCP110	16p12.3	-0.13964	0.006262	0.017814032
KLRK1	12p13.2	0.139611	0.006273	0.017843949
CXCL14	5q31.1	-0.13961	0.006276	0.017847451
SLC17A9	20q13.33	-0.1396	0.006279	0.017854142
BMPR2	2q33.1-q33.2	-0.13958	0.006284	0.0178642
GPR107	9q34.11	0.139582	0.006284	0.0178642
ATP11AUN	13q34	-0.13958	0.006285	0.0178642
CDCA4	14q32.33	-0.13957	0.006289	0.017872389
EIF4A1	17p13.1	0.139553	0.006295	0.017888331
ATP11A	13q34	-0.13951	0.006313	0.017933682
INTS4P1	7q11.21	-0.13951	0.006313	0.017933682
SNORC	2q37.1	-0.1395	0.006315	0.017935145
SYNE3	14q32.13	0.1395	0.006316	0.017935766
ARSI	5q32	-0.1395	0.006317	0.017937632
RAD51B	14q24.1	-0.13948	0.006322	0.017947368
CCNA2	4q27	0.139454	0.006333	0.017977754
KLHL6	3q27.1	0.139439	0.006339	0.017991209
BEST3	12q15	-0.13942	0.006344	0.018002618
APOBEC3A	22q13.1	-0.13942	0.006345	0.018002618
TEX38	1p33	-0.1394	0.006353	0.018024759
SIPA1	11q13.1	-0.1394	0.006355	0.018026345
DIP2B	12q13.12	0.139376	0.006363	0.0180466
RAB5A	3p24.3	0.139361	0.006368	0.018059651
PTPRR	12q15	0.139348	0.006373	0.018068752
KRT73	12q13.13	0.139346	0.006374	0.018068752
ECHDC3	10p14	-0.13935	0.006374	0.018068752
METTL9	16p12.2	-0.13931	0.006387	0.018103763
HNRNPLL	2p22.1	-0.1393	0.006391	0.018110076
FAM98C	19q13.2	0.13924	0.006415	0.018175591
SIMC1	5q35.2	0.13923	0.006419	0.01818427
FAM135A	6q13	0.139209	0.006427	0.018204682
HNRNPL	19q13.2	-0.13917	0.00644	0.018240624
MED16	19p13.3	0.139139	0.006454	0.018276157
TMEM232	5q22.1	0.139096	0.00647	0.018320793

TMUB2	17q21.31	-0.13908	0.006475	0.018331819
MAPKBP1	15q15.1	-0.13906	0.006486	0.018359233
LMOD1	1q32.1	-0.13905	0.006487	0.018360184
SMIM8	6q15	-0.13903	0.006497	0.018386925
NUMBL	19q13.2	-0.139	0.006506	0.018407776
TMEM39B	1p35.2	-0.13897	0.006518	0.018439562
HBE1	11p15.4	-0.13895	0.006528	0.018465767
CTC1	17p13.1	0.138943	0.00653	0.018468312
HAUS6	9p22.1	-0.1389	0.006548	0.018515669
SELPLG	12q24.11	0.138843	0.006569	0.018573163
B3GALT5-AS1	21q22.2	0.138836	0.006572	0.018578282
FBF1	17q25.1	-0.1388	0.006586	0.018615407
DPP6	7q36.2	-0.1388	0.006587	0.018615407
FCRL1	1q23.1	0.138791	0.006589	0.018620519
TCL1B	14q32.13	0.138787	0.006591	0.018622544
ARCN1	11q23.3	0.138783	0.006593	0.018624379
FAM9A	Xp22.31	-0.13877	0.006597	0.018633302
LMF2	22q13.33	0.138766	0.006599	0.018636652
LKAAEAR1	20q13.33	-0.13876	0.0066	0.018636652
SCAMP5	15q24.2	-0.13875	0.006606	0.01865196
TNFSF14	19p13.3	0.138698	0.006626	0.018705351
PRELID3A	18p11.21	-0.13869	0.006629	0.018712718
OSBPL5	11p15.4	0.138669	0.006637	0.018732932
RPL19P12	7q22.1	-0.13866	0.006639	0.018735346
ZNF676	19p12	-0.13865	0.006646	0.01875213
HIST1H2BA	6p22.2	-0.13863	0.006652	0.018764636
SGCD	5q33.2-q33.3	-0.13861	0.006662	0.018792497
IGFBP6	12q13.13	-0.1386	0.006663	0.018792497
KIAA1257	3q21.3	-0.13859	0.006671	0.018810613
ZNF416	19q13.43	-0.13855	0.006686	0.018850271
RIMKLB	12p13.31	-0.13854	0.006688	0.018853183
FANCB	Xp22.2	-0.13852	0.006698	0.018880315
TMEM267	5p12	-0.1385	0.006704	0.018890997
BCLAF3	Xp22.12	-0.1385	0.006704	0.018890997
ZSCAN29	15q15.3	-0.13845	0.006723	0.018939801
SHF	15q21.1	0.138454	0.006723	0.018939801
SLC6A19	5p15.33	0.138449	0.006725	0.018943407
FAM222A	12q24.11	-0.13839	0.006747	0.019001873
MGAM2	7q34	0.13837	0.006757	0.019027177
SRSF3	6p21.31-p21.2	-0.13836	0.006759	0.019031154
CCDC130	19p13.13	-0.13835	0.006764	0.019039511
ESF1	20p12.1	-0.13835	0.006764	0.019039511
SLC26A9	1q32.1	0.13835	0.006765	0.019039511
CALY	10q26.3	-0.13834	0.006769	0.019046581
CEP72	5p15.33	-0.13834	0.00677	0.019046581
ASMT	Xp22.33 and Yp11.2	-0.13832	0.006778	0.019066146
SNHG10	14q32.13	-0.13832	0.006778	0.019066146
PCDHB7	5q31.3	-0.13831	0.006781	0.019072023
IREB2	15q25.1	0.138301	0.006785	0.019078147
BAIAP2L1	7q21.3-q22.1	0.13828	0.006793	0.019099688
KATNAL2	18q21.1	0.138267	0.006799	0.019112187
POU3F4	Xq21.1	-0.13826	0.006803	0.019120554
CCDC96	4p16.1	0.138249	0.006806	0.0191274
PHYHIP	8p21.3	-0.13824	0.006811	0.019138689
HMGCS1	5p12	0.138216	0.006819	0.019159064
BIVM	13q33.1	-0.13821	0.00682	0.019159567
VPS11	11q23.3	-0.1382	0.006824	0.019168417
SKIL	3q26.2	-0.13818	0.006832	0.019187099



TBC1D10C	11q13.2	0.138177	0.006835	0.019192765
TRIM26	6p22.1	0.138174	0.006836	0.01919327
VPS9D1	16q24.3	0.138154	0.006844	0.019213696
ACSBG2	19p13.3	-0.13814	0.006849	0.019225216
SPATA2L	16q24.3	-0.13811	0.006861	0.019254227
CIPC	14q24.3	0.13811	0.006862	0.019255605
TM4SF1	3q25.1	-0.13811	0.006864	0.01925907
KBTD12	3q21.3	0.138085	0.006872	0.019279145
ALAS2	Xp11.21	0.138073	0.006877	0.019289976
CCIN	9p13.3	-0.13806	0.006882	0.019299371
TCEAL2	Xq22.1	-0.13805	0.006887	0.019312597
TMEM74B	20p13	-0.13804	0.00689	0.01931772
TCL1A	14q32.13	0.13804	0.006891	0.01931772
NUDT12	5q21.2	0.138028	0.006896	0.019328563
INPP5B	1p34.3	-0.13802	0.0069	0.019338474
ARHGAP5	14q12	0.138013	0.006902	0.019339017
TMED8	14q24.3	0.13801	0.006903	0.019339017
AAAS	12q13.13	-0.13801	0.006903	0.019339017
ABHD8	19p13.11	-0.13798	0.006915	0.019367754
HIST1H2BF	6p22.2	-0.13796	0.006923	0.019387798
SIGLEC6	19q13.41	0.137942	0.006931	0.019408717
ZBED9	6p22.1	-0.13792	0.006939	0.01942888
PRKCB	16p12.2-p12.1	0.137911	0.006944	0.019438811
ILF3	19p13.2	-0.13791	0.006945	0.019438811
GPRASP1	Xq22.1	-0.13789	0.006951	0.019452503
ITPRID2	2q31.3	0.137877	0.006958	0.019469687
GJB1	Xq13.1	-0.13786	0.006966	0.019490124
RFPL3S	22q12.3	-0.13784	0.006975	0.019511074
NDUFAF4	6q16.1	-0.13783	0.006979	0.019521821
GRIPAP1	Xp11.23	-0.1378	0.006988	0.019542469
TFIP11	22q12.1	-0.13778	0.006998	0.019569059
AP3D1	19p13.3	0.137773	0.007001	0.019573828
ING2	4q35.1	0.13777	0.007002	0.019575096
MTOR	1p36.22	0.13775	0.00701	0.019592395
JRKL	11q21	-0.13775	0.00701	0.019592395
ZBTB26	9q33.2	-0.13772	0.007024	0.019625493
EPHA2	1p36.13	0.137717	0.007024	0.019625493
LRP4	11p11.2	-0.1377	0.007031	0.01964206
ARHGAP30	1q23.3	0.137696	0.007033	0.019644839
KLK10	19q13.41	0.137675	0.007042	0.01966594
ADH4	4q23	0.13767	0.007044	0.019667486
NFYC	1p34.2	0.137669	0.007044	0.019667486
CASQ2	1p13.1	-0.13766	0.007046	0.019669822
C9ORF153	9q21.33	-0.13766	0.007047	0.019670448
LMCD1	3p25.3	-0.13764	0.007056	0.019692671
UBOX5	20p13	-0.13762	0.007063	0.019709541
JSRP1	19p13.3	0.137619	0.007065	0.019710742
SERPINB7	18q21.33	0.137617	0.007066	0.019710742
XPO7	8p21.3	0.137615	0.007067	0.019710742
DOK5	20q13.2	-0.13761	0.007068	0.019710742
TTC21B	2q24.3	-0.1376	0.007071	0.019718708
ZNF839	14q32.31	0.137596	0.007075	0.019722048
VIPR2	7q36.3	-0.13759	0.007076	0.019722048
ANTXR1	2p13.3	-0.13759	0.007076	0.019722048
CCN3	8q24.12	0.137583	0.00708	0.019732645
FGF16	Xq21.1	-0.13758	0.007082	0.019734242
MSTO2P	1q22	-0.13756	0.007088	0.019749569
MC3R	20q13.2	-0.13753	0.007102	0.019785551

PSG5	19q13.31	-0.13753	0.007104	0.019786972
NAP1L3	Xq21.32	-0.13752	0.007107	0.019792368
ZNF10	12q24.33	-0.13751	0.007109	0.019797089
HERPUD2	7p14.2	-0.1375	0.007116	0.01981227
MED26	19p13.11	-0.13749	0.007119	0.019818613
LCE1E	1q21.3	0.137482	0.007123	0.019826211
RPL35A	3q29	-0.13746	0.007132	0.019850026
SLC22A13	3p22.2	-0.13743	0.007144	0.01987948
SLC26A4	7q22.3	0.137411	0.007153	0.01990092
BCL7A	12q24.31	-0.1374	0.007157	0.019909152
GNB1	1p36.33	0.137397	0.007159	0.01991273
MUL1	1p36.12	0.137369	0.007171	0.019942751
BMP4	14q22.2	-0.13737	0.007172	0.019942751
PTMA	2q37.1	-0.13735	0.00718	0.019963117
CXXC1	18q21.1	0.137329	0.007188	0.01998121
RPL27	17q21.31	-0.13732	0.00719	0.019984546
SSX3	Xp11.23	-0.13731	0.007195	0.019997136
P2RX4	12q24.31	0.137308	0.007197	0.019998097
TMEM214	2p23.3	0.137302	0.007199	0.020002456
TMPRSS9	19p13.3	-0.13727	0.007213	0.0200037752
SERPINA12	14q32.13	-0.13725	0.007221	0.0200056466
BTBD3	20p12.2	0.137233	0.007229	0.0200076292
GAGE2D	Xp11.23	-0.1372	0.007244	0.020115924
KCTD20	6p21.31	-0.13716	0.007259	0.020153676
KIAA1324L	7q21.12	-0.13714	0.00727	0.020179642
KIRREL1	1q23.1	-0.13714	0.00727	0.020179642
ECE2	3q27.1	-0.13712	0.007278	0.02020023
SNORD17	20p11.23	-0.13711	0.007281	0.020203561
PTBP3	9q32	-0.13708	0.007294	0.020237582
BMS1P20	22q11.22	0.137066	0.0073	0.020252803
TSNAX-DISC1	1q42.2	-0.13705	0.007308	0.02027114
POLR3C	1q21.1	-0.13704	0.007311	0.020276828
DDX39B	6p21.33	-0.13704	0.007313	0.020278146
SAMD14	17q21.33	-0.13703	0.007315	0.020282559
FBRS	16p11.2	-0.13702	0.007321	0.02029523
LCA5L	21q22.2	0.136998	0.00733	0.020317721
LRRC3	21q22.3	0.13697	0.007342	0.020347992
TNNC1	3p21.1	-0.13696	0.007345	0.020355297
LINC01126	2p21	-0.13692	0.007363	0.020402414
IL1RAPL2	Xq22.3	0.136907	0.007369	0.020415444
TP73	1p36.32	0.136854	0.007392	0.020476749
C9ORF135	9q21.12	0.13683	0.007403	0.020500826
LGI3	8p21.3	-0.13683	0.007403	0.020500826
REN	1q32.1	-0.1368	0.007414	0.020527314
NDUFA11	19p13.3	-0.13678	0.007426	0.020559209
WDR59	16q23.1	-0.13677	0.007429	0.020564721
GTF2IRD2	7q11.23	-0.13676	0.007432	0.020570233
TXLNA	1p35.2	0.13676	0.007433	0.020570524
YWHAG	7q11.23	-0.13675	0.007436	0.02057353
ORM2	9q32	-0.13675	0.007437	0.02057353
PRDM6	5q23.2	-0.13675	0.007438	0.02057353
RAB40AL	Xq22.1	-0.13673	0.007448	0.02060065
PDSS2	6q21	0.136712	0.007454	0.020614327
SPCS2	11q13.4	-0.1367	0.007459	0.020625348
ERBB2	17q12	0.136679	0.007469	0.020649209
ABCB4	7q21.12	-0.13666	0.007479	0.020674931
WDR36	5q22.1	0.136648	0.007483	0.020678667
FBXO25	8p23.3	0.136648	0.007483	0.020678667

CDX1	5q32	0.13664	0.007486	0.020684471
FANCL	2p16.1	-0.13663	0.00749	0.020693426
MTIF2	2p16.1	-0.1366	0.007504	0.020729446
EEF1AKMT3	12q14.1	-0.13658	0.00751	0.020743679
ZP3	7q11.23	-0.13657	0.007518	0.020762131
SYS1-DBNDD2	20q13.12	-0.13656	0.007521	0.020766631
PSD	10q24.32	-0.13656	0.007522	0.020767182
ARHGAP11A	15q13.3	0.136547	0.007527	0.020778558
IDI1	10p15.3	0.1365	0.007548	0.020833711
IMPA1	8q21.13	0.136475	0.007559	0.020860692
DPH2	1p34.1	-0.13647	0.007562	0.02086446
CTAGE9	6q23.2	0.136468	0.007563	0.02086446
TXNL4B	16q22.2	-0.13646	0.007568	0.020874039
FICD	12q23.3	0.136455	0.007568	0.020874039
FAM171B	2q32.1	-0.13643	0.007579	0.020900545
AIFM3	22q11.21	-0.13642	0.007582	0.020905346
TMEM231	16q23.1	0.136416	0.007586	0.020914121
JOSD2	19q13.33	-0.13641	0.00759	0.020922237
NRIP1	21q11.2-q21.1	0.136396	0.007595	0.020932478
ITPR2	12p11.23	-0.13639	0.007596	0.020932815
AGAP6	10q11.23	-0.13639	0.007597	0.020932815
SERP1	3q25.1	0.136388	0.007598	0.020933116
S100A7	1q21.3	-0.13637	0.007606	0.02095187
EEF1B2	2q33.3	-0.13636	0.00761	0.020961308
MYLK	3q21.1	-0.13633	0.007625	0.0209988
LAMC1	1q25.3	-0.13632	0.007629	0.021007877
RIPOR3	20q13.13	-0.13631	0.007632	0.021012826
TEKT4	2q11.1	-0.1363	0.007639	0.021029008
UBR4	1p36.13	0.136294	0.00764	0.021029008
PHAX	5q23.2	0.136282	0.007645	0.021041026
DEFB104A	8p23.1	-0.13627	0.007652	0.021055412
SOD2	6q25.3	0.136263	0.007654	0.021059218
TRPM2	21q22.3	-0.13626	0.007655	0.021059766
SPATA31A6	9p11.2	-0.13626	0.007656	0.021059766
KLK5	19q13.41	-0.13622	0.007675	0.021106861
TUBB4B	9q34.3	0.136192	0.007686	0.021135713
RPL36AL	14q21.3	0.136188	0.007688	0.021138158
REX1BD	19p13.11	-0.13618	0.00769	0.021141406
MED28	4p15.32	-0.13617	0.007697	0.021158031
CD74	5q33.1	0.136116	0.007721	0.021218891
CLDN16	3q28	-0.13609	0.007733	0.021249992
KIF25	6q27	-0.13605	0.007749	0.021292032
LRCH2	Xq23	-0.13603	0.007759	0.021314667
CHMP3	2p11.2	-0.136	0.007772	0.021349512
HTT	4p16.3	0.135994	0.007776	0.021356835
GNAZ	22q11.22-q11.23	-0.13594	0.007801	0.021420895
FOXG1	14q12	-0.13592	0.00781	0.021444401
STXBP2	19p13.2	0.135907	0.007816	0.021456988
RHOBTB1	10q21.2	-0.13589	0.007826	0.021478479
IL17RD	3p14.3	-0.13589	0.007826	0.021478479
ZNF764	16p11.2	-0.13587	0.007834	0.021495104
NEK6	9q33.3	0.135867	0.007834	0.021495104
SNRNP70	19q13.33	-0.13584	0.007847	0.021528813
TSPAN31	12q14.1	-0.13581	0.00786	0.021559304
DES	2q35	-0.13581	0.007861	0.021560976
MAGEC2	Xq27.2	-0.1358	0.007864	0.02156546
RNF44	5q35.2	-0.13573	0.007899	0.021658925
ATP1B2	17p13.1	-0.13571	0.007905	0.021670695

MAP3K13	3q27.2	0.135703	0.00791	0.021682508
THSD4	15q23	0.135688	0.007917	0.021698138
GTF2IRD2P1	7q11.23	-0.13566	0.00793	0.021731071
HNRNPH3	10q21.3	-0.13566	0.007931	0.021731071
CCDC80	3q13.2	-0.13565	0.007934	0.021736317
EID2B	19q13.2	-0.13564	0.00794	0.021750336
ANKRD29	18q11.2	-0.13559	0.00796	0.021801964
MPP4	2q33.1	-0.13556	0.007975	0.021838983
MLLT1	19p13.3	-0.13554	0.007984	0.02186147
GNL3L	Xp11.22	-0.13554	0.007987	0.021865642
EGFL8	6p21.32	-0.13553	0.007992	0.021876427
CRYGN	7q36.1	-0.13552	0.007997	0.021887808
GSTT1	22q11.23	0.135487	0.00801	0.021921636
DSCR4	21q22.13	-0.13548	0.008012	0.021922039
CD48	1q23.3	0.135466	0.00802	0.021943358
METTL18	1q24.2	-0.13545	0.008026	0.02195257
NLRP3	1q44	0.135454	0.008026	0.02195257
WDR63	1p22.3	0.135409	0.008047	0.022006899
SLC9C2	1q25.1	0.135407	0.008048	0.022006899
ARRB2	17p13.2	-0.13539	0.008054	0.022019438
RASAL3	19p13.12	0.135393	0.008055	0.022019438
RNLS	10q23.31	-0.13539	0.008057	0.02202108
ZNF138	7q11.21	-0.13539	0.008058	0.02202108
GDI2	10p15.1	0.135383	0.008059	0.02202108
PNMT	17q12	-0.13538	0.00806	0.02202108
C3ORF33	3q25.31	0.135329	0.008085	0.022085974
ITGA11	15q23	-0.13532	0.00809	0.022097135
SNORD15A	11q13.4	-0.1353	0.008099	0.022119336
SEC63	6q21	-0.1353	0.008101	0.022120583
H1FX	3q21.3	-0.13528	0.008106	0.022130969
OXA1L	14q11.2	0.135283	0.008107	0.022130969
CYP2J2	1p32.1	0.135256	0.008119	0.022161928
FDFT1	8p23.1	0.135229	0.008132	0.022194879
CNTN1	12q12	-0.13522	0.008136	0.022200615
DACH2	Xq21.2	-0.13517	0.008161	0.022267832
RPL37	5p13.1	-0.13516	0.008167	0.022274828
RAPGEF5	7p15.3	0.135157	0.008167	0.022274828
ZNF667	19q13.43	-0.13515	0.008168	0.022274828
C12ORF45	12q23.3	-0.13515	0.008169	0.022274828
RASSF9	12q21.31	-0.13515	0.008169	0.022274828
CRACR2B	11p15.5	0.135124	0.008182	0.022306545
UTP18	17q21.33	-0.13511	0.008189	0.02232145
ACOT11	1p32.3	0.135104	0.008192	0.022325984
ZFHX4	8q21.13	-0.1351	0.008194	0.022328836
ERLIN2	8p11.23	0.13506	0.008213	0.022378018
GPR25	1q32.1	0.135049	0.008218	0.022389169
ANGPT2	8p23.1	-0.13504	0.008222	0.022397793
BRWD1	21q22.2	0.135004	0.00824	0.0224426
NPM2	8p21.3	-0.13498	0.008253	0.02247491
SLCO2A1	3q22.1-q22.2	0.134965	0.008259	0.022487251
TMEM161A	19p13.11	-0.13496	0.008262	0.022491311
NME5	5q31.2	-0.13496	0.008262	0.022491311
NEUROG2	4q25	-0.13495	0.008267	0.022500607
NHP2	5q35.3	-0.13494	0.008268	0.022500994
WIZ	19p13.12	-0.13494	0.00827	0.022504149
NUBP1	16p13.13	0.134928	0.008276	0.022516627
TMCO3	13q34	0.134907	0.008286	0.022541553
ORMDL2	12q13.2	0.13489	0.008294	0.022560559

RNF113B	13q32.2	-0.13488	0.0083	0.022572626
RNF103	2p11.2	0.134863	0.008308	0.02259011
POLD4	11q13.2	0.134856	0.008311	0.022596961
RALGPS2	1q25.2	0.134849	0.008315	0.022601881
PITPNC1	17q24.2	0.134847	0.008315	0.022601881
SWI5	9q34.11	-0.13482	0.008328	0.022632281
GPR135	14q23.1	-0.13481	0.008336	0.022651354
MPIG6B	6p21.33	-0.13478	0.008347	0.022680019
UBP1	3p22.3	-0.13476	0.008358	0.022706045
CATSPER3	5q31.1	0.134745	0.008365	0.022721888
BACH1	21q21.3	0.134738	0.008368	0.022727218
NR4A1	12q13.13	0.134716	0.008379	0.022753203
WDR4	21q22.3	-0.13471	0.008382	0.022759234
ATP10B	5q34	0.134661	0.008406	0.022819828
KDM4C	9p24.1	0.134655	0.008409	0.02282279
CTXN1	19p13.2	0.134655	0.008409	0.02282279
ZC3HAV1	7q34	0.134646	0.008413	0.022830615
GBP4	1p22.2	0.134644	0.008414	0.022830615
RAMP1	2q37.3	0.134622	0.008425	0.022856695
ARNTL2	12p11.23	0.134616	0.008428	0.022861338
PRCD	17q25.1	-0.13461	0.008432	0.022868253
CHD1	5q15-q21.1	0.1346	0.008436	0.022876336
CAVIN3	11p15.4	-0.13457	0.008449	0.022910502
OR9G9	11q11	-0.13457	0.008451	0.022912755
ZNF85	19p12	-0.13456	0.008454	0.022916347
ZNF688	16p11.2	-0.13455	0.008463	0.022936913
HLA-F	6p22.1	0.134472	0.008499	0.023029218
RABGGTA	14q12	0.134472	0.008499	0.023029218
CDC14C	7p12.3	0.134456	0.008507	0.023047431
SULT2A1	19q13.33	-0.13443	0.008521	0.023081504
DELE1	5q31.3	0.134426	0.008522	0.023081586
MIGA1	1p31.1	0.134416	0.008527	0.023091747
CRYBA4	22q12.1	-0.13439	0.008538	0.023118765
CD38	4p15.32	0.13439	0.00854	0.023120716
PPP2R5C	14q32.31	0.134373	0.008548	0.02314019
EXOSC10	1p36.22	0.134325	0.008572	0.023201369
PLA2G3	22q12.2	0.13432	0.008574	0.023203935
DOK7	4p16.3	0.134318	0.008575	0.023203935
ZCRB1	12q12	-0.13431	0.00858	0.0232122
CHRD1	Xq23	-0.13431	0.008581	0.0232122
IL22RA2	6q23.3	0.134305	0.008582	0.0232122
ICA1L	2q33.2	-0.13427	0.008599	0.023257154
FCRL6	1q23.2	0.134225	0.008621	0.023313801
GSTTP2	22q11.23	0.134216	0.008626	0.023323277
SIGLEC17P	19q13.41	0.134213	0.008628	0.023324345
IFT140	16p13.3	0.134201	0.008634	0.023337131
SHOC2	10q25.2	0.134185	0.008642	0.023355558
ZFR2	19p13.3	-0.13416	0.008656	0.023388482
LINC02085	3q12.3	0.134156	0.008656	0.023388482
MAGOHB	12p13.2	-0.13415	0.00866	0.023397172
FLRT3	20p12.1	0.134129	0.00867	0.023419745
ID1	20q11.21	-0.13411	0.008678	0.023437937
ARFIP1	4q31.3	0.134087	0.008691	0.023470492
CHKB-DT	22q13.33	-0.13408	0.008694	0.02347552
CLEC3A	16q23.1	-0.13405	0.00871	0.023515891
ZNHIT2	11q13.1	-0.13405	0.008712	0.023516888
TYW1	7q11.21	-0.13398	0.008744	0.023600815
DGKG	3q27.2-q27.3	-0.13398	0.008747	0.023604464

DIO2	14q31.1	-0.13397	0.008748	0.023604464
TRAPPC3	1p34.3	-0.13394	0.008764	0.023644002
HACL1	3p25.1	-0.13394	0.008767	0.023650548
PLA2G12A	4q25	0.133932	0.008769	0.023652671
PRR15L	17q21.32	0.133923	0.008774	0.023661579
PRMT1	19q13.33	-0.13388	0.008797	0.023721891
ODF3B	22q13.33	0.133863	0.008804	0.023738218
AACS	12q24.31	0.133853	0.008809	0.023748338
CDC42EP3	2p22.2	-0.13384	0.008814	0.023757574
MOB1B	4q13.3	-0.13384	0.008818	0.023764444
C1ORF141	1p31.3	0.133834	0.008819	0.023765003
SLC2A11	22q11.23	-0.13382	0.008825	0.023777598
COL26A1	7q22.1	-0.13382	0.008828	0.023782074
AEBP1	7p13	-0.13378	0.008847	0.023830508
RPL23AP53	8p23.3	0.133763	0.008856	0.023850466
TIMM10B	11p15.4	-0.13374	0.008868	0.02388144
FAM204A	10q26.11	-0.13369	0.008892	0.023942242
CYGB	17q25.1	-0.13366	0.008909	0.023983437
IQCA1	2q37.2-q37.3	-0.13366	0.00891	0.023983437
KLHDC7A	1p36.13	0.133634	0.008922	0.024010232
DDX28	16q22.1	-0.13363	0.008922	0.024010232
ZNF701	19q13.41	-0.13358	0.00895	0.024081346
LINC00475	9q22.31	-0.13357	0.008956	0.024093503
DHODH	16q22.2	-0.13355	0.008964	0.024113703
WNT3A	1q42.13	-0.13355	0.008966	0.024116385
PPFIA1	11q13.3	0.133521	0.00898	0.024148807
CHAF1A	19p13.3	0.133519	0.008981	0.024148807
MOGAT1	2q36.1	0.133518	0.008982	0.024148807
SNAPC1	14q23.2	-0.13351	0.008985	0.024154532
LOC283731	15q24.1	-0.13349	0.008999	0.024184411
TBC1D7	6p24.1	-0.13349	0.008999	0.024184411
MAGEB3	Xp21.2	-0.13347	0.009006	0.024198943
KRT8	12q13.13	0.133432	0.009027	0.024251976
DDX19A	16q22.1	-0.13341	0.009036	0.024275259
PCP2	19p13.2	-0.1334	0.009043	0.024288714
GUCY1A2	11q22.3	-0.13339	0.00905	0.024304654
SYT17	16p12.3	0.133376	0.009056	0.024317266
PNCK	Xq28	-0.13337	0.009057	0.024317266
ASB5	4q34.2	-0.13337	0.009058	0.024317266
B3GALT6	1p36.33	-0.13336	0.009062	0.02432516
GKAP1	9q21.32	-0.13334	0.009072	0.024348465
VGLL1	Xq26.3	-0.13333	0.009078	0.024360749
ACP7	19q13.2	-0.13333	0.009079	0.02436125
INTS4	11q14.1	-0.13332	0.009085	0.024372604
ZNF652	17q21.32-q21.33	0.133317	0.009087	0.024375092
FAM221A	7p15.3	0.1333	0.009096	0.024395449
RPS10	6p21.31	-0.1333	0.009098	0.024397407
GRM5	11q14.2-q14.3	-0.13329	0.009099	0.024397407
DPH1	17p13.3	0.133269	0.009112	0.0244296
METTL25	12q21.31	0.133266	0.009114	0.024429969
MEG8	14q32.2-q32.31	-0.13326	0.009116	0.024432086
ADGRA2	8p11.23	-0.13325	0.009122	0.024446488
LINC01590	6q15	-0.13322	0.009138	0.024484733
LIPT1	2q11.2	-0.13321	0.009143	0.024495834
FNDC5	1p35.1	-0.1332	0.009149	0.024509861
POU3F2	6q16.1	-0.13319	0.009152	0.024512834
COG4	16q22.1	-0.13319	0.009154	0.024512834
MYO15B	17q25.1	-0.13319	0.009154	0.024512834

TTBK1	6p21.1	0.133176	0.009161	0.024528117
PSAPL1	4p16.1	0.133146	0.009177	0.02456711
IVD	15q15.1	0.133125	0.009188	0.024592553
SFMBT1	3p21.1	0.133099	0.009202	0.024626343
HBS1L	6q23.3	-0.13308	0.00921	0.024645824
CASP14	19p13.12	-0.13308	0.009214	0.024652328
MFSD14A	1p21.2	-0.13307	0.009219	0.024663085
SNAI2	8q11.21	-0.13305	0.009226	0.024677839
FAM71B	5q33.3	-0.13304	0.009234	0.024696318
DUSP21	Xp11.3	0.13303	0.009238	0.024705101
HCFC2	12q23.3	0.133021	0.009243	0.024715099
FAM78A	9q34.13	0.133004	0.009252	0.024734785
FZD9	7q11.23	-0.13296	0.009276	0.024792628
TERF2IP	16q23.1	-0.13296	0.009276	0.024792628
ANAPC5	12q24.31	-0.13294	0.009289	0.024823131
CSNK1D	17q25.3	-0.13291	0.009303	0.024857978
CCDC116	22q11.21	-0.13289	0.009314	0.024885262
EPGN	4q13.3	-0.13285	0.009332	0.02492868
BOC	3q13.2	-0.13283	0.009348	0.024967103
TNFSF8	9q32-q33.1	0.132819	0.009351	0.024973441
ADAMTS6	5q12.3	-0.13278	0.009371	0.025022014
PDE9A	21q22.3	0.132758	0.009384	0.025055244
ZNF780B	19q13.2	-0.13273	0.009398	0.025089445
UBIAD1	1p36.22	-0.13273	0.009401	0.025093241
EPB41L2	6q23.1-q23.2	0.132709	0.009411	0.025115366
ATP13A5	3q29	0.132704	0.009413	0.025119047
WNT16	7q31.31	-0.1327	0.009416	0.025123003
CFAP206	6q15	0.132692	0.009419	0.025126842
PRICKLE3	Xp11.23	-0.13269	0.00942	0.025126842
AKT3	1q43-q44	-0.13269	0.009423	0.025131267
DZIP1	13q32.1	-0.13268	0.009428	0.025142057
CNTNAP3	9p12	0.132673	0.00943	0.025143818
TMEFF1	9q31.1	-0.13267	0.009433	0.025148902
PPP2CA	5q31.1	0.132662	0.009436	0.025152397
PTN	7q33	-0.13265	0.009442	0.025166786
PLGLB2	2p11.2	-0.13264	0.009446	0.025170746
EXOSC2	9q34.12	-0.13264	0.009447	0.025170746
TRPM6	9q21.13	-0.13264	0.009448	0.025170746
PKN3	9q34.11	0.132628	0.009454	0.025185144
GAL3ST2	2q37.3	0.132624	0.009457	0.025188023
PRR27	4q13.3	-0.1326	0.009471	0.025222091
BMP8A	1p34.3	-0.13255	0.009498	0.025292394
NUP43	6q25.1	-0.13251	0.009516	0.025337206
CRTAC1	10q24.2	-0.1325	0.009522	0.025349125
RFC4	3q27.3	-0.13247	0.00954	0.025394395
FAM168B	2q21.1	-0.13242	0.009568	0.025464344
FAM3B	21q22.3	-0.13232	0.009623	0.025608343
C7ORF61	7q22.1	-0.13232	0.009625	0.025610205
EGLN2	19q13.2	-0.13229	0.009639	0.02564296
CARS	11p15.4	-0.13229	0.009641	0.025643667
TUBB6	18p11.21	-0.13227	0.00965	0.025664316
WDR81	17p13.3	0.132262	0.009655	0.025676109
VAT1L	16q23.1	0.132239	0.009668	0.025706439
SPOCK2	10q22.1	0.132234	0.009671	0.025708292
DMRT1	9p24.3	-0.13223	0.009671	0.025708292
GLYATL2	11q12.1	-0.13217	0.009709	0.025804617
MUC16	19p13.2	-0.13216	0.009712	0.025810231
PPP6C	9q33.3	0.132154	0.009715	0.025814357

FAM169A	5q13.3	0.132132	0.009727	0.02584277
EIF4G2	11p15.4	-0.13207	0.009759	0.025925467
ALG5	13q13.3	-0.13206	0.009765	0.025936726
TMEM191A	22q11.21	-0.13206	0.009769	0.025942863
MIR503HG	Xq26.3	-0.13204	0.009777	0.025962752
UHRF2	9p24.1	-0.13203	0.009782	0.025972766
TLX3	5q35.1	-0.13203	0.009785	0.025975559
DHX29	5q11.2	0.132011	0.009795	0.025998526
NAALAD2	11q14.3	-0.132	0.0098	0.026009161
C22ORF24	22q12.3	-0.132	0.009802	0.026010468
PPWD1	5q12.3	0.131995	0.009804	0.02601221
SNU13	22q13.2	-0.13198	0.009812	0.026027426
GABARAP	17p13.1	0.13198	0.009812	0.026027426
TSPAN12	7q31.31	0.131975	0.009815	0.026031992
ANKRD39	2q11.2	-0.13192	0.009847	0.026114248
ABHD13	13q33.3	-0.13191	0.009854	0.026127831
HMGCS2	1p12	0.131894	0.009861	0.026140854
MSL3	Xp22.2	-0.13189	0.009861	0.026140854
MAGEA5	Xq28	-0.13188	0.009866	0.026150844
CEP135	4q12	0.131881	0.009868	0.026151632
REEP5	5q22.2	0.131874	0.009872	0.026158149
TCL6	14q32.13	0.131863	0.009878	0.026170223
BMS1	10q11.21	0.131861	0.009879	0.026170223
ZNF20	19p13.2	-0.13185	0.009886	0.026184798
MYH13	17p13.1	0.131839	0.009892	0.026196479
TMEM64	8q21.3	0.131821	0.009902	0.026220744
CD8A	2p11.2	0.131816	0.009905	0.026224373
HTR2A	13q14.2	-0.13177	0.009933	0.026295419
FAM47A	Xp21.1	-0.13176	0.009937	0.026302995
DDX31	9q34.13	-0.13172	0.009959	0.026357825
CCDC177	14q24.1	0.131709	0.009965	0.026370651
CCNL1	3q25.31	-0.13167	0.009986	0.026423515
FAM185A	7q22.1	-0.13167	0.009988	0.026423911
MIR924HG	18q12.2-q12.3	0.131663	0.009992	0.026430395
SEMA4D	9q22.2	0.131653	0.009997	0.026441952
IFI16	1q23.1	0.131618	0.010017	0.02649064
SIRT5	6p23	-0.13161	0.01002	0.026495127
LYPD8	1q44	0.131604	0.010025	0.026505488
MFAP4	17p11.2	-0.13159	0.010032	0.02652004
ABCC8	11p15.1	0.131586	0.010036	0.026526012
SERPINA9	14q32.13	0.131583	0.010038	0.026527088
ANO3	11p14.3-p14.2	-0.13152	0.010075	0.026621809
PTGIR	19q13.32	-0.13151	0.010079	0.026630355
SMN2	5q13.2	-0.13151	0.010081	0.026631092
SPATA21	1p36.13	-0.1315	0.010084	0.026635211
FAM156A	Xp11.22	-0.13149	0.01009	0.026649247
A4GALT	22q13.2	-0.13148	0.010097	0.026664056
ZBP1	20q13.31	-0.13145	0.010112	0.026697871
FBXO6	1p36.22	0.1314	0.010142	0.026776039
SASH1	6q24.3-q25.1	0.131397	0.010144	0.026777108
EPHA8	1p36.12	-0.13138	0.010152	0.026793793
CTHRC1	8q22.3	-0.13138	0.010154	0.026796994
ZNF19	16q22.2	-0.13137	0.010163	0.026809086
ZNF815P	7p22.1	-0.13137	0.010163	0.026809086
DDA1	19p13.11	0.131365	0.010163	0.026809086
TYW1B	7q11.22-q11.23	-0.13136	0.010164	0.026809173
PER1	17p13.1	0.131356	0.010168	0.026815179
NTNG1	1p13.3	-0.13135	0.010174	0.026827108



NPY1R	4q32.2	0.131337	0.010179	0.026837741
ELAC2	17p12	0.131323	0.010187	0.026854603
KRTAP12-1	21q22.3	-0.13131	0.010195	0.026872516
ZNF555	19p13.3	-0.13129	0.010204	0.026891682
RASGRF2	5q14.1	0.131272	0.010217	0.026923107
CROCCP3	1p36.13	-0.13124	0.010237	0.026971903
GABPA	21q21.3	0.131227	0.010243	0.026982505
QPCT	2p22.2	-0.13123	0.010244	0.026982505
MROH1	8q24.3	-0.1312	0.010258	0.027016008
DDIT3	12q13.3	-0.13119	0.010262	0.027023711
RSU1	10p13	-0.13118	0.010268	0.027036385
LRATD1	2p24.3	0.131174	0.010274	0.027049063
ST6GALNAC5	1p31.1	-0.13115	0.010289	0.027083458
C19ORF33	19q13.2	0.131138	0.010295	0.027096
ATP5MF	7q22.1	-0.13111	0.010311	0.027133946
MEF2A	15q26.3	0.131104	0.010315	0.02713986
KRTAP4-1	17q21.2	-0.1311	0.010316	0.02713986
C5ORF49	5p15.31	-0.1311	0.01032	0.027148415
NTF4	19q13.33	-0.13108	0.010328	0.02716571
DOCK2	5q35.1	0.131046	0.010349	0.027217576
INTS14	15q22.31	-0.131	0.010374	0.027278117
NDUFA4	7p21.3	-0.131	0.010375	0.027278117
PCDHB15	5q31.3	-0.131	0.010378	0.027282548
APOBEC1	12p13.31	0.130975	0.010391	0.027313368
CNPPD1	2q35	-0.13097	0.010395	0.027320812
KCNMB1	5q35.1	-0.13096	0.010401	0.02732835
NSD3	8p11.23	0.130958	0.010401	0.02732835
MKKS	20p12.2	-0.13093	0.010416	0.02736524
DUSP1	5q35.1	0.130906	0.010432	0.027403178
ACTR1B	2q11.2	-0.1309	0.010435	0.027408297
PPP1CA	11q13.2	-0.1309	0.010438	0.027411407
DHX37	12q24.31	-0.13088	0.010449	0.027436072
TTL	2q14.1	-0.13088	0.01045	0.027436072
HSF4	16q22.1	-0.13086	0.01046	0.027459657
PRDM4	12q23.3	-0.13081	0.01049	0.027531732
EFCAB3	17q23.2	-0.13081	0.010491	0.027531732
MSH6	2p16.3	-0.13079	0.010501	0.027556099
MSL1	17q21.1	-0.13078	0.010509	0.027572023
PSMD4	1q21.3	-0.13074	0.01053	0.027623707
DEFA6	8p23.1	-0.13073	0.010534	0.027630912
PTGIS	20q13.13	-0.13073	0.010536	0.027630912
CYP11B2	8q24.3	-0.13073	0.010537	0.027630912
TDRD1	10q25.3	0.130722	0.010541	0.027638731
MGA	15q15.1	-0.13071	0.010546	0.027647473
UBE2E3	2q31.3	-0.13071	0.010548	0.027648581
TRIM25	17q22	0.130689	0.010561	0.027680437
EIF5A2	3q26.2	0.130671	0.010572	0.027704871
PCDH8	13q14.3	-0.13065	0.010583	0.027729744
ETV6	12p13.2	0.130649	0.010585	0.027732827
ACSL5	10q25.2	-0.13064	0.010593	0.027749519
NPY4R	10q11.22	0.130625	0.010599	0.027762153
GAPDH	12p13.31	0.130612	0.010607	0.0277766
SPRR3	1q21.3	0.130612	0.010607	0.0277766
SLC38A6	14q23.1	-0.13059	0.010621	0.027806291
MRPL21	11q13.3	-0.13059	0.010622	0.027806291
ARRDC2	19p13.11	0.130562	0.010637	0.027843741
LINC00906	19q12	-0.13052	0.010664	0.027909752
R3HDM1	2q21.3	-0.13051	0.010671	0.027925584

SAPCD2	9q34.3	-0.13049	0.010682	0.027950217
SENP6	6q14.1	-0.13048	0.010687	0.02795918
RPS18	6p21.32	-0.13047	0.01069	0.027964393
KY	3q22.2	0.130454	0.010703	0.027989549
HOXC10	12q13.13	0.130454	0.010703	0.027989549
ANGPTL1	1q25.2	-0.13042	0.010723	0.028039064
IRF8	16q24.1	0.130404	0.010733	0.028061791
TXNL1	18q21.31	0.130394	0.010739	0.028073038
NEK1	4q33	0.130392	0.010741	0.028073038
KCNE3	11q13.4	0.13039	0.010742	0.028073038
AGER	6p21.32	-0.13038	0.010749	0.02808693
CLIP3	19q13.12	-0.13038	0.01075	0.02808693
LINC00628	1q32.1	0.130364	0.010758	0.028103626
TCF20	22q13.2 22q13.3	-0.13036	0.010759	0.02810391
FAM217A	6p25.2	0.13035	0.010766	0.028117747
TRAF3IP3	1q32.2	0.13033	0.010778	0.028146771
STON1-GTF2A1L	2p16.3	-0.1303	0.010799	0.028197156
SMIM10L2B	Xq26.3	-0.13028	0.010806	0.028212039
LL22NC03-63E9.3	22q11.22	-0.13026	0.010819	0.028242963
ERCC1	19q13.32	-0.13026	0.010822	0.02824697
LRP2	2q31.1	-0.13025	0.010829	0.028261492
CDCA8	1p34.3	0.13023	0.010839	0.028283315
SLA	8q24.22	0.130211	0.010851	0.028310291
KLK6	19q13.41	-0.13021	0.010853	0.028312107
DSTN	20p12.1	-0.13019	0.010865	0.028340843
FGD3	9q22.31	-0.13018	0.010871	0.028347731
MT1H	16q13	0.130178	0.010871	0.028347731
PIP5K1P1	6p24.3	-0.13016	0.010884	0.028377703
TANGO6	16q22.1	-0.13015	0.010891	0.028388662
SPPL3	12q24.31	-0.13015	0.010891	0.028388662
AQP2	12q13.12	0.130128	0.010902	0.028414276
BBS9	7p14.3	-0.13012	0.01091	0.02843001
HOXD13	2q31.1	-0.1301	0.01092	0.028450983
KLF2	19p13.11	0.130098	0.01092	0.028450983
NTS	12q21.31	-0.13006	0.010943	0.028501529
RPS11	19q13.33	-0.13006	0.010944	0.028501529
ACSL3	2q36.1	0.13006	0.010944	0.028501529
CPA2	7q32.2	-0.13	0.010978	0.028587047
CR2	1q32.2	0.129997	0.010983	0.028595825
TADA2A	17q12	-0.12999	0.010987	0.028600959
COL18A1	21q22.3	-0.12998	0.010991	0.028608662
GCAT	22q13.1	0.129982	0.010992	0.028608662
SUN3	7p12.3	-0.12996	0.011003	0.028633208
HPGDS	4q22.3	0.12991	0.011037	0.028716632
ZNF781	19q13.12	-0.1299	0.011045	0.028731393
CCNDBP1	15q15.2	0.129897	0.011045	0.028731393
PLA2R1	2q24.2	-0.12985	0.011073	0.028800342
UGT1A7	2q37.1	0.129848	0.011075	0.02880238
RFPL2	22q12.3	-0.12983	0.011087	0.028829826
MESP1	15q26.1	0.129812	0.011098	0.028853531
VKORC1L1	7q11.21	-0.12979	0.011115	0.028893255
ARL6IP4	12q24.31	-0.12974	0.011144	0.028966581
RNF144A	2p25.1	0.129736	0.011146	0.028966581
LYPD6B	2q23.2	0.129734	0.011147	0.028966581
PSMA8	18q11.2	0.129722	0.011155	0.028982136
IL9R	Xq28 and Yq12	0.129697	0.01117	0.029019356
LINS1	15q26.3	0.129673	0.011185	0.029054068
LRR37BP1	17q11.2	-0.12966	0.011194	0.029068459

RPL23A	17q11.2	-0.12966	0.011195	0.029068459
TRIM9	14q22.1	-0.12966	0.011195	0.029068459
NMB	15q25.2	-0.12962	0.011216	0.029116305
SHANK1	19q13.33	-0.12962	0.011217	0.029116305
CSRP2	12q21.2	-0.12962	0.011218	0.029116305
ZNF860	3p23-p22.3	-0.12956	0.011254	0.029206585
	7-Mar 2q24.2	-0.12956	0.011258	0.029212007
PGM5-AS1	9q21.11	-0.12955	0.011265	0.029227982
FLRT1	11q13.1	-0.12954	0.01127	0.029236319
FSTL1	3q13.33	-0.12953	0.011274	0.029242922
SCARA3	8p21.1	-0.12953	0.011275	0.029242922
H2BFXP	Xq22.2	-0.12953	0.011278	0.02924326
TMEM9B	11p15.4	0.129525	0.011279	0.02924326
EML5	14q31.3	0.129524	0.01128	0.02924326
MAFA	8q24.3	0.129518	0.011283	0.029248208
USP15	12q14.1	0.129513	0.011287	0.029253767
HDAC10	22q13.33	-0.1295	0.011295	0.029271613
STK38	6p21.31	-0.1295	0.011298	0.029274211
ERI2	16p12.3	0.129477	0.01131	0.029300943
B4GALNT1	12q13.3	-0.12946	0.011319	0.029322011
DKK1	10q21.1	-0.12945	0.011325	0.029333482
LANCL2	7p11.2	-0.12945	0.011329	0.029340009
LINC01551	14q12	-0.12944	0.011331	0.029342632
C17ORF97	17p13.3	0.129435	0.011337	0.029351972
UNC93A	6q27	-0.1294	0.011358	0.029402971
VCX	Xp22.31	-0.1294	0.011361	0.02940752
NUDT19	19q13.11	-0.12939	0.011368	0.029420657
FOXO1	13q14.11	0.129353	0.011389	0.029472116
DCDC2	6p22.3	0.129347	0.011393	0.029478258
ELP4	11p13	-0.12934	0.011398	0.029486982
MYL4	17q21.32	-0.12933	0.011401	0.029491191
HES5	1p36.32	0.129314	0.011414	0.029521609
LGALS3BP	17q25.3	0.129297	0.011425	0.029545571
ID3	1p36.12	-0.12928	0.011436	0.029571802
CTSK	1q21.3	-0.12924	0.011464	0.029638546
USP33	1p31.1	0.129232	0.011467	0.029642609
GGA3	17q25.1	-0.12922	0.011474	0.029658509
PNOC	8p21.1	0.129169	0.011507	0.029739975
ZNF574	19q13.2	-0.12916	0.011514	0.029750473
ZNF140	12q24.33	-0.12916	0.011514	0.029750473
RHBDD2	7q11.23	-0.12915	0.011517	0.029753469
BMP2K	4q21.21	0.129136	0.011528	0.029779141
CNPY1	7q36.3	-0.12913	0.011531	0.029781583
HECW1	7p14.1-p13	-0.12913	0.011534	0.029786905
NAT8L	4p16.3	-0.12912	0.011539	0.029794863
TXN2	22q12.3	0.129112	0.011544	0.02980482
C1ORF122	1p34.3	-0.12909	0.011555	0.02982946
HOXA9	7p15.2	-0.12909	0.011559	0.029836432
OR5A1	11q12.1	-0.12905	0.011581	0.029888701
HLA-DMA	6p21.32	0.128983	0.011628	0.030005857
LOC441204	7p15.2	-0.12894	0.011658	0.030078342
PIEZO2	18p11.22-p11.21	-0.12892	0.011668	0.030100611
CFAP70	10q22.2	-0.12892	0.011671	0.030105649
PARD3	10p11.22-p11.21	0.12891	0.011676	0.030110749
PCYT1A	3q29	0.128909	0.011677	0.030110749
BOLA3	2p13.1	-0.12891	0.011678	0.030110749
GZMK	5q11.2	0.128896	0.011685	0.030125334
KCNA7	19q13.33	-0.12889	0.011687	0.030126421

CST9	20p11.21	-0.12888	0.011695	0.030143825
CCDC71	3p21.31	-0.12888	0.011698	0.030147605
ARMC9	2q37.1	-0.12886	0.011709	0.03017248
PITPNM2	12q24.31	0.128838	0.011723	0.030203567
CHRNA4	20q13.33	-0.12882	0.011733	0.030226627
IGIP	5q31.3	0.128818	0.011736	0.030229323
DAAM1	14q23.1	0.128795	0.011751	0.030264783
GGA1	22q13.1	0.128793	0.011753	0.030264783
GNG11	7q21.3	-0.12875	0.011784	0.030340756
LRRC3B	3p24.1	-0.12874	0.011785	0.030341446
LINC00636	3q13.12	-0.12873	0.011792	0.030353909
ST6GALNAC4	9q34.11	0.128731	0.011794	0.030355036
VASN	16p13.3	-0.12871	0.011808	0.030386652
HSD17B14	19q13.33	-0.12869	0.011819	0.030411332
NEXN	1p31.1	-0.12866	0.01184	0.030462085
UGT1A4	2q37.1	0.128651	0.011846	0.030471516
PSMD9	12q24.31	0.128651	0.011847	0.030471516
WNK4	17q21.2	0.128623	0.011865	0.03051537
STMN4	8p21.2	-0.12862	0.011869	0.030520513
MID1P1	Xp11.4	0.128581	0.011893	0.030579659
SOWAHD	Xq24	0.128576	0.011896	0.030583641
CSGALNACT1	8p21.3	-0.12854	0.011918	0.030633479
NDC1	1p32.3	0.128542	0.011919	0.030633479
ELMO3	16q22.1	0.128537	0.011922	0.030639152
TULP2	19q13.33	-0.12853	0.011928	0.030648723
CRYL1	13q12.11	0.128519	0.011934	0.030662094
EEFSEC	3q21.3	-0.12851	0.011938	0.03066648
CCL21	9p13.3	-0.12849	0.011955	0.030706584
SRARP	1p36.13	-0.12844	0.011984	0.030773257
GLT8D2	12q23.3	-0.12844	0.011986	0.030773257
SCARNA6	2q37.1	-0.12844	0.011987	0.030773257
EMB	5q11.1	-0.12844	0.011987	0.030773257
PPP1R3B	8p23.1	-0.12844	0.01199	0.030774627
HSD17B4	5q23.1	0.128435	0.011991	0.030774627
IDS	Xq28	-0.12843	0.011993	0.030776979
ATP10A	15q12	-0.12838	0.01203	0.030867599
FAM117A	17q21.33	-0.12837	0.012035	0.030874173
PROM2	2q11.1	0.128368	0.012035	0.030874173
ADAM32	8p11.22	-0.12836	0.01204	0.030882725
SLC9A5	16q22.1	0.128349	0.012048	0.030898955
GNG13	16p13.3	0.128343	0.012052	0.030902563
STOML1	15q24.1	-0.12834	0.012053	0.030902563
TMEM270	7q11.23	-0.12834	0.012055	0.030905063
RNF14	5q31.3	0.12832	0.012068	0.03093369
SCIMP	17p13.2	0.1283	0.012081	0.030963559
ARHGDI3	12p12.3	0.128297	0.012083	0.0309641
LINC00239	14q32.31	0.128295	0.012085	0.030964978
PRKCH	14q23.1	0.128284	0.012092	0.030979635
FAM110A	20p13	-0.12828	0.012095	0.030982749
TRIM4	7q22.1	-0.12827	0.012104	0.031002258
TLDC2	20q11.23	-0.12823	0.01213	0.031065807
LINC00592	12q13.13	-0.12822	0.012137	0.031078325
RSL24D1	15q21.3	-0.1282	0.012146	0.031097078
CPLX4	18q21.32	0.128202	0.012147	0.03109751
RNASEH2A	19p13.13	-0.12818	0.01216	0.031125894
EIF5B	2q11.2	-0.12818	0.012162	0.031125894
HDC	15q21.2	0.12817	0.012169	0.031141321
NPIP3	16p12.2	-0.12811	0.012207	0.031234406

STAT6	12q13.3	0.12808	0.01223	0.031289725
COL8A1	3q12.1	-0.12806	0.012244	0.031320339
CTXN2	15q21.1	-0.12806	0.012245	0.031320339
MOXD1	6q23.2	-0.12805	0.012249	0.031326592
RPS6KA2	6q27	0.128029	0.012265	0.031363225
EFNB3	17p13.1	-0.12801	0.01228	0.031395887
CEP85	1p36.11	0.128006	0.012281	0.031395887
C9ORF16	9q34.11	-0.12798	0.012298	0.031435607
INSYN1	15q24.1	-0.12796	0.012313	0.03146317
RAB17	2q37.3	-0.12796	0.012313	0.03146317
CCL23	17q12	0.127958	0.012314	0.03146317
DSP	6p24.3	0.127954	0.012317	0.031466723
NAPB	20p11.21	-0.12795	0.01232	0.031471014
MPI	15q24.1	0.127938	0.012328	0.031486635
SLCO4A1	20q13.33	-0.12793	0.012334	0.031498485
NDOR1	9q34.3	0.127902	0.012353	0.031542478
GAGE12D	Xp11.23	-0.12789	0.01236	0.03155703
SLC51B	15q22.31	0.127889	0.012362	0.03155703
FGD2	6p21.2	0.127885	0.012364	0.031558776
LINC01128	1p36.33	0.127873	0.012373	0.031575346
FAP	2q24.2	-0.12787	0.012373	0.031575346
LINC01098	4q34.3	-0.12786	0.012381	0.031590891
ZNF671	19q13.43	-0.12786	0.012384	0.031593806
MICU3	8p22	-0.1278	0.012424	0.031693382
DIO3OS	14q32.31	-0.12779	0.012429	0.031699914
KCNJ4	22q13.1	0.12776	0.01245	0.031751597
RPS6	9p22.1	-0.12775	0.012457	0.031764847
LOC100129534	1p36.32	0.12773	0.012472	0.031797351
GLRA3	4q34.1	-0.1277	0.012493	0.031847427
LRIG1	3p14.1	-0.12769	0.012501	0.031865499
EVPLL	17p11.2	0.127671	0.012512	0.031889404
MFSD9	2q12.1	0.127658	0.012521	0.031907403
PPIL2	22q11.21	0.12765	0.012527	0.031918245
CEACAM19	19q13.31	-0.12764	0.012531	0.031919678
BAIAP2	17q25.3	-0.12764	0.012531	0.031919678
CGB7	19q13.33	-0.12763	0.012542	0.031945232
RANGRF	17p13.1	-0.12762	0.012548	0.031951843
ARID1A	1p36.11	0.12762	0.012548	0.031951843
ARRDC3-AS1	5q14.3	0.127587	0.012571	0.032005178
SENP1	12q13.11	-0.12757	0.01258	0.032025258
ENPP4	6p21.1	0.127565	0.012586	0.032036136
EMX2OS	10q26.11	-0.12754	0.012603	0.032075435
RAD9B	12q24.11	-0.12753	0.012607	0.032082073
NBPF9	1q21.2	-0.12753	0.01261	0.032084906
PCTP	17q22	-0.12751	0.012622	0.032111163
BTLA	3q13.2	0.127499	0.012632	0.032133268
LDOC1	Xq27.1	-0.12749	0.01264	0.032147965
BCL9	1q21.2	-0.12743	0.012682	0.032252446
C1QTNF4	11p11.2	-0.12739	0.012706	0.032309253
ADAMTS14	10q22.1	-0.12737	0.012722	0.032345408
LCE1B	1q21.3	0.127361	0.01273	0.032360957
MED22	9q34.2	-0.12735	0.01274	0.032382442
SP5	2q31.1	-0.12734	0.012743	0.032386071
GPBAR1	2q35	-0.12732	0.01276	0.032425697
ACSF2	17q21.33	-0.12729	0.012781	0.032473535
MAPK4	18q21.1-q21.2	-0.12728	0.012786	0.032483007
FNDC1	6q25.3	-0.12728	0.01279	0.032488183
CCHCR1	6p21.33	0.127268	0.012796	0.032499197

OSBPL10	3p23	-0.12726	0.012801	0.03250905
NAA38	17p13.1	0.127204	0.012841	0.032606382
FUT11	10q22.2	0.127197	0.012846	0.032615873
CCDC198	14q22.3	-0.12716	0.012869	0.032669026
PRAME	22q11.22	-0.12716	0.012871	0.032670804
MAU2	19p13.11	-0.12711	0.01291	0.032764952
STARD13	13q13.1-q13.2	-0.12708	0.012929	0.032809687
PRR23B	3q23	-0.12708	0.012931	0.03281014
LINC00634	22q13.2	-0.12707	0.012939	0.032825634
SPIN2A	Xp11.21	-0.12704	0.012956	0.032865318
MFSD4B	6q21	0.127039	0.012959	0.032869421
FAM225A	9q32	-0.12702	0.012969	0.032890717
RPSAP52	12q14.3	-0.12701	0.012977	0.032906658
SLC25A43	Xq24	-0.12699	0.012995	0.032947556
SYT15	10q11.22	0.126982	0.013	0.032956138
RUBCN	3q29	0.126941	0.013029	0.033025702
TPI1P2	7q32.1	-0.12693	0.013038	0.033040567
XRCC6	22q13.2	-0.12693	0.013038	0.033040567
NT5DC2	3p21.1	-0.12693	0.01304	0.033041111
MIF	22q11.23	-0.12692	0.013045	0.033048743
AKT1	14q32.33	0.126915	0.013048	0.033053226
HIST1H4E	6p22.2	-0.12691	0.013052	0.03305918
CIT	12q24.23	0.126862	0.013086	0.033141455
CHD4	12p13.31	-0.12685	0.013093	0.033154636
FADS6	17q25.1	-0.12683	0.013108	0.03318647
CDON	11q24.2	-0.12682	0.013116	0.033201869
FGF1	5q31.3	-0.12682	0.013118	0.033201869
S100BPB	1p35.1	-0.12682	0.013119	0.033201869
USP4	3p21.31	-0.12681	0.013125	0.033215071
SLC44A1	9q31.1-q31.2	0.126778	0.013147	0.033266275
RRP7A	22q13.2	-0.12678	0.013149	0.033266429
PGM5	9q21.11	-0.12676	0.013163	0.033297484
CYP3A7	7q22.1	-0.12675	0.013172	0.033314695
VCY	Yq11.221	-0.12674	0.013176	0.033323098
C16ORF46	16q23.2	0.12673	0.013182	0.033333608
MAGEA10	Xq28	-0.12673	0.013186	0.033339003
APBB1IP	10p12.1	0.126715	0.013194	0.03335377
FOXL2	3q22.3	-0.12669	0.013212	0.033396722
INCA1	17p13.2	0.126663	0.013232	0.033441298
ACTG2	2p13.1	-0.12666	0.013236	0.033447632
UTF1	10q26.3	-0.12665	0.013242	0.033458858
LRRC74B	22q11.21	0.126643	0.013246	0.033465677
MPO	17q22	-0.12662	0.013261	0.033499314
TRAF3IP1	2q37.3	-0.12662	0.013266	0.03350599
ZNF81	Xp11.23	-0.12661	0.013269	0.033511327
NFX1	9p13.3	0.126608	0.013272	0.033512681
QSER1	11p13	-0.12659	0.013282	0.033535161
SRP68	17q25.1	0.126591	0.013284	0.033536117
HAPLN2	1q23.1	0.126582	0.013291	0.03354699
ZNF720	16p11.2	-0.12658	0.013292	0.03354699
ILF3-DT	19p13.2	-0.12658	0.013294	0.033549356
MAPK9	5q35.3	0.126547	0.013316	0.033596692
COL6A2	21q22.3	-0.12655	0.013317	0.033596692
STX4	16p11.2	-0.12654	0.01332	0.033596692
BEX4	Xq22.1	-0.12654	0.01332	0.033596692
GPR35	2q37.3	-0.12653	0.013329	0.033614428
ZNF782	9q22.33	-0.12652	0.013338	0.033632971
SIM2	21q22.13	-0.1265	0.013353	0.033666722

SLC37A2	11q24.2	0.126495	0.013354	0.033666884
DMP1	4q22.1	-0.12649	0.013361	0.033678812
TDRD6	6p12.3	-0.12648	0.013363	0.033678812
SCN2B	11q23.3	-0.12647	0.013377	0.033710145
LINC00965	8p23.1	-0.12645	0.013339	0.033738486
PLCD1	3p22.2	0.126426	0.013406	0.03377161
XKR8	1p35.3	-0.12643	0.013406	0.03377161
RASGEF1B	4q21.21	0.126407	0.01342	0.033802269
SLC18A2	10q25.3	0.126404	0.013422	0.033803988
VAX2	2p13.3	-0.12639	0.013431	0.033821258
USP54	10q22.2	0.126371	0.013447	0.033856352
SKA1	18q21.1	0.126369	0.013448	0.033856352
KDF1	1p36.11	0.126348	0.013464	0.033891503
PBDC1	Xq13.3	-0.12634	0.013468	0.033898106
ARMC7	17q25.1	0.126303	0.013497	0.033966333
ZNF500	16p13.3	-0.12627	0.013522	0.0340262
SLC2A5	1p36.23	0.126246	0.013539	0.034064332
WASH2P	2q14.1	-0.12622	0.013556	0.034102097
FERMT3	11q13.1	0.126216	0.013562	0.034112376
LINC02693	17p11.2	-0.12621	0.013564	0.034112947
SRP72	4q12	0.126209	0.013567	0.034115303
MVB12B	9q33.3	-0.12621	0.013568	0.034115303
TEKT3	17p12	0.126197	0.013576	0.034131238
GLIS3-AS1	9p24.2	0.126179	0.013589	0.034159623
ARL8B	3p26.1	-0.12616	0.0136	0.034181168
PLP2	Xp11.23	-0.12616	0.013601	0.034181168
SOWAHB	4q21.1	0.126151	0.013611	0.034200794
TWSG1	18p11.22	0.126146	0.013614	0.034203565
ZNF253	19p13.11	-0.12614	0.013615	0.034203565
SCAF1	19q13.33	-0.12613	0.013623	0.034217789
EPB41L4A-DT	5q22.2	0.126133	0.013624	0.034217789
TBX18	6q14.3	-0.12607	0.013671	0.034331282
ARL8A	1q32.1	-0.12606	0.013681	0.034345302
ZNF32	10q11.21	-0.12606	0.013682	0.034345302
TMEM88B	1p36.33	-0.12605	0.013684	0.034345302
NCSTN	1q23.2	0.126054	0.013684	0.034345302
E2F7	12q21.2	0.126045	0.01369	0.034358089
CHST12	7p22.3	-0.12604	0.013692	0.034358668
ARAP3	5q31.3	-0.12604	0.013695	0.03436169
KLHL13	Xq24	0.126035	0.013698	0.034363899
SAMSN1	21q11.2	0.126017	0.013711	0.034392578
EMILIN1	2p23.3	-0.12598	0.013738	0.03445472
TMCO4	1p36.13	0.125965	0.01375	0.03448243
C4ORF48	4p16.3	-0.12594	0.013766	0.034517733
COL11A1	1p21.1	-0.12594	0.013769	0.034520984
SLC25A17	22q13.2	-0.12593	0.013776	0.034534238
ZNF771	16p11.2	-0.12592	0.013783	0.034547893
FPGT	1p31.1	0.125882	0.013813	0.034619302
LPA	6q25.3-q26	-0.12588	0.013817	0.03462291
BRINP3	1q31.1	0.125869	0.013823	0.034632295
HIST1H2AD	6p22.2	-0.12587	0.013824	0.034632295
PAQR8	6p12.2	0.125866	0.013826	0.034632295
LINC00894	Xq28	-0.12586	0.013833	0.034646406
MAN1B1-DT	9q34.3	-0.12583	0.013853	0.034692522
RBM45	2q31.2	-0.12582	0.013857	0.034693448
CHRM4	11p11.2	0.125825	0.013857	0.034693448
SETD5	3p25.3	-0.12582	0.013864	0.034706189
ZNF460	19q13.43	0.125813	0.013866	0.03470738

ZNF487	10q11.21	0.125804	0.013873	0.034716657
LOC100131496	20q13.12	-0.1258	0.013873	0.034716657
BDH2	4q24	-0.1258	0.013877	0.034721684
INMT	7p14.3	-0.12579	0.013882	0.034730887
FAM118A	22q13.31	-0.12576	0.013904	0.034780401
MRPL23	11p15.5	-0.12573	0.013929	0.0348382
PDZK1	1q21.1	-0.12572	0.013936	0.03485115
KDM1B	6p22.3	0.125692	0.013958	0.034903275
PADI3	1p36.13	0.125687	0.013962	0.034908683
ANOS1	Xp22.31	-0.12567	0.013973	0.034930458
GALK1	17q25.1	-0.12556	0.014064	0.03515376
RPS16	19q13.2	-0.12555	0.014066	0.035155184
FAM110B	8q12.1	-0.12553	0.014083	0.035194377
TRIM69	15q21.1	0.125482	0.01412	0.035278063
VGLL2	6q22.1	-0.12548	0.01412	0.035278063
MAGEA12	Xq28	-0.12547	0.014128	0.03529235
TMEM272	13q14.3	-0.12546	0.014141	0.035320167
SNRNP27	2p13.3	-0.12545	0.014144	0.035324317
TBC1D28	17p11.2	-0.12544	0.01415	0.03533071
CACTIN	19p13.3	-0.12544	0.01415	0.03533071
KCTD8	4p13	-0.12541	0.014172	0.035380998
JAML	11q23.3	0.12541	0.014176	0.035385943
TRAK2	2q33.1	0.125398	0.014185	0.035405332
VSX1	20p11.21	-0.12539	0.01419	0.035413415
AKAP9	7q21.2	0.125378	0.014201	0.035431768
MPEG1	11q12.1	0.125377	0.014201	0.035431768
RPL6	12q24.13	-0.12533	0.014239	0.035520656
FAM131A	3q27.1	-0.12532	0.014242	0.035525027
DOCK7	1p31.3	0.125308	0.014256	0.035554121
BDP1	5q13.2	0.12529	0.01427	0.035584074
SATL1	Xq21.1	-0.12528	0.014274	0.035589711
E4F1	16p13.3	-0.12528	0.014278	0.035592995
A2ML1	12p13.31	-0.12528	0.014278	0.035592995
TFB1M	6q25.3	-0.12527	0.014287	0.035608911
DHX15	4p15.2	0.125266	0.014288	0.035608911
IRF2BPL	14q24.3	-0.12525	0.014302	0.035637645
RNF128	Xq22.3	-0.12522	0.014323	0.035685314
RPS5	19q13.43	-0.12522	0.014324	0.0356855
MCF2L2	3q27.1	0.12521	0.014332	0.035697647
TSG101	11p15.1	-0.12521	0.014333	0.035697647
RGS18	1q31.2	0.125161	0.014371	0.035787289
SEMA6C	1q21.3	-0.12513	0.014397	0.035849283
SCG3	15q21.2	-0.12511	0.014409	0.035873592
METTL2A	17q23.2	-0.12511	0.014411	0.035874146
ANXA4	2p13.3	0.125084	0.014431	0.03592082
XIRP1	3p22.2	-0.12508	0.014436	0.035926692
SUOX	12q13.2	0.125076	0.014437	0.035926692
PTPN7	1q32.1	0.125062	0.014448	0.035949709
C11ORF71	11q23.2	-0.12504	0.014464	0.035984197
COA8	14q32.33	-0.12504	0.014468	0.035989044
MAL	2q11.1	0.125027	0.014476	0.036004714
CCDC3	10p13	-0.12502	0.014481	0.036013993
LIME1	20q13.33	-0.125	0.014495	0.036043432
ABCD2	12q12	0.124979	0.014514	0.036086289
TBXA2R	19p13.3	-0.12497	0.014522	0.036101524
OSBPL3	7p15.3	-0.12496	0.014527	0.036109783
PLEKHG3	14q23.3	0.124959	0.01453	0.036112946
COL21A1	6p12.1 6p12.3-p11.2	-0.12495	0.014536	0.03612243



MSC	8q13.3	-0.12494	0.014544	0.036138396
CNIH1	14q22.2	0.124937	0.014547	0.036141988
CSNK2B	6p21.33	-0.12493	0.014549	0.036142605
LASP1	17q12	0.124921	0.01456	0.03616448
KCTD6	3p14.3	-0.12491	0.014566	0.036174454
TMEM170A	16q23.1	0.124895	0.014581	0.036207412
U2AF2	19q13.42	-0.12487	0.014603	0.03625744
TRIM22	11p15.4	0.124855	0.014613	0.03627683
CHRM2	7q33	-0.12485	0.014614	0.03627683
PAPLN	14q24.2	-0.12485	0.014617	0.036278057
CCNK	14q32.2	0.124834	0.01463	0.036305549
COL3A1	2q32.2	-0.12483	0.014635	0.036315131
GFI1B	9q34.13	0.124815	0.014645	0.036334459
NUDT9P1	10q23.32	-0.1248	0.014655	0.036354216
SNRPGP15	19p13.12	-0.12477	0.014682	0.036416552
RPL22	1p36.31	-0.12472	0.014717	0.036500249
C9ORF64	9q21.32	0.124705	0.014733	0.036535607
CIDECP1	3p25.3	-0.12467	0.014764	0.036607492
GOSR1	17q11.2	0.124662	0.014768	0.036611334
GNG10	9q31.3	-0.12466	0.014769	0.036611334
PSMD11	17q11.2	-0.12463	0.014792	0.036662702
HDAC1	1p35.2-p35.1	0.124613	0.014807	0.036695612
MARS	12q13.3	-0.12461	0.014812	0.03670356
SPATA13	13q12.12	-0.1246	0.014821	0.036721418
LOC645752	15q24.3	-0.12458	0.014834	0.036749716
MARK4	19q13.32	-0.12458	0.014837	0.036752845
SEMA5B	3q21.1	-0.12456	0.014853	0.036786256
UBXN4	2q21.3	-0.12454	0.014863	0.036807603
ZC3H10	12q13.2	-0.12453	0.014874	0.036828961
TGIF2LX	Xq21.31	-0.12451	0.014893	0.036871962
GSC	14q32.13	-0.12449	0.014909	0.036907961
GPAM	10q25.2	-0.12447	0.014925	0.036942008
AP1S3	2q36.1	0.124465	0.014927	0.036943073
ATP6V1E2	2p21 2p16-p12	-0.12443	0.014956	0.037010453
LOC728392	17p13.2	-0.1244	0.014979	0.037058162
EIF3IP1	7q31.1	-0.1244	0.014979	0.037058162
LRRC69	8q21.3	-0.12438	0.014997	0.037098487
AQP1	7p14.3	-0.12437	0.015004	0.037106985
ZNF607	19q13.12	-0.12437	0.015004	0.037106985
SMYD3	1q44	-0.12435	0.015017	0.037133712
SETD3	14q32.2	0.124344	0.015026	0.037150446
CENPC	4q13.2	0.124338	0.01503	0.037153212
PPP3CC	8p21.3	-0.12434	0.015032	0.037153212
WNK1	12p13.33	-0.12434	0.015032	0.037153212
VEGFC	4q34.3	-0.12432	0.015041	0.037170838
NKX2-5	5q35.1	-0.12431	0.01505	0.037188845
IQCD	12q24.13	0.124283	0.015075	0.037245083
NFKBID	19q13.12	-0.12428	0.015077	0.037245083
CRLS1	20p12.3	-0.12427	0.015085	0.037260552
CREBL2	12p13.1	0.124269	0.015087	0.037261192
NTMT1	9q34.11	-0.12426	0.015092	0.037269249
GPRC5B	16p12.3	-0.12421	0.015139	0.037379548
MED18	1p35.3	0.124193	0.01515	0.037401396
PXYLP1	3q23	-0.12419	0.015151	0.037401396
NUDT21	16q13	-0.12418	0.015158	0.037413856
TMPRSS5	11q23.2	-0.12414	0.015192	0.037492633
DYNC1H1	14q32.31	0.124136	0.015197	0.037498841
TNFSF12-TNFSF13	17p13.1	-0.12413	0.015202	0.037504076

C16ORF91	16p13.3	-0.12413	0.015202	0.037504076
TLX2	2p13.1	0.12412	0.01521	0.037517501
TAP1	6p21.32	0.124116	0.015213	0.0375216
ALDH1A3	15q26.3	-0.12409	0.015234	0.037567471
PRPF31	19q13.42	-0.12408	0.015245	0.037591846
NPLOC4	17q25.3	-0.12406	0.015262	0.037628112
CSPP1	8q13.1-q13.2	-0.12405	0.015266	0.037633598
CTSG	14q12	0.124043	0.015274	0.037647598
SFXN4	10q26.11	-0.12401	0.015299	0.037705347
EDN3	20q13.32	0.124007	0.015304	0.037712317
SLC36A2	5q33.1	-0.12398	0.015323	0.037754913
LOC440173	9q21.33	-0.12397	0.015336	0.037782507
SPRED2	2p14	0.123957	0.015345	0.037799705
DLGAP1	18p11.31	-0.12395	0.015355	0.03781986
PPP1R26	9q34.3	0.123943	0.015357	0.037820001
RHBDL3	17q11.2	0.123935	0.015363	0.037831648
SNX10	7p15.2	-0.12392	0.015376	0.037857967
RMRP	9p13.3	-0.12392	0.015378	0.037857967
ICK	6p12.1	0.123908	0.015386	0.037873449
GARNL3	9q33.3	-0.1239	0.015389	0.037875389
THSD1	13q14.3	-0.1239	0.015395	0.037887144
POMC	2p23.3	-0.12389	0.015403	0.037901459
C19ORF47	19q13.2	-0.12387	0.01542	0.037935594
SLC45A4	8q24.3	0.123866	0.015421	0.037935594
PAX8-AS1	2q14.1	-0.12384	0.01544	0.03797546
GLI4	8q24.3	-0.12384	0.015441	0.03797546
SNHG7	9q34.3	-0.12383	0.015452	0.03799783
PCDHGA3	5q31.3	-0.12383	0.015455	0.03799783
EPHB1	3q22.2	-0.12382	0.015456	0.03799783
KCNN2	5q22.3	0.123736	0.01553	0.038176664
CCDC171	9p22.3	0.123726	0.015538	0.038192077
GPM6A	4q34.2	-0.12372	0.015545	0.038204091
P2RX5	17p13.2	-0.12372	0.015547	0.038204091
NCLN	19p13.3	0.123705	0.015556	0.038221242
PPCS	1p34.2	0.123693	0.015567	0.038240846
PLIN3	19p13.3	0.123691	0.015568	0.038240846
PNLDC1	6q25.3	-0.12368	0.015579	0.038262971
WFDC9	20q13.12	-0.12363	0.015616	0.038350625
HAO2	1p12	-0.12363	0.01562	0.038353567
RNASET2	6q27	-0.12363	0.015622	0.038353567
NOL4	18q12.1	0.123625	0.015623	0.038353567
TMEM37	2q14.2	0.123598	0.015646	0.038404782
RBPMS	8p12	-0.12359	0.015651	0.038413057
SF3A3	1p34.3	-0.12357	0.015672	0.038458067
HMBS	11q23.3	-0.12356	0.015678	0.038469042
GREM1	15q13.3	-0.12352	0.015713	0.038549558
TMEM126A	11q14.1	-0.12352	0.015716	0.038549558
CYP51A1	7q21.2	0.123515	0.015717	0.038549558
TRIM17	1q42.13	-0.12351	0.015719	0.038551035
GRHL1	2p25.1	0.123491	0.015738	0.038588171
RORA	15q22.2	-0.12349	0.015738	0.038588171
MARK2	11q13.1	0.123488	0.01574	0.038588171
ZNF436-AS1	1p36.12	-0.12348	0.015748	0.038602986
VPS35	16q11.2	-0.12346	0.015763	0.038635827
TMEM174	5q13.2	0.123432	0.015787	0.038689695
TSPAN7	Xp11.4	0.123412	0.015804	0.03872679
ZCWPW1	7q22.1	-0.12341	0.015807	0.038729265
CFAP100	3q21.3	-0.12339	0.01582	0.038755886

PLEKHA5	12p12.3	-0.12338	0.015835	0.038787452
GPR34	Xp11.4	0.123368	0.015842	0.038797377
PEX11B	1q21.1	0.123367	0.015843	0.038797377
CYREN	7q33	-0.12336	0.015849	0.038807533
ZNF821	16q22.2	-0.12335	0.015855	0.038818596
H2AFV	7p13	-0.12335	0.015861	0.038825368
HLA-B	6p21.33	0.123345	0.015862	0.038825368
DYDC2	10q23.1	-0.12334	0.01587	0.038840962
HEMGN	9q22.33	0.123329	0.015876	0.038850448
ZNF431	19p12	-0.12332	0.015887	0.038872597
CD79B	17q23.3	0.12331	0.015893	0.03887757
TMEM14C	6p24.2	-0.12331	0.015893	0.03887757
FAM210A	18p11.21	0.123299	0.015902	0.038893629
TMEM167B	1p13.3	0.123291	0.015909	0.038902907
SLC7A4	22q11.21	-0.12329	0.015909	0.038902907
RSAD1	17q21.33	-0.12329	0.015911	0.038902907
SURF1	9q34.2	-0.12328	0.015922	0.038923954
ENDOV	17q25.3	0.123263	0.015933	0.038944334
MTCH1	6p21.2	-0.12326	0.015934	0.038944334
BMI1	10p12.2	-0.12326	0.015939	0.038952716
TSR1	17p13.3	0.123239	0.015953	0.038981492
PDZRN4	12q12	-0.12323	0.015957	0.038986879
TUT4	1p32.3	-0.12323	0.015962	0.038994645
LMTK3	19q13.33	-0.12322	0.015969	0.039007118
STIMATE	3p21.1	-0.12321	0.015974	0.039014606
RNF10	12q24.31	0.123203	0.015984	0.039034345
IMP4	2q21.1	-0.12317	0.016011	0.039093604
TMEM165	4q12	0.123148	0.016032	0.039141113
HOXA11	7p15.2	-0.12313	0.016047	0.03917068
ZNF135	19q13.43	-0.12313	0.01605	0.03917068
CASC8	8q24.21	-0.12313	0.01605	0.03917068
CCDC113	16q21	-0.12312	0.016054	0.039174802
SLC29A2	11q13.2	-0.12306	0.016109	0.039305852
NT5C1B	2p24.2	-0.12306	0.016111	0.039305915
ADAMTS18	16q23.1	-0.12305	0.016117	0.039315313
ZNF646	16p11.2	-0.12304	0.016121	0.039320705
EMC8	16q24.1	-0.12304	0.016124	0.039321852
PSMC3	11p11.2	-0.123	0.016158	0.039400234
QSOX2	9q34.3	-0.12298	0.016175	0.039436159
CYMP	1p13.3	0.122971	0.016186	0.039458704
EPCAM	2p21	-0.12297	0.01619	0.039464101
ALG2	9q22.33	0.122962	0.016193	0.039464114
LOX	5q23.1	-0.12296	0.016194	0.039464114
AATK	17q25.3	0.122951	0.016203	0.039481758
SCGB1C1	11p15.5	0.122927	0.016224	0.039520715
AGAP4	10q11.22	-0.12293	0.016225	0.039520715
RENBP	Xq28	-0.12293	0.016225	0.039520715
VNN3	6q23.2	0.122896	0.016251	0.03956964
DCTN1	2p13.1	-0.1229	0.016251	0.03956964
HMX3	10q26.13	0.122896	0.016251	0.03956964
SPAG1	8q22.2	-0.12289	0.016253	0.03956964
CENPK	5q12.3	0.122883	0.016262	0.039587785
MAGEA6	Xq28	-0.12287	0.01627	0.039600369
NIBAN3	19p13.11	0.122871	0.016273	0.039604021
GPBP1	5q11.2	0.122842	0.016299	0.039661115
DNAH5	5p15.2	0.122836	0.016304	0.039669161
ALG12	22q13.33	0.12283	0.01631	0.039678157
DHCR7	11q13.4	-0.12282	0.016321	0.039700487

HOXA7	7p15.2	-0.12279	0.016343	0.039748867
PRR5-ARHGAP8	22q13.31	-0.12279	0.016345	0.039748867
DPPA2P3	3q29	-0.12277	0.016358	0.039774702
DRC3	17p11.2	0.122773	0.016359	0.039774702
CCDC142	2p13.1	-0.12276	0.016367	0.0397897
SDAD1	4q21.1	-0.12276	0.01637	0.039790865
THOC2	Xq25	-0.12274	0.016389	0.039832172
TMEM209	7q32.2	-0.12273	0.016396	0.039838906
LINC02347	12q24.32	0.122731	0.016397	0.039838906
KDM4B	19p13.3	0.12273	0.016397	0.039838906
DYNC1LI2	16q22.1	0.122726	0.0164	0.039840998
TGS1	8q12.1	-0.12269	0.016431	0.039910063
LMNTD1	12p12.1	-0.12269	0.016433	0.039910063
NUP188	9q34.11	0.122687	0.016435	0.039911036
F12	5q35.3	0.12268	0.016441	0.039917167
LAMP5	20p12.2	-0.12268	0.016442	0.039917167
KDSR	18q21.33	0.122673	0.016448	0.039926574
HOXC4	12q13.13	0.122662	0.016458	0.039945994
CELF5	19p13.3	-0.12266	0.016462	0.039951772
RASD2	22q12.3	0.122612	0.016502	0.040040086
HLA-H	6p22.1	0.122611	0.016502	0.040040086
KCNA2	1p13.3	-0.12259	0.016519	0.040062493
DSCAM	21q22.2	-0.12259	0.01652	0.040062493
PHACTR4	1p35.3	0.122589	0.016522	0.040062493
COCH	14q12	-0.12259	0.016523	0.040062493
MORF4L2	Xq22.2	-0.12258	0.016527	0.040062493
C1QTNF6	22q12.3	-0.12258	0.016527	0.040062493
SETD4	21q22.12	-0.12258	0.016527	0.040062493
FABP3	1p35.2	-0.12258	0.016528	0.040062493
VPS13C	15q22.2	0.12253	0.016574	0.040170467
KTI12	1p32.3	-0.12252	0.016581	0.040182342
NKX3-1	8p21.2	0.122516	0.016587	0.040190965
ACTRT3	3q26.2	-0.12251	0.016594	0.040199843
RFWD3	16q23.1	-0.12251	0.016594	0.040199843
GSTM2P1	6q21	0.122489	0.016611	0.040236128
FAM225B	9q32	-0.12248	0.016617	0.040245745
SSRP1	11q12.1	-0.12248	0.016619	0.040245745
FGF12	3q28-q29	-0.12247	0.016629	0.040265492
C17ORF50	17q12	0.122408	0.016683	0.040391174
SELENOS	15q26.3	0.122405	0.016686	0.040393397
LBX1	10q24.32	-0.12239	0.016696	0.040412398
TMIE	3p21.31	-0.12238	0.016709	0.040438441
FAM133A	Xq21.32	-0.12235	0.016732	0.040488645
PRNP	20p13	-0.12235	0.016734	0.040488645
PLPP7	9q34.13	-0.12235	0.016736	0.040488645
ELOVL2	6p24.2	-0.12234	0.016744	0.040503375
CD53	1p13.3	0.122336	0.016748	0.040508818
COX6C	8q22.2	-0.12233	0.016756	0.040517981
CEP83	12q22	-0.12233	0.016756	0.040517981
ELOB	16p13.3	-0.12231	0.01677	0.040546123
PCDHB1	5q31.3	0.122301	0.016779	0.040565192
FAM104A	17q25.1	-0.12227	0.016809	0.040628283
TACC2	10q26.13	0.122267	0.01681	0.040628283
DSTYK	1q32.1	-0.12227	0.016812	0.040628283
TIAM2	6q25.2-q25.3	0.122176	0.016893	0.040819476
LRRC70	5q12.1	-0.12217	0.016899	0.04082866
ARMC4	10p12.1	-0.12215	0.016918	0.040871241
LONRF1	8p23.1	-0.12214	0.016923	0.040877307

MNX1	7q36.3	-0.12211	0.016949	0.040935162
NEMP1	12q13.3	-0.1221	0.016957	0.040950068
ZW10	11q23.2	-0.12209	0.016972	0.040981525
CMTM8	3p22.3	-0.12207	0.016987	0.041009478
XYLB	3p22.2	-0.12207	0.016988	0.041009478
SRP9	1q42.12	0.122026	0.017029	0.041104454
WDR73	15q25.2	-0.12201	0.017041	0.041127475
ARNT	1q21.3	0.121996	0.017056	0.041159997
CHRNA1	2q31.1	-0.12199	0.01706	0.04116304
KLK14	19q13.41	-0.12198	0.017067	0.041175289
PIK3IP1	22q12.2	-0.12197	0.017076	0.041191641
AGPS	2q31.2	0.121965	0.017085	0.041208527
ZNF275	Xq28	-0.12194	0.017103	0.04124776
RIIAD1	1q21.3	-0.12193	0.017119	0.04128107
PPIL3	2q33.1	-0.12191	0.017137	0.041319656
KLF15	3q21.3	0.1219	0.017145	0.041333254
CALML6	1p36.33	-0.12188	0.017161	0.041366656
TMEM158	3p21.31	-0.12188	0.017163	0.041366656
TM2D1	1p31.3	-0.12187	0.01717	0.041375288
PEX14	1p36.22	-0.12187	0.01717	0.041375288
SOCS1	16p13.13	0.121855	0.017185	0.041406548
CHEK2	22q12.1	-0.12185	0.01719	0.041413015
TOMM7	7p15.3	-0.12182	0.017214	0.041464829
ADAMTS5	21q21.3	-0.12181	0.017226	0.041488979
PPIL1	6p21.2	-0.1218	0.017234	0.041501591
EIF3G	19p13.2	-0.1218	0.017236	0.041501591
SCRG1	4q34.1	-0.1218	0.017239	0.041501591
C3ORF20	3p25.1	0.121797	0.017239	0.041501591
FAM153B	5q35.2	0.121788	0.017247	0.041515395
SNRPF	12q23.1	-0.12178	0.017259	0.041538132
SLC38A4	12q13.11	-0.12176	0.017273	0.041568887
CCM2	7p13	-0.12176	0.017277	0.041572413
LINC00652	20p11.23	-0.12175	0.017284	0.041584083
GALE	1p36.11	0.121735	0.017296	0.041608859
EPB41L4A-AS1	5q22.1	-0.12172	0.017306	0.041627332
WFDC1	16q24.1	-0.12172	0.017313	0.041638144
HLA-DRA	6p21.32	0.121695	0.017333	0.041682042
PAGE4	Xp11.23	-0.12167	0.017355	0.04173043
VPS39	15q15.1	-0.12164	0.017385	0.041796875
KCNF1	2p25.1	-0.12164	0.017388	0.041798473
SAXO1	9p22.1	-0.12163	0.017392	0.041804955
CHCHD3	7q32.3-q33	-0.1216	0.017418	0.041862156
CDK12	17q12	-0.1216	0.017422	0.041866628
CD99	Xp22.33 and Yp11.2	-0.1216	0.017425	0.041867569
ZPBP2	17q21.1	0.121594	0.017427	0.041867569
ZSCAN23	6p22.1	-0.12154	0.017473	0.041973899
ADCY7	16q12.1	0.121537	0.01748	0.041984987
NMRAL1	16p13.3	-0.12153	0.017489	0.042001672
RTTN	18q22.2	0.121523	0.017493	0.042006291
C1QL4	12q13.12	-0.1215	0.017511	0.042045497
SMG7	1q25.3	-0.1215	0.017514	0.042045963
KCNA1	12p13.32	-0.12143	0.017582	0.042205929
XRCC1	19q13.31	-0.1214	0.017609	0.042264439
WAS	Xp11.23	0.121371	0.017636	0.04232445
ADAMTS19	5q23.3	-0.12137	0.017639	0.042326355
CRADD	12q22	0.121354	0.017652	0.042351734
HMX2	10q26.13	-0.12135	0.017656	0.04235277
SAMD4B	19q13.2	-0.12135	0.017656	0.04235277

TSPYL5	8q22.1	-0.12134	0.017669	0.042378336
ZNF675	19p12	-0.12131	0.017695	0.042436536
PDGFRB	5q32	-0.12129	0.017717	0.042482128
COPS4	4q21.22	0.121275	0.017726	0.042500445
GDAP2	1p12	0.121271	0.01773	0.042504623
PSG4	19q13.31	-0.12126	0.017743	0.042526153
TFAP2E	1p34.3	-0.12126	0.017743	0.042526153
TRAF1	9q33.2	-0.12124	0.017757	0.042553273
DCAF12	9p13.3	0.121227	0.017772	0.042584315
UQCRBP1	Xp11.21	-0.1212	0.017797	0.042639821
KRTAP10-10	21q22.3	-0.12119	0.017805	0.042654076
GMPPA	2q35	0.121136	0.017858	0.042773849
ADGRA3	4p15.2	0.121134	0.01786	0.042773849
GRM3	7q21.11-q21.12	-0.12111	0.017879	0.042815594
STAG3L2	7q11.23	-0.1211	0.017894	0.04284703
HSBP1	16q23.3	-0.12109	0.017899	0.04285222
GIPC1	19p13.12	0.12108	0.017911	0.04287706
SCAI	9q33.3	-0.12108	0.017914	0.042877571
TMEM86B	19q13.42	0.12105	0.01794	0.042936124
FAM92A1P2	4q35.1	-0.12103	0.017961	0.042979495
BMPR1A	10q23.2	-0.12101	0.017981	0.043022352
SERGEF	11p15.1	-0.12099	0.017997	0.043055585
ANGPTL3	1p31.3	-0.12099	0.017999	0.043055585
ZNF367	9q22.32 9q22.32	0.120973	0.018014	0.043086801
ADSSL1	14q32.33	0.12097	0.018017	0.04308804
PHB	17q21.33	-0.12095	0.018032	0.043120432
DPY19L2	12q14.2	-0.12095	0.018036	0.043124784
FNBP1	9q34.11	-0.12092	0.01806	0.043176322
RMI1	9q21.32	0.120922	0.018062	0.043176837
GSTA4	6p12.2	-0.12091	0.018071	0.043186977
SOX7	8p23.1	-0.12091	0.018075	0.043186977
IL1RL2	2q12.1	0.120909	0.018075	0.043186977
CYP4F2	19p13.12	-0.12091	0.018077	0.043186977
CCL26	7q11.23	0.120906	0.018077	0.043186977
SCUBE1	22q13.2	0.120889	0.018094	0.043221981
HIST1H4D	6p22.2	-0.12088	0.018102	0.043236579
FGFBP2	4p15.32	0.120857	0.018125	0.04328403
LOC90246	3q21.3	0.120853	0.018129	0.043288991
TPGS2	18q12.2	0.120823	0.018158	0.043353231
C1QBP	17p13.2	0.120815	0.018166	0.043367406
ELOA	1p36.11	0.120791	0.018188	0.043415129
NEDD4L	18q21.31	0.120789	0.01819	0.043415129
CBX6	22q13.1	-0.12077	0.01821	0.043458136
OXCT2	1p34.2	-0.12072	0.018256	0.043561896
N4BP1	16q12.1	0.120714	0.018264	0.043574635
RPL29P2	17p13.1	-0.12068	0.018295	0.043645078
TBC1D21	15q24.1	0.120674	0.018302	0.043655163
GNAT3	7q21.11	0.120658	0.018318	0.04368836
EGFR	7p11.2	0.12065	0.018325	0.043700465
TBL1XR1	3q26.32	0.120609	0.018365	0.043787499
MAD2L2	1p36.22	-0.12061	0.018366	0.043787499
UBXN10	1p36.12	0.120594	0.01838	0.043812432
IFNL2	19q13.2	-0.12059	0.018381	0.043812432
JAG1	20p12.2	0.120578	0.018396	0.043842415
GUF1	4p12	0.120558	0.018415	0.043882761
GPHN	14q23.3-q24.1	0.120555	0.018418	0.043885572
LGALS7	19q13.2	-0.12055	0.018426	0.043898595
VCAN	5q14.2-q14.3	-0.1205	0.018471	0.04400154

SNX27	1q21.3	0.120491	0.018481	0.04401891
MGAM	7q34	0.120479	0.018492	0.044037583
ENPP5	6p21.1	-0.12048	0.018493	0.044037583
RDH11	14q24.1	0.120468	0.018503	0.04405748
ABLIM3	5q32	0.120446	0.018524	0.044102036
GTF2IRD2B	7q11.23	-0.12044	0.01853	0.044109374
ZNF799	19p13.2	-0.12043	0.01854	0.044128292
DLD	7q31.1	0.120385	0.018584	0.044229376
TOE1	1p34.1	0.120357	0.018612	0.044285987
PIH1D1	19q13.33	0.120357	0.018613	0.044285987
MEOX2	7p21.2	-0.12034	0.018627	0.04431082
TFRC	3q29	0.120342	0.018627	0.04431082
ANO10	3p22.1-p21.33	0.120332	0.018637	0.044328295
DPYD	1p21.3	0.120284	0.018684	0.04443534
KERA	12q21.33	-0.12026	0.018707	0.044484731
RSPH9	6p21.1	-0.12025	0.018714	0.044495835
POLE4	2p12	-0.12024	0.018726	0.044519348
HYPK	15q15.3	-0.12023	0.018736	0.044537401
MRPL38	17q25.1	-0.12022	0.01875	0.044564598
NLRX1	11q23.3	0.120179	0.018788	0.044650257
BRICD5	16p13.3	-0.12014	0.018827	0.044737077
MINDY2	15q21.3-q22.1	0.120133	0.018834	0.044749089
C17ORF107	17p13.2	0.120123	0.018844	0.044763949
WDR82	3p21.2	-0.12012	0.018845	0.044763949
ARID3C	9p13.3	0.120107	0.01886	0.044795516
CTAGE6	7q35	0.120099	0.018868	0.044809349
NRG4	15q24.2	0.120061	0.018906	0.044894336
POLR2J2	7q22.1	-0.12006	0.018909	0.044894475
OMP	11q13.5	0.120052	0.018915	0.044903902
PRSS22	16p13.3	-0.12005	0.01892	0.044911422
NCR3	6p21.33	0.120035	0.018932	0.044934497
FTO	16q12.2	-0.12003	0.018937	0.044941429
ZFAND4	10q11.22	-0.12002	0.018943	0.044949399
EEF2	19p13.3	0.119993	0.018974	0.045017248
ZNF217	20q13.2	-0.11997	0.018997	0.045062929
ACVR2B-AS1	3p22.2	-0.11997	0.018998	0.045062929
ING4	12p13.31	-0.11996	0.019009	0.045082089
CYP27C1	2q14.3	-0.11996	0.01901	0.045082089
CARNMT1	9q21.13	0.119953	0.019015	0.045087412
XCL2	1q24.2	0.119929	0.019038	0.045134694
SLC10A5	8q21.13	0.119928	0.019039	0.045134694
FATE1	Xq28	-0.11992	0.019047	0.045147505
MFAP3	5q33.2	0.119884	0.019084	0.045229295
EME1	17q21.33	-0.11988	0.019091	0.045240395
GTF2A1L	2p16.3	-0.11987	0.019096	0.045249044
ACKR2	3p22.1	0.119858	0.01911	0.045276735
CHIC1	Xq13.2	0.119851	0.019117	0.045287603
ALLC	2p25.3	-0.11983	0.019141	0.045337641
DHX30	3p21.31	-0.11983	0.019143	0.045337641
FERMT1	20p12.3	-0.11981	0.01916	0.045372986
LYZL6	17q12	0.119804	0.019165	0.045378972
PRRT3	3p25.3	-0.1198	0.019168	0.045380798
RPL10L	14q21.2	0.119794	0.019174	0.045390593
MIS12	17p13.2	0.119787	0.019182	0.045403083
ZNF879	5q35.3	-0.11978	0.019187	0.045409064
TNKS1BP1	11q12.1	0.119777	0.019191	0.045415045
FAM13C	10q21.1	-0.11977	0.019195	0.045418448
RCSD1	1q24.2	0.119767	0.019202	0.045429591

DAD1P1	12p12.1	-0.11976	0.019211	0.045444287
MRPL42P5	15q15.1	-0.11974	0.019228	0.045480919
DOK2	8p21.3	0.119719	0.01925	0.045527608
TRIM11	1q42.13	0.1197	0.019269	0.045567217
OLFML2B	1q23.3	-0.11961	0.019362	0.045776718
SH2D3A	19p13.3	0.119609	0.019363	0.045776718
SGK1	6q23.2	0.119604	0.019367	0.04578222
PSMD1	2q37.1	0.119542	0.019431	0.045927638
CSNK1G1	15q22.31	0.119515	0.019459	0.045988396
P2RX3	11q12.1	-0.11951	0.019468	0.046003174
UQCC2	6p21.31	-0.1195	0.019473	0.046009874
IL25	14q11.2	-0.1195	0.019476	0.046012549
SPRYD7	13q14.2	-0.11948	0.01949	0.046040755
HOXC5	12q13.13	0.119473	0.019502	0.046061812
HPS1	10q24.2	0.119413	0.019564	0.046200365
TBX21	17q21.32	0.11941	0.019567	0.046200365
DBN1	5q35.3	-0.11941	0.019567	0.046200365
CEP162	6q14.2-q14.3	-0.11941	0.019571	0.046203293
RMDN1	8q21.3	-0.1194	0.019579	0.046216693
PCMTD1	8q11.23	-0.11939	0.019584	0.046224859
ITLN2	1q23.3	0.119383	0.019594	0.046242843
SATB2-AS1	2q33.1	-0.11937	0.019603	0.046253266
B3GNT4	12q24.31	0.119374	0.019603	0.046253266
ZNF669	1q44	-0.11935	0.019632	0.046314681
ABL1	9q34.12	-0.11933	0.019648	0.046348049
BEND6	6p12.1	-0.11932	0.019664	0.04637545
FKBP15	9q32	0.119315	0.019664	0.04637545
STAB2	12q23.3	0.119309	0.01967	0.046383905
GAD1	2q31.1	0.119304	0.019676	0.046390051
ASB13	10p15.1	-0.1193	0.019678	0.046390051
DOK6	18q22.2	-0.11927	0.019714	0.046469978
C12ORF60	12p13.1-p12.3	-0.11924	0.019746	0.046539521
B3GAT3	11q12.3	-0.11922	0.019764	0.046574924
CHRM3	1q43	-0.11922	0.019765	0.046574924
ADGRG2	Xp22.13	-0.11921	0.019777	0.046598103
PHF19	9q33.2	-0.1192	0.019784	0.046608768
ATAD2B	2p24.1-p23.3	-0.11916	0.019826	0.0467025
XAB2	19p13.2	-0.11912	0.019867	0.046792689
PLXNA4	7q32.3	-0.11911	0.019877	0.046810188
VCX3A	Xp22.31	-0.1191	0.019888	0.046832051
SLX1B	16p11.2	0.119087	0.019901	0.04685717
DNAJC13	3q22.1	0.119065	0.019924	0.046905712
MSLN	16p13.3	0.119025	0.019967	0.046999422
DNAJC7	17q21.2	-0.11902	0.019971	0.04700452
MRPL35	2p11.2	0.119017	0.019975	0.047008025
TMEM145	19q13.2	-0.11901	0.019984	0.047023007
CCDC14	3q21.1	-0.11901	0.019986	0.047023007
HRC	19q13.33	-0.11896	0.020035	0.04713267
STOX1	10q22.1	-0.11896	0.020037	0.04713267
AIPL1	17p13.2	0.118951	0.020045	0.047144369
DHRS4-AS1	14q11.2	0.118943	0.020052	0.047156739
ZMYM4	1p34.3	-0.11894	0.02006	0.047168245
ZNF444	19q13.43	-0.11892	0.020075	0.047198937
KMT5C	19q13.42	-0.11891	0.020086	0.047219515
DAW1	2q36.3	-0.11887	0.02013	0.04731623
RINL	19q13.2	-0.11886	0.020142	0.047340786
FSTL3	19p13.3	-0.11884	0.020163	0.047384406
DMRT3	9p24.3	-0.11881	0.020191	0.04744352



LYZL2	10p11.23	-0.1188	0.020203	0.04746568
ADCY10	1q24.2	0.118795	0.020209	0.047474166
RBM20	10q25.2	-0.11877	0.020233	0.047525124
FAM184A	6q22.31	-0.11876	0.020243	0.047544356
LEF1	4q25	-0.11876	0.020247	0.047547538
MSH5	6p21.33	-0.11875	0.020259	0.047570391
RBM10	Xp11.3	-0.11873	0.020277	0.047606674
MFSD6L	17p13.1	0.118714	0.020295	0.047642696
NLRP11	19q13.42-q13.43	-0.1187	0.020307	0.047665119
NHLRC1	6p22.3	-0.1187	0.020309	0.047665123
GOLGA7	8p11.21	-0.11869	0.020322	0.047690713
C5ORF51	5p13.1	0.118669	0.020343	0.047732992
PBX1	1q23.3	-0.11866	0.020355	0.047756998
ARHGEF11	1q23.1	0.118654	0.020359	0.047760016
HOXB7	17q21.32	0.118651	0.020362	0.04776142
TSPYL1	6q22.1	0.118644	0.02037	0.047774131
USHBP1	19p13.11	-0.11862	0.020399	0.04783803
SFTPD	10q22.3	-0.11861	0.020409	0.047854089
ANKRD36BP2	2p11.2	0.118589	0.020428	0.047889499
TEFM	17q11.2	-0.11859	0.02043	0.047889499
UBE2A	Xq24	-0.11859	0.020431	0.047889499
HTR3E	3q27.1	0.118582	0.020435	0.047894658
C11ORF49	11p11.2	-0.11857	0.020445	0.047910665
ZNF692	1q44	-0.11856	0.020458	0.047936095
CCSER1	4q22.1	0.118559	0.02046	0.047936095
DCUN1D1	3q26.33	0.118556	0.020463	0.047937571
TCOF1	5q32-q33.1	-0.11854	0.020483	0.047978414
TAL2	9q31.2	-0.11853	0.020491	0.047990388
FBP1	9q22.32	0.118513	0.020509	0.048028812
AXL	19q13.2	-0.1185	0.020524	0.048056734
CNTNAP1	17q21.2	-0.11845	0.020578	0.048177859
LRTM1	3p14.3	0.118445	0.020582	0.048182628
LARP4B	10p15.3	0.118424	0.020605	0.048230063
OR2A1	7q35	-0.11841	0.020619	0.048256789
VPS45	1q21.2	0.118409	0.020621	0.048256789
CTSO	4q32.1	0.11837	0.020663	0.048349509
ZNF507	19q13.11	-0.11835	0.020684	0.048391194
RAB4A	1q42.13	0.118343	0.020693	0.048407859
TPI1	12p13.31	0.118327	0.02071	0.048442504
RBX1	22q13.2	-0.11832	0.020722	0.04846061
SLC25A19	17q25.1	-0.11831	0.020723	0.04846061
TREML1	6p21.1	0.118288	0.020752	0.048523508
TARS	5p13.3	-0.11828	0.020762	0.048540899
TEX43	5q23.2	-0.11827	0.020769	0.048550478
KIF21B	1q32.1	0.11826	0.020782	0.048575962
COL5A2	2q32.2	-0.11823	0.020813	0.048644047
GAGE12J	Xp11.23	-0.11821	0.020835	0.048688926
OVGP1	1p13.2	-0.11819	0.02086	0.048741824
NAAA	4q21.1	0.118169	0.020881	0.048785182
ATP8B4	15q21.2	0.118072	0.020987	0.049027172
BICD1	12p11.21	-0.11806	0.021001	0.049054483
UBAP1L	15q22.31	-0.11805	0.021017	0.049084901
DCN	12q21.33	-0.11803	0.021035	0.049121271
NOVA2	19q13.32	-0.11802	0.021041	0.049130429
CWC22	2q31.3	-0.11801	0.021057	0.049160333
LRRC15	3q29	-0.11801	0.021059	0.049160333
ADO	10q21.3	-0.118	0.021069	0.049178877
CASR	3q13.33-q21.1	0.117957	0.021114	0.04927636

SYNCRIP	6q14.3	-0.11794	0.021131	0.049311587
POLR3H	22q13.2	-0.11791	0.021169	0.049394948
MRPL58	17q25.1	-0.1179	0.021178	0.049409134
UNC5D	8p12	0.117882	0.021196	0.049445564
SLC25A33	1p36.22	-0.11788	0.021201	0.049452486
DDX19B	16q22.1	-0.11787	0.021208	0.04946336
SYPL2	1p13.3	-0.11784	0.021242	0.049535505
TP53INP1	8q22.1	0.117825	0.021259	0.049568938
PPM1G	2p23.3	-0.11782	0.021262	0.0495715
MBD5	2q23.1	-0.11781	0.021276	0.049597957
CREG2	2q11.2	0.1178	0.021287	0.049616932
ATXN7	3p14.1	0.117787	0.021301	0.049645343
METTL27	7q11.23	-0.11777	0.021319	0.049680738
ZC3H13	13q14.13	-0.11776	0.021336	0.04971504
MFAP5	12p13.31	-0.11774	0.021351	0.049738561
SAP30L	5q33.2	0.117742	0.021351	0.049738561
CCDC39	3q26.33	-0.11773	0.021359	0.04975167
ALPK3	15q25.3	-0.11771	0.021386	0.049808369
SLC5A12	11p14.2	-0.11771	0.02139	0.049812424
KCNIP2	10q24.32	-0.1177	0.021393	0.049813486
ARHGAP11B	15q13.2	0.11769	0.021409	0.049843992
LAMP1	13q34	-0.11764	0.021467	0.049968134
SPACA1	6q15	-0.11764	0.021467	0.049968134
GPD1	12q13.12	0.117625	0.021481	0.049994489
CWF19L1	10q24.31	-0.11758	0.021527	0.050095932
ZNF45	19q13.31	0.117579	0.021533	0.050103003
GPR1	2q33.3	-0.11756	0.021551	0.050139289
PWWP2A	5q33.3	0.117551	0.021565	0.050165387
SNX15	11q13.1	-0.11755	0.02157	0.050172467
RBM3	Xp11.23	-0.11751	0.021615	0.050271107
TRIM44	11p13	-0.1175	0.021623	0.050283259
TPPP2	14q11.2	-0.11748	0.021642	0.050322933
DPYSL3	5q32	-0.11746	0.021672	0.050385809
ZBTB44	11q24.3	-0.11745	0.021681	0.050399807
CYP7A1	8q12.1	0.117444	0.021684	0.050399807
RHBDF2	17q25.1	-0.11744	0.021685	0.050399807
LSP1	11p15.5	0.117426	0.021705	0.050439038
OAZ3	1q21.3	0.117423	0.021708	0.050439636
ODF3L2	19p13.3	-0.11742	0.02171	0.050439757
ACTN2	1q43	-0.11742	0.021716	0.050444382
TMEM63A	1q42.12	-0.11741	0.021717	0.050444382
TMEM129	4p16.3	0.117408	0.021725	0.050457136
GPATCH2	1q41	-0.11738	0.021753	0.050507266
ZNF397	18q12.2	0.117382	0.021754	0.050507266
C10ORF95	10q24.32	0.117382	0.021754	0.050507266
SLC46A2	9q32	-0.11737	0.021771	0.050539564
TIMM22	17p13.3	0.117365	0.021773	0.050539564
NMNAT2	1q25.3	-0.11734	0.021803	0.050597905
WFS1	4p16.1	-0.11734	0.021804	0.050597905
MRFAP1	4p16.1	0.117312	0.021833	0.050660459
NTHL1	16p13.3	-0.11727	0.021881	0.050760822
SH2B2	7q22.1	-0.11727	0.021881	0.050760822
TNKS	8p23.1	0.117223	0.021935	0.050878601
ANKRD53	2p13.3	-0.11721	0.021954	0.05091706
ZNF75D	Xq26.3	-0.11718	0.021978	0.050966819
RIMBP2	12q24.33	-0.11718	0.021986	0.050978815
TMEM108	3q22.1	-0.11717	0.021995	0.050996035
IRAK2	3p25.3	-0.11717	0.021999	0.050998598

RTN4	2p16.1	-0.11716	0.022005	0.051006919
OR2T10	1q44	-0.11716	0.02201	0.051012053
ELF4	Xq26.1	-0.11711	0.022069	0.051142642
SLC25A5-AS1	Xq24	-0.1171	0.02208	0.051162962
RTL1	14q32.2	-0.11709	0.022087	0.051173516
FAM32A	19p13.11	-0.11708	0.022096	0.051187428
MFSD3	8q24.3	-0.11708	0.022098	0.051187428
OXSR1	3p22.2	0.11706	0.02212	0.051231746
DDI2	1p36.21	0.117027	0.022158	0.051307686
TMEM217	6p21.2	-0.11703	0.022161	0.051307686
CCDC43	17q21.31	-0.11703	0.022161	0.051307686
RAF1	3p25.2	0.116984	0.022207	0.051407414
WARS2	1p12	0.116983	0.022209	0.051407414
ATE1	10q26.13	0.116974	0.022219	0.051425532
INA	10q24.33	-0.11696	0.022239	0.051465493
ZFP69	1p34.2	-0.11695	0.02225	0.051483844
CLCN5	Xp11.23	-0.11694	0.022256	0.051493684
SALL3	18q23	-0.11691	0.02229	0.051565492
COL1A2	7q21.3	-0.1169	0.022299	0.051581079
MYD88	3p22.2	0.116898	0.022307	0.051592355
C22ORF39	22q11.21	-0.11689	0.022317	0.051609954
KLHL29	2p24.1	-0.11689	0.022321	0.051614339
GAP43	3q13.31	-0.11687	0.022336	0.051641571
DUSP12	1q23.3	-0.11686	0.022346	0.051660178
SDR39U1	14q12	-0.11686	0.02235	0.051662149
OR2AE1	7q22.1	0.116857	0.022354	0.051662149
AARSD1	17q21.31	-0.11686	0.022355	0.051662149
CRIPAK	4p16.3	0.116853	0.022359	0.05166539
AKAP7	6q23.2	0.116807	0.022413	0.051783199
PCDH9	13q21.32	-0.1168	0.022424	0.051804331
CD4	12p13.31	0.116793	0.022428	0.051807561
MTMR11	1q21.2	0.116788	0.022434	0.051815422
CCR5	3p21.31	0.116774	0.022451	0.05184693
STXBP5L	3q13.33	-0.11674	0.022494	0.051940455
PIMREG	17p13.2	0.116717	0.022516	0.051986265
PLPBP	8p11.23	0.116702	0.022534	0.052022489
CENPE	4q24	0.116615	0.022636	0.052250639
OR7E156P	13q21.31	-0.11659	0.022667	0.052316509
FBXW2	9q33.2	0.116572	0.022686	0.052354821
IL12RB2	1p31.3	0.116565	0.022694	0.052367028
SLC12A3	16q13	0.116551	0.02271	0.052398279
DHTKD1	10p14	0.116544	0.022718	0.052410621
UQCRB	8q22.1	-0.11654	0.022729	0.052429621
SMYD4	17p13.3	0.11652	0.022746	0.052463192
RPH3A	12q24.13	-0.1165	0.022766	0.052503858
ZNF772	19q13.43	-0.11649	0.022786	0.052537757
ASMTL-AS1	Xp22.33 and Yp11.2	-0.11649	0.022786	0.052537757
GCFC2	2p12	-0.11646	0.022814	0.052595906
RIN1	11q13.2	0.116457	0.022821	0.05260445
CES4A	16q22.1	-0.11644	0.022838	0.052637007
RNF13	3q25.1	-0.11644	0.02284	0.052637007
PIH1D3	Xq22.3	0.116424	0.022859	0.052675033
PAMR1	11p13	-0.11639	0.022899	0.052760294
C10ORF55	10q22.2	-0.11635	0.022952	0.05287237
SLC25A16	10q21.3	0.116345	0.022953	0.05287237
TNPO3	7q32.1	-0.11633	0.022967	0.052898552
PLEKHF1	19q12	-0.11633	0.022975	0.05291242
COX5A	15q24.2	0.116319	0.022984	0.052926877

UPK1B	3q13.32	0.116302	0.023003	0.052965036
F5	1q24.2	0.116298	0.023009	0.052971662
NAP1L6	Xq13.2	-0.11629	0.023023	0.052998302
CASD1	7q21.3	0.11626	0.023054	0.053063522
FIGNL1	7p12.2	-0.11625	0.023061	0.05307272
TTPA	8q12.3	-0.11624	0.023076	0.053095828
IL17RA	22q11.1	0.116241	0.023076	0.053095828
SULF1	8q13.2-q13.3	-0.11623	0.023083	0.053106209
TUFT1	1q21.3	-0.11623	0.023087	0.053107141
RFPL1	22q12.2	-0.11623	0.023089	0.053107141
ABCC6P2	16p13.11	-0.11621	0.02311	0.053145985
NXT2	Xq23	-0.11621	0.023111	0.053145985
KIFC2	8q24.3	-0.11621	0.023118	0.053154608
PTPN12	7q11.23	-0.1162	0.023126	0.053166768
HEXIM2	17q21.31	-0.11618	0.023151	0.053219604
CFAP221	2q14.2	0.116152	0.023182	0.053283197
ARHGAP1	11p11.2	0.116144	0.023192	0.053291117
OR6X1	11q24.1	-0.11614	0.023195	0.053291117
DNAJB13	11q13.4	-0.11614	0.023195	0.053291117
CENPM	22q13.2	0.116141	0.023196	0.053291117
RXRG	1q23.3	-0.11613	0.023211	0.053318788
PKD1L2	16q23.2	-0.11613	0.023213	0.053318788
ZNF804A	2q32.1	0.116116	0.023225	0.053340897
RGS1	1q31.2	0.116113	0.023229	0.053342837
CD37	19q13.33	0.116094	0.023251	0.053379355
GLP1R	6p21.2	-0.11609	0.023252	0.053379355
GPR173	Xp11.22	-0.11609	0.023253	0.053379355
PIK3R6	17p13.1	0.116074	0.023275	0.053425043
STPG3	9q34.3	-0.11606	0.023297	0.053469688
MRPL3	3q22.1	-0.11604	0.023319	0.053514322
EIF4B	12q13.13	0.116015	0.023346	0.053569227
BLOC1S5	6p24.3	-0.116	0.023368	0.053612906
ZNF394	7q22.1	-0.11599	0.02338	0.053635839
SOCS2	12q22	0.115957	0.023416	0.053711049
HCLS1	3q13.33	0.115953	0.023421	0.053715593
NDUFB7	19p13.12	-0.11595	0.02343	0.053730242
TMEM222	1p36.11	-0.11594	0.023442	0.053751434
RPS6KB2	11q13.2	-0.11593	0.023449	0.053762523
ZNF670	1q44	-0.11592	0.023457	0.053773614
CCDC184	12q13.11	-0.1159	0.023485	0.053831702
PCDHGB5	5q31.3	-0.11589	0.023501	0.053862737
NDUFAF5	20p12.1	-0.11588	0.023504	0.053863457
STX7	6q23.2	0.11587	0.023521	0.053896015
TAS2R42	12p13.2	-0.11586	0.023535	0.053922748
SNORA71A	20q11.23	-0.11585	0.023549	0.05394806
PEF1	1p35.2	0.115843	0.023553	0.053952027
TTLL1	22q13.2	-0.11584	0.023559	0.053958978
DGCR5	22q11.21	-0.11583	0.023568	0.053968335
SLC12A2	5q23.3	0.115829	0.02357	0.053968335
DCANP1	5q31.1	0.115828	0.023571	0.053968335
DHRS4L2	14q11.2	0.115826	0.023574	0.053968893
MED25	19q13.33	-0.11582	0.023579	0.053972865
ACP4	19q13.33	-0.1158	0.0236	0.05401645
EXO5	1p34.2	-0.11577	0.023636	0.054091877
HOXA11-AS	7p15.2	-0.11577	0.023645	0.054106017
TPRG1	3q28	0.115754	0.023661	0.054134309
PTGR1	9q31.3	0.115753	0.023663	0.054134309
SENP5	3q29	-0.11574	0.023673	0.054149454

TRIM47	17q25.1	0.115743	0.023675	0.054149454
TKFC	11q12.2	-0.1157	0.023721	0.05424842
PELO	5q11.2	0.115703	0.023723	0.05424842
FAM155A	13q33.3	-0.1157	0.023733	0.054263195
DTHD1	4p14	0.115689	0.02374	0.054274233
CEACAM22P	19q13.31	0.115657	0.02378	0.05435857
COL6A4P1	3p25.1	-0.11564	0.023803	0.054405776
HLA-A	6p22.1	0.115627	0.023815	0.054427378
BAG2	6p12.1	-0.11558	0.023871	0.054548039
RPL5	1p22.1	-0.11557	0.02389	0.054586968
LINC00893	Xq28	-0.11556	0.023894	0.054589757
MSH2	2p21-p16.3	-0.11555	0.023908	0.054615473
CBL	11q23.3	-0.11555	0.023916	0.054625795
RPA2	1p35.3	-0.1155	0.023972	0.05474775
CEPT1	1p13.3	0.115495	0.023978	0.054755393
LINC01959	5q31.1	-0.11549	0.023986	0.054766682
DNAAF2	14q21.3	-0.11549	0.023989	0.054768872
DCAF8L1	Xp21.3	0.115474	0.024003	0.054794928
DCPS	11q24.2	0.11547	0.024008	0.054796047
CARHSP1	16p13.2	-0.11547	0.024009	0.054796047
ZNF552	19q13.43	0.115467	0.024012	0.054796431
PSMF1	20p13	-0.11546	0.02402	0.054804689
MAEL	1q24.1	-0.11546	0.024021	0.054804689
C1QL1	17q21.31	-0.11544	0.02404	0.054841703
IQCE	7p22.3	0.115428	0.02406	0.054879954
FAM47B	Xp21.1	-0.11537	0.024126	0.055025563
RNMT	18p11.21	0.115367	0.024136	0.055040368
HCRTR2	6p12.1	-0.11536	0.024145	0.055055871
ATG4D	19p13.2	0.115353	0.024153	0.055067256
FLOT1	6p21.33	-0.11535	0.024157	0.055070087
FBXO16	8p21.1	0.115335	0.024175	0.055099417
MOGAT3	7q22.1	-0.11533	0.024175	0.055099417
NEDD8	14q12	-0.11533	0.024184	0.055113783
SRD5A2	2p23.1	-0.11529	0.024236	0.055225185
HOXC9	12q13.13	0.115246	0.024285	0.055330441
TLCD3B	16p11.2	0.115236	0.024297	0.055348938
CD8B	2p11.2	-0.11524	0.024299	0.055348938
WEE1	11p15.4	-0.11523	0.024304	0.055354828
TBX2	17q23.2	-0.11519	0.02436	0.055475378
NFATC1	18q23	0.115175	0.024374	0.055500817
SCX	8q24.3	-0.11516	0.024389	0.055527285
RNASEK	17p13.1	0.115161	0.024391	0.055527285
EXO1	1q43	0.115146	0.02441	0.055564357
YWHAE	17p13.3	0.115136	0.024422	0.055584939
NOTCH4	6p21.32	-0.11513	0.024426	0.055587793
NPM3	10q24.32	-0.11509	0.024478	0.055699581
B3GALT2	1q31.2	0.115078	0.024494	0.055731234
DCAF8L2	Xp21.3	-0.115	0.024592	0.055947941
HPRT1	Xq26.2-q26.3	-0.115	0.024597	0.055953029
CEBPE	14q11.2	0.114984	0.024612	0.055974755
GLI3	7p14.1	-0.11498	0.024612	0.055974755
SLC38A8	16q23.3	-0.11497	0.024627	0.05600136
SYT2	1q32.1	0.114966	0.024635	0.056012453
RPL36	19p13.3	-0.11496	0.024641	0.056020899
TK1	17q25.3	0.114944	0.024663	0.056059891
MAN1A1	6q22.31	0.114943	0.024664	0.056059891
RGS17	6q25.2	-0.11493	0.024674	0.05607293
ABHD12B	14q22.1	-0.11493	0.024675	0.05607293

ADRA1A	8p21.2	0.114924	0.024688	0.056096161
ARMH1	1p34.1	0.114915	0.0247	0.056115539
DISC1	1q42.2	0.114907	0.024709	0.056130961
CENPQ	6p12.3	-0.11489	0.02473	0.05617269
SLC25A25	9q34.11	0.114867	0.024759	0.056232346
ICAM2	17q23.3	-0.11485	0.024786	0.056285259
CHAF1B	21q22.12-q22.13	0.114837	0.024797	0.056305448
ADGRB1	8q24.3	-0.11483	0.024801	0.056306904
CELSR3	3p21.31	-0.11483	0.024811	0.056322968
SORBS3	8p21.3	-0.11479	0.024851	0.056408133
BCL2L12	19q13.33	-0.11479	0.024862	0.056427121
IL33	9p24.1	0.11478	0.024869	0.056437445
MNAT1	14q23.1	-0.11473	0.024939	0.056589737
DEFB109A	8p23.1	-0.11472	0.02495	0.056601875
IL18RAP	2q12.1	0.114716	0.02495	0.056601875
RABL6	9q34.3	-0.1147	0.024965	0.056625133
UPK3BL1	7q22.1	-0.1147	0.024966	0.056625133
PYGM	11q13.1	-0.1147	0.024976	0.056640892
TMEM109	11q12.2	-0.11468	0.024991	0.056668025
MS4A12	11q12.2	0.114642	0.025045	0.056783293
ANKRD31	5q13.3	-0.11461	0.025087	0.056873759
ETF1	5q31.2	0.114602	0.025096	0.056882585
ORM1	9q32	-0.1146	0.025097	0.056882585
HEATR1	1q43	-0.1146	0.025104	0.056886178
IL20RB	3q22.3	-0.1146	0.025104	0.056886178
AMPD3	11p15.4	0.114593	0.025107	0.056886928
NUDT10	Xp11.22	-0.11454	0.025177	0.057039472
MYH11	16p13.11	-0.11453	0.025185	0.057050045
MSRB2	10p12.2	-0.1145	0.025229	0.057142389
HLA-DMB	6p21.32	0.114494	0.025235	0.057150319
OR5B21	11q12.1	0.11448	0.025253	0.057184662
TPPP	5p15.33	0.114462	0.025275	0.057228809
BAIAP3	16p13.3	0.11443	0.025317	0.057313271
OR2L1P	1q44	0.114429	0.025318	0.057313271
RGS14	5q35.3	0.114422	0.025327	0.057326632
USP50	15q21.2	-0.1144	0.025356	0.057386143
SCARA5	8p21.1	0.114365	0.025401	0.057479847
ZCCHC12	Xq24	-0.11432	0.025455	0.057596001
RPAP3	12q13.11	-0.11431	0.025476	0.057636472
FAM91A1	8q24.13	-0.11429	0.025492	0.057667788
RBFOX1	16p13.3	0.114286	0.025503	0.05768377
CD248	11q13.2	-0.11428	0.025505	0.05768377
FLJ44635	Xq13.1	-0.11427	0.025522	0.057715738
FBXL7	5p15.1	-0.11425	0.025556	0.057779939
UBA6-AS1	4q13.2	-0.11424	0.025557	0.057779939
CUTA	6p21.32	-0.11424	0.02556	0.057779939
LCP1	13q14.13	0.11424	0.025562	0.057779939
SRMS	20q13.33	0.114215	0.025595	0.057848729
DR1	1p22.1	0.114206	0.025606	0.057866742
CCL24	7q11.23	-0.11418	0.025643	0.057944029
PLOD2	3q24	-0.11416	0.025668	0.057991925
CCDC87	11q13.2	0.114155	0.025673	0.057991925
ASAH2B	10q11.23	0.114155	0.025673	0.057991925
RGS10	10q26.11	0.114134	0.0257	0.058046811
PF4	4q13.3	0.114124	0.025713	0.058069257
ZNF750	17q25.3	-0.11412	0.025721	0.058080028
PRKDC	8q11.21	-0.1141	0.025748	0.058135014
POM121C	7q11.23	-0.11409	0.025759	0.058153203

LAMC2	1q25.3	0.114086	0.025762	0.058154286
CRHR1	17q21.31	-0.11408	0.025774	0.058174315
MPDZ	9p23	-0.11404	0.025827	0.058287354
WSCD2	12q23.3	-0.11403	0.02584	0.05831027
USP32	17q23.1-q23.2	0.114003	0.025872	0.05837416
PAGR1	16p11.2	-0.114	0.025876	0.058377139
SPAG8	9p13.3	-0.11395	0.025942	0.058519724
SLC7A2	8p22	0.113941	0.025954	0.058539363
PDCL	9q33.2	0.113935	0.025961	0.058548848
ASIC4	2q35	-0.11393	0.025964	0.058548848
THAP10	15q23	-0.11393	0.02597	0.058556624
TELO2	16p13.3	-0.1139	0.026006	0.058630977
CARD11	7p22.2	-0.1139	0.026009	0.058630977
BDNF	11p14.1	-0.1139	0.026012	0.058631393
ZNF30	19q13.11	-0.11388	0.02603	0.058666379
TMEM128	4p16.3	-0.11388	0.026036	0.05867321
PRRX2	9q34.11	-0.11384	0.026088	0.058782484
OR1D4	17p13.3	0.113814	0.02612	0.058849121
BEND2	Xp22.13	0.113805	0.026133	0.058871093
DDX46	5q31.1	0.113795	0.026145	0.058892159
GGT5	22q11.23	-0.11378	0.026164	0.058921067
DKK3	11p15.3	-0.11378	0.026166	0.058921067
JAG2	14q32.33	-0.11378	0.026167	0.058921067
PRPF39	14q21.2	-0.11376	0.026192	0.058970954
TMEM89	3p21.31	-0.11375	0.026205	0.058992975
ECSCR	5q31.2	-0.11374	0.026213	0.059005547
ZSCAN16	6p22.1	-0.11374	0.026221	0.059017253
CEP290	12q21.32	-0.11373	0.026237	0.059043666
TSLP	5q22.1	0.113724	0.026239	0.059043666
POR	7q11.23	-0.11372	0.026248	0.059056508
PFKM	12q13.11	-0.11369	0.02628	0.05912194
FBXW11	5q35.1	0.113673	0.026308	0.059170275
ELP5	17p13.1	0.113672	0.026309	0.059170275
INHBA	7p14.1	-0.11367	0.02631	0.059170275
RAB31	18p11.22	-0.11362	0.026377	0.059308493
COL4A6	Xq22.3	0.11362	0.026377	0.059308493
TBCCD1	3q27.3	0.113598	0.026407	0.059368361
GPR183	13q32.3	0.11358	0.026432	0.059417272
ALDH1B1	9p13.1	-0.11351	0.026529	0.05961735
SUB1	5p13.3	-0.11351	0.026529	0.05961735
GFPT2	5q35.3	-0.11351	0.02653	0.05961735
MMP7	11q22.2	-0.1135	0.026535	0.059623627
FAM13A	4q22.1	0.113498	0.026541	0.059626458
ABHD6	3p14.3	0.113497	0.026543	0.059626458
MCAM	11q23.3	-0.11349	0.026553	0.059642465
TPST1	7q11.21	-0.11348	0.02657	0.059673378
ZNF490	19p13.2-p13.13	-0.11347	0.026579	0.059687125
ALYREF	17q25.3	-0.11347	0.026584	0.059690734
BANF2	20p12.1	-0.11346	0.026586	0.059690734
CIAPIN1	16q21	-0.11346	0.026592	0.05969625
ZBTB11-AS1	3q12.3	-0.11345	0.026606	0.059721705
SKA3	13q12.11	-0.11343	0.026631	0.05977021
C20ORF85	20q13.32	-0.11342	0.026646	0.059795778
ABCC6P1	16p12.3	-0.11342	0.026648	0.059795778
MAP4	3p21.31	-0.1134	0.026675	0.059848903
SYT11	1q22	-0.11338	0.026693	0.059879073
RIN3	14q32.12	0.113384	0.026694	0.059879073
GNG12	1p31.3	0.113381	0.026698	0.059882126

OR1C1	1q44	0.113367	0.026718	0.059919301
SPC24	19p13.2	0.113341	0.026752	0.059990118
PLPPR4	1p21.3-p21.2	-0.11333	0.02677	0.060023501
GPR156	3q13.33	-0.11332	0.026774	0.060025468
RNF39	6p22.1	0.113321	0.026779	0.060028769
PDE10A	6q27	0.113319	0.026782	0.060028769
APOL3	22q12.3	0.113305	0.026801	0.060066193
FAR1	11p15.3	0.113302	0.026804	0.060066193
ARSA	22q13.33	0.113295	0.026814	0.060076886
KREMEN1	22q12.1	-0.11329	0.026815	0.060076886
S100A13	1q21.3	0.113289	0.026823	0.06008778
EIF3C	16p11.2	-0.11326	0.026867	0.060177743
CHRNA3	8p11.21	-0.11325	0.026869	0.060177743
ANXA1	9q21.13	0.11325	0.026876	0.060186427
ARGLU1	13q33.3	-0.11322	0.026912	0.060260748
CDO1	5q22.3	-0.11319	0.026952	0.060343567
PLA2G2D	1p36.12	0.113185	0.026964	0.060356358
ADORA2B	17p12	0.113185	0.026964	0.060356358
PEX2	8q21.13	-0.11318	0.02697	0.06036271
AFDN	6q27	-0.11317	0.026987	0.060393956
MIXL1	1q42.12	0.113162	0.026995	0.060404414
TLR9	3p21.2	-0.11314	0.02703	0.060476474
LRRN3	7q31.1	-0.11311	0.027064	0.06054744
TGDS	13q32.1	-0.11311	0.02707	0.060553213
HCP5	6p21.33	0.113097	0.027084	0.060572374
ANKFN1	17q22	0.113096	0.027085	0.060572374
ABCC6	16p13.11	-0.11309	0.027097	0.060593347
EYA2	20q13.12	-0.11308	0.027107	0.060609559
S100A7A	1q21.3	-0.11305	0.027147	0.060690516
FURIN	15q26.1	0.113026	0.02718	0.060759167
SLAMF1	1q23.3	0.113023	0.027184	0.060760946
SCARNA2	1p13.3	-0.11302	0.027189	0.060764608
DYNC2H1	11q22.3	-0.11301	0.027201	0.060785581
YWHAEP7	17q12	0.113008	0.027206	0.060788528
FASTKD3	5p15.31	-0.113	0.02721	0.060792438
CEP19	3q29	-0.11298	0.027248	0.060870678
ERVFRD-1	6p24.2	0.112973	0.027253	0.060873394
CRABP1	15q25.1	-0.11297	0.027257	0.060873394
LRPAP1	4p16.3	0.112969	0.027259	0.060873394
SLC13A1	7q31.32	0.112956	0.027276	0.060904613
CDH7	18q22.1	0.112945	0.027291	0.060932575
PIWIL2	8p21.3	-0.11293	0.027307	0.060954442
RAD9A	11q13.2	-0.11293	0.027307	0.060954442
BTK	Xq22.1	0.112908	0.027342	0.061024924
WT1-AS	11p13	-0.11286	0.027404	0.061157042
ZNF479	7p11.2	-0.11282	0.027459	0.061271917
CENPBD1P1	19q13.43	0.112821	0.027462	0.061271917
RPPH1	14q11.2	-0.1128	0.027498	0.061346008
LRRC4C	11p12	-0.11277	0.027528	0.061405179
C9ORF163	9q34.3	-0.11277	0.027533	0.061410011
PNPLA5	22q13.31	-0.11276	0.02754	0.061419127
POLK	5q13.3	0.112756	0.027552	0.06143956
INTS6	13q14.3	-0.11275	0.027558	0.061446011
ZXDA	Xp11.21	-0.11274	0.027575	0.061476378
PGC	6p21.1	-0.11273	0.027591	0.061506275
LRRC37A	17q21.31	-0.1127	0.027625	0.061575148
PRADC1	2p13.2	0.112691	0.027642	0.061604922
HOXA5	7p15.2	-0.11266	0.027679	0.061681367



PRR23A	3q23	0.112659	0.027686	0.061690073
KDM4E	11q21	-0.11265	0.027705	0.061724117
FBLN5	14q32.12	-0.11264	0.027708	0.061724135
UBE2L6	11q12.1	0.112641	0.027711	0.061725943
HELZ2	20q13.33	-0.11263	0.027722	0.06174243
GPR101	Xq26.3	-0.11262	0.027735	0.061763584
NCAN	19p13.11	0.112605	0.027762	0.061818291
KCNH5	14q23.2	-0.11257	0.027813	0.061924101
FLJ42627	16p13.3	0.112555	0.027832	0.061958847
CYBB	Xp21.1-p11.4	0.112552	0.027836	0.061961329
TTY6	Yq11.223	0.112549	0.02784	0.061964069
TAS2R1	5p15.31	-0.11254	0.027848	0.061974301
PNPLA6	19p13.2	-0.11252	0.027877	0.062031725
XPR1	1q25.3	0.112481	0.027935	0.062154897
PYGO1	15q21.3	-0.11246	0.027962	0.062206744
OSBP2	22q12.2	-0.11246	0.027971	0.062221957
ITGB3BP	1p31.3	-0.11244	0.027992	0.062261082
CANX	5q35.3	0.112397	0.028054	0.062390695
SERPINF1	17p13.3	-0.11239	0.028069	0.06241743
CRNN	1q21.3	-0.11237	0.028086	0.062443824
NEXMIF	Xq13.3	-0.11237	0.028087	0.062443824
SLC11A2	12q13.12	-0.11236	0.028104	0.062467843
GRN	17q21.31	0.112361	0.028104	0.062467843
SNRPA1	15q26.3	-0.11236	0.028111	0.062477757
SIRT6	19p13.3	0.112331	0.028146	0.062547008
IGLL1	22q11.23	-0.11233	0.028154	0.062559287
HAGHL	16p13.3	0.112316	0.028168	0.062581704
FHDC1	4q31.3	-0.1123	0.028194	0.062632815
TMEM63C	14q24.3	-0.11228	0.028222	0.062688017
EN2	7q36.3	-0.11223	0.028285	0.062821096
MUC15	11p14.2	-0.11221	0.028312	0.062875698
TBC1D13	9q34.11	-0.11219	0.028347	0.062944682
DLGAP2	8p23.3	-0.11216	0.02839	0.063034191
TAAR8	6q23.2	0.112139	0.028418	0.06309019
CR1	1q32.2	0.112103	0.028469	0.063194669
CREG1	1q24.2	-0.1121	0.028479	0.063211558
WFIKKN1	16p13.3	0.112057	0.028535	0.063327146
AGO2	8q24.3	-0.11205	0.028544	0.06334126
PABPC5	Xq21.31	-0.11202	0.028582	0.063418814
FAM151A	-	0.112012	0.028599	0.063449131
CHEK1	11q24.2	-0.11193	0.028714	0.063694431
TBC1D20	20p13	-0.11193	0.028716	0.063694431
PARK7	1p36.23	-0.11192	0.028731	0.063713939
FGF23	12p13.32	-0.11192	0.028731	0.063713939
TWF2	3p21.2	-0.1119	0.028755	0.063760288
VAMP5	2p11.2	-0.1119	0.02876	0.063764198
NSMCE4A	10q26.13	-0.1119	0.028764	0.063764661
TXLNG	Xp22.2	-0.11189	0.028776	0.06378416
AGPAT5	8p23.1	0.111886	0.028779	0.06378416
KNG1	3q27.3	-0.11187	0.028801	0.063821755
OPRPN	4q13.3	0.111869	0.028804	0.063821755
NCR2	6p21.1	0.111866	0.028808	0.063821755
EGOT	3p26.1	-0.11187	0.028809	0.063821755
MEGF8	19q13.2	-0.11185	0.02883	0.063856652
DERL2	17p13.2	0.111849	0.028832	0.063856652
MST1	3p21.31	-0.11185	0.028836	0.063856652
ZNF117	7q11.21	-0.11185	0.028837	0.063856652
NNMT	11q23.2	-0.11184	0.028848	0.063874301

RAD1	5p13.2	-0.11183	0.028859	0.063891954
LAMA4	6q21	-0.11181	0.028885	0.063934829
PSKH1	16q22.1	-0.11181	0.028885	0.063934829
RHCE	1p36.11	0.111799	0.028905	0.063971345
FAM193A	4p16.3	0.111765	0.028954	0.06407402
MKLN1	7q32.3	-0.11175	0.02897	0.064101357
SYNPO2L	10q22.2	-0.1117	0.029042	0.064252953
ZSCAN4	19q13.43	0.111699	0.02905	0.064263571
SP2	17q21.32	0.111683	0.029072	0.064305516
GPC4	Xq26.2	-0.11166	0.029101	0.064361055
LIAS	4p14	0.111662	0.029103	0.064361055
RAG1	11p12	-0.11164	0.029139	0.064432735
CCDC88B	11q13.1	-0.11163	0.029149	0.064447749
TMEM143	19q13.33	0.111615	0.029171	0.064485399
ZNF248	10p11.21	-0.11161	0.029173	0.064485399
DPY19L2P4	7q21.13	-0.11161	0.029177	0.064488042
FBLN2	3p25.1	-0.1116	0.029187	0.064502995
SIX1	14q23.1	-0.11159	0.029202	0.064529003
WNK2	9q22.31	-0.11159	0.029212	0.064544827
EVA1C	21q22.11	0.111571	0.029235	0.064588265
POM121	7q11.23	-0.11156	0.029254	0.064622024
GATA2	3q21.3	0.111553	0.029261	0.064630818
DMRTC1	Xq13.1	-0.11151	0.029328	0.064772483
MPND	19p13.3	0.111496	0.029345	0.06480185
NOL9	1p36.31	0.111484	0.029363	0.064834292
DDX53	Xp22.11	-0.11147	0.029379	0.064862968
PPID	4q32.1	-0.11147	0.029387	0.064873175
TTC8	14q31.3	-0.11145	0.02941	0.064917164
GNAI2	3p21.31	-0.11144	0.029422	0.06493645
CNIH4	1q42.11	-0.11143	0.029441	0.064971056
FYCO1	3p21.31	0.111423	0.029452	0.06498757
TALDO1	11p15.5	-0.11139	0.029505	0.065098871
HSPB1	7q11.23	-0.11138	0.029512	0.065105647
LINC00598	13q14.11	0.111375	0.029522	0.065120401
ZBTB43	9q33.3	0.111371	0.029527	0.065120401
IGFBP5	2q35	-0.11137	0.029528	0.065120401
TOX3	16q12.1	-0.11136	0.029545	0.065150903
GIN1	5q21.1	0.111353	0.029554	0.065163268
DNAJC8	1p35.3	-0.11134	0.029569	0.065189598
ORC1	1p32.3	0.111315	0.029611	0.065273921
PRR16	5q23.1	-0.11131	0.02962	0.065287705
FRG2C	3p12.3	-0.1113	0.029626	0.065293346
CCDC150	2q33.1	-0.11126	0.029692	0.065431441
NAXD	13q34	-0.11126	0.029699	0.065438948
COL28A1	7p21.3	0.111246	0.029713	0.065462567
SPATS2L	2q33.1	-0.11124	0.029719	0.065469377
FLJ30679	16q24.1	-0.11123	0.029735	0.065497636
ARHGAP6	Xp22.2	-0.11123	0.029741	0.065500165
PRSS42P	3p21.31	-0.11122	0.029745	0.065500165
SP7	12q13.13	-0.11122	0.029747	0.065500165
WFDC6	20q13.12	0.111221	0.029749	0.065500165
CLUAP1	16p13.3	-0.11122	0.029756	0.065508158
DICER1	14q32.13	0.111209	0.029766	0.065523388
FAM126A	7p15.3	-0.1112	0.029778	0.065542126
CHRNE	17p13.2	-0.11119	0.029792	0.065565779
NR1H2	19q13.33	0.111183	0.029805	0.065585931
PCA3	9q21.2	0.111176	0.029815	0.065594672
ATP5F1D	19p13.3	0.111176	0.029815	0.065594672

CCN5	20q13.12	-0.11115	0.029855	0.065676017
ADAMTS9	3p14.1	0.11113	0.029883	0.065729823
ITGA6	2q31.1	0.11111	0.029913	0.065788694
CEACAM5	19q13.2	0.111094	0.029938	0.065834939
TBXT	6q27	-0.11108	0.029956	0.065867545
SPNS1	16p11.2	-0.11106	0.02999	0.065936671
CHTF8	16q22.1	0.111048	0.030006	0.065963071
SELE	1q24.2	-0.11105	0.030009	0.065963071
CDHR5	11p15.5	0.111029	0.030034	0.066010123
FAT3	11q14.3	-0.11102	0.030044	0.066025904
BFSP2	3q22.1	0.111019	0.030049	0.066028473
XPA	9q22.33	-0.11102	0.030053	0.066030695
KIF20A	5q31.2	0.111005	0.03007	0.066060162
USP27X-AS1	Xp11.23	-0.111	0.030082	0.066079363
DIAPH2	Xq21.33	-0.11099	0.030099	0.066109907
SNORA3B	11p15.4	-0.11093	0.030175	0.066259325
UPP1	7p12.3	0.110934	0.030175	0.066259325
PSG9	19q13.31	-0.11093	0.030177	0.066259325
COL4A2	13q34	-0.11091	0.030208	0.066320578
JUP	17q21.2	-0.1109	0.030219	0.066338092
TBX5	12q24.21	-0.1109	0.03023	0.066354964
CCDC57	17q25.3	-0.1109	0.030234	0.066356129
ZNF559	19p13.2	-0.11088	0.03025	0.066382863
ZNF418	19q13.43	-0.11088	0.030264	0.066406928
ATP5PF	21q21.3	0.110867	0.030276	0.06642714
MAP1S	19p13.11	0.11086	0.030286	0.066441133
LCMT2	15q15.3	-0.11085	0.030299	0.066462221
ELOVL4	6q14.1	-0.11084	0.030324	0.066510279
CUBN	10p13	-0.11083	0.030335	0.066527442
NFYC-AS1	1p34.2	-0.11082	0.030346	0.066536692
MEDAG	13q12.3	-0.11082	0.030346	0.066536692
TEKT4P2	21p11.2	-0.11081	0.030367	0.066571114
APH1A	1q21.2	0.110806	0.030369	0.066571114
YWHAH	22q12.3	0.110796	0.030383	0.066594369
C1ORF74	1q32.2	-0.11079	0.030395	0.066614078
UGT3A2	5p13.2	0.110745	0.03046	0.066749152
KIF1BP	10q22.1	0.110729	0.030484	0.066794396
INSL3	19p13.11	0.11072	0.030497	0.066816213
HBB	11p15.4	0.110713	0.030508	0.066832827
RAI14	5p13.2	-0.11065	0.0306	0.067026345
LURAP1	1p34.1	-0.11064	0.030619	0.067060809
RAB43	3q21.3	0.110621	0.030647	0.067116016
CEP57L1	6q21	0.110617	0.030654	0.067123654
NDUFA13	19p13.11	-0.11061	0.030666	0.067141386
BRINP2	1q25.2	-0.11059	0.030688	0.067175351
MINDY3	10p13	0.110594	0.030688	0.067175351
CA10	17q21.33-q22	0.11059	0.030695	0.067183942
PTPN3	9q31.3	0.110568	0.030728	0.067243121
VEPH1	3q25.31-q25.32	0.110567	0.030729	0.067243121
HOMEZ	14q11.2	0.110527	0.030791	0.067371619
DCTN4	5q33.1	0.11052	0.030801	0.067385779
DLG5	10q22.3	0.11051	0.030817	0.067413576
LRP2BP	4q35.1	-0.11049	0.030842	0.067461087
RBP7	1p36.22	-0.11049	0.030851	0.067473467
ZNF780A	19q13.2	-0.11048	0.030863	0.067491995
GALNTL5	7q36.1	-0.11046	0.030891	0.067546353
MRO	18q21.2	0.110449	0.030909	0.067577892
HTATIP2	11p15.1	-0.11044	0.030917	0.067589188

SLIRP	14q24.3	-0.11044	0.030925	0.067599071
CLCN2	3q27.1	-0.11043	0.030931	0.06760464
TIGD2	4q22.1	0.110427	0.030943	0.067621721
EPB41L3	18p11.31	0.110406	0.030974	0.067684152
FAM50B	6p25.2	-0.11039	0.031002	0.067736544
ARHGAP18	6q22.33	-0.11038	0.031016	0.067760138
MEIG1	10p13	-0.11038	0.03102	0.067762148
ANAPC2	9q34.3	0.110361	0.031043	0.067805183
RNF167	17p13.2	0.110358	0.031048	0.067807883
PIGO	9p13.3	0.110355	0.031053	0.067811305
IBSP	4q22.1	-0.11035	0.031063	0.067825805
KANK2	19p13.2	-0.11033	0.031092	0.067881636
SAMD4A	14q22.2	-0.11032	0.031108	0.067909604
MARF1	16p13.11	0.110316	0.031113	0.06791231
RHBDD3	22q12.2	-0.11031	0.031129	0.067940289
RAB29	1q32.1	-0.11029	0.031158	0.067995736
HLA-DOB	6p21.32	0.110242	0.031227	0.068140222
BIN2	12q13.13	0.110221	0.031259	0.068200877
SIGLEC11	19q13.33	0.11018	0.031323	0.068332869
IPMK	10q21.1	0.110177	0.031327	0.068335382
TUBB8	10p15.3	0.110171	0.031337	0.06834931
TRABD2A	2p11.2	-0.11017	0.031342	0.068353883
TMSB4XP8	4q22.1	-0.11015	0.031371	0.068401726
LINC02610	2q37.3	-0.11015	0.031371	0.068401726
HERC2P2	15q11.2	-0.11013	0.031406	0.068469551
IL32	16p13.3	-0.11012	0.031422	0.06849772
PDZRN3	3p13	-0.1101	0.031439	0.068528081
SCAMP4	19p13.3	-0.11009	0.031468	0.068583926
TMIGD2	19p13.3	0.110039	0.031542	0.068736042
WNT2	7q31.2	-0.11004	0.031547	0.068740204
CCR7	17q21.2	0.110032	0.031552	0.068740907
TLR1	4p14	0.110031	0.031554	0.068740907
FLT4	5q35.3	-0.11002	0.031566	0.068758611
SLC26A11	17q25.3	-0.10999	0.03162	0.068870105
MBD3	19p13.3	-0.10998	0.031635	0.068894027
ABCC12	16q12.1	-0.10994	0.031688	0.069002281
TRPV4	12q24.11	-0.10992	0.031723	0.069069006
CHERP	19p13.11	-0.10992	0.031725	0.069069006
CCDC66	3p14.3	-0.1099	0.031751	0.06911789
FAM78B	1q24.1	0.1099	0.031758	0.069124844
ATXN1	6p22.3	-0.1099	0.031761	0.069124844
LINC00029	20q13.33	-0.10989	0.031772	0.06914017
ZNF525	19q13.42	-0.10989	0.03178	0.069150121
RIMS2	8q22.3	-0.10987	0.031806	0.069198125
TM9SF1	14q12	0.109858	0.031824	0.069230405
METTL24	6q21	-0.10985	0.031836	0.069249273
PSMG3-AS1	7p22.3	-0.10984	0.031855	0.069282869
CNGB1	16q21	-0.10982	0.031876	0.069320509
LYSMD4	15q26.3	0.109802	0.031912	0.069391204
AUH	9q22.31	0.109796	0.031921	0.069403515
FKBP14	7p14.3	-0.10979	0.031927	0.069409212
SNORD97	11p15.4	-0.10979	0.031931	0.069410955
CYP7B1	8q12.3	-0.10978	0.031943	0.069430146
TTC33	5p13.1	0.109778	0.031949	0.069435131
NCOA7	6q22.31-q22.32	0.109717	0.032046	0.069637407
KLF16	19p13.3	0.109714	0.032049	0.069637939
NDST4	4q26	-0.10969	0.032082	0.069699532
TOM1L1	17q22	0.109692	0.032085	0.069699532

SOX30	5q33.3	0.109675	0.032111	0.069749503
PLSCR1	3q24	0.109651	0.03215	0.069825396
SDHC	1q23.3	0.109638	0.03217	0.069862158
PORCN	Xp11.23	-0.1096	0.032228	0.06998105
SMAD7	18q21.1	-0.10958	0.032254	0.070028987
TMEM41B	11p15.4	0.109565	0.032285	0.070088808
UCK1	9q34.13	-0.10956	0.032292	0.070096774
TTLL3	3p25.3	-0.10955	0.032303	0.070112153
CCN2	6q23.2	-0.10954	0.032329	0.070158496
BRD9	5p15.33	-0.10954	0.032331	0.070158496
SPTSSA	14q13.1	0.109524	0.03235	0.070192434
DCLRE1B	1p13.2	0.109512	0.032369	0.070226387
STK35	20p13	-0.1095	0.032386	0.070255155
KLF11	2p25.1	0.109393	0.032559	0.070623329
MEIS2	15q14	0.109363	0.032607	0.070719403
NF2	22q12.2	0.109348	0.032631	0.070762529
AMHR2	12q13.13	0.10934	0.032644	0.070783264
TMEM116	12q24.12-q24.13	-0.10933	0.032668	0.070827911
WDHD1	14q22.2-q22.3	0.109305	0.0327	0.070890542
KRTAP5-10	11q13.4	-0.10928	0.032732	0.070951864
NUDT16P1	3q22.1	0.109278	0.032743	0.070968751
CXCL3	4q13.3	0.109274	0.03275	0.070975299
EIF4G1	3q27.1	0.109259	0.032774	0.071020802
ZEB1	10p11.22	-0.10922	0.032833	0.071139081
KCTD19	16q22.1	-0.10917	0.032916	0.071312348
CLPSL1	6p21.31	-0.10914	0.032966	0.071413235
VMO1	17p13.2	0.109135	0.032973	0.071421096
PPP2R2C	4p16.1	-0.10912	0.033002	0.071474368
INKA1	3p21.31	-0.10911	0.033008	0.071480931
MRPS10	6p21.1	-0.10911	0.033013	0.071483017
XRN1	3q23	0.109097	0.033035	0.071522759
TAP2	6p21.32	0.109082	0.033059	0.071568552
LNPK	2q31.1	0.109044	0.033121	0.071694386
SAR1A	10q22.1	0.10904	0.033127	0.071698721
BICC1	10q21.1	-0.10898	0.033231	0.071916315
SNX2	5q23.2	0.108971	0.03324	0.071920522
CPB1	3q24	0.10897	0.03324	0.071920522
MYLK3	16q11.2	-0.10897	0.033246	0.071924791
NPTX1	17q25.3	-0.10896	0.033261	0.071949767
TF	3q22.1	-0.10893	0.033299	0.072023797
PICSA	21q22.3	-0.10893	0.033302	0.072023797
RTL6	22q13.31	0.108926	0.033312	0.072038434
AFAP1-AS1	4p16.1	0.108882	0.033383	0.072183833
MGAT5B	17q25.2	-0.10887	0.033401	0.07221355
PCDH7	4p15.1	-0.10887	0.03341	0.072226841
SNTN	3p14.2	-0.10886	0.033418	0.072235433
PPP1CC	12q24.11	0.108834	0.033462	0.072323001
SPATA31D1	9q21.32	-0.10882	0.033479	0.072349994
NEIL1	15q24.2	-0.10882	0.033482	0.072349994
TRIM48	11q11	-0.10882	0.033487	0.072353915
GPR45	2q12.1	-0.10881	0.033503	0.072379312
OSTC	4q25	0.108753	0.033595	0.072571108
ZC3H14	14q31.3	0.108739	0.033619	0.072614403
NEURL4	17p13.1	0.108733	0.033628	0.07262718
TUBGCP5	15q11.2	0.108712	0.033662	0.072693416
LHX3	9q34.3	-0.1087	0.033675	0.072707534
MORC2-AS1	22q12.2	-0.1087	0.033676	0.072707534
ABRACL	6q24.1	-0.1087	0.033684	0.072715741

KPTN	19q13.32	-0.10869	0.033701	0.072745327
TRNT1	3p26.2	-0.10868	0.033714	0.072762844
CRHBP	5q13.3	0.108679	0.033716	0.072762844
ZNF716	7p11.2	-0.10867	0.03373	0.072784782
PPOX	1q23.3	-0.10866	0.033754	0.072828676
SENP8	15q23	0.108637	0.033785	0.072888173
ZNF383	19q13.12	-0.10863	0.033803	0.0729182
AKAP8	19p13.12	-0.10862	0.033813	0.072932193
DCAF15	19p13.12	-0.10862	0.033821	0.072941956
ATF3	1q32.3	0.1086	0.033848	0.072990798
HTR3C	3q27.1	0.108562	0.03391	0.073116651
KRTAP10-6	21q22.3	-0.10855	0.033927	0.073146215
C6ORF163	6q15	-0.10854	0.033943	0.073171985
CAPN13	2p23.1	-0.10853	0.033955	0.073191214
PSMG4	6p25.2	-0.10852	0.033973	0.073222349
SCARNA1	1p35.3	-0.10852	0.033981	0.073231304
LINC00051	8q24.3	-0.10851	0.033992	0.073244875
SLC9B1	4q24	-0.10851	0.034001	0.073244875
PAX3	2q36.1	-0.10851	0.034001	0.073244875
C12ORF56	12q14.2	-0.10851	0.034002	0.073244875
PES1	22q12.2	-0.1085	0.034011	0.073255769
FAM183A	1p34.2	-0.1085	0.034018	0.073264666
OSTM1	6q21	-0.10849	0.034037	0.073296902
CARD9	9q34.3	-0.10848	0.034046	0.073307478
LOC93429	19q13.32	-0.10848	0.034052	0.073309404
C2CD2	21q22.3	0.108475	0.034054	0.073309404
ATF6B	6p21.32	-0.10847	0.034059	0.073311523
SUMO2	17q25.1	-0.10844	0.034109	0.07341137
PPP1R13L	19q13.32	0.108439	0.034113	0.073413491
POTEC	18p11.21	0.108434	0.034122	0.073424918
PGBD3	10q11.23	0.108412	0.034159	0.073491306
SPCS2P4	1p35.3	-0.10841	0.034163	0.073491306
CHD1L	1q21.1	0.108409	0.034164	0.073491306
ARPC5L	9q33.3	-0.10839	0.034187	0.073531376
ALX3	1p13.3	-0.10839	0.03419	0.073531376
IQCF5	3p21.2	0.108381	0.03421	0.073565589
TMEM18	2p25.3	-0.10836	0.034242	0.073626285
MEF2C	5q14.3	-0.10835	0.034263	0.073665466
ZNF396	18q12.2	0.108326	0.034302	0.07374057
FDXACB1	11q23.1	-0.10831	0.034323	0.073777095
GJA1	6q22.31	-0.10831	0.034329	0.073783113
CST2	20p11.21	-0.10829	0.034367	0.073857394
HLX	1q41	-0.10828	0.034376	0.073864282
	11-Mar 5p15.1	-0.10828	0.034378	0.073864282
ZFYVE1	14q24.2	0.108274	0.034389	0.073880604
CYBC1	17q25.3	-0.10822	0.034487	0.07407876
CRYGA	2q33.3	-0.10821	0.034489	0.07407876
TBC1D9	4q31.21	-0.10821	0.034502	0.074099337
ADAMTS10	19p13.2	-0.10816	0.034586	0.074271922
C15ORF40	15q25.2	-0.10815	0.034602	0.074297799
L3MBTL3	6q23.1	-0.10814	0.034614	0.074315495
VMP1	17q23.1	-0.10813	0.034633	0.074348754
LIMS3-LOC440895	2q13	-0.10811	0.034671	0.074420924
PGA5	11q12.2	0.108104	0.034674	0.074420924
RHBG	1q22	-0.1081	0.034684	0.074433805
AMOTL1	11q21	-0.10809	0.034698	0.074455017
GCG	2q24.2	0.108073	0.034727	0.074509912
OPN1LW	Xq28	-0.10805	0.034761	0.074569761

USP49	6p21.1	-0.10805	0.034762	0.074569761
RAB28	4p15.33	0.108027	0.034804	0.074648642
SLC7A7	14q11.2	0.108026	0.034806	0.074648642
CHPT1	12q23.2	-0.10801	0.034837	0.074705453
RMDN3	15q15.1	0.107994	0.034861	0.074749015
VENTXP1	Xp21.3	-0.10798	0.034892	0.074807921
SCLY	2q37.3	-0.10797	0.034906	0.074829161
ST8SIA1	12p12.1	-0.10796	0.034918	0.074848528
CSPG5	3p21.31	0.107938	0.034954	0.074917556
TRAPPC2	Xp22.2	-0.10792	0.03499	0.074986722
ARMC8	3q22.3	0.107891	0.035035	0.075074326
PABPC4L	4q28.3	-0.10788	0.035048	0.075093639
FARSB	2q36.1	-0.10783	0.035132	0.075265506
DDX47	12p13.1	-0.10783	0.035136	0.0752661
ARMT1	6q25.1	0.10782	0.035156	0.075296364
LOC100129935	19q13.2	-0.10782	0.035157	0.075296364
FAM120B	6q27	0.107799	0.035192	0.075363011
GREB1	2p25.1	-0.10779	0.035206	0.07538365
NOL3	16q22.1	-0.10778	0.035222	0.075411441
ETNK1	12p12.1	0.107756	0.035265	0.075495515
AMBP	9q32	-0.10773	0.035307	0.075572318
NANOG	12p13.31	-0.10773	0.035309	0.075572318
CDC25A	3p21.31	-0.10773	0.035318	0.075583226
ARMCX2	Xq22.1	-0.10769	0.035386	0.07572115
DNLZ	9q34.3	-0.10768	0.0354	0.075742285
TMA7	3p21.31	-0.10766	0.035425	0.075789506
SNORD22	11q12.3	-0.10766	0.035431	0.07579295
SNORD94	2p11.2	-0.10766	0.035437	0.075798241
LRRTM4	2p12	-0.10765	0.035443	0.075802443
PSMB10	16q22.1	0.107636	0.03547	0.075847059
IL11RA	9p13.3	-0.10764	0.035471	0.075847059
CTBP2	10q26.13	0.107627	0.035486	0.075870598
SEC31A	4q21.22	0.107602	0.035529	0.075953507
LOC100132215	2p15	-0.10758	0.035573	0.076039223
INSIG1	7q36.3	0.10757	0.035584	0.076056116
GOPC	6q22.1	-0.10756	0.035593	0.076066231
NWD2	4p14	0.10756	0.035601	0.076076387
GLIPR1	12q21.2	-0.10755	0.035624	0.076117394
OR5111	11p15.4	0.107524	0.035664	0.076192984
LAG3	12p13.31	0.107499	0.035707	0.076277374
DGCR11	22q11.21	0.10749	0.035722	0.076302612
IGSF9	1q23.2	0.107478	0.035743	0.076338193
ZNF33A	10p11.1	0.107474	0.03575	0.076344364
NOC3L	10q23.33	-0.10747	0.035757	0.076347418
PCDHGB1	5q31.3	-0.10747	0.035759	0.076347418
BLMH	17q11.2	-0.10747	0.035764	0.076350159
TRPC3	4q27	-0.10746	0.03578	0.07637046
ZFH3	16q22.2-q22.3	-0.10746	0.035781	0.07637046
ZNF304	19q13.43	-0.10745	0.035797	0.076397317
L1TD1	1p31.3	0.107429	0.035827	0.076452629
IRX4	5p15.33	-0.10742	0.03584	0.07647244
PHF13	1p36.31	-0.10742	0.035845	0.076475547
GPC6	13q31.3-q32.1	-0.1074	0.035879	0.076538279
SHISA2	13q12.13	-0.10737	0.035925	0.076629759
VWA7	6p21.33	0.107357	0.035953	0.076679221
PLEKHG7	12q22	-0.10735	0.035956	0.076679221
BBS1	11q13.2	-0.10734	0.035978	0.076718561
LEUTX	19q13.2	-0.10734	0.03599	0.076735619

AVPR1B	1q32.1	0.107327	0.036006	0.076760314
MADCAM1	19p13.3	0.107311	0.036032	0.076808593
KIAA0930	22q13.31	-0.1073	0.036049	0.076836831
SMIM7	19p13.11	-0.10727	0.036096	0.076927803
CXCL13	4q21.1	0.10727	0.036105	0.076933
GALNT13	2q23.3-q24.1	-0.10727	0.036106	0.076933
PCDHB19P	5q31.3	-0.10726	0.036121	0.076956808
ZNF157	Xp11.3	-0.10725	0.036143	0.076994871
CIAO3	16p13.3	-0.10722	0.036186	0.077072405
TMEM208	16q22.1	-0.10722	0.036187	0.077072405
ARHGAP5-AS1	14q12	-0.10722	0.036196	0.077078265
KIAA0895	7p14.2	0.107216	0.036198	0.077078265
RPGRIP1L	16q12.2	-0.10721	0.036201	0.077078265
ARHGAP25	2p13.3	0.107142	0.036329	0.077342069
LGALS17A	19q13.2	-0.10712	0.036369	0.077420148
CYP2F1	19q13.2	-0.1071	0.036401	0.077479178
POLDIP2	17q11.2	-0.1071	0.03641	0.077490284
THAP9	4q21.22	-0.10705	0.036487	0.077645558
NOP9	14q12	0.107039	0.036508	0.077680659
STK26	Xq26.2	-0.10704	0.036511	0.077680659
APOD	3q29	-0.10703	0.036533	0.077719189
MAIP1	2q33.1	-0.10699	0.03659	0.07783202
DLEU2	13q14.2	-0.10698	0.036613	0.077873036
DPH5	1p21.2	-0.10697	0.036627	0.077894668
KIR3DL1	19q13.42	0.106947	0.03667	0.077978283
LMNB1	5q23.2	0.106891	0.03677	0.078181675
CARMIL3	14q11.2	-0.10689	0.036777	0.078187969
PSENN	19q13.12	-0.10685	0.036836	0.078305037
PROKR1	2p13.3	-0.10685	0.036841	0.078305037
TESC	12q24.22	-0.10685	0.036844	0.078305037
TRAP1	16p13.3	-0.10683	0.036887	0.078389312
OTUD4	4q31.21	0.106801	0.036931	0.078473663
LRRC46	17q21.32	-0.10679	0.036952	0.078510438
PRKD2	19q13.32	0.106774	0.036978	0.078557895
DOLPP1	9q34.11	0.106771	0.036983	0.078558516
NDE1	16p13.11	0.10676	0.037004	0.07859088
SLC35B2	6p21.1	-0.10676	0.037007	0.07859088
ZNF385B	2q31.2-q31.3	-0.10675	0.037013	0.07859088
FAM209B	20q13.31	-0.10675	0.037013	0.07859088
ZCCHC7	9p13.2	-0.10675	0.037024	0.078603968
CDV3	3q22.1	0.106743	0.037033	0.078615994
SERPING1	11q12.1	-0.10673	0.037048	0.078638611
LINC00173	12q24.22	0.106727	0.037061	0.078658449
PDC	1q31.1	0.106699	0.037112	0.078758388
GALNT17	7q11.22	-0.10666	0.03718	0.078888264
MEF2D	1q22	0.10666	0.037181	0.078888264
RAB21	12q21.1	0.106652	0.037195	0.078909312
BAG5	14q32.33	0.106649	0.0372	0.07891239
LPCAT2	16q12.2	-0.10664	0.037226	0.078957959
SEC11C	18q21.32	0.106604	0.037281	0.079066535
LYNX1	8q24.3	-0.10653	0.037422	0.079356451
WDR97	8q24.3	-0.10652	0.037436	0.079379022
CNTD1	17q21.2-q21.31	-0.1065	0.037463	0.079426674
PNMA1	14q24.3	0.106495	0.037477	0.079447816
PIK3R5	17p13.1	0.106476	0.037512	0.079514189
IL17RB	3p21.1	-0.10646	0.037546	0.07957734
OAS3	12q24.13	0.106449	0.03756	0.079592582
ATR	3q23	-0.10645	0.037561	0.079592582



GLO1	6p21.2	-0.10645	0.037567	0.079596502
PROKR2	20p12.3	0.106426	0.037603	0.079664301
TTLL12	22q13.2	0.106408	0.037634	0.079722906
KRTAP4-8	17q21.2	-0.1064	0.037649	0.079745983
CBARP	19p13.3	-0.10637	0.03771	0.079867169
CDK11A	1p36.33	0.106352	0.037735	0.079911171
GLYATL3	6p12.3	-0.10634	0.037755	0.079945804
HENMT1	1p13.3	-0.10634	0.03776	0.079947108
ASB18	2q37.2	-0.10632	0.037788	0.079997721
MAPKAPK5-AS1	12q24.12	-0.1063	0.037829	0.080069608
SNORA41	2q33.3	-0.1063	0.03783	0.080069608
CHMP5	9p13.3	0.106293	0.037842	0.080078431
REG3A	2p12	0.106293	0.037842	0.080078431
VPS33A	12q24.31	-0.10629	0.037854	0.080094693
GPANK1	6p21.33	-0.10625	0.037912	0.080202701
SLC2A3	12p13.31	-0.10625	0.037913	0.080202701
NSUN4	1p33	0.106238	0.037942	0.080256335
GSTZ1	14q24.3	0.106208	0.037997	0.080363057
TRPV5	7q34	0.106174	0.038059	0.080486442
PDS5B	13q13.1	-0.10617	0.038072	0.080504575
SLFN13	17q12	0.106137	0.038127	0.08060971
KCNH8	3p24.3	-0.10614	0.038129	0.08060971
ZNF229	19q13.31	-0.10609	0.038211	0.080773801
ERP29	12q24.13	0.106085	0.038222	0.080789058
NCOA1	2p23.3	0.106066	0.038257	0.080853848
FAM71D	14q23.3	-0.10605	0.038291	0.080917013
EFCAB13	17q21.32	-0.10602	0.038336	0.081003984
HCST	19q13.12	0.10601	0.03836	0.081045135
MISP	19p13.3	0.10599	0.038395	0.081111765
CABLES1	18q11.2	0.105981	0.038413	0.081135901
GABRA5	15q12	-0.10598	0.038415	0.081135901
HSPB1P1	9q21.13	-0.10596	0.038448	0.081197276
SNAPC3	9p22.3	0.105955	0.03846	0.081213806
TDRD5	1q25.2	0.105947	0.038476	0.081232651
EGFLAM	5p13.2-p13.1	-0.10595	0.038477	0.081232651
PCDHGB4	5q31.3	-0.10594	0.038493	0.081258786
KDM2A	11q13.2	-0.10591	0.038539	0.081346103
HNMT	2q22.1	-0.10591	0.038548	0.08135241
RBBP9	20p11.23	-0.10591	0.03855	0.08135241
CPNE3	8q21.3	-0.1059	0.038563	0.081371481
P2RY8	Xp22.33 and Yp11.2	0.105888	0.038584	0.08140855
IL17C	16q24.2	0.105879	0.0386	0.081433902
PIGC	1q24.3	-0.10588	0.038606	0.081436261
PARN	16p13.12	-0.10587	0.038613	0.081443611
DMAC1	9p24.1	-0.10587	0.038619	0.081446771
CHM	Xq21.2	-0.10585	0.038657	0.081519541
KIF17	1p36.12	-0.10584	0.038674	0.081545315
ST3GAL6	3q12.1	-0.10583	0.038685	0.081561112
ADAMDEC1	8p21.2	0.105831	0.03869	0.081562597
MRRF	9q33.2	0.105823	0.038704	0.08158339
SEPTIN1	16p11.2	0.105817	0.038715	0.08159747
CNRIP1	2p14	-0.1058	0.03874	0.081641787
TOMM22	22q13.1	-0.10579	0.038768	0.081692006
FAN1	15q13.3	-0.10577	0.038795	0.081740568
BLVRA	7p13	0.105766	0.038809	0.081761398
FOXJ1	17q25.1	-0.10576	0.038815	0.081765534
CEP350	1q25.2	0.105755	0.03883	0.081788772
KIDINS220	2p25.1	-0.10574	0.03885	0.081821392

LRATD2	8q24.21	-0.1057	0.038924	0.081968373
PPA1	10q22.1	-0.1057	0.038928	0.081968373
RAB7A	3q21.3	-0.10569	0.038948	0.081994771
C10ORF25	10q11.21	0.105691	0.03895	0.081994771
MT1G	16q13	0.105689	0.038952	0.081994771
EAF1	3p25.1	0.105681	0.038967	0.082016498
FGL2	7q11.23	0.105674	0.038981	0.082038231
CAMLG	5q31.1	-0.10565	0.03902	0.082110587
GNGT2	17q21.32	0.105648	0.039028	0.082114429
TMEM38A	19p13.11	0.105648	0.03903	0.082114429
NKAIN1	1p35.2	-0.10564	0.039052	0.082153353
NR2F6	19p13.11	0.105632	0.039058	0.082156255
OTOA	16p12.2 16p12.2	-0.10561	0.039093	0.082222335
KAZN	1p36.21	-0.10561	0.039108	0.082243715
KDM7A-DT	7q34	-0.10559	0.039146	0.082308339
TTC29	4q31.22	0.105585	0.039146	0.082308339
IQCF1	3p21.2	0.105571	0.039173	0.082352021
FKBP5	6p21.31	0.105569	0.039175	0.082352021
KLHL32	6q16.1	0.105553	0.039205	0.082405982
OR13J1	9p13.3	-0.10552	0.039261	0.082515118
SACM1L	3p21.31	0.105505	0.039296	0.082578396
SLC6A11	3p25.3	0.105498	0.039308	0.08259629
KLHL36	16q24.1	-0.10548	0.039335	0.082644165
KYAT3	1p22.2	0.105477	0.039349	0.082665187
WT1	11p13	-0.10547	0.039357	0.082671947
FRMPD4	Xp22.2	-0.10546	0.039372	0.08269465
SKOR1	15q23	0.105454	0.039392	0.082723001
C1S	12p13.31	-0.10545	0.039393	0.082723001
CHADL	22q13.2	-0.10545	0.039407	0.082744041
LIPK	10q23.31	-0.10541	0.039477	0.08288176
PARP9	3q21.1	0.105392	0.039508	0.082937444
C10ORF105	10q22.1	0.105359	0.03957	0.083059748
TMSB10	2p11.2	-0.10535	0.039593	0.083098836
MUTYH	1p34.1	-0.10534	0.039615	0.083135294
DSEL	18q22.1	-0.10532	0.039638	0.083176029
HS3ST5	6q21-q22.1	-0.10529	0.039708	0.083313649
ZNF702P	19q13.41	0.105279	0.039721	0.083332676
MZT1	13q21.33	-0.10528	0.039726	0.083334173
RAC2	22q13.1	0.105218	0.039836	0.083557164
SGCA	17q21.33	-0.10518	0.039909	0.08370016
KCNC2	12q21.1	-0.10516	0.039947	0.083771414
FBXO38	5q32	0.105157	0.039953	0.083775095
BSCL2	11q12.3	-0.10515	0.039973	0.08380922
NRBF2	10q21.3	0.105138	0.039988	0.083832199
EMP3	19q13.33	-0.1051	0.040064	0.083982317
SYNC	1p35.1	-0.10509	0.04008	0.084007053
POMGNT2	3p22.1	-0.10509	0.040089	0.084014404
SELENOO	22q13.33	-0.10508	0.040092	0.084014404
HIST1H4B	6p22.2	-0.10507	0.040111	0.084045844
RSC1A1	1p36.21	0.105064	0.04013	0.084076803
ZNF80	3q13.31	0.105059	0.040139	0.084078978
AOC3	17q21.31	-0.10506	0.04014	0.084078978
SDS	12q24.13	0.105015	0.040223	0.084241153
CA9	9p13.3	0.105013	0.040227	0.084241153
ABTB2	11p13	-0.10501	0.04023	0.084241153
OR1L3	9q33.2	-0.10499	0.040265	0.084306341
TIMM29	19p13.2	-0.10498	0.040287	0.084343359
WRAP53	17p13.1	0.104966	0.040317	0.08439752

TLX1NB	10q24.31	-0.10496	0.040326	0.084407514
IHH	2q35	-0.10495	0.040353	0.084455835
SREK1	5q12.3	0.104935	0.040377	0.084497098
CFAP298	21q22.11	-0.10492	0.040405	0.084537321
UBE2D1	10q21.1	-0.10492	0.040405	0.084537321
ZNF382	19q13.12	-0.10491	0.040423	0.084556711
STPG4	2p21	0.104911	0.040423	0.084556711
ODF2L	1p22.3	-0.1049	0.040436	0.084575643
RGS11	16p13.3	0.104884	0.040474	0.084646769
NCKAP1L	12q13.13-q13.2	0.104874	0.040494	0.084675395
CCL22	16q21	0.104873	0.040496	0.084675395
RPL7L1	6p21.1	-0.10486	0.040524	0.084724536
ZBTB42	14q32.33	0.104854	0.040533	0.084733387
NBPF1	1p36.13	0.104845	0.04055	0.084760522
FLVCR1-DT	1q32.3	-0.10481	0.040622	0.084901575
MRPL32	7p14.1	-0.10479	0.040646	0.084938489
H2AFX	11q23.3	-0.10479	0.040648	0.084938489
HTN3	4q13.3	-0.10475	0.040731	0.085103185
NOS3	7q36.1	-0.10473	0.040777	0.085190836
VPS37D	7q11.23	-0.10471	0.040806	0.08523481
SEC62	3q26.2	0.104712	0.040806	0.08523481
TRAF3	14q32.32	0.104708	0.040814	0.085240709
RAB33B	4q31.1	0.104696	0.040836	0.085278803
MAFG	17q25.3	-0.10467	0.040895	0.085389003
WDFY4	10q11.23	0.104665	0.040897	0.085389003
SIRPA	20p13	-0.10466	0.040912	0.085410594
PLAAT5	11q12.3	0.104647	0.040932	0.085444502
RNASE3	14q11.2	-0.10463	0.040959	0.085484201
NPIP13	16p11.2	-0.10463	0.04096	0.085484201
LYPLA1	8q11.23	-0.10463	0.04097	0.085496134
C2ORF66	2q33.1	0.104622	0.04098	0.085505253
FLG2	1q21.3	-0.10462	0.040983	0.085505253
CCBE1	18q21.32	-0.1046	0.041027	0.085587992
CBX2	17q25.3	-0.10456	0.041098	0.08572672
LAMTOR3	4q23	0.104533	0.041153	0.085833208
ZNF808	19q13.41	0.104527	0.041165	0.085844201
HAAO	2p21	-0.10453	0.041167	0.085844201
ZNF777	7q36.1	-0.10452	0.041178	0.085858887
HNRNPH1	5q35.3	-0.10449	0.041236	0.085970762
TP53TG1	7q21.12	-0.10449	0.041241	0.085972325
LINC00461	5q14.3	-0.10448	0.041256	0.085995091
CD300A	17q25.1	0.104478	0.041261	0.085995601
LOXL2	8p21.3	-0.10445	0.04131	0.086088326
USF1	1q23.3	0.104446	0.041324	0.086109186
SNHG12	1p35.3	-0.10443	0.041362	0.086180066
SLC4A2	7q36.1	-0.10441	0.041393	0.086234308
PPY	17q21.31	0.104397	0.041419	0.086272677
SOX5	12p12.1	-0.1044	0.04142	0.086272677
SNORD1C	17q25.1	-0.10439	0.041428	0.086281172
VPS18	15q15.1	0.104373	0.041466	0.086350409
CMC1	3p24.1	-0.10435	0.04151	0.086434647
DOCK10	2q36.2	0.104344	0.041522	0.086450296
THBS3	1q22	-0.10434	0.041531	0.086459787
ELP6	3p21.31	-0.10433	0.041553	0.086497445
RFPL3	22q12.3	0.104302	0.041606	0.086598436
C17ORF98	17q12	-0.1043	0.041616	0.086610296
GTPBP2	6p21.1	-0.10429	0.041634	0.086637821
PSMB7	9q33.3	-0.10428	0.041641	0.086643804

MICU2	13q12.11	-0.10428	0.041652	0.086652061
PLIN5	19p13.3	0.104277	0.041655	0.086652061
MAST2	1p34.1	0.104275	0.041658	0.086652061
SLC25A5	Xq24	0.104269	0.04167	0.086667745
SBNO1	12q24.31	0.104259	0.041689	0.086699304
MAGEA2	Xq28	-0.10426	0.041698	0.086707339
KLK12	19q13.41	0.104219	0.041769	0.086847446
ACRV1	11q24.2	-0.10421	0.041789	0.08687853
SPRR2B	1q21.3	-0.1042	0.041812	0.086909179
USP8	15q21.2	0.104197	0.041813	0.086909179
RALGDS	9q34.13-q34.2	-0.1042	0.041816	0.086909179
KYAT1	9q34.11	-0.10418	0.041851	0.086972634
MGAT2	14q21.3	0.104171	0.041864	0.086990135
FAM133CP	10q21.1	-0.10415	0.041908	0.08707264
ZMYND19	9q34.3	-0.10414	0.041935	0.08711895
LYG1	2q11.2	0.104122	0.041961	0.087164183
CCDC173	2q31.1	0.104106	0.041993	0.087214945
MICB	6p21.33	0.104105	0.041994	0.087214945
BCL2L11	2q13	0.10409	0.042024	0.087267942
CASKIN1	16p13.3	-0.10409	0.042032	0.087272851
PRPH2	6p21.1	-0.10408	0.042035	0.087272851
KRTAP10-4	21q22.3	-0.10407	0.042067	0.08733014
FAM133B	7q21.2	-0.10406	0.042077	0.087341708
LINC01134	1p36.32	-0.10406	0.042083	0.087345963
TENM2	5q34	-0.10403	0.04214	0.087452024
LMAN1L	15q24.1	0.10403	0.042143	0.087452024
NSFL1C	20p13	-0.10402	0.042169	0.087490652
H2BFWT	Xq22.2	-0.10402	0.042173	0.087490652
IPP	1p34.1	0.104014	0.042175	0.087490652
ABHD14B	3p21.2	0.104008	0.042187	0.087506464
MIEF2	17p11.2	0.104002	0.0422	0.087520324
SPARCL1	4q22.1	-0.104	0.042202	0.087520324
STX17	9q31.1	0.103993	0.042218	0.087543227
SAAL1	11p15.1	-0.10399	0.042225	0.087548804
HCN2	19p13.3	-0.10396	0.042275	0.087636964
KIAA1755	20q11.23	-0.10396	0.042276	0.087636964
ATP7A	Xq21.1	0.103961	0.042281	0.087637678
PIGH	14q24.1	-0.10395	0.042294	0.087655293
FDPS	1q22	0.103928	0.042346	0.0877548
MNS1	15q21.3	0.103889	0.042425	0.087908781
ABI3BP	3q12.2	0.103885	0.042432	0.087915737
VGLL3	3p12.1	-0.10386	0.042486	0.088012631
SRGN	10q22.1	0.103857	0.042488	0.088012631
MBL1P	10q22.3	-0.10383	0.042538	0.08809889
TMEM71	8q24.22	0.103832	0.042538	0.08809889
NUDT5	10p14	-0.10381	0.042576	0.088168412
MOB4	2q33.1	-0.1038	0.042598	0.0882031
ZFP36L2	2p21	0.103791	0.042622	0.088244061
RNF7	3q23	-0.10378	0.042635	0.08826267
ACTL7A	9q31.3	0.103774	0.042655	0.088294484
CFAP97	4q35.1	-0.10376	0.042684	0.088345547
PLEKHG6	12p13.31	-0.10375	0.042698	0.088365964
LOC344967	4p14	0.103737	0.042729	0.088420355
COL4A5	Xq22.3	0.103709	0.042785	0.088526915
SIRT1	10q21.3	0.103679	0.042845	0.088642488
RFX5	1q21.3	-0.10367	0.042866	0.088677328
CCDC74A	2q21.1	-0.10366	0.042884	0.088704992
AGPAT3	21q22.3	0.103656	0.042893	0.088713797

EHBP1	2p15	-0.10365	0.042902	0.088723501
PRKD3	2p22.2	-0.10363	0.042937	0.088786231
ZSCAN12P1	6p22.1	0.10362	0.042965	0.088827889
C12ORF54	12q13.11	-0.10362	0.042966	0.088827889
DDB1	11q12.2	-0.1036	0.043004	0.088898122
LINC01588	14q21.3	0.103595	0.043015	0.088912273
ZNF576	19q13.31	-0.10358	0.043047	0.088968877
ATP6V0D2	8q21.3	0.103532	0.043144	0.089159292
FGF7	15q21.2	-0.10352	0.043164	0.089191582
THUMPD1	16p12.3	0.103493	0.043223	0.089303819
CHSY3	5q23.3	-0.10346	0.043286	0.089426071
PARP1	1q42.12	0.10345	0.043309	0.089463422
AACSP1	5q35.3	-0.10343	0.043343	0.089516463
TM4SF18	3q25.1	-0.10343	0.043344	0.089516463
FAM209A	20q13.31	-0.10342	0.043363	0.089539633
DMAC2	19q13.2	-0.10342	0.043364	0.089539633
MED31	17p13.1	0.10342	0.043371	0.089545789
PSME3	17q21.31	-0.1034	0.04342	0.089637977
SLAIN1	13q22.3	0.103364	0.043486	0.089763797
OLFML1	11p15.4	-0.10333	0.043546	0.089879296
RINT1	7q22.3	-0.1033	0.043607	0.089995873
MTTP	4q23	-0.1033	0.043616	0.090004758
SDHAP3	5p15.33	0.103297	0.043623	0.090009141
ZNF679	7q11.21	-0.10329	0.04363	0.090012412
SLC44A3	1p21.3	0.103292	0.043633	0.090012412
BTN2A1	6p22.2	-0.10329	0.043639	0.090015867
GPR39	2q21.2	-0.10323	0.043749	0.090233142
FLT3	13q12.2	0.103222	0.043776	0.090279962
RNF149	2q11.2	-0.10321	0.043805	0.090330304
VSTM4	10q11.23	-0.10319	0.043845	0.090399245
ACRBP	12p13.31	0.103187	0.043848	0.090399245
AKAP17A	Xp22.33 and Yp11.2	-0.10318	0.043869	0.090432818
SLC29A3	10q22.1	-0.10316	0.043899	0.090486485
GJD4	10p11.21	-0.10316	0.043907	0.090487945
C1D	2p14	-0.10316	0.043909	0.090487945
EYA3	1p35.3	0.103122	0.043982	0.09061985
NIPA1	15q11.2	0.103121	0.043983	0.09061985
GUSBP11	22q11.23	-0.10312	0.043986	0.09061985
TDH	8p23.1	0.103112	0.044002	0.090643202
KIFC1	6p21.32	0.103105	0.044017	0.090655872
TMEM184A	7p22.3	-0.1031	0.044017	0.090655872
SPINK1	5q32	-0.10307	0.044083	0.090781931
BNIP1	5q35.1	0.103069	0.044092	0.090785966
TNRC6A	16p12.1	-0.10307	0.044098	0.090785966
ANKRD37	4q35.1	0.103065	0.044099	0.090785966
OTUD7B	1q21.2	0.103037	0.044157	0.090895677
CLEC10A	17p13.1	0.103024	0.044183	0.090940598
C11ORF80	11q13.2	-0.10301	0.044219	0.090997004
CHGB	20p12.3	-0.10301	0.044219	0.090997004
SLC25A18	22q11.21	0.103002	0.044228	0.091006188
DSCR8	21q22.13	-0.10299	0.044245	0.091031195
SYNGAP1	6p21.32	-0.10299	0.04425	0.091031195
SHBG	17p13.1	-0.10299	0.04426	0.091038179
UBE3B	12q24.11	0.102986	0.044262	0.091038179
GPR146	7p22.3	-0.10298	0.044279	0.091063689
ANGPTL2	9q33.3	-0.10295	0.044333	0.091165402
HDDC3	15q26.1	-0.10295	0.044347	0.091184512
SPZ1	5q14.1	-0.10293	0.04437	0.091223279

THAP3	1p36.31	-0.10292	0.044401	0.091276045
BRIP1	17q23.2	0.102913	0.044413	0.091292416
NR2F2	15q26.2	0.102894	0.044453	0.091365789
RLBP1	15q26.1	-0.10287	0.044502	0.091455939
FMNL3	12q13.12	-0.10287	0.04451	0.091463938
TULP4	6q25.3	-0.10283	0.044586	0.091597919
MEGF6	1p36.32	0.10283	0.044586	0.091597919
TCTN1	12q24.11	-0.10283	0.044589	0.091597919
SFSWAP	12q24.33	-0.1028	0.044649	0.091704551
IQSEC2	Xp11.22	0.102799	0.04465	0.091704551
LSM4	19p13.11	-0.10276	0.044725	0.091849158
RTKN2	10q21.2	0.102761	0.04473	0.091849158
CFAP300	11q22.1	-0.10272	0.044809	0.092002027
PCDHB3	5q31.3	-0.10271	0.044827	0.092030035
SFRP5	10q24.2	-0.10271	0.044845	0.092057919
SNX20	16q12.1	0.102704	0.044851	0.092059294
SH3PXD2A	10q24.33	0.1027	0.044858	0.092065595
MACROD1	11q13.1	-0.10269	0.044886	0.092112636
ACSS1	20p11.21	-0.10267	0.044921	0.092175447
KCNH6	17q23.3	-0.10264	0.04498	0.092286285
PRRT2	16p11.2	0.102624	0.045018	0.092346456
UFSP2	4q35.1	0.102624	0.045018	0.092346456
TMEM201	1p36.22	-0.1026	0.045063	0.092428817
ADAM5	8p11.22	-0.1026	0.045068	0.092428817
CEP57	11q21	-0.10257	0.045129	0.092545606
BSG	19p13.3	0.102564	0.045144	0.092565879
TYK2	19p13.2	0.10256	0.045152	0.092573138
MOB2	11p15.5	-0.10256	0.045158	0.092576678
NUP58	13q12.13	-0.10253	0.045207	0.092666729
MED13	17q23.2	-0.10253	0.045223	0.092691677
IFI27L2	14q32.12	0.102517	0.045243	0.092717845
RNU12-2P	Xp11.3	-0.10252	0.045245	0.092717845
TPH1	11p15.1	0.102474	0.045333	0.092888229
PHGR1	15q15.1	0.102465	0.045352	0.092908787
RALGPS1	9q33.3	0.102465	0.045353	0.092908787
MOSPD2	Xp22.2	-0.10246	0.045372	0.092938453
TDG	12q23.3	0.102449	0.045387	0.09295973
TMEM235	17q25.3	-0.10244	0.045396	0.092969439
LOC341056	11q24.1	-0.10244	0.045405	0.092977102
CDRT15P1	17p12	0.102437	0.045412	0.092982802
CRYBA1	17q11.2	-0.10243	0.045426	0.093002042
ALDH8A1	6q23.3	-0.10243	0.045436	0.093013065
CDKN2B	9p21.3	0.102415	0.045459	0.093048701
RNF150	4q31.21	-0.10241	0.045463	0.093048701
BUB3	10q26.13	0.10241	0.04547	0.093054451
IL19	1q32.1	0.102391	0.04551	0.09312621
NRN1	6p25.1	0.102369	0.045556	0.09321199
ICOS	2q33.2	0.102319	0.045662	0.093417653
PPFIA2	12q21.31	-0.1023	0.045699	0.093484537
CLPX	15q22.31	0.102298	0.045706	0.093489464
CDCA5	11q13.1	-0.10229	0.045724	0.093516468
LRRN1	3p26.2	-0.10228	0.045738	0.093536309
FAM160B2	8p21.3	0.102275	0.045756	0.093562057
RFC1	4p14	0.102271	0.045764	0.093567754
AKR7A2P1	1p13.2	0.10227	0.045768	0.093567754
ENTPD2	9q34.3	0.102257	0.045795	0.093614995
HIGD2A	5q35.2	0.102247	0.045815	0.093644845
GRK5	10q26.11	0.102245	0.04582	0.093646993

SLC1A5	19q13.32	-0.10223	0.045851	0.093699874
PAEP	9q34.3	-0.10222	0.045872	0.093733956
AFG3L1P	16q24.3	-0.1022	0.045926	0.093834795
MYO1G	7p13	0.102186	0.045946	0.093863588
CPLANE2	1p36.13	0.102184	0.04595	0.093863588
FRS2	12q15	0.102182	0.045955	0.093865296
PDCD4	10q25.2	0.102145	0.046035	0.094017524
LIN52	14q24.3	0.10212	0.046087	0.094114353
LDB3	10q23.2	-0.10211	0.046106	0.094144308
WRB	21q22.2	0.102108	0.046114	0.094150755
SYNDIG1L	14q24.3	-0.10208	0.046171	0.094256572
RDM1	17q12	-0.10208	0.046181	0.094269192
ANO6	12q12	-0.10207	0.046202	0.094302066
IFT88	13q12.11	-0.10206	0.046208	0.09430378
MXI1	10q25.2	0.102056	0.046225	0.094329089
SLC9A6	Xq26.3	0.102053	0.046231	0.094332692
SIRT7	17q25.3	0.102049	0.04624	0.094340071
SNHG4	5q31.2	-0.10205	0.046245	0.094340844
SELENOP	5p12	0.10204	0.046258	0.094358609
FAM111A	11q12.1	0.102036	0.046267	0.094366936
DCLK3	3p22.2	-0.10203	0.046275	0.09437288
FES	15q26.1	-0.10203	0.046284	0.094381705
CYTH4	22q13.1	0.101997	0.046351	0.094510021
LRRK2	12q12	-0.10197	0.046416	0.094632801
CDPF1	22q13.31	-0.10196	0.046421	0.094633577
PPM1B	2p21	0.101956	0.04644	0.094661798
SNORA67	17p13.1	-0.10194	0.046469	0.094712159
SLC25A31	4q28.1	-0.10193	0.046491	0.094746482
GOLGA6L5P	15q25.2	-0.10193	0.046499	0.09475311
FAM174A	5q21.1	0.101907	0.046546	0.094839193
SP4	7p15.3	-0.1019	0.046559	0.094857035
RBM41	Xq22.3	-0.1019	0.046565	0.094858739
FNDC9	5q33.3	-0.1019	0.046571	0.094862143
NQO1	16q22.1	0.101876	0.046612	0.094936192
SNORD116-20	15q11.2	-0.10183	0.046707	0.095119658
TSACC	1q22	-0.10183	0.046714	0.09512284
MORN1	1p36.32	0.101827	0.046718	0.095123149
FHIT	3p14.2	-0.10182	0.046742	0.095161517
SLC12A6	15q14	0.101806	0.046765	0.095195403
SYNPO2	4q26	-0.1018	0.046768	0.095195403
RBM11	21q11.2	-0.10179	0.046798	0.095246322
MSGN1	2p24.2	0.10178	0.046821	0.095280298
MDGA2	14q21.3	-0.10178	0.046824	0.095280298
PAXIP1-AS2	7q36.2	0.101771	0.04684	0.095302191
MRGPRX3	11p15.1	-0.10174	0.046917	0.095449763
TAS2R41	7q35	0.101711	0.04697	0.095535701
RPL13AP6	10q25.2	-0.10171	0.046975	0.095535701
CEP44	4q34.1	-0.10171	0.046976	0.095535701
GOLGA6L9	15q25.2	-0.10171	0.046978	0.095535701
ARPC5	1q25.3	0.101704	0.046987	0.095543163
SBSN	19q13.12	-0.10169	0.047013	0.095586897
YTHDF3	8q12.3	-0.10164	0.047121	0.095796736
TOPAZ1	3p21.31	0.101634	0.047139	0.095823215
KRT81	12q13.13	-0.10162	0.047172	0.09587079
ULK1	12q24.33	-0.10162	0.047172	0.09587079
CCS	11q13.2	-0.1016	0.047213	0.095942978
PLPPR5	1p21.3	-0.1016	0.047218	0.095942978
CRELD1	3p25.3	-0.1016	0.047222	0.095942978

RTEL1	20q13.33	-0.10158	0.047259	0.096008843
ESS2	22q11.21 22q11.2	-0.10157	0.047287	0.096056548
GOLGA6A	15q24.1	-0.10156	0.047298	0.096067991
CD84	1q23.3	0.101556	0.04731	0.096083966
KRI1	19p13.2	-0.10152	0.047382	0.096214954
BORCS8	19p13.11	-0.10152	0.047384	0.096214954
BET1	7q21.3	-0.10152	0.047394	0.096224377
PRKAR1A	17q24.2	0.101498	0.047436	0.096300952
DAD1	14q11.2	0.101492	0.04745	0.09631806
ATP6V0A4	7q34	-0.10149	0.047456	0.096320252
ZNF843	16p11.2	-0.10146	0.047525	0.096452267
EID1	15q21.1	-0.10144	0.047574	0.096540422
LIPA	10q23.31	0.101412	0.047626	0.096636444
NR5A1	9q33.3	-0.1014	0.047661	0.096697711
ZFC3H1	12q21.1	-0.10139	0.047666	0.096697711
PRR34-AS1	22q13.31	-0.10138	0.047695	0.096746655
GMIP	19p13.11	0.101375	0.047708	0.09676366
RBBP6	16p12.1	-0.10137	0.047713	0.09676366
NXN	17p13.3	-0.10135	0.047755	0.096839617
CCDC141	2q31.2	0.101337	0.047791	0.096903303
ANKRD35	1q21.1	-0.10133	0.047796	0.096904217
BMX	Xp22.2	0.10131	0.047852	0.097006926
NOX3	6q25.3	-0.1013	0.047866	0.097024617
CD14	5q31.3	0.101269	0.047942	0.097169853
ANAPC4	4p15.2	-0.10124	0.047999	0.097276054
FAM223B	Xq28	-0.10123	0.048026	0.097320609
ANAPC16	10q22.1	-0.10121	0.048071	0.097402515
HMG2	1p36.11	0.101202	0.04809	0.097425856
DPP7	9q34.3	-0.1012	0.048093	0.097425856
DLEC1	3p22.2	0.101175	0.048151	0.097533384
ACTL6B	7q22.1	-0.10117	0.048155	0.097533384
PARVB	22q13.31	-0.10117	0.048166	0.097545082
HCCAT5	16q22.3	-0.10116	0.048183	0.09756863
HOXB5	17q21.32	0.101146	0.048215	0.097623305
FRMD5	15q15.3	-0.10113	0.04825	0.097686214
GLMP	1q22	0.101099	0.04832	0.097816188
ZNF57	19p13.3	0.101088	0.048343	0.097850092
ADGRD2	9q33.3	-0.10109	0.048346	0.097850092
SAP30	4q34.1	0.101075	0.048373	0.097895389
CACNA1B	9q34.3	-0.10107	0.048379	0.097896701
DPY19L2P1	7p14.2	-0.10103	0.048473	0.098076719
PRKG2	4q21.21	-0.10102	0.048496	0.098113756
SCCPDH	1q44	0.101002	0.048536	0.098177337
DCLK1	13q13.3	-0.101	0.048537	0.098177337
FAM180A	7q33	-0.10099	0.048567	0.098227206
LINC00294	11p13	0.100986	0.048572	0.098227206
MAGT1	Xq21.1	-0.10096	0.048621	0.098317746
MBNL2	13q32.1	-0.10094	0.048668	0.098394514
CACNA1C	12p13.33	0.100943	0.048669	0.098394514
RPEL1	10q24.33	-0.10094	0.048677	0.09840118
ZC3H11A	1q32.1	0.100902	0.04876	0.098558311
PSCA	8q24.3	0.100889	0.04879	0.098605886
DLEU1	13q14.2-q14.3	-0.10089	0.048793	0.098605886
RPS19BP1	22q13.1	-0.10088	0.048803	0.098614519
EPHA5	4q13.1-q13.2	-0.10085	0.048883	0.098766234
TMEM155	4q27	-0.10082	0.048936	0.098863398
ENTPD1	10q24.1	-0.10082	0.048946	0.09887348
CNTN2	1q32.1	-0.1008	0.048991	0.098954745



FAM24B	10q26.13	-0.10077	0.049069	0.099102618
SMIM32	5q31.1	0.100752	0.049098	0.099152472
GLRX5	14q32.13	0.100743	0.049119	0.099184889
KHDC4	1q22	-0.10073	0.049142	0.099221081
EXOSC9	4q27	0.100682	0.049257	0.099443267
MYB	6q23.3	-0.10068	0.049269	0.099455894
TLCD4	1p21.3	0.100666	0.049294	0.099497091
CLASRP	19q13.32	-0.10066	0.049306	0.099510709
MTERF4	2q37.3	0.100639	0.049355	0.099599244
SMC6	2p24.2	-0.10062	0.049403	0.099686857
RPS28	19p13.2	-0.10058	0.049491	0.099855553
PSMC3IP	17q21.2	-0.10057	0.04952	0.099903778
TUBA1B	12q13.12	0.10056	0.049534	0.099920405
HBD	11p15.4	-0.10056	0.04954	0.099922622
PASK	2q37.3	-0.10053	0.049595	0.100024887
ANKRD28	3p25.1	0.10053	0.049602	0.100027677
TMIGD1	17q11.2	0.100506	0.049657	0.100128522
MCCC1	3q27.1	0.100494	0.049685	0.10017367
EFNA1	1q22	-0.10049	0.049689	0.10017367
PANK2	20p13	-0.10048	0.049707	0.100199251
FGF4	11q13.3	0.100441	0.049806	0.100388133
LILRA3	19q13.4	0.100406	0.049886	0.100540546
TAGAP	6q25.3	0.100398	0.049905	0.100567853
CRYGC	2q33.3	-0.10039	0.049925	0.100598428
SEC61G	7p11.2	-0.10038	0.049945	0.100629121
SCARNA20	17q23.2	-0.10036	0.04999	0.100707804
LSM3	3p25.1	-0.10036	0.049994	0.100707804
IFIT2	10q23.31	0.100353	0.050006	0.100720723
SPNS2	17p13.2	0.100351	0.050012	0.100720723
ANKRD50	4q28.1	0.100349	0.050016	0.100720723
TMEM127	2q11.2	0.100343	0.050029	0.100737283
PKN1	19p13.12	-0.10034	0.050034	0.100737283
BPIFB1	20q11.21	0.100336	0.050045	0.100749869
ZNF638	2p13.3-p13.2	-0.1003	0.050137	0.10092414
PITRM1	10p15.2	0.100289	0.050155	0.100949875
ZNF678	1q42.13	0.100285	0.050164	0.100957148
UBL4B	1p13.3	-0.10026	0.050212	0.101036089
NMUR1	2q37.1	-0.10026	0.050213	0.101036089
HOXA6	7p15.2	-0.10023	0.050293	0.101188209
LRRC41	1p34.1-p33	-0.1002	0.050348	0.101287339
GPRIN1	5q35.2	0.100201	0.050357	0.101296155
MRPL54	19p13.3	0.100198	0.050363	0.101297975
AICDA	12p13.31	0.100189	0.050385	0.10133131
MAGED4B	Xp11.22	-0.10017	0.050428	0.101408612
TGM7	15q15.2-q15.3	-0.10016	0.050448	0.101431889
PRDM1	6q21	0.100158	0.050456	0.101431889
AGXT2	5p13.2	0.100158	0.050456	0.101431889
CLBA1	14q32.33	-0.10016	0.05046	0.101431889
ITGAE	17p13.2	0.100151	0.050473	0.101447748
CFAP61	20p11.23	0.100143	0.050492	0.101474703
RHOA	1q42.13	0.100139	0.050499	0.101479423
C7ORF65	7p12.3	-0.10013	0.050512	0.101494839
PI15	8q21.13	-0.10013	0.050527	0.101516088
IL2RA	10p15.1	0.100124	0.050535	0.10152042
TXNDC2	18p11.22	-0.10011	0.050565	0.101570416
C5	9q33.2	0.100104	0.05058	0.101591703
EQTN	9p21.2	0.100082	0.050631	0.101683378
SPATA9	5q15	-0.10008	0.05064	0.101683378

CKS1B	1q21.3	-0.10008	0.050641	0.101683378
HLA-DPA1	6p21.32	0.100068	0.050665	0.101721304
TCIRG1	11q13.2	0.100046	0.050715	0.101811409
STK17A	7p13	0.100043	0.050722	0.101814248
CETN3	5q14.3	-0.10001	0.050791	0.10194241
UBE2R2	9p13.3	-0.10001	0.050796	0.10194241
FBXO48	2p13.3	-0.1	0.050818	0.101977274
GLCCI1	7p21.3	-0.09999	0.050844	0.102014217
EMX2	10q26.11	-0.09999	0.050847	0.102014217
PPIAL4C	1q21.2	-0.09998	0.050867	0.102037017
MUS81	11q13.1	-0.09998	0.050868	0.102037017
EDARADD	1q42.3-q43	-0.09997	0.050883	0.102056953
CD83	6p23	-0.09997	0.050899	0.102077898
LRRC8C	1p22.2	0.099964	0.050906	0.102082758
MTAP	9p21.3	-0.09995	0.05094	0.102139915
UBE2V2	8q11.21	-0.09994	0.050968	0.102179825
PSTPIP1	15q24.3	0.099937	0.05097	0.102179825
VLDLR	9p24.2	-0.09991	0.051021	0.102272265
SLC14A2	18q12.3	0.09988	0.051102	0.102424129
STT3A	11q24.2	0.099846	0.051181	0.102572363
KRT71	12q13.13	-0.09984	0.05119	0.102578924
KLHDC3	6p21.1	-0.09983	0.051214	0.102616275
MXRA5	Xp22.33	-0.09983	0.051218	0.102616275
KISS1R	19p13.3	-0.09983	0.051229	0.102627272
RFFL	17q12	0.099814	0.051256	0.102671483
TEX33	22q12.3	0.099807	0.051272	0.102693375
TRIO	5p15.2	-0.09979	0.051313	0.102765122
ADAM12	10q26.2	-0.09979	0.051323	0.102774052
CCL13	17q12	0.099737	0.051438	0.102993785
FAM99B	11p15.5	0.099728	0.051458	0.103015217
TMEM135	11q14.2	0.099726	0.051463	0.103015217
MESD	15q25.1	0.099726	0.051464	0.103015217
SNORA5A	7p13	-0.0997	0.051522	0.103120615
ASIC2	17q11.2-q12	-0.0997	0.051528	0.103123643
ARL13A	Xq22.1	-0.09968	0.051579	0.103215535
SLC43A2	17p13.3	-0.09967	0.05159	0.103226397
NRN1L	16q22.1	-0.09966	0.051625	0.103285166
BCRP3	22q11.23	-0.09965	0.051638	0.103297941
CCDC124	19p13.11	-0.09965	0.051641	0.103297941
RAPGEF2	4q32.1	-0.09962	0.051707	0.103418618
GAST	17q21.2	-0.0996	0.051753	0.103501769
EVC	4p16.2	-0.09957	0.051827	0.103637923
GSTT4	22q11.23	0.099541	0.0519	0.103774755
ITGA5	12q13.13	-0.09953	0.051927	0.103817849
THRSP	11q14.1	-0.09948	0.052047	0.104047476
TGM4	3p21.31	0.099475	0.052055	0.104052812
LINC00626	1q24.2	-0.09947	0.052061	0.10405434
AK3	9p24.1	-0.09947	0.052071	0.104064038
FAM86FP	12p13.31	0.099461	0.052089	0.104090417
CCDC15	11q24.2	-0.09945	0.052118	0.104137234
NDUFAF2	5q12.1	-0.09943	0.052152	0.104194288
APEH	3p21.31	0.09942	0.052188	0.104255459
SCARNA5	2q37.1	-0.09941	0.052205	0.104279164
PLCG2	16q23.3	0.099393	0.052251	0.104361509
MST1P2	1p36.13	-0.09937	0.052306	0.104461136
GPR31	6q27	0.099365	0.052318	0.104473504
DIRAS1	19p13.3	-0.09936	0.052326	0.104480251
IRX6	16q12.2	-0.09934	0.052388	0.104594148

PRPS2	Xp22.2	-0.09933	0.052407	0.104619834
PLAUR	19q13.31	0.099315	0.052436	0.104666406
FMO2	1q24.3	-0.09931	0.05244	0.104666406
RAMAC	15q25.2	-0.09929	0.052508	0.104783261
UBQLN3	11p15.4	0.099285	0.052509	0.104783261
RBM27	5q32	0.099264	0.052559	0.104871477
C1QC	1p36.12	0.099236	0.052625	0.104993627
HINT1	5q23.3	0.099224	0.052655	0.105041798
CYP19A1	15q21.2	-0.0992	0.052711	0.105143059
LINC01000	7q32.1	-0.0992	0.052721	0.105152605
ELP2	18q12.2	0.09919	0.052735	0.105164266
SNORA65	9q33.3	-0.09919	0.052739	0.105164266
OR2W3	1q44	0.099187	0.052743	0.105164266
AP1M2	19p13.2	0.099185	0.052748	0.105164266
HOXC8	12q13.13	0.099161	0.052805	0.105268737
EAF2	3q13.33	0.099157	0.052815	0.105278268
RASIP1	19q13.33	-0.09915	0.05283	0.105297055
SH2D7	15q25.1	0.099149	0.052835	0.105297055
VEZF1	17q22	-0.09914	0.05286	0.105335478
KIZ	20p11.23	-0.09913	0.052871	0.105346649
B4GALNT3	12p13.33	0.099132	0.052876	0.10534751
CSF2RB	22q12.3	0.099127	0.052888	0.105355422
CNGA1	4p12	0.099126	0.052891	0.105355422
RNF175	4q31.3	-0.09912	0.052901	0.10536447
KHSRP	19p13.3	-0.09912	0.052914	0.105380867
CARD8	19q13.33	-0.09911	0.052937	0.105416801
SYAP1	Xp22.2	-0.0991	0.05295	0.105432083
IL36RN	2q14.1	-0.0991	0.052957	0.105434599
SH3BP1	22q13.1	0.099081	0.052997	0.105505046
C7ORF66	7q31.1	0.099067	0.053032	0.105563064
AARS	16q22.1	-0.09904	0.053107	0.105688247
IFT74	9p21.2	-0.09904	0.053108	0.105688247
BNC2	9p22.3-p22.2	-0.09903	0.053111	0.105688247
PPFIA3	19q13.33	-0.09903	0.053133	0.105722197
LINC00476	9q22.32	-0.09902	0.053157	0.105759258
ADGRB3	6q12-q13	-0.09901	0.053166	0.105763867
MAGEB1	Xp21.2	-0.09901	0.05317	0.105763867
DDX12P	12p13.31	-0.099	0.053195	0.105804278
C6ORF120	6q27	-0.09898	0.053251	0.1059045
LILRB5	19q13.42	0.098973	0.05326	0.105911456
ARFGEF1	8q13.2	-0.09895	0.053322	0.106024322
PRORP	14q13.2	0.09894	0.05334	0.106045595
GOLGA6L10	15q25.2	-0.09894	0.053344	0.106045595
MLST8	16p13.3	-0.09894	0.053348	0.106045595
IL15RA	10p15.1	0.098924	0.053377	0.106092078
VPS16	20p13	-0.09891	0.053405	0.106137539
GALNT6	12q13.13	-0.0989	0.053437	0.106189241
CPEB1	15q25.2	-0.09887	0.053517	0.10633778
SMIM13	6p24.2	-0.09886	0.053525	0.106344631
ABCB1	7q21.12	-0.09884	0.053576	0.106433827
TMEM164	Xq23	0.098827	0.053612	0.106495002
CYSLTR2	13q14.2	0.098808	0.05366	0.106579806
NENF	1q32.3	-0.09879	0.053709	0.106667383
ZDHHC15	Xq13.3	-0.09878	0.053724	0.106686026
PON3	7q21.3	0.098778	0.053732	0.106691558
PPL	16p13.3	-0.09877	0.053743	0.106702323
SPRR2D	1q21.3	-0.09874	0.053829	0.106850823
ZFP92	Xq28	-0.09874	0.05383	0.106850823

ZRANB3	2q21.3	-0.09874	0.053834	0.106850823
EGFL7	9q34.3	-0.09873	0.053845	0.106863198
EIF2B3	1p34.1	-0.09873	0.053852	0.106866164
ACTG1	17q25.3	0.098725	0.053862	0.106875387
ECRG4	2q12.2	-0.09872	0.053878	0.106896736
FAM241B	10q22.1	-0.09871	0.053894	0.106917827
ZNF181	19q13.11	-0.0987	0.053916	0.106950007
LBHD1	11q12.3	-0.09868	0.05396	0.107023785
NAIF1	9q34.11	-0.09868	0.053963	0.107023785
CCDC110	4q35.1	0.098679	0.053974	0.10703326
CXCL12	10q11.21	-0.09867	0.053998	0.10707045
RPL7A	9q34.2	-0.09866	0.054009	0.107076401
WDR48	3p22.2	-0.09866	0.054011	0.107076401
FGF8	10q24.32	0.098655	0.054033	0.107108301
CRSP8P	5q14.1	-0.09865	0.054055	0.107140847
CUX2	12q24.11-q24.12	0.098615	0.054129	0.107278262
COLQ	3p25.1	-0.09861	0.054149	0.107306204
CSRNP3	2q24.3	-0.0986	0.054168	0.107334752
DCXR	17q25.3	-0.09859	0.054198	0.107382822
NINJ2	12p13.33	-0.09858	0.05422	0.107415115
BBOF1	14q24.3	0.098571	0.054239	0.10744218
ASH1L-AS1	1q22	-0.09857	0.054246	0.107443963
LAMP3	3q27.1	0.098566	0.05425	0.107443963
PPP1R18	6p21.33	-0.09854	0.054308	0.10754646
PAX6	11p13	0.098541	0.054313	0.107546803
GIT2	12q24.11	0.098534	0.054329	0.107568157
GLIPR1L2	12q21.2	-0.09853	0.054342	0.107583385
GUCY1B2	13q14.3	-0.09853	0.054351	0.107590496
YBEY	21q22.3	0.098519	0.054367	0.107610672
ASTN2	9q33.1	0.098498	0.054417	0.107700154
PDE8A	15q25.3	0.098486	0.054446	0.107746716
UGT2B28	4q13.2	0.098479	0.054465	0.107773435
GBAP1	1q22	0.098453	0.054528	0.1078871
RGPD5	2q13	-0.09842	0.054609	0.108036991
MTREX	5q11.2	0.098416	0.054619	0.108042301
DDX11L2	2q14.1	-0.09841	0.054623	0.108042301
CERS6	2q24.3	0.09841	0.054634	0.108053614
ELAVL1	19p13.2	-0.09841	0.054644	0.108063978
TOR3A	1q25.2	-0.09838	0.054703	0.108170102
SERPINA4	14q32.13	-0.09837	0.054741	0.108233646
HMOX1	22q12.3	0.098352	0.054779	0.10829828
ZNF583	19q13.43	-0.09835	0.054789	0.108307609
GRXCR2	5q32	0.098342	0.054803	0.108325049
SRSF1	17q22	-0.09833	0.054833	0.108358641
FAM25A	10q23.2	0.098328	0.054837	0.108358641
DNMT1	19p13.2	0.098328	0.054837	0.108358641
ZNF175	19q13.41	-0.09832	0.054849	0.108371615
NACA	12q13.3	-0.09831	0.054878	0.108418435
PLCL1	2q33.1	-0.0983	0.054895	0.108441486
SPINT1	15q15.1	0.098298	0.054911	0.108463486
PIK3R2	19p13.11	-0.09829	0.054939	0.108507648
C19ORF24	19p13.3	-0.09827	0.054979	0.108575047
MACO1	1p36.11 1p36.11	0.098262	0.055001	0.108607628
IGF2BP3	7p15.3	0.098255	0.055019	0.108632798
CSAD	12q13.13	-0.09824	0.055063	0.108708738
GNRH2	20p13	0.098231	0.055079	0.108730593
GOT2	16q21	0.098215	0.055119	0.108798292
IL3	5q31.1	0.098198	0.055161	0.108870876

PSMB4	1q21.3	-0.09819	0.055183	0.108902718
RPRML	17q21.32	-0.09815	0.055275	0.109073385
MAGEA9B	Xq28	-0.09815	0.055284	0.109077755
ST8SIA2	15q26.1	-0.09815	0.055288	0.109077755
SPATA31A5	9q12	-0.09814	0.055307	0.109105743
STRC	15q15.3	-0.09813	0.055323	0.109126623
FTHL17	Xp21.2	-0.09812	0.055354	0.109175471
SNHG8	4q26	-0.0981	0.055394	0.109243906
PCDHB5	5q31.3	-0.09809	0.055437	0.109317984
CYSLTR1	Xq21.1	0.098028	0.055585	0.109589433
PANX2	22q13.33	-0.09803	0.055592	0.109589433
PDK4	7q21.3	0.098025	0.055593	0.109589433
KRTAP5-AS1	11p15.5	0.098024	0.055596	0.109589433
OTUD6A	Xq13.1	-0.09802	0.055606	0.109598587
PARP3	3p21.2	0.098013	0.055623	0.109621043
TBX19	1q24.2	-0.09798	0.055709	0.109779487
C3ORF67	3p14.2	-0.09797	0.05573	0.109793947
PSAT1	9q21.2	-0.09797	0.055731	0.109793947
RASSF5	1q32.1	0.097969	0.055733	0.109793947
TEX9	15q21.3	0.09796	0.055755	0.109825728
TOMM5	9p13.2	-0.09795	0.05577	0.10984089
SYT12	11q13.2	0.097953	0.055773	0.10984089
ZNF776	19q13.43	0.097921	0.055854	0.109989465
DYNC2LI1	2p21	-0.09791	0.055873	0.110015423
KCND2	7q31.31	-0.09788	0.055955	0.11016539
UROS	10q26.2	-0.09788	0.055966	0.110176864
LINC00689	7q36.3	-0.09785	0.056043	0.11031681
KL	13q13.1	-0.09783	0.056085	0.110389217
TNFRSF21	6p12.3	0.09782	0.056108	0.110421982
CFAP36	2p16.1	-0.09782	0.056116	0.110421982
	6-Mar 5p15.2	0.097816	0.056118	0.110421982
TMEM187	Xq28	-0.09781	0.056136	0.110440795
ALDH1A2	15q21.3	0.097807	0.056141	0.110440795
ITGB2	21q22.3	0.097806	0.056144	0.110440795
KATNB1	16q21	-0.0978	0.056158	0.110446922
MYH14	19q13.33	0.0978	0.056158	0.110446922
LINC00471	2q37.1	-0.09777	0.056239	0.110595651
ZFAND2A	7p22.3	-0.09776	0.056252	0.110610443
SCN7A	2q24.3	-0.09776	0.056261	0.110616394
KRTAP5-6	11p15.5	0.09775	0.056285	0.110653275
TMEM179B	11q12.3	-0.09775	0.056294	0.110659293
ALDH1L2	12q23.3	-0.09774	0.056323	0.110705236
GRHL3	1p36.11	-0.09771	0.056399	0.11083562
CCDC183-AS1	9q34.3	-0.0977	0.056401	0.11083562
ADAMTS7	15q25.1	-0.0977	0.056406	0.11083562
PCDHB13	5q31.3	0.097695	0.056426	0.110864475
UQCRH	1p33	0.097689	0.056441	0.11088365
PAGE2	Xp11.21	-0.09768	0.05646	0.110909987
TEX26	13q12.3	0.097678	0.056469	0.110916008
ZNF624	17p11.2	0.09767	0.056489	0.110945488
ARL2BP	16q13	-0.09766	0.056501	0.110958232
ART3	4q21.1 4p15.1-p14	0.097661	0.056511	0.110961978
NETO1	18q22.3	-0.09766	0.056517	0.110961978
ADD2	2p13.3	-0.09766	0.05652	0.110961978
EP300	22q13.2	0.09761	0.056641	0.111188738
TNNI1	1q32.1	0.097602	0.056662	0.111218691
PIGP	21q22.13	0.097594	0.056682	0.111247627
SLC34A2	4p15.2	0.097584	0.056707	0.111286672

RNF11	1p32.3	0.097525	0.056859	0.111572706
GPR160	3q26.2	-0.0975	0.056913	0.111667514
PHLDA3	1q32.1	-0.09749	0.056958	0.111746186
PEG3	19q13.43	-0.09747	0.057011	0.111838384
CCNH	5q14.3	-0.09745	0.057037	0.111878796
ABTB1	3q21.3	0.097445	0.057062	0.11191649
PODN	1p32.3	-0.09743	0.057107	0.111993137
GLYATL1	11q12.1	-0.09742	0.057119	0.112006425
POGLUT3	11q22.3	-0.09742	0.057131	0.112018023
NANOGNB	12p13.31	0.097416	0.057136	0.112018023
GPR162	12p13.31	-0.09739	0.057203	0.112137597
WFDC3	20q13.12	-0.09739	0.057215	0.11215153
ATP13A3	3q29	-0.09735	0.057302	0.112309605
C16ORF96	16p13.3	-0.09734	0.057334	0.112361875
LRRC40	1p31.1	0.097337	0.05734	0.112363537
IKZF5	10q26.13	-0.09732	0.057376	0.112421951
TXNRD1	12q23.3	0.097308	0.057415	0.112488042
ZNF625	19p13.2	-0.09729	0.057464	0.112565095
LHX2	9q33.3	0.097288	0.057466	0.112565095
TLNRD1	15q25.1	0.097268	0.057518	0.11265598
MRPL28	16p13.3	-0.09725	0.057559	0.112726503
STARD6	18q21.2	0.097238	0.057594	0.112783515
ZNF184	6p22.1	0.097217	0.057649	0.112879604
MRPL17	11p15.4	-0.09719	0.057725	0.113017815
CLUHP3	16p11.2	-0.09718	0.057749	0.113054151
GAB2	11q14.1	0.097161	0.057792	0.113127625
NCF1C	7q11.23	0.097156	0.057806	0.11314313
KRTAP5-7	11q13.4	-0.09715	0.057822	0.113163851
COX17	3q13.33	-0.09712	0.057889	0.113283217
FAM20B	1q25.2	0.097103	0.057942	0.113376994
NKG7	19q13.41	0.097082	0.057998	0.113474112
PFKFB4	3p21.31	0.097079	0.058005	0.11347724
TMTC3	12q21.32	0.097061	0.058053	0.113560204
CISD2	4q24	0.097057	0.058064	0.113569898
TMEM33	4p13	0.097032	0.058128	0.113684664
IKZF4	12q13.2	-0.09702	0.058149	0.113714598
PKD2L2	5q31.2	0.096995	0.058223	0.113848147
UNQ6494	9q22.2	0.096968	0.058295	0.113977556
GNPAT	1q42.2	0.096931	0.058391	0.114153449
RTN4R	22q11.21	0.096925	0.058406	0.114171968
LCE1C	1q21.3	0.096909	0.058448	0.114244305
NET1	10p15.1	0.096904	0.058461	0.114257378
DNM1	9q34.11	-0.09684	0.058634	0.114585209
TNFSF4	1q25.1	-0.09682	0.058673	0.114648973
CKS2	9q22.2	-0.09681	0.058702	0.11469512
FGA	4q31.3	-0.0968	0.058725	0.114728447
MRPL51	12p13.31	-0.09679	0.058757	0.114779735
DRAIC	15q23	-0.09678	0.058791	0.114825762
ZNF740	12q13.13	-0.09678	0.058792	0.114825762
ZGLP1	19p13.2	-0.09677	0.058815	0.114859821
HUWE1	Xp11.22	-0.09677	0.058823	0.114864077
EDA2R	Xq12	-0.09675	0.058854	0.114906663
MAP4K4	2q11.2	-0.09675	0.05886	0.114906663
FOXN2	2p16.3	-0.09675	0.058862	0.114906663
COLGALT2	1q25.3	0.096746	0.058876	0.11491187
ORAI1	12q24.31	-0.09675	0.058876	0.11491187
CEP83-DT	12q22	-0.09674	0.05889	0.114917082
APEX1	14q11.2	-0.09674	0.05889	0.114917082

DNMT3L	21q22.3	-0.09674	0.058902	0.114928236
SDC3	1p35.2	-0.09673	0.05892	0.114952116
MIR1-1HG-AS1	20q13.33	-0.09672	0.058953	0.115006395
NCF1	7q11.23	0.096706	0.05898	0.11504683
SDHAF1	19q13.12	-0.09668	0.059054	0.115180475
MRPL14	6p21.1	-0.09667	0.059088	0.115235646
CENPU	4q35.1	0.096649	0.059132	0.115292137
DPP10	2q14.1	-0.09665	0.059134	0.115292137
RPSAP9	9q21.13	-0.09665	0.059134	0.115292137
DCLRE1C	10p13	-0.09664	0.059145	0.115296868
C1RL-AS1	12p13.31	-0.09664	0.059148	0.115296868
RBKS	2p23.2	-0.09664	0.05916	0.115306383
CYB5R2	11p15.4	0.096636	0.059166	0.115306383
SLC7A8	14q11.2	-0.09663	0.05917	0.115306383
WDR62	19q13.12	0.096619	0.059211	0.115374892
TAB1	22q13.1	-0.09661	0.059224	0.115388036
BRPF3	6p21.31	0.096592	0.059282	0.115489835
GPR75	2p16.2	-0.09659	0.059292	0.115497974
SAPCD1	6p21.33	-0.09657	0.059347	0.115594884
SMAD9	13q13.3	0.096534	0.059434	0.115752345
FBXL22	15q22.31	-0.09652	0.059468	0.115807732
PCLAF	15q22.31	0.096515	0.059486	0.115832024
AIMP2	7p22.1	-0.0965	0.059534	0.11591301
ZNF425	7q36.1	-0.09648	0.059577	0.11598567
TPRXL	3p25.1	0.09647	0.059606	0.116030264
MAP7D1	1p34.3	-0.09647	0.059613	0.116032676
HOXB4	17q21.32	0.096439	0.059688	0.116168333
MAGED1	Xp11.22	-0.09644	0.059695	0.116170409
CD1C	1q23.1	0.096425	0.059723	0.116214195
LINC01119	2p21	-0.09642	0.059747	0.116248764
LDB2	4p15.32	-0.0964	0.059784	0.116301281
KCNJ2	17q24.3	0.096402	0.059785	0.116301281
IER3	6p21.33	0.096389	0.05982	0.116356725
FN3KRP	17q25.3	-0.09639	0.059825	0.116356725
SPC25	2q24.3	-0.09638	0.059848	0.11638416
MSANTD3	9q31.1	-0.09638	0.059852	0.11638416
TTC9	14q24.2	0.096375	0.059857	0.11638416
OGG1	3p25.3	-0.09637	0.059865	0.116388474
SNAP25	20p12.2	-0.09637	0.059875	0.11639628
SOX21	13q32.1	-0.09637	0.059881	0.116397152
GLRA4	Xq22.2	0.096341	0.059947	0.116514018
TCTN2	12q24.31	-0.09631	0.060035	0.11667367
PATE3	11q24.2	-0.09623	0.060257	0.117094539
ACAP1	17p13.1	0.09622	0.060272	0.117112074
C9ORF40	9q21.13	-0.09622	0.06028	0.117115284
EBNA1BP2	1p34.2	-0.0962	0.060325	0.117185458
WWTR1	3q25.1	-0.0962	0.060331	0.117185458
ZNF496	1q44	-0.0962	0.060334	0.117185458
P2RY13	3q25.1	0.096184	0.060369	0.117243629
ITGB5	3q21.2	-0.09618	0.060392	0.117276013
PHTF1	1p13.2	-0.09617	0.060417	0.117314016
GABBR2	9q22.33	-0.09615	0.060447	0.117359529
KLK15	19q13.33	0.096131	0.060512	0.117467401
RGPD3	2q12.2	0.09613	0.060514	0.117467401
ARHGEF7	13q34	-0.0961	0.060592	0.117602924
PDE6D	2q37.1	-0.0961	0.060597	0.117602924
IFIH1	2q24.2	0.096097	0.060601	0.117602924
LINC01554	5q15	0.096085	0.060635	0.117656188

UXT-AS1	Xp11.23	-0.09607	0.060682	0.117735235
AFF2	Xq28	0.096065	0.060687	0.117735235
AKT1S1	19q13.33	0.096049	0.060732	0.117811649
CELA1	12q13.13	0.096033	0.060774	0.1178814
CCDC83	11q14.1-q14.2	0.096016	0.060822	0.117961738
LPAR1	9q31.3	0.095965	0.060958	0.11820795
PODNL1	19p13.12	-0.09596	0.06096	0.11820795
ZFP2	5q35.3	0.09593	0.061053	0.118375537
ABI3	17q21.32	0.09592	0.061081	0.118418935
SNORA40	11q21	-0.09591	0.061103	0.118450905
PCDHA11	5q31.3	-0.09591	0.061112	0.118455367
FASLG	1q24.3	0.095875	0.061203	0.11862116
HPYR1	8q24.22	0.095871	0.061213	0.118628531
DEPDC7	11p13	-0.09586	0.061251	0.118690907
CD200R1	3q13.2	0.095854	0.061259	0.118695973
RASA3	13q34	0.095842	0.061291	0.118746111
HIST1H1C	6p22.2	0.095834	0.061314	0.118778821
GRIN2B	12p13.1	-0.09583	0.06132	0.118778849
ZNF318	6p21.1	0.095817	0.061361	0.118846531
PRRC2C	1q24.3	0.095811	0.061377	0.118865654
FLJ12825	12q13.13	0.095806	0.06139	0.118879289
PLAU	10q22.2	-0.0958	0.06141	0.118907312
FST	5q11.2	-0.09578	0.061447	0.118967558
ICE2	15q22.2	-0.09577	0.06149	0.11903978
TENM3	4q34.3-q35.1	-0.09576	0.061508	0.119062876
MMP2	16q12.2	-0.09574	0.061573	0.119176911
GJA4	1p34.3	-0.09573	0.061591	0.119199486
CCR4	3p22.3	0.095716	0.061635	0.119274394
ESYT1	12q13.2	0.095687	0.061715	0.119417552
SPTBN4	19q13.2	0.095659	0.061791	0.119552493
IRF1	5q31.1	0.095649	0.061819	0.119594905
FBXO46	19q13.32	-0.09563	0.061864	0.119671118
APOL4	22q12.3	0.095622	0.061891	0.11971087
RWDD4	4q35.1	0.095611	0.061922	0.119759759
POLR3K	16p13.3	-0.09558	0.061994	0.119887426
ZCCHC10	5q31.1	0.095569	0.062036	0.119956932
USP3	15q22.31	0.095555	0.062077	0.120024184
ARHGEF4	2q21.1	-0.09555	0.062095	0.120048026
KIAA1147	7q34	-0.09554	0.062107	0.12006044
CHRNA10	11p15.4	-0.09552	0.062172	0.120173488
ERP44	9q31.1	0.095507	0.062207	0.120230536
MET	7q31.2	-0.09548	0.062278	0.120355163
FAF2	5q35.2	0.09547	0.062311	0.12040655
LOC400710	19q13.33	0.095463	0.062329	0.120420952
GRAPL	17p11.2	-0.09546	0.06233	0.120420952
VWA8	13q14.11	-0.09545	0.062354	0.120455315
ARL9	4q12	-0.09544	0.062391	0.120515503
FRMD6	14q22.1	-0.09542	0.062453	0.120623583
SYCE2	19p13.13	0.0954	0.062502	0.120705942
LTA	6p21.33	0.095397	0.06251	0.120711083
IPO7	11p15.4	-0.09539	0.062521	0.120719507
TMEM19	12q21.1	-0.09539	0.06253	0.120725089
RPA4	Xq21.33	-0.09537	0.062588	0.120819694
ACTA1	1q42.13	-0.09537	0.062591	0.120819694
RARS	5q34	0.095345	0.062654	0.120930247
PCDHGA4	5q31.3	-0.09533	0.0627	0.121006765
KCNH7	2q24.2	-0.09532	0.062712	0.12101931
TMEM200C	18p11.31	-0.09532	0.06273	0.121042844



CROCC	1p36.13	-0.09529	0.062794	0.121153939
KIAA0232	4p16.1	0.095282	0.06283	0.121211353
TLR8	Xp22.2	0.095259	0.062893	0.121322095
HIST1H4K	6p22.1	-0.09524	0.062939	0.121398875
ZDHHHC6	10q25.2	-0.09522	0.062989	0.121484063
BTBD11	12q23.3	-0.09521	0.063034	0.121557758
LINC00938	12q12	-0.0952	0.063065	0.121606085
TUBA4A	2q35	-0.09518	0.063119	0.121699479
OR13A1	10q11.21	0.095172	0.063133	0.121714282
SIPA1L1	14q24.2	0.095161	0.063165	0.121763867
EIF3D	22q12.3	-0.09514	0.063233	0.121883959
OR1J2	9q33.2	-0.09513	0.063251	0.121906682
PRSS8	16p11.2	0.095125	0.063265	0.121920654
LCP2	5q35.1	0.095118	0.063285	0.121948262
EMCN	4q24	-0.0951	0.063337	0.12203723
IRF5	7q32.1	-0.09508	0.063393	0.122118975
EPPIN	20q13.12	-0.09508	0.063393	0.122118975
LYL1	19p13.13	-0.09508	0.063398	0.122118975
WDR61	15q25.1	-0.09507	0.063408	0.122125765
PATL2	15q21.1	0.09507	0.063419	0.122136639
ASB6	9q34.11	-0.09506	0.063441	0.122167156
DPYSL4	10q26.3	-0.09506	0.063454	0.122180639
FOXI3	2p11.2	-0.09504	0.063513	0.122280884
MSX2	5q35.2	-0.09503	0.063544	0.12233015
EIF4A2	3q27.3	-0.09501	0.063578	0.122383359
NF1	17q11.2	-0.09498	0.063668	0.122545739
ZNF749	19q13.43	-0.09495	0.063765	0.12271992
NCDN	1p34.3	-0.09492	0.063831	0.122834933
DCP1B	12p13.33	-0.09491	0.063854	0.122867359
RET	10q11.21	0.094895	0.06391	0.122956689
NOTCH2	1p12	0.094894	0.063913	0.122956689
PIR	Xp22.2	-0.09489	0.063933	0.122983316
L2HGDH	14q21.3	0.094882	0.063946	0.122997133
PRAG1	8p23.1	0.094877	0.063961	0.123014446
FBXL18	7p22.1	-0.09487	0.063981	0.123039918
NDUFA6	22q13.2	0.094857	0.064016	0.123095701
ZNF468	19q13.41	0.09484	0.064064	0.12317716
LOC90784	2p11.2	0.094818	0.064125	0.123283169
LUC7L2	7q34	-0.09481	0.064147	0.123312187
GOLGA8F	15q13.1	-0.09479	0.064209	0.123419529
TNMD	Xq22.1	-0.09478	0.064244	0.12346703
NUDT3	6p21.31	-0.09478	0.064246	0.12346703
STRIP1	1p13.3	-0.09477	0.064265	0.123491407
PAX2	10q24.31	0.094766	0.064272	0.123494317
C21ORF62-AS1	21q22.11	-0.09476	0.064283	0.123503461
ZBTB25	14q23.3	0.094747	0.064327	0.123575085
PWWP3A	19p13.3	-0.09473	0.064372	0.123650943
STK19	6p21.33	-0.09471	0.06443	0.123750247
RNF220	1p34.1	-0.0947	0.064448	0.123773498
SNORA57	11q12.3	-0.0947	0.064474	0.123810272
TMEM203	9q34.3	-0.09469	0.064484	0.123817668
PCED1B-AS1	12q13.11	0.09466	0.064574	0.123979083
NSUN7	4p14	0.094633	0.064651	0.124115073
TAF1	Xq13.1	-0.09463	0.06466	0.124119602
HPS3	3q24	-0.09462	0.064679	0.124145254
ALCAM	3q13.11	0.094609	0.064717	0.124195397
CPQ	8q22.1	-0.09461	0.064718	0.124195397
TRIM46	1q22	-0.09461	0.064726	0.124199315

MYH10	17p13.1	-0.0946	0.064733	0.124200943
SPDYE8P	7q11.23	-0.0946	0.064754	0.124228958
SMCR5	-	0.09458	0.0648	0.124295573
RPS24	10q22.3	-0.09458	0.064801	0.124295573
EPHA6	3q11.2	-0.09458	0.064812	0.124304811
QTRT2	3q13.31	-0.09456	0.064869	0.124401556
ARHGAP45	19p13.3	-0.09454	0.064917	0.124469878
BCKDHB	6q14.1	0.094537	0.064922	0.124469878
CCT2	12q15	-0.09454	0.064923	0.124469878
CYP4F35P	18p11.21	0.094531	0.064939	0.12447897
GPR89A	1q21.1	-0.09453	0.06494	0.12447897
SIK2	11q23.1	0.094528	0.064948	0.124480858
SPRN	10q26.3	-0.09453	0.064955	0.124480858
PLIN4	19p13.3	-0.09452	0.06496	0.124480858
OR10A6	11p15.4	-0.09451	0.064999	0.124538174
ADAMTS12	5p13.3-p13.2	-0.09451	0.065002	0.124538174
MIR31HG	9p21.3	0.094505	0.065015	0.124550537
SNRPD3	22q11.23	-0.0945	0.065025	0.124559043
FABP6	5q33.3	-0.09447	0.06512	0.124719823
GNG3	11q12.3	-0.09447	0.065123	0.124719823
LAMA3	18q11.2	0.094465	0.065128	0.124719823
NDFIP1	5q31.3	0.094462	0.065137	0.124724382
PKIA	8q21.13	-0.09445	0.065174	0.124783118
HLA-DPB2	6p21.32	0.094418	0.065263	0.124942043
GMPR	6p22.3	0.094399	0.065317	0.125033916
ACY3	11q13.2	0.09439	0.065342	0.125069162
TSG1	6q16.1	-0.09439	0.065348	0.125069979
CLEC16A	16p13.13	0.094374	0.065387	0.125132594
MAN2A2	15q26.1	-0.09436	0.065421	0.125166352
MYCN	2p24.3	-0.09436	0.065423	0.125166352
UCP3	11q13.4	-0.09436	0.065424	0.125166352
VPS35L	16p12.3	0.094354	0.065445	0.125187189
CCDC32	15q15.1	-0.09435	0.065453	0.125187189
ASPM	1q31.3	0.094351	0.065453	0.125187189
RARB	3p24.2	-0.09433	0.065519	0.125300443
GPATCH8	17q21.31	-0.09432	0.06553	0.125309748
FUOM	10q26.3	0.09432	0.065545	0.125323147
STXBP6	14q12	0.094317	0.065553	0.125323147
SPESP1	15q23	-0.09432	0.065556	0.125323147
HSPA9	5q31.2	0.094308	0.065579	0.125355257
SIGMAR1	9p13.3	-0.0943	0.065614	0.125410677
ZNF835	19q13.43	-0.09429	0.065626	0.125421661
KCNK2	1q41	-0.09429	0.065644	0.125438627
AKAP6	14q12	-0.09428	0.065647	0.125438627
TAF5	10q24.33	0.09427	0.065688	0.125503961
ZNF205-AS1	16p13.3	0.094268	0.065694	0.125503961
GLS2	12q13.3	-0.09426	0.065712	0.125525735
CXORF65	Xq13.1	-0.09425	0.065738	0.125562137
NDUFS8	11q13.2	-0.09425	0.065743	0.125562137
SLMAP	3p14.3	0.09422	0.06583	0.125715919
SLC24A1	15q22.31	-0.09421	0.065846	0.125734733
SF3A2	19p13.3	-0.09421	0.065867	0.125761843
STARD7	2q11.2	-0.0942	0.065894	0.125800809
IFT80	3q25.33	-0.09416	0.066018	0.126023503
ZSCAN5A	19q13.43	0.094154	0.066023	0.126023503
CAPZA3	12p12.3	0.094149	0.066035	0.126034281
PGAP3	17q12	-0.09415	0.066046	0.126044584
TERF1	8q21.11	-0.09414	0.066056	0.126049047

MCEMP1	19p13.2	-0.09414	0.066061	0.126049047
CALCR	7q21.3	-0.09414	0.066068	0.126049428
ZSCAN22	19q13.43	0.094133	0.066081	0.12606302
NAPSA	19q13.33	-0.09412	0.066114	0.12611422
DCT	13q32.1	-0.09412	0.066126	0.126123603
C1R	12p13.31	-0.09408	0.066245	0.126339432
CD80	3q13.33	0.094072	0.066259	0.126354612
KAT5	11q13.1	-0.09407	0.066273	0.126367696
ATCAY	19p13.3	-0.09404	0.066353	0.126498297
PRPF4	9q32	-0.09404	0.066354	0.126498297
FNDC7	1p13.3	-0.09402	0.06642	0.126613116
PIAS3	1q21.1	0.094008	0.066445	0.126648065
ZNF354B	5q35.3	-0.09397	0.06655	0.126836279
LINC00922	16q21	-0.09397	0.066568	0.126857697
CHRNA5	15q25.1	0.093958	0.066589	0.126887296
GDE1	16p12.3	-0.0939	0.066754	0.127177222
RRM2	2p25.1	0.093901	0.066754	0.127177222
LDLRAD1	1p32.3	0.09388	0.066817	0.127284802
PACSIN1	6p21.31	0.093844	0.066923	0.127474895
SPRTN	1q42.2	-0.09383	0.066951	0.127515437
SPATA7	14q31.3	-0.09381	0.067018	0.12763153
CSMD1	8p23.2	0.093805	0.067035	0.127651022
SIL1	5q31.2	0.093796	0.067063	0.127692383
RNF32	7q36.3	-0.09378	0.067115	0.127778603
AP4S1	14q12	-0.09377	0.067137	0.127809597
GCLM	1p22.1	0.093761	0.067165	0.127850285
ST3GAL5	2p11.2	0.093738	0.067233	0.127958112
SYNE2	14q23.2	0.093735	0.067239	0.127958112
SENP2	3q27.2	-0.09373	0.067242	0.127958112
TRIM78P	11p15	-0.09373	0.067247	0.127958112
ACADL	2q34	0.093724	0.067274	0.127997111
CDHR4	3p21.31	0.093714	0.067303	0.128039936
DAAM2	6p21.2	-0.09369	0.067372	0.128159268
CHTF18	16p13.3	-0.09365	0.067488	0.128367309
DENND2C	1p13.2	-0.09365	0.067498	0.128374385
SSX2IP	1p22.3	-0.09364	0.067508	0.128381462
GDPD4	11q13.5	-0.09363	0.067552	0.128452808
SLC26A7	8q21.3	-0.09362	0.06759	0.128512053
TMPRSS11D	4q13.2	0.093612	0.067602	0.128523549
ZFPM2	8q23.1	-0.09361	0.067616	0.128537498
EFHD2	1p36.21	0.093601	0.067636	0.128562666
KLHL40	3p22.1	-0.0936	0.067646	0.12857078
YIPF3	6p21.1	0.093589	0.06767	0.128603367
HAS3	16q22.1	0.093572	0.067719	0.128682392
CPT1A	11q13.3	0.093571	0.067724	0.128682392
PHKB	16q12.1	0.093568	0.067733	0.128682392
SNAP47	1q42.13	-0.09357	0.067737	0.128682392
YY1AP1	1q22	0.093559	0.067757	0.12870879
PITPNM1	11q13.2	0.093557	0.067765	0.128711033
PMM2	16p13.2	0.093552	0.067778	0.128724192
GSTA2	6p12.2	0.093537	0.067823	0.128796202
MAGEB18	Xp21.3	-0.09352	0.067876	0.128875376
SGCG	13q12.12	-0.09352	0.067877	0.128875376
STOML2	9p13.3	-0.0935	0.067925	0.128953042
SCPEP1	17q22	-0.0935	0.06794	0.128971026
PTPRZ1	7q31.32	-0.09348	0.068	0.129072529
MRPS18A	6p21.1	0.093455	0.068067	0.129187191
MTFR2	6q23.3	-0.09344	0.068099	0.129234246

SORT1	1p13.3 1p21.3-p13.1	0.09344	0.06811	0.129243786
CDH6	5p13.3	-0.09342	0.068166	0.129338633
PCDHB6	5q31.3	-0.09341	0.068186	0.129362811
HPCAL4	1p34.2	-0.09336	0.06834	0.129632052
RIMBP3C	22q11.21	0.093362	0.068341	0.129632052
CACNG1	17q24.2	-0.09332	0.068476	0.129871551
FCF1	14q24.3	-0.09331	0.068488	0.129871551
CTRB2	16q23.1	-0.09331	0.068495	0.129871551
C17ORF64	17q23.2	0.093309	0.068498	0.129871551
ARHGEF26	3q25.2	0.093307	0.068505	0.129871551
CPNE4	3q22.1	0.093307	0.068506	0.129871551
MED24	17q21.1	-0.09329	0.068559	0.129949248
PHF12	17q11.2	-0.09329	0.06856	0.129949248
ZACN	17q25.1	-0.09328	0.068599	0.13001235
AVIL	12q14.1	-0.09327	0.068622	0.130033931
TNRC6C	17q25.3	-0.09327	0.068624	0.130033931
PHPT1	9q34.3	-0.09325	0.068667	0.130104341
SF3B1	2q33.1	-0.09324	0.068698	0.130149222
PSME2	14q12	0.093237	0.068714	0.130157459
GTPBP10	7q21.13	-0.09324	0.068715	0.130157459
ZNF428	19q13.31	-0.09321	0.068793	0.130293681
ARHGEF5	7q35	0.093207	0.068802	0.130298412
FYB2	1p32.2	0.093196	0.068838	0.130352601
BCOR	Xp11.4	-0.09317	0.068925	0.130505328
NRCAM	7q31.1	-0.09314	0.06899	0.130616205
GPRC5C	17q25.1	0.093134	0.069021	0.130663665
ATP1A2	1q23.2	-0.09313	0.069047	0.130699133
RPL15	3p24.2	-0.09311	0.069092	0.13077206
TMEM120A	7q11.23	-0.09308	0.069194	0.130954028
SLC35G1	10q23.33	0.093063	0.069235	0.131018709
SLC38A1	12q13.11	0.093047	0.069284	0.131098102
WNT8A	5q31.2	-0.09303	0.069348	0.131207594
CNR2	1p36.11	0.093017	0.069374	0.131244049
CLCN6	1p36.22	-0.09299	0.069449	0.131373283
SUCLA2	13q14.2	-0.09299	0.069469	0.131400109
RPL11	1p36.11	-0.09297	0.069504	0.131453922
MT1X	16q13	0.09293	0.069634	0.13168699
FAM228A	2p23.3	-0.09292	0.069666	0.131733786
VGF	7q22.1	-0.09288	0.069787	0.13195099
SNX4	3q21.2	0.092848	0.069883	0.132120706
LRRC45	17q25.3	-0.09283	0.069936	0.132206783
OR5C1	9q33.2	0.092813	0.069989	0.132295284
POLN	4p16.3	-0.09281	0.070002	0.132306638
LOC285593	5q35.2	-0.0928	0.070027	0.132342586
CRIP2	14q32.33	-0.09279	0.070048	0.132368885
BORCS8-MEF2B	19p13.11	-0.09279	0.070056	0.132371784
ITGA2B	17q21.31	0.09278	0.070088	0.132420689
RADX	Xq22.3	-0.09274	0.070202	0.132622681
CXCL1	4q13.3	0.092739	0.070215	0.132634876
SPTB	14q23.3	0.092733	0.070231	0.132652015
ZNF22	10q11.21	-0.09271	0.070315	0.132798938
NID1	1q42.3	-0.0927	0.070333	0.132819644
ANKMY2	7p21.1	0.092698	0.070339	0.132819644
NUTM2F	9q22.32	-0.0927	0.070346	0.132820546
ZNF658	9q21.11	0.092689	0.070366	0.132845303
BTF3	5q13.2	0.092678	0.070398	0.132892152
LCN15	9q34.3	-0.0926	0.070648	0.133351344
LMTK2	7q21.3	0.092582	0.070691	0.133420934

ZNF792	19q13.11	0.092557	0.070769	0.133547247
XPNPEP3	22q13.2	-0.09256	0.070771	0.133547247
SPOCK3	4q32.3	-0.09254	0.070807	0.133596447
MRPS12	19q13.2	-0.09254	0.070811	0.133596447
LOC100270746	6p22.2	-0.09254	0.070817	0.133596447
LINC01142	1q24.2	-0.09253	0.070849	0.133643486
CFAP43	10q25.1	0.092522	0.070876	0.133681909
CATSPERE	1q44	-0.0925	0.070952	0.133813487
MYH2	17p13.1	-0.09249	0.070986	0.133863303
MRPL2	6p21.1	-0.09247	0.07104	0.133953802
INTS13	12p11.23	-0.09247	0.071049	0.133957375
C22ORF23	22q13.1	-0.09246	0.071067	0.133979623
STAG3	7q22.1	-0.09245	0.071096	0.1340218
FAM95B1	9p11.2	0.092427	0.071167	0.134141984
TSPO2	6p21.1	0.092424	0.071176	0.134147454
CENPA	2p23.3	-0.0924	0.071254	0.134281798
TTLL13P	15q26.1	0.092392	0.071274	0.134306583
CEP131	17q25.3	-0.09238	0.071297	0.13433761
CLPS	6p21.31	0.092377	0.07132	0.134368045
NAT2	8p22	0.092369	0.071346	0.13440402
RBM12B-AS1	8q22.1	-0.09236	0.071368	0.134431915
NCF1B	7q11.23	0.092359	0.071375	0.134433397
COL6A4P2	3q22.1	-0.09234	0.071424	0.134512599
HERC6	4q22.1	0.092327	0.071475	0.134596346
RGPD4	2q12.3	0.092322	0.071489	0.134609873
MYOM2	8p23.3	-0.09231	0.07152	0.134655983
EIF1	17q21.2	-0.0923	0.071559	0.134717108
PTHLH	12p11.22	-0.0923	0.071572	0.134727547
LANCL1	2q34	-0.09229	0.071593	0.134754303
P4HA2	5q31.1	0.092263	0.071672	0.134890512
LRRTM3	10q21.3	0.092235	0.071757	0.135037884
ITIH1	3p21.1	0.092211	0.071832	0.135166586
SIGLEC8	19q13.41	0.092206	0.071849	0.135185909
OR2A7	7q35	0.092184	0.071917	0.135300884
SYCE1	10q26.3	-0.09215	0.072009	0.135462405
ANKRD44	2q33.1	0.092139	0.072057	0.13553904
PECR	2q35	0.092118	0.07212	0.135644499
PNPLA1	6p21.31	-0.09209	0.072204	0.135789678
ACOX3	4p16.1	0.092076	0.07225	0.135864306
COL1A1	17q21.33	-0.09207	0.07227	0.13588646
PPIG	2q31.1	-0.09207	0.072277	0.13588646
ARHGAP27	17q21.31	0.092066	0.072282	0.13588646
STAC3	12q13.3	0.092058	0.072307	0.135920286
CDC7	1p22.1	0.092049	0.072336	0.135961509
CAMSAP3	19p13.2	-0.09205	0.072343	0.135961509
RAB6C	2q21.1	-0.09203	0.072404	0.136064643
NPW	16p13.3	-0.09202	0.072419	0.136079729
PCDHA8	5q31.3	-0.09201	0.07245	0.136125556
JUNB	19p13.13	0.091988	0.072526	0.136254527
FBXO9	6p12.1	-0.09198	0.072564	0.13631366
LHX4	1q25.2	0.091969	0.072585	0.136335026
ADAMTSL3	15q25.2	-0.09197	0.072594	0.136335026
IL17RC	3p25.3 3p25.3-p24.1	0.091965	0.072597	0.136335026
MYH15	3q13.13	0.091963	0.072603	0.136335026
EIF2B5	3q27.1	-0.09195	0.072641	0.136393613
SYNDIG1	20p11.21	-0.09194	0.072685	0.136463499
TMX2	11q12.1	0.091924	0.072726	0.136528417
CFHR4	1q31.3	-0.0919	0.072791	0.136637844

IGSF1	Xq26.1	-0.0919	0.072798	0.136637844
ZNF311	6p22.1	-0.09189	0.072818	0.136661895
PPM1M	3p21.2	-0.09188	0.072857	0.136723695
GALNT14	2p23.1	-0.09187	0.072885	0.136751034
BTBD19	1p34.1	-0.09187	0.072887	0.136751034
RPS6KA3	Xp22.12	0.091871	0.072892	0.136751034
SNAR-A2	19q13.33	-0.09183	0.073019	0.13697565
SPRR1B	1q21.3	0.091815	0.073067	0.137049325
WLS	1p31.3	-0.09181	0.073072	0.137049325
PDXDC2P-NPIPB14P	16q22.1	0.09181	0.073082	0.137055497
CENPB	20p13	-0.09179	0.073131	0.137133914
BICRA	19q13.33	-0.09177	0.073209	0.137266909
HTR2B	2q37.1	-0.09176	0.073236	0.137305414
SLC25A45	11q13.1	0.091716	0.073379	0.13755989
FAM66D	8p23.1	0.091702	0.073422	0.137628782
TFCP2L1	2q14.2	-0.09168	0.073477	0.137706863
SOX17	8q11.23	-0.09168	0.073478	0.137706863
ZNF208	19p12	-0.09168	0.073489	0.137715238
CACNA2D4	12p13.33	-0.09167	0.073517	0.137755472
GRIP2	3p25.1	0.091659	0.073558	0.137818028
TRIM39	6p22.1	-0.09165	0.073591	0.137861262
AHDC1	1p36.11-p35.3	0.091647	0.073594	0.137861262
URM1	9q34.11	-0.09164	0.073613	0.137882737
MFAP1	15q15.3	0.091637	0.073627	0.137887949
GCGR	17q25.3	0.091636	0.073629	0.137887949
HCG26	6p21.33	0.091629	0.073651	0.137915347
PRDM12	9q34.12	-0.09162	0.073684	0.13796476
TLR2	4q31.3	-0.0916	0.07373	0.138038569
RIOX1	14q24.3	-0.09159	0.073777	0.138101734
NYNRIN	14q12	-0.09159	0.073781	0.138101734
LINC00889	Xq26.3	-0.09159	0.073785	0.138101734
NLK	17q11.2	-0.09158	0.0738	0.138116933
NBR2	17q21.31	-0.09158	0.073818	0.138138442
FAM71E2	19q13.42	-0.09156	0.07387	0.138222268
OR2T11	1q44	-0.09154	0.073947	0.138353185
CSF1R	5q32	0.091507	0.074039	0.138506591
FGF11	17p13.1	0.091506	0.074043	0.138506591
C6ORF201	6p25.2	0.09149	0.074094	0.138588855
CCDC97	19q13.2	-0.09147	0.074153	0.138684117
OR6V1	7q34	0.091469	0.074158	0.138684117
GALNT10	5q33.2	0.091456	0.074201	0.138751376
ZNF804B	7q21.13	0.091445	0.074236	0.138803009
FRAT2	10q24.1	0.091433	0.074273	0.138859813
MPHOSPH8	13q12.11	-0.09142	0.074302	0.138900613
POU3F1	1p34.3	-0.09142	0.07431	0.138902543
PDE1C	7p14.3	0.091412	0.07434	0.138946036
LRPPRC	2p21	-0.09139	0.074405	0.139053819
SLC5A5	19p13.11	-0.09136	0.074517	0.13925027
H2AFB1	Xq28	-0.09134	0.074556	0.139310887
PPP2R2B	5q32	-0.09133	0.074594	0.13936904
SERPINB9	6p25.2	0.091325	0.074619	0.139402026
HIST1H3E	6p22.2	0.09132	0.074634	0.139417268
SPRR2C	1q21.3	-0.09131	0.074665	0.139452893
TMEM117	12q12	-0.09131	0.074667	0.139452893
ARSB	5q14.1	0.091307	0.074676	0.139457867
CHKB-CPT1B	22q13.33	-0.0913	0.074713	0.139500538
SCML4	6q21	-0.09129	0.074719	0.139500538
ZFAND5	9q21.13	-0.09129	0.074721	0.139500538

KIRREL2	19q13.12	-0.09129	0.074727	0.139500538
NTRK1	1q23.1	0.091271	0.074789	0.139602061
SLC25A38	3p22.1	-0.09127	0.074802	0.139610905
PNRC1	6q15	-0.09127	0.074807	0.139610905
GOS2	1q32.2	-0.09124	0.074882	0.139738024
FAM157A	3q29	-0.09123	0.074907	0.13976343
KLHL25	15q25.3	0.091234	0.07491	0.13976343
CSAG3	Xq28	-0.09122	0.07494	0.139806528
USP1	1p31.3	0.091218	0.074961	0.139825718
MSTN	2q32.2	-0.09122	0.074964	0.139825718
SECISBP2L	15q21.1	0.091211	0.074984	0.139848999
CCDC36	3p21.31	-0.0912	0.075021	0.139900012
C1ORF131	1q42.2	0.091196	0.075029	0.139900012
SULF2	20q13.12	-0.0912	0.075032	0.139900012
CLPTM1	19q13.32	0.091192	0.075044	0.139910156
CPZ	4p16.1	-0.09119	0.07506	0.13992545
FOXD4L5	9q21.11	0.091166	0.075127	0.140037914
SNORA59B	17p11.2	-0.09116	0.07514	0.140044864
IRX1	5p15.33	-0.09116	0.075145	0.140044864
LINC01144	1p34.1	-0.09112	0.075284	0.140291378
MAP6D1	3q27.1	-0.0911	0.075342	0.140387376
CHAMP1	13q34	-0.09108	0.075388	0.140459537
WDR1	4p16.1	0.09108	0.075402	0.140472293
TMEM189-UBE2V1	20q13.13	0.091078	0.07541	0.140474901
LINC01139	1q43	-0.09104	0.075529	0.140681769
DHRS7B	17p11.2	0.091022	0.075591	0.140785858
DICER1-AS1	14q32.13	-0.09101	0.075621	0.14082839
OR7C1	19p13.12	-0.09101	0.07563	0.140831587
UEVLD	11p15.1	0.091001	0.075657	0.140868186
USH2A	1q41	0.090998	0.075669	0.140877558
SPATA46	1q23.3	0.090992	0.075687	0.140897643
HUS1	7p12.3	-0.09095	0.07582	0.141131885
SCN8A	12q13.13	-0.09092	0.075918	0.141302869
MMP10	11q22.2	0.090916	0.075933	0.141314066
EHMT1	9q34.3	0.090913	0.075941	0.141314066
C14ORF132	14q32.2	-0.09091	0.075946	0.141314066
NUP98	11p15.4	-0.0909	0.075978	0.141360612
CTNS	17p13.2	0.090898	0.075991	0.141372133
AMBN	4q13.3	-0.09089	0.076025	0.1414231
KIAA1191	5q35.2	0.090882	0.076042	0.141440603
DAO	12q24.11	0.090878	0.076057	0.141454979
SELL	1q24.2	0.090873	0.076071	0.141467553
UBQLN1	9q21.32 9q21.2-q21.3	0.090852	0.07614	0.141584273
RAET1K	6q25.1	-0.09085	0.076159	0.141592903
PHB2	12p13.31	0.090846	0.076161	0.141592903
SLC4A7	3p24.1	-0.09084	0.076166	0.141592903
CASTOR1	22q12.2	0.090816	0.076258	0.141740747
ZNF596	8p23.3	0.090815	0.07626	0.141740747
SPAG5	17q11.2	0.090795	0.076324	0.141845931
RPS14	5q33.1	-0.09079	0.076335	0.141854883
CDKN2B-AS1	9p21.3	0.090784	0.076362	0.141878585
GSTM5	1p13.3	-0.09078	0.076362	0.141878585
TMEM159	16p12.3	0.090766	0.076421	0.141974143
CTRL	16q22.1	-0.09076	0.076433	0.141984374
DHRS13	17q11.2	0.090753	0.076461	0.142015346
KIAA0319L	1p34.3	0.090752	0.076464	0.142015346
SFR1	10q25.1	0.090747	0.076483	0.142034576
RETREG1	5p15.1	0.090745	0.076489	0.142034576

CTBP1-DT	4p16.3	0.090725	0.076554	0.142142529
RFX7	15q21.3	-0.09072	0.076584	0.142185378
FBXO33	14q21.1	0.090696	0.076647	0.142288204
ROBO2	3p12.3	-0.09069	0.076675	0.142327144
CFAP65	2q35	0.090631	0.076858	0.142647945
STK32C	10q26.3	-0.09063	0.076862	0.142647945
OR10K1	1q23.1	-0.09062	0.076896	0.14269788
MESP2	15q26.1	0.090593	0.076985	0.142850284
KRTAP4-9	17q21.2	-0.09059	0.077006	0.142875129
CELSR1	22q13.31	-0.09056	0.07709	0.143008142
PIKFYVE	2q34	-0.09056	0.077092	0.143008142
CBX4	17q25.3	-0.09056	0.077105	0.143019768
ACCS	11p11.2	-0.09055	0.077113	0.143020922
DNAJC14	12q13.2	-0.09055	0.077126	0.14303255
KIAA0100	17q11.2	0.090547	0.077135	0.143035016
C17ORF67	17q22	-0.09053	0.077197	0.143137601
CEMIP	15q25.1	-0.09052	0.077216	0.143159122
MYH3	17p13.1	-0.09051	0.077246	0.14320152
FBXO5	6q25.2	-0.09051	0.077257	0.143208604
SCGB3A1	5q35.3	-0.0905	0.077303	0.143281224
FSCN1	7p22.1	0.090482	0.077348	0.143341553
LOC644936	5q14.1	0.090479	0.07736	0.143341553
DNAJC25	9q31.3	0.090478	0.07736	0.143341553
KRT18	12q13.13	0.090477	0.077365	0.143341553
HCFC1R1	16p13.3	-0.09047	0.077378	0.143351709
PWP2	21q22.3	0.090471	0.077385	0.143351709
CACNA2D1	7q21.11	-0.09047	0.077391	0.143351709
ASAH2	10q11.23	0.090444	0.077474	0.143488948
CD300LB	17q25.1	0.090442	0.07748	0.143488948
NAPSB	19q13.33	0.090432	0.077514	0.143530739
STAM	10p12.33	0.090431	0.077517	0.143530739
TMEM106B	7p21.3	-0.09043	0.077525	0.143531907
ASPG	14q32.33	0.090418	0.077558	0.143580732
GYS2	12p12.1	-0.09039	0.077636	0.143710912
WDR45B	17q25.3	0.09037	0.077718	0.143850674
RNF186	1p36.13	0.090322	0.077875	0.144126834
TUSC3	8p22	-0.0903	0.077953	0.144258406
ESYT2	7q36.3	0.090275	0.078031	0.144388754
CYLD	16q12.1	0.090268	0.078053	0.144411918
PPAN-P2RY11	19p13.2	0.090267	0.078058	0.144411918
RAD23A	19p13.13	-0.09026	0.078081	0.144441048
GUCY2C	12p12.3	0.090238	0.078153	0.144560962
CAV3	3p25.3	0.090234	0.078166	0.144571619
HSD17B8	6p21.32	-0.09023	0.078187	0.144597615
TPSD1	16p13.3	0.090207	0.078258	0.14471504
RPRD2	1q21.2	0.090203	0.078269	0.14472276
PIK3C2A	11p15.1	-0.0902	0.078283	0.144735818
SNORA50C	17q23.3	-0.0902	0.078294	0.144741529
STAT5A	17q21.2	0.090193	0.078303	0.144746085
REG1CP	2p12	0.090172	0.078374	0.144864025
JADE2	5q31.1	0.090169	0.078382	0.144864718
HOXB13	17q21.32	0.090141	0.078477	0.145027202
POLRMT	19p13.3	-0.09014	0.078489	0.145035019
TRAPPC13	5q12.3	0.090109	0.078582	0.145193708
NCAM2	21q21.1	-0.0901	0.078601	0.145207271
IL12A	3q25.33	-0.0901	0.078605	0.145207271
AIM2	1q23.1-q23.2	0.0901	0.078611	0.145207271
MAGEB2	Xp21.2	-0.09009	0.078651	0.14526767



HORMAD2	22q12.2	0.090084	0.078666	0.145282876
EHBP1L1	11q13.1	0.090064	0.078732	0.145391535
RDH16	12q13.3	0.090051	0.078775	0.145457615
MPZL1	1q24.2	0.090041	0.078808	0.145497159
SH3TC1	4p16.1	-0.09004	0.078811	0.145497159
ZFAND3	6p21.2	0.090029	0.078849	0.145552722
TXNL4A	18q23	0.089996	0.078961	0.145746368
C1ORF35	1q42.13	-0.08999	0.078987	0.145782078
PRMT5	14q11.2	0.089983	0.079004	0.145791075
GTF2A2	15q22.2	0.089982	0.079007	0.145791075
FAM162B	6q22.1	-0.08998	0.079021	0.145803028
TARSL2	15q26.3	0.089966	0.079058	0.145858533
ENTHD1	22q13.1	-0.08992	0.079206	0.146117695
FMO1	1q24.3	-0.08992	0.079228	0.146145151
HLA-C	6p21.33	0.089901	0.079278	0.146213155
THEG	19p13.3	0.0899	0.079279	0.146213155
IPPK	9q22.31	0.089884	0.079335	0.146302124
DCAF13P3	15q21.2	-0.08988	0.079356	0.146326734
ZAR1	4p11	-0.08983	0.079507	0.146592421
KCNA5	12p13.32	-0.08979	0.079665	0.146869641
FAAP100	17q25.3	-0.08978	0.07968	0.146884481
ARHGEF9	Xq11.1	-0.08976	0.079751	0.147001939
COX7A2L	2p21	-0.08972	0.079882	0.147229206
NUB1	7q36.1	-0.08971	0.07993	0.147304021
ZNF593	1p36.11	-0.08969	0.079988	0.147397622
NPEPPS	17q21.32	0.089682	0.080016	0.147434977
KANK4	1p31.3	-0.08965	0.080109	0.14759435
CRISP3	6p12.3	0.089634	0.080177	0.147705027
IL7R	5p13.2	0.089629	0.080194	0.147723461
B9D2	19q13.2	0.089626	0.080203	0.14772668
HIST1H3G	6p22.2	-0.08962	0.080216	0.147737165
GTF3C4	9q34.13	0.089618	0.08023	0.147749169
HESX1	3p14.3	-0.08955	0.080451	0.148142371
ZNF497	19q13.43	0.089529	0.080532	0.148274229
FOSB	19q13.32	0.089527	0.080538	0.148274229
RPS17	15q25.2	-0.08952	0.080571	0.148314274
SRFBP1	5q23.1	-0.08952	0.080574	0.148314274
APOBEC3F	22q13.1	-0.0895	0.080631	0.148404328
UBA6	4q13.2	0.089485	0.080683	0.148481957
TRAPPC5	19p13.2	-0.08948	0.080689	0.148481957
NPIP5	16p12.2	-0.08948	0.080695	0.148481957
LBR	1q42.12	-0.08947	0.08074	0.148551868
LINC00452	13q34	-0.08946	0.080751	0.148557322
CDR1	Xq27.1	-0.08945	0.080793	0.148620663
CRYZ	1p31.1	0.089411	0.080934	0.148867033
XAF1	17p13.1	0.089405	0.080955	0.148891166
LOC93622	4p16.1	0.089378	0.081046	0.149044992
ITGA7	12q13.2	-0.08937	0.081071	0.149073031
NBPF14	1q21.2	-0.08937	0.081076	0.149073031
TSC22D3	Xq22.3	-0.08936	0.081123	0.149145858
FAM122A	9q21.11	0.089348	0.081148	0.149178109
LOC641367	19p12	-0.08934	0.08116	0.149187405
FLOT2	17q11.2	-0.08933	0.081213	0.149270959
NFAM1	22q13.2	0.089327	0.081221	0.149270959
ERH	14q24.1	-0.08932	0.081246	0.149304615
ATP5MC2	12q13.13	-0.08931	0.081273	0.14933963
ABRAXAS1	4q21.23	-0.0893	0.081315	0.14940308
HNRNPD	4q21.22	-0.08926	0.081435	0.149601852

RIC1	9p24.1	0.089264	0.081438	0.149601852
VDAC3	8p11.21	0.089259	0.081455	0.149619301
PPP1R16A	8q24.3	-0.08925	0.081473	0.149638107
TNF	6p21.33	-0.08922	0.081595	0.149848762
NPY5R	4q32.2	0.089212	0.081615	0.149863656
PABPN1L	16q24.3	0.089211	0.081618	0.149863656
PPP3CB	10q22.2	0.089199	0.08166	0.149927705
NPR2	9p13.3	-0.08919	0.081683	0.149956043
RBM5	3p21.31	-0.08919	0.081694	0.149961305
PPP6R3	11q13.2	-0.08918	0.081721	0.149997796
HIVEP1	6p24.1	0.089164	0.08178	0.150083024
COL5A1	9q34.3	-0.08916	0.081782	0.150083024
RNF126	19p13.3	0.089148	0.081836	0.150167099
CCNF	16p13.3	0.089143	0.081851	0.150180522
PTPN5	11p15.1	-0.08912	0.081919	0.150292411
TRIL	7p14.3	-0.0891	0.081991	0.150411375
TOP3B	22q11.22	-0.0891	0.082016	0.150442505
FAF1	1p32.3	-0.08907	0.082102	0.150586653
ASPA	17p13.2	0.089066	0.082116	0.150598438
SRF	6p21.1	-0.08905	0.082181	0.150703477
CILP	15q22.31	-0.08904	0.082218	0.150757795
GJD2	15q14	-0.08903	0.08224	0.150783919
SPDYE4	17p13.1	0.089027	0.082252	0.150793373
ICAM5	19p13.2	0.089009	0.082313	0.150891398
APOA2	1q23.3	-0.089	0.082337	0.150921158
ADGRG5	16q21	0.088999	0.08235	0.150931534
MACF1	1p34.3	-0.08898	0.082401	0.151010511
CXORF38	Xp11.4	-0.08896	0.082466	0.15111166
CAMK2N2	3q27.1	0.088963	0.082474	0.15111166
SLC2A6	9q34.2	-0.08891	0.08267	0.151462303
TAOK2	16p11.2	0.088891	0.082724	0.151546968
CREM	10p11.21	-0.08888	0.082764	0.151607024
FAM86JP	3q21.2	-0.08884	0.082884	0.151812324
STON2	14q31.1	-0.08882	0.082953	0.151906382
ATP6V1G2	6p21.33	-0.08882	0.082955	0.151906382
GIMAP5	7q36.1	0.088823	0.082958	0.151906382
LIPI	21q11.2	-0.08882	0.082977	0.151926807
ZNF83	19q13.41	-0.08881	0.083004	0.151962255
PTPRS	19p13.3	-0.08878	0.083109	0.152140462
TBL3	16p13.3	-0.08877	0.083132	0.152163446
TMEM236	10p12.33	0.088772	0.083136	0.152163446
ATP5IF1	1p35.3	0.088765	0.083161	0.152194849
BMERB1	16p13.11	-0.08875	0.083218	0.152285322
HLA-DQB2	6p21.32	0.088743	0.08324	0.1523105
EBP	Xp11.23	-0.08869	0.08343	0.152645232
ZNF846	19p13.2	-0.08868	0.083458	0.152682215
ST20-AS1	15q25.1	-0.08866	0.083512	0.152767401
WBP1L	10q24.32	0.088632	0.083627	0.152955802
SRGAP1	12q14.2	0.088631	0.08363	0.152955802
REG3G	2p12	0.088607	0.083714	0.153095013
EFR3B	2p23.3	-0.0886	0.083722	0.153096093
SNORA63	3q27.3	-0.0886	0.083738	0.153109869
GDF6	8q22.1	-0.08859	0.083759	0.153134292
TTC21A	3p22.2	-0.08858	0.083821	0.153233538
TRAPPC10	21q22.3	0.088536	0.083962	0.153477841
SF3B3	16q22.1	-0.08853	0.083986	0.153496822
GK2	4q21.21	0.088529	0.083988	0.153496822
FDCSP	4q13.3 4q13	0.088518	0.084026	0.153552656

CHP2	16p12.2	0.088497	0.084098	0.153671
ERBIN	5q12.3	0.088492	0.084116	0.153689872
NPFF	12q13.13	-0.08849	0.084128	0.153696623
CYB5R4	6q14.2	0.08848	0.084159	0.1537407
LINGO2	9p21.2-p21.1	-0.08847	0.084178	0.15376078
NEAT1	11q13.1	0.088458	0.084237	0.153853842
TBX20	7p14.2	-0.08845	0.084273	0.153905892
ACAN	15q26.1	-0.08843	0.084329	0.153994759
C12ORF4	12p13.32	0.088412	0.084397	0.154105456
GUCA1A	6p21.1	-0.08837	0.084543	0.154336375
TMEM50A	1p36.11	0.08837	0.084547	0.154336375
LOC650293	4p16.1	-0.08837	0.08455	0.154336375
NTN1	17p13.1	0.088368	0.084555	0.154336375
MEIOC	17q21.31	-0.08834	0.084658	0.154511154
HS3ST3B1	17p12	0.088336	0.084669	0.15451603
PROSER3	19q13.12	0.08833	0.084687	0.154535786
C4ORF3	4q26	0.08832	0.084723	0.154573769
ADH1B	4q23	0.08832	0.084723	0.154573769
CALCR1	2q32.1	-0.08831	0.084748	0.154604707
MRPL20-AS1	1p36.33	-0.08831	0.084767	0.15462537
SMG1P3	16p12.2	-0.0883	0.084797	0.154665497
ADRA1B	5q33.3	-0.08829	0.084815	0.154681813
ABCG1	21q22.3	0.088292	0.084821	0.154681813
TEAD3	6p21.31	-0.08829	0.084842	0.154705267
COL12A1	6q13-q14.1	-0.08827	0.084884	0.154767663
SPIC	12q23.2	0.088265	0.084918	0.154815542
COP1	1q25.1-q25.2	-0.08826	0.084928	0.154820158
DSC3	18q12.1	-0.08824	0.085005	0.154936687
ADCK2	7q34	-0.08824	0.085007	0.154936687
ARL4C	2q37.1	-0.08822	0.085075	0.155045107
MARK3	14q32.32-q32.33	0.088205	0.08513	0.155132685
LTK	15q15.1	0.088203	0.08514	0.155133715
F8	Xq28	-0.0882	0.085147	0.155133715
ZBTB20	3q13.31	-0.08815	0.085314	0.155424156
RNF151	16p13.3	-0.08813	0.085388	0.155544822
APBA2	15q13.1	-0.08812	0.085421	0.155590692
TMEM82	1p36.21	0.088112	0.085463	0.15563902
RUFY4	2q35	-0.08811	0.085468	0.15563902
VIPAS39	14q24.3	-0.08811	0.085471	0.15563902
DOLK	9q34.11	-0.0881	0.085489	0.155658392
SNORA12	10q24.31	-0.0881	0.085506	0.155675078
POP1	8q22.2	-0.0881	0.085517	0.155681776
OR6B1	7q35	0.088094	0.085527	0.155685372
KIAA1143	3p21.31	-0.08807	0.085606	0.155815571
TLE5	19p13.3	0.088062	0.08564	0.155862925
NSL1	1q32.3	-0.08802	0.085775	0.156094989
ADAMTS3	4q13.3	-0.08798	0.085942	0.156373502
MYOC	1q24.3	-0.08798	0.085944	0.156373502
CLDN3	7q11.23	-0.08797	0.085978	0.156420873
GAGE1	Xp11.23	-0.08796	0.086019	0.15648071
PHACTR2	6q24.2	-0.08794	0.086094	0.156602862
HTR7	10q23.31	0.087923	0.086139	0.156670336
PDXK	21q22.3	0.087916	0.086162	0.15669794
PON2	7q21.3	-0.0879	0.086216	0.156782013
OR14A16	1q44	0.087892	0.08625	0.156830615
STMN1	1p36.11	-0.08783	0.086461	0.157199252
SLFN5	17q12	0.087825	0.08649	0.157238474
CEACAM4	19q13.2	0.087821	0.086503	0.157247959

TMEM114	16p13.2	-0.0878	0.086578	0.157369161
PCDHGA8	5q31.3	-0.08779	0.086612	0.157417182
GSTA3	6p12.2	-0.08778	0.086654	0.157479631
ZNF131	5p12	-0.08776	0.086715	0.157575664
GH1	17q23.3	0.08776	0.086725	0.15758019
SIGLEC1	20p13	0.087717	0.086879	0.157844794
PNRC2	1p36.11	-0.08771	0.086888	0.15784742
DNAH12	3p14.3	-0.08771	0.086899	0.157852423
MICOS13	19p13.3	-0.0877	0.086932	0.15789854
IGHMBP2	11q13.3	-0.0877	0.086956	0.157921484
BRAP	12q24.12	-0.08769	0.086961	0.157921484
GPAT2	2q11.2	0.087689	0.086978	0.157929571
FLVCR1	1q32.3	-0.08769	0.086981	0.157929571
CPNE8	12q12	-0.08768	0.087013	0.15797317
HYOU1	11q23.3	0.087671	0.087045	0.158018191
TMEM268	9q32	0.087661	0.087081	0.158068875
DDX39A	19p13.12	-0.08765	0.087119	0.158123814
RELN	7q22.1	-0.08762	0.087218	0.158277589
NCAPG	4p15.31	0.087623	0.08722	0.158277589
BPHL	6p25.2	-0.0876	0.087287	0.158384952
TTC39C	18q11.2	-0.0876	0.087317	0.158417126
TRIM41	5q35.3	0.087595	0.08732	0.158417126
FOXE3	1p33	-0.08759	0.087352	0.158459465
DUSP26	8p12	-0.08758	0.087365	0.158468934
RAB9BP1	5q21.2-q21.3	-0.08757	0.087395	0.158508768
OR7C2	19p13.12	0.087567	0.087423	0.158529915
WDR88	19q13.11	-0.08756	0.087429	0.158529915
NNAT	20q11.23	-0.08756	0.08743	0.158529915
LPAR4	Xq21.1	-0.08755	0.087498	0.158638823
FBXO10	9p13.2	-0.08754	0.087536	0.158693262
CAMKK1	17p13.2	0.087526	0.08757	0.158741275
JCAD	10p11.23	-0.08752	0.087606	0.158790717
NUSAP1	15q15.1	0.087511	0.087626	0.158813221
SNX11	17q21.32	-0.0875	0.087678	0.158891235
CYP21A2	6p21.33	-0.08749	0.087685	0.158891235
NRROS	3q29	-0.08748	0.087729	0.158957375
HDAC9	7p21.1	-0.08747	0.087772	0.159018038
HRCT1	9p13.3	0.087469	0.087779	0.159018038
LEKR1	3q25.31	-0.08746	0.087812	0.159063254
HGC6.3	6q27	-0.08744	0.087883	0.159179031
COX5B	2q11.2	-0.08743	0.087905	0.159203536
CDH12	5p14.3	-0.08742	0.087949	0.159268139
FAM216B	13q14.11	0.087405	0.088012	0.159365022
ZSWIM8	10q22.2	0.087403	0.088018	0.159365022
YIPF1	1p32.3	0.087389	0.088068	0.159441638
FABP12	8q21.13	0.08738	0.088101	0.159479489
SMPDL3B	1p35.3	0.087379	0.088108	0.159479489
SLC16A10	6q21	-0.08738	0.088113	0.159479489
PHOSPHO1	17q21.32	-0.08736	0.088171	0.159569294
CITED4	1p34.2 1p35-p34	-0.08735	0.088226	0.159654188
ENHO	9p13.3	0.087338	0.088256	0.159694442
SLC26A1	4p16.3	-0.08733	0.088274	0.159713629
TTC17	11p12-p11.2	-0.08729	0.088414	0.159951443
FOXP4	6p21.1	-0.08728	0.088454	0.159997209
LOC100134868	20p11.1	-0.08728	0.088455	0.159997209
SPRR4	1q21.3	-0.08726	0.088553	0.160159174
SYT14P1	4q13.2	-0.08725	0.088573	0.16017431
ZCCHC8	12q24.31	0.087249	0.088583	0.16017431

WDR47	1p13.3	0.087248	0.088585	0.16017431
GABARAPL3	15q26.1	-0.08723	0.088668	0.160310603
ABRA	8q23.1	-0.08721	0.088715	0.160381103
FRG1	4q35.2	-0.0872	0.088766	0.160458
FOXI1	5q35.1	0.087193	0.088787	0.160481836
DNAL1	14q24.3	0.087189	0.088802	0.16049479
EFEMP1	2p16.1	-0.08714	0.088973	0.160789313
RMND5B	5q35.3	0.08713	0.089018	0.160854796
UNG	12q24.11	-0.08713	0.089026	0.160854796
POMT2	14q24.3	0.087118	0.089063	0.160907599
UBE2W	8q21.11	-0.08711	0.089099	0.160958982
BTN2A2	6p22.2	-0.0871	0.08912	0.160982402
OR10A3	11p15.4	0.087098	0.089139	0.161001208
CRIM1	2p22.2	0.087078	0.089212	0.16110728
GAS5	1q25.1	-0.08708	0.089214	0.16110728
SLC6A17	1p13.3	-0.08707	0.089235	0.161131603
RPS27	1q21.3	-0.08706	0.089263	0.161167127
SIGLEC16	19q13.33	0.087061	0.089274	0.161173733
LINC00957	7p13	0.08705	0.089315	0.16123273
ETFRF1	12p12.1	0.087014	0.089447	0.161456452
QKI	6q26	-0.08701	0.089458	0.161462006
MLIP	6p12.1	0.087007	0.089474	0.161476326
UNC13D	17q25.1	0.086982	0.089566	0.161626654
TP73-AS1	1p36.32	-0.08698	0.089574	0.161626654
ATP5MC3	2q31.1	0.086974	0.089595	0.161650898
LIN7C	11p14.1	0.086945	0.089702	0.161829019
MDK	11p11.2	0.086935	0.089738	0.161875017
GAGE4	Xp11.4-p11.2	-0.08693	0.089744	0.161875017
MT2A	16q13	0.086925	0.089775	0.161916218
MTHFD2L	4q13.3	-0.08692	0.089785	0.16191657
FBP2	9q22.32	-0.08692	0.089791	0.16191657
CCDC134	22q13.2	0.086882	0.089936	0.162163326
FRG2B	10q26.3	-0.08688	0.089957	0.162186424
EHD1	11q13.1	0.086857	0.090029	0.162301308
PGAP1	2q33.1	0.086844	0.090076	0.162371775
HACD4	9p21.3	-0.0868	0.090226	0.162625378
SPTAN1	9q34.11	0.086802	0.090233	0.162625378
ITFG1	16q12.1	0.086799	0.090243	0.162629516
PRCC	1q23.1	0.086797	0.090252	0.162630766
LINC00115	1p36.33	-0.08675	0.090423	0.162923911
BRD7P3	6q22.31	0.086731	0.090499	0.163046588
BRMS1L	14q13.2	-0.08672	0.090526	0.163069387
FILIP1	6q14.1	-0.08672	0.090528	0.163069387
IFT81	12q24.11	-0.08671	0.090561	0.16310049
PPP1R42	8q13.1	0.086714	0.090562	0.16310049
CA4	17q23.1	0.086708	0.090583	0.163123543
RPRD1A	18q12.2	0.086706	0.090592	0.163125768
FXYD5	19q13.12	-0.08665	0.090817	0.16350325
PRAMEF10	1p36.21	0.086645	0.090818	0.16350325
ZFYVE27	10q24.2	0.086589	0.09103	0.163871184
PAWR	12q21.2	0.086552	0.091167	0.164102057
HPS6	10q24.32	0.086543	0.091202	0.164151295
LINC00518	6p24.3	-0.08653	0.091234	0.164192487
PKHD1	6p12.3-p12.2	-0.08653	0.091259	0.164218838
ZNF486	19p12	-0.08653	0.091265	0.164218838
GNLV	2p11.2	0.086524	0.091273	0.164218838
CHIAP2	1p13.2	0.08651	0.091325	0.164298368
LOC100272216	-	0.086502	0.091356	0.164338949

HCRT1	1p35.2	-0.08648	0.091432	0.164461237
C20ORF194	20p13	-0.08647	0.091473	0.164520834
C1QTNF9B	13q12.12	-0.08641	0.091697	0.1649082
RSPRY1	16q13	0.0864	0.091739	0.164969614
ZKSCAN8	6p22.1	-0.0864	0.091755	0.164982542
TLK1	2q31.1	-0.08639	0.091791	0.165025925
HIST1H2BD	6p22.2	-0.08639	0.091796	0.165025925
BSPRY	9q32	0.086379	0.091817	0.165050541
BOLL	2q33.1	-0.08637	0.091852	0.165098106
GINS2	16q24.1	-0.08637	0.091865	0.165105627
GRASP	12q13.13	-0.08636	0.091906	0.165158668
EBF3	10q26.3	-0.08635	0.091911	0.165158668
NELL1	11p15.1	0.086352	0.091919	0.165158668
OCSTAMP	20q13.12	-0.08633	0.092009	0.165306222
ILVBL	19p13.12	-0.08632	0.092023	0.165316502
PIP5K1C	19p13.3	0.086319	0.092047	0.165332173
HDHD3	9q32	0.086318	0.092048	0.165332173
BLCAP	20q11.23	-0.08628	0.092186	0.165564588
FHAD1	1p36.21	0.086278	0.092201	0.165576059
TBL2	7q11.23	-0.08627	0.092241	0.165632982
CCDC148	2q24.1	0.086253	0.092296	0.165716628
PSMB5	14q11.2	-0.08624	0.092348	0.165786052
VIP	6q25.2	-0.08624	0.092351	0.165786052
DNAH1	3p21.1	-0.0862	0.092506	0.166049866
TKT	3p21.1	-0.08619	0.092529	0.166076064
FAM66E	8p23.1	-0.08619	0.092543	0.166086432
SUGT1P1	9p13.3	-0.08617	0.092597	0.166168749
SEC14L2	22q12.2	0.086166	0.092625	0.166203121
FAM71F2	7q32.1	-0.08615	0.092673	0.166275419
VWA2	10q25.3	-0.08615	0.092684	0.166279054
DDX24	14q32.12	0.086139	0.092729	0.16634494
TRMT2A	22q11.21	-0.08608	0.092956	0.166737322
SNX6	14q13.1	0.086071	0.092985	0.166775375
SUPT6H	17q11.2	-0.08607	0.093001	0.166788408
FBN1	15q21.1	-0.08606	0.093035	0.166835304
PRKCSH	19p13.2	-0.08604	0.093086	0.166911666
CDC37L1	9p24.1	0.086031	0.093141	0.166995421
GIPC3	19p13.3	-0.08603	0.093152	0.166999626
C10ORF131	10q24.1	-0.08599	0.093301	0.167252458
SLC17A3	6p22.2	-0.08598	0.093351	0.167327298
CROCCP2	1p36.13	-0.08596	0.093405	0.167408985
OTP	5q14.1	0.085945	0.093467	0.167503832
PIGL	17p11.2	-0.08591	0.093619	0.167752564
FGFR1	8p11.23	-0.0859	0.093622	0.167752564
EIF2AK4	15q15.1	-0.08585	0.093839	0.168126754
GPR12	13q12.13	0.085837	0.093883	0.168189573
MISP3	19p13.12	0.085792	0.094054	0.168480593
SPEN	1p36.21-p36.13	0.085782	0.094093	0.168535261
HEATR3	16q12.1	-0.08578	0.094104	0.168540964
DESI2	1q44	-0.08577	0.094152	0.168611976
SSR2	1q22	0.085764	0.094163	0.168616197
LRCH4	7q22.1	0.085736	0.094269	0.168791206
ZNF639	3q26.33	-0.08572	0.094341	0.168886404
SNAR-F	19q13.33	-0.08572	0.094348	0.168886404
HIST1H4G	6p22.2	-0.08572	0.094348	0.168886404
TSPAN16	19p13.2	-0.08571	0.094358	0.168890383
CNOT8	5q33.2	0.08571	0.094372	0.16890001
PARVA	11p15.3	-0.08571	0.094384	0.168905496

FBXO22-AS1	15q24.2	-0.0857	0.094392	0.168905496
LOC148696	1q32.2	0.08569	0.094447	0.168988049
SNORA74B	5q35.1	-0.08567	0.094511	0.169088678
SNRPA	19q13.2	-0.08565	0.094588	0.1692112
KLRF1	12p13.31	0.085643	0.09463	0.169271268
GRB10	7p12.1	-0.08563	0.094691	0.169364092
FAM227B	15q21.2	0.085594	0.09482	0.16957993
GRIA3	Xq25	-0.08558	0.094862	0.169640672
CYLC1	Xq21.1	-0.08558	0.094888	0.169658257
MRTFA	22q13.1-q13.2	-0.08558	0.094889	0.169658257
DISC2	1q42.2	-0.08556	0.094946	0.169744178
RASGRP4	19q13.2	0.085559	0.094954	0.169744178
BAZ2A	12q13.3	0.085549	0.094996	0.169788603
LINC01559	12p13.1	0.085549	0.094996	0.169788603
NEUROG1	5q31.1	-0.08554	0.095013	0.169805
IMPG2	3q12.3	0.085537	0.095041	0.169829696
CNKSR3	6q25.2	0.085536	0.095044	0.169829696
PLEKHO1	1q21.2	-0.08553	0.09507	0.169860809
FBXO21	12q24.22	-0.08552	0.095089	0.169873756
PIP5K1A	1q21.3	-0.08552	0.095094	0.169873756
SLC15A2	3q13.33	-0.08551	0.095129	0.169921329
TTLL11	9q33.2	-0.08549	0.095211	0.170050992
SPRR2E	1q21.3	-0.08548	0.095253	0.170104511
OLIG3	6q23.3	-0.08548	0.095258	0.170104511
FBXL15	10q24.32	0.085459	0.095344	0.170244387
CBX7	22q13.1	0.085457	0.095353	0.170244387
ERCC4	16p13.12	-0.08543	0.095463	0.17042663
TNFAIP3	6q23.3	-0.08542	0.095477	0.170435378
KLHL24	3q27.1	-0.08542	0.095498	0.170457596
GTPBP3	19p13.11	-0.08542	0.095515	0.170472333
NCOA2	8q13.3	0.085405	0.095556	0.170530478
ALDH3B2	11q13.2	0.085365	0.095709	0.170788728
PLXDC2	10p12.31	0.085357	0.095741	0.170831104
ZWINT	10q21.1	0.085347	0.09578	0.170883112
STAMBPL1	10q23.31	-0.08535	0.095787	0.170883112
RPTOR	17q25.3	-0.08534	0.095802	0.170893378
MAP3K8	10p11.23	-0.08531	0.095906	0.171064136
LGALS1	2p14	-0.08529	0.095999	0.171214003
OR10X1	1q23.1	-0.08525	0.096153	0.17147464
GRK7	3q23	-0.08523	0.096219	0.171576139
CEP78	9q21.2	0.08522	0.096277	0.17166571
C11ORF96	11p11.2	-0.08521	0.096317	0.171712289
BARX1	9q22.32	-0.08521	0.096323	0.171712289
CCDC196	14q23.3	0.085207	0.096329	0.171712289
TDRG1	6p21.2	-0.08518	0.096426	0.171870057
PAX1	20p11.22	-0.08517	0.096476	0.171942647
CLCNKA	1p36.13	-0.08516	0.096503	0.171970946
CDSN	6p21.33	-0.08516	0.096512	0.171970946
RPS3A	4q31.3	-0.08516	0.096517	0.171970946
USP20	9q34.11	-0.08514	0.096595	0.172094276
LOC100128164	3q26.2	0.085133	0.09662	0.172123498
PCDHGA7	5q31.3	-0.08513	0.096639	0.172134271
DLGAP1-AS1	18p11.31	-0.08513	0.096643	0.172134271
C1ORF50	1p34.2	-0.08512	0.096685	0.172182049
UMPS	3q21.2	-0.08512	0.096687	0.172182049
SEMA3F	3p21.31	-0.08511	0.096722	0.172228563
SLC5A8	12q23.1-q23.2	0.0851	0.09675	0.172262119
PIGK	1p31.1	0.085072	0.096859	0.172440838

VGLL4	3p25.3-p25.2	-0.08506	0.096904	0.172507032
MCM3	6p12.2	-0.08506	0.096915	0.172511327
COPZ1	12q13.13	0.085039	0.096987	0.172622858
FRAS1	4q21.21	0.085035	0.097004	0.172627457
C1QL2	2q14.2	-0.08503	0.097007	0.172627457
ABI1	10p12.1	0.085022	0.097055	0.172699214
KATNBL1P6	6q24.3	0.085006	0.097118	0.172795716
OR2T2	1q44	-0.08499	0.097192	0.172896329
NRDC	1p32.3	0.084987	0.097194	0.172896329
UVSSA	4p16.3	0.084985	0.097201	0.172896329
INPP5F	10q26.11	0.084973	0.097249	0.172951601
PIK3CD	1p36.22	0.084972	0.097253	0.172951601
LONP2	16q12.1	0.084971	0.097258	0.172951601
MRPL12	17q25.3	-0.08496	0.097293	0.17299827
OR11H12	14q11.2	-0.08496	0.097306	0.17300635
NEIL2	8p23.1	0.08495	0.09734	0.173052286
BIN3	8p21.3	0.084945	0.097359	0.173070219
CNTFR	9p13.3	0.084931	0.097413	0.173151031
TEKT2	1p34.3	-0.08492	0.097473	0.173242039
HBQ1	16p13.3	-0.0849	0.097553	0.173368272
UBE2Q2P1	15q25.2	-0.08489	0.097574	0.173390313
LMBR1L	12q13.12	-0.08488	0.097604	0.17342804
CXCR2P1	2q35	0.084868	0.097666	0.173512481
SNUPN	15q24.2	-0.08487	0.097668	0.173512481
LINC00111	21q22.3	0.084853	0.097724	0.173595536
SUV39H2	10p13	-0.0848	0.097915	0.173920283
GAS2L3	12q23.1	0.084793	0.097962	0.173988419
CCNB1	5q13.2	0.084775	0.098033	0.174099138
IZUMO1R	11q21	0.084767	0.098064	0.174137954
RNF207	1p36.31	0.084755	0.098115	0.174212716
DAB1	1p32.2	-0.08474	0.098177	0.174300247
PIGX	3q29	-0.08474	0.098182	0.174300247
PDZK1P1	1q21.2	-0.08474	0.09819	0.174300247
CAMK2B	7p13	-0.08473	0.09823	0.174356205
POLR2M	15q21.3	-0.08472	0.098249	0.174369549
SLC26A2	5q32	-0.08472	0.098255	0.174369549
NRDE2	14q32.11	0.084711	0.098288	0.174411935
FBXO40	3q13.33	0.084707	0.098304	0.17442535
HMMR	5q34	0.08469	0.09837	0.174527189
EIF1B	3p22.1	-0.08468	0.098394	0.17455434
PDE12	3p14.3	0.084664	0.098474	0.174674267
KIAA1211L	2q11.2	0.084663	0.098479	0.174674267
NUCKS1	1q32.1	0.084659	0.098497	0.1746908
TUBB4A	19p13.3	0.084653	0.09852	0.174702533
TMEM250	9q34.3	-0.08465	0.098522	0.174702533
SULT1A1	16p11.2	0.084643	0.098561	0.174757873
IFNE	9p21.3	0.084636	0.098587	0.174787576
ST7-OT3	7q31.2	-0.08462	0.098649	0.174864187
SLC35B4	7q33	-0.08462	0.098651	0.174864187
PRICKLE4	6p21.1	0.084619	0.098657	0.174864187
FBXL17	5q21.3	0.084616	0.098667	0.174864187
KCNC1	11p15.1	-0.08461	0.098674	0.174864187
CSPG4	15q24.2	-0.08461	0.098687	0.17487147
IGFLR1	19q13.12	0.084608	0.098698	0.174875822
RNU11	1p35.3	-0.0846	0.098712	0.174885072
CD274	9p24.1	0.084595	0.098752	0.174941659
TAF12	1p35.3	-0.08457	0.098866	0.17512691
STX11	6q24.2	0.084549	0.098937	0.175238157



C12ORF29	12q21.32	-0.08454	0.09896	0.175262372
ARHGAP44	17p12	0.084537	0.098985	0.175291172
RND3	2q23.3	-0.08453	0.099022	0.175342099
PPCDC	15q24.2	0.084496	0.099147	0.175539421
PLEKHD1	14q24.1	0.084495	0.099153	0.175539421
PCF11	11q14.1	-0.08449	0.09916	0.175539421
CHRNA3	15q25.1	-0.08448	0.099193	0.175581766
RUNX1T1	8q21.3	-0.08448	0.099201	0.175581766
KPNA4	3q25.33	-0.08447	0.099245	0.175642765
RYR3	15q13.3-q14	-0.08447	0.09927	0.175668331
EEA1	12q22	-0.08446	0.099277	0.175668331
PHF5A	22q13.2	-0.08446	0.099291	0.175669204
CSKMT	11q12.3	0.084458	0.099303	0.175669204
PIEZO1	16q24.3	-0.08446	0.099303	0.175669204
PARP14	3q21.1	0.084443	0.099361	0.175733495
SNORA72	8q22.2	-0.08444	0.099363	0.175733495
FAM106C	17p11.2	0.084442	0.099366	0.175733495
RPL28	19q13.42	-0.08443	0.099393	0.175755862
F2	11p11.2	-0.08443	0.099396	0.175755862
NOP53	19q13.33	-0.08443	0.099407	0.175759725
GTSE1	22q13.31	0.084418	0.099461	0.175839108
SGTB	5q12.3	-0.0844	0.099524	0.175919624
SPX	12p12.1	-0.0844	0.099527	0.175919624
SNX30	9q32	-0.0844	0.099533	0.175919624
CTSA	20q13.12	-0.0844	0.099549	0.175933196
ZNF483	9q31.3	-0.08437	0.099639	0.176075235
ENOPH1	4q21.22	-0.08436	0.099715	0.176194807
HGSNAT	8p11.21-p11.1	0.084328	0.099825	0.176374052
PRAMEF16	1p36.21	-0.08432	0.099847	0.176396614
STK40	1p34.3	-0.08431	0.099911	0.176494873
EMBP1	1p11.2	-0.0843	0.099926	0.17650614
CSN2	4q13.3	-0.08429	0.099968	0.17656405
SPRR2G	1q21.3	-0.08429	0.09999	0.176586463
LRRC37A2	17q21.31	-0.08427	0.100059	0.176693673
EVC2	4p16.2	-0.08426	0.100089	0.176731809
SIGLEC7	19q13.41	0.084245	0.10016	0.17683575
CSNK2A1	20p13	-0.08424	0.100168	0.17683575
MFSD14B	9q22.32	0.084241	0.100175	0.17683575
N4BP2L1	13q13.1	-0.08423	0.100223	0.176885382
HLA-DRB6	6p21.32	0.084228	0.100227	0.176885382
BPIFB2	20q11.21	0.084228	0.100229	0.176885382
ZNF324B	19q13.43	0.084211	0.100299	0.176991759
CTTN	11q13.3	0.084205	0.100323	0.177019239
JMJD6	17q25.1	-0.08419	0.100374	0.177092886
FER1L5	2q11.2	-0.08419	0.10039	0.17710561
SIKE1	1p13.2	-0.08416	0.100485	0.177258729
CIC	19q13.2	0.08416	0.100502	0.177272377
GPATCH2L	14q24.3	-0.08412	0.100649	0.177515633
GULP1	2q32.1-q32.2	-0.0841	0.100737	0.177655761
CIAO2B	16q22.1	-0.08409	0.100778	0.177712631
FBLL1	5q34	-0.08409	0.100788	0.177714242
ANKIB1	7q21.2	-0.08408	0.100833	0.177778558
KLHL20	1q25.1	0.084068	0.100877	0.177840089
PAK3	Xq23	-0.08404	0.100994	0.178030652
DHRS11	17q12	0.084005	0.101136	0.178264609
MROH2B	5p13.1	0.084001	0.10115	0.178265494
CISH	3p21.2	-0.084	0.101157	0.178265494
EBI3	19p13.3	0.083998	0.101163	0.178265494

RAN	12q24.33	-0.08399	0.101208	0.178328696
NCOR2	12q24.31	-0.08398	0.101237	0.17836561
CNTFR-AS1	9p13.3	0.083974	0.101259	0.178388443
SZT2	1p34.2	0.083968	0.101286	0.178419334
TMC8	17q25.3	0.083951	0.101353	0.178516622
FGF17	8p21.3	-0.08395	0.101359	0.178516622
RAP2A	13q32.1	-0.08395	0.101369	0.178519298
COX14	12q13.12	-0.08393	0.101433	0.17861509
WDR86	7q36.1	-0.08392	0.101476	0.178675155
VPS28	8q24.3	-0.0839	0.101561	0.178809889
PPBP	4q13.3	-0.08389	0.101587	0.178840209
FOXD3	1p31.3	-0.08389	0.101612	0.178868571
PREPL	2p21	-0.08387	0.101705	0.179017039
ZFYVE26	14q24.1	0.083842	0.101802	0.179170465
SLC39A1	1q21.3	-0.08384	0.101827	0.179185004
LOC441455	9q22.33	-0.08384	0.101828	0.179185004
DNAJB3	2q37.1	0.083803	0.101961	0.179403507
TEX37	2p11.2	-0.0838	0.101972	0.179408016
ZNF283	19q13.31	0.083798	0.101982	0.179409305
ZC3H7A	16p13.13	0.08379	0.102012	0.17944564
PRH1	12p13.2	-0.08379	0.102024	0.179451637
PLPPR1	9q31.1	0.083775	0.102075	0.179526238
USP12	13q12.13	-0.08377	0.102097	0.179547581
AVP	20p13	-0.08376	0.102137	0.179602318
C9ORF47	9q22.1	-0.08374	0.102212	0.179719328
PCNP	3q12.3	-0.08372	0.102315	0.179881006
GAGE2C	Xp11.23	-0.08371	0.102327	0.179881006
FGFR3	4p16.3	-0.08371	0.102331	0.179881006
HLA-DPB1	6p21.32	0.083709	0.102347	0.179892809
TRIM42	3q23	-0.08371	0.102358	0.179892809
LRSAM1	9q33.3-q34.11	-0.0837	0.102365	0.179892809
PTPRA	20p13	-0.08369	0.102405	0.17994865
PAOX	10q26.3	0.083689	0.102428	0.179971795
MAST1	19p13.13	-0.08366	0.10253	0.180136695
MRGPRG-AS1	11p15.4	-0.08364	0.102624	0.18028545
CDK19	6q21	-0.08362	0.102717	0.180432601
BSDC1	1p35.1	0.083601	0.102792	0.180546104
FOXK1	7p22.1	-0.0836	0.1028	0.180546104
HCN4	15q24.1	0.083594	0.102818	0.180563433
PARG	10q11.23	-0.08357	0.10293	0.1807438
RABGEF1	7q11.21	-0.08357	0.102939	0.1807438
CLDN5	22q11.21	-0.08356	0.10295	0.18074742
WRN	8p12	0.083539	0.103047	0.180901971
FLG	1q21.3	-0.08351	0.103163	0.181089335
MPG	16p13.3	-0.0835	0.103224	0.181164936
YBX1	1p34.2	-0.0835	0.103224	0.181164936
CNST	1q44	0.083491	0.103247	0.181188192
IDH1	2q34	0.08348	0.103293	0.181253724
SLC23A1	5q31.2	-0.08346	0.103375	0.1813818
FLI1	11q24.3	0.08345	0.103415	0.181436545
OR6C75	12q13.2	0.083447	0.103428	0.181442355
DTWD1	15q21.2	-0.08344	0.103456	0.181471918
ITM2B	13q14.2	0.083439	0.103463	0.181471918
FAM183BP	7p14.1	0.083432	0.10349	0.181504239
HEXD	17q25.3	-0.0834	0.103633	0.181739573
GSC2	22q11.21	-0.08339	0.103652	0.181740803
HSFY1P1	22q11.1	0.083393	0.103652	0.181740803
PCBD1	10q22.1	-0.08339	0.103677	0.181767929

GPS2	17p13.1	0.083384	0.10369	0.1817748
KLHL14	18q12.1	0.083373	0.103738	0.181842684
CCDC28A	6q24.1	0.083366	0.103767	0.181877937
ELOA2	18q21.1	0.083359	0.103796	0.181913713
GAGE2B	Xp11.23	-0.08333	0.103931	0.182134096
SPCS3	4q34.2	0.083321	0.103954	0.182146015
TMEM211	22q11.23	-0.08332	0.103956	0.182146015
SNHG9	16p13.3	-0.08331	0.103996	0.182200368
TMEM192	4q32.3	-0.0833	0.104022	0.182230045
TRIP13	5p15.33	-0.08327	0.104147	0.182432689
DDX42	17q23.3	-0.08327	0.104178	0.182467988
ECI1	16p13.3	0.083265	0.104187	0.182467988
TMEM151B	6p21.1	-0.08326	0.104196	0.182467988
APBB2	4p14-p13	-0.08326	0.104204	0.182467988
LY6K	8q24.3	-0.08321	0.104402	0.182799126
CD86	3q13.33	0.083196	0.104475	0.182911662
NOC4L	12q24.33	-0.08318	0.104562	0.183047042
TAS2R60	7q35	0.083151	0.104662	0.183206319
IGFL2	19q13.32	0.083142	0.104701	0.183259594
FBXO30	6q24.3	-0.08311	0.104821	0.183453635
GNAT1	3p21.31	-0.08311	0.104841	0.183471928
MPHOSPH9	12q24.31	0.083103	0.104866	0.183498994
KLHL22	22q11.21	0.08309	0.104917	0.183573044
SLC25A20	3p21.31	0.083076	0.104979	0.183664509
RERE	1p36.23	-0.08307	0.105021	0.183722791
MAPK8IP3	16p13.3	-0.08306	0.105059	0.183773177
NOM1	7q36.3	-0.08305	0.105105	0.183837814
EID2	19q13.2	-0.08303	0.105161	0.183919879
DUSP5P1	1q42.13	0.083029	0.105174	0.183925622
CSF1	1p13.3	0.083026	0.105189	0.183936828
MED8	1p34.2	0.083018	0.105219	0.183973008
METTL11B	1q24.2	-0.083	0.105289	0.184078486
PTPN21	14q31.3	0.082985	0.105362	0.184189537
ZNF268	12q24.33	-0.08298	0.105373	0.184194027
SLC25A2	5q31.3	-0.08298	0.105399	0.184223019
EXD2	14q24.1	0.082948	0.105518	0.184413953
FLJ13224	12p11.21	-0.08294	0.105552	0.184458596
SAFB	19p13.3	-0.08294	0.105565	0.184461602
PSTK	10q26.13	-0.08293	0.105572	0.184461602
ZNF41	Xp11.3	-0.08293	0.105591	0.184478061
NRG3	10q23.1	-0.08293	0.105612	0.184499005
MCM5	22q12.3	0.082909	0.105682	0.184604541
CASS4	20q13.31	0.0829	0.10572	0.184655833
APP	21q21.3	0.082894	0.105742	0.184677101
THAP1	8p11.21	-0.08285	0.105946	0.185002313
SOCS3	17q25.3	0.082846	0.105947	0.185002313
UBC	12q24.31	-0.08284	0.105963	0.185014798
SLC33A1	3q25.31	0.082836	0.105989	0.185044774
FAM86B1	8p23.1	0.082832	0.106008	0.185060442
OR10A5	11p15.4	-0.08281	0.106089	0.185186551
APOC1	19q13.32	-0.0828	0.106126	0.185234945
RRM1	11p15.4	0.082784	0.10621	0.185365223
PLG	6q26	0.082776	0.106243	0.185407168
ICE1	5p15.32	-0.08277	0.106261	0.185422076
MARK1	1q41	-0.08275	0.106363	0.185584316
SNORA74A	5q31.2	-0.08272	0.106461	0.185738417
KNDC1	10q26.3	-0.08272	0.106488	0.185769437
XYLT2	17q21.33	-0.0827	0.106556	0.185872187

TNIP2	4p16.3	0.082692	0.1066	0.185932578
TBC1D9B	5q35.3	0.082685	0.106627	0.185964257
TIRAP	11q24.2	0.082681	0.106648	0.185983937
HCN3	1q22	-0.08268	0.106669	0.185989087
LACTB2	8q13.3	0.082675	0.10667	0.185989087
INCENP	11q12.3	0.082625	0.106885	0.186348205
VEZT	12q22	0.08257	0.107118	0.186723382
SPATA4	4q34.2	-0.08257	0.107119	0.186723382
LONRF2	2q11.2	-0.08257	0.107129	0.186725746
CD276	15q24.1	-0.08255	0.10722	0.186867246
C9ORF72	9p21.2	0.082543	0.107233	0.186873375
RRN3P3	16p12.2	-0.08251	0.107369	0.187094304
KTN1	14q22.3	0.082496	0.107435	0.187193475
LIG4	13q33.3	-0.08247	0.107552	0.187364648
RNF111	15q22.1-q22.2	0.082469	0.107552	0.187364648
SREBF2	22q13.2	0.082455	0.107608	0.187446265
PHF24	9p13.3	-0.08244	0.107679	0.187552793
LINC00593	15q23	0.082435	0.107698	0.187569701
DDR2	1q23.3	-0.08242	0.107752	0.187647884
PIANP	12p13.31	-0.08241	0.107787	0.187692627
DUSP7	3p21.2	0.082404	0.10783	0.187751007
NUAK1	12q23.3	-0.08239	0.10788	0.187822328
CENPX	17q25.3	-0.08239	0.107898	0.18783655
TOMM40	19q13.32	-0.08236	0.10801	0.188014841
BOLA2	16p11.2	-0.08236	0.108032	0.188037117
MAS1	6q25.3	-0.08235	0.108057	0.188063801
HDGFL1	6p22.3	-0.08233	0.108152	0.188214111
HPCA	1p35.1	0.082289	0.108322	0.188492046
MPC2	1q24.2	0.082279	0.108366	0.188540784
LINC00882	3q13.12	-0.08228	0.108368	0.188540784
ECT2L	6q24.1	-0.08227	0.108418	0.188610573
SMG1P1	16p12.2	-0.08226	0.108469	0.188683073
SORBS2	4q35.1	-0.08223	0.108578	0.188855504
TAAR6	6q23.2	-0.08221	0.108656	0.188975528
WFDC5	20q13.12	0.082199	0.108711	0.18905395
IL27RA	19p13.12	0.082187	0.108762	0.189127721
NAGS	17q21.31	0.082164	0.10886	0.189281048
CYP26A1	10q23.33	-0.08216	0.108891	0.189317944
SBSPON	8q21.11	0.08214	0.108965	0.189430969
SMYD1	2p11.2	-0.08209	0.109165	0.189759146
SEC31B	10q24.31	0.082092	0.109173	0.189759146
PLXND1	3q22.1	0.082078	0.109233	0.189819666
EXOC3-AS1	5p15.33	-0.08208	0.109233	0.189819666
OR2AG2	11p15.4	-0.08208	0.109241	0.189819666
COX8A	11q13.1	0.082075	0.109246	0.189819666
AKR1B1	7q33	-0.08205	0.109337	0.189962055
MROH5	8q24.3	-0.08205	0.109355	0.189977015
EIF2S3	Xp22.11	-0.08205	0.109365	0.189977744
ISOC1	5q23.3	0.082028	0.109449	0.19010724
UBE3C	7q36.3	0.082016	0.109502	0.190169994
PFAS	17p13.1	0.082016	0.109504	0.190169994
IFITM2	11p15.5	-0.08201	0.109539	0.19021355
MS4A5	11q12.2	0.081999	0.109575	0.190259316
AP5S1	20p13	-0.08199	0.109602	0.190290942
LINC00923	15q26.2	0.081989	0.109619	0.190302699
SLC36A1	5q33.1	0.081987	0.109629	0.190305032
POTEF	2q21.1	-0.08192	0.109941	0.19080179
ITPKB	1q42.12	0.081915	0.109942	0.19080179

DUSP27	1q24.1	0.081912	0.109955	0.19080179
PFKFB1	Xp11.21	-0.08191	0.10996	0.19080179
OR51E2	11p15.4	-0.08191	0.109963	0.19080179
LIMCH1	4p13	0.081901	0.110003	0.190844408
TMEM14A	6p12.2	-0.0819	0.110007	0.190844408
FEM1A	19p13.3	0.081869	0.110141	0.191060622
PSMD12	17q24.2	-0.08185	0.110211	0.191164592
AFAP1L1	5q32	-0.08185	0.110237	0.19119365
CHRD12	11q13.4	-0.08184	0.11025	0.191200396
CHCHD5	2q14.1	-0.08184	0.110271	0.191219188
CT62	15q23	0.081821	0.11035	0.19134026
ISL1	5q11.1	0.081812	0.11039	0.191392302
SERPINB4	18q21.33	0.081801	0.110441	0.191464928
RAB39A	11q22.3	-0.08178	0.110549	0.191635534
MAN2B1	19p13.13	0.081726	0.110769	0.191999497
CLMP	11q24.1	-0.08172	0.110786	0.192012299
SNAPC4	9q34.3	-0.08168	0.110969	0.192312943
WNT1	12q13.12	0.081675	0.110989	0.192332487
GRID1	10q23.1-q23.2	-0.08167	0.111004	0.192340209
JAKMIP1	4p16.1	0.081668	0.111023	0.192357381
ADAM11	17q21.31	-0.08163	0.111169	0.192594314
CD207	2p13.3	0.081614	0.111257	0.192728494
TMPRSS12	12q13.12	-0.08161	0.111266	0.192728494
CALHM3	10q24.33	-0.0816	0.111307	0.192782587
PF4V1	4q13.3	0.081598	0.111331	0.192807789
SEC11A	15q25.2-q25.3	0.081577	0.111422	0.192947774
GATAD2B	1q21.3	0.081567	0.111463	0.193003274
DANCR	4q12	0.081562	0.111486	0.193013348
HIST1H2BC	6p22.2	0.081562	0.111488	0.193013348
PSMB8	6p21.32	0.081552	0.111533	0.193074638
OR10T2	1q23.1	0.081535	0.111607	0.193185093
KRTAP4-2	17q21.2	-0.08152	0.111682	0.19329798
BRI3	7q21.3	-0.08151	0.111718	0.193344728
ZNF98	19p12	-0.08151	0.111737	0.193360561
GRIK3	1p34.3	0.081449	0.111984	0.193770574
PLK5	19p13.3	-0.08144	0.112037	0.193846089
TOP2B	3p24.2	-0.08142	0.112105	0.19394723
ZNF800	7q31.33	-0.08142	0.112124	0.193963411
NRIP3	11p15.4	-0.0814	0.112222	0.194116323
PDE1B	12q13.2	-0.08138	0.112311	0.194252838
GATA1	Xp11.23	0.081359	0.112382	0.194358566
C6	5p13.1	0.081344	0.11245	0.194458923
PIGY	4q22.1	-0.08133	0.112505	0.194537343
CCSAP	1q42.13	0.081323	0.112542	0.19458492
C17ORF53	17q21.31	-0.08131	0.112584	0.19464076
LHFPL5	6p21.31	-0.08131	0.112619	0.194685402
CFDP1	16q23.1	-0.0813	0.112661	0.194734017
LUZP6	7q33	-0.0813	0.112667	0.194734017
FLYWCH2	16p13.3	-0.08129	0.112679	0.194737031
H3F3A	1q42.12	-0.08128	0.112745	0.194835858
UCP1	4q31.1	-0.08123	0.112973	0.195212248
HEMK1	3p21.31	-0.08121	0.113034	0.195299981
RSRP1	1p36.11	-0.08121	0.113048	0.195307962
GNG7	19p13.3	0.081207	0.11306	0.195312633
NUTM2A	10q23.2	-0.0812	0.113077	0.19532472
FAT1	4q35.2	0.081194	0.113115	0.195373298
CLDN8	21q22.11	0.081137	0.113371	0.195799317
CAPN15	16p13.3	0.081125	0.113423	0.195861289

FOXRED2	22q12.3	-0.08112	0.113427	0.195861289
LOC284009	17p13.3	-0.08112	0.113457	0.19588753
OR6S1	14q11.2	0.081117	0.113462	0.19588753
RPL13AP3	14q22.3	-0.0811	0.113543	0.19601052
ACP5	19p13.2	-0.08109	0.113568	0.196037641
CSTA	3q21.1	-0.08108	0.113612	0.196097104
RRP12	10q24.1	-0.08108	0.113634	0.196118356
LY6G5B	6p21.33	-0.08107	0.113653	0.196133035
SNORA11D	Xp11.22	-0.08107	0.113669	0.196143635
PKD1	16p13.3	-0.08106	0.113728	0.196228761
FANCE	6p21.31	0.081027	0.113864	0.196446108
WDR11	10q26.12	0.081011	0.113932	0.196547266
PHTF2	7q11.23-q21.11	-0.08101	0.113953	0.196558308
ATAD1	10q23.31	-0.08101	0.113958	0.196558308
CCL25	19p13.2	-0.081	0.114004	0.196619823
CHI3L2	1p13.2	0.080981	0.114069	0.196715481
SLN	11q22.3	-0.08097	0.114101	0.196727575
PARP16	15q22.31	-0.08097	0.114101	0.196727575
POU2F1	1q24.2	-0.08097	0.114113	0.196727575
GPR61	1p13.3	0.080969	0.114123	0.196727575
ENKD1	16q22.1	-0.08097	0.114125	0.196727575
PXDN	2p25.3	-0.08096	0.114182	0.196808826
UBE2G2	21q22.3	0.080949	0.114214	0.196846817
ETS1	11q24.3	0.080927	0.114312	0.196994819
RIPPLY2	6q14.2	-0.08093	0.114319	0.196994819
TMEM11	17p11.2	0.080906	0.114404	0.197124077
CBY1	22q13.1	-0.08088	0.114521	0.197308784
HSD17B1	17q21.2	0.080874	0.114547	0.197333687
MSMP	9p13.3	0.080864	0.114593	0.197399087
SEMA5A	5p15.31	-0.08083	0.114753	0.197656677
TINF2	14q12	0.080823	0.114777	0.197681424
SPRY2	13q31.1	0.080816	0.11481	0.197721204
PLK1	16p12.2	0.080779	0.114977	0.197991613
YEATS4	12q15	0.080756	0.11508	0.198151862
TMEM8B	9p13.3	-0.08075	0.115106	0.198179997
ALKBH2	12q24.11	-0.08074	0.115145	0.198229889
MASP1	3q27.3	-0.08073	0.115181	0.198274551
OR2S2	9p13.3	0.080716	0.115262	0.198397627
RBM25	14q24.2	0.080704	0.115317	0.198475073
TIMM9	14q23.1	-0.0807	0.11533	0.198479791
FOXD4L3	9q21.11	0.080692	0.11537	0.198531645
HSD17B3	9q22.32	-0.08066	0.115535	0.198798514
LINC00523	14q32.2	0.080649	0.115564	0.198832449
DGAT1	8q24.3	0.080643	0.115591	0.198846992
ZNFX1	20q13.13	-0.08064	0.115593	0.198846992
TCEA1	8q11.23	-0.08062	0.115675	0.198970827
PROCR	20q11.22	-0.08061	0.115756	0.199093039
OMG	17q11.2	0.080596	0.115802	0.199156161
SEPHS2	16p11.2	-0.08059	0.115842	0.199206598
PPP1R27	17q25.3	-0.08055	0.116008	0.199475022
NUCB1	19q13.33	0.080523	0.116138	0.199668731
SND1-IT1	7q32.1	-0.08052	0.11614	0.199668731
IRAK3	12q14.3	0.080512	0.116186	0.199729857
PYY	17q21.31	0.080506	0.116215	0.19974942
SATB1	3p24.3	-0.08051	0.116217	0.19974942
GTF2E2	8p12	0.080486	0.116305	0.199870098
NPB	17q25.3	0.080485	0.116307	0.199870098
RSPH6A	19q13.32	-0.08048	0.116329	0.199887253

GANC	15q15.1	0.080476	0.116351	0.199887253
ACSM6	10q23.33	0.080475	0.116352	0.199887253
ACTR1A	10q24.32	0.080474	0.116357	0.199887253
DEFB126	20p13	-0.08046	0.116438	0.200008087
TYR	11q14.3	-0.08045	0.11648	0.200063719
PRMT2	21q22.3	0.080436	0.11653	0.200132234
TMEM251	14q32.12	0.080429	0.116562	0.200170649
TNK2	3q29	0.080417	0.116618	0.200249593
NPBWR1	8q11.23	-0.08041	0.116651	0.200288511
SEC14L1	17q25.2-q25.3	0.0804	0.116696	0.20034845
CST11	20p11.21	-0.08039	0.11676	0.200440875
HR	8p21.3	0.080383	0.116771	0.200443969
SDE2	1q42.12	0.080379	0.116794	0.20046559
CCKAR	4p15.2	-0.08037	0.11685	0.200540811
LCE6A	1q21.3	-0.08036	0.116858	0.200540811
FAM110C	2p25.3	0.080354	0.116906	0.200607186
OR6A2	11p15.4	-0.08035	0.116944	0.200637719
CDRT15	17p12	0.080346	0.116944	0.200637719
SLC25A28	10q24.2	0.08033	0.117014	0.200740547
C12ORF74	12q22	-0.08033	0.117033	0.200743309
RAB12	18p11.22	0.080326	0.117036	0.200743309
NFKBIL1	6p21.33	-0.0803	0.11716	0.200938957
NRSN1	6p22.3	-0.08026	0.117319	0.201194911
R3HDM2	12q13.3	-0.08023	0.11746	0.201406503
SOWAHA	5q31.1	-0.08023	0.117463	0.201406503
CRYBB2	22q11.23	-0.08023	0.117495	0.201444864
FTH1	11q12.3	-0.08022	0.117534	0.201480091
ZMAT3	3q26.32	0.080216	0.117536	0.201480091
ZNF233	19q13.31	-0.0802	0.117602	0.201564921
MAP10	1q42.2	-0.0802	0.117606	0.201564921
ADAP1	7p22.3	0.080192	0.117649	0.201621423
DCC	18q21.2	-0.08019	0.117671	0.201642757
LOC541473	7q11.23	-0.08016	0.117801	0.201847592
DEFB118	20q11.21	-0.08014	0.117882	0.201952023
IFNA14	9p21.3	-0.08014	0.117882	0.201952023
MROH9	1q24.3	-0.08014	0.117902	0.201970163
HDGF	1q23.1	-0.08013	0.117913	0.201970448
LINC01587	4p16.2	-0.08011	0.118007	0.202105552
BAZ1B	7q11.23	-0.08011	0.118012	0.202105552
RHOJ	14q23.2	-0.08011	0.11804	0.20213378
ACAD8	11q25	0.080105	0.118048	0.20213378
PCDHB4	5q31.3	-0.08007	0.11822	0.202410247
FLRT2	14q31.3	-0.08006	0.118264	0.202467634
RAB39B	Xq28	0.080042	0.11834	0.202567347
CFB	6p21.33	0.080041	0.118342	0.202567347
NAGLU	17q21.2	0.080025	0.118417	0.202677545
VN1R2	19q13.42	0.080015	0.118462	0.202737216
SPATA31E1	9q22.1	-0.08	0.118523	0.202825571
TAS2R4	7q34	-0.08	0.118542	0.202840307
LCE5A	1q21.3	0.079986	0.118597	0.202917706
PC	11q13.2	0.079967	0.118683	0.203046896
CYP2C8	10q23.33	0.079963	0.118703	0.203063227
POLD2	7p13	-0.07996	0.118715	0.203066732
DRD5	4p16.1	0.079942	0.118802	0.203197746
CLGN	4q31.1	-0.07994	0.118818	0.203203439
PKM	15q23	0.079935	0.118833	0.203203439
COL6A1	21q22.3	-0.07993	0.118836	0.203203439
OR2B2	6p22.1	-0.07991	0.118932	0.203350329

TMEM273	10q11.23	0.079902	0.118984	0.203423379
DIMT1	5q12.1	-0.07988	0.119072	0.203548723
OR10S1	11q24.1	-0.07988	0.119078	0.203548723
CCAR2	8p21.3	0.079867	0.11915	0.203653701
PUDP	Xp22.31	-0.07986	0.119173	0.203675569
C17ORF78	17q12	0.079855	0.119205	0.203713398
ERICH5	8q22.2	-0.07981	0.119434	0.204087883
GAS8	16q24.3	-0.07979	0.119497	0.204178514
C6ORF52	6p24.2	0.079762	0.119636	0.204397385
ADPRM	17p13.1	0.079757	0.119659	0.204419047
SERINC5	5q14.1	0.079742	0.119727	0.204503972
SEPTIN8	5q31.1	0.079742	0.119729	0.204503972
MRPL41	9q34.3	0.079737	0.119754	0.204529326
APOBEC3H	22q13.1	0.079732	0.119776	0.204550089
LY6H	8q24.3	0.07972	0.11983	0.204624435
TRA2B	3q27.2	-0.07969	0.119955	0.204821236
MIR205HG	1q32.2	-0.07968	0.120028	0.204849925
VN1R4	19q13.42	-0.07968	0.120034	0.204849925
OR5T3	11q12.1	-0.07968	0.120034	0.204849925
SPINT3	20q13.12	-0.07968	0.120034	0.204849925
OR4A5	11q11	-0.07968	0.120034	0.204849925
KRTAP13-3	21q22.11	-0.07968	0.120034	0.204849925
GYPC	2q14.3	-0.07964	0.120215	0.205141308
TAF7	5q31.3	-0.07963	0.120229	0.205147847
CPA5	7q32.2	-0.07963	0.120267	0.205195782
KRT77	12q13.13	0.079558	0.120586	0.205704996
SYBU	8q23.2	-0.07956	0.120586	0.205704996
ZNF155	19q13.31	-0.07954	0.120672	0.205833626
ZNF433	19p13.2	-0.07953	0.120701	0.205865974
F2RL2	5q13.3	-0.07951	0.120797	0.206011887
PRAC1	17q21.32	-0.0795	0.120838	0.206055936
MYCT1	6q25.2	-0.0795	0.120843	0.206055936
SPATA45	1q32.3	-0.07948	0.120949	0.206218228
LAPTM4A	2p24.1	-0.07948	0.120969	0.206236091
LRRC32	11q13.5	-0.07946	0.12103	0.206304326
TIGD6	5q32	0.079464	0.12103	0.206304326
ROPN1	3q21.1	0.079447	0.12111	0.206422366
RIN2	20p11.23	-0.07943	0.121185	0.206532873
HIST1H4H	6p22.2	-0.07943	0.121203	0.206544275
BRPF1	3p25.3	-0.07942	0.121212	0.206544275
INS	11p15.5	-0.07942	0.121231	0.206558814
RPL4	15q22.31	-0.07941	0.121271	0.206609135
SH2B3	12q24.12	0.079402	0.121317	0.206662832
LINC02447	4p16.1	-0.0794	0.121323	0.206662832
C1QB	1p36.12	0.07938	0.121423	0.206815154
AOPEP	9q22.32	-0.07935	0.12155	0.206996371
MSH3	5q14.1	0.07935	0.121563	0.206996371
HAUS4	14q11.2	0.07935	0.121564	0.206996371
OR5H2	3q11.2	-0.07935	0.12157	0.206996371
OR5M10	11q12.1	0.079342	0.1216	0.207029258
DUSP2	2q11.2	-0.07933	0.121676	0.207141236
GOLGA6B	15q24.1	-0.07931	0.121761	0.207268626
RAD50	5q31.1	-0.0793	0.121811	0.207335864
PTPRB	12q15	0.079279	0.1219	0.207468685
GAPT	5q11.2	0.079258	0.121997	0.207617596
OTULIN	5p15.2	-0.07918	0.122346	0.208193714
AMIGO3	3p21.31	0.07916	0.122463	0.208373795
FBXO3	11p13	-0.07915	0.12253	0.208470648



OPRK1	8q11.23	-0.07914	0.122578	0.208535408
MEAK7	16q24.1	-0.07911	0.122708	0.208737425
SRRT	7q22.1	-0.0791	0.122756	0.208801375
BTBD1	15q25.2	0.079061	0.122933	0.209084477
SOS2	14q21.3	0.079054	0.122963	0.209118919
CERS3	15q26.3	-0.07905	0.122988	0.209143643
SORD	15q21.1	0.079033	0.123064	0.209254799
TIE1	1p34.2	-0.07903	0.123076	0.209257088
ZNF565	19q13.12	-0.079	0.123239	0.209517081
H2AFZ	4q23	0.078977	0.123333	0.209651472
APRT	16q24.3	-0.07898	0.123339	0.209651472
PACS2	14q32.33	-0.07896	0.123426	0.209766888
UGT1A6	2q37.1	0.078957	0.123428	0.209766888
KCTD2	17q25.1	-0.07894	0.123504	0.209877948
SLC35G6	17p13.1	0.078934	0.123537	0.20990256
ALOX5AP	13q12.3	0.078933	0.123539	0.20990256
CNTNAP4	16q23.1	-0.07891	0.123674	0.210113094
ST14	11q24.3	-0.0789	0.123705	0.210147961
ADGRL3	4q13.1	0.07889	0.123744	0.210197028
CFAP46	10q26.3	0.078875	0.123818	0.210304431
SLC9A3R2	16p13.3	0.078871	0.123839	0.210321194
TRIM52	5q35.3	-0.07887	0.123849	0.210321194
MPZ	1q23.3	-0.07885	0.123928	0.210437891
RTL3	Xq21.1	-0.07885	0.123957	0.210454683
RCAN2	6p12.3	-0.07885	0.123959	0.210454683
BEND3	6q21	0.078813	0.124114	0.210700908
SRGAP3	3p25.3	-0.07879	0.124201	0.210812177
STAP2	19p13.3	0.078795	0.124201	0.210812177
LOC653653	17q23.1	-0.07877	0.124309	0.210978137
ZNF321P	19q13.41	0.078751	0.124413	0.211127823
IQSEC3	12p13.33	-0.07875	0.124421	0.211127823
LOC646813	11p11.12	-0.07875	0.124429	0.211127823
LINC00847	5q35.3	0.078708	0.124618	0.211430613
PBX4	19p13.11	-0.0787	0.124655	0.211475853
ZNF69	19p13.2	-0.0787	0.124676	0.211493027
NAA30	14q22.3	-0.07869	0.124703	0.211509172
ART4	12p12.3	-0.07869	0.124707	0.211509172
ATP6V0C	16p13.3	0.078656	0.124869	0.211765736
NMI	2q23.3	0.078652	0.124887	0.211779413
TTF1	9q34.13	-0.0786	0.12515	0.212207493
SIGLEC10	19q13.41	0.078595	0.125161	0.212207493
BST2	19p13.11	0.078574	0.125265	0.212365455
CRIP3	6p21.1	0.078571	0.125276	0.21236742
CBLN4	20q13.2	-0.07855	0.125356	0.212484771
PDPN	1p36.21	-0.07854	0.125431	0.212593181
OR52M1	11p15.4	-0.07852	0.125511	0.212685626
CMPK2	2p25.2	0.07852	0.125522	0.212685626
CSHL1	17q23.3	-0.07852	0.125527	0.212685626
GALR3	22q13.1	0.078519	0.125528	0.212685626
LETMD1	12q13.12	-0.07851	0.125549	0.212703885
MAMDC2	9q21.12	-0.07851	0.12557	0.212717366
NMRK1	9q21.13	0.078509	0.125578	0.212717366
CDHR1	10q23.1	-0.0785	0.125636	0.212783572
SNX5	20p11.23	-0.0785	0.125639	0.212783572
PNMA5	Xq28	-0.07849	0.125669	0.212816395
MEGF10	5q23.2	0.078486	0.125688	0.212830587
IFI30	19p13.11	0.078478	0.125727	0.212879384
NDUFS6	5p15.33	-0.07846	0.125793	0.212972446

TRIM67	1q42.2	-0.07846	0.125836	0.213027308
KSR1	17q11.2	-0.07843	0.125974	0.213243358
KCNS1	20q13.12	-0.07841	0.126061	0.213371941
CYP4F3	19p13.12	-0.0784	0.126092	0.213406784
RASSF1	3p21.31	0.078396	0.126124	0.213443493
RBM43	2q23.3	-0.07838	0.12618	0.213519066
GOLT1A	1q32.1	-0.07838	0.126212	0.213555789
WDR3	1p12	-0.07836	0.12628	0.213652597
ZFP14	19q13.12	-0.07836	0.126308	0.213682266
RPL39L	3q27.3	-0.07835	0.126336	0.213711938
CABP4	11q13.2	0.078321	0.126486	0.213947974
ZNF462	9q31.2	0.078311	0.126535	0.214004296
EIF2D	1q32.1	0.07831	0.126541	0.214004296
LINC00924	15q26.2	-0.07831	0.126552	0.214004296
S100A1	1q21.3	-0.07829	0.126647	0.21414779
SLCO4A1-AS1	20q13.33	-0.07826	0.126804	0.21438175
EBF1	5q33.3	-0.07826	0.126807	0.21438175
IFI27	14q32.12	0.078244	0.12686	0.214452244
EXOSC6	16q22.1	-0.07824	0.126901	0.21450503
NEU2	2q37.1	-0.0782	0.127081	0.214786212
ZDHHC21	9p22.3	0.078197	0.127089	0.214786212
OR52E4	11p15.4	-0.07819	0.12712	0.214819568
LRP6	12p13.2	-0.07818	0.127181	0.214904332
LMAN2	5q35.3	0.078165	0.127245	0.214994476
TCEAL5	Xq22.1	-0.07814	0.127352	0.215157782
ATP6V0E2	7q36.1	0.078129	0.127422	0.215258351
HACE1	6q16.3	0.078115	0.12749	0.215353935
CRYGB	2q33.3	-0.0781	0.127584	0.215495882
KRTAP4-12	17q21.2	-0.07807	0.127727	0.215718851
FLJ37453	1p36.21	-0.07805	0.127833	0.215879394
ZNF594	17p13.2	-0.07804	0.127855	0.215898588
TCTA	3p21.31	-0.07801	0.128002	0.216116927
ANK2	4q25-q26	-0.07801	0.128006	0.216116927
ZNF697	1p12	-0.07798	0.128138	0.216321557
DAND5	19p13.13	0.077968	0.128212	0.216428617
CFAP299	4q21.21	-0.07795	0.128308	0.216567962
BTBD16	10q26.13	-0.07794	0.128327	0.216567962
IL21R	16p12.1	0.077944	0.128327	0.216567962
CFAP47	Xp21.1	-0.07793	0.128402	0.216675028
LGALS7B	19q13.2	-0.07792	0.128469	0.216768875
INSYN2A	10q26.2	-0.07791	0.128479	0.216768875
ACOT7	1p36.31	0.077896	0.128563	0.216893177
TOM1	22q12.3	-0.07789	0.128593	0.21692494
SIRT2	19q13.2	-0.07789	0.128608	0.2169295
MS4A7	11q12.2	0.077885	0.128617	0.2169295
STC1	8p21.2	-0.07788	0.128658	0.216979141
MLYCD	16q23.3	0.077865	0.128719	0.217049843
LOC100130872	4p16.3	-0.07786	0.128721	0.217049843
ARHGEF12	11q23.3	0.077855	0.128768	0.217110231
PIM1	6p21.2	0.077851	0.128789	0.217127714
FNDC3B	3q26.31	-0.07784	0.128842	0.217198848
POTEA	8p11.1	-0.07782	0.128949	0.217359965
CD40	20q13.12	-0.07781	0.128966	0.217365424
CCL11	17q12	-0.07781	0.128981	0.217365424
EIF4E	4q23	0.077811	0.128984	0.217365424
RBBP4	1p35.1	0.077801	0.129033	0.217429454
RNASE6	14q11.2	0.077776	0.129158	0.21762063
HOXB2	17q21.32	0.077731	0.129379	0.217975064

CACNA1S	1q32.1	0.077723	0.12942	0.21802585
IFNA4	9p21.3	-0.07771	0.129469	0.218090453
MRC2	17q23.2	-0.07771	0.129488	0.218104195
TAS2R46	12p13.2	-0.07771	0.129499	0.218104195
SESN3	11q21	-0.0777	0.129519	0.218120121
TMEM154	4q31.3	-0.07769	0.129574	0.21819328
DNAH9	17p12	-0.07767	0.129666	0.218329553
PTPRG	3p14.2	0.077669	0.129684	0.218342309
RAB9A	Xp22.2	-0.07767	0.129696	0.218344634
NUPR2	7p11.2	-0.07766	0.129728	0.218372557
CENPF	1q41	0.077659	0.129735	0.218372557
LY86	6p25.1	0.077638	0.129839	0.218530191
WDR31	9q32	0.077626	0.1299	0.21861203
TTK	6q14.1	-0.07762	0.12991	0.21861203
PSMB6	17p13.2	0.077619	0.129933	0.218633191
PYDC1	16p11.2	0.077617	0.129946	0.218636434
PSMD3	17q21.1	-0.0776	0.130005	0.218716855
ACYP2	2p16.2	-0.0776	0.130039	0.218756
PDHA2	4q22.3	-0.07757	0.130201	0.218997968
OAZ1	19p13.3	-0.07756	0.130205	0.218997968
TYMP	22q13.33	0.077532	0.130364	0.219247333
SCAF8	6q25.2	-0.07753	0.130375	0.219247333
VIM	10p13	-0.07752	0.130422	0.219308152
BBS2	16q13	-0.07748	0.130604	0.219596033
TMEM218	11q24.2	-0.07747	0.130682	0.219709214
MCC	5q22.2	-0.07744	0.13083	0.219939725
USP44	12q22	-0.07742	0.130946	0.220115415
PCDHGA10	5q31.3	0.077393	0.131058	0.220268938
JPT2	16p13.3	-0.07739	0.131059	0.220268938
ACACA	17q12	-0.07738	0.131106	0.22032815
RBM8A	1q21.1	0.077379	0.13113	0.220351227
GFER	16p13.3	-0.07735	0.131255	0.220509378
OR13C4	9q31.1	0.077354	0.131255	0.220509378
GALR2	17q25.1	-0.07735	0.131257	0.220509378
PEG3-AS1	19q13.43	-0.07735	0.131271	0.220513541
OGFOD3	17q25.3	0.077347	0.13129	0.220526305
TUBA4B	2q35	-0.07734	0.131339	0.220590358
SPOCD1	1p35.2	-0.07733	0.131397	0.220669224
PRRX1	1q24.2	-0.0773	0.131515	0.220848895
RAB11B	19p13.2	-0.07729	0.131563	0.220898714
CYP2R1	11p15.2	-0.07729	0.131566	0.220898714
CLDN20	6q25.3	-0.07729	0.131594	0.220901997
SEC16B	1q25.2	0.077285	0.131598	0.220901997
SPINK13	5q32	-0.07728	0.131601	0.220901997
TRIM74	7q11.23	0.07728	0.131624	0.220920218
ROR2	9q22.31	-0.07728	0.131634	0.220920218
SFRP1	8p11.21	-0.07727	0.131675	0.220966056
RASA2	3q23	0.077267	0.131688	0.220966056
PLSCR5	3q24	-0.07727	0.131695	0.220966056
PARD3B	2q33.3	-0.07725	0.131763	0.221062497
YIPF4	2p22.3	-0.07724	0.131832	0.221159903
TIMM44	19p13.2	-0.07723	0.131889	0.221236534
PKD2	17q21.33	0.077217	0.131941	0.221304992
ARHGAP31	3q13.32-q13.33	0.077192	0.132067	0.221498584
MAGEB16	Xp21.1	-0.07718	0.132128	0.221580864
SHD	19p13.3	0.077172	0.132164	0.221622929
SUGT1P4-STRA6LP-CCDC180	9q22.33	-0.07715	0.132261	0.221766969
HERC1	15q22.31	0.07715	0.132277	0.221776367

UST	6q25.1	0.07714	0.132326	0.221839496
SFT2D2	1q24.2	0.077136	0.132346	0.221854481
KLKB1	4q35.2	0.0771	0.132529	0.222143158
BRF1	14q32.33	-0.07709	0.132567	0.222187062
HAT1	2q31.1	-0.07707	0.132691	0.222377571
AADA3L3	1p36.21	-0.07706	0.132724	0.222413512
ENPP6	4q35.1	0.077031	0.132876	0.222650212
ZNF862	7q36.1	-0.07702	0.132938	0.222734849
SRA1	5q31.3	0.077012	0.132972	0.222772671
MDP1	14q12	-0.07701	0.132986	0.222777712
RABL3	3q13.33	0.076976	0.133156	0.223043316
SNORA75	2q37.1	-0.07697	0.133207	0.223110827
BIK	22q13.2	0.076956	0.133252	0.22316827
NECAP2	1p36.13	0.076951	0.13328	0.2231952
LAPTM5	1p35.2	0.076945	0.13331	0.223227604
MAL2	8q24.12	0.076925	0.133414	0.223382254
STMN2	8q21.13	-0.07691	0.133478	0.223471434
PA2G4P4	3q25.31	-0.07689	0.133592	0.223644294
DIPK2B	Xp11.3	-0.07687	0.133677	0.223766261
SNRNP48	6p24.3	0.076867	0.133706	0.223796894
LRP1	12q13.3	-0.07686	0.133745	0.223843978
CLDN22	4q35.1	-0.07686	0.133766	0.223860238
GFRA2	8p21.3	0.076834	0.133874	0.224021152
CCN6	6q21	-0.07683	0.133906	0.224056005
TBX1	22q11.21	-0.07682	0.133955	0.224103852
MDH1B	2q33.3	-0.07682	0.133957	0.224103852
PTGER1	19p13.12	-0.07681	0.134008	0.224171377
EHD3	2p23.1	-0.0768	0.134024	0.224178824
ZNF35	3p21.31	-0.0768	0.134035	0.224178824
BABAM1	19p13.11	-0.07678	0.13416	0.224368717
HLA-G	6p22.1	0.076734	0.134383	0.224723633
ADIRF	10q23.2	0.07673	0.134404	0.224739692
C16ORF70	16q22.1	-0.07673	0.134425	0.224744792
TCTE1	6p21.1	0.076725	0.134429	0.224744792
NR1D2	3p24.2	-0.07671	0.134486	0.224820876
SELENOK	3p21.1	-0.0767	0.134539	0.224890114
OSR1	2p24.1	0.076684	0.134636	0.225034022
ROCK2	2p25.1	-0.07667	0.134714	0.225146064
MAN1B1	9q34.3	-0.07663	0.134898	0.225433891
SPAG11B	8p23.1	-0.07662	0.134965	0.225527693
CDR2	16p12.2	-0.07659	0.135121	0.22576891
ORMDL3	17q21.1	0.076587	0.135132	0.22576891
GCSAML-AS1	1q44	0.076579	0.135173	0.22581842
SHANK3	22q13.33	-0.07657	0.135197	0.225839749
ASCC2	22q12.2	0.076561	0.135264	0.225933125
WDFY3	4q21.23	0.076547	0.135338	0.226037571
HBZ	16p13.3	0.076538	0.135385	0.226096564
IYD	6q25.1	-0.07652	0.135455	0.226195003
IGFBP3	7p12.3	-0.07649	0.13565	0.22650223
CCDC181	1q24.2	-0.07648	0.135688	0.226546115
RORB	9q21.13	-0.07648	0.135701	0.226548464
SPINK6	5q32	-0.07644	0.135864	0.226803095
CD59	11p13	0.076431	0.135932	0.22689698
MAML2	11q21	-0.07643	0.135949	0.226905754
LHFPL3-AS2	7q22.2-q22.3	0.076406	0.136057	0.227067877
USP13	3q26.33	0.076393	0.136127	0.22716608
DGCR6L	22q11.21	-0.07635	0.136346	0.227512208
CIRBP	19p13.3	0.076346	0.136369	0.227532089

KIAA0753	17p13.1	0.07632	0.1365	0.22773143
PRPF38A	1p32.3	-0.07631	0.136545	0.227766593
KAZALD1	10q24.31	0.076308	0.136562	0.227766593
BEX1	Xq22.1 Xq22	-0.07631	0.136563	0.227766593
TSC22D2	3q25.1	-0.07631	0.136567	0.227766593
GUK1	1q42.13	0.076303	0.136591	0.227788342
C17ORF82	17q23.2	0.076295	0.136632	0.227837717
PRKX	Xp22.33	0.076283	0.136691	0.227917005
BBS4	15q24.1	0.07627	0.136761	0.228014692
FANCD2	3p25.3	0.07625	0.136864	0.228152709
TULP3	12p13.33	-0.07625	0.136867	0.228152709
RIBC1	Xp11.22	-0.07622	0.136998	0.228352427
CIB4	2p23.3	0.076209	0.137073	0.228459465
SPNS3	17p13.2	-0.07614	0.13744	0.229051301
ZBED3-AS1	5q13.3	-0.07612	0.137549	0.229213442
INO80	15q15.1	0.076114	0.137567	0.229225086
ADGRB2	1p35.2	-0.0761	0.137615	0.22928594
DEGS1	1q42.11	-0.0761	0.137659	0.229339435
ATXN8OS	13q21.33	0.076082	0.137731	0.229441434
IL26	12q15	0.07608	0.137745	0.229445727
CNNM1	10q24.2	-0.07607	0.13778	0.229484672
RUNX1-IT1	21q22.12	-0.07606	0.137858	0.229595084
RHBDL1	16p13.3	-0.07603	0.138013	0.229834062
PYROXD1	12p12.1	0.076016	0.138076	0.229919288
BCAP29	7q22.3	-0.07601	0.138089	0.229922533
SPRR2A	1q21.3	-0.07601	0.138121	0.229956582
IFT27	22q12.3	0.075998	0.13817	0.230018484
DNER	2q36.3	0.075983	0.138246	0.230126289
SYT10	12p11.1	0.075975	0.13829	0.230180007
MFSD12	19p13.3	-0.07596	0.138371	0.230296756
MMP14	14q11.2	-0.07595	0.138415	0.23035038
KRTAP5-9	11q13.4	-0.07592	0.138553	0.230554726
PARP6	15q23	-0.07592	0.138561	0.230554726
SYT8	11p15.5	0.075913	0.138609	0.230615826
COX8C	14q32.12	-0.0759	0.13868	0.230714513
PIF1	15q22.31	-0.07589	0.138729	0.230777398
TNFAIP8L2	1q21.3	0.075875	0.138808	0.230889034
PRSS21	16p13.3	0.075871	0.138831	0.230908675
ACTN4	19q13.2	-0.07581	0.139152	0.231423055
OR10H1	19p13.12	-0.0758	0.139179	0.231449059
DIPK1A	1p22.1	0.075793	0.13924	0.231530673
KRTAP1-5	17q21.2	-0.07579	0.13928	0.231577994
PAXIP1	7q36.2	-0.07578	0.139295	0.231584001
IRS4	Xq22.3	0.075764	0.139391	0.231724096
SMIM6	17q25.1	0.075744	0.139493	0.23186548
SLC38A5	Xp11.23	-0.07574	0.139499	0.23186548
CDH18	5p14.3	-0.07572	0.139641	0.232082359
ZNF718	4p16.3	0.07571	0.139671	0.232102134
FAM13A-AS1	4q22.1	0.075709	0.139676	0.232102134
ERG	21q22.2	-0.07569	0.139755	0.232214259
CCL4	17q12	0.075689	0.139785	0.23224379
MRPS6	21q22.11	-0.07568	0.139816	0.232277078
VTCN1	1p13.1-p12	0.075675	0.139858	0.23232638
NIM1K	5p12	-0.07566	0.139919	0.232409148
LRRC28	15q26.3	0.075658	0.139944	0.232431421
SNRNP35	12q24.31	0.07565	0.139988	0.232485388
DLAT	11q23.1	0.075618	0.140154	0.232742313
RAD21	8q24.11	-0.07561	0.140212	0.232818892

ANKRD26P1	16q11.2	-0.07557	0.140408	0.233102624
RRNAD1	1q23.1	-0.07557	0.140413	0.233102624
KCNB1	20q13.13	-0.07557	0.140423	0.233102624
CTSW	11q13.1	0.075566	0.14043	0.233102624
ISOC2	19q13.42	0.07556	0.140459	0.233126263
CNTNAP2	7q35-q36.1	0.075559	0.140467	0.233126263
GRK6	5q35.3	0.075545	0.140539	0.233225519
AMN1	12p11.21	0.075533	0.140603	0.233313506
WDR13	Xp11.23	-0.07552	0.14066	0.233388332
BARD1	2q35	0.075504	0.140756	0.233529116
RAP2C	Xq26.2	-0.0755	0.140789	0.233558868
RFLNB	17p13.3	-0.0755	0.140801	0.233558868
C10ORF53	10q11.23	-0.07549	0.140809	0.233558868
EEF1AKNMT	1q24.3	-0.07549	0.140835	0.233581754
ADAM18	8p11.22	-0.07549	0.140856	0.233597932
CXORF21	Xp21.2	0.075479	0.140889	0.233617949
STAT2	12q13.3	0.075478	0.140892	0.233617949
ZNF586	19q13.43	-0.07546	0.140963	0.233717347
SPANXA2	Xq27.2	-0.07546	0.140979	0.233724818
CT83	Xq23	-0.07542	0.141214	0.234094217
ATP6V0B	1p34.1	0.07539	0.141361	0.234317766
TPPP3	16q22.1	-0.07539	0.141381	0.23433237
PCBP3	21q22.3	-0.07538	0.141411	0.234362086
ADCY5	3q21.1	-0.07536	0.141492	0.234477413
ACAD9	3q21.3	-0.07536	0.141541	0.23453868
LOXL1	15q24.1	-0.07531	0.141779	0.234914493
PHLDB2	3q13.2	-0.07529	0.141867	0.235040782
SPANXN5	Xp11.22	-0.07528	0.141918	0.235105866
FOXP3	Xp11.23	0.075254	0.142079	0.235352238
SMARCB1	22q11.23 22q11	-0.07524	0.142147	0.235440268
OVCA2	17p13.3	0.07524	0.142155	0.235440268
ANKRD7	7q31.31	-0.07523	0.142199	0.235493489
OR2A4	6q23.2	0.075228	0.142216	0.235501782
GGT8P	2p11.2	0.07522	0.14226	0.235555351
CHPF2	7q36.1	-0.07521	0.142324	0.235641049
PPP4C	16p11.2	-0.07519	0.1424	0.235748292
CNDP1	18q22.3	0.075192	0.142412	0.235748292
ZFAT	8q24.22	-0.07518	0.142456	0.235802622
PTPA	9q34.11	0.07518	0.142475	0.235813489
ERMN	2q24.1	0.075174	0.142507	0.235847682
MYBL1	8q13.1	-0.07517	0.142549	0.235897844
TRIM53AP	11q14.3	0.075156	0.142604	0.235968817
CNTN4	3p26.3-p26.2	-0.07515	0.142645	0.236000689
TRIR	19p13.13	-0.07515	0.142647	0.236000689
MMACHC	1p34.1	0.07514	0.142687	0.236047635
RRP1	21q22.3	-0.07511	0.14284	0.236280719
LZTR1	22q11.21 22q11.1-q11.2	-0.07508	0.142984	0.236500663
SPATA12	3p14.3	-0.07507	0.143037	0.236568592
ANKMY1	2q37.3	-0.07506	0.143095	0.236644143
SLC16A12	10q23.31	-0.07503	0.143286	0.236940782
CHRD	3q27.1	-0.07502	0.14332	0.236978023
ELP3	8p21.1	0.07501	0.143381	0.237059378
LIMK2	22q12.2	0.074983	0.143527	0.237279842
TAS2R19	12p13.2	-0.07497	0.143585	0.237356268
OR56A1	11p15.4	-0.07495	0.143685	0.237502059
AAMP	2q35	-0.07495	0.143697	0.237503205
ATP8B5P	9p13.3	-0.07494	0.143754	0.237577056
GPR50	Xq28	-0.07492	0.143845	0.237708341

ZEB1-AS1	10p11.22	0.074908	0.143927	0.237824052
ADCK1	14q24.3	-0.0749	0.143963	0.237863607
DEPTOR	8q24.12	-0.0749	0.143989	0.237887892
NDST3	4q26	-0.07488	0.144088	0.238022406
SERPINE1	7q22.1	-0.07488	0.144095	0.238022406
MTMR12	5p13.3	-0.07486	0.144161	0.238111652
PPIAL4D	1q21.1	-0.07486	0.144181	0.23812396
SEMA6D	15q21.1	0.074859	0.144192	0.23812396
SLCO1B7	12p12.2	0.074831	0.144344	0.238336935
LILRB1	19q13.42	0.07483	0.144345	0.238336935
LINC00313	21q22.3	-0.07481	0.144441	0.238476586
MRAS	3q22.3	-0.07481	0.144459	0.238485932
CD300LF	17q25.1	0.074801	0.144501	0.238520606
CLIC3	9q34.3	0.074797	0.144523	0.238520606
C1ORF140	1q41	-0.0748	0.144527	0.238520606
ELK4	1q32.1	0.074795	0.144536	0.238520606
GRIP1	12q14.3	-0.07479	0.144539	0.238520606
TIMP2	17q25.3	-0.07479	0.144561	0.238531026
NGEF	2q37.1	-0.07479	0.144569	0.238531026
CNOT10	3p22.3	-0.07477	0.144649	0.238633001
DRICH1	22q11.23	-0.07477	0.144655	0.238633001
KLC1	14q32.33	-0.07477	0.144682	0.238649415
LILRA4	19q13.42	0.074767	0.144689	0.238649415
PKP3	11p15.5	-0.07473	0.144874	0.238936003
LHFPL1	Xq23	-0.07471	0.144969	0.239059431
COL4A1	13q34	-0.07471	0.144973	0.239059431
IL5RA	3p26.2	0.074695	0.145072	0.23918482
SAT2	17p13.1	0.074695	0.145073	0.23918482
RFPL4A	19q13.42	-0.07468	0.145137	0.239271246
CAPN11	6p21.1	0.074655	0.14529	0.239502457
DNAJC27	2p23.3	-0.07463	0.145414	0.239671005
TAS2R13	12p13.2	0.074632	0.145416	0.239671005
ZNF556	19p13.3	-0.07463	0.14545	0.23970792
COL15A1	9q22.33	-0.07462	0.145498	0.239758369
C1ORF53	1q31.3	-0.07462	0.145505	0.239758369
SLC16A6	17q24.2	0.074605	0.145559	0.239828827
CYB5A	18q22.3	0.074603	0.145572	0.23983025
JAKMIP2	5q32	-0.07458	0.145685	0.239996144
OR5M3	11q12.1	0.074566	0.145772	0.240099457
OR10H4	19p13.12	-0.07457	0.145772	0.240099457
FAM98B	15q14	0.074536	0.145935	0.240348788
CHFR	12q24.33	-0.07452	0.146014	0.240459792
ADGRG4	Xq26.3	-0.0745	0.146142	0.240649236
DMAP1	1p34.1	-0.07447	0.14632	0.240922591
TRIM58	1q44	0.074461	0.146343	0.240941966
PRB3	12p13.2	-0.07445	0.146425	0.241056722
TCTEX1D4	1p34.1	0.074409	0.146623	0.241362765
ZNF585B	19q13.12	-0.0744	0.146653	0.24139265
CFP	Xp11.23	0.074399	0.14668	0.241417176
CMA1	14q12	0.074394	0.146708	0.241442583
NUDT2	9p13.3	0.074367	0.146856	0.241666388
RAMP3	7p13	-0.07436	0.146868	0.241666388
WTAP	6q25.3	-0.07435	0.146945	0.241771438
UFM1	13q13.3	-0.07435	0.146956	0.241771438
C1QA	1p36.12	0.074343	0.146984	0.241797957
CAAP1	9p21.2	0.07433	0.147056	0.241895908
CUZD1	10q26.13	-0.07432	0.147091	0.241934667
LOC642846	12p13.31	-0.07431	0.147152	0.242014588

ARPC1A	7q22.1	-0.0743	0.147221	0.242108733
RNU4ATAC	2q14.2	-0.07429	0.147289	0.242199811
EXOC1	4q12	0.074279	0.147335	0.242256489
COL7A1	3p21.31	-0.07427	0.147379	0.24230815
KCNIP1	5q35.1	-0.07422	0.147629	0.24269212
RPL10A	6p21.31	-0.07422	0.147637	0.24269212
PRR5L	11p13-p12	0.074219	0.147659	0.242708988
GABRA6	5q34	-0.07421	0.147699	0.242754401
SH3RF3	2q13	-0.07421	0.147718	0.242765966
THAP2	12q21.1	-0.0742	0.147746	0.242792523
COL24A1	1p22.3	-0.0742	0.147771	0.24281284
TECR	19p13.12	-0.07419	0.147797	0.242835959
SLC17A1	6p22.2	-0.07418	0.147865	0.242927834
SHH	7q36.3	-0.07418	0.147896	0.242938903
PSMC6	14q22.1	-0.07418	0.147896	0.242938903
BCL6B	17p13.1	-0.07417	0.14792	0.242939189
RGS6	14q24.2	0.07417	0.147929	0.242939189
RPS8	1p34.1	-0.07417	0.147932	0.242939189
HLA-DOA	6p21.32	0.074159	0.147993	0.243005902
C9ORF78	9q34.11	-0.07416	0.147997	0.243005902
STK16	2q35	-0.07416	0.14801	0.243007293
CEACAM8	19q13.2	0.07415	0.148038	0.243032178
LINC00341	14q32.13	0.07414	0.148094	0.243104957
XPO6	16p12.1	-0.07411	0.148261	0.243358466
PRXL2C	9q22.33	-0.07408	0.148408	0.243562505
SRRM2	16p13.3	0.074082	0.148414	0.243562505
FAM131C	1p36.13	-0.07408	0.148421	0.243562505
BOLA1	1q21.2	0.074077	0.148439	0.243571623
GNB5	15q21.2	-0.07407	0.148471	0.243604067
MAP3K19	2q21.3	0.074066	0.148501	0.243633807
CCL19	9p13.3	0.07404	0.148644	0.243829573
NCAPH2	22q13.33	-0.07404	0.148645	0.243829573
TMEM200A	6q23.1	-0.07403	0.148721	0.243933913
IQCF6	3p21.2	0.074022	0.148743	0.243949424
PMM1	22q13.2	0.074016	0.148775	0.243983326
TDP1	14q32.11	-0.07398	0.148964	0.244272399
MTMR3	22q12.2	0.073969	0.149033	0.2443652
PFDN1	5q31.3	-0.07396	0.14908	0.244422969
MTHFS	15q25.1	-0.07396	0.1491	0.244429678
POP5	12q24.31	-0.07396	0.149109	0.244429678
TNC	9q33.1	-0.07395	0.149154	0.244483602
CDC25B	20p13	-0.07394	0.149179	0.244504454
WEE2	7q34	-0.07394	0.149205	0.244509189
PLAT	8p11.21	-0.07394	0.149206	0.244509189
HIPK3	11p13	0.073929	0.149255	0.244568964
KIF20B	10q23.31	0.073915	0.149332	0.244675466
TPTE2P1	13q12.13	-0.07391	0.149346	0.244678706
SYT4	18q12.3	-0.07391	0.149386	0.244724988
NRG2	5q31.2	-0.07386	0.149656	0.245146289
EFNB2	13q33.3	0.07385	0.149692	0.245185622
LINC00326	6q23.2	0.073838	0.149759	0.245275001
NLGN3	Xq13.1	0.073828	0.149811	0.245339502
MCF2	Xq27.1	-0.07382	0.149874	0.245423299
SPINK14	5q32	0.073798	0.14998	0.245576689
TEN1	17q25.1	-0.07379	0.15005	0.245670581
LINC01089	12q24.31	-0.07377	0.150159	0.245830152
DSC1	18q12.1	-0.07373	0.150344	0.246113001
ATP6V1B1	2p13.3	-0.07373	0.150378	0.246148088



GLIDR	9p12	-0.07372	0.150405	0.246172411
MGAT5	2q21.2-q21.3	-0.07371	0.150461	0.246244197
SLC6A13	12p13.33	-0.07369	0.150559	0.246384575
TGFBRAP1	2q12.1-q12.2	-0.07366	0.150728	0.246640288
CXCL11	4q21.1	0.073652	0.150791	0.246710591
FAM92B	16q24.1	0.073651	0.150796	0.246710591
AMPH	7p14.1	-0.07365	0.150818	0.246726547
OR11A1	6p22.1	0.073641	0.150853	0.246764098
PWAR1	15q11.2	-0.07362	0.150951	0.246904424
NOVA1	14q12	-0.07361	0.151004	0.246957831
NOG	17q22	-0.07361	0.151014	0.246957831
GJB3	1p34.3	0.073609	0.151031	0.246957831
BPY2	Yq11.223	0.073608	0.151033	0.246957831
ACSF3	16q24.3	0.073602	0.151068	0.246995014
NT5C	17q25.1	-0.07359	0.151146	0.247102247
CFC1B	2q21.1	0.073563	0.151286	0.247296625
ALDH7A1	5q23.2	-0.07356	0.151295	0.247296625
RAB3IP	12q15	0.07356	0.151302	0.247296625
SYT5	19q13.42 11p	0.073538	0.151422	0.247472196
PITX1	5q31.1	0.073521	0.151519	0.247611409
PVALB	22q12.3	0.073516	0.151546	0.247634152
SLC34A1	5q35.3	-0.0735	0.151612	0.247722224
CALU	7q32.1	-0.07348	0.15172	0.247878746
PLCXD2	3q13.2	-0.07347	0.151779	0.247954801
FAM20C	7p22.3	-0.07347	0.151802	0.247971913
SEL1L2	20p12.1	-0.07344	0.15196	0.248193795
ITGA8	10p13	0.073442	0.151962	0.248193795
PROZ	13q34	-0.07342	0.152057	0.248328597
CCDC77	12p13.33	-0.07341	0.152119	0.248409059
CCL2	17q12	-0.07341	0.152132	0.248409501
GBX1	7q36.1	0.073404	0.152172	0.248455757
PALM2	9q31.3	-0.0734	0.152188	0.248461475
ABLIM2	4p16.1	-0.0734	0.152213	0.248480578
PAICS	4q12	-0.07339	0.152272	0.248517074
FNTB	14q23.3	0.073385	0.152278	0.248517074
PTMS	12p13.31	-0.07338	0.152286	0.248517074
PLD4	14q32.33	0.073383	0.152291	0.248517074
RFXAP	13q13.3	-0.07338	0.152297	0.248517074
MYOD1	11p15.1	-0.07338	0.152313	0.248522358
ANP32D	12q13.11	-0.07337	0.152347	0.248557805
RAC1	7p22.1	0.073364	0.152399	0.248607334
DBX2	12q12	-0.07336	0.152402	0.248607334
IL37	2q14.1	0.073359	0.152423	0.248622256
IPO11	5q12.1	0.073355	0.152447	0.248639634
ZNF521	18q11.2	-0.07335	0.152485	0.248682377
GFRA1	10q25.3	0.073345	0.152503	0.248690935
CAMK2A	5q32	0.073339	0.152536	0.248724984
ZNF580	19q13.42	-0.07334	0.152558	0.248726218
DNM1P46	15q26.3	0.073335	0.152562	0.248726218
PWRN2	15q11.2	-0.07331	0.152705	0.248939216
RGS12	4p16.3	0.073277	0.152884	0.249211861
COMMD10	5q23.1	-0.07327	0.152947	0.249293159
TMEM163	2q21.3	0.073257	0.153	0.24935961
DAGLA	11q12.2	-0.07325	0.153018	0.24936894
RPL23AP82	22q13.33	-0.07325	0.153044	0.249390069
OR6B2	2q37.3	-0.07324	0.153077	0.249424322
RANBP3	19p13.3	-0.07323	0.153126	0.249483628
ZNF441	19p13.2	-0.07322	0.153217	0.249611329

PLEK	2p14	0.073207	0.15328	0.249693666
SLC30A6	2p22.3	-0.0732	0.153298	0.249702969
DEFA4	8p23.1	0.073188	0.153386	0.249820304
TM4SF5	17p13.2	0.073186	0.153395	0.249820304
HINT3	6q22.32	0.073182	0.15342	0.249840437
C3ORF79	3q25.2	0.073163	0.153527	0.249988474
MSX1	4p16.2	-0.07316	0.153536	0.249988474
KRTCAP3	2p23.3	-0.07316	0.153564	0.250013592
KRTAP5-11	11q13.4	-0.07313	0.153714	0.250238794
C11ORF65	11q22.3	-0.07312	0.153753	0.250281187
CACNA1I	22q13.1	-0.07311	0.153814	0.250360123
THOP1	19p13.3	-0.0731	0.1539	0.250479896
TRMT9B	8p22	-0.07309	0.153949	0.250533656
PPIAP80	7p15.1	-0.07309	0.153958	0.250533656
HAL	12q23.1	0.073082	0.153983	0.250540931
KIAA0895L	16q22.1	-0.07308	0.153988	0.250540931
CSMD3	8q23.3	-0.07307	0.154061	0.250639321
LINC00346	13q34	-0.07307	0.154079	0.250648601
C17ORF47	17q22	-0.07306	0.154114	0.250674649
DCAF4L1	4p13	-0.07306	0.15413	0.250674649
AGTPBP1	9q21.33	0.073056	0.154132	0.250674649
ANXA2P3	10q21.3	0.073052	0.154154	0.25068992
MAP2K6	17q24.3	0.073035	0.154249	0.250823975
CYP4Z1	1p33	-0.07303	0.154278	0.250851046
UBE2NL	Xq27.3	-0.07303	0.154301	0.250868246
INE1	Xp11.3	-0.07302	0.154355	0.250935125
MEPE	4q22.1	-0.073	0.154424	0.25102651
ETS2	21q22.2	-0.07299	0.15451	0.251146022
DAZ4	Yq11.23	-0.07298	0.154553	0.251193877
NBR1	17q21.31	0.072978	0.154573	0.251193877
NDUFB2	7q34	-0.07298	0.154577	0.251193877
RAB33A	Xq26.1	0.072972	0.154609	0.251224955
KIF5B	10p11.22	0.072966	0.154638	0.251252216
PIP4K2A	10p12.2	0.072943	0.154769	0.251442575
XKRY2	Yq11.222	-0.07294	0.15478	0.251442575
CLDN23	8p23.1	0.07293	0.154843	0.251524181
HPVC1	7p11.2	0.07291	0.154959	0.251692437
RRAGC	1p34.3	0.072904	0.154995	0.251729421
MSMO1	4q32.3	0.07287	0.155183	0.252014798
TMEM132B	12q24.31-q24.32	0.07285	0.155299	0.252176175
C1QL3	10p13	0.072848	0.155307	0.252176175
SSUH2	3p25.3	-0.07284	0.155338	0.252205831
NPRL2	3p21.31	-0.07283	0.155399	0.252284736
BAX	19q13.33	0.072817	0.155488	0.252407478
C6ORF89	6p21.2	0.072811	0.155523	0.252444693
TRAF7	16p13.3	0.072806	0.155546	0.252462022
SPG21	15q22.31	-0.07278	0.155708	0.252703956
SLCO1B3	12p12.2	0.072776	0.155721	0.252703956
HNRNPR	1p36.12	0.07277	0.155754	0.252736874
RBM44	2q37.3	-0.07276	0.155822	0.252827801
DSCR10	21q22.13	-0.07275	0.155871	0.25288667
FBXO24	7q22.1	0.072742	0.155913	0.252934253
DPY19L3	19q13.11	-0.07271	0.156078	0.253155302
ACTG1P4	1p21.1	-0.07271	0.156084	0.253155302
CCDC169	13q13.3	-0.07271	0.156087	0.253155302
OR5K4	3q11.2	-0.07271	0.156109	0.253169846
OPA3	19q13.32	0.072705	0.156127	0.253178414
USP6	17p13.2	-0.0727	0.156163	0.25321663

CHST3	10q22.1	-0.07266	0.156383	0.253552107
KCNJ16	17q24.3	0.072643	0.156478	0.253686011
RAD51C	17q22	-0.07263	0.15653	0.253750496
SET	9q34.11	-0.07263	0.156548	0.253757901
MED19	11q12.1	-0.07262	0.156591	0.253807226
CD5L	1q23.1	0.072603	0.156709	0.253979012
TECPR2	14q32.31	-0.0726	0.156742	0.253993861
SLC7A14	3q26.2	-0.0726	0.156744	0.253993861
FIGN	2q24.3	-0.07257	0.156875	0.254185929
TAF8	6p21.1	-0.07256	0.15693	0.254253764
SYCP2L	6p24.2	-0.07254	0.157075	0.254468314
SLIT3	5q34-q35.1	-0.07251	0.157219	0.254680584
TBC1D29P	17q11.2	-0.07248	0.157416	0.254980533
OR2T35	1q44	-0.07246	0.157508	0.255108391
DPP3	11q13.2	-0.07245	0.157575	0.255195492
PSMA5	1p13.3	0.072447	0.157601	0.255216942
CELF4	18q12.2	-0.07243	0.157716	0.255373522
GTF2H4	6p21.33	-0.07242	0.157733	0.255373522
ICOSLG	21q22.3	0.072424	0.157736	0.255373522
CNGA2	Xq28	0.07242	0.157759	0.255382361
CPOX	3q11.2	0.072418	0.157767	0.255382361
ZNF619	3p22.1	0.072407	0.157835	0.255469685
TP53TG3B	16p11.2	-0.0724	0.157846	0.255469685
SLED1	4q35.1	0.072398	0.157883	0.255508539
METTL17	14q11.2	0.072374	0.158023	0.255714972
LRAT	4q32.1	-0.07237	0.158039	0.255719522
NECTIN1	11q23.3	-0.07236	0.158107	0.255810122
KRCC1	2p11.2	0.072354	0.15814	0.255841646
CCN1	1p22.3	-0.07234	0.158197	0.255913327
SLURP1	8q24.3	-0.07232	0.158309	0.256074335
MLC1	22q13.33	-0.07232	0.15834	0.256083217
MOB1A	2p13.1	0.072319	0.15834	0.256083217
EGR3	8p21.3	0.072308	0.158405	0.256168039
EXOC1L	4q12	0.072299	0.158457	0.256230199
C1RL	12p13.31	0.07229	0.158506	0.256289429
HES3	1p36.31	-0.07229	0.158532	0.256311356
ATAD2	8q24.13	-0.07227	0.158597	0.256394775
CCR2	3p21.31	0.072257	0.158699	0.256538555
LCLAT1	2p23.1	-0.07223	0.158842	0.256749592
SETBP1	18q12.3	0.072228	0.158866	0.256767105
ANAPC15	11q13.4	-0.07222	0.158888	0.256782607
SLC13A5	17p13.1	-0.07221	0.158945	0.256854374
RSPH3	6q25.3	0.072212	0.158959	0.256855882
GNMT	6p21.1	-0.07218	0.159127	0.257107384
VPS25	17q21.2	-0.07216	0.159252	0.25728767
SLFN12L	17q12	0.072137	0.159394	0.257496446
SIK3	11q23.3	-0.07211	0.159528	0.257691801
WASF1	6q21	-0.07209	0.159669	0.257899064
NGRN	15q26.1	-0.07206	0.159832	0.258140786
POLD1	19q13.33	-0.07206	0.159858	0.258162393
CC2D2B	10q24.1	-0.07204	0.159975	0.258330784
LOC401052	3p25.3	-0.07202	0.160077	0.258459661
REXO2	11q23.2	-0.07202	0.160081	0.258459661
HEBP2	6q24.1	-0.07199	0.160274	0.258750313
NAGPA	16p13.3	0.071978	0.160319	0.258802306
EIF2S1	14q23.3	0.071974	0.160339	0.258813826
FSHR	2p16.3	-0.07195	0.160456	0.258982211
CTAG2	Xq28	-0.07195	0.160507	0.259044093

CACYBP	1q25.1	-0.07194	0.160546	0.259085277
NRIP2	12p13.33	-0.07193	0.160596	0.259145418
PLPP2	19p13.3	0.071923	0.160636	0.259189361
RAG2	11p12	-0.07192	0.160684	0.259245102
LINC00200	10p15.3	-0.07191	0.160732	0.259298929
IGSF6	16p12.2	0.071905	0.160743	0.259298929
RS1	Xp22.13	-0.07188	0.160902	0.2595161
RUNX2	6p21.1	-0.07188	0.16091	0.2595161
HNF1B	17q12	0.071873	0.16093	0.2595161
LINC00896	22q11.21	0.07187	0.160948	0.2595161
SAT1	Xp22.11	0.071869	0.160951	0.2595161
EPHX3	19p13.12	-0.07187	0.160955	0.2595161
NEK4	3p21.1	0.071852	0.161051	0.259649351
GADD45B	19p13.3	-0.07184	0.161129	0.259754209
CA5B	Xp22.2	-0.07183	0.161198	0.259844891
OR2A2	7q35	0.071823	0.161222	0.259862625
COPB1	11p15.2	0.071793	0.161397	0.260123783
CHURC1	14q23.3	0.071764	0.161568	0.260379125
LINC00526	18p11.31	-0.07175	0.161638	0.260469957
NOCT	4q31.1	0.071722	0.161811	0.260727575
C12ORF10	12q13.13	-0.0717	0.161918	0.260879536
TNFRSF4	1p36.33	-0.0717	0.161969	0.260939918
THBS1	15q14	-0.07169	0.162012	0.260988169
VSIG10L	19q13.41	0.071686	0.162026	0.26099055
TLR7	Xp22.2	0.071672	0.162105	0.261096833
GIMAP6	7q36.1	0.071649	0.16224	0.261293757
NIPSNAP3A	9q31.1	0.071635	0.162321	0.261402506
SEC22C	3p22.1	-0.07163	0.162334	0.261402506
RAP1GDS1	4q23	0.071627	0.162372	0.261442625
METTL3	14q11.2	-0.07162	0.162405	0.261474596
COL16A1	1p35.2	-0.07161	0.162456	0.261525046
IFNB1	9p21.3	-0.07161	0.162462	0.261525046
PSME1	14q12	0.071593	0.162568	0.26167451
STAG3L3	7q11.23	-0.07157	0.162689	0.261847245
KCNT2	1q31.3	-0.07156	0.162779	0.261971775
LOC391322	22q11.23	0.071543	0.162866	0.262039307
GABRA4	4p12	-0.07154	0.162869	0.262039307
NAB1	2q32.2	0.071542	0.162873	0.262039307
CBWD6	9p11.2	-0.07154	0.162874	0.262039307
MRPL50	9q31.1	0.071539	0.162886	0.262039307
FANCD2OS	3p25.3	0.071535	0.16291	0.262055348
PPP1R3E	14q11.2	0.071532	0.162928	0.26206351
C1ORF100	1q44	0.071521	0.162993	0.262148077
AKAP11	13q14.11	-0.07152	0.163015	0.262161281
ESRRA	11q13.1	-0.07151	0.163038	0.262176979
PSMB9	6p21.32	0.071505	0.163088	0.262237599
LMO2	11p13	0.071496	0.163144	0.262306398
NHLRC3	13q13.3	-0.07149	0.163173	0.262332315
COL6A5	3q22.1	0.071484	0.16321	0.262369799
VCPIP1	8q13.1	-0.07145	0.163425	0.262694781
LOC100130093	1q42.13	-0.07144	0.163472	0.262749347
AKAP1	17q22	-0.07143	0.163529	0.262820281
TCTEX1D2	3q29	-0.0714	0.163681	0.263019627
RNF123	3p21.31	0.071405	0.163681	0.263019627
ARGFX	3q13.33	0.071403	0.163693	0.263019627
REPS1	6q24.1	-0.07139	0.163751	0.263091866
H1FO	22q13.1	-0.07139	0.163784	0.263111605
LINC01102	2q12.1	0.071386	0.16379	0.263111605

ABCA13	7p12.3	0.071382	0.163816	0.26313229
LRRC25	19p13.11	0.07138	0.163829	0.26313229
NUP54	4q21.1	0.071374	0.163861	0.263162355
SNORA84	9q22.31	-0.07137	0.163876	0.263166699
SELENOI	2p23.3	-0.07135	0.163999	0.263343289
KCNJ10	1q23.2	-0.07134	0.164054	0.263409136
DAP3	1q22	-0.07132	0.1642	0.263607037
SV2B	15q26.1	-0.07132	0.164206	0.263607037
TRIM45	1p13.1	0.071314	0.164216	0.263607037
PXDC1	6p25.2	-0.07129	0.164371	0.263817828
FAM138F	19p13.3	-0.07129	0.164374	0.263817828
PABPC1P2	2q22.3	-0.07126	0.16451	0.264004269
ZWILCH	15q22.31	0.071264	0.164517	0.264004269
GINM1	6q25.1	0.071252	0.164584	0.264077154
GDF3	12p13.31	-0.07125	0.164588	0.264077154
CDC20B	5q11.2	0.071249	0.164605	0.264082972
OR4F5	1p36.33	0.071235	0.164687	0.264193387
GMPS	3q25.31	-0.07122	0.164761	0.264290397
SMIM5	17q25.1	0.071213	0.164821	0.264365678
ZNF774	15q26.1	0.0712	0.164897	0.26446569
CYP2D6	22q13.2	-0.07118	0.165019	0.264640642
AKR1C8P	10p15.1	-0.07116	0.165152	0.26483375
BSND	1p32.3	0.071138	0.165266	0.26498507
NVL	1q42.11	-0.07114	0.165273	0.26498507
CCNY	10p11.21	0.071115	0.165399	0.265165477
CNTLN	9p22.2	0.071072	0.16566	0.265562148
GTF2F1	19p13.3	-0.07107	0.165698	0.265602688
VN1R1	19q13.43	-0.07106	0.165737	0.265643029
MS4A4A	11q12.2	0.071055	0.165759	0.265656996
PSPC1	13q12.11	-0.07104	0.165823	0.265738758
CMKLR1	12q23.3	0.07103	0.165909	0.265855576
SLC39A6	18q12.2	0.071022	0.165955	0.265908515
UTP15	5q13.2	0.07101	0.166026	0.266000639
PRSS35	6q14.2	0.071006	0.166053	0.266022376
MIRLET7BHG	22q13.31	-0.071	0.166116	0.266101369
LINC01001	11p15.5	-0.07098	0.166183	0.266171253
ANKRD24	19p13.3	0.070984	0.166186	0.266171253
GSTM2	1p13.3	-0.07094	0.166444	0.266562431
WFDC8	20q13.12	0.070938	0.166457	0.266562431
PLA1A	3q13.33	-0.07091	0.166608	0.266783452
KHNYN	14q12	0.070897	0.166706	0.266918189
SIM1	6q16.3	-0.07089	0.16673	0.266935758
BRDTP1	Xq21.33	-0.07086	0.166906	0.267197035
ANGPTL4	19p13.2	0.070856	0.166948	0.267242912
ST18	8q11.23	0.070851	0.166981	0.267273144
RNASE11	14q11.2	-0.07085	0.167004	0.267289094
RIPOR1	16q22.1	-0.07084	0.167021	0.267294691
SCG2	2q36.1	-0.07084	0.167062	0.267339542
BRAF	7q34	-0.07082	0.167154	0.267465115
MARS2	2q33.1	-0.07079	0.167329	0.267723271
ZNF784	19q13.42	0.070787	0.167364	0.267757774
MSX2P1	17q22	-0.07078	0.167387	0.267774209
HIST1H2BB	6p22.2	-0.07078	0.167413	0.26779429
TMEM233	12q24.23	-0.07074	0.167627	0.268115053
KIR2DL3	19q13.42	0.07074	0.167648	0.268126638
SLC5A1	22q12.3	0.070732	0.167699	0.268187615
TCF4	18q21.2	-0.07073	0.167732	0.268202852
ADAMTSL4	1q21.2	-0.07073	0.167736	0.268202852

SNHG3	1p35.3	-0.0707	0.16786	0.268341869
SPDYE5	7q11.23	-0.0707	0.167861	0.268341869
C19ORF48	19q13.33	-0.0707	0.167863	0.268341869
SPPL2B	19p13.3	-0.0707	0.167887	0.268359865
ZFPL1	11q13.1	-0.07069	0.167948	0.268435957
LOC391343	2p25.3	-0.07069	0.167971	0.268451119
SKI	1p36.33-p36.32	-0.07068	0.168021	0.268509314
ZNF655	7q22.1	-0.07067	0.168048	0.268518346
SLC38A2	12q13.11	0.070673	0.168054	0.268518346
DLX1	2q31.1	-0.07067	0.168096	0.268553456
PEX5L	3q26.33	-0.07066	0.168102	0.268553456
LZTFL1	3p21.31	-0.07065	0.168207	0.268698996
HAUS2	15q15.2	-0.0706	0.168505	0.269153285
ZNF101	19p13.11	-0.07058	0.168613	0.269293305
WDR54	2p13.1	-0.07058	0.168619	0.269293305
KCNE1	21q22.12	0.070576	0.168641	0.269307109
ATP5MGL	22q13.2	0.070566	0.168701	0.26938016
ZSCAN31	6p22.1 6p22.3-p22.1	-0.07056	0.168715	0.269381696
ACMSD	2q21.3	0.07056	0.168736	0.269393898
DAXX	6p21.32	-0.07056	0.16875	0.269393898
TM6SF1	15q25.2	-0.07054	0.168851	0.269534604
CHODL	21q21.1	-0.07053	0.168944	0.26966193
ACOX2	3p14.3	-0.0705	0.169113	0.269910096
LINC00028	20q11.21	-0.07048	0.169207	0.270019965
KMT2B	19q13.12	-0.07048	0.169218	0.270019965
GPR26	10q26.13	-0.07048	0.169223	0.270019965
ANGPTL8	19p13.2	-0.07047	0.169276	0.270083465
ADCY1	7p12.3	-0.07046	0.169323	0.270137924
ITPRIP	10q25.1	0.070423	0.169568	0.270506256
PNLIPRP1	10q25.3	-0.07042	0.169584	0.270509846
SYCP1	1p13.2	-0.07041	0.169659	0.270602239
TPR	1q31.1	0.070406	0.169669	0.270602239
DNAJB1	19p13.12	-0.07039	0.16976	0.27072675
PARP11	12p13.32	-0.07038	0.169815	0.270792851
NDUFA3	19q13.42	-0.07037	0.169858	0.270840173
GDF2	10q11.22	0.070364	0.169924	0.270878169
DDX25	11q24.2	0.070363	0.169931	0.270878169
MRPL47	3q26.33	-0.07036	0.169947	0.270878169
PAPPA	9q33.1	-0.07036	0.169949	0.270878169
GABRG2	5q34	-0.07036	0.16995	0.270878169
SOX6	11p15.2	-0.07035	0.170014	0.270959238
COG8	16q22.1	0.070321	0.170185	0.271209194
TMED7-TICAM2	5q22.3	0.070311	0.170248	0.271288238
FDPSP2	7q11.23	0.070303	0.170295	0.271341524
HMGB2	4q34.1	0.070294	0.170354	0.271414032
SOHLH2	13q13.3	-0.07029	0.170398	0.27146074
WAC	10p12.1 10p12.1-p11.2	0.070284	0.17041	0.27146074
SMCP	1q21.3	-0.07027	0.17051	0.271587736
MBD3L2	19p13.2	-0.07027	0.170517	0.271587736
GIMAP7	7q36.1	0.070221	0.170794	0.272006803
HARS2	5q31.3	0.070202	0.170913	0.272175729
ESM1	5q11.2	-0.07019	0.17097	0.272244158
FBXL14	12p13.33	0.070182	0.171032	0.272320979
MBTPS1	16q23.3-q24.1	0.070159	0.171175	0.272527771
CGGBP1	3p11.1	-0.07015	0.171232	0.272596259
MMP19	12q13.2	-0.07012	0.171439	0.272903911
PGPEP1L	15q26.3	-0.07011	0.171473	0.272936664
CCDC30	1p34.2	0.070088	0.171609	0.2731313

ZNF204P	6p22.1	0.070072	0.171705	0.273262896
KRTAP10-12	21q22.3	-0.07007	0.171746	0.273306216
LOC401463	8q12.3	-0.07004	0.171903	0.27353491
PI16	6p21.2	-0.07004	0.171926	0.273549101
NCCRP1	19q13.2	-0.07003	0.171992	0.273631557
ZNF207	17q11.2	-0.06999	0.17219	0.273925732
MTG1	10q26.3	-0.06999	0.172228	0.273964992
SAA3P	11p15.1	0.069984	0.172249	0.273975505
FAXDC2	5q33.2	-0.06998	0.172268	0.2739846
NDUFB5	3q26.33	0.069978	0.172283	0.273985988
MTMR8	Xq11.2	-0.06995	0.172465	0.274253579
CSF3	17q21.1	-0.06994	0.172537	0.274346704
RNF187	1q42.13	-0.06992	0.172644	0.274494403
	1-Mar 4q32.2-q32.3	0.069892	0.172814	0.274743475
TGIF2LY	Yp11.2	-0.06988	0.17286	0.274794508
RPS6KA4	11q13.1	-0.06988	0.172913	0.274857998
MYH6	14q11.2	-0.06987	0.172979	0.274940005
UOX	1p31.1	-0.06985	0.173095	0.275102962
GAL3ST1	22q12.2	0.069838	0.173147	0.275163837
TRIM66	11p15.4	-0.06983	0.173211	0.275243316
AGO3	1p34.3	-0.06982	0.173245	0.275276363
LINC00472	6q13	-0.06982	0.173286	0.275295338
UBALD1	16p13.3	-0.06981	0.173292	0.275295338
IL36G	2q14.1	-0.06981	0.173298	0.275295338
SYDE2	1p22.3	-0.06981	0.173318	0.275304029
MAP3K3	17q23.3	-0.06981	0.173345	0.275325509
PSMC5	17q23.3	-0.06979	0.173461	0.275487378
UNC5A	5q35.2	0.069784	0.173478	0.275493223
AUTS2	7q11.22	-0.06978	0.173532	0.275557743
RAB38	11q14.2	-0.06976	0.173644	0.275713363
UBA5	3q22.1	0.069752	0.173676	0.275742222
PHLDA2	11p15.4	0.069736	0.173776	0.275878886
RAB40A	Xq22.2	-0.06971	0.173965	0.276157276
SERPINA5	14q32.13	-0.06969	0.174082	0.276321598
NPL	1q25.3	0.069682	0.174109	0.276342065
NOXRED1	14q24.3	-0.06967	0.174196	0.276448555
CELSR2	1p13.3	-0.06967	0.174204	0.276448555
KRTAP12-4	21q22.3	0.069659	0.174255	0.276508572
ROGDI	16p13.3	-0.06965	0.174293	0.276546602
ARHGAP35	19q13.32	0.06965	0.174308	0.276547986
B4GAT1	11q13.2	-0.06961	0.174528	0.276875612
TRMT10C	3q12.3	-0.0696	0.174598	0.276963896
HEATR5B	2p22.2	0.069539	0.174996	0.277574155
LINC00905	19p13.12	-0.06953	0.175053	0.277642075
LIG1	19q13.33	0.069525	0.175085	0.277665335
ZBTB37	1q25.1	0.069523	0.175095	0.277665335
NKIRAS1	3p24.2	-0.06952	0.175115	0.277675204
BTBD8	1p22.1	0.069509	0.175184	0.277762366
PSMC4	19q13.2	-0.06949	0.175274	0.277881876
BET1L	11p15.5	0.069491	0.175295	0.277893875
COX7B	Xq21.1	-0.06947	0.175437	0.278097155
PDZD8	10q25.3-q26.11	0.069461	0.175481	0.2781453
FOLR2	11q13.4	0.069444	0.175591	0.278297656
PCGF5	10q23.32	0.069435	0.175645	0.278360714
FAM24A	10q26.13	-0.06943	0.175672	0.278380622
ACTB	7p22.1	0.069427	0.175695	0.278395371
TAF4B	18q11.2	-0.0694	0.175895	0.278690432
ZNF711	Xq21.1	-0.06939	0.175953	0.278759936

MIA	19q13.2	0.06937	0.17605	0.278891279
IGDCC4	15q22.31	-0.06936	0.176115	0.278973537
CA5A	16q24.2	-0.06936	0.176136	0.27898408
PYGB	20p11.21	0.069345	0.176205	0.27907216
WNT9B	17q21.32	-0.06932	0.17635	0.279278713
SNORA58	3q22.1	0.069315	0.176395	0.27932856
ZBTB4	17p13.1	0.069308	0.176437	0.27937258
RAPGEF1	9q34.13	0.069298	0.176502	0.27945286
FOXN1	17q11.2	0.069262	0.176728	0.279779935
SOX18	20q13.33	-0.06926	0.176736	0.279779935
UBE4B	1p36.22	0.069229	0.176933	0.280069591
ANKLE2	12q24.33	-0.06922	0.177006	0.280162824
MAS1L	6p22.1	0.069207	0.177073	0.280237998
HGFAC	4p16.3	0.069202	0.177103	0.280237998
SNORA79	14q31.1	-0.0692	0.177107	0.280237998
LSMEM2	3p21.31	-0.0692	0.17711	0.280237998
PDLIM2	8p21.3	-0.06918	0.177223	0.280393289
MPRIP	17p11.2	0.069181	0.177236	0.280393289
FUBP3	9q34.11-q34.12	-0.06917	0.177317	0.280499422
LRP5L	22q11.23	-0.06916	0.177344	0.280512847
MAPK8IP2	22q13.33	-0.06916	0.177353	0.280512847
CAPNS1	19q13.12	0.06915	0.17743	0.280612592
GNAO1	16q13	-0.06912	0.177635	0.280902039
ZNF519	18p11.21	0.069116	0.177641	0.280902039
FKBP1AP1	19q13.43	-0.06911	0.177667	0.280920491
RPS2	16p13.3	-0.06911	0.177689	0.280922493
C9	5p13.1	0.069107	0.1777	0.280922493
ERCC8	5q12.1	-0.06911	0.17771	0.280922493
RFK	9q21.13	-0.0691	0.177732	0.280925843
CCDC152	5p12	0.069097	0.177762	0.280925843
PLXNA1	3q21.3	-0.0691	0.177765	0.280925843
ERBB3	12q13.2	0.069096	0.177769	0.280925843
LRRC6	8q24.22	0.069078	0.17788	0.281063411
INHBE	12q13.3	-0.06908	0.177884	0.281063411
AADAC	3q25.1	0.069056	0.178023	0.281260503
FAM43A	3q29	-0.06902	0.178232	0.281569632
RAC3	17q25.3	0.068997	0.178391	0.281798295
TSPY3	Yp11.2	0.068991	0.178431	0.281821371
KLLN	10q23.31	0.068991	0.178434	0.281821371
RSPO2	8q23.1	-0.06898	0.178485	0.281879209
PYROXD2	10q24.2	0.068965	0.178594	0.282029041
EVX2	2q31.1	-0.06894	0.178777	0.282296778
KRTAP12-2	21q22.3	-0.06893	0.178825	0.282340849
CNGB3	8q21.3	-0.06893	0.178833	0.282340849
EGR2	10q21.3	-0.06892	0.178853	0.282350102
WBP2	17q25.1	0.068887	0.179086	0.282681566
ECT2	3q26.31	0.068886	0.179091	0.282681566
CDH19	18q22.1	-0.06888	0.179121	0.282706246
TESK2	1p34.1	0.068861	0.179255	0.282894996
CLDN19	1p34.2	-0.06885	0.179335	0.282998955
ARHGAP36	Xq26.1	-0.06884	0.17938	0.283048575
TMEM257	Xq27.3	0.068838	0.179396	0.283050727
IFIT1B	10q23.31	0.068835	0.17942	0.283058646
GLRX3	10q26.3	-0.06883	0.179438	0.283058646
C21ORF91	21q21.1	-0.06883	0.179447	0.283058646
LAIR1	19q13.42	0.068828	0.179464	0.283058646
GSAP	7q11.23	-0.06883	0.179472	0.283058646
NSG2	5q35.2	-0.06882	0.179527	0.283102263



GTF2B	1p22.2	0.068818	0.179528	0.283102263
EFCAB11	14q32.11	-0.06881	0.179562	0.283133756
RTN4IP1	6q21	-0.0688	0.179644	0.283240563
MKRN2	3p25.2	-0.06879	0.179697	0.283302196
PABPC1L2A	Xq13.2	0.068782	0.179751	0.283364886
UGT3A1	5p13.2	-0.06877	0.179807	0.283431818
ANKRD55	5q11.2	0.068757	0.179914	0.283577924
IFNW1	9p21.3	0.068747	0.179974	0.283650177
AKAP2	9q31.3	-0.06874	0.179989	0.283651418
WIPF3	7p14.3	-0.06874	0.180007	0.283657535
SGF29	16p11.2	-0.06874	0.180023	0.28366063
VAMP1	12p13.31	0.068731	0.180077	0.283722322
IGF2R	6q25.3	-0.06872	0.18012	0.283768941
YWHAZ	8q22.3	-0.06871	0.180212	0.283890989
UQCRHL	1p36.21	0.0687	0.180275	0.283965431
NKAIN2	6q22.31	-0.0687	0.180288	0.283965431
HAPLN1	5q14.3	-0.06869	0.180348	0.284038424
LINC00917	16q24.1	-0.06868	0.180378	0.284063615
SOD3	4p15.2	0.068667	0.180484	0.28420108
ZNF124	1q44	-0.06867	0.180494	0.28420108
ADRB3	8p11.23	-0.06866	0.180524	0.284226468
ARPP19	15q21.2	0.068656	0.180554	0.284251286
ELAVL4	1p33-p32.3	0.06864	0.180655	0.284386854
KRR1	12q21.2	-0.0686	0.180935	0.284806578
P2RY4	Xq13.1	0.068587	0.180995	0.284877612
HIC1	17p13.3	-0.06857	0.181117	0.285031061
FLCN	17p11.2	0.068567	0.181121	0.285031061
CASC10	10p12.31	-0.06855	0.181222	0.285148161
PRAMEF4	1p36.21	0.068549	0.181235	0.285148161
MZT2A	2q21.1	-0.06855	0.181246	0.285148161
TTC36	11q23.3	-0.06855	0.181255	0.285148161
PCDHGA9	5q31.3	0.068544	0.181266	0.285148161
LINC00937	12p13.31	-0.06853	0.181353	0.285254677
IFFO1	12p13.31	-0.06853	0.181363	0.285254677
PITPNB	22q12.1	-0.06851	0.181464	0.285358275
TEX2	17q23.3	-0.06851	0.18147	0.285358275
UBA1	Xp11.3	-0.06851	0.181471	0.285358275
LINC00698	3p14.2	-0.0685	0.181572	0.285493795
CCNYL1	2q33.3	0.068494	0.181588	0.285497288
ACOT1	14q24.3	-0.06848	0.181644	0.285539631
RPL18	19q13.33	-0.06848	0.181646	0.285539631
FIBCD1	9q34.12	0.068483	0.181658	0.285539631
ASH1L	1q22	0.068476	0.181705	0.285591511
EIF2AK2	2p22.2	-0.06844	0.18195	0.285951285
ESR1	6q25.1-q25.2	0.068435	0.181963	0.285951285
TEX44	2q37.1	-0.06843	0.182007	0.285999186
SLCO6A1	5q21.1	-0.06842	0.18204	0.286015312
TEX19	17q25.3	-0.06842	0.182046	0.286015312
KRT33B	17q21.2	-0.06841	0.182096	0.286053598
ZRANB1	10q26.13	-0.06841	0.182099	0.286053598
CT45A1	Xq26.3	-0.0684	0.182169	0.286118706
PUS7L	12q12	-0.0684	0.182176	0.286118706
TRPM5	11p15.5	0.068401	0.182183	0.286118706
FAM76A	1p35.3	0.068377	0.182335	0.286334271
BEND3P3	10q22.3	0.068359	0.182449	0.28649129
SPART	13q13.3	-0.06836	0.182465	0.28649129
UNC5C	4q22.3	0.068354	0.182485	0.28649129
TLX1	10q24.31	-0.06835	0.182492	0.28649129

DNAH6	2p11.2	-0.06834	0.182567	0.286586153
AGTR2	Xq23	-0.06834	0.182597	0.286597995
RASGEF1C	5q35.3	0.068335	0.182603	0.286597995
EDF1	9q34.3	0.068331	0.182632	0.286620677
ARL17A	17q21.31	-0.06833	0.182666	0.286649482
ADGRE2	19p13.12	0.068324	0.182679	0.286649482
FMO6P	1q24.3	-0.06831	0.182794	0.286807322
CSAG1	Xq28	-0.0683	0.182835	0.286849597
SNAPIN	1q21.3	-0.06829	0.182866	0.286875944
POU2F2	19q13.2	0.068291	0.182889	0.286889307
LRCH3	3q29	0.068285	0.182927	0.286898803
CWH43	4p11	0.068284	0.182933	0.286898803
TIFAB	5q31.1	0.068283	0.182938	0.286898803
SPICE1	3q13.2	0.068272	0.183012	0.286992529
PLCXD3	5p13.1	0.068269	0.183026	0.286992576
PTCH2	1p34.1	-0.06827	0.183053	0.287011564
FKBP3	14q21.2	-0.06826	0.183084	0.287037957
GRK1	13q34	-0.06826	0.183101	0.287042699
TUG1	22q12.2	-0.06825	0.18315	0.287097184
MIPEP	13q12.12	-0.06824	0.183221	0.287185408
RIC3	11p15.4	-0.06822	0.183334	0.287327164
DOK4	16q21	0.068221	0.18334	0.287327164
USP21	1q23.3	-0.06822	0.183372	0.287354625
CTTNBP2NL	1p13.2	0.068201	0.183465	0.287477654
TANGO2	22q11.21	0.06818	0.183605	0.287674602
ADGRL4	1p31.1	-0.06813	0.183899	0.28811307
CACNA1E	1q25.3	-0.06813	0.183948	0.288166249
YPEL2	17q22	0.068115	0.184023	0.288261652
PCDHB17P	5q31.3	-0.06811	0.184046	0.288270811
TMEM213	7q34	0.068109	0.184057	0.288270811
AQR	15q14	0.068091	0.184173	0.288420712
PASD1	Xq28	-0.06809	0.184182	0.288420712
FIRRE	Xq26.2	-0.06808	0.18427	0.288518165
PGR	11q22.1	-0.06808	0.184273	0.288518165
TNRC18	7p22.1	-0.06807	0.184293	0.288522079
NEUROD6	7p14.3	-0.06807	0.184304	0.288522079
CCDC191	3q13.31	-0.06805	0.184451	0.288729313
FRY	13q13.1	0.068045	0.184476	0.288745961
OR10H5	19p13.12	-0.06804	0.184533	0.288812991
LAMB3	1q32.2	0.068028	0.184585	0.28885858
FGF22	19p13.3	0.068027	0.184591	0.28885858
TTYH2	17q25.1	-0.06802	0.18461	0.288864863
KCNE5	Xq23	-0.06802	0.184638	0.28888626
SNAR-G2	19q13.33	-0.06802	0.184653	0.288888022
VAMP8	2p11.2	-0.06799	0.184799	0.289093578
ZFPM1	16q24.2	0.067973	0.184937	0.289286888
GPR149	3q25.2	0.067963	0.185007	0.28937295
SCGB1D2	11q12.3	-0.06796	0.185046	0.289402349
ANKRD36	2q11.2	-0.06796	0.185055	0.289402349
NUP214	9q34.13	0.067951	0.18508	0.289419023
RALA	7p14.1	-0.06795	0.185098	0.289419648
EMC6	17p13.2	0.067947	0.185109	0.289419648
GNG8	19q13.32	-0.06793	0.185197	0.28953547
LINC02145	5p15.31	-0.06792	0.185277	0.289636459
ZBTB21	21q22.3	0.067912	0.185335	0.289684327
TREML4	6p21.1	0.067912	0.185336	0.289684327
TMEM141	9q34.3	0.067887	0.185494	0.289909116
NUP62CL	Xq22.3	0.067868	0.185617	0.290044676

WAPL	10q23.2	0.067867	0.185624	0.290044676
SLC16A11	17p13.1	-0.06787	0.185633	0.290044676
HSD11B1	1q32.2	-0.06787	0.185639	0.290044676
PCDHGA2	5q31.3	-0.06786	0.185689	0.290083577
SERBP1	1p31.3	0.067857	0.185693	0.290083577
WSB1	17q11.1	-0.06785	0.185766	0.290167244
BCL6	3q27.3	0.067844	0.185775	0.290167244
DCX	Xq23	-0.06782	0.185916	0.290363667
ZNF644	1p22.2	0.067787	0.186148	0.290689717
PLEC	8q24.3	0.067786	0.186153	0.290689717
PCCA	13q32.3	0.06778	0.186191	0.290726131
TMEM205	19p13.2	-0.06775	0.18641	0.291044957
C3P1	19p13.2	-0.06774	0.186431	0.291051998
SERPINB10	18q22.1	-0.06774	0.186444	0.291051998
ZNF197	3p21.31	-0.06773	0.186539	0.291178386
NOL12	22q13.1	-0.06772	0.186612	0.291258483
MAD2L1	4q27	0.067714	0.186621	0.291258483
FABP4	8q21.13	-0.06771	0.186644	0.291258483
EXOC3	5p15.33	-0.06771	0.186649	0.291258483
AEBP2	12p12.3	-0.06769	0.186763	0.291401531
BAZ1A	14q13.1-q13.2	0.067691	0.186769	0.291401531
CFAP52	17p13.1	-0.06767	0.186885	0.291559551
CFTR	7q31.2	-0.06766	0.186946	0.291632324
LHX5	12q24.13	-0.06766	0.186988	0.291670218
PAQR3	4q21.21	0.067656	0.187	0.291670218
GIMAP1	7q36.1	0.06765	0.187042	0.29171329
MCF2L	13q34	-0.06763	0.187157	0.291870432
RUVBL2	19q13.33	-0.06761	0.187302	0.292073723
UNC79	14q32.12	-0.06759	0.187453	0.292286191
FAM110D	1p36.11	-0.06756	0.187614	0.292513553
NSA2	5q13.3	0.067558	0.18764	0.292532529
UROC1	3q21.3	-0.06753	0.187812	0.292777535
LINC00635	3q13.12	0.067528	0.187839	0.292779809
CHRNB4	15q25.1	-0.06753	0.187843	0.292779809
PTGFR	1p31.1	-0.06752	0.18786	0.292784297
GPR27	3p13	0.067519	0.187897	0.292819465
TSR3	16p13.3	-0.06751	0.187924	0.292837667
DNASE1L1	Xq28	-0.06749	0.188092	0.293060402
TMEM51-AS1	1p36.21	-0.06749	0.188096	0.293060402
CREB1	2q33.3	-0.06746	0.188282	0.293328076
BIN3-IT1	8p21.3	0.06744	0.188413	0.293490791
PARD6G-AS1	18q23	0.067438	0.188429	0.293490791
XIAP	Xq25	-0.06744	0.188431	0.293490791
PPP2R5B	11q13.1	0.067427	0.1885	0.293575876
RHNO1	12p13.33	-0.0674	0.188647	0.293782158
RANBP10	16q22.1	-0.0674	0.188691	0.293814391
OR1D2	17p13.3	0.067397	0.188697	0.293814391
MAP3K15	Xp22.12	0.067377	0.18883	0.293998329
EPHA7	6q16.1	-0.06737	0.188874	0.294044451
TMEM72	10q11.21	0.067356	0.188971	0.294169714
AMIGO1	1p13.3	0.067353	0.188984	0.294169714
MAP3K14-AS1	17q21.31	-0.06734	0.189043	0.294238233
DCDC2B	1p35.2	0.067339	0.189077	0.294267976
REXO1L6P	8q21.2	0.067287	0.189423	0.294773397
ARHGEF6	Xq26.3	0.067286	0.189431	0.294773397
PARP2	14q11.2	-0.06728	0.189474	0.294816754
ALOX15	17p13.2	-0.06727	0.189503	0.29484039
UBTD2	5q35.1	0.06725	0.189665	0.295069204

FGFBP3	10q23.32	0.067233	0.18978	0.295206291
TCHHL1	1q21.3	-0.06723	0.189783	0.295206291
TMEM119	12q23.3	-0.06723	0.189827	0.295252428
GLB1	3p22.3	-0.06722	0.189893	0.295321543
GORAB	1q24.2	0.067214	0.189901	0.295321543
SOX14	3q22.3	-0.06721	0.189949	0.295372874
FHL1	Xq26.3	-0.0672	0.189994	0.295419384
FGB	4q31.3	-0.06715	0.190337	0.295897165
YIF1B	19q13.2	0.067148	0.190338	0.295897165
GBE1	3p12.2	0.067147	0.190345	0.295897165
PIK3R1	5q13.1	-0.06711	0.190596	0.296264055
ZNF385A	12q13.13	-0.06709	0.190702	0.296405079
ABCA4	1p22.1	0.067071	0.190851	0.296614792
BTAF1	10q23.32	0.067055	0.190958	0.296758254
STK32A	5q32	-0.06705	0.191007	0.296810883
ADRB2	5q32	0.067037	0.191076	0.29689519
KLK8	19q13.41	-0.06703	0.191116	0.296916889
SYPL1	7q22.3	0.06703	0.19112	0.296916889
CLIP4	2p23.2	-0.06702	0.191173	0.296975978
ARL13B	3q11.1-q11.2	-0.06701	0.191224	0.297032855
OR2H2	6p22.1	-0.067	0.191289	0.297110299
SLC13A4	7q33	-0.067	0.191331	0.297153507
ATP5ME	4p16.3	0.066989	0.191393	0.297225736
LRIG2	1p13.2	0.066972	0.191507	0.297374383
HIST1H3F	6p22.2	-0.06697	0.191518	0.297374383
KRTAP5-2	11p15.5	0.066965	0.191552	0.297400047
RPS10P7	1q32.1	0.066963	0.191564	0.297400047
CELA3A	1p36.12	0.066961	0.191583	0.297406448
D2HGDH	2q37.3	-0.06695	0.191664	0.297498795
PDZD3	11q23.3	0.066947	0.191673	0.297498795
SLC9A7	Xp11.3 Xp11.3	0.066945	0.191687	0.297498795
PDGFD	11q22.3	-0.06694	0.191736	0.297510824
PSMG3	7p22.3	-0.06694	0.191739	0.297510824
TRIM49D2	11q14.3	-0.06694	0.19174	0.297510824
PAXX	9q34.3	-0.06693	0.191786	0.297558905
DNALI1	1p34.3	-0.06692	0.191825	0.297597
PWAR5	15q11.2	-0.06689	0.192024	0.297863145
ZNF329	19q13.43	-0.06689	0.192041	0.297863145
PIDD1	11p15.5	-0.06689	0.192064	0.297863145
RPL23AP64	11q23.3	-0.06689	0.192081	0.297863145
NFATC3	16q22.1	0.066885	0.192083	0.297863145
TMEM266	15q24.2	-0.06689	0.192086	0.297863145
ADM5	19q13.33	0.066866	0.192212	0.298035783
DMAC2L	14q21.3	0.066861	0.192249	0.298070618
KAT6A	8p11.21	0.06682	0.192518	0.298458671
FABP1	2p11.2	0.066818	0.192532	0.298458671
ARL6IP1	16p12.3	0.066816	0.192547	0.298458671
CYP26C1	10q23.33	-0.06681	0.192564	0.298458671
TMEM31	Xq22.2	-0.06681	0.192574	0.298458671
CLEC18B	16q23.1	0.066804	0.192625	0.298513767
FAM138B	2q14.1	-0.06679	0.192686	0.298586401
OR2F1	7q35	-0.06679	0.192719	0.298613762
BTN1A1	6p22.2	-0.06677	0.192844	0.298783619
ZNF284	19q13.31	-0.06677	0.192866	0.298794708
SLC17A7	19q13.33	-0.06674	0.193073	0.29909216
FNDC8	17q12	-0.06673	0.193097	0.299107339
BMP5	6p12.1	0.066729	0.19313	0.299134449
CXORF51A	Xq27.3	-0.0667	0.193324	0.299392589

NOMO3	16p13.11	-0.0667	0.193335	0.299392589
HCAR2	12q24.31	-0.0667	0.193341	0.299392589
SCARNA23	Xp22.11	-0.06669	0.193388	0.299441339
ATP5F1C	10p14	0.066678	0.193472	0.299548446
FAM163A	1q25.2	-0.06667	0.1935	0.299569291
PAQR6	1q22	0.066662	0.193573	0.299658367
TOGARAM1	14q21.2	-0.06666	0.193591	0.299664224
DAZL	3p24.3	-0.06665	0.193634	0.299707195
MRPS7	17q25.1	-0.06663	0.193765	0.299885826
RNF157	17q25.1	-0.06663	0.193808	0.299929654
NDUFAF1	15q15.1	0.066618	0.193871	0.300004761
CCDC102B	18q22.1-q22.2	-0.06661	0.193906	0.300035158
MMADHC	2q23.2	-0.0666	0.194006	0.300166183
GLI1	12q13.3	-0.06659	0.194063	0.300232387
OR7E5P	11q12.1	-0.06658	0.194109	0.300260094
OR10W1	11q12.1	0.066582	0.194111	0.300260094
NHLH1	1q23.2	-0.06657	0.194172	0.300330304
HIST1H2BH	6p22.2	-0.06655	0.194358	0.300594958
VENTXP7	3p24.3	-0.06654	0.194426	0.300677447
GKN2	2p13.3	0.066526	0.19449	0.300753023
AOC4P	17q21.31	-0.06652	0.194527	0.300786741
NRAS	1p13.2	-0.06652	0.194559	0.300813816
POU6F1	12q13.13	-0.0665	0.19464	0.300915922
RPL13A	19q13.33	-0.0665	0.194681	0.300941594
TSHR	14q31.1	0.066496	0.194687	0.300941594
OR6C3	12q13.2	-0.06648	0.194821	0.301124704
LRRC34	3q26.2	-0.06644	0.19509	0.301498501
SYTL3	6q25.3	0.066436	0.195093	0.301498501
WDR19	4p14	-0.06642	0.195193	0.301606069
PTH2	19q13.33	0.06642	0.195203	0.301606069
CACNG6	19q13.42	0.066419	0.195207	0.301606069
MIEN1	17q12	-0.06641	0.195239	0.301631828
SLC18A3	10q11.23	-0.0664	0.19534	0.30176141
EDN2	1p34.2	0.066398	0.195353	0.30176141
KRT6C	12q13.13	-0.06637	0.195562	0.302060395
HDGFL2	19p13.3	-0.06636	0.195622	0.302121026
ZNF615	19q13.41	-0.06636	0.195631	0.302121026
ZBTB34	9q33.3	-0.06633	0.1958	0.302358122
SLC25A22	11p15.5	0.066325	0.195845	0.30240442
HLA-J	6p22.1	0.066294	0.196053	0.302702336
SEMA3C	7q21.11	-0.06629	0.196075	0.302712708
KRT18P55	17q11.2	0.066279	0.196154	0.302812047
C1ORF87	1p32.1	-0.06627	0.19622	0.302889978
HRH4	18q11.2	0.066218	0.19657	0.303407107
OR51L1	11p15.4	-0.0662	0.196665	0.303529912
SNORA50A	16q21	0.066195	0.196724	0.303598508
TPM3P9	19q13.42	-0.06619	0.19677	0.303645583
ARMC3	10p12.2	-0.06618	0.196794	0.303658536
SNCA	4q22.1	-0.06617	0.196865	0.303745143
TRADD	16q22.1	0.066153	0.197008	0.303942563
UBE3A	15q11.2	0.066147	0.19705	0.303984502
AIF1L	9q34.12-q34.13	0.066135	0.197132	0.304087302
TMEM247	2p21	-0.06611	0.197288	0.304303758
KRTAP13-4	21q22.11	-0.0661	0.197389	0.3044335976
PRSS40A	2q21.1	-0.06609	0.197467	0.304533636
IFT122	3q21.3-q22.1	0.066075	0.197536	0.304616066
H2BFM	Xq22.2	-0.06606	0.197646	0.304732146
TMPRSS11B	4q13.2	-0.06606	0.197649	0.304732146

RRM2B	8q22.3	-0.06606	0.197665	0.304732146
TANK	2q24.2	0.066055	0.197672	0.304732146
TMCO1	1q24.1	0.066049	0.197711	0.304761982
LYSMD2	15q21.2	0.066048	0.197722	0.304761982
C9ORF170	9q21.33	-0.06602	0.197917	0.305038938
LPCAT3	12p13.31	0.066013	0.197958	0.305078611
DAB2	5p13.1	-0.06601	0.197991	0.305107092
MEX3C	18q21.2	0.065965	0.198288	0.30554016
GPR4	19q13.32	-0.06595	0.198371	0.305635618
SNHG29	17p11.2	0.065951	0.19838	0.305635618
PURG	8p12	-0.06594	0.198466	0.30574386
THUMPD3	3p25.3	-0.06593	0.198495	0.305765029
ZNF689	16p11.2	-0.06593	0.198533	0.305800333
CCDC166	8q24.3	0.065924	0.198569	0.305832553
FAM224B	Yq11.222	-0.0659	0.198734	0.306063607
KRTAP5-5	11p15.5	-0.06589	0.198785	0.306118644
GPR176	15q14-q15.1	-0.06589	0.198802	0.306120401
ZMAT1	Xq22.1	-0.06587	0.198909	0.306262162
PRDX1	1p34.1	-0.06586	0.198972	0.306336006
P2RX2	12q24.33	0.065841	0.199133	0.306560446
GNL2	1p34.3	-0.06584	0.19915	0.30656304
CLEC14A	14q21.1	-0.06583	0.199195	0.306607466
BHLHE22	8q12.3	-0.06583	0.199223	0.306626964
BIRC5	17q25.3	-0.06581	0.199332	0.306771142
TMEM79	1q22	-0.06579	0.199494	0.306997018
RICTOR	5p13.1	-0.06574	0.199812	0.307463649
LINC00301	11q12.2	0.065739	0.199831	0.307469444
SSX2	Xp11.22	-0.06573	0.199911	0.307551747
SERF2	15q15.3	0.065727	0.199916	0.307551747
FIG4	6q21	0.065718	0.199973	0.307616038
RPS26P11	Xq13.1	-0.06572	0.199988	0.307616038
TEX12	11q23.1	-0.0657	0.200072	0.307721519
FAM153A	5q35.3	0.065697	0.200117	0.307767124
CDC20	1p34.2	0.06568	0.200239	0.307931156
RAB9B	Xq22.2	-0.06567	0.200275	0.307963395
S100A9	1q21.3	-0.06567	0.200307	0.307988427
CNBD1	8q21.3	-0.06567	0.200329	0.307998605
MYO1F	19p13.2	0.065659	0.200379	0.308052489
NLGN4Y	Yq11.221	-0.06565	0.200468	0.30816471
ILF2	1q21.3	-0.06564	0.200511	0.308207593
MPPED1	22q13.2	0.065632	0.200568	0.308266817
GABBR1	6p22.1	-0.06563	0.200585	0.308266817
MYF5	12q21.31	0.065628	0.200596	0.308266817
PDZD2	5p13.3	-0.0656	0.200798	0.308554284
TBC1D24	16p13.3	0.065593	0.200831	0.308580679
ICAM4	19p13.2	-0.06559	0.200868	0.308613866
HADHA	2p23.3	0.065572	0.200981	0.308763233
SLC20A1	2q14.1	0.065556	0.201086	0.308901222
ZNF236	18q23	0.065547	0.201151	0.308977744
GPX6	6p22.1	-0.06554	0.201205	0.309037072
SLCO1A2	12p12.1	-0.06553	0.201259	0.30907978
MAP7	6q23.3	0.065531	0.201264	0.30907978
TMTC1	12p11.22	0.065523	0.201319	0.309140379
TNFRSF10B	8p21.3	0.065495	0.201507	0.309406131
FCGR2A	1q23.3	0.065488	0.201558	0.309459929
AURKAP1	1q41	-0.06548	0.201594	0.309491958
MIR155HG	-	0.065461	0.201745	0.309696452
FAM47C	Xp21.1	0.065459	0.201758	0.309696452

RPL18A	19p13.11	-0.06543	0.20196	0.309970904
EXOC3L2	19q13.32	-0.06543	0.201968	0.309970904
CSK	15q24.1	0.065426	0.201987	0.309976825
PPEF2	4q21.1	-0.06542	0.202048	0.310046141
GSTK1	7q34	0.065408	0.202106	0.310111949
ZNF511	10q26.3	0.065396	0.202194	0.310222915
ETFB	19q13.41	0.065382	0.202286	0.31034076
OR9I1	11q12.1	0.065368	0.202384	0.310466459
GALNT9	12q24.33	0.06536	0.202442	0.310531634
HAVCR2	5q33.3	0.065348	0.202528	0.310639604
SLC35F6	2p23.3	-0.06534	0.202587	0.310707252
HIST1H2AJ	6p22.1	0.065321	0.202711	0.310873824
GBP1P1	1p22.2	-0.06531	0.202795	0.310978064
FAM76B	11q21	-0.0653	0.202853	0.311030548
APPBP2	17q23.2	0.0653	0.20286	0.311030548
SDC4P	22q12.2	-0.06527	0.203035	0.311274594
PRR35	16p13.3	-0.06527	0.203054	0.311280621
OR4D1	17q22	0.065267	0.203083	0.311294427
CLTRN	Xp22.2	-0.06527	0.203094	0.311294427
NAP1L2	Xq13.2	-0.06526	0.203168	0.311383318
HGF	7q21.11	-0.06525	0.203215	0.311432237
NPFFR2	4q13.3	-0.06524	0.20325	0.311461447
LOC91450	15q24.3	-0.06524	0.203283	0.311466141
TBX6	16p11.2	-0.06524	0.203284	0.311466141
ABITRAM	9q31.3	-0.06523	0.203317	0.311489167
CCDC155	19q13.33	-0.06523	0.20333	0.311489167
C1ORF185	1p32.3	-0.06522	0.203383	0.311545987
VSX2	14q24.3	0.065216	0.203437	0.311589259
TIPRL	1q24.2	0.065214	0.203452	0.311589259
CPS1-IT1	2q34	0.065213	0.203458	0.311589259
ZNF213	16p13.3	-0.0652	0.203568	0.31173183
INGX	Xq13.1	-0.0652	0.203582	0.31173183
RPTN	1q21.3	-0.06519	0.203631	0.311783191
EFHB	3p24.3	-0.06518	0.203718	0.311891601
NUDT18	8p21.3	0.065173	0.203739	0.311894749
KCP	7q32.1	-0.06517	0.203751	0.311894749
RAB32	6q24.3	-0.06514	0.203967	0.312200959
QRICH1	3p21.31	0.065122	0.204091	0.312367436
ARL6	3q11.2	-0.06512	0.20414	0.312406856
UBE2D2	5q31.2	-0.06511	0.204148	0.312406856
FBXL19-AS1	16p11.2	-0.06511	0.204172	0.312419686
NAA15	4q31.1	0.065098	0.204263	0.312521056
PPIF	10q22.3	0.065097	0.204269	0.312521056
HCAR3	12q24.31	-0.06508	0.204356	0.31263044
SCFD2	4q12	-0.06508	0.204385	0.312649983
AP2A1	19q13.33	0.065076	0.204416	0.312659596
NFKBIB	19q13.2	-0.06507	0.204422	0.312659596
SPEF2	5p13.2	0.065053	0.204572	0.312855959
C2ORF78	2p13.1	-0.06505	0.204582	0.312855959
YTHDF2	1p35.3	0.065048	0.20461	0.312874862
SPRY1	4q28.1	0.065043	0.204641	0.312899187
MASTL	10p12.1	0.065037	0.204683	0.312939585
UBTFL1	11q14.3	0.065033	0.204712	0.312944579
HNRNPA3P1	10q11.21	-0.06503	0.204718	0.312944579
ISG20L2	1q23.1	0.065006	0.204901	0.313187569
LOC100132831	Xp11.4	-0.065	0.204912	0.313187569
ZNF292	6q14.3	-0.065	0.204924	0.313187569
AK8	9q34.13	-0.06498	0.205086	0.313411816

EIF3L	22q13.1	0.064973	0.205133	0.31345915
IFT22	7q22.1	-0.06496	0.205213	0.313557063
AAK1	2p13.3	-0.06496	0.205241	0.313576784
LRIT2	10q23.1	-0.06495	0.205302	0.313645778
SNRNP40	1p35.2	-0.06493	0.205419	0.313800314
ZCCHC4	4p15.2	-0.06493	0.205453	0.313829282
LRFN4	11q13.2	-0.06492	0.205512	0.313895058
SEPTIN12	16p13.3	-0.06491	0.205546	0.313917567
ADAMTS13	9q34.2	-0.06491	0.205572	0.313917567
SDC1	2p24.1	-0.06491	0.205574	0.313917567
WFDC11	20q13.12	-0.06489	0.205743	0.314152339
COTL1	16q24.1	0.064883	0.205764	0.314155452
LOC145845	15q14	0.064879	0.20579	0.314155452
PRTFDC1	10p12.1	-0.06488	0.205792	0.314155452
MS4A6A	11q12.2	0.064863	0.205903	0.314299542
PRSS3	9p13.3	0.064852	0.205978	0.314390709
HMGB3P1	20q11.22	-0.06484	0.206072	0.314510294
CAV2	7q31.2	-0.06484	0.206096	0.314522417
SZRD1	1p36.13	0.064826	0.206162	0.314571311
THPO	3q27.1	-0.06483	0.206168	0.314571311
DEFB136	8p23.1	0.064824	0.206175	0.314571311
ST7-OT4	7q31.2	-0.06481	0.20627	0.314677073
GPR139	16p12.3	0.06481	0.206276	0.314677073
DRAM2	1p13.3	0.064791	0.206407	0.314853205
KCNK13	14q32.11	0.064788	0.20643	0.314864762
RNF17	13q12.12	0.064776	0.20651	0.314958741
ASPRV1	2p13.3	0.064774	0.206523	0.314958741
SLC25A39	17q21.31	-0.06476	0.206643	0.315116893
DCP2	5q22.2	0.064737	0.206786	0.315312008
OLFM3	1p21.1	0.064724	0.206877	0.315404727
POLR3D	8p21.3	0.064724	0.206879	0.315404727
RIPOR2	6p22.3	0.064719	0.206915	0.315436094
HCK	20q11.21	0.064678	0.207204	0.315853002
LAMB2	3p21.31	-0.06466	0.207353	0.316055348
RABGAP1	9q33.2-q33.3	-0.06464	0.20745	0.316179191
PTGR2	14q24.3	-0.06464	0.207491	0.316217534
DUS2	16q22.1	0.064617	0.20763	0.316406158
HIRIP3	16p11.2	0.064592	0.207808	0.316652693
GLI2	2q14.2	-0.06458	0.207867	0.316704431
PHACTR1	6p24.1	-0.06458	0.207881	0.316704431
MRPL42	12q22	0.064578	0.207903	0.316704431
GNRHR	4q13.2	-0.06458	0.207905	0.316704431
ZDHHC12	9q34.11	0.064552	0.20809	0.316962654
NOP2	12p13.31	-0.06454	0.208157	0.317040413
PCNX2	1q42.2	-0.06454	0.208183	0.317055663
EVI2A	17q11.2	0.064525	0.208277	0.317156608
FAM186B	12q13.12	-0.06452	0.208281	0.317156608
LAT2	7q11.23	-0.06451	0.20841	0.317328399
GSK3B	3q13.33	-0.0645	0.208442	0.317352924
RPL13AP17	7q21.11	0.064493	0.208504	0.317406614
ELOF1	19p13.2	-0.06449	0.208509	0.317406614
DEK	6p22.3	0.064485	0.208566	0.317469542
PAX8	2q14.1	-0.06448	0.208582	0.317469542
FMO3	1q24.3	-0.06447	0.208681	0.317596085
SSTR2	17q25.1	-0.06445	0.208832	0.317802205
ZP1	11q12.2	-0.0644	0.209151	0.318264106
CFHR5	1q31.3	-0.0644	0.20919	0.318298575
KLRD1	12p13.2	0.064387	0.20926	0.318381329



SH3YL1	2p25.3	-0.06435	0.20953	0.318767876
SNAR-1	3q28	-0.06435	0.209553	0.318779129
ATXN3	14q32.12	0.064343	0.20957	0.318779865
C10ORF90	10q26.2	-0.06434	0.209594	0.318792481
LHFPL3	7q22.2-q22.3	0.064329	0.209668	0.318880402
ZNF605	12q24.33	-0.06432	0.209764	0.319002384
C3AR1	12p13.31	0.064298	0.209891	0.319166647
SDF2L1	22q11.21	0.064294	0.209917	0.319166647
TCF15	20p13	-0.06429	0.20992	0.319166647
PRKACB	1p31.1	0.064284	0.209987	0.319244954
MDF1	6p21.1	-0.06428	0.210029	0.319283517
CHRNA9	4p14	0.064273	0.210065	0.319315183
ITPRIPL2	16p12.3	0.06426	0.21016	0.319435099
RRAS	19q13.33	-0.06426	0.210186	0.319440127
SLC39A11	17q24.3-q25.1	-0.06425	0.210195	0.319440127
NUP62	19q13.33	0.064249	0.210238	0.319481032
GC	4q13.3	0.064244	0.210272	0.319508594
PCDH12	5q31.3	-0.06421	0.210486	0.319787059
POM121L9P	22q11.23	-0.06421	0.210507	0.319787059
ANP32A	15q23	-0.06421	0.210517	0.319787059
NFASC	1q32.1	-0.06421	0.210535	0.319787059
ALDH1A1	9q21.13	0.064207	0.210535	0.319787059
SETDB1	1q21.3	-0.06416	0.210879	0.320284556
AIFM1	Xq26.1	-0.06413	0.211112	0.320614635
PRAMEF2	1p36.21	-0.06412	0.211133	0.320621724
OR5AN1	11q12.1	0.06412	0.211158	0.320635487
SCUBE2	11p15.4	-0.06409	0.211369	0.320931286
ENSA	1q21.3	0.064082	0.211424	0.320990974
ANP32C	4q32.3	-0.06408	0.211474	0.321028669
KLC4	6p21.1	-0.06407	0.211481	0.321028669
TRIM5	11p15.4	0.064059	0.211592	0.321172416
SPRY4	5q31.3	0.064006	0.21197	0.321716094
FAM41AY1	Yq11.222	0.064003	0.211994	0.321716094
PPP1R12C	19q13.42	-0.064	0.211998	0.321716094
TTY6B	Yq11.223	-0.064	0.212022	0.321727471
CRAMP1	16p13.3	-0.06399	0.212049	0.32174448
MFSD8	4q28.2	-0.06399	0.212084	0.32177387
UFC1	1q23.3	-0.06397	0.212246	0.321995003
MYCL	1p34.2	-0.06396	0.212268	0.322003355
SSH2	17q11.2	0.063927	0.212535	0.322384866
RAD52	12p13.33	-0.06392	0.212566	0.322406131
ANGPTL6	19p13.2	0.063914	0.212629	0.322477885
CYP4F11	19p13.12	0.063901	0.212723	0.32259572
SPN	16p11.2	0.063865	0.212979	0.322945452
PLK4	4q28.1	0.063864	0.212986	0.322945452
OR10J3	1q23.2	0.06386	0.213016	0.322966722
YPEL3	16p11.2	-0.06385	0.213112	0.323088732
C14ORF39	14q23.1	-0.06383	0.213226	0.323232012
KCNJ14	19q13.33	-0.06383	0.213239	0.323232012
TFDP1	13q34	-0.0638	0.21344	0.323506767
SKIV2L	6p21.33	-0.0638	0.213453	0.323506767
ELMOD2	4q31.1	0.06379	0.213518	0.323580824
WBP11	12p12.3	-0.06376	0.213701	0.323826222
SPATA22	17p13.2	0.063763	0.213712	0.323826222
PCNA	20p12.3	-0.06376	0.213745	0.323852357
OR5B12	11q12.1	0.063739	0.213887	0.324041734
CALR3	19p13.11	-0.06374	0.213905	0.324045253
KIAA0754	1p34.3	-0.06373	0.213956	0.324098194

PRKCZ	1p36.33	-0.06372	0.214031	0.324186429
EYS	6q12	0.063706	0.214123	0.324301626
GHR	5p13.1-p12	-0.0637	0.214201	0.324385417
MRPS22	3q23	-0.06369	0.214211	0.324385417
FAM66A	8p23.1	0.063684	0.214285	0.324462768
GSX1	13q12.2	-0.06368	0.214294	0.324462768
TMEM184B	22q13.1	0.063643	0.214577	0.324866684
DPH3	3p25.1	-0.06364	0.214611	0.32487638
EMP1	12p13.1	0.063638	0.214616	0.32487638
NDUFA8	9q33.2	-0.06363	0.214697	0.324974157
TPP1	11p15.4	0.063613	0.214793	0.325095486
NCR3LG1	11p15.1	0.063604	0.214859	0.325169767
XAGE5	Xp11.22	-0.0636	0.214893	0.325197067
CIART	1q21.2	-0.06359	0.214963	0.325260784
PDCD1	2q37.3	0.063589	0.214967	0.325260784
SIGLEC9	19q13.41	0.063526	0.215427	0.32593111
CPTP	1p36.33	0.063522	0.21545	0.325941925
CYCSP52	1q23.1	0.063513	0.215519	0.326012921
ZHX2	8q24.13	0.063511	0.21553	0.326012921
TRAF2	9q34.3	-0.0635	0.215623	0.326129778
CECR7	22q11.1	-0.06349	0.215719	0.326243255
TMEM147	19q13.12	-0.06348	0.215731	0.326243255
TAS1R2	1p36.13	0.063468	0.215847	0.326393701
PRINS	10p12.1	-0.06346	0.215914	0.326470729
SFN	1p36.11	0.063453	0.215954	0.32650568
CASP8	2q33.1	-0.06345	0.215969	0.32650568
OR2K2	9q31.3	-0.06345	0.215987	0.326507931
HSPA2	14q23.3	0.063442	0.216034	0.326554291
ADM2	22q13.33	-0.06343	0.216144	0.326696091
EMILIN3	20q12	-0.0634	0.216347	0.326977114
ATRN	20p13	-0.0634	0.216366	0.326982096
CFAP161	15q25.1	0.063368	0.216571	0.327266184
PRKY	Yp11.2	0.06335	0.216704	0.327443382
UBXN7	3q29	-0.06334	0.216793	0.327553284
TTC3	21q22.13	0.063282	0.217194	0.328134373
GGTA1P	9q33.2	0.063268	0.217295	0.328261185
SMCO2	12p11.23	0.063266	0.217316	0.32826817
GID4	17p11.2 17p11.2	0.063237	0.21752	0.328530413
FTH1P3	2p23.3	-0.06324	0.217522	0.328530413
TINCR	19p13.3	0.063223	0.217626	0.328662704
ERBB4	2q34	-0.06322	0.217642	0.328662704
EZH1	17q21.2	-0.06322	0.217679	0.328687273
STX10	19p13.13	0.063214	0.217692	0.328687273
FAM83H	8q24.3	-0.06321	0.217715	0.328698049
VPS4A	16q22.1	-0.06321	0.217753	0.328711226
UCN	2p23.3	-0.06321	0.217757	0.328711226
	10-Mar 17q23.2	0.063196	0.217824	0.328787433
ENC1	5q13.3	0.063178	0.217952	0.328956928
DHX58	17q21.2	0.063176	0.217971	0.328960596
ST7	7q31.2	-0.06316	0.218102	0.329129223
G2E3	14q12	0.063156	0.218116	0.329129223
PEG10	7q21.3	-0.06309	0.218588	0.329816576
NSUN2	5p15.31	0.063075	0.218709	0.329974725
CORO1C	12q24.11	-0.06307	0.218753	0.330016411
TPM1	15q22.2	0.063062	0.2188	0.330062855
MMAB	12q24.11	-0.06305	0.218855	0.330121188
EDC4	16q22.1	-0.06305	0.218873	0.330122473
BMP1	8p21.3	-0.06303	0.21907	0.330394825

ZBTB17	1p36.13	-0.06302	0.219101	0.330399733
ANP32AP1	15q14	-0.06302	0.219106	0.330399733
ADAMTS17	15q26.3	0.063005	0.21922	0.330546158
HHLA3	1p31.1	0.063	0.219254	0.330553485
RBM7	11q23.2	0.063	0.219258	0.330553485
MEFV	16p13.3	0.062983	0.219378	0.330709712
NEK2	1q32.3	0.062977	0.219427	0.330735799
ZNF430	19p12	-0.06298	0.219428	0.330735799
SCARNA14	15q22.31	-0.06295	0.219612	0.33098839
PSD4	2q14.1	0.062949	0.219633	0.330995456
UBE2O	17q25.1	-0.06293	0.219806	0.331219508
UBL7	15q24.1	-0.06292	0.219815	0.331219508
ARRDC3	5q14.3	0.062912	0.219902	0.331325614
IFIT1	10q23.31	-0.0629	0.219983	0.331413421
C1QTNF8	16p13.3	0.062899	0.219994	0.331413421
INHA	2q35	-0.06288	0.220125	0.331587204
RIF1	2q23.3	-0.06287	0.220214	0.331695403
ASNA1	19p13.13	0.062835	0.22047	0.332030765
TAF7L	Xq22.1	-0.06283	0.220484	0.332030765
IQSEC1	3p25.2-p25.1	-0.06283	0.220486	0.332030765
ZNF227	19q13.31	-0.06281	0.220624	0.3322134
OXR1	8q23.1	-0.06281	0.220688	0.332285052
TBPL2	14q22.3	0.062791	0.220795	0.332404133
GRIK4	11q23.3	-0.06279	0.220801	0.332404133
POM121L10P	22q11.23	-0.06276	0.220998	0.332651917
HMCES	3q21.3	-0.06276	0.220998	0.332651917
OR9A4	7q34	-0.06276	0.221049	0.332692725
RRP36	6p21.1	-0.06275	0.221059	0.332692725
CD163	12p13.31	0.062747	0.221114	0.332751336
TIGAR	12p13.32	-0.06272	0.221332	0.33305373
SYMPK	19q13.32	-0.06271	0.221373	0.333071713
MT1DP	16q13	0.062711	0.22138	0.333071713
LOC154449	6q27	0.062709	0.221394	0.333071713
TYRO3	15q15.1	-0.06269	0.221567	0.333307496
RAD51	15q15.1	0.062681	0.221607	0.333320768
BEAN1	16q21	-0.06268	0.221609	0.333320768
C8B	1p32.2	0.062673	0.221662	0.333375717
RXFP2	13q13.1	-0.06265	0.221804	0.333560258
ZNF766	19q13.41	-0.06265	0.221818	0.333560258
AZGP1	7q22.1	-0.06264	0.221877	0.333623746
ITGA10	1q21.1	-0.06264	0.221917	0.333658524
SLC22A10	11q12.3	0.062634	0.221953	0.333681491
FKBP6	7q11.23	-0.06263	0.221966	0.333681491
MRC1	10p12.33	0.062612	0.222116	0.33388256
RSAD2	2p25.2	0.062598	0.22222	0.334013133
TCF21	6q23.2	-0.06258	0.222371	0.334215603
TMEM104	17q25.1	-0.06257	0.222416	0.334257603
SLC7A5P2	16p12.2	-0.06256	0.222488	0.334341222
RASGEF1A	10q11.21	0.062555	0.222532	0.334382312
LOC100130987	11q13.2	0.062537	0.22267	0.334564507
TBL1X	Xp22.31-p22.2	0.062534	0.222693	0.334574243
GPHA2	11q13.1	-0.06253	0.222715	0.334582102
NCF2	1q25.3	0.062522	0.222781	0.334655901
UCN2	3p21.31	-0.06252	0.222803	0.334664216
BPIFB6	20q11.21	0.062487	0.223041	0.334995836
CHPF	2q35	-0.06248	0.223097	0.33505547
OSGIN1	16q23.3	0.062475	0.223131	0.335080734
ANXA8L1	10q11.22	-0.06247	0.22317	0.33511406

SNORA2C	12q13.11	-0.06247	0.223188	0.335116462
SREK1IP1	5q12.3	0.062453	0.223295	0.335252537
ZSCAN1	19q13.43	-0.06243	0.223431	0.335386728
PABPN1	14q11.2	-0.06243	0.223433	0.335386728
TMED9	5q35.3	0.062433	0.223438	0.335386728
SLC35G5	8p23.1	0.062431	0.223452	0.335386728
CSGALNACT2	10q11.21	-0.06243	0.22349	0.335419734
GRIN2A	16p13.2	-0.06242	0.223536	0.335463098
LRRC75A	17p11.2	0.062418	0.223553	0.335463098
ISG15	1p36.33	-0.06241	0.22361	0.335524401
OR6C70	12q13.2	-0.0624	0.223664	0.335579525
TBC1D22B	6p21.2	0.062399	0.22369	0.335594192
RAB1A	2p14	0.062391	0.223754	0.335665116
OPTC	1q32.1	-0.06239	0.223774	0.33566527
PLCB2	15q15.1	0.062386	0.223788	0.33566527
AFF3	2q11.2	0.062371	0.223898	0.33580583
DLK1	14q32.2	-0.06235	0.224021	0.335963695
NLRP10	11p15.4	-0.06232	0.224286	0.336336267
GADD45G	9q22.2	0.062309	0.22436	0.336401311
GJB4	1p34.3	0.062306	0.224389	0.336401311
HERC2P4	16p11.2	-0.06231	0.224392	0.336401311
EMC9	14q12	0.062304	0.224402	0.336401311
ASB16	17q21.31	-0.0623	0.224413	0.336401311
DNHD1	11p15.4	-0.0623	0.224442	0.336419423
AIDA	1q41	0.062294	0.224477	0.336447156
ANKEF1	20p12.2	-0.06228	0.224545	0.336522962
EOGT	3p14.1	-0.06228	0.22458	0.336550739
PNLIPRP3	10q25.3	0.062277	0.224599	0.336554704
PEBP1	12q24.23	-0.06227	0.224689	0.336663964
SIVA1	14q32.33	-0.06226	0.224729	0.336698929
QPCTL	19q13.32	-0.06226	0.224752	0.336707428
PALLD	4q32.3	0.062252	0.224787	0.336735177
GPR22	7q22.3	-0.06224	0.224849	0.336802008
LINC00304	16q24.3	0.062225	0.224992	0.336991312
ACTR6	12q23.1	0.062183	0.225302	0.337430094
PHIP	6q14.1	-0.06217	0.225364	0.337498841
AHNAK2	14q32.33	-0.06217	0.225413	0.337545904
CARD17	11q22.3	0.062139	0.225634	0.33785259
DCTD	4q35.1	-0.06213	0.22568	0.337895626
WDR78	1p31.3	0.062116	0.225802	0.338053685
SNORA66	1p22.1	-0.0621	0.225935	0.33822668
PLGLA	2q12.2	0.062073	0.226125	0.338486149
SORCS2	4p16.1	-0.06207	0.226143	0.338487097
FOXF1	16q24.1	-0.06204	0.226401	0.338848266
TRH	3q22.1	-0.06203	0.226444	0.33888814
OCRL	Xq26.1	-0.06202	0.226532	0.338993365
ZNF683	1p36.11	0.062013	0.226577	0.339019157
SH3BGR	21q22.2	-0.06201	0.226599	0.339019157
DSG4	18q12.1	0.06201	0.2266	0.339019157
SNORA70	Xq28	0.061984	0.226794	0.339263679
M1AP	2p13.1	0.061984	0.226797	0.339263679
TP53TG5	20q13.12	-0.06198	0.226826	0.339281105
NACA4P	8q22.3	-0.06198	0.226858	0.339304378
ZNF600	19q13.41	-0.06197	0.226881	0.339312893
HNRNPA3	2q31.2	-0.06196	0.226942	0.33937945
TMEM105	17q25.3	-0.06195	0.227073	0.339550034
IRF2BP1	19q13.32	-0.06194	0.227107	0.339575487
ALG1L2	3q22.1	0.061939	0.227131	0.339585645

PRLHR	10q26.11	-0.06194	0.227154	0.339594286
TRPS1	8q23.3	-0.06193	0.227181	0.339609441
NEK5	13q14.3	-0.06192	0.227304	0.339768525
C17ORF102	17q12	-0.06191	0.227362	0.339830148
GOLGA2P7	15q25.2	-0.06191	0.227382	0.339834727
OR2L8	1q44	-0.0619	0.227459	0.339924425
ADRA2B	2q11.2	0.061873	0.227628	0.340126618
RBFOX2	22q12.3	-0.06187	0.227629	0.340126618
SUN1	7p22.3	-0.06187	0.227658	0.340144833
CLEC3B	3p21.31	-0.06186	0.227701	0.340169156
CALHM6	6q22.1	0.061862	0.227708	0.340169156
HEPN1	11q24.2	-0.06186	0.227732	0.340179141
C4ORF47	4q35.1	-0.06185	0.227778	0.340222379
FABP5P3	7q36.1	-0.06184	0.227863	0.340309854
ZBTB47	3p22.1	-0.06184	0.22787	0.340309854
VAMP7	Xq28 and Yq12	-0.06182	0.228008	0.340490399
PPDPFL	8q11.21	-0.06182	0.228026	0.340492017
MECR	1p35.3	-0.06181	0.228068	0.340529242
BUB1B	15q15.1	0.061799	0.228183	0.340675959
FKBPL	6p21.32	-0.0618	0.228203	0.340679649
HNRNPUL2	11q12.3	-0.06179	0.228256	0.340734244
LILRB2	19q13.42	0.061779	0.228339	0.340832483
CCL27	9p13.3	-0.06177	0.228429	0.340930966
UFD1	22q11.21	-0.06176	0.228451	0.340930966
SLC4A8	12q13.13	-0.06176	0.228477	0.340930966
ISX	22q12.3	-0.06176	0.228487	0.340930966
LURAP1L	9p23	-0.06176	0.22849	0.340930966
FLT1	13q12.3	-0.06174	0.228598	0.341065616
SPHK2	19q13.33	-0.06174	0.228666	0.341142079
PHF2	9q22.31	-0.06172	0.228765	0.341264648
LCN10	9q34.3	-0.06172	0.228783	0.341265539
CHI3L1	1q32.1	-0.06171	0.228895	0.341407929
CLIP1	12q24.31	0.061699	0.228942	0.341452884
FBXO15	18q22.3	0.061691	0.229	0.341463342
PCDHGA6	5q31.3	-0.06169	0.229002	0.341463342
PRPSAP2	17p11.2	0.061687	0.229034	0.341463342
NLRP6	11p15.5	-0.06169	0.229034	0.341463342
HIST1H2AK	6p22.1	-0.06169	0.229035	0.341463342
RPSAP58	19p12	-0.06168	0.22906	0.341475086
CDHR3	7q22.3	-0.06166	0.229235	0.341711823
WSCD1	17p13.2	0.061648	0.229328	0.341824797
PATJ	1p31.3	0.061643	0.229367	0.341857642
PHOX2A	11q13.4	-0.06164	0.229417	0.341906812
SCTR	2q14.2	0.061613	0.229589	0.342136692
SPAM1	7q31.32	0.061578	0.22986	0.342515028
OLIG1	21q22.11	-0.06157	0.22991	0.342563683
CRH	8q13.1	-0.06156	0.229987	0.34263705
LEP	7q32.1	-0.06156	0.229993	0.34263705
ZNF44	19p13.2	-0.06155	0.230044	0.342688061
PTENP1	9p13.3	0.061549	0.230079	0.342713653
DESI1	22q13.2	-0.06153	0.230204	0.342875492
SCN2A	2q24.3	-0.06153	0.230224	0.342878784
NROB1	Xp21.2	-0.06152	0.230308	0.342974198
USB1	16q21	-0.06152	0.230322	0.342974198
DPEP3	16q22.1	0.061509	0.230384	0.343041082
SMARCD1	4q22.3	-0.0615	0.230453	0.343117903
MTMR6	13q12.13	-0.06149	0.230546	0.343231158
TSPYL6	2p16.2	0.061484	0.230567	0.343237216

TMEM52B	12p13.2	-0.06148	0.230591	0.343247403
ZNF37BP	10q11.21	0.061461	0.230744	0.343449259
XCR1	3p21.31	0.061452	0.230813	0.343510548
SCGB1B2P	19q13.11	-0.06145	0.230819	0.343510548
ZNF763	19p13.2	-0.06143	0.230968	0.34370643
IFI35	17q21.31	0.061426	0.231011	0.34374425
B3GALNT1	3q26.1	-0.06142	0.231058	0.343789383
CDC26	9q32	-0.06139	0.231258	0.344061244
DRAM1	12q23.2	0.061368	0.231452	0.344323487
DEFA1B	8p23.1	0.061356	0.231548	0.344440987
MINPP1	10q23.2	-0.06135	0.23158	0.344462646
CCDC172	10q25.3	0.061341	0.231659	0.344555553
CCNQP1	1q32.1	-0.06132	0.231786	0.344718954
GPR182	12q13.3	-0.06131	0.231861	0.344805017
SLC35A2	Xp11.23	-0.06131	0.231903	0.344841176
GORASP1	3p22.2	0.061306	0.231929	0.344854644
RAB2B	14q11.2	-0.06129	0.232054	0.345014656
OSBPL11	3q21.2	0.061283	0.232098	0.34505089
BAHD1	15q15.1	0.061281	0.232117	0.34505089
RD3	1q32.3	0.061279	0.23213	0.34505089
HEATR4	14q24.3	-0.06126	0.232282	0.345250387
SLITRK4	Xq27.3	-0.06125	0.232385	0.345377972
GIGYF2	2q37.1	-0.06123	0.232498	0.345520738
TBX15	1p12	-0.06123	0.232521	0.345529328
LLCFC1	7q34	0.061208	0.232673	0.345729671
FMNL1	17q21.31	0.061185	0.232847	0.345962328
AKAP10	17p11.2	0.06118	0.232885	0.345992943
IP6K1	3p21.31	-0.06117	0.232984	0.346114116
NEK7	1q31.3	0.061162	0.23303	0.346156978
SOX1	13q34	-0.06115	0.233099	0.346234076
SLC48A1	12q13.11	0.061146	0.233147	0.346279435
PEX7	6q23.3	-0.06114	0.233165	0.346280687
MEF2B	19p13.11	-0.06112	0.233378	0.346570917
LRRC37A16P	17q24.2	0.06111	0.233426	0.346597874
COL23A1	5q35.3	0.061109	0.23343	0.346597874
HIST1H1B	6p22.1	-0.0611	0.233482	0.346649212
ARIH1	15q24.1	-0.06109	0.233586	0.346755105
SLC25A47	14q32.2	-0.06109	0.233588	0.346755105
FAM238C	10p12.1	0.061085	0.233616	0.346770361
CT45A6	Xq26.3	-0.06108	0.233639	0.346774474
INTS10	8p21.3	0.06108	0.233653	0.346774474
OR2T34	1q44	0.061074	0.2337	0.34681876
C5AR1	19q13.32	0.061065	0.233769	0.346894609
SCN1B	19q13.11	-0.06105	0.233851	0.346991451
PCNAP1	4q23	0.061008	0.234206	0.347491694
LIPG	18q21.1	0.061001	0.234265	0.34755313
KIR3DX1	19q13.42	0.060991	0.234341	0.347640844
ACOX1	17q25.1	-0.06098	0.234448	0.347774061
CAPN7	3p25.1	-0.06094	0.234766	0.348203046
SHCBP1L	1q25.3	-0.06093	0.234772	0.348203046
OR6B3	2q37.3	-0.06089	0.235084	0.348639883
LRRC18	10q11.23	0.060892	0.235102	0.348639999
FSD2	15q25.2	0.060868	0.235282	0.348881557
NLRP5	19q13.43	-0.06087	0.235304	0.34888802
P2RX1	17p13.2	0.060858	0.23536	0.348945172
OR10A2	11p15.4	-0.06085	0.235427	0.349018755
ZNF543	19q13.43	0.060846	0.235458	0.349038674
MTRF1L	6q25.2	-0.06082	0.235654	0.349303265

COL4A4	2q36.3	0.060796	0.235841	0.349555671
SNORA71D	20q11.23	-0.06079	0.23587	0.349571979
STRADA	17q23.3	-0.06079	0.235921	0.349622166
ARHGEF18	19p13.2	0.060781	0.235956	0.349648026
GPR62	3p21.2	-0.06078	0.235996	0.349672653
MACROD2	20p12.1	-0.06077	0.236008	0.349672653
PCYT2	17q25.3	0.060768	0.236056	0.349718226
EPB41	1p35.3	0.060759	0.236127	0.349798297
SNORA27	13q12.2	-0.06075	0.236224	0.349915765
DDX4	5q11.2	-0.06074	0.236287	0.349983498
HIST2H2BE	1q21.2	-0.06073	0.236339	0.350033644
CLVS2	6q22.31	-0.06072	0.236413	0.350118026
WIPI1	17q24.2	0.060681	0.236732	0.350563869
GRM2	3p21.2	-0.06068	0.236755	0.350572862
NIPSNAP1	22q12.2	-0.06067	0.236815	0.350635406
OR1E1	17p13.3	0.060659	0.236902	0.3507341
FAM234A	16p13.3	-0.06066	0.236917	0.3507341
DDHD1	14q22.1	-0.06065	0.236995	0.350824145
PDGFA	7p22.3	-0.06064	0.237045	0.350872309
ENO1	1p36.23	0.060634	0.237092	0.350892038
ITGAM	16p11.2	0.060634	0.237093	0.350892038
OR4C45	11p11.12	0.060628	0.237135	0.350928037
GBP7	1p22.2	0.060583	0.237489	0.351411913
RAB36	22q11.23	-0.06058	0.237497	0.351411913
KCTD15	19q13.11	0.060577	0.237536	0.351442787
SH3GL2	9p22.2	-0.06056	0.23765	0.351586305
FAM90A1	12p13.31	-0.06054	0.237811	0.351767951
SLC1A6	19p13.12	-0.06054	0.237831	0.351767951
PTPRJ	11p11.2	0.060538	0.237835	0.351767951
MTNR1B	11q14.3	0.060537	0.237843	0.351767951
ACSL4	Xq23	-0.06051	0.238036	0.352026183
TENM4	11q14.1	-0.06049	0.238211	0.352259984
CLEC9A	12p13.2	0.060486	0.238239	0.352274435
NLRP8	19q13.43	-0.06047	0.238396	0.352481676
LBP	20q11.23	-0.06046	0.23845	0.352535192
CDK9	9q34.11	0.060448	0.238538	0.352638661
OCIAD2	4p11	0.060444	0.238565	0.352652255
GABARAPL1	12p13.2	-0.06044	0.238635	0.352730245
LINC00696	3p21.2	0.06043	0.23868	0.352770842
RFX2	19p13.3	0.060385	0.239029	0.3532605
ZNF300	5q33.1	-0.06038	0.239079	0.353308776
LY75	2q24.2	-0.06036	0.239209	0.353473693
PRLH	2q37.3	0.060348	0.239319	0.353610279
UCK2	1q24.1	-0.06034	0.239366	0.353654708
ERN1	17q23.3	0.060331	0.239449	0.353740197
TMCC2	1q32.1	-0.06033	0.23946	0.353740197
UNC5B	10q22.1	0.060325	0.239492	0.353761252
NOP14	4p16.3	0.060323	0.239509	0.353761252
HLA-DQA2	6p21.32	0.060308	0.239628	0.353888751
LOC286359	9q22.33	-0.06031	0.239631	0.353888751
PRAMEF20	1p36.21	-0.0603	0.239697	0.353949688
LRTOMT	11q13.4	0.060298	0.239707	0.353949688
HP1BP3	1p36.12	0.060292	0.239754	0.353993129
RNU6ATAC	9q34.2	-0.06029	0.239775	0.353997552
SLC25A51P1	6q12	0.060285	0.239804	0.354014691
CLEC4G	19p13.2	0.06028	0.23985	0.354056087
MAVS	20p13	-0.06028	0.239882	0.35406493
KIAA1328	18q12.2	0.060274	0.239894	0.35406493

CEP126	11q22.1	0.060272	0.239909	0.35406493
SAMHD1	20q11.23	0.060257	0.240029	0.354215101
CDH11	16q21	-0.06025	0.240108	0.354305708
HUS1B	6p25.3	-0.06023	0.240223	0.354450183
MMP26	11p15.4	0.060229	0.240248	0.354460406
CD300C	17q25.1	0.060223	0.240294	0.354501797
ZNF346	5q35.2	-0.06021	0.240391	0.354618572
BTG3	21q21.1	0.06019	0.240547	0.354806095
MYSM1	1p32.1	0.06019	0.240553	0.354806095
DDX3X	Xp11.4	0.060187	0.240576	0.354813557
DOC2A	16p11.2	-0.06017	0.240674	0.35493156
KRTAP26-1	21q22.11	0.060164	0.240755	0.355025265
KCNJ12	17p11.2	-0.06015	0.240826	0.355104296
ZNF469	16q24.2	-0.06013	0.240991	0.355320689
ZFP90	16q22.1	0.060125	0.241063	0.355401509
ZNF317	19p13.2	-0.06012	0.241136	0.35548234
MSL2	3q22.3	-0.06011	0.241186	0.355530828
ASIP	20q11.22	-0.0601	0.241267	0.35562376
SEMA3D	7q21.11	-0.06008	0.241404	0.355798561
SNORA1	11q21	0.060072	0.241475	0.355877825
CASP9	1p36.21	0.060058	0.241582	0.355987907
ANKRD26P3	13q12.11	0.060058	0.241585	0.355987907
COX6B1	19q13.12	-0.06003	0.241776	0.356242777
MOS	8q12.1	-0.06003	0.241834	0.356301988
CFAP157	9q34.11	0.06002	0.241881	0.35633556
GCM2	6p24.2	-0.06002	0.241893	0.35633556
GTF2IP1	7q11.23	-0.06001	0.241928	0.356362213
SBF1P1	8q12.1	-0.06001	0.241977	0.356407477
CSN3	4q13.3	0.060001	0.242032	0.35646179
MRPL39	21q21.3	0.059993	0.242094	0.356527835
SFPQ	1p34.3	-0.05998	0.242201	0.356658679
BANP	16q24.2	-0.05997	0.242277	0.356744289
LINC00114	21q22.2	0.059962	0.242339	0.356809614
CDH13	16q23.3	-0.05995	0.242445	0.356939118
SNAI3-AS1	16q24.2	-0.05994	0.242483	0.35695649
CARD10	22q13.1	0.059943	0.242492	0.35695649
YARS2	12p11.21	-0.05992	0.242648	0.357159791
SEPTIN14	7p11.2	-0.05991	0.242756	0.357291436
UROD	1p34.1	0.059905	0.242791	0.357316934
PSMA3	14q23.1	-0.0599	0.242809	0.357318135
VPS41	7p14.1	-0.05987	0.24303	0.357616457
DIXDC1	11q23.1	-0.05987	0.243055	0.357627644
CST7	20p11.21	-0.05985	0.243232	0.357861124
SNORD15B	11q13.4	-0.05981	0.243536	0.358282667
PLEKHF2	8q22.1	-0.05979	0.243706	0.358506077
SUFU	10q24.32	0.059769	0.243864	0.358712435
GART	21q22.11	-0.05975	0.243973	0.35884627
FKBP9P1	7p11.2	-0.05975	0.244006	0.358867477
GNG5	1p22.3	0.059741	0.244081	0.358932546
SNX31	8q22.3	-0.05974	0.244086	0.358932546
HAUS3	4p16.3	-0.05974	0.24413	0.358947311
ZNF584	19q13.43	0.059735	0.244131	0.358947311
PCSK9	1p32.3	0.059717	0.244275	0.359131276
C9ORF131	9p13.3	-0.05971	0.244362	0.359226307
P3H3	12p13.31	-0.0597	0.244375	0.359226307
	5-Mar 10q23.32-q23.33	0.059702	0.244394	0.359227491
OR11G2	14q11.2	-0.0597	0.244413	0.359229406
ITSN2	2p23.3	0.059693	0.24446	0.359272441



FCER1A	1q23.2	0.059662	0.244707	0.359608058
FAM169B	15q26.3	0.059658	0.244741	0.359632013
NUP205	7q33	-0.05965	0.24483	0.359737048
ATAD3B	1p36.33	-0.05964	0.244922	0.359846031
NRG1	8p12	0.059629	0.24497	0.359889937
MS4A10	11q12.2	0.059607	0.245144	0.360104483
PRB1	12p13.2	0.059606	0.245152	0.360104483
CYLC2	9q31.1	-0.05959	0.245304	0.360301248
RBM24	6p22.3	0.059579	0.245363	0.360360975
PIPSL	10q23.33	-0.05955	0.245585	0.360661011
CCDC185	1q41	0.059549	0.245607	0.360666847
MAPRE3	2p23.3	-0.05952	0.245818	0.360949668
ATL1	14q22.1	-0.05952	0.245843	0.360960887
SLC26A3	7q22.3-q31.1	0.059477	0.246175	0.361421832
BST1	4p15.32	-0.05944	0.246476	0.36183684
ABCF3	3q27.1	-0.05942	0.246606	0.361968823
PRR29	17q23.3	-0.05942	0.24661	0.361968823
C22ORF15	22q11.23	0.059421	0.24662	0.361968823
CHST2	3q24	0.059409	0.246721	0.36209063
TMEM242	6q25.3	-0.0594	0.246805	0.362186268
SLC7A3	Xq13.1	0.059394	0.246836	0.362206131
GPR137	11q13.1	0.059372	0.247017	0.362445444
ZKSCAN3	6p22.1	0.059363	0.247086	0.362519649
SFMBT2	10p14	0.059342	0.247254	0.362740014
SIGLECL1	19q13.41	0.059338	0.247286	0.362760455
DDO	6q21	-0.05932	0.247402	0.362903628
SCRT1	8q24.3	-0.05931	0.24749	0.363001727
CHMP4A	14q12	-0.05931	0.247505	0.363001727
ARHGAP29	1p22.1	0.059291	0.24766	0.36320209
TERF2	16q22.1	-0.05928	0.247762	0.363324313
ARHGAP24	4q21.23-q21.3	0.059267	0.247854	0.363433908
MAP11	7q22.1	0.059241	0.248059	0.363683558
NCKAP1	2q32.1	-0.05924	0.248061	0.363683558
GGTLC2	22q11.22	-0.05921	0.248275	0.363970016
PELI1	2p14	0.059212	0.248295	0.36397368
TBX3	12q24.21	0.059197	0.248411	0.364116268
ZNRF2	7p14.3	-0.05919	0.24843	0.364117407
SGSM2	17p13.3	0.05918	0.24855	0.364256113
TMEM178A	2p22.1	-0.05918	0.248561	0.364256113
GGA2	16p12.2	-0.05917	0.248595	0.364279993
RPS15	19p13.3	-0.05916	0.248721	0.364437814
TUSC1	9p21.2	0.059134	0.248919	0.364690362
NUP210	3p25.1	-0.05913	0.24893	0.364690362
FAM181A-AS1	14q32.12	-0.05913	0.248969	0.364721159
XKR6	8p23.1	-0.05912	0.249012	0.364757124
SNRPD1	18q11.2	0.059077	0.24937	0.365255386
HIST1H2BM	6p22.1	0.059073	0.249407	0.365282912
ZNF234	19q13.31	-0.05906	0.249484	0.365369023
RAB1B	11q13.2	0.059032	0.249733	0.365680214
LRP8	1p32.3	-0.05903	0.249733	0.365680214
CYP2A13	19q13.2	-0.05902	0.249826	0.365789327
SH2D2A	1q23.1	-0.05901	0.249917	0.36589527
PRSS38	1q42.13	-0.05897	0.250239	0.366340301
AKIRIN1	1p34.3	0.05893	0.250554	0.366774938
ADCYAP1R1	7p14.3	-0.05893	0.250587	0.366796599
CFLAR	2q33.1	-0.0589	0.250811	0.367084167
GOLGA6D	15q24.2	-0.0589	0.25082	0.367084167
CSNK1G2	19p13.3	-0.05889	0.25091	0.367166856

SLC5A4	22q12.3	-0.05889	0.250914	0.367166856
DBP	19q13.33	0.05888	0.250962	0.367201292
EIF3K	19q13.2	0.058876	0.250991	0.367201292
SYT6	1p13.2	-0.05887	0.251001	0.367201292
RANGAP1	22q13.2	-0.05887	0.25101	0.367201292
PIP5KL1	9q34.11	-0.05886	0.25112	0.367334546
ZNF578	19q13.41	-0.05885	0.251182	0.367399092
TJP1	15q13.1	0.058844	0.25125	0.367471338
GBP1	1p22.2	0.058835	0.251321	0.367548674
CADPS	3p14.2	0.058829	0.251366	0.3675879
CNTN5	11q22.1	-0.05881	0.251497	0.367751647
BPESC1	3q23	0.058808	0.251541	0.367789053
CLC	19q13.2	-0.0588	0.251588	0.36780179
HHAT	1q32.2	0.058801	0.251594	0.36780179
SAMD15	14q24.3	-0.0588	0.251605	0.36780179
ZNF384	12p13.31	-0.05879	0.251672	0.367874154
OR2Z1	19p13.2	-0.05877	0.251846	0.368073421
RBMY3AP	Yp11.2	0.05877	0.251846	0.368073421
CHST7	Xp11.3	-0.05876	0.251954	0.36820552
TNFAIP8L1	19p13.3	0.058741	0.25208	0.368361809
RESF1	12p11.21	0.058735	0.252132	0.368395614
HMGCLL1	6p12.1	0.058734	0.25214	0.368395614
POLR2B	4q12	0.058716	0.252283	0.36857889
ARSH	Xp22.33	0.058714	0.252303	0.368580276
KLHL1	13q21.33	0.058708	0.25235	0.36862289
ZNF551	19q13.43	-0.05871	0.252369	0.368622943
MED23	6q23.2	0.058701	0.252404	0.368646962
ARHGAP22	10q11.22-q11.23	0.058685	0.252531	0.368763101
TET3	2p13.1	-0.05868	0.252536	0.368763101
GUCA1C	3q13.13	-0.05868	0.252538	0.368763101
SLC15A3	11q12.2	0.058672	0.252637	0.368880525
CLTA	9p13.3	-0.05866	0.252731	0.368991132
EP400P1	12q24.33	-0.05866	0.252752	0.368994791
FAM74A1	9p12	-0.05865	0.252812	0.369055593
NKAIN3-IT1	8q12.3	-0.05865	0.252853	0.369088622
B9D1	17p11.2	0.058642	0.25288	0.369100004
TRIP4	15q22.31	0.058636	0.252934	0.369121184
STYX	14q22.1	0.058634	0.252949	0.369121184
QDPR	4p15.32	-0.05863	0.252949	0.369121184
MAGEC3	Xq27.2	-0.05862	0.253032	0.369204926
RILPL2	12q24.31	0.058622	0.253044	0.369204926
GPKOW	Xp11.23	-0.05862	0.253072	0.369212076
FAM182B	20p11.1	-0.05862	0.253086	0.369212076
CCN4	8q24.22	-0.05861	0.253107	0.369215933
MGC16275	17q25.1	-0.0586	0.253246	0.369392788
AADA4L4	1p36.21	0.058591	0.253299	0.369442964
RNF24	20p13	-0.05859	0.253334	0.369464986
CGAS	6q13	0.058584	0.253351	0.369464986
SCGB2B2	19q13.11	0.058574	0.253438	0.369529673
PAN2	12q13.3	-0.05857	0.253438	0.369529673
VHLL	1q22	-0.05857	0.253451	0.369529673
SRRM4	12q24.23	-0.05857	0.253493	0.369564852
TSHZ3	19q12	-0.05856	0.253571	0.369651541
OR5AK2	11q12.1	-0.05852	0.253896	0.37009727
ATOX8	2p11.2	-0.0585	0.25407	0.370324465
FOXH1	8q24.3	-0.05848	0.254166	0.370437865
SPO11	20q13.31	-0.05846	0.254341	0.370665887
CMTM2	16q21	0.058457	0.254385	0.370683711

FLYWCH1	16p13.3	-0.05846	0.25439	0.370683711
C9ORF106	9q34.11	-0.05845	0.254417	0.370695175
RPS2P32	7p15.3	-0.05843	0.254644	0.370999239
KCNJ6	21q22.13	0.058421	0.25468	0.37102514
HERC4	10q21.3	0.05841	0.254767	0.371124911
ZNF735	7q11.21	-0.05838	0.254981	0.371408796
LINC01341	1q44	-0.05838	0.255044	0.37145917
LINGO1	15q24.3	0.058375	0.255052	0.37145917
OTOAP1	16p12.2	-0.05837	0.255109	0.3715142
ZBTB32	19q13.12	0.058346	0.255291	0.371752891
EHD2	19q13.33	-0.05834	0.255345	0.371803911
MATK	19p13.3	0.058333	0.255392	0.371845944
LCN8	9q34.3	0.058314	0.255554	0.372015296
ERICH3	1p31.1	0.058312	0.255569	0.372015296
ADAM23	2q33.3	-0.05831	0.255615	0.372015296
LINC00606	3p25.3	-0.05831	0.25562	0.372015296
PPBPP1	4q13.3	-0.05831	0.25562	0.372015296
DEFB123	20q11.21	-0.05831	0.25562	0.372015296
TIMD4	5q33.3	0.058292	0.255731	0.372130216
SSTR4	20p11.21	-0.05829	0.255736	0.372130216
RANBP17	5q35.1	0.058284	0.255795	0.372188536
CAPN6	Xq23	-0.05828	0.25586	0.372256125
CREB3	9p13.3	0.05827	0.255907	0.372298251
NUP155	5p13.2	-0.05824	0.256133	0.372598912
GIMAP8	7q36.1	0.058237	0.256177	0.372635873
DCTN2	12q13.3	0.058225	0.256275	0.372752239
FAM27E5	17p11.2	-0.05822	0.256298	0.372757898
KIF15	3p21.31	-0.05821	0.256379	0.372849236
DPEP2	16q22.1	0.05821	0.256402	0.372855466
CHD9	16q12.2	0.058202	0.256466	0.372920624
PSORS1C2	6p21.33	0.058198	0.256501	0.372944376
ADGRE1	19p13.3-p13.2	0.058186	0.256599	0.373036692
OGFOD2	12q24.31	-0.05819	0.256601	0.373036692
LCE1F	1q21.3	-0.05817	0.256721	0.373155345
TAS2R31	12p13.2	-0.05817	0.256735	0.373155345
MRPL52	14q11.2	-0.05817	0.256739	0.373155345
TTY15	Yq11.221	-0.05816	0.256788	0.373200374
LINC00597	15q24.3	0.058154	0.256858	0.373274177
SLC35F2	11q22.3	-0.05815	0.256892	0.37329709
PYGL	14q22.1	0.058117	0.257162	0.373662324
HELQ	4q21.23	0.058107	0.257242	0.373750649
ATG101	12q13.13	-0.0581	0.257335	0.373859513
GRIN3B	19p13.3	-0.05808	0.257427	0.373959234
BCAT1	12p12.1	-0.05808	0.257441	0.373959234
ASF1B	19p13.12	0.05808	0.257466	0.373968038
FBXW8	12q24.22	0.05807	0.257553	0.37406667
ARPC1B	7q22.1	-0.05806	0.257662	0.374198689
CPSF4L	17q25.1	-0.05805	0.257684	0.374203419
ZNRF1	16q23.1	0.058049	0.25772	0.374229139
GABRG1	4p12	-0.05803	0.257852	0.374367431
PRKN	6q26	-0.05803	0.257853	0.374367431
FUT9	6q16.1	-0.05802	0.257924	0.374443762
GALNT15	3p25.1	-0.05802	0.257986	0.374505714
PRKAG1	12q13.12	-0.05799	0.258234	0.37483827
C2CD4D-AS1	1q21.3	0.057981	0.258282	0.374882116
ZNF761	19q13.42	-0.05797	0.258393	0.375015245
VPS13B	8q22.2	-0.05796	0.258489	0.37512689
ST8SIA4	5q21.1	0.057944	0.258587	0.375242374

PCGF6	10q24.33	-0.05792	0.258813	0.375543171
CHKB	22q13.33	-0.0579	0.258925	0.375671442
ERGIC2	12p11.22	-0.0579	0.258939	0.375671442
KRT24	17q21.2	0.057896	0.258978	0.375701254
CEP295	11q21	-0.05788	0.259088	0.375833198
OR6K6	1q23.1	-0.05784	0.259434	0.376280093
OR10Z1	1q23.1	0.057841	0.259434	0.376280093
LOC646214	15q11.2	-0.05782	0.259601	0.376495797
CD70	19p13.3	-0.05782	0.259631	0.376512342
TMEM184C	4q31.23	0.057801	0.259763	0.3766758
AGAP2-AS1	12q14.1	0.057779	0.259948	0.376889373
LOC283922	16q23.1	-0.05778	0.259948	0.376889373
SHISAL1	22q13.31	-0.05775	0.260175	0.377190904
TRPC4	13q13.3	-0.05775	0.260207	0.377211367
PCDHA7	5q31.3	-0.05774	0.260234	0.377221955
CACNA1H	16p13.3	-0.05773	0.260357	0.3773735
DHH	12q13.12	-0.05772	0.260417	0.377433748
TPI1P3	6q22.1	0.057704	0.260565	0.377619857
LOC100192426	18p11.23	0.05767	0.260844	0.377996892
NKX2-8	14q13.3	0.057665	0.260891	0.378038203
ACACB	12q24.11	-0.05766	0.260934	0.378073467
FBXO7	22q12.3	-0.05766	0.26097	0.378097789
PCDH18	4q28.3	-0.05764	0.261056	0.378167107
KNSTRN	15q15.1	-0.05764	0.261056	0.378167107
CCNE2	8q22.1	0.05762	0.261264	0.37844214
MRGPRX2	11p15.1	-0.0576	0.261425	0.378647524
ADGRL2	1p31.1	-0.05758	0.261589	0.378852599
LRRC37A6P	10p12.1	0.057579	0.261604	0.378852599
CACNB4	2q23.3	-0.05758	0.261626	0.378856247
ZNF705A	12p13.31	-0.05757	0.261664	0.378881153
ASB12	Xq11.2	0.057569	0.261681	0.378881153
OR1E2	17p13.2	0.057556	0.261795	0.37901923
EMC1	1p36.13	0.05755	0.261839	0.379055874
RXFP1	4q32.1	-0.05752	0.262081	0.379378148
PROK1	1p13.3	-0.05752	0.262102	0.379380572
TMOD4	1q21.3	-0.0575	0.262299	0.379617269
OR8S1	12q13.11	-0.05749	0.262303	0.379617269
TEC	4p12-p11	0.057466	0.262537	0.379928652
ZFP42	4q35.2	-0.05746	0.262623	0.380024913
TMEM241	18q11.2	-0.05745	0.262643	0.380026646
ARHGAP20	11q22.3-q23.1	0.05745	0.262674	0.38004436
SAP130	2q14.3	-0.05741	0.263007	0.380498044
PSMC1	14q32.11	-0.0574	0.26306	0.380548375
IST1	16q22.2	-0.0574	0.263091	0.380564986
OR1S1	11q12.1	-0.05738	0.263286	0.380803182
TPTEP1	22q11.1	-0.05738	0.263294	0.380803182
OR5AR1	11q12.1	-0.05737	0.263333	0.380818249
FAM83F	22q13.1	0.05737	0.263342	0.380818249
PIAS4	19p13.3	0.057366	0.263371	0.380832272
NDUFV1	11q13.2	0.057353	0.26348	0.380963084
CENPS	1p36.22	0.057349	0.263518	0.380990087
PLCD4	2q35	-0.05735	0.263545	0.380997376
LAMTOR2	1q22	-0.05734	0.263561	0.380997376
PROP1	5q35.3	0.05732	0.263754	0.381248597
EXOC5	14q22.3	0.057316	0.263791	0.381274665
SPDL1	5q35.1	0.057304	0.263887	0.381386045
NGLY1	3p24.2	0.057279	0.264097	0.381638853
ZNF200	16p13.3	-0.05728	0.2641	0.381638853

TRPC6	11q22.1	-0.05726	0.26423	0.38179841
PRND	20p13	-0.05724	0.26442	0.382006883
HTR2C	Xq23	-0.05724	0.264431	0.382006883
ARV1	1q42.2	0.057239	0.264431	0.382006883
HSPBP1	19q13.42	0.057234	0.264474	0.382041722
FAM201A	9p13.1	-0.05723	0.264514	0.382071364
BRD8	5q31.2	0.057214	0.26464	0.382225821
EPO	7q22.1	-0.05719	0.26482	0.38245792
OAT	10q26.13	-0.05719	0.264878	0.382500535
SLC15A4	12q24.33	-0.05718	0.264888	0.382500535
TSIX	Xq13.2	-0.05718	0.264906	0.382500535
MGC2889	3q29	0.057169	0.265021	0.382638401
NPR1	1q21.3	-0.05716	0.265067	0.382676913
OR4F6	15q26.3	-0.05716	0.265133	0.382744435
SERPINE2	2q36.1	-0.05713	0.265321	0.382988747
TTL10	1p36.33	-0.05712	0.265417	0.383081551
FGG	4q32.1	-0.05712	0.265424	0.383081551
PRR23C	3q23	-0.05711	0.265473	0.383124878
TMEM245	9q31.3	-0.05707	0.265825	0.383605051
GRHPR	9p13.2	0.057063	0.265906	0.3836947
ZBTB40	1p36.12	-0.05706	0.265931	0.383703548
MED12L	3q25.1	-0.05706	0.265962	0.383720768
PLEKHG4B	5p15.33	-0.05705	0.266021	0.383777298
CORO1A	16p11.2	0.057044	0.266067	0.383816125
RNF115	1q21.1	-0.05704	0.266092	0.383824977
IL11	19q13.42	-0.05704	0.266112	0.383826009
IGF1	12q23.2	-0.05704	0.266141	0.38384004
BRD4	19p13.12	-0.05703	0.266204	0.383903681
PLRG1	4q31.3	-0.05702	0.26626	0.383956861
LRRCC1	8q21.2	-0.05702	0.266309	0.383999615
PRG2	11q12.1	0.057004	0.266402	0.384096597
FREM1	9p22.3	-0.057	0.266423	0.384096597
GOLPH3	5p13.3	0.057	0.266434	0.384096597
DNASE2	19p13.13	-0.057	0.266465	0.384113281
ESPL1	12q13.13	0.056993	0.266492	0.384124751
PRPSAP1	17q25.1	0.056982	0.266591	0.384240543
CYP2U1	4q25	0.056976	0.26664	0.384283315
MCM9	6q22.31	-0.05697	0.266673	0.384302613
GAGE13	Xp11.23	0.056964	0.266739	0.38437067
SPATA20	17q21.33	-0.05694	0.266941	0.384633441
RPAP1	15q15.1	-0.05693	0.267019	0.384717996
FOXD2	1p33	-0.05692	0.267098	0.384805173
CHST1	11p11.2	-0.05692	0.26712	0.384805671
NAPEPLD	7q22.1	0.056916	0.267144	0.384805671
SPATA41	15q26.3	0.056914	0.267156	0.384805671
COL6A3	2q37.3	-0.05691	0.267209	0.384853698
ZSWIM7	17p12	0.056899	0.267285	0.384935668
DLGAP3	1p34.3	-0.05687	0.267521	0.385247329
SCARNA15	15q25.2	-0.05686	0.267655	0.385413096
SLAMF9	1q23.2	-0.05685	0.267696	0.385444437
SYVN1	11q13.1	-0.05684	0.267787	0.385548439
C19ORF54	19q13.2	0.056823	0.267924	0.385716753
FOXE1	9q22.33	-0.05682	0.26795	0.385727681
SLC10A6	4q21.3	0.056813	0.268011	0.38577079
WDR38	9q33.3	-0.05681	0.268019	0.38577079
RNASE12	14q11.2	0.056799	0.268127	0.385883999
ZNF37A	10p11.1	0.056798	0.268136	0.385883999
BRS3	Xq26.3	0.056778	0.268307	0.38610185

ATP6V1G1	9q32	-0.05674	0.268587	0.386477264
SCNN1B	16p12.2	-0.05673	0.268748	0.386681726
CCDC163	1p34.1	0.056718	0.268816	0.38675149
CROT	7q21.12	0.056711	0.268873	0.386804954
AK2	1p35.1	0.056672	0.269206	0.387256549
OPN5	6p12.3	-0.05667	0.269233	0.387267223
PPBPP2	4q13.3	-0.05664	0.269456	0.387560904
ABCA2	9q34.3	0.056628	0.269574	0.387702627
DACT1	14q23.1	-0.05662	0.269645	0.387777068
ZNF320	19q13.41	0.056614	0.269691	0.387814794
GNB4	3q26.33	-0.05661	0.269714	0.387821047
CSTF2	Xq22.1	-0.05657	0.270036	0.388246302
SNHG28	1q23.2	0.05657	0.270065	0.388246302
APOF	12q13.3	0.05657	0.270068	0.388246302
PTPRVP	1q32.1	0.056557	0.270179	0.388378045
NEGR1	1p31.1	-0.05654	0.270341	0.388581925
PDE3B	11p15.2	-0.05653	0.270394	0.388630195
AHSG	3q27.3	0.056521	0.270478	0.388723321
NLRP7	19q13.42	0.056513	0.270547	0.388755012
SYN2	3p25.2	-0.05651	0.270548	0.388755012
SUDS3	12q24.23	0.056512	0.270558	0.388755012
KRBA2	17p13.1	0.056481	0.270825	0.389110712
VPS36	13q14.3	-0.05647	0.270918	0.389216844
SNCG	10q23.2	-0.05646	0.270993	0.389271408
FBXL3	13q22.3	-0.05646	0.270995	0.389271408
HS3ST6	16p13.3	0.056457	0.271028	0.389290924
POPDC3	6q21	-0.05645	0.27108	0.389337801
RAB6D	2q21.1	-0.05644	0.271162	0.389426881
IDO1	8p11.21	0.056438	0.271191	0.389436765
HSP90B1	12q23.3	0.056436	0.271208	0.389436765
DTX2P1-UPK3BP1-PMS2P11	7q11.23	-0.05643	0.271277	0.389508757
DLEU2L	1p31.3	-0.05642	0.271358	0.389597404
HSPB9	17q21.2	-0.0564	0.271508	0.389784465
TAL1	1p33	-0.05639	0.271568	0.389843153
STAG1	3q22.3	0.056385	0.271638	0.389915186
PI4KAP1	22q11.21	-0.05638	0.271684	0.389944621
ACSBG1	15q25.1	0.056378	0.271698	0.389944621
HNRNPH2	Xq22.1	-0.05636	0.271812	0.390081322
MX1	21q22.3	0.056356	0.271884	0.390128902
SKA2	17q22	0.056356	0.271887	0.390128902
AARD	8q24.11	-0.05635	0.271904	0.390128902
OR4K15	14q11.2	0.056351	0.271929	0.390137189
HIST3H2BB	1q42.13	-0.05629	0.272459	0.390869776
ESRG	3p14.3 3p14.3	0.056285	0.272489	0.39088465
PIWIL4	11q21	-0.05628	0.27257	0.390973141
OR6C4	12q13.2	-0.05627	0.272656	0.391067595
HSPA6	1q23.3	-0.05626	0.272706	0.391112169
FAAH2	Xp11.21	-0.05625	0.272824	0.391252875
RPL34-AS1	4q25	0.056242	0.272856	0.391270694
CATSPER4	1p36.11	-0.05624	0.272902	0.391308247
KDM4A	1p34.2-p34.1	0.056218	0.273061	0.391488202
GPI	19q13.11	0.056217	0.273072	0.391488202
IGSF10	3q25.1	-0.05621	0.273102	0.391488202
NISCH	3p21.1	-0.05621	0.273105	0.391488202
MED14	Xp11.4	-0.0562	0.273247	0.39166327
LINC00685	Xp22.33 and Yp11.31	-0.05619	0.27329	0.391673158
DOP1A	6q14.1	-0.05619	0.273293	0.391673158
AMPD2	1p13.3	-0.05617	0.273483	0.391894115

HIRA	22q11.21	0.056168	0.273486	0.391894115
C4A	6p21.33	-0.05616	0.273525	0.39192149
MIR4697HG	11q25	-0.05614	0.273709	0.39214438
S100A12	1q21.3	-0.05614	0.27372	0.39214438
LINC00928	15q26.1	-0.05612	0.273909	0.392386787
SCGN	6p22.2	0.056115	0.27394	0.392403059
SLC1A2	11p13	-0.05611	0.274005	0.392468109
SCD5	4q21.22	-0.05611	0.274024	0.392468586
TTY4C	Yq11.23	0.05608	0.274247	0.39275907
TMCO5A	15q14	0.056075	0.274284	0.392784167
CGB1	19q13.33	-0.05605	0.274489	0.393049962
PTPN11	12q24.13	-0.05605	0.274526	0.393074943
OR2A9P	7q35	-0.05604	0.274598	0.393149942
HTRA4	8p11.22	-0.05602	0.274736	0.393319184
ERCC6	10q11.23	0.056004	0.274894	0.393516842
CKAP5	11p11.2	-0.05599	0.274994	0.393608732
PPP1R8	1p35.3	-0.05599	0.274997	0.393608732
ABCF1	6p21.33	-0.05596	0.275262	0.393959032
CLIC2	Xq28	0.055958	0.275288	0.393967939
OR2G3	1q44	0.05594	0.275443	0.394162381
CAV1	7q31.2	-0.05594	0.27548	0.394186976
SLC20A2	8p11.21	-0.05592	0.275658	0.394413067
MED15	22q11.21	0.055906	0.275737	0.394498802
ZDHHC23	3q13.31	-0.05589	0.275875	0.394661938
HRG	3q27.3	0.055888	0.275891	0.394661938
TMPO-AS1	12q23.1	0.055884	0.275925	0.394681864
KRTAP4-5	17q21.2	-0.05588	0.275948	0.394687399
GIP	17q21.32	-0.05588	0.275982	0.394708139
AKAIN1	18p11.31	-0.05587	0.276015	0.39472605
LEFTY2	1q42.12	-0.05586	0.276095	0.394812477
PLEKHM1P1	17q24.1	0.055857	0.27616	0.394877498
KCNIP4-IT1	4p15.2	-0.05585	0.276224	0.394941246
FCER1G	1q23.3	0.055843	0.276279	0.394990759
CD300LG	17q21.31	0.055834	0.27636	0.39507916
KRTAP1-3	17q21.2	-0.05583	0.27638	0.39507916
SERTM1	13q13.3	-0.05582	0.276458	0.395162116
GABRA2	4p12	-0.05581	0.276589	0.395322114
PCDHGA5	5q31.3	-0.0558	0.276689	0.395436738
USP24	1p32.3	0.055768	0.276922	0.395741881
KMT2C	7q36.1	0.055762	0.276976	0.395790612
PSORS1C3	6p21.33	0.055741	0.277158	0.396022087
LMOD2	7q31.32	0.055737	0.277193	0.396044023
GIMAP4	7q36.1	0.055731	0.277248	0.39607707
HIST3H2A	1q42.13	-0.05573	0.277266	0.39607707
C14ORF180	14q32.33	0.055728	0.277276	0.39607707
IKBKB	8p11.21	-0.05572	0.277303	0.396088373
MILR1	17q23.3	0.055721	0.277328	0.396095066
KLK2	19q13.33	0.055709	0.277433	0.3962167
BHLHE23	20q13.33	-0.0557	0.277474	0.396222324
AP3M2	8p11.21	-0.0557	0.277476	0.396222324
PEX13	2p15	-0.0557	0.277549	0.396297645
RAD51AP1	12p13.32	0.055691	0.27759	0.39632782
PCED1B	12q13.11	-0.05569	0.277623	0.396347373
SLC3A1	2p21	0.05568	0.277688	0.396412081
MRPL1	4q21.1	0.055673	0.277748	0.396468825
CPVL	7p14.3	0.055669	0.277781	0.396488382
ZNF816	19q13.41	-0.05566	0.27783	0.396529192
RAET1G	6q25.1	0.055653	0.277921	0.396613477

PTCHD3P1	10p11.23	0.055652	0.277928	0.396613477
RAD21L1	20p13	0.055631	0.278114	0.396849899
GATA3-AS1	10p14	-0.05563	0.278141	0.396860711
SYK	9q22.2	-0.0556	0.278338	0.397113379
DYNLL1	12q24.31	-0.0556	0.278417	0.397196767
FSIP1	15q14	0.055585	0.278509	0.397300074
KC6	-	-0.05556	0.278704	0.397550136
CPA1	7q32.2	-0.05555	0.278786	0.397612895
ARID4A	14q23.1	0.055553	0.278788	0.397612895
ARRDC1	9q34.3	-0.05555	0.278825	0.397637797
TMED5	1p22.1	0.055544	0.278864	0.397665361
CHGA	14q32.12	0.055518	0.279087	0.397954464
LILRA5	19q13.42	0.055514	0.279121	0.397974647
DDTL	22q11.23	-0.05551	0.27917	0.398004469
TRAPPC3L	6q22.1	-0.05551	0.279199	0.398004469
BBOX1	11p14.2	-0.05551	0.279201	0.398004469
PKD1L3	16q22.2	0.055499	0.279251	0.398020719
SLC24A3	20p11.23	-0.0555	0.279252	0.398020719
HLA-DQA1	6p21.32	0.055483	0.279391	0.398189413
DUXA	19q13.43	-0.05548	0.279457	0.398255382
CHMP1A	16q24.3	-0.05546	0.279604	0.398415329
GEN1	2p24.2	-0.05546	0.279626	0.398415329
SLCO1B1	12p12.1	0.055456	0.279629	0.398415329
TNNI2	11p15.5	-0.05545	0.27967	0.398445637
TMEM86A	11p15.1	-0.05544	0.279738	0.398514754
MMS19	10q24.1	0.055407	0.280053	0.398916383
CTPS1	1p34.2	-0.05541	0.28006	0.398916383
MAST4	5q12.3	0.055399	0.280126	0.398979604
DSCAML1	11q23.3	-0.0554	0.280144	0.398979604
ZDBF2	2q33.3	-0.05539	0.280169	0.398985879
CRB1	1q31.3	-0.05539	0.280206	0.399010771
HTR6	1p36.13	0.055385	0.280241	0.399032211
SCAF4	21q22.11	0.05538	0.28029	0.399074049
ZNF512	2p23.3	-0.05537	0.280332	0.399104293
ZAP70	2q11.2	0.055364	0.280431	0.39921727
ZZZ3	1p31.1	-0.05536	0.28048	0.399258224
RBMS3	3p24.1	-0.05535	0.280531	0.399303111
OR51B5	11p15.4	-0.05535	0.280578	0.399326205
LOC401127	4p14	-0.05535	0.280587	0.399326205
MRPS11	15q25.3	0.055335	0.280678	0.399427395
MED1	17q12	-0.05533	0.280712	0.399447022
GBP5	1p22.2	0.055328	0.280742	0.399461316
NOP16	5q35.2	-0.05532	0.280793	0.39947932
CLEC12A	12p13.31	0.055322	0.280794	0.39947932
SRD5A1	5p15.31	-0.05531	0.280881	0.399573556
TEX29	13q34	-0.05529	0.281033	0.399759559
AARS2	6p21.1	0.055292	0.281051	0.399759559
CLEC7A	12p13.2	0.055287	0.281099	0.399799171
TRMO	9q22.33	0.055277	0.281185	0.399860739
LINC01591	8q24.22	-0.05528	0.281188	0.399860739
SERPINB12	18q21.33	0.055275	0.281202	0.399860739
PRKG1	10q11.23-q21.1	-0.05526	0.281293	0.399961831
ULK4	3p22.1	0.055261	0.28132	0.399970762
CBX5	12q13.13	0.055235	0.281547	0.4002654
AIF1	6p21.33	0.055226	0.281626	0.400349135
CCDC9	19q13.32	0.055218	0.281701	0.400427538
CLEC19A	16p12.3	0.055207	0.281799	0.400538839
BCL2L13	22q11.21	0.055202	0.281834	0.400560328



HEXA-AS1	15q23	-0.0552	0.281858	0.400565144
YIF1A	11q13.2	-0.0552	0.281893	0.400586283
IQCF3	3p21.2	0.055192	0.281927	0.400607424
KRTDAP	19q13.12	-0.05518	0.282069	0.400780499
DGKD	2q37.1	-0.05515	0.282319	0.401107566
PTGES	9q34.11	-0.05512	0.282536	0.401386604
LINC00207	22q13.31	-0.0551	0.28272	0.401608557
CLEC6A	12p13.31	0.0551	0.282732	0.401608557
PCDHGB6	5q31.3	-0.05509	0.282828	0.401715775
SLC66A1	1p36.13	0.055085	0.282866	0.401729559
NEFH	22q12.2	-0.05508	0.282878	0.401729559
SPINK8	3p21.31	0.055053	0.283138	0.402054141
TP53BP2	1q41	0.055052	0.283146	0.402054141
CH25H	10q23.31	-0.05505	0.283173	0.402063115
ATP11C	Xq27.1	-0.05503	0.283333	0.402262191
SCN1A	2q24.3	-0.05502	0.283432	0.402374315
MESTIT1	7q32.2	-0.05502	0.283459	0.402383353
USF2	19q13.12	-0.055	0.283618	0.402581075
AQP6	12q13.12	-0.05498	0.283775	0.402769212
XIRP2	2q24.3	-0.05498	0.283791	0.402769212
TSSK3	1p35.1	0.054965	0.283911	0.402889189
ELAVL3	19p13.2	-0.05496	0.283915	0.402889189
OPHN1	Xq12	-0.05494	0.284101	0.403086124
ACHE	7q22.1	0.054943	0.284105	0.403086124
KRT19	17q21.2	0.054942	0.284115	0.403086124
CAPRIN2	12p11.21	-0.05492	0.284304	0.403325712
HIST1H2BJ	6p22.1	-0.05491	0.284428	0.40347417
SMAD3	15q22.33	-0.05489	0.284559	0.403630709
FAM20A	17q24.2	-0.05488	0.284672	0.403763128
USP22	17p11.2	0.054866	0.284782	0.403890204
NUDT15	13q14.2	-0.05486	0.284831	0.403931394
OTX2	14q22.3	0.054858	0.284854	0.403935247
GJB7	6q14.3-q15	-0.05485	0.284896	0.403966329
GPR6	6q21	-0.05485	0.284929	0.403983522
PPFIBP1	12p11.23-p11.22	0.054846	0.284954	0.403991477
SAMD3	6q23.1	-0.05484	0.285047	0.404094423
GCNT2	6p24.3-p24.2	0.054819	0.285197	0.404277944
A4GNT	3q22.3	0.054754	0.285765	0.405054249
LY6E-DT	8q24.3	-0.05475	0.285808	0.405081516
VPS26A	10q22.1	0.054748	0.285824	0.405081516
TBK1	12q14.2	0.054735	0.285936	0.405211513
LINC00426	13q12.3	0.054723	0.286045	0.405336725
FIGNL2	12q13.13	-0.05471	0.286125	0.405421766
DENND6A	3p14.3	-0.0547	0.286252	0.405572041
FAM136BP	6p25.2	-0.05469	0.286317	0.40563558
STOM	9q33.2	0.05468	0.286417	0.405748788
SH3GLB1	1p22.3	0.054645	0.286729	0.406161642
KRTAP10-7	21q22.3	-0.05462	0.286918	0.406389719
COBL	7p12.1	-0.05462	0.28693	0.406389719
SMARCC2	12q13.2	-0.05462	0.286985	0.406439114
MAPK10	4q21.3	-0.05461	0.287016	0.406446152
DNMBP-AS1	10q24.2	0.054611	0.287031	0.406446152
LINC02159	5q34	-0.0546	0.287152	0.406588564
OR51A2	11p15.4	0.054589	0.287226	0.406634902
SIN3A	15q24.2	0.054588	0.287231	0.406634902
MS4A6E	11q12.2	0.054585	0.287264	0.406634902
RASL10A	22q12.2	-0.05458	0.287266	0.406634902
MMP25	16p13.3	0.054577	0.28733	0.406696922

ANGPT4	20p13	-0.05457	0.287378	0.406736837
PMEL	12q13.2	-0.05457	0.287421	0.406768802
RNASE8	14q11.2	0.054558	0.287503	0.406856247
CLEC4A	12p13.31	0.054551	0.287559	0.406906695
TDO2	4q32.1	-0.05455	0.287596	0.40693055
LIMD2	17q23.3	-0.05454	0.287661	0.406993459
CEMP1	16p13.3	-0.05453	0.287711	0.407034805
LOC283856	16q13	-0.05453	0.287738	0.407045161
ALS2	2q33.1	0.054527	0.28777	0.40706088
SLC6A5	11p15.1	0.054507	0.287952	0.407289374
CDH15	16q24.3	0.0545	0.288014	0.407349065
CPLANE1	5p13.2	-0.05441	0.288806	0.408440108
SLC6A15	12q21.31	-0.0544	0.288932	0.408589732
MRPS30	5p12	-0.05436	0.289278	0.40903856
MYBPH	1q32.1	-0.05436	0.289291	0.40903856
LINC00909	18q22.3	0.054347	0.289366	0.409116772
SERPINB3	18q21.33	0.054328	0.289537	0.409329157
DENND1A	9q33.3	-0.05431	0.28972	0.409559545
NXP2	2q22.1	-0.0543	0.289757	0.409581947
EBF2	8p21.2	-0.0543	0.289816	0.409618465
OR4A47	11p11.2	-0.0543	0.289823	0.409618465
U2AF1L4	19q13.12	-0.05427	0.290054	0.40991495
SLC30A10	1q41	0.054267	0.290079	0.409914975
MAP1LC3C	1q43	-0.05427	0.290095	0.409914975
DEPDC4	12q23.1	-0.05426	0.290156	0.409966952
SUPT20HL2	Xp22.11	-0.05426	0.290172	0.409966952
PCDHA13	5q31.3	-0.05423	0.290421	0.410288796
ERICH4	19q13.2	0.054225	0.290456	0.410310216
NEURL1B	5q35.1	-0.05421	0.290589	0.41046819
NUTM2D	10q23.2	-0.0542	0.290667	0.410546123
NIN	14q22.1	-0.0542	0.2907	0.410546123
NFE2L1	17q21.32	0.054195	0.290723	0.410546123
FAM124A	13q14.3	-0.05419	0.290726	0.410546123
INSM2	14q13.2	0.054192	0.290752	0.410553892
NME8	7p14.1	-0.05416	0.291013	0.410883483
DBR1	3q22.3	-0.05416	0.291026	0.410883483
CTR9	11p15.4	0.054142	0.291191	0.4110615
NR2F1-AS1	5q15	-0.05414	0.291193	0.4110615
CTSC	11q14.2	-0.05414	0.291247	0.411108465
TBC1D19	4p15.2	-0.05413	0.291324	0.41115259
ZNF814	19q13.43	0.054124	0.291353	0.41115259
LINC00320	21q21.1	-0.05412	0.291354	0.41115259
MFN1	3q26.33	0.054124	0.291361	0.41115259
COL13A1	10q22.1	-0.05411	0.291439	0.411234822
NBPF10	1q21.1	0.054093	0.291634	0.411479848
PLET1	11q23.1	0.054077	0.291776	0.411651725
NHSL2	Xq13.1	-0.05406	0.291958	0.411879128
ODF4	17p13.1	0.054026	0.292233	0.412220715
SOX10	22q13.1	-0.05402	0.292249	0.412220715
FBH1	10p15.1	0.054022	0.292269	0.412220715
TTC4	1p32.3	-0.05402	0.292282	0.412220715
GRIK2	6q16.3	-0.05402	0.292312	0.412233585
PCDHB16	5q31.3	-0.05399	0.292561	0.412556606
ZNF878	19p13.2	0.053978	0.292666	0.412674248
NDUFB4	3q13.33	-0.05397	0.292721	0.412705912
UBXN6	19p13.3	0.05397	0.292729	0.412705912
SNX3	6q21	-0.05395	0.29287	0.412875306
LTC4S	5q35.3	-0.05395	0.292891	0.412875427

L3MBTL2	22q13.2	0.053941	0.292993	0.412991194
TCHH	1q21.3	-0.05392	0.293181	0.413225973
TERT	5p15.33	-0.05391	0.293289	0.413349193
C15ORF61	15q23	-0.0539	0.293365	0.413405287
MAP3K1	5q11.2	0.053899	0.29337	0.413405287
SCARNA21	17p13.1	-0.05385	0.293812	0.413981303
SMAD5	5q31.1	0.053849	0.29382	0.413981303
NTSR1	20q13.33	-0.05384	0.293929	0.414106119
SLAMF8	1q23.2	0.053779	0.294448	0.414808614
SLC26A6	3p21.31	0.053768	0.294543	0.414913051
DYDC1	10q23.1	-0.05376	0.294622	0.414994536
EMILIN2	18p11.32-p11.31	0.053748	0.294725	0.415111057
TP53INP2	20q11.22	0.053741	0.294791	0.415145418
TMEM140	7q33	0.053741	0.294791	0.415145418
TCEAL3	Xq22.2	-0.05373	0.294896	0.41526354
PRPF38B	1p13.3	-0.05372	0.294946	0.415305279
IGSF9B	11q25	-0.05372	0.294969	0.415308675
NFKBIA	14q13.2	0.053716	0.295012	0.415339613
CCR8	3p22.1	0.053713	0.29504	0.41535034
XIST	Xq13.2	-0.05368	0.295308	0.415698134
FAT4	4q28.1	-0.05367	0.2954	0.415785053
NDUFA10	2q37.3	0.053672	0.295411	0.415785053
PIN1P1	1p31.1	-0.05367	0.295471	0.415837306
ADAM30	1p12	0.053663	0.29549	0.415837306
OR51A7	11p15.4	0.05366	0.295521	0.415851997
CRYBB1	22q12.1	-0.05366	0.295561	0.415878003
MYH4	17p13.1	-0.05364	0.295683	0.416020451
OR52K2	11p15.4	-0.05362	0.295884	0.416275274
HCG4B	6p22.1	0.053593	0.296123	0.416572763
SRP19	5q22.2	0.053591	0.296138	0.416572763
NOX5	15q23	-0.05359	0.296173	0.416593253
PCARE	2p23.2	-0.05357	0.296357	0.416822673
SMPD2	6q21	-0.05355	0.296478	0.416963379
EFR3A	8q24.22	-0.05354	0.296642	0.417159232
MAPT-AS1	17q21.31	0.053534	0.296659	0.417159232
MAFK	7p22.3	0.053523	0.296752	0.417261174
INTS5	11q12.3	-0.0535	0.296923	0.417472654
ZMAT2	5q31.3	-0.05349	0.297032	0.417584507
LOC153910	6q24.2	-0.05349	0.29706	0.417584507
PRRG1	Xp21.1	0.053489	0.297065	0.417584507
ANAPC10	4q31.21	-0.05348	0.297133	0.417650991
PWRN1	15q11.2	-0.05347	0.297193	0.417706086
TMEM212	3q26.31	0.053458	0.297346	0.417869527
ARPC2	2q35	-0.05346	0.297365	0.417869527
IDO2	8p11.21	0.053455	0.297372	0.417869527
SNORA68	19p13.11	0.053452	0.2974	0.41787854
GREM2	1q43	-0.05344	0.297516	0.418012752
PTX4	16p13.3	0.053433	0.29757	0.41805986
MAML1	5q35.3	0.053425	0.29764	0.418128273
SPEM2	17p13.1	-0.05341	0.297803	0.418299402
ZNF114	19q13.33	-0.05341	0.297804	0.418299402
FAM189A1	15q13.1	0.053395	0.297917	0.418429732
LAMB4	7q31.1	0.053348	0.298337	0.418989245
XYLT1	16p12.3	0.053344	0.298376	0.418994752
SLC25A52	18q12.1	0.053343	0.298382	0.418994752
CDH23	10q22.1	-0.05334	0.298442	0.419049045
TEDDM1	1q25.3	0.053334	0.298469	0.419058163
CYC1	8q24.3	-0.05333	0.29854	0.419127474

CTSB	8p23.1	0.05332	0.298592	0.41917214
PCDHA10	5q31.3	-0.05331	0.298697	0.419266965
UBE2S	19q13.42	-0.05331	0.298702	0.419266965
OR13D1	9q31.1	0.053284	0.298924	0.419548886
SLC14A1	18q12.3	-0.05327	0.299036	0.419677307
JMJD1C	10q21.3	-0.05325	0.2992	0.419878502
ACSM4	12p13.31	0.053247	0.299256	0.419914255
SSX8P	Xp11.22	0.053246	0.299268	0.419914255
LINC01845	5q33.3	0.05322	0.299505	0.420184428
FAM102A	9q34.11	0.053218	0.299519	0.420184428
AATBC	21q22.3	-0.05322	0.299523	0.420184428
ADH5	4q23	0.053193	0.299747	0.420468136
BTC	4q13.3	0.053176	0.299903	0.420631799
FASTKD5	20p13	0.053176	0.299905	0.420631799
CNOT4	7q33	-0.05317	0.299952	0.420668296
ZCCHC13	Xq13.2	0.053166	0.299997	0.42070153
SLC37A3	7q34	-0.05315	0.300097	0.420812757
KCNJ9	1q23.2	-0.05315	0.300137	0.420838798
C3ORF38	3p11.1	-0.05314	0.300221	0.420927003
PPP1R14D	15q15.1	-0.05314	0.300268	0.420963512
DHX8	17q21.31	-0.05313	0.300303	0.420983529
KCNG1	20q13.13	-0.05312	0.300429	0.421130629
HLA-DRB1	6p21.32	0.053107	0.300533	0.421246289
KIF2C	1p34.1	0.053087	0.300715	0.421472608
PRDM2	1p36.21	-0.05308	0.300739	0.421476089
COQ10B	2q33.1	0.053082	0.30076	0.421476893
MIAT	22q12.1	0.053072	0.300853	0.421576703
MAPKAPK2	1q32.1	0.053064	0.300927	0.421610046
NDFIP2	13q31.1	-0.05306	0.300953	0.421610046
EBF4	20p13	-0.05306	0.300961	0.421610046
BICDL2	16p13.3	-0.05306	0.300961	0.421610046
TXNRD2	22q11.21	-0.05305	0.301029	0.42165011
ADAMTSL5	19p13.3	0.053052	0.301031	0.42165011
DCP1A	3p21.1	-0.05305	0.301073	0.421678397
SPI1	11p11.2	0.053042	0.301126	0.421707462
CCDC107	9p13.3	0.053041	0.301135	0.421707462
MITF	3p13	-0.05302	0.301367	0.422002693
ZNF485	10q11.21	-0.053	0.301477	0.422127302
OR13C8	9q31.1	0.052996	0.301544	0.422190928
VEGFD	Xp22.2	-0.05299	0.301643	0.422300778
FOXL1	16q24.1	-0.05298	0.301731	0.422369966
STAB1	3p21.1	0.052975	0.301735	0.422369966
THTPA	14q11.2	-0.05294	0.302026	0.422748111
OXER1	2p21	-0.05293	0.302121	0.422835058
ADGRL1	19p13.12	-0.05293	0.302131	0.422835058
SPA17	11q24.2	0.052922	0.302217	0.422926762
IRF9	14q12	0.05291	0.302331	0.423045961
RERGL	12p12.3	-0.05291	0.302351	0.423045961
SNORA4	3q27.3	0.052906	0.302366	0.423045961
C10ORF113	10p12.31	-0.0529	0.302421	0.42309402
FXN	9q21.11	0.052894	0.302473	0.423129096
CDK5RAP3	17q21.32	-0.05289	0.302489	0.423129096
SNORD115-26	15q11.2	-0.05289	0.302521	0.423129096
SDR9C7	12q13.3	-0.05289	0.302531	0.423129096
TARDBP	1p36.22	-0.05287	0.302732	0.423380213
INAFM1	19q13.32	-0.05286	0.302773	0.423408552
VAT1	17q21.31	-0.05284	0.302943	0.423616151
DBNDD1	16q24.3	-0.05284	0.30297	0.423625188

DRG2	17p11.2	-0.05284	0.302994	0.42362871
TSPAN19	12q21.31	-0.05283	0.303063	0.423696474
TMCO2	1p34.2	-0.05278	0.303534	0.424312588
P2RX7	12q24.31	-0.05278	0.303547	0.424312588
KRTAP10-9	21q22.3	-0.05276	0.303713	0.424499095
AIMP1	4q24	-0.05276	0.303722	0.424499095
IGFBP1	7p12.3	-0.05275	0.303786	0.424558832
C3ORF62	3p21.31	0.052733	0.303956	0.424741685
LALBA	12q13.11	0.052732	0.30396	0.424741685
GGNBP2	17q12	-0.05271	0.304145	0.424971709
LTF	3p21.31	-0.05271	0.304205	0.425024924
HLA-DRB5	6p21.32	0.052682	0.304424	0.425302111
QRICH2	17q25.1	-0.05267	0.304509	0.42539129
FAM199X	Xq22.2	-0.05267	0.304563	0.425409401
DDC	7p12.2-p12.1	-0.05267	0.304565	0.425409401
CCDC7	10p11.22	0.052661	0.30461	0.425442944
RBSN	3p25.1	-0.05266	0.304662	0.425485544
LINC00167	11q24.3	-0.05264	0.304761	0.425576267
ATP6V0E2-AS1	7q36.1	0.052642	0.304785	0.425576267
ALKBH1	14q24.3	-0.05264	0.304791	0.425576267
C5ORF60	5q35.3	-0.05264	0.304835	0.425608797
ATP7B	13q14.3	0.052605	0.305125	0.425984369
MYOM1	18p11.31	-0.0526	0.305207	0.426068084
HRH3	20q13.33	-0.05258	0.305362	0.426254716
CDYL	6p25.1	-0.05257	0.305494	0.426410042
PYY2	17q11.2	-0.05256	0.305556	0.426442238
KCNMB2	3q26.32	-0.05256	0.305581	0.426442238
OR5B3	11q12.1	-0.05256	0.305581	0.426442238
SCMH1	1p34.2	-0.05255	0.305613	0.42645725
DCST2	1q21.3	0.052542	0.305707	0.426558392
PDE6H	12p12.3	-0.05252	0.305921	0.426803503
C10ORF71	10q11.23	-0.05252	0.305925	0.426803503
USP34	2p15	-0.05251	0.306028	0.426917135
TCERG1L	10q26.3	-0.0525	0.30609	0.42694431
EPM2A	6q24.3	0.0525	0.306096	0.42694431
GJA5	1q21.2	-0.0525	0.306111	0.42694431
ATP6V0A2	12q24.31	-0.05249	0.306177	0.427005992
PANK1	10q23.31	-0.05249	0.306203	0.427012271
NOX1	Xq22.1	-0.05248	0.306302	0.427080978
THEM4	1q21.3	0.052478	0.306302	0.427080978
EI24	11q24.2	0.052476	0.306316	0.427080978
HYAL6P	7q31.32	0.052465	0.306418	0.427158007
SSBP3	1p32.3	0.052464	0.306425	0.427158007
ABCB8	7q36.1	0.052463	0.306435	0.427158007
PCDHGB2	5q31.3	-0.05245	0.306525	0.427252916
APPL1	3p14.3	0.052439	0.306662	0.42741442
C1QTNF7	4p15.32	-0.05243	0.306767	0.427512908
CYB5R1	1q32.1	-0.05243	0.306775	0.427512908
DMRTC2	19q13.2	-0.05242	0.306804	0.427523036
LRRC39	1p21.2	-0.05242	0.30687	0.427584284
HOXD3	2q31.1	0.052414	0.306891	0.427584284
LSM2	6p21.33	-0.0524	0.306996	0.427701599
NR2F1	5q15	-0.05239	0.307096	0.427810468
FAM180B	11p11.2	-0.05237	0.307268	0.427985749
SKAP1	17q21.32	-0.05237	0.307283	0.427985749
EPX	17q22	-0.05237	0.307286	0.427985749
KCNA10	1p13.3	-0.05237	0.307325	0.428010278
BRWD3	Xq21.1	-0.05235	0.307482	0.428188762

TINAGL1	1p35.2	-0.05235	0.307514	0.428188762
GCOM1	15q21.3	-0.05234	0.307532	0.428188762
NSG1	4p16.3	0.052342	0.307558	0.428188762
RGS2	1q31.2	0.052342	0.30756	0.428188762
TSPY2	Yp11.2	0.052334	0.307628	0.428254776
KLC2	11q13.2	0.052309	0.307859	0.428543336
SHMT2	12q13.3	0.052307	0.307878	0.428543336
DEFA5	8p23.1	-0.05228	0.308085	0.428801686
LINC02694	15q14	0.052279	0.308138	0.428835883
LHCGR	2p16.3	-0.05228	0.308153	0.428835883
ZNF267	16p11.2	-0.05227	0.308245	0.428934895
GPX3	5q33.1	-0.05225	0.308369	0.429077243
GCNT7	20q13.31	-0.05225	0.308455	0.429167282
ANKRD34C	15q25.1	-0.05222	0.308704	0.42948355
PICK1	22q13.1	0.052182	0.309036	0.429897257
ETV7	6p21.31	0.052181	0.309052	0.429897257
GPR20	8q24.3	0.052179	0.309066	0.429897257
TXNDC5	6p24.3	0.052177	0.30909	0.429901293
BHMT	5q14.1	-0.05216	0.309203	0.430027155
DIO1	1p32.3	0.052162	0.309226	0.430027155
PCDHGA1	5q31.3	0.05216	0.309245	0.430027155
SHISA7	19q13.42	-0.05215	0.309374	0.430176164
CCDC33	15q24.1	0.052121	0.309607	0.430470528
SERPINB2	18q21.33-q22.1	0.052113	0.309678	0.430539557
LIMS3	2q13	-0.05211	0.309727	0.43057834
YBX3P1	16p11.2	-0.05209	0.309856	0.430727594
TRIM21	11p15.4	0.052088	0.30991	0.430772877
KCNQ3	8q24.22	0.052013	0.310609	0.431714586
RPS12	6q23.2	-0.05199	0.310816	0.431967947
FAM172A	5q15	-0.05199	0.310842	0.431967947
PAK1	11q13.5-q14.1	0.051987	0.310856	0.431967947
TUBA8	22q11.21	-0.05198	0.310955	0.432074594
TANC1	2q24.2	0.051966	0.311049	0.432175677
SLC52A3	20p13	-0.05196	0.311085	0.432195892
CNTRL	9q33.2	0.051955	0.311149	0.432253059
CENPW	6q22.32	-0.05195	0.31117	0.432253059
PCOTH	13q12.12	-0.05195	0.31122	0.432265609
OPLAH	8q24.3	-0.05195	0.311222	0.432265609
GANAB	11q12.3	-0.05193	0.311346	0.432408549
ASPDH	19q13.33	-0.05193	0.311394	0.432444925
NAA25	12q24.13	-0.05192	0.311477	0.432529892
LYSMD1	1q21.3	-0.0519	0.311625	0.4326868
WDR72	15q21.3	0.051903	0.311633	0.4326868
DDX6	11q23.3	0.051895	0.31171	0.43276356
KIFC3	16q21	-0.05185	0.312124	0.433308622
DEFB119	20q11.21	-0.05184	0.312232	0.43342783
COA3	17q21.2	-0.05181	0.312474	0.43373461
OR51E1	11p15.4	-0.0518	0.312561	0.433824714
ENDOG	9q34.11	0.051794	0.312652	0.433920417
GSK3A	19q13.2	0.051791	0.31268	0.433926274
ADAD1	4q27	-0.05179	0.312699	0.433926274
KLHL8	4q22.1	0.05177	0.312883	0.434151671
ATP2B1-AS1	12q21.33	0.051765	0.312923	0.434154138
PCDHA9	5q31.3	-0.05176	0.312928	0.434154138
CGRRF1	14q22.2	0.051748	0.313089	0.434346629
LRRC71	1q23.1	-0.05173	0.313231	0.434513407
RGS21	1q31.2	0.051726	0.313292	0.434558412
KPNA1	3q21.1	-0.05172	0.313306	0.434558412

ANKRD42	11q14.1	0.05172	0.313347	0.43458426
MVD	16q24.2	0.051718	0.313369	0.434584934
MYO3A	10p12.1	0.051712	0.313426	0.434633475
PODXL	7q32.3	0.0517	0.313532	0.434751332
NLGN1	3q26.31	-0.0517	0.313561	0.434761125
LINC00608	2q35	0.05168	0.313728	0.434962272
ZXDB	Xp11.21	-0.05166	0.313884	0.435147931
RBFA	18q23	0.051655	0.313954	0.435215783
SLC38A7	16q21	0.05165	0.314009	0.435261244
NR4A3	9q31.1	0.05163	0.314197	0.435469738
C22ORF46	22q13.2	0.051629	0.314203	0.435469738
PRDM16	1p36.32	0.051619	0.314296	0.435568457
GTF3C1	16p12.1	-0.05161	0.314352	0.435616735
SLC66A3	2p25.1	-0.05161	0.314397	0.435623025
GRID2	4q22.1-q22.2	0.051608	0.3144	0.435623025
AKR1D1	7q33	0.051598	0.314489	0.435697794
MROH7	1p32.3	0.051598	0.314498	0.435697794
TIMM23	10q11.22	-0.05159	0.314546	0.435734912
MRGPRX1	11p15.1 11	0.051589	0.314578	0.435749201
IFNA1	9p21.3	0.051581	0.314651	0.435819329
SNORA23	11p15.4	-0.05157	0.314742	0.435883928
CYCS	7p15.3	0.051571	0.314749	0.435883928
BCAN	1q23.1	-0.05157	0.314763	0.435883928
HDAC4	2q37.3	-0.05156	0.314813	0.43592382
OR2T8	1q44	0.051552	0.314926	0.436049425
SMS	Xp22.11	-0.05153	0.315155	0.436337076
ZNF493	19p12	-0.05152	0.315259	0.436409941
LINC02593	1p36.33	-0.05152	0.315267	0.436409941
HTR1F	3p11.2-p11.1	0.051515	0.315273	0.436409941
PDCD6	5p15.33	0.051512	0.315305	0.436423842
LOC100268168	5q35.1	-0.05149	0.315544	0.436724463
MYO10	5p15.1	-0.05148	0.315581	0.436744794
LINC01553	10q21.2	0.051478	0.31562	0.436769553
IRGQ	19q13.31	-0.05145	0.315852	0.437060265
TUSC7	3q13.31	-0.05144	0.315938	0.437148417
B3GNTL1	17q25.3	-0.05142	0.316134	0.437368098
TRIM33	1p13.2	0.051423	0.31614	0.437368098
RPP25	15q24.2	0.051415	0.316215	0.437441729
CC2D1A	19p13.12	0.051412	0.31624	0.437445195
CNTN6	3p26.3	-0.05139	0.31641	0.437620152
WDR64	1q43	0.051394	0.31641	0.437620152
MXD3	5q35.3	0.051389	0.316457	0.437654895
BMP8B	1p34.2	-0.05138	0.316568	0.437768402
OR3A3	17p13.2	0.051376	0.316583	0.437768402
CT47A11	Xq24	-0.05134	0.316953	0.438249857
SLC16A4	1p13.3	-0.0513	0.317265	0.438652007
NCOR1P1	20p11.1	-0.0513	0.317325	0.43870403
SLC35F4	14q22.3-q23.1	-0.05129	0.31737	0.438735744
USP2	11q23.3	0.051286	0.317434	0.438794507
UPF2	10p14	0.051279	0.317495	0.438848537
MRPL27	17q21.33	0.051258	0.317695	0.439093886
GPR152	11q13.2	0.051228	0.317985	0.439464455
UNC13A	19p13.11	0.051217	0.318086	0.439573456
FZR1	19p13.3	-0.0512	0.318224	0.439734575
NAPA	19q13.32-q13.33	0.051199	0.318251	0.439740833
WDR60	7q36.3	0.051191	0.318327	0.439816033
MALAT1	11q13.1	-0.05119	0.318367	0.439840629
RGS7	1q43 1q23.1	0.051169	0.318537	0.440045784

XKR5	8p23.1	-0.05117	0.318574	0.440066193
NAMPT	7q22.3	0.051162	0.318609	0.440084684
NUFIP2	17q11.2	-0.05116	0.31864	0.440096577
SNORA13	5q22.1	0.051156	0.318665	0.440100507
TP53I3	2p23.3	0.051147	0.31875	0.440187961
SERPINB11	18q21.33	-0.05114	0.318819	0.44023147
MAP3K4	6q26	-0.05114	0.318825	0.44023147
OR6W1P	7q34	0.051101	0.319186	0.440698441
RAB41	Xq13.1	-0.05107	0.319472	0.441062872
CWC27	5q12.3	-0.05107	0.319505	0.441078826
ACOT12	5q14.1	0.05106	0.319574	0.441143097
SNORA15	7p11.2	-0.05104	0.319742	0.441344668
CNNM2	10q24.32	0.051035	0.31981	0.441396572
WNT9A	1q42.13	0.051034	0.319824	0.441396572
OARD1	6p21.1	0.051029	0.319866	0.441424554
FGD5	3p25.1	-0.05102	0.319971	0.441539464
SPATS1	6p21.1	0.051003	0.320114	0.441706057
IFNA5	9p21.3	0.050994	0.320197	0.441773155
OR9A2	7q34	0.050993	0.320207	0.441773155
OR56B1	11p15.4	0.050989	0.32025	0.441773916
TMEM39A	3q13.33	0.050988	0.320251	0.441773916
DOCK1	10q26.2	0.050979	0.320337	0.44186202
ARHGEF40	14q11.2	-0.05097	0.320413	0.441936018
DNAJA1	9p21.1	-0.05096	0.320536	0.442061449
BTBD10	11p15.3	0.050957	0.320548	0.442061449
POU2F3	11q23.3	0.050951	0.320612	0.442094344
PHF3	6q12	0.050948	0.320634	0.442094344
SIGLEC5	19q13.41	0.050948	0.320638	0.442094344
MRPL37	1p32.3	0.050945	0.320667	0.442103429
LSM6	4q31.22	-0.05093	0.320763	0.442192178
MEP1A	6p12.3	0.050933	0.320775	0.442192178
HMGN1	21q22.2	0.050927	0.320833	0.442240791
FAM138E	15q26.3	0.050922	0.320884	0.442257485
SIRPB1	20p13	-0.05092	0.320889	0.442257485
C17ORF58	17q24.2	-0.05092	0.320913	0.442259554
AJM1	9q34.3	0.050904	0.321052	0.442408607
IFNK	9p21.2	0.050903	0.321065	0.442408607
LINC00887	3q29	-0.0509	0.321101	0.442428507
LINC00113	21q21.3	-0.0509	0.32113	0.442437709
CAMK2G	10q22.2	0.050878	0.321299	0.442639633
KCNQ5	6q13	-0.05086	0.32145	0.442817127
COG5	7q22.3	-0.05086	0.321489	0.442829369
PDIA3	15q15.3	0.050857	0.321503	0.442829369
RFTN1	3p24.3	-0.05085	0.321616	0.442954297
MGC16025	2q37.3	0.050838	0.321684	0.443017823
IL12B	5q33.3	0.050831	0.321753	0.443082899
MYCBPAP	17q21.33	-0.05083	0.321789	0.443100924
ANKRD9	14q32.31	0.050823	0.321825	0.443120623
NR2E3	15q23	-0.05082	0.321878	0.44316331
NANOS1	10q26.11	0.050799	0.322057	0.44337909
MYT1L	2p25.3	-0.05077	0.32232	0.443711298
TGM5	15q15.2	-0.05076	0.322406	0.443777394
PPP1R32	11q12.2	-0.05076	0.322428	0.443777394
MTX3	5q14.1	0.050759	0.322435	0.443777394
C12ORF42	12q23.2-q23.3	-0.05075	0.322501	0.443837781
P2RY12	3q25.1	0.050739	0.322623	0.443975843
NAV2	11p15.1	-0.05073	0.322747	0.444115849
VPS26B	11q25	0.050718	0.322826	0.444192853



CAPN1	11q13.1	0.050712	0.322885	0.444232648
INSYN2B	5q35.1	-0.05071	0.322899	0.444232648
SMG9	19q13.31	-0.05071	0.322949	0.444271081
ERC1	12p13.33	0.050696	0.323035	0.444359418
ATP6AP1L	5q14.2	-0.05069	0.323093	0.444408139
BCAR4	16p13.13	-0.05067	0.323265	0.444613989
SLC32A1	20q11.23	0.050667	0.323317	0.444655192
VCX3B	Xp22.31	-0.05066	0.32342	0.444766488
RTF1	15q15.1	-0.05065	0.323472	0.44480689
IL36B	2q14.1	0.050642	0.323556	0.444891751
PLEKHJ1	19p13.3	-0.05064	0.323603	0.444927034
ZBTB11	3q12.3	0.050632	0.323653	0.444964455
CCNT1	12q13.11-q13.12	0.050628	0.323688	0.444982054
HIST3H3	1q42.13	0.050587	0.324081	0.445491175
SLTM	15q22.1	0.050566	0.324286	0.445742632
SNORA29	6q25.3	-0.05055	0.324413	0.445886966
EP400	12q24.33	0.050544	0.324494	0.445957057
RNF40	16p11.2	-0.05054	0.324509	0.445957057
GPR180	13q32.1	-0.05053	0.324626	0.4460881
SMARCA4	19p13.2	-0.05052	0.324727	0.446189609
CHL1	3p26.3	0.050518	0.324745	0.446189609
ADAM21	14q24.2	0.050514	0.324779	0.446196551
VWA3A	16p12.2	-0.05051	0.324794	0.446196551
PRKAB1	12q24.23	0.05051	0.324822	0.446204505
OTOR	20p12.1	0.050502	0.324892	0.446269176
C7	5p13.1	-0.05049	0.325001	0.446366418
TBX4	17q23.2	-0.05049	0.325007	0.446366418
HIST1H3C	6p22.2	0.050487	0.325045	0.446387597
LINC02203	15q11.2	0.050483	0.325076	0.446400069
KIFAP3	1q24.2	-0.05047	0.325177	0.446508724
GNG2	14q22.1	0.050452	0.325378	0.446753387
PDE8B	5q13.3	-0.05044	0.325481	0.446854139
ADGRE3	19p13.12	0.05044	0.325496	0.446854139
OR3A2	17p13.3	0.050408	0.325798	0.447238354
UIMC1	5q35.2	-0.05041	0.325823	0.447241194
KIF2A	5q12.1	0.050398	0.325893	0.447307096
WIPF1	2q31.1	-0.05038	0.326085	0.447540595
WDR34	9q34.11	0.050375	0.326114	0.447549698
CFL1P1	10q23.31	-0.05037	0.326209	0.447649554
C11ORF16	11p15.4	-0.05036	0.326245	0.447667744
INSL5	1p31.3	-0.05035	0.326325	0.447746907
BTBD18	11q12.1	-0.05034	0.326422	0.447842207
C16ORF89	16p13.3	0.050341	0.326439	0.447842207
AMBRA1	11p11.2	-0.05033	0.326574	0.447996463
RIPPLY1	Xq22.3	0.050323	0.326615	0.448003408
TMEM30CP	3q12.1	-0.05032	0.326624	0.448003408
RAVER1	19p13.2	-0.05031	0.326771	0.448146399
FRMD7	Xq26.2	-0.05031	0.326773	0.448146399
HTR1A	5q12.3	-0.0503	0.326798	0.448149736
ARHGEF15	17p13.1	-0.0503	0.326829	0.448161964
TNP2	16p13.13	0.050285	0.326983	0.448339386
CSTF2T	10q21.1	0.050283	0.327003	0.448339386
EXOC2	6p25.3	-0.05027	0.327088	0.448396389
DBH	9q34.2	0.050274	0.32709	0.448396389
IL4I1	19q13.33	-0.05026	0.327188	0.448500359
ANP32B	9q22.33	0.050235	0.327468	0.44885363
HS3ST3A1	17p12	-0.05022	0.327601	0.449000051
TMEM151A	11q13.2	-0.05022	0.327645	0.449000051

FBXO31	16q24.2	-0.05021	0.327661	0.449000051
C6ORF118	6q27	0.050214	0.327664	0.449000051
TOGARAM2	2p23.2	0.050211	0.327695	0.449011672
FBXW12	3p21.31	-0.0502	0.32781	0.449138522
GALT	9p13.3	-0.0502	0.32784	0.449147886
DISP1	1q41	0.050187	0.327931	0.449242377
ATG16L1	2q37.1	-0.05017	0.328124	0.449472272
JMJD1C-AS1	10q21.3	-0.05016	0.328144	0.449472272
ZBTB3	11q12.3	-0.05016	0.328193	0.449508824
OR5T2	11q12.1	-0.05015	0.328311	0.449618125
CCDC114	19q13.33	-0.05015	0.328318	0.449618125
PTK6	20q13.33	0.050114	0.328632	0.450017452
FN3K	17q25.3	0.050106	0.328711	0.450094938
PNPLA8	7q31.1	-0.0501	0.328786	0.450166732
PDIA3P1	1q21.1	0.050085	0.328915	0.450312622
USP9X	Xp11.4	-0.05004	0.329325	0.450843435
STAC2	17q12	-0.05003	0.329406	0.450895622
HIF1AN	10q24.31	-0.05003	0.329429	0.450895622
FAM221B	9p13.3	-0.05003	0.329431	0.450895622
DGAT2L6	Xq13.1	0.050023	0.329511	0.45097518
FAM181A	14q32.12	0.05002	0.329542	0.450986721
LINC00663	19p13.11	-0.04997	0.330067	0.451657605
ZNF281	1q32.1	-0.04996	0.330077	0.451657605
CACFD1	9q34.2	0.049949	0.330228	0.451832304
CCDC54	3q13.12	-0.04994	0.330284	0.451878779
FAIM2	12q13.12	0.049925	0.330459	0.452087548
COL14A1	8q24.12	-0.04992	0.330489	0.452096653
SLC26A5	7q22.1	0.049919	0.330521	0.452110011
HS6ST2	Xq26.2	-0.04991	0.330599	0.45218624
MYO19	17q12	0.049899	0.330718	0.452300499
FMR1-AS1	Xq27.3	-0.0499	0.330728	0.452300499
USP26	Xq26.2	-0.04989	0.330776	0.45232555
SPHAR	1q42.13	0.049891	0.330791	0.45232555
FARSA	19p13.13	-0.04989	0.330842	0.452363229
PIGZ	3q29	0.049882	0.330877	0.452380911
HNRNPM	19p13.2	0.049874	0.330954	0.452455733
AEN	15q26.1	0.049866	0.331036	0.452516579
KRTAP12-3	21q22.3	-0.04986	0.331044	0.452516579
LINC00473	6q27	-0.04984	0.331249	0.452765159
CPSF2	14q32.12	0.049829	0.331393	0.452932298
LGALS12	11q12.3	0.049774	0.331931	0.453636564
RPL9	4p14	-0.04977	0.331954	0.453636938
RAD23B	9q31.2	0.049766	0.332011	0.453683244
ASB10	7q36.1	-0.04973	0.33232	0.454074169
UBE2Z	17q21.32	0.04972	0.332457	0.454231037
ZNF826P	19p12	-0.04972	0.332493	0.454248443
PCDHB11	5q31.3	-0.04971	0.332554	0.45430079
CTNNA3	10q21.3	0.04967	0.332941	0.454799505
LILRB4	19q13.42	0.049657	0.333063	0.454934972
TENM1	Xq25	-0.0496	0.333601	0.455610502
SEZ6L	22q12.1	-0.0496	0.333623	0.455610502
UBE2DNL	Xq21.1	0.049598	0.333638	0.455610502
LINC00032	9p21.2	0.049597	0.333649	0.455610502
MUC20	3q29	-0.04959	0.333767	0.455709324
GPR65	14q31.3	0.049585	0.333767	0.455709324
RNF34	12q24.31	0.049573	0.333884	0.455816461
RPL34	4q25	-0.04957	0.333891	0.455816461
DLG1	3q29	0.049564	0.33397	0.455894424

CDH3	16q22.1	-0.04956	0.334036	0.455941317
PLXNC1	12q22	0.049556	0.33405	0.455941317
LRFN5	14q21.1	-0.04954	0.334196	0.456109367
TRUB2	9q34.11	-0.04953	0.334343	0.456278102
RCC2	1p36.13	-0.04952	0.334393	0.456315908
ACTBL2	5q11.2	0.049517	0.334431	0.4563361
LOC284379	19q13.42	-0.04951	0.334541	0.456455344
GOT1L1	8p11.23	-0.04948	0.334832	0.456820728
HOXB8	17q21.32	0.049462	0.33497	0.456974571
ZC2HC1C	14q24.3	0.049459	0.334997	0.456974571
ERCC2	19q13.32	-0.04946	0.335037	0.456974571
PLEKHH2	2p21	-0.04945	0.335046	0.456974571
MAT2A	2p11.2	-0.04945	0.335058	0.456974571
ALDOC	17q11.2	-0.04944	0.335212	0.457136433
NCBP1	9q22.33	-0.04944	0.335223	0.457136433
JPT1	17q25.1	0.049428	0.335301	0.457211626
PPP6R2	22q13.33	0.049425	0.33533	0.457220727
WDR91	7q33	-0.0494	0.335619	0.457583372
UBL3	13q12.3	0.049376	0.335811	0.457813882
UBAP1	9p13.3	-0.04937	0.335866	0.457857491
FAM71A	1q32.3	0.049356	0.336005	0.458016323
IL13RA1	Xq24	0.049346	0.336108	0.458112023
VCAM1	1p21.2	-0.04934	0.336121	0.458112023
DZIP1L	3q22.3	-0.04934	0.33621	0.458179128
MTFR1L	1p36.11	-0.04933	0.336216	0.458179128
ADGRF5	6p12.3	-0.04933	0.336275	0.458228507
DDX43	6q13	-0.0493	0.336513	0.458521723
FEM1B	15q23	0.049288	0.336677	0.458712938
SPATA24	5q31.2	-0.04926	0.336989	0.459107905
SLC49A3	4p16.3	0.049249	0.337062	0.459176014
REL	2p16.1	0.049229	0.337254	0.459405506
ADAM29	4q34.1	0.04922	0.337343	0.459495969
RSPH4A	6q22.1	-0.04921	0.33741	0.459533678
PIN1	19p13.2	-0.04921	0.337417	0.459533678
ALG13	Xq23	-0.0492	0.337588	0.459735875
CLIP2	7q11.23	0.049191	0.337626	0.459756498
DCAF12L1	Xq25	0.049181	0.337725	0.459855849
SAMM50	22q13.31	0.049179	0.337749	0.459855849
LTB4R2	14q12	-0.04918	0.337768	0.459855849
UBE2MP1	16p11.2	0.049168	0.337857	0.459945665
FAM72D	1q21.1	0.049156	0.337969	0.460064319
C3ORF35	3p22.2	-0.04915	0.338012	0.460064319
LINC01777	1p36.32	0.049152	0.338013	0.460064319
USP17L2	8p23.1	0.04913	0.338228	0.460325243
SUMO3	21q22.3	0.049127	0.338264	0.460342949
STRA8	7q33	-0.04912	0.338298	0.46035865
NTAN1	16p13.11	0.049118	0.338351	0.460398641
CCSER2	10q23.1	-0.04911	0.338387	0.460405304
RPS29	14q21.3	-0.04911	0.338401	0.460405304
CEBPD	8q11.21	0.049059	0.33893	0.461062558
TFPI2	7q21.3	-0.04906	0.338931	0.461062558
BCL7B	7q11.23	-0.04905	0.33898	0.461099111
MDM1	12q15	-0.04905	0.339046	0.461157319
NTRK3	15q25.3	-0.04903	0.339177	0.461303666
FBXL8	16q22.1	0.049008	0.339435	0.461623116
APCS	1q23.2	0.048998	0.339527	0.461711333
SCGB1D4	11q12.3	-0.04899	0.339592	0.461711333
CSH1	17q23.3	-0.04899	0.339592	0.461711333

TSPY1	Yp11.2	-0.04899	0.339592	0.461711333
BBX	3q13.12	0.048982	0.33969	0.461758209
CSNK1G2-AS1	19p13.3	0.048982	0.339691	0.461758209
SNAR-B2	19q13.33	-0.04898	0.339696	0.461758209
PCDHA2	5q31.3	-0.04897	0.339764	0.461819692
IL17F	6p12.2	-0.04893	0.340189	0.462366542
PPP3R2	9q31.1	-0.04893	0.340231	0.462391929
PI4KAP2	22q11.21	-0.04892	0.340328	0.462491893
ARID1B	6q25.3	-0.04891	0.340423	0.462590625
PCDHB2	5q31.3	-0.04889	0.340589	0.462784809
NUDT22	11q13.1	0.048887	0.340626	0.46280258
RGS16	1q25.3	-0.04888	0.340653	0.462808784
PCLO	7q21.11	-0.04887	0.340753	0.462913191
APOBEC2	6p21.1	-0.04887	0.340839	0.462980703
MFSD13A	10q24.32	0.048865	0.340849	0.462980703
OGFRL1	6q13	0.048857	0.340926	0.463043136
ZNF653	19p13.2	0.048853	0.340966	0.463043136
SRSF9	12q24.31	0.048853	0.340966	0.463043136
TFEC	7q31.2	0.048851	0.340988	0.463043136
SBF2	11p15.4	-0.04885	0.341015	0.463043985
CPT1B	22q13.33	-0.04885	0.341035	0.463043985
H3F3B	17q25.1	-0.04883	0.341179	0.463209305
RCOR2	11q13.1	0.048823	0.341258	0.463284954
LIPF	10q23.31	0.048812	0.341366	0.463372607
YBX3	12p13.2	-0.04881	0.341369	0.463372607
DOCK11	Xq24	-0.04881	0.341403	0.463387499
ZNF112	19q13.31	-0.0488	0.341465	0.46344001
VWC2	7p12.2	-0.04879	0.341543	0.463514617
COQ5	12q24.31	0.04879	0.341591	0.463547933
SH3BP5L	1q44	0.048771	0.341776	0.463768334
PLA2G4D	15q15.1	0.048769	0.341801	0.46376964
SRR	17p13.3	0.048765	0.341832	0.463780757
ITIH2	10p14	-0.04876	0.341925	0.463876104
NEK11	3q22.1	0.048752	0.341966	0.463900295
MAATS1	3q13.33	-0.04875	0.342014	0.46393406
LCE1D	1q21.3	0.048729	0.34219	0.464125356
ZDHHC13	11p15.1	0.048726	0.342227	0.464125356
GGTLC1	20p11.21	-0.04872	0.342244	0.464125356
PCSK4	19p13.3	-0.04872	0.342248	0.464125356
ELMOD1	11q22.3	-0.04871	0.342363	0.46424917
C7ORF69	7p12.3	0.048704	0.342439	0.464321449
BCL11B	14q32.2	-0.0487	0.342504	0.46437858
MRPS34	16p13.3	-0.04869	0.342564	0.464428243
ZNF616	19q13.41	0.048671	0.342769	0.464674909
HIST2H2BA	1p11.2	-0.04863	0.343194	0.465218822
PEAK3	19p13.3	0.048624	0.343233	0.465240838
ERCC6L	Xq13.1	-0.04861	0.343328	0.465337041
PTRHD1	2p23.3	0.048592	0.34355	0.465584374
RBM18	9q33.2	-0.04859	0.343556	0.465584374
ADARB2	10p15.3	-0.04859	0.343601	0.465613011
ACP6	1q21.2	0.048566	0.343807	0.465860788
CYP4X1	1p33 1	0.048561	0.343863	0.465904713
NEU4	2q37.3	0.048558	0.343895	0.465916719
KRTAP4-3	17q21.2	-0.04855	0.343978	0.465997669
SPATA31C1	9q22.1	0.048539	0.34408	0.466105101
EFCC1	3q21.3	0.048532	0.344154	0.466173305
OPRL1	20q13.33	-0.04851	0.344337	0.466389899
CYP1A2	15q24.1	0.048498	0.344449	0.466565016

URB2	1q42.13	-0.04849	0.344568	0.466639025
PLAAT1	3q29	0.048475	0.344717	0.466805357
FTSJ3	17q23.3	-0.04847	0.344737	0.466805357
ARHGEF1	19q13.2	-0.04847	0.344808	0.466864232
MTFP1	22q12.2	0.048464	0.344827	0.466864232
POLE3	9q32	-0.04844	0.345053	0.467137716
MTSS1	8q24.13	0.048431	0.345158	0.467248528
ARTN	1p34.1	-0.04842	0.345252	0.467344784
DRP2	Xq22.1	-0.0484	0.345456	0.467581067
KIF21A	12q12	0.048397	0.345495	0.467581067
CABP1	12q24.31	0.048397	0.345497	0.467581067
TSHB	1p13.2	0.048392	0.345548	0.467618644
EDIL3	5q14.3	-0.04838	0.345714	0.467786085
LINC00950	9p13.3	0.048375	0.345718	0.467786085
TRAPPC2L	16q24.3	-0.04837	0.345763	0.467815508
MYF6	12q21.31	-0.04837	0.345807	0.467843312
HAX1	1q21.3	-0.04834	0.34603	0.468112951
CXCL2	4q13.3	-0.04834	0.346114	0.468194779
NUDC	1p36.11	-0.04833	0.346204	0.468285341
CBWD3	9q21.11	-0.04832	0.34628	0.468355543
STKLD1	9q34.2	-0.0483	0.34648	0.46859541
GHRHR	7p14.3	-0.04829	0.346542	0.468647606
DHX38	16q22.2	-0.04827	0.346716	0.468851433
B3GNT9	16q22.1	0.048268	0.346781	0.468907117
RAPGEF6	5q31.1	0.048262	0.346848	0.468945701
MYH9	22q12.3	0.048261	0.346856	0.468945701
SPINT2	19q13.2	0.048251	0.346949	0.469039242
TRPT1	11q13.1	-0.04824	0.347065	0.469164824
C22ORF31	22q12.1	-0.04823	0.347203	0.4692937
DCTPP1	16p11.2	-0.04823	0.347208	0.4692937
C22ORF34	22q13.33	-0.04822	0.347295	0.469380683
FERD3L	7p21.1	-0.0482	0.347491	0.469613381
C17ORF99	17q25.3	-0.04819	0.347545	0.469654172
TTBK2	15q15.2	-0.04819	0.347598	0.469694263
CACNB3	12q13.12	0.048182	0.347649	0.469732505
OLFM4	13q14.3	0.048172	0.347746	0.469801673
P2RY2	11q13.4	0.048172	0.347748	0.469801673
GABRR2	6q15	0.048167	0.347791	0.469828501
LYPD6	2q23.2	0.048157	0.347891	0.469932116
ALDH5A1	6p22.3	0.048147	0.347999	0.470046148
COX6A1	12q24.31 12q24.2	0.048136	0.348105	0.470157277
ANO4	12q23.1	-0.04811	0.348321	0.470400063
DPF1	19q13.2	-0.04811	0.348331	0.470400063
PRSS48	4q31.3	0.04811	0.348364	0.47040617
HS6ST3	13q32.1	0.048108	0.348383	0.47040617
DNAJC18	5q31.2	-0.0481	0.348433	0.470430578
SLC35E2B	1p36.33	-0.0481	0.348448	0.470430578
IFNA7	9p21.3	0.048085	0.34862	0.470631746
CNOT9	2q35	-0.04808	0.348662	0.470655842
SPAG11A	8p23.1	-0.04806	0.348873	0.470909294
CFAP410	21q22.3	0.048047	0.348999	0.471018635
ZNF704	8q21.13	-0.04805	0.349001	0.471018635
TMBIM4	12q14.3	0.04803	0.34917	0.471214499
TECRL	4q13.1	0.048027	0.349198	0.471221268
FOXM1	12p13.33	0.048016	0.349306	0.471334861
UGT1A5	2q37.1	0.048011	0.349364	0.471381705
C10ORF91	10q26.3	0.048007	0.349402	0.471400698
THEM5	1q21.3	0.047998	0.349492	0.471490378

SNORA56	Xq28	-0.04799	0.349609	0.471615933
TBR1	2q24.2	0.047983	0.349639	0.4716257
DET1	15q26.1	-0.04796	0.349862	0.471868268
HIST1H2AH	6p22.1	-0.04796	0.349866	0.471868268
QRFP	9q34.12	-0.04795	0.349959	0.471961091
RPN1	3q21.3	0.047948	0.349999	0.471983248
VAR5	6p21.33	0.047941	0.350059	0.472033247
RLN3	19p13.12	-0.04794	0.350107	0.472065982
PA2G4	12q13.2	-0.04791	0.350341	0.472349437
AAGAB	15q23	0.047899	0.350491	0.472519262
KRT26	17q21.2	0.047882	0.350657	0.472712154
TMSB4Y	Yq11.221	0.047859	0.350887	0.472990666
STRN4	19q13.32	-0.04783	0.35115	0.47331003
DERL1	8q24.13	-0.04783	0.351172	0.47331003
TRIM2	4q31.3	0.04781	0.35138	0.473559037
ECSIT	19p13.2	0.047793	0.351554	0.47376125
DNPH1	6p21.1	0.047771	0.351775	0.474027988
RPL21P44	4q12	-0.04776	0.35186	0.474109734
C11ORF45	11q24.3	-0.04775	0.351951	0.474201366
MTMR4	17q22	0.047751	0.351984	0.47421339
LTBP2	14q24.3	-0.04771	0.352436	0.474790792
EPPK1	8q24.3	0.047698	0.352517	0.47485
GGPS1	1q42.3	-0.0477	0.352528	0.47485
LECT2	5q31.1	-0.04769	0.352625	0.474948643
KRTCAP2	1q22	-0.04768	0.352715	0.475034039
ZNF239	10q11.21	-0.04768	0.352735	0.475034039
TMC3	15q25.1	-0.04766	0.352889	0.47520916
TCEAL6	Xq22.1	-0.04764	0.353151	0.475508462
PDP2	16q22.1	0.047634	0.353159	0.475508462
RSPO3	6q22.33	-0.04762	0.3533	0.475666994
FLJ42393	3q27.3	0.047599	0.35352	0.475930274
HCG27	6p21.33	0.047594	0.353564	0.475958148
ATG7	3p25.3	0.047586	0.353647	0.476011534
PARD6G	18q23	-0.04759	0.353651	0.476011534
FOSL1	11q13.1	-0.04758	0.353743	0.476102787
TMPRSS11A	4q13.2	-0.04757	0.353818	0.476171884
LY6G6C	6p21.33	0.047563	0.353876	0.476217637
TEX13A	Xq22.3	-0.04755	0.354012	0.47636896
C1QTNF1	17q25.3	-0.04754	0.354072	0.476388345
FAM181B	11q14.1	-0.04754	0.354074	0.476388345
RNF185	22q12.2	-0.04754	0.35414	0.476421759
ADAMTS4	1q23.3	-0.04754	0.354146	0.476421759
LIN9	1q42.12	0.047533	0.354181	0.476436722
CCNJL	5q33.3	0.047529	0.354225	0.476463427
VCPKMT	14q21.3	-0.04752	0.354356	0.476607557
AGMAT	1p36.21	-0.04751	0.354404	0.476640137
CA6	1p36.23	-0.04749	0.35462	0.476898756
CCDC144CP	17p11.2	0.047479	0.354728	0.477012051
ZBTB45	19q13.43	-0.04748	0.354764	0.477028608
OR52D1	11p15.4	0.047458	0.354943	0.477237373
GAB4	22q11.1	0.047453	0.354994	0.477258571
KMT2A	11q23.3	-0.04745	0.355007	0.477258571
CD47	3q13.12	-0.04741	0.355398	0.477752555
EIF2A	3q25.1	-0.0474	0.355494	0.477849837
TMEM97	17q11.2	-0.04739	0.355586	0.477941247
C3ORF36	3q22.1	0.047385	0.355682	0.478038337
VSTM2A	7p11.2	0.047378	0.355759	0.478109625
RAB5C	17q21.2	-0.04738	0.355787	0.478115533

MLNR	13q14.2	0.047351	0.356033	0.478412887
ACAP3	1p36.33	-0.04735	0.356076	0.478439598
BMP15	Xp11.22	-0.04734	0.356194	0.478563682
ACP2	11p11.2 11p12-p11	0.047333	0.356217	0.478563682
PCDHGB8P	5q31.3	0.04733	0.356241	0.478565
ZBTB1	14q23.3	0.047314	0.356411	0.478761344
LMF1	16p13.3	-0.04727	0.356863	0.479306441
LRP5	11q13.2	-0.04727	0.356865	0.479306441
CATSPERD	19p13.3	-0.04726	0.357007	0.47946537
KRTAP7-1	21q22.11	0.047248	0.357077	0.479526826
SPATA1	1p22.3	0.047216	0.357406	0.479936277
SPAG7	17p13.2	0.047193	0.357646	0.480226653
SPSB1	1p36.22	-0.04717	0.357835	0.480448008
UTP25	1q32.2	-0.04717	0.357897	0.480498363
HIST1H2AA	6p22.2	-0.04716	0.358024	0.480605175
LINC00293	8q11.1	-0.04716	0.358024	0.480605175
ADAMTSL1	9p22.2-p22.1	-0.04715	0.358088	0.480638102
LGALS13	19q13.2	-0.04715	0.358114	0.480638102
MAPK12	22q13.33	-0.04715	0.358121	0.480638102
ERICH6	3q25.1	-0.04714	0.358173	0.480676706
TLN1	9p13.3	0.047132	0.358259	0.480759477
SMCO1	3q29	-0.04712	0.358365	0.480840344
CST9L	20p11.21	-0.04712	0.358367	0.480840344
LARP4	12q13.12	0.047112	0.35847	0.480943724
KRT5	12q13.13	-0.04711	0.358492	0.480943724
MCM10	10p13	0.047095	0.358646	0.481117549
HINT2	9p13.3	0.047076	0.358837	0.48134203
MKNK1	1p33	0.047053	0.359068	0.481619704
ZIC1	3q24	-0.04705	0.359141	0.481684612
NR2C2	3p25.1	-0.04704	0.359238	0.481782518
OSGEP	14q11.2	0.047034	0.359269	0.481791592
FBXW9	19p13.13	0.047024	0.35937	0.48186289
MARCKS	6q21	-0.04702	0.35937	0.48186289
NDUFB10	16p13.3	-0.04701	0.359469	0.481963504
HACD3	15q22.31	0.047009	0.35952	0.481999158
LYPD3	19q13.31	-0.04699	0.359759	0.482287312
CSRP3	11p15.1	0.046966	0.359964	0.482530407
DKFZP586I1420	7p14.3	-0.04696	0.360022	0.482575837
CDH1	16q22.1	-0.04694	0.360205	0.482788833
ERRF1	1p36.23	0.046938	0.360247	0.482812683
NOTO	2p13.2	-0.04693	0.360287	0.482834001
ZNF324	19q13.43	0.046925	0.360384	0.482931329
TBX22	Xq21.1	-0.04692	0.360413	0.482937347
SCARNA10	12p13.31	-0.04692	0.360446	0.482949531
FASTK	7q36.1	-0.04691	0.360549	0.483032153
PRDM9	5p14.2	-0.04691	0.360556	0.483032153
FKRP	19q13.32	-0.04689	0.360752	0.483263479
TAX1BP3	17p13.2	0.046879	0.360854	0.483367182
B3GNT8	19q13.2	-0.04688	0.360889	0.48338217
SNORA51	20p13	-0.04687	0.360927	0.483399721
SLC25A13	7q21.3	-0.04687	0.36098	0.48343873
OR6C1	12q13.2	0.046844	0.36121	0.483714086
PRR32	Xq25	-0.04684	0.361285	0.483782853
SETD1B	12q24.31	0.046812	0.361541	0.484093192
MCM2	3q21.3	-0.04681	0.361592	0.484128899
JAK3	19p13.11	-0.0468	0.36164	0.484161648
C2ORF48	2p25.1	-0.0468	0.361667	0.484164662
GLT8D1	3p21.1	-0.0468	0.361691	0.484164994

MED21	12p11.23	-0.04679	0.361733	0.484188866
IQCC	1p35.2	0.046774	0.361926	0.484414024
ATF2	2q31.1	-0.04677	0.361988	0.484462788
CNKS2R2	Xp22.12	0.046766	0.362011	0.484462788
GRIA1	5q33.2	-0.04676	0.362057	0.484492544
RUNDC3B	7q21.12	0.046749	0.362189	0.48462815
DENND4B	1q21.3	-0.04675	0.362207	0.48462815
HPN	19q13.11	-0.04674	0.362269	0.484678838
TAS2R10	12p13.2	-0.04674	0.362302	0.484691221
KCNJ1	11q24.3	0.046732	0.362364	0.484741385
RTP2	3q27.3	0.046727	0.36241	0.484770054
SRXN1	20p13	-0.04672	0.362439	0.484777169
DCDC1	11p13	0.04672	0.362484	0.484804475
ZNF366	5q13.2 5q13.2	0.046716	0.362528	0.484830861
CERKL	2q31.3	-0.04671	0.362554	0.48483402
STK11IP	2q35	-0.0467	0.362647	0.484902523
DOHH	19p13.3	-0.0467	0.362654	0.484902523
OR6C68	12q13.2	-0.0467	0.362727	0.484968042
OR2T1	1q44	-0.04669	0.362785	0.485012991
OR2W1	6p22.1	0.046664	0.36306	0.485348856
ANKRD34A	1q21.1	0.046652	0.363182	0.485479335
WBP2NL	22q13.2	-0.04664	0.363259	0.485524853
PGLYRP3	1q21.3	0.046644	0.363265	0.485524853
SMIM3	5q33.1	0.046641	0.363299	0.485537792
ZNF276	16q24.3	-0.04662	0.363467	0.485730606
SEPTIN7P9	10p11.1	-0.04662	0.363559	0.485802116
JMJD7-PLA2G4B	15q15.1	-0.04661	0.363569	0.485802116
TUBG1	17q21.2	0.046604	0.363685	0.485923833
HSPA7	1q23.3	-0.0466	0.36374	0.485965521
PPP1R15A	19q13.33	-0.04659	0.36378	0.485978539
ZNF536	19q12	0.046593	0.363798	0.485978539
FAM200B	4p15.32	-0.04659	0.36384	0.486001663
ADAMTS2	5q35.3	-0.04658	0.363962	0.48611231
RRAD	16q22.1	-0.04657	0.363986	0.48611231
KIAA2013	1p36.22	0.046573	0.363998	0.48611231
TRRAP	7q22.1	-0.04657	0.36404	0.48611231
TBC1D10B	16p11.2	-0.04657	0.364044	0.48611231
FAM99A	11p15.5	-0.04656	0.364126	0.486189571
ST8SIA3	18q21.31	-0.04656	0.364169	0.486213958
INSIG2	2q14.1-q14.2	-0.04654	0.364339	0.486315544
TBC1D17	19q13.33	-0.04654	0.364351	0.486315544
ACOT2	14q24.3	-0.04654	0.364355	0.486315544
DNTTIP2	1p22.1	-0.04654	0.364364	0.486315544
CA5BP1	Xp22.2	-0.04654	0.364371	0.486315544
OR2M4	1q44	-0.04654	0.364391	0.486315544
PHYH	10p13	-0.04653	0.364459	0.486374969
PPIAL4E	1q21.1	-0.04653	0.364485	0.48637609
SFTPA1	10q22.3	0.046521	0.36454	0.48641814
ZNF626	19p12	-0.04652	0.364597	0.486461552
MFAP3L	4q33	-0.04651	0.364633	0.486474025
SRP14P1	12p13.31	-0.04651	0.364658	0.486474025
LEFTY1	1q42.12	-0.04651	0.364679	0.486474025
SPRR1A	1q21.3	0.046504	0.364715	0.486488832
SHISAL2A	1p32.3	0.046489	0.364865	0.486656631
ANKS1B	12q23.1	-0.04648	0.36492	0.486695697
SLITRK3	3q26.1	-0.04648	0.364943	0.486695697
PDE6A	5q32	-0.04647	0.36509	0.486836996
AMMECR1	Xq23	-0.04647	0.365097	0.486836996



HERC2	15q13.1	-0.04645	0.365249	0.487006249
HOXD4	2q31.1	0.046433	0.365442	0.487231974
MTMR9LP	1p35.2	-0.04643	0.365516	0.487297371
DDT	22q11.23	-0.04642	0.365553	0.487315372
SLC2A4	17p13.1	-0.04641	0.3657	0.487455221
SLC35E4	22q12.2	-0.0464	0.365736	0.487455221
PSKH2	8q21.3	-0.0464	0.365769	0.487455221
TMEM115	3p21.31	-0.0464	0.365772	0.487455221
PCDHA4	5q31.3	-0.0464	0.36578	0.487455221
LOC728989	1q21.1	0.046388	0.365913	0.487599537
NFIA	1p31.3	0.04636	0.366195	0.487942978
PROK2	3p13	-0.04635	0.366319	0.488076068
YBX2	17p13.1	0.046343	0.366373	0.48811557
ATP2A1	16p11.2	0.046334	0.366471	0.488213686
TEX264	3p21.2	-0.04632	0.36658	0.488326798
AGTRAP	1p36.22	0.046317	0.366643	0.488377478
MYO18B	22q12.1	-0.04631	0.3667	0.488389738
WNT5A	3p14.3	-0.04631	0.366701	0.488389738
C12ORF77	12p12.1	0.046305	0.366769	0.488422792
RCCD1	15q26.1	-0.0463	0.366774	0.488422792
MANEAL	1p34.3	0.046293	0.366893	0.488547732
ZNF221	19q13.31	-0.04629	0.36692	0.488551176
COG6	13q14.11	-0.04627	0.367129	0.488797657
LRR8E	19p13.2	0.046263	0.367209	0.488872127
MIF4GD	17q25.1	-0.04625	0.367328	0.48899712
MOB3C	1p33	0.046245	0.36739	0.489047827
AVPR2	Xq28	-0.04624	0.367463	0.489111875
GJB6	13q12.11	0.046232	0.367526	0.489163591
KLHDC4	16q24.2	-0.04622	0.367696	0.489357504
DPPA2	3q13.13	-0.04621	0.367792	0.48943709
OR51M1	11p15.4	-0.04621	0.367805	0.48943709
JPH1	8q21.11	0.0462	0.367862	0.489479942
TRIM61	4q32.3	-0.04619	0.367984	0.489610891
MUSTN1	3p21.1	-0.04618	0.368077	0.489701756
PTS	11q23.1	-0.04615	0.368329	0.490003893
RPL17	18q21.1	0.046148	0.3684	0.49006654
PHOX2B	4p13	-0.04614	0.368493	0.490158012
TAFA4	3p14.1	-0.0461	0.368892	0.490656028
OR51T1	11p15.4	0.046096	0.368934	0.490679162
ILDR1	3q13.33	0.046072	0.369186	0.490981003
SP9	2q31.1	-0.04606	0.369337	0.49114908
TTC23L	5p13.2	-0.04605	0.369381	0.491169106
THG1L	5q33.3	0.046052	0.369401	0.491169106
DDI1	11q22.3	-0.04604	0.3695	0.491260018
CLEC12B	12p13.2	0.04604	0.369518	0.491260018
GFM1	3q25.32	0.046035	0.369576	0.491303616
IFT20	17q11.2	-0.046	0.369972	0.49179841
DNAJC4	11q13.1	-0.04599	0.370055	0.491876055
TRIP12	2q36.3	0.045982	0.370129	0.491915061
ACOT4	14q24.3	0.045981	0.370134	0.491915061
LNP1	3q12.2	0.04597	0.370255	0.492043427
KLHDC2	14q21.3	-0.04595	0.370425	0.492237374
AMDHD1	12q23.1	-0.04593	0.370626	0.492443899
DMRTA2	1p32.3	0.045934	0.37063	0.492443899
OR2A14	7q35	0.04593	0.370671	0.49246556
SRY	Yp11.2	-0.04591	0.370827	0.49264053
DHRS7	14q23.1	0.045909	0.370883	0.492682469
C12ORF66	12q14.2	-0.0459	0.370948	0.492736304

OR13F1	9q31.1	0.045899	0.370991	0.492760154
KCNU1	8p11.23	0.045859	0.371404	0.49327533
PAIP2B	2p13.3	0.04585	0.371506	0.493378349
TNFRSF18	1p36.33	0.045845	0.371553	0.493408328
ZNF770	15q14	0.045839	0.371616	0.493459208
PTPRK	6q22.33	-0.04583	0.371728	0.49357578
KIF3A	5q31.1	-0.04581	0.371947	0.493802706
PPP4R3C	Xp21.3	-0.04581	0.371949	0.493802706
KIAA0825	5q15	0.045804	0.371986	0.493819466
RPE65	1p31.3	0.045796	0.372071	0.493900224
RPL13AP20	12p13.1	-0.04579	0.372129	0.49394373
ATP5MPL	14q32.33	0.045782	0.37221	0.494018529
PLAAT3	11q12.3-q13.1	-0.04577	0.372327	0.494115233
CENPI	Xq22.1	0.045768	0.372363	0.494115233
TRAPPC4	11q23.3	-0.04577	0.37237	0.494115233
HPDL	1p34.1	-0.04576	0.372419	0.494115233
KRTAP21-1	21q22.11	-0.04576	0.372424	0.494115233
CYP2B7P	19q13.2	-0.04576	0.372451	0.494115233
COX7A2	6q14.1	0.045758	0.372464	0.494115233
CHRNA2	8p21.2	0.045756	0.37248	0.494115233
PTBP1	19p13.3	-0.04575	0.372505	0.494115233
AMZ1	7p22.3	-0.04574	0.3726	0.494208811
FMO9P	1q24.1	0.045736	0.372691	0.494297112
RPSA	3p22.1	-0.04572	0.372829	0.494447218
TPTEP2	22q13.1	-0.04572	0.37287	0.494468258
AQP12B	2q37.3	-0.04569	0.373152	0.494809417
LINC01565	3q21.3	-0.04569	0.373222	0.494869798
EEF2K	16p12.2	-0.04567	0.373402	0.495053649
PIK3CD-AS1	1p36.22	0.045668	0.37341	0.495053649
ARID3B	15q24.1	-0.04566	0.373499	0.495138395
G6PC	17q21.31	-0.04565	0.373623	0.495270498
RNF169	11q13.4	0.045637	0.373735	0.495386828
RYR2	1q43	-0.04562	0.373939	0.495623244
RELB	19q13.32	0.045608	0.374031	0.495713104
SNORA14A	7q11.23	0.045596	0.374164	0.495856987
LAMB1	7q31.1	-0.04558	0.374338	0.496054449
CLRN1-AS1	3q25.1	-0.04557	0.374419	0.496114511
SRP14	15q15.1	-0.04557	0.374433	0.496114511
CTLA4	2q33.2	0.045561	0.374532	0.496213388
MICAL3	22q11.21	-0.04556	0.374587	0.496252402
MYH7	14q11.2	0.045542	0.374722	0.496399111
NAA11	4q21.21	-0.04552	0.374926	0.496636514
MRPL20	1p36.33	-0.04552	0.374984	0.496680852
MAP3K2	2q14.3	0.045488	0.375297	0.497037484
PDX1	13q12.2	0.045487	0.375303	0.497037484
MEIS3P1	17p12	-0.04548	0.375423	0.497163409
CLUL1	18p11.32	-0.04546	0.375557	0.497295157
BSPH1	19q13.33	-0.04546	0.375572	0.497295157
SEC14L5	16p13.3	0.045455	0.375644	0.497356774
KRT27	17q21.2	0.045422	0.375986	0.497777076
ANXA8	10q11.22	-0.04539	0.376348	0.498223276
SLIT2	4p15.31	-0.04538	0.376408	0.498253684
PSG3	19q13.2	0.045381	0.376421	0.498253684
GTSF1L	20q13.12	0.045377	0.376458	0.498270301
PADI6	1p36.13	-0.04536	0.376634	0.498469561
ASXL3	18q12.1	0.045355	0.376696	0.49851952
KLHL17	1p36.33	-0.04534	0.376841	0.498678585
NCKIPSD	3p21.31	-0.04533	0.376987	0.498807763

SLC9A3	5p15.33	0.045327	0.376989	0.498807763
UBD	6p22.1	-0.04532	0.377109	0.498933892
NMS	2q11.2	-0.0453	0.377303	0.499153166
SH3GLB2	9q34.11	0.045295	0.377325	0.499153166
NIPA2	15q11.2	0.045275	0.377533	0.499357322
MMP9	20q13.12	-0.04527	0.377543	0.499357322
PRSS41	16p13.3	-0.04527	0.377554	0.499357322
PDIA4	7q36.1	0.045267	0.377624	0.499396672
FDX1	11q22.3	0.045266	0.377633	0.499396672
GYPB	4q31.21	-0.0452	0.378379	0.500349415
C2ORF74	2p15	-0.04515	0.37884	0.500926683
DNM1L	12p11.21	-0.04515	0.37889	0.500959797
CPED1	7q31.31	-0.04514	0.379009	0.501055008
OR8D1	11q24.2	0.045135	0.379012	0.501055008
ARHGAP15	2q22.2-q22.3	0.04513	0.379066	0.501092243
EMID1	22q12.2	-0.04512	0.379148	0.501161697
UACA	15q23	-0.04512	0.379182	0.501161697
LINC00588	8q12.1	0.045118	0.379193	0.501161697
DDX58	9p21.1	0.045114	0.379232	0.50117959
CDC5L	6p21.1	-0.04511	0.379257	0.501179616
SPINT4	20q13.12	0.045108	0.379297	0.501200238
KCNC4	1p13.3	0.045094	0.37945	0.501369233
ITGB6	2q24.2	-0.04507	0.379678	0.501637122
RBMXL3	Xq23	-0.04507	0.379749	0.501697678
PON1	7q21.3	0.04506	0.379805	0.501738823
RB1	13q14.2	0.045031	0.380114	0.502112895
LRRC42	1p32.3	-0.045	0.380469	0.502549709
AGPAT1	6p21.32	0.044992	0.380533	0.502600936
CCDC65	12q13.12	0.044985	0.3806	0.502655855
RHPN2	19q13.11	0.044961	0.380862	0.502968631
NOP10	15q14	0.044941	0.381067	0.503206803
TMCO6	5q31.3	-0.04491	0.381424	0.503644122
ERLEC1	2p16.2	0.044893	0.381577	0.503809023
OR8D4	11q24.1	-0.04489	0.381599	0.503809023
MT1B	16q13	0.044882	0.381694	0.503901679
RAD17	5q13.2	0.044875	0.381774	0.503953842
AFM	4q13.3	0.044874	0.381784	0.503953842
CCND2	12p13.32	-0.04487	0.381842	0.503997014
POLL	10q24.32	-0.04487	0.381872	0.504003028
SIX6	14q23.1	-0.04485	0.382074	0.504236585
TSNAX	1q42.2	0.044834	0.382203	0.504264196
MYL2	12q24.11	0.044834	0.382209	0.504264196
ARGFXP2	17q11.2	-0.04483	0.382211	0.504264196
PPIEL	1p34.3	-0.04483	0.382215	0.504264196
OR10AG1	11q12.1	-0.04483	0.382221	0.504264196
SBK2	19q13.42	0.044829	0.382253	0.504274253
NUAK2	1q32.1	-0.04482	0.382313	0.504319751
AJAP1	1p36.32	0.044816	0.382399	0.504400115
TMEM179	14q32.33	-0.04481	0.382464	0.504451926
SEZ6L2	16p11.2	0.044803	0.382535	0.504470579
SLC39A14	8p21.3	0.044801	0.382551	0.504470579
DOK3	5q35.3	0.044801	0.382553	0.504470579
ZNF484	9q22.31	0.044797	0.382594	0.504491659
HIST1H1T	6p22.2	0.044777	0.382812	0.504745846
ZNF598	16p13.3	-0.04477	0.382844	0.504754289
NCAPD3	11q25	-0.04474	0.383231	0.505231421
SLC25A41	19p13.3	-0.04473	0.383262	0.505239334
ITGB1	10p11.22	-0.04472	0.383405	0.505394496

NOMO1	16p13.11	-0.04469	0.383761	0.505829628
IL6	7p15.3	-0.04467	0.383992	0.506101673
GZMH	14q12	0.044662	0.384031	0.506119634
FAM153CP	5q35.3	0.044631	0.384367	0.506527953
SVIL	10p11.23	-0.04463	0.384392	0.506527953
SUMO4	6q25.1	-0.04462	0.384469	0.506596356
MRPS18C	4q21.23	0.0446	0.384697	0.506863672
ACSM2B	16p12.3	-0.04459	0.384802	0.50696343
RASGRP3	2p22.3	-0.04459	0.384844	0.50696343
NXF4	Xq22.1	-0.04459	0.384849	0.50696343
TASOR	3p14.3	-0.04458	0.384952	0.507066193
NLRP4	19q13.43	-0.04455	0.385183	0.507317237
ATP2B2	3p25.3	-0.04455	0.385206	0.507317237
MYO9A	15q23	0.044551	0.385219	0.507317237
FRMD8	11q13.1	0.044531	0.38543	0.507562405
SFTP8	2p11.2	-0.04451	0.385649	0.507817278
ARG1	6q23.2	0.044493	0.385845	0.508041554
HSD17B12	11p11.2	-0.04447	0.386093	0.50833464
HEATR6	17q23.1	-0.04446	0.386173	0.508401066
ADAMTS8	11q24.3	0.04446	0.386196	0.508401066
ZNF641	12q13.11	-0.04446	0.386219	0.508401066
ZAR1L	13q13.1	-0.04445	0.386306	0.508482225
NELFA	4p16.3	-0.04442	0.386626	0.5088692
ZNF326	1p22.2	-0.04437	0.387139	0.509510659
BPIFB3	20q11.21	-0.04437	0.387177	0.509525418
EXOC3L1	16q22.1	0.044365	0.38721	0.509525418
LINC00596	14q11.2	0.044362	0.387239	0.509525418
SOBP	6q21	0.044361	0.387252	0.509525418
M6PR	12p13.31	-0.04435	0.38733	0.509537258
CEACAM6	19q13.2	-0.04435	0.387335	0.509537258
CBLN3	14q12	0.044353	0.387337	0.509537258
IL1RAP	3q28	0.044348	0.387392	0.509576603
ARHGEF3	3p14.3	0.044329	0.3876	0.509816216
RGPD8	2q14.1	-0.04431	0.387785	0.51002597
KRT17P5	17p11.2	0.044297	0.387934	0.51018933
ZNF295-AS1	21q22.3	-0.04428	0.388082	0.510349476
AQP8	16p12.1	0.04426	0.388334	0.510647859
TGFBR2	3p24.1	-0.04425	0.388443	0.510735482
NBN	8q21.3	-0.04425	0.388452	0.510735482
TPTE2	13q12.11	-0.04424	0.38852	0.510791419
PTGS1	9q33.2	0.044222	0.388738	0.511045158
SLC22A24	11q12.3	-0.0442	0.388926	0.511258048
ITGA1	5q11.2	0.044197	0.389016	0.51134273
C8ORF86	8p11.22	-0.04419	0.389084	0.511394147
EPS8	12p12.3	0.044188	0.389106	0.511394147
U2AF1	21q22.3	-0.04418	0.389159	0.511430495
MAPK11	22q13.33	0.044152	0.389492	0.511834714
CCDC144B	17p11.2	0.044136	0.38967	0.512034457
LATS1	6q25.1	0.044133	0.389698	0.512038202
REC8	14q12	-0.04413	0.389775	0.512104979
CSDE1	1p13.2	0.044114	0.389907	0.51222958
ADORA3	1p13.2	0.044111	0.389932	0.51222958
UMOD	16p12.3	0.044108	0.389966	0.51222958
ANTXR1	10q11.22	-0.04411	0.389972	0.51222958
FZD8	10p11.21	-0.0441	0.390078	0.512335472
CDH24	14q11.2	-0.04406	0.390476	0.51282524
OR52K1	11p15.4	-0.04406	0.390518	0.512845759
SLC29A4	7p22.1	-0.04405	0.390604	0.512925357

HELLS	10q23.33	0.044042	0.390673	0.512983078
TRIM32	9q33.1	0.044039	0.390706	0.512992062
FCGR1A	1q21.2	-0.04403	0.390799	0.513080161
SEMA6A	5q23.1	0.044017	0.390945	0.513235165
CELF6	15q23	0.044015	0.390968	0.513235165
PLEKHM2	1p36.21	-0.04401	0.391072	0.513338539
RRAGD	6q15	-0.04399	0.391237	0.513521101
C2CD3	11q13.4	0.043987	0.391267	0.513527038
SELENOF	1p22.3	0.043958	0.391578	0.513901554
HSPA14	10p13	-0.04396	0.391606	0.513904439
KRTAP4-7	17q21.2	-0.04395	0.391677	0.513964072
KDM7A	7q34	-0.04395	0.391706	0.5139681
ITGA4	2q31.3	0.043928	0.39191	0.514202568
TSKU	11q13.5	0.043919	0.392001	0.514287736
SHOX2	3q25.32	0.043897	0.392242	0.514570086
SLC38A10	17q25.3	0.043889	0.392324	0.514644051
RHOT2	16p13.3	-0.04388	0.392403	0.514714004
LOC100240734	12q13.13	0.043873	0.392499	0.514806212
IRX5	16q12.2	-0.04387	0.392584	0.514884408
TTY2	Yp11.2	0.043858	0.392666	0.514958282
IPO13	1p34.1	-0.04384	0.392852	0.515167705
DPPA4	3q13.13	0.043829	0.392981	0.515303031
RMDN2	2p22.2	-0.04382	0.393041	0.515348821
TBC1D3	17q12	-0.0438	0.393301	0.515645464
PAXBP1	21q22.11	-0.0438	0.393326	0.515645464
PCDHA3	5q31.3	-0.04379	0.393345	0.515645464
MNDA	1q23.1	0.043782	0.39348	0.51578902
FAT2	5q33.1	0.043775	0.393565	0.515866529
RPLP0	12q24.23	-0.04377	0.393608	0.515889401
MCHR2	6q16.2	-0.04376	0.39369	0.515962599
ZRANB2	1p31.1	-0.04375	0.393806	0.516081335
RNF26	11q23.3	-0.04374	0.39393	0.51620937
MYEOV	11q13.3	0.043685	0.394533	0.516966685
ADGB	6q24.3	-0.04365	0.394884	0.517392737
GPR89B	1q21.2	-0.04364	0.395014	0.517528691
CDY2B	Yq11.222	0.043608	0.395367	0.517956989
C12ORF43	12q24.31	0.043606	0.395396	0.517960959
MRPS14	1q25.1	-0.04358	0.39571	0.518326778
SLC7A5P1	16p11.2	-0.04358	0.395727	0.518326778
ATXN7L3B	12q21.1	-0.04356	0.395866	0.518475866
FOXN3	14q31.3-q32.11	0.043557	0.395927	0.518505273
PKHD1L1	8q23.1-q23.2	0.043555	0.395941	0.518505273
PRKAG3	2q35	-0.04355	0.395973	0.518514325
MPZL3	11q23.3	-0.04355	0.396049	0.518578971
PAX7	1p36.13	-0.04354	0.396116	0.518633608
ANKRD20A11P	21q11.2	-0.04352	0.396298	0.518838253
CFH	1q31.3	-0.0435	0.396526	0.519101508
LSR	19q13.12	0.043499	0.396551	0.519101508
VDAC1	5q31.1	0.043491	0.39664	0.51915831
SPATA8	15q26.2	-0.04349	0.396647	0.51915831
GOLT1B	12p12.1	-0.04349	0.396685	0.519174266
RGS7BP	5q12.3	-0.04348	0.396713	0.519177446
SNX19	11q24.3-q25	-0.04347	0.396825	0.519255975
IL4	5q31.1	0.043473	0.396836	0.519255975
MPST	22q12.3	-0.04347	0.396851	0.519255975
ECHDC1	6q22.33	-0.04347	0.396916	0.519307793
CRISP1	6p12.3	0.043461	0.39697	0.519344436
NDUFA4L2	12q13.3	-0.04345	0.397054	0.51942062

MT1IP	16q13	-0.04345	0.397105	0.519429855
ADPRHL1	13q34	0.043446	0.397129	0.519429855
GPLD1	6p22.3	-0.04344	0.397139	0.519429855
OR3A4P	17p13.3	-0.04344	0.397206	0.519449712
PSG10P	19q13.2	0.043439	0.397206	0.519449712
EBLN2	3p13	-0.04341	0.397535	0.519844893
TBRG1	11q24.2	-0.0434	0.397591	0.519884509
CLLU1OS	12q22	-0.04338	0.397829	0.520122759
SGO1	3p24.3	0.04338	0.397851	0.520122759
B4GALT2	1p34.1	-0.04338	0.397851	0.520122759
STAG3L4	7q11.21	0.043372	0.397931	0.520192991
BTRC	10q24.32	-0.04337	0.397967	0.520206501
TNFRSF11B	8q24.12	0.043365	0.398013	0.520232336
MRPS2	9q34.3	0.043362	0.398043	0.52023822
SLCO4C1	5q21.1	0.04334	0.398283	0.520517603
KLK9	19q13.41	0.043321	0.398488	0.520752162
TIMELESS	12q13.3	0.043315	0.398559	0.520810663
STOML3	13q13.3	-0.04331	0.398629	0.520865344
STXBP3	1p13.3	0.043306	0.398653	0.520865344
SARNP	12q13.2	-0.04329	0.398806	0.520982058
KCNN4	19q13.31	0.043292	0.398808	0.520982058
BNIP5	6p21.31	-0.04329	0.398843	0.520982058
OVCH1	12p11.22	0.043288	0.398846	0.520982058
CXCL6	4q13.3	-0.04322	0.399555	0.52185461
CD36	7q21.11	0.043222	0.399567	0.52185461
UGT2B4	4q13.3	0.043216	0.399631	0.521904325
PPP2R3A	3q22.2-q22.3	0.043181	0.400013	0.522362173
CPXCR1	Xq21.31	-0.04318	0.400033	0.522362173
HIST2H3D	1q21.2	-0.04318	0.400069	0.522375148
USP5	12p13.31	-0.04317	0.400133	0.522424237
SIT1	9p13.3	-0.04317	0.400166	0.522433169
TOMM20	1q42.3	0.043157	0.400281	0.522549581
SHOX	Xp22.33 and Yp11.2	-0.04315	0.400316	0.522560411
SCN3A	2q24.3	0.043144	0.400418	0.522659797
GUCA2A	1p34.2	-0.04314	0.400449	0.522665818
TXNDC15	5q31.1	-0.04314	0.4005	0.522698945
CDC14A	1p21.2	0.043129	0.40059	0.52278159
CMTR2	16q22.2	0.043113	0.400761	0.522881902
HPD	12q24.31	-0.04311	0.400769	0.522881902
ZNF844	19p13.2	-0.04311	0.400841	0.522881902
ZNF296	19q13.32	-0.04311	0.400843	0.522881902
SERHL	22q13.2	-0.04311	0.400846	0.522881902
MYCNOS	2p24.3	-0.0431	0.40086	0.522881902
MS4A14	11q12.2	0.043104	0.400861	0.522881902
OSBPL6	2q31.2	-0.0431	0.400875	0.522881902
PLAC8L1	5q32	-0.0431	0.400919	0.522904509
ATP2B3	Xq28	-0.04309	0.401003	0.522980452
LIPJ	10q23.31	0.043087	0.401049	0.523006928
NDUFV3	21q22.3	0.043057	0.401371	0.523392627
HOMER2	15q25.2	-0.04303	0.401622	0.523684977
KBTBD8	3p14.1	-0.04303	0.401723	0.523782357
TMEM255A	Xq24	0.04302	0.401774	0.523815815
DPM3	1q22	0.043012	0.401864	0.523898589
SQSTM1	5q35.3	-0.04299	0.402072	0.52413503
UBB	17p11.2	0.042987	0.402138	0.524187009
SYNRG	17q12	0.042981	0.402204	0.52423899
OR10K2	1q23.1	0.042974	0.402279	0.524303247
WEE2-AS1	7q34	-0.04297	0.402358	0.524372138

GMCL1	2p13.3	0.042964	0.40239	0.524379565
ZNF699	19p13.2	0.042956	0.402474	0.524454585
IFT43	14q24.3	-0.04295	0.402552	0.524521952
OR4C3	11p11.2	-0.04295	0.402589	0.52453595
LRRC52	1q24.1	-0.04293	0.402776	0.524746328
ZNF8	19q13.43	0.042899	0.403105	0.525141011
CPN2	3q29	-0.04289	0.403153	0.525168341
MTR	1q43	-0.04289	0.403226	0.52521223
LINC00964	8q24.13	-0.04289	0.403239	0.52521223
MAP3K11	11q13.1	-0.04288	0.403278	0.525229036
FOXA2	20p11.21	-0.04287	0.403446	0.525413398
P2RY14	3q25.1	0.042864	0.403488	0.525434572
PRR13	12q13.13	0.042861	0.403519	0.525440487
DKFZP434A062	9q34.3	-0.04285	0.40366	0.525559923
RAB11FIP4	17q11.2	-0.04285	0.403663	0.525559923
RBL2	16q12.2	0.042824	0.403923	0.52586441
SPANXC	Xq27.2	-0.04281	0.404085	0.526040594
CD9	12p13.31	0.042793	0.404273	0.526251837
TSKS	19q13.33	-0.04279	0.404336	0.526275841
CPNE2	16q13	0.042786	0.404344	0.526275841
PLA2G1B	12q24.31	0.042776	0.404452	0.526352215
GON4L	1q22	0.042776	0.404456	0.526352215
SCGB3A2	5q32	-0.04276	0.404634	0.526550015
OR8G5	11q24.2	-0.04275	0.404715	0.526621659
ZNF664	12q24.31	-0.04274	0.404891	0.526794605
MAP2K7	19p13.2	0.042735	0.404901	0.526794605
C1QTNF2	5q33.3	-0.04271	0.405131	0.527033697
NME9	3q22.3	0.042713	0.405152	0.527033697
PCDHA6	5q31.3	-0.04271	0.405183	0.527033697
FAM171A2	17q21.31	-0.04271	0.40519	0.527033697
LINC01366	5q35.1	0.042698	0.405317	0.52716455
LLGL2	17q25.1	0.042694	0.405361	0.527187163
RHAG	6p12.3	-0.04269	0.405393	0.527195074
SAA2	11p15.1	0.042685	0.405459	0.527229019
CCDC159	19p13.2	-0.04268	0.405486	0.527229019
SGO2	2q33.1	-0.04268	0.405498	0.527229019
LRRK1	15q26.3	0.042663	0.405697	0.527384938
NDUFB8	10q24.31	-0.04266	0.405716	0.527384938
SNORA25	11q21	0.042661	0.405716	0.527384938
MYO1B	2q32.3	-0.04266	0.405723	0.527384938
GRIA2	4q32.1	-0.04264	0.406001	0.52769613
OR9K2	12q13.2	0.042634	0.406015	0.52769613
KRTAP2-4	17q21.2	-0.04263	0.40611	0.527785008
PRR12	19q13.33	-0.04261	0.406274	0.52796332
ZMYND11	10p15.3	0.042608	0.406305	0.527969157
SGSH	17q25.3	-0.0426	0.406366	0.528015091
TSPAN11	12p11.21	-0.0426	0.406407	0.528033267
PLAC9P1	2q21.1	0.04257	0.406719	0.528405093
TRMT5	14q23.1	-0.04256	0.406806	0.528483007
GPR37	7q31.33	0.042557	0.406867	0.528528955
OLR1	12p13.2	-0.04255	0.406972	0.52863045
PNLIPRP2	10q25.3	-0.04254	0.407105	0.52876896
C8ORF34	8q13.2	-0.04253	0.407181	0.528833349
ZNF841	19q13.41	-0.04253	0.407212	0.528839294
LRRC7	1p31.1	-0.04251	0.407394	0.529041289
GABRB2	5q34	-0.04251	0.407439	0.529065501
UPK3B	7q11.2	0.042482	0.407697	0.529346519
TUBA3D	2q21.1	0.042481	0.407708	0.529346519

PRMT8	12p13.32	-0.04247	0.40781	0.529444424
COQ3	6q16.2	0.042463	0.407904	0.529531895
PRPF4B	6p25.2	-0.04245	0.408077	0.529723041
LYG2	2q11.2	-0.04244	0.408115	0.529736899
UNC13C	15q21.3	0.042426	0.408314	0.529961658
C11ORF42	11p15.4	0.042414	0.408444	0.530095766
DUSP19	2q32.1	-0.04241	0.408483	0.530112399
H2AFY	5q31.1	-0.0424	0.408565	0.530161979
MYL1	2q34	-0.0424	0.408581	0.530161979
SECISBP2	9q22.2	-0.0424	0.408627	0.530161979
MARCKSL1	1p35.1	0.042398	0.408627	0.530161979
RAET1L	6q25.1	-0.04239	0.408764	0.530304405
INPP5D	2q37.1	-0.04236	0.409073	0.530641561
ZFP57	6p22.1	-0.04236	0.409077	0.530641561
DYNAP	18q21.2	0.042353	0.409121	0.53066523
PDCD1LG2	9p24.1	0.042346	0.409203	0.53070994
ANKRA2	5q13.2	0.042345	0.409209	0.53070994
MS4A13	11q12.2	-0.04233	0.409396	0.530917999
TTY10	Yq11.223	-0.04232	0.409504	0.531024532
GPR150	5q15	0.042312	0.409581	0.531054749
AGO4	1p34.3	0.042312	0.409581	0.531054749
COL20A1	20q13.33	-0.0423	0.409688	0.531126404
ARPP21	3p22.3	-0.0423	0.409689	0.531126404
ATP5MD	10q24.33	0.042262	0.410134	0.53166915
CHST11	12q23.3	-0.04225	0.410289	0.531816948
ALOX12B	17p13.1	0.042247	0.410301	0.531816948
LINC00284	13q14.11	0.042242	0.410356	0.531854028
RPP14	3p14.3	-0.04223	0.410437	0.531924452
SH2D4B	10q23.1	0.042229	0.410496	0.531966583
TUBGCP6	22q13.33	-0.04221	0.410738	0.532220032
ANXA5	4q27	-0.04221	0.410757	0.532220032
ABHD11	7q11.23	0.042204	0.410772	0.532220032
IL3RA	Xp22.33 and Yp11.2	-0.0422	0.410839	0.532268756
APOO	Xp22.11	-0.0422	0.410862	0.532268756
TERC	3q26.2	-0.04219	0.410973	0.532355035
CR1L	1q32.2	0.042185	0.410982	0.532355035
DDIT4	10q22.1	0.042179	0.411056	0.532384882
ZNF28	19q13.41	0.042178	0.411058	0.532384882
MAK16	8p12	0.04217	0.411147	0.532456937
LCNL1	9q34.3	-0.04217	0.411167	0.532456937
TRAM1	8q13.3	-0.04216	0.411264	0.532497514
GLMN	1p22.1	-0.04216	0.411271	0.532497514
GOLGA2P5	12q23.1	0.042159	0.411278	0.532497514
ATMIN	16q23.2	0.04214	0.411486	0.532732406
ATG13	11p11.2	-0.04213	0.411601	0.532824525
SF3B5	6q24.2	-0.04213	0.411611	0.532824525
NIPBL	5p13.2	0.042105	0.411879	0.533136905
SNAP91	6q14.2	-0.0421	0.411907	0.533139205
SNORA37	18q21.2	-0.04209	0.412062	0.533304987
PARVG	22q13.31	0.042083	0.41212	0.53334636
OR10G8	11q24.2	-0.04208	0.412163	0.533367218
PCDHB14	5q31.3	0.042071	0.412252	0.533447804
VPS29	12q24.11	0.042066	0.412305	0.533481489
CCDC144NL	17p11.2	-0.04206	0.412376	0.533539181
UCN3	10p15.1	0.042057	0.412404	0.533539181
PRR5	22q13.31	-0.04205	0.412429	0.533539181
OR5F1	11q12.1	-0.04205	0.41254	0.533647832
TRPC5	Xq23	0.042042	0.412572	0.533654349



PHF21B	22q13.31	-0.04203	0.412662	0.533736605
HARS	5q31.3	0.042031	0.412695	0.533745195
TMEM44	3q29	-0.04202	0.412784	0.533793991
CDK2AP1	12q24.31	-0.04202	0.412786	0.533793991
STX8	17p13.1	-0.04201	0.412967	0.533960935
C20ORF144	20q11.22	-0.04201	0.412969	0.533960935
ANKRD20A8P	2q11.1	-0.04198	0.413279	0.53431829
BEX5	Xq22.1	-0.04198	0.413298	0.53431829
LAMA2	6q22.33	-0.04197	0.413397	0.534411844
TTC16	9q34.11	-0.04196	0.413452	0.534447785
DGKB	7p21.2	0.041955	0.413542	0.534473308
DCBLD1	6q22.1	0.041954	0.413548	0.534473308
ETV2	19q13.12	-0.04195	0.413577	0.534473308
CT45A5	Xq26.3	-0.04195	0.413578	0.534473308
HCG4	6p22.1	-0.04195	0.413642	0.534521248
KRT6B	12q13.13	-0.04194	0.413759	0.53463734
SHC2	19p13.3	0.041933	0.413786	0.534638084
CAMK1	3p25.3	-0.04192	0.413939	0.534802005
SMC1B	22q13.31	-0.04191	0.414087	0.534957987
OR10G4	11q24.2	-0.0419	0.414122	0.534968288
COMMD9	11p13	-0.04188	0.41436	0.535241168
SUSD4	1q41	-0.04187	0.414471	0.535351223
DIPK2A	3q24	0.041862	0.414583	0.535460603
RACGAP1P	12q12	-0.04185	0.414692	0.535546658
GUCA1B	6p21.1	-0.04185	0.414703	0.535546658
KCNG2	18q23	-0.04185	0.414745	0.535566277
CC2D1B	1p32.3	0.04184	0.414826	0.535597907
CYSRT1	9q34.3	-0.04184	0.414832	0.535597907
TPD52L3	9p24.1	0.041838	0.41485	0.535597907
OR2J2	6p22.1	0.041815	0.4151	0.535886468
CFAP44	3q13.2	0.041794	0.415338	0.536158642
MELK	9p13.2	0.041788	0.415402	0.536207893
BPIFC	22q12.3	-0.04177	0.415657	0.536502162
GOLGA8EP	15q11.2	-0.04176	0.415758	0.536597102
ARHGAP33	19q13.12	-0.04175	0.415819	0.536641304
SH3TC2	5q32	-0.04174	0.415941	0.536765103
HIST2H2AB	1q21.2	-0.04172	0.416149	0.536998162
CHCHD1	10q22.2	0.041697	0.416425	0.537320319
PCDHAC2	5q31.3	-0.04168	0.416618	0.53751168
LEAP2	5q31.1	0.041678	0.41664	0.53751168
TMEM26	10q21.2	-0.04168	0.416654	0.53751168
PPP4R2	3p13	-0.04167	0.416682	0.537512764
PCDHA12	5q31.3	-0.04166	0.416838	0.537677759
ACAT2	6q25.3	-0.04166	0.416881	0.537677759
CXADR	21q21.1	-0.04166	0.41689	0.537677759
CPLX3	15q24.1	0.041649	0.416963	0.537737276
BTF3P11	13q22.3	-0.04163	0.417216	0.53802841
HNRNPA2B1	7p15.2	-0.04162	0.417252	0.538039698
KIF5C	2q23.1-q23.2	-0.04162	0.417278	0.538039698
FAM120AOS	9q22.31	-0.04162	0.417334	0.538076564
PHC2	1p35.1	-0.04161	0.417404	0.538132086
BCL9L	11q23.3	-0.04159	0.417667	0.538436382
ZNF432	19q13.41	0.041556	0.418001	0.538832479
SPATS2	12q13.12	-0.04155	0.418115	0.538945654
CD33	19q13.41	0.041538	0.4182	0.538980932
ZNF714	19p12	-0.04154	0.418222	0.538980932
PRB4	12p13.2	0.041536	0.418224	0.538980932
ACYP1	14q24.3	-0.04153	0.418306	0.539052727

RGS20	8q11.23	-0.04152	0.418374	0.539105217
C20ORF141	20p13	-0.04152	0.418439	0.539154198
SNORA44	1p35.3	-0.04151	0.418558	0.539272638
AMY2B	1p21.1	-0.0415	0.418668	0.539374082
TAB2	6q25.1	0.041495	0.41869	0.539374082
ST7L	1p13.2	-0.04149	0.418734	0.539385615
TTF2	1p13.1	0.041489	0.418753	0.539385615
CLEC4C	12p13.31	0.041478	0.418877	0.5395103
NUDCD2	5q34	-0.04146	0.419024	0.539664829
DGCR8	22q11.21	-0.04146	0.419072	0.539692352
PCGF3	4p16.3	0.041452	0.419174	0.539788429
TRNAU1AP	1p35.3	0.041447	0.419224	0.539819099
OR5B2	11q12.1	0.04143	0.419416	0.540030749
MAP2K5	15q23	0.041426	0.419459	0.540051688
ZNF564	19p13.2	0.041416	0.41957	0.540160212
C21ORF58	21q22.3	0.041377	0.420011	0.540692407
TSPAN17	5q35.2	0.041361	0.420193	0.540892886
FAM86DP	3p12.3	0.041358	0.420224	0.540897108
MIER2	19p13.3	0.041346	0.420359	0.54103687
NCEH1	3q26.31	0.04134	0.420425	0.541086253
HYI	1p34.2	0.041319	0.420662	0.541356968
BRD1	22q13.33	-0.0413	0.420849	0.541549388
ANKRD22	10q23.31	0.0413	0.420882	0.541549388
ZIM3	19q13.43	-0.0413	0.420893	0.541549388
SAMD1	19p13.12	0.041284	0.421062	0.541709466
INSRR	1q23.1	0.041283	0.421072	0.541709466
MX2	21q22.3	-0.04128	0.421098	0.541709466
HIST1H1D	6p22.2	-0.04127	0.421271	0.541896441
EAPP	14q13.1	0.041244	0.421503	0.542160734
CYP4F29P	21q11.2	0.041238	0.421571	0.542203999
SNORA11E	Xp11.22	0.041237	0.421591	0.542203999
FABP5	8q21.13	-0.04123	0.421666	0.542265297
IL36A	2q14.1	-0.04123	0.421701	0.542276607
CRCT1	1q21.3	0.041218	0.421797	0.542365221
EIF4E1B	5q35.2	0.041206	0.421932	0.542503212
SPDYE7P	7q11.23	-0.0412	0.422024	0.542507766
MSLNL	16p13.3	0.041198	0.422026	0.542507766
NAA40	11q13.1	0.041196	0.422049	0.542507766
CHMP2A	19q13.43	-0.04119	0.422071	0.542507766
BATF2	11q13.1	-0.04119	0.422071	0.542507766
CDKN2A-DT	9p21.3	0.041155	0.422508	0.543034901
MRPL44	2q36.1	0.041143	0.422651	0.543170057
TUBBP5	9q34.3	0.041139	0.422693	0.543170057
KCNB2	8q21.11	-0.04114	0.422695	0.543170057
RUFY3	4q13.3	0.041133	0.422765	0.543226157
SURF6	9q34.2	0.04112	0.422909	0.543375542
DNAL4	22q13.1	0.041116	0.422953	0.543396885
NMD3	3q26.1	0.041113	0.422987	0.543405739
PAFAH1B2	11q23.3	0.041105	0.423079	0.543489532
ARPC4	3p25.3	-0.04109	0.423237	0.543657646
HSPA1B	6p21.33	-0.04108	0.423303	0.543707098
KHDC1L	6q13	-0.04108	0.423402	0.543800122
OR2T3	1q44	-0.04107	0.423486	0.543872941
CCL20	2q36.3	-0.04106	0.423619	0.544008519
SMTNL1	11q12.1	-0.04103	0.423869	0.544295336
CABP2	11q13.2	-0.041	0.424226	0.544718886
TMEFF2	2q32.3	-0.04097	0.424564	0.545117464
OSTN	3q28	0.040964	0.424666	0.545167479

SVOP	12q24.11	-0.04096	0.424672	0.545167479
HLTF	3q24	0.040961	0.4247	0.545167479
ZER1	9q34.11	0.04096	0.424712	0.545167479
RESP18	2q35	0.040932	0.425033	0.545545127
PTTG1	5q33.3	0.040922	0.425143	0.545631325
TMEM256	17p13.1	0.04092	0.425172	0.545631325
CNOT7	8p22	0.040919	0.425182	0.545631325
ITIH4	3p21.1	0.04091	0.425277	0.545718078
LIMD1	3p21.31	0.040902	0.425377	0.545811678
VRK1	14q32.2	0.040887	0.425541	0.545986349
TCP11	6p21.31	-0.04087	0.425707	0.546158379
TMC2	20p13	-0.04087	0.425729	0.546158379
UTP3	4q13.3	0.040857	0.425885	0.546322649
PLOD1	1p36.22	-0.04085	0.425916	0.54632838
GPR158-AS1	10p12.1	-0.04084	0.42605	0.546464408
MYH16	7q22.1	-0.04084	0.426102	0.546496945
ECHDC2	1p32.3	0.040829	0.426195	0.546580254
ZBTB6	9q33.2	-0.04083	0.426243	0.546607866
CDC23	5q31.2	0.040792	0.426614	0.547048822
TRIM77	11q14.3	-0.04079	0.426664	0.547060204
ESAM	11q24.2	0.040787	0.426678	0.547060204
ADAM2	8p11.22	0.040768	0.426888	0.547294981
IFI44	1p31.1	0.040761	0.426969	0.547358577
PARD6A	16q22.1	-0.04076	0.426996	0.547358577
ARL3	10q24.32	-0.04076	0.42702	0.547358577
OR2L3	1q44	0.040751	0.427086	0.547407755
CYBRD1	2q31.1	-0.04075	0.42712	0.547416949
SYCE3	22q13.33	0.040735	0.427264	0.547566062
MTPAP	10p11.23	0.040733	0.427294	0.547569338
RARG	12q13.13	-0.04071	0.427519	0.547822561
OR10H2	19p13.12	-0.0407	0.427685	0.547979914
ABCA9	17q24.2	0.040697	0.427696	0.547979914
CACNG5	17q24.2	0.04069	0.42778	0.548051811
GUCY2D	17p13.1	0.04066	0.428117	0.548448625
ATF7	12q13.13	0.040654	0.428184	0.548499841
PGAM2	7p13	-0.04065	0.428219	0.548508623
MRPS18B	6p21.33	-0.04064	0.428314	0.548592131
POLE	12q24.33	0.040641	0.428339	0.548592131
DEF6	6p21.31	-0.04063	0.428429	0.548673067
CTDSP12	15q15.3-q21.1	0.040614	0.428647	0.548911195
ARHGDIG	16p13.3	0.040612	0.42867	0.548911195
APOBEC3D	22q13.1	0.040587	0.428951	0.549219568
ZDHHC16	10q24.1	-0.04059	0.428966	0.549219568
SLC4A11	20p13	0.040579	0.429037	0.549275437
GRIK1-AS1	21q21.3	-0.04057	0.429145	0.549378668
SLC4A9	5q31.3	-0.04057	0.429185	0.549395324
DGKK	Xp11.22	0.040562	0.429239	0.549428909
KIAA1549	7q34	-0.04056	0.429288	0.549456539
C6ORF132	6p21.1	0.040545	0.429421	0.549592461
MDM4	1q32.1	-0.04051	0.429779	0.550015535
DTD2	14q12	-0.04051	0.429868	0.550093436
ADGRA1	10q26.3	-0.04047	0.430268	0.5505699
IL2RG	Xq13.1	-0.04047	0.430314	0.550594625
METTL7B	12q13.2	-0.04042	0.430855	0.551218638
CT47A1	Xq24	-0.04042	0.430857	0.551218638
TEX15	8p12	-0.0404	0.431114	0.551511643
CLEC2D	12p13.31	0.040383	0.43128	0.551688828
PRKAB2	1q21.1	0.040369	0.431435	0.551840944

RITA1	12q24.13	0.040367	0.431454	0.551840944
ASB7	15q26.3	0.040365	0.431481	0.551840944
SLC25A6	Xp22.33 and Yp11.2	-0.04036	0.431555	0.5518703
CYP4Z2P	1p33	-0.04036	0.431559	0.5518703
EDDM3B	14q11.2	-0.04035	0.431661	0.551964908
ZBTB5	9p13.2	-0.04032	0.431973	0.552328953
MT1A	16q13	-0.04032	0.43205	0.552391679
CLEC4M	19p13.2	0.040308	0.432127	0.552455554
KPRP	1q21.3	-0.04028	0.432413	0.552785449
BCKDK	16p11.2	0.040278	0.432473	0.552826567
MTFR1	8q13.1	-0.04027	0.432564	0.552907723
TUBGCP4	15q15.3	0.040255	0.432741	0.553098373
SYNGR2	17q25.3	0.040252	0.432768	0.553098373
ZNF180	19q13.31	0.040241	0.432896	0.55322676
KCNN3	1q21.3	0.040237	0.432943	0.55325127
SLC25A35	17p13.1	0.040233	0.432985	0.553269484
KLHDC8A	1q32.1	-0.0402	0.433342	0.553690687
POMT1	9q34.13	0.040192	0.433463	0.553809712
LYVE1	11p15.4	-0.04018	0.433542	0.553875168
NPY	7p15.3	-0.04017	0.433704	0.554046734
ZNF560	19p13.2	-0.04016	0.433843	0.554189377
MDC1	6p21.33	-0.04015	0.433924	0.554228385
HTR1B	6q14.1	0.040151	0.433929	0.554228385
FGF9	13q12.11	-0.04013	0.434216	0.554559
SLU7	5q33.3	0.040116	0.434329	0.554644406
OR56A5	11p15.4	0.040115	0.434338	0.554644406
TUBA1C	12q13.12	-0.04006	0.434919	0.555350885
CPLX1	4p16.3	0.040056	0.435013	0.555435324
NBAS	2p24.3	0.040048	0.435112	0.555526075
SLC39A12	10p12.33	0.040044	0.435159	0.555551583
KBTBD7	13q14.11	0.04004	0.435206	0.555575107
TMEM219	16p11.2	0.040023	0.435396	0.555782585
PI4KB	1q21.3	0.04002	0.435435	0.555797606
LINC02209	8p12	0.040014	0.435499	0.555831887
PANX3	11q24.2	-0.04001	0.435518	0.555831887
TOPBP1	3q22.1	-0.04001	0.435569	0.555861727
OR1A2	17p13.3	0.039999	0.435668	0.555953223
R3HCC1	8p21.3	0.039977	0.43592	0.556238912
DCUN1D4	4q12	0.039972	0.435984	0.556285523
FAM187B	19q13.12	0.039968	0.43603	0.556308767
TREML5P	6p21.1	-0.03996	0.436113	0.556379202
SPEM1	17p13.1	0.039946	0.43628	0.556530208
PCSK5	9q21.13	0.039945	0.436294	0.556530208
OPRD1	1p35.3	-0.03994	0.436315	0.556530208
SNORD115-13	15q11.2	-0.0399	0.436794	0.557105785
PTCHD1	Xp22.11	0.03989	0.436925	0.557237017
KRTAP4-11	17q21.2	-0.03989	0.436965	0.557253383
MTA2	11q12.3	0.039879	0.437056	0.557308937
C1ORF54	1q21.2	-0.03988	0.437065	0.557308937
TTC23	15q26.3	0.039851	0.437368	0.557660403
EVL	14q32.2	0.03982	0.437733	0.558089443
GLB1L2	11q25	-0.03981	0.437792	0.558129771
AGAP5	10q22.2	0.03981	0.437849	0.558166908
TMEM98	17q11.2	-0.03981	0.437879	0.558169339
STAC	3p22.3-p22.2	-0.03979	0.438039	0.558338222
ZSWIM5	1p34.1	-0.03979	0.438122	0.558397805
USP47	11p15.3	-0.03978	0.438142	0.558397805
KRT28	17q21.2	-0.03975	0.438514	0.558836571

HIST1H2BO	6p22.1	0.039747	0.438571	0.558851723
B3GAT1	11q25	0.039746	0.438582	0.558851723
DHPS	19p13.13	0.039739	0.438658	0.55891328
NKX6-2	10q26.3	0.039713	0.438968	0.559273456
HIST1H4I	6p22.1	-0.03971	0.43905	0.559341567
NQO2	6p25.2	0.039702	0.439092	0.559360113
MORF4L1	15q25.1	0.039686	0.439279	0.559561825
DEDD	1q23.3	-0.03965	0.439646	0.559994629
TMEM225	11q24.1	-0.03964	0.43986	0.560213901
HIST1H4C	6p22.2	-0.03963	0.439874	0.560213901
C20ORF202	20p13	0.039626	0.439971	0.560300884
NFIL3	9q22.31	-0.03958	0.440532	0.560979504
TACR3	4q24	-0.0395	0.441388	0.562014428
UBE2T	1q32.1	0.039502	0.4414	0.562014428
SPATA3	2q37.1	0.039487	0.441569	0.562194014
FAM27B	9q21.11	0.039481	0.441646	0.562255861
PGK2	6p12.3	0.039468	0.441793	0.562406962
INTS9	8p21.1	0.039445	0.442056	0.562705803
SNORA46	16q21	0.039434	0.442192	0.562843014
FNIP1	5q31.1	-0.03943	0.44225	0.562861605
OR4N4	15q11.2	-0.03943	0.442262	0.562861605
SMR3A	4q13.3	0.039387	0.442729	0.563419872
IQCK	16p12.3	0.039375	0.442874	0.563551385
RAB13	1q21.3	0.039374	0.442889	0.563551385
UNC5CL	6p21.1	-0.03936	0.443009	0.563634444
VSIG8	1q23.2	0.039363	0.44301	0.563634444
RNF130	5q35.3	0.039358	0.443074	0.563678967
INHBA-AS1	7p14.1	-0.03934	0.443298	0.563928107
KIT	4q12	0.039335	0.443341	0.563933603
PLPP6	9p24.1	-0.03933	0.443358	0.563933603
SYNJ2	6q25.3	0.03932	0.443513	0.564094729
SLC41A1	1q32.1	0.039309	0.443635	0.564214571
GPR21	9q33.2	-0.03929	0.443872	0.564480046
P2RY6	11q13.4	-0.03928	0.444023	0.564635394
TGOLN2	2p11.2	-0.03925	0.444333	0.564993731
SRGAP2	1q32.1	-0.03924	0.44441	0.565053741
POTEE	2q21.1	-0.03924	0.444436	0.565053741
YJU2	19p13.3	-0.03923	0.444513	0.565114127
HAGH	16p13.3	-0.03923	0.44454	0.565114127
WRAP73	1p36.32	-0.03921	0.44473	0.565319902
UBQLN2	Xp11.21	-0.03921	0.444793	0.565363519
MROH6	8q24.3	-0.0392	0.444903	0.565467558
GLRX2	1q31.2	0.039193	0.444981	0.565530258
SMR3B	4q13.3	-0.03919	0.44501	0.565532039
MIGA2	9q34.11	0.039184	0.445086	0.565592056
ICAM1	19p13.2	0.03918	0.445141	0.565626136
FASN	17q25.3	-0.03918	0.445173	0.565631594
STARD8	Xq13.1	0.039165	0.445313	0.565750643
EMSY	11q13.5	0.039164	0.445323	0.565750643
PPRC1	10q24.32	-0.03915	0.445529	0.565975575
SLC51A	3q29	0.039141	0.445584	0.56600966
PRAMEF14	1p36.21	-0.03914	0.445638	0.566042133
SH3GL3	15q25.2	-0.03913	0.445702	0.566087402
MYO16	13q33.3	-0.03913	0.44573	0.566087788
PELP1	17p13.2	0.039105	0.446007	0.566383712
TSC22D4	7q22.1	-0.0391	0.44602	0.566383712
CEP170	1q43	-0.03909	0.446239	0.566626209
CHCHD4	3p25.1	0.039063	0.446493	0.566913381

ATP1A4	1q23.2	-0.03904	0.446708	0.567149791
NYX	Xp11.4	-0.03904	0.446779	0.567203478
WDR18	19p13.3	0.03902	0.447	0.567448712
ANKRD66	6p12.3	0.039011	0.447101	0.567540627
CAVIN2	2q32.3	-0.039	0.447241	0.567682537
IRX2	5p15.33	0.038981	0.447448	0.567909889
ZNF765	19q13.42	0.038976	0.447512	0.56795463
GPAT4	8p11.21	-0.03896	0.447648	0.568090695
RACGAP1	12q13.12	0.03891	0.448278	0.568854769
NEUROD4	12q13.2	0.038907	0.448312	0.568862124
NUP153	6p22.3	-0.0389	0.448354	0.568878346
INTS3	1q21.3	-0.0389	0.448454	0.568969855
DUSP8	11p15.5	-0.03888	0.448582	0.569084852
C5ORF56	5q31.1	0.038881	0.448615	0.569084852
OR9G4	11q12.1	0.03888	0.448636	0.569084852
USP9Y	Yq11.221	-0.03888	0.448663	0.569084852
KNCN	1p33	-0.03888	0.448687	0.569084852
JUND	19p13.11	0.038867	0.448781	0.569168153
TSHZ1	18q22.3	-0.03886	0.448861	0.569234158
HEATR9	17q12	0.038835	0.449162	0.569579384
HSPG2	1p36.12	-0.03882	0.449337	0.569744805
SULT2B1	19q13.33	-0.03882	0.449349	0.569744805
AQP4-AS1	18q11.2	0.038816	0.449378	0.569745364
FFAR3	19q13.12	-0.03881	0.449439	0.569785787
OR52E8	11p15.4	-0.03879	0.449649	0.569979933
KRTAP19-1	21q22.11	-0.03879	0.449649	0.569979933
VTN	17q11.2	0.038753	0.450112	0.570530747
BRINP1	9q33.1	-0.03875	0.450175	0.570574804
SEC23B	20p11.23	0.038738	0.450294	0.570689028
NXPH4	12q13.3	0.038706	0.450669	0.571128669
TRIM56	7q22.1	0.038665	0.451148	0.571699624
OR4C12	11p11.12	-0.03863	0.45159	0.572223445
TMEM80	11p15.5	0.038584	0.452099	0.572832687
OR1F2P	16p13.3	-0.03855	0.452468	0.573263269
FAM81B	5q15	-0.03855	0.452501	0.573268636
GAS2L1P2	9q22.33	0.038541	0.452595	0.573351348
DGKE	17q22	0.038529	0.452746	0.573506888
UPB1	22q11.23	-0.0385	0.453038	0.57384107
MRFAP1L1	4p16.1	-0.03849	0.453161	0.573951905
EEF1E1	6p24.3	-0.03849	0.453183	0.573951905
CETP	16q13	0.038483	0.453282	0.574040494
CDK14	7q21.13	-0.03846	0.453542	0.574333407
GAGE10	Xp11.23	-0.03845	0.453623	0.574399231
PLIN1	15q26.1	-0.03843	0.453881	0.574684783
MYRIP	3p22.1	-0.03843	0.453905	0.574684783
REST	4q12	0.038392	0.45435	0.575210906
PDHB	3p14.3	-0.03839	0.454393	0.575229038
TOP2A	17q21.2	-0.03838	0.454459	0.575276021
GNAT2	1p13.3	-0.03835	0.454795	0.575641617
GML	8q24.3	-0.03835	0.454805	0.575641617
HIST1H1E	6p22.2	-0.03834	0.455009	0.575858354
NUP88	17p13.2	-0.03833	0.455034	0.575858354
HDAC3	5q31.3	-0.03831	0.45531	0.576171572
ANKUB1	3q25.1	-0.0383	0.455454	0.576303668
IRX3	16q12.2	0.038297	0.455472	0.576303668
MINAR1	15q25.1	0.038286	0.455599	0.576428074
RALYL	8q21.2	-0.03827	0.455804	0.576642665
TTY13	Yq11.223	0.038267	0.455826	0.576642665

ZBTB22	6p21.32	0.038249	0.456035	0.576870747
GSPT1	16p13.13	0.03824	0.456142	0.576969115
ARHGAP27P2	17q24.2	0.038226	0.4563	0.577133317
NEFM	8p21.2	-0.03821	0.456436	0.577267724
KCNV2	9p24.2	-0.03821	0.456465	0.577268449
CABP7	22q12.2	-0.03819	0.456703	0.577532819
SGTA	19p13.3	-0.03818	0.456797	0.57758398
ALG1L	3q21.2	-0.03818	0.456827	0.57758398
PAK4	19q13.2	0.038182	0.45683	0.57758398
NRL	14q11.2-q12	-0.03815	0.45716	0.577964988
GCKR	2p23.3	0.038138	0.457345	0.578162414
MTSS2	16q22.1	-0.03813	0.457475	0.578290394
DNAJB9	7q31.1 14q24.2-q24.3	-0.0381	0.457823	0.578694145
AADAT	4q33	-0.03809	0.457856	0.578699405
PYGO2	1q21.3	-0.03809	0.45789	0.578704667
STRN	2p22.2	0.038086	0.457958	0.578754925
PDHX	11p13	0.038075	0.458093	0.578875044
C1QTNF9	13q12.12	-0.03807	0.458111	0.578875044
CYP46A1	14q32.2	-0.03807	0.458185	0.578931615
CNOT2	12q15	0.038058	0.458294	0.579022306
ACTR3	2q14.1	-0.03806	0.458314	0.579022306
KDM6A	Xp11.3	0.038045	0.458442	0.579146508
TGFA	2p13.3	0.038028	0.458638	0.579357531
CUL5	11q22.3	-0.03802	0.458699	0.579376519
UBA52	19p13.11	-0.03802	0.458716	0.579376519
ATP6V0A1	17q21.2	0.03802	0.458739	0.579376519
TMEM207	3q28	0.038008	0.458885	0.579512013
DSG3	18q12.1	0.038005	0.458912	0.579512013
CCDC13	3p22.1	0.038002	0.458949	0.579512013
ZNF266	19p13.2	-0.038	0.458981	0.579512013
DRD4	11p15.5	-0.038	0.458991	0.579512013
LOC389705	9p22.3	-0.03799	0.459107	0.579621877
ELF2	4q31.1	-0.03798	0.459166	0.579659275
TYROBP	19q13.12	0.037946	0.459613	0.58015113
HHIP	4q31.21	-0.03794	0.459631	0.58015113
KRTAP5-4	11p15.5	0.037944	0.459642	0.58015113
PDCL2	4q12	0.037927	0.459841	0.580365715
ZSCAN5B	19q13.43	-0.03792	0.459921	0.580367197
MCOLN3	1p22.3	0.03792	0.459927	0.580367197
CADM2	3p12.1	-0.03792	0.459929	0.580367197
JAM2	21q21.3	-0.03791	0.460092	0.580535969
EPS15L1	19p13.11	0.037869	0.460523	0.58104327
IFNA17	9p21.3	0.037864	0.460587	0.58108753
NDST1	5q33.1	0.037861	0.460625	0.581098814
RCAN3	1p36.11	0.037844	0.460821	0.581308436
RNF5P1	8p11.22	-0.03783	0.460955	0.581440875
TIMP4	3p25.2	0.037823	0.461068	0.581547504
ZDHHC11	5p15.33	0.037804	0.4613	0.581803859
DEFB131A	4p16.1	-0.03779	0.461417	0.581906198
NRM	6p21.33	-0.03779	0.46144	0.581906198
LILRA1	19q13.42	0.037782	0.461552	0.582010899
TFAP2B	6p12.3	-0.03778	0.46159	0.582021936
GMCL2	5q35.3	0.037767	0.461731	0.582131574
LOC100128076	9q22.31	-0.03777	0.461735	0.582131574
CSNK2A3	11p15.4	-0.03776	0.461843	0.582195249
MMEL1	1p36.32	0.037758	0.461843	0.582195249
KIR3DP1	19q13.42	-0.03775	0.461921	0.58225595
RNF135	17q11.2	0.037746	0.461986	0.582294687

SNX1	15q22.31	0.037744	0.462009	0.582294687
SF3B4	1q21.2	-0.03774	0.462048	0.58230636
XRCC4	5q14.2	-0.03773	0.462141	0.582387258
IK	5q31.3	0.037702	0.462511	0.582816195
DUSP3	17q21.31	-0.03769	0.462592	0.582882645
ADAM21P1	14q24.2	0.037683	0.462732	0.582986033
CYTL1	4p16.2	0.037683	0.462733	0.582986033
LOC100130449	2q37.3	0.037675	0.462833	0.583075293
SRCAP	16p11.2	-0.03766	0.462991	0.583206642
PDCD11	10q24.33	-0.03766	0.463017	0.583206642
OTUD7A	15q13.3	0.037658	0.463024	0.583206642
OPALIN	10q24.1	-0.03764	0.463258	0.583464866
CYBA	16q24.2	0.037612	0.463575	0.583827004
MICALL1	22q13.1	-0.03758	0.463904	0.584176066
TRIM34	11p15.4	-0.03758	0.463911	0.584176066
SMN1	5q13.2	-0.03756	0.46416	0.584452868
LGR6	1q32.1	-0.03756	0.464195	0.58446068
POC5	5q13.3	-0.03755	0.464305	0.584562673
OR51I2	11p15.4	0.037538	0.464458	0.584718825
GRIK1	21q21.3	0.037524	0.464625	0.58489193
POLA2	11q13.1	-0.03751	0.464777	0.585046198
KLF12	13q22.1	-0.03751	0.464833	0.585080438
ELL	19p13.11	-0.03749	0.465005	0.585259941
OR6C2	12q13.2	-0.03749	0.465053	0.585276773
TGIF1	18p11.31	0.037486	0.465077	0.585276773
WNK3	Xp11.22	-0.03747	0.465214	0.585412342
CINP	14q32.31	-0.03746	0.465364	0.585564797
SEMA3G	3p21.1	-0.03745	0.465454	0.585610684
NCAPD2	12p13.31	0.037454	0.465459	0.585610684
ATP1A1-AS1	1p13.1	0.037447	0.465539	0.585673989
CCNC	6q16.2	-0.03744	0.465605	0.585716649
ZNF622	5p15.1	-0.03744	0.465631	0.585716649
OR10G2	14q11.2	0.037415	0.46592	0.585984326
MRPL34	19p13.11	0.037415	0.465926	0.585984326
PCDH20	13q21.2	-0.03741	0.465954	0.585984326
CCDC144A	17p11.2	0.037412	0.465961	0.585984326
KCNK18	10q25.3	-0.0374	0.466112	0.58613727
DNAJC5G	2p23.3	-0.03739	0.466242	0.586263611
DAZ2	Yq11.223	-0.03738	0.466283	0.58627894
ZNF264	19q13.43	0.03738	0.466345	0.586320039
FAM74A3	9q21.11	0.037354	0.466652	0.586669379
BOK	2q37.3	0.037341	0.46681	0.586799129
RNF213	17q25.3	0.03734	0.466814	0.586799129
TRIM75P	4q32.3	-0.03732	0.467054	0.587051463
ARHGEF35	7q35	0.037318	0.46708	0.587051463
CT47B1	Xq24	-0.03732	0.467103	0.587051463
PCDHB10	5q31.3	-0.03729	0.467384	0.587367575
ADAM8	10q26.3	0.037282	0.467512	0.587491776
CCDC197	14q32.12	0.037279	0.467541	0.587491776
CDKN2D	19p13.2	0.037276	0.467587	0.587512435
OR8A1	11q24.2	0.037272	0.467627	0.587525481
LONP1	19p13.3	0.037218	0.468282	0.588311801
NAV1	1q32.1	-0.0372	0.468439	0.588472236
GPR85	7q31.1	-0.03718	0.468687	0.588747501
CLVS1	8q12.2-q12.3	-0.03718	0.468721	0.588753115
HOMER1	5q14.1	-0.03716	0.468926	0.588973056
CCDC178	18q12.1	0.037155	0.469032	0.589027311
DEPDC1B	5q12.1	0.037153	0.469049	0.589027311



CAPRIN1	11p13	-0.03715	0.469057	0.589027311
SLFNL1	1p34.2	-0.03715	0.469097	0.589040211
CYB5RL	1p32.3	0.037143	0.469173	0.589099084
PPIB	15q22.31	-0.03712	0.469444	0.589402019
VSIG4	Xq12	0.037113	0.469532	0.589475138
AHI1	6q23.3	0.037108	0.469593	0.589515885
UBQLNL	11p15.4	0.037103	0.469651	0.589551061
GTSF1	12q13.13	0.037081	0.469917	0.5898324
CAPG	2p11.2	0.03708	0.469934	0.5898324
LOC100240735	12q13.13	-0.03707	0.470049	0.589940063
ZNF143	11p15.4	-0.03706	0.470202	0.590095259
PTPRM	18p11.23	-0.03705	0.470305	0.590157333
UGP2	2p15	0.037048	0.470311	0.590157333
CLDN4	7q11.23	-0.03703	0.470571	0.590447506
MRPL16	11q12.1	-0.03701	0.470824	0.590728021
TTC37	5q15	0.036998	0.470917	0.590773526
H1FOO	3q22.1	0.036997	0.47092	0.590773526
S100Z	5q13.3	0.036987	0.471045	0.590893456
RAB40C	16p13.3	-0.03698	0.471106	0.59090188
SNORA20	6q25.3	0.036981	0.471111	0.59090188
OR1F1	16p13.3	-0.03698	0.471151	0.590915966
HSPA12B	20p13	-0.03697	0.471209	0.590951782
TMEM244	6q22.33	-0.03696	0.471397	0.591150067
G3BP1	5q33.1	0.036951	0.471481	0.591218029
ZNF222	19q13.31	0.036944	0.471556	0.59127497
BCL2L2	14q11.2	0.036932	0.471708	0.591429211
SNORA9	7p13	-0.03692	0.47185	0.591569426
DPCD	10q24.32	0.036913	0.47193	0.591633932
UBAP2L	1q21.3	-0.03689	0.472158	0.591882204
EDDM3A	14q11.2	0.036881	0.472313	0.592039341
NDUFA5	7q31.32	0.036876	0.472375	0.592047977
MMP8	11q22.2	-0.03688	0.472379	0.592047977
RPAIN	17p13.2	-0.03687	0.472502	0.592165283
RBPJL	20q13.12	-0.03684	0.472783	0.592480266
UBE2Q2	15q24.2	0.036827	0.472971	0.59265924
AADA2L2	3q25.1	0.036823	0.473013	0.59265924
AP4E1	15q21.2	0.036823	0.473015	0.59265924
ATP8B3	19p13.3	0.036789	0.473421	0.593094478
A1BG	19q13.43	-0.03679	0.473421	0.593094478
PHLDA1	12q21.2	-0.03677	0.473647	0.593301218
OR5L1	11q12.1	-0.03677	0.473671	0.593301218
SP100	2q37.1	0.036768	0.473675	0.593301218
CFAP69	7q21.13	-0.03674	0.473997	0.593666617
CLPP	19p13.3	0.036731	0.474118	0.593782083
IZUMO1	19q13.33	-0.03672	0.474251	0.593910421
KCNQ2	20q13.33	-0.03671	0.474419	0.594084709
B3GNT2	2p15	0.036696	0.474544	0.594203222
LAMC3	9q34.12	-0.03669	0.474627	0.594270002
HSP90AB4P	15q21.3	0.036671	0.474844	0.594484609
TMC1	9q21.13	0.03667	0.474857	0.594484609
AP5B1	11q13.1	0.036663	0.474938	0.594548312
SLC16A5	17q25.1	0.036654	0.475043	0.594642685
UBE2B	5q31.1	-0.03665	0.475076	0.594646156
CACNB1	17q12	-0.03663	0.475361	0.594966376
SLC35A5	3q13.2	0.036608	0.475606	0.59521734
SLC22A6	11q12.3	-0.0366	0.475665	0.59521734
UBE2H	7q32.2	0.036603	0.475665	0.59521734
KANSL1L	2q34	0.036602	0.475681	0.59521734

KLRC3	12p13.2	0.036597	0.475739	0.595253052
AMER2	13q12.13	-0.03659	0.475862	0.59536972
PDIA2	16p13.3	-0.03658	0.475938	0.595406572
RPS26	12q13.2	-0.03658	0.475951	0.595406572
C16ORF72	16p13.2	0.036569	0.476075	0.595525386
TRDMT1	10p13	-0.03654	0.476389	0.595879869
TMEM38B	9q31.2	-0.03654	0.476478	0.595954852
KNTC1	12q24.31	-0.03653	0.476535	0.595989164
FAM86HP	3q22.1	-0.03652	0.476616	0.59605271
GAS7	17p13.1	-0.0365	0.476847	0.596304926
RABL2B	22q13.33	-0.0365	0.476902	0.596327334
CCDC140	2q36.1	0.036499	0.476925	0.596327334
ASB15	7q31.32	-0.03648	0.477101	0.596510873
EPS8L2	11p15.5	-0.03648	0.477165	0.596552764
EGR1	5q31.2	0.036465	0.477326	0.596717189
SBDS	7q11.21	0.036422	0.477854	0.597340447
TAS2R38	7q34	0.036416	0.477924	0.597348873
LRRC47	1p36.32	-0.03641	0.477948	0.597348873
WNT7B	22q13.31	0.036414	0.477951	0.597348873
GNRH1	8p21.2	-0.0364	0.478058	0.597445147
ARHGAP17	16p12.1	-0.0364	0.478115	0.597479497
CDH4	20q13.33	-0.03638	0.478367	0.597757081
C15ORF32	15q26.1	0.03637	0.478479	0.597860498
GPSM3	6p21.32	0.036359	0.47861	0.597981365
ADI1	2p25.3	0.036357	0.478636	0.597981365
SFTA3	14q13.3	-0.03635	0.478738	0.598071656
DNAJB8	3q21.3	-0.03635	0.478768	0.598072112
THAP7	22q11.21	-0.03634	0.478881	0.598175501
SLC30A1	1q32.3	0.036333	0.47893	0.598200057
SPP1	4q22.1	0.036311	0.479199	0.598498153
MDH1	2p15	0.036296	0.479376	0.598682304
KCNK12	2p16.3	-0.03628	0.479593	0.598903277
RYR1	19q13.2	-0.03627	0.479655	0.598903277
MST1L	1p36.13	-0.03627	0.479676	0.598903277
DHX9	1q25.3	-0.03627	0.479682	0.598903277
USP17L9P	4p16.1	-0.03627	0.479703	0.598903277
HNRNPU-AS1	-	-0.03626	0.479833	0.599028344
ALDH18A1	10q24.1	0.036246	0.479982	0.5991767
HAMP	19q13.12	-0.03624	0.480077	0.599201748
SSPO	7q36.1	-0.03624	0.480089	0.599201748
CDYL2	16q23.2	-0.03623	0.480138	0.599201748
VN1R5	1q44	-0.03623	0.480142	0.599201748
SLC25A51	9p13.2-p13.1	0.036232	0.480151	0.599201748
TAAR2	6q23.2	-0.03623	0.480225	0.599256765
PATE2	11q24.2	0.0362	0.480535	0.599605741
OR51F2	11p15.4	0.036186	0.480706	0.599722042
ESX1	Xq22.2	0.036185	0.480717	0.599722042
CCDC91	12p11.22	0.036185	0.480718	0.599722042
CZIB	1p32.3	-0.03617	0.480872	0.599876958
CETN4P	4q27	0.036168	0.480932	0.599913037
HYLS1	11q24.2	-0.03617	0.480961	0.599913037
LMO7	13q22.2	-0.03616	0.481058	0.59999626
COX18	4q13.3	0.036142	0.481241	0.600187049
ATAD5	17q11.2	-0.03607	0.482093	0.601212774
CCDC85A	2p16.1	-0.03607	0.482148	0.601232515
HES4	1p36.33	-0.03607	0.482169	0.601232515
COLGALT1	19p13.11	-0.03605	0.482352	0.601423466
DEFB132	20p13	0.036047	0.482395	0.601439339

FCGR1B	1p11.2	-0.03603	0.48259	0.601645518
RAB6B	3q22.1	0.036021	0.482713	0.601733478
OR2D2	11p15.4	0.03602	0.482721	0.601733478
OR7A5	19p13.12	-0.03602	0.482753	0.601735979
SNX33	15q24.2	-0.036	0.482949	0.601942808
FAM72B	1p11.2	0.035994	0.483047	0.601991913
HPF1	4q33	0.035993	0.483048	0.601991913
IQCJ	3q25.32	-0.03599	0.483144	0.602041019
GLE1	9q34.11	0.035985	0.483148	0.602041019
DNAH10	12q24.31	-0.03597	0.483364	0.602272814
GFRA4	20p13	-0.03596	0.483466	0.602361925
CFHR2	1q31.3	0.035941	0.483691	0.602604807
GPATCH11	2p22.2	-0.03591	0.484052	0.602989818
PPP1R12A	12q21.2-q21.31	0.03591	0.48406	0.602989818
AKR1C3	10p15.1	0.035896	0.484241	0.603177686
LOC100130331	1q43	0.035868	0.484574	0.603533883
RSRC2	12q24.31	-0.03587	0.484587	0.603533883
GAGE2A	Xp11.23	-0.03586	0.484659	0.603586443
FSCN2	17q25.3	0.035858	0.484694	0.603592402
FRRS1L	9q31.3	-0.03585	0.484745	0.603617414
FCHO1	19p13.11	-0.03585	0.484813	0.603664753
AOX2P	2q33.1	0.035836	0.48497	0.603823689
CRTC3	15q26.1	0.035828	0.485062	0.603900111
LINC00159	21q22.11	0.035821	0.485147	0.603923153
SSX4	Xp11.23	-0.03582	0.485169	0.603923153
ASTE1	3q22.1	0.035817	0.485201	0.603923153
HIST1H2BK	6p22.1	0.035817	0.485201	0.603923153
LOC730101	6p12.2	-0.03581	0.485277	0.603980381
UBR3	2q31.1	0.035804	0.485359	0.604044145
PTPN20	10q11.22	-0.0358	0.485423	0.604087179
FAM238A	10p12.1	-0.03576	0.485863	0.604596589
C15ORF39	15q24.2	-0.03576	0.485952	0.604639158
POMZP3	7q11.23	-0.03575	0.485958	0.604639158
KIF4B	5q33.2	-0.03575	0.486031	0.604693131
HNRNPCL3	1p36.21	-0.03573	0.48626	0.60491426
CEACAM18	19q13.41	0.035729	0.486269	0.60491426
PRDX3	10q26.11	0.03568	0.486867	0.605594238
CLEC4D	12p13.31	0.03568	0.486876	0.605594238
ASAP1-IT1	8q24.21	-0.03566	0.48717	0.605919759
PDGFRL	8p22	0.035653	0.487199	0.605919759
TMEM45A	3q12.2	0.035642	0.487341	0.605996138
MEX3B	15q25.2	-0.03564	0.487364	0.605996138
ZNF121	19p13.2	0.035639	0.487375	0.605996138
GPR141	7p14.1	0.035638	0.487381	0.605996138
LOC441601	11p11.12	-0.03563	0.48745	0.606043953
QRFPR	4q27	0.035601	0.487831	0.606447025
GDF1	19p13.11	-0.0356	0.487835	0.606447025
C6ORF62	6p22.3	-0.03559	0.488015	0.606633234
METTL21C	13q33.1	0.035571	0.488201	0.606826862
SLC12A5	20q13.12	-0.03557	0.488272	0.606877984
SIRPB2	20p13	0.035556	0.488386	0.606981817
SCARNA18	5q14.2	-0.03554	0.488572	0.607175502
MIS18BP1	14q21.2	0.035522	0.488797	0.607398783
GDNF	5p13.2	-0.03552	0.48882	0.607398783
SELENOV	19q13.2	-0.03552	0.488863	0.607398783
OR52N4	11p15.4	-0.03552	0.488873	0.607398783
TAS2R8	12p13.2	0.035507	0.488991	0.607507249
ALG9	11q23.1	-0.03548	0.489377	0.607949581

MMS22L	6q16.1	0.035458	0.489588	0.608174
BCDIN3D	12q13.12	-0.03542	0.490082	0.608749203
RBM15	1p13.3	0.035376	0.490594	0.609330699
PAGE5	Xp11.21	0.035374	0.490611	0.609330699
LRRC57	15q15.2	-0.03535	0.490934	0.609695222
MIP	12q13.3	-0.03534	0.491021	0.609764522
NLRC4	2p22.3	0.035337	0.491072	0.609790218
CLEC1A	12p13.2	-0.03533	0.491112	0.609801625
YJEFN3	19p13.11	0.03532	0.491274	0.609954525
OR52I2	11p15.4	-0.03532	0.491296	0.609954525
ST7-AS2	7q31.2	0.035309	0.491408	0.61005675
HIPK4	19q13.2	-0.0353	0.491542	0.610135921
EXOG	3p22.2	-0.0353	0.491545	0.610135921
KRT13	17q21.2	-0.0353	0.491564	0.610135921
HIST1H2AB	6p22.2	-0.03529	0.491702	0.610234703
GJA3	13q12.11	0.035285	0.491704	0.610234703
POM121L1P	22q11.22	0.035264	0.491964	0.610519287
KLK4	19q13.41	-0.03526	0.49204	0.610575777
IKBKE	1q32.1	-0.03525	0.492111	0.610626076
RGS3	9q32	0.035249	0.492145	0.610630914
UTP20	12q23.2	-0.03524	0.492222	0.610688269
SUGP2	19p13.11	-0.03523	0.492349	0.610807992
OR2T12	1q44	0.035224	0.492453	0.610863622
HK3	5q35.2	0.035224	0.492455	0.610863622
MDGA1	6p21.2	-0.03521	0.492587	0.610989917
GFOD2	16q22.1	-0.03519	0.492889	0.611217604
PRKACA	19p13.12	0.035189	0.492889	0.611217604
CT45A3	Xq26.3	-0.03519	0.492902	0.611217604
NFE2L2	2q31.2	-0.03519	0.492913	0.611217604
ZNRF2P1	7p14.3	-0.03519	0.492923	0.611217604
LINC00908	18q23	-0.03518	0.493007	0.611258405
UGT2A3	4q13.2	-0.03518	0.493025	0.611258405
FPR3	19q13.41	0.035176	0.493048	0.611258405
TAF3	10p14	-0.03517	0.493088	0.611269809
SPSB2	12p13.31	-0.03516	0.493273	0.611461776
BMP10	2p13.3	0.03514	0.493489	0.61169164
DEUP1	11q21	0.03512	0.493733	0.611956085
S100B	21q22.3	0.035096	0.494039	0.61227586
HNRNPU	1q44	-0.03509	0.494052	0.61227586
TTC1	5q33.3	-0.03509	0.494129	0.612321636
CERS2	1q21.3	0.035087	0.49415	0.612321636
TACR2	10q22.1	0.03507	0.494358	0.612541618
DMGDH	5q14.1	-0.03506	0.494455	0.612623638
TMPRSS11F	4q13.2	0.035058	0.494502	0.61264438
THSD7A	7p21.3	-0.03502	0.494972	0.613188108
C2CD4D	1q21.3	-0.03502	0.495029	0.613221429
EIF5	14q32.32	-0.03501	0.495113	0.613287075
MTRR	5p15.31	0.035003	0.495179	0.613331325
RGS9	17q24.1	0.034994	0.495296	0.61343775
KBTBD3	11q22.3	-0.03499	0.495373	0.61349544
ZIK1	19q13.43	-0.03496	0.495679	0.613836918
UBE2Q1	1q21.3	0.03491	0.496321	0.614565348
MAB21L1	13q13.3	-0.03491	0.496329	0.614565348
FEZ2	2p22.2	-0.0349	0.496404	0.614584483
SNORA78	16p13.3	0.034904	0.496406	0.614584483
MAMDC4	9q34.3	0.034898	0.496473	0.614629266
NOL6	9p13.3	0.034893	0.496536	0.614670239
PRR30	2p23.3	-0.03488	0.496645	0.614766901

HTR3B	11q23.2	-0.03488	0.49668	0.614771356
DIAPH3	13q21.2	0.034875	0.496754	0.614797939
CDC27	17q21.32	0.034875	0.496762	0.614797939
PSMD5	9q33.2	0.034859	0.496962	0.61500673
PCK2	14q11.2-q12	0.034855	0.49701	0.615027961
C20ORF197	20q13.33	-0.03484	0.497198	0.615222609
API5	11p12	0.034831	0.497305	0.615295664
TAS2R14	12p13.2	-0.03483	0.497318	0.615295664
FBXO36	2q36.3	0.034808	0.497588	0.61559174
DMKN	19q13.12	-0.0348	0.49764	0.615617934
ZNF192P1	6p22.1	-0.03479	0.497824	0.615807286
NANOS2	19q13.32	-0.03479	0.497863	0.615817355
OR8D2	11q24.2	-0.03476	0.49816	0.616147498
OR2M3	1q44	-0.03476	0.498241	0.616209281
ABCA1	9q31.1	-0.03475	0.498316	0.616264052
GPR32	19q13.33	0.034738	0.49845	0.616391627
IMPDH2	3p21.31	-0.03472	0.498636	0.616583163
LYRM7	5q23.3-q31.1	0.034705	0.49886	0.616821807
C1ORF43	1q21.3	0.03468	0.499174	0.617172528
C1ORF174	1p36.32	0.034671	0.499278	0.617262951
LILRA6	19q13.42	0.034663	0.499377	0.617346785
HSD3B1	1p12	-0.03466	0.499413	0.617353128
YTHDC1	4q13.2	-0.03464	0.499614	0.617563903
CNIH2	11q13.2	0.034631	0.499779	0.617726437
TMEM132E	17q12	-0.03463	0.499817	0.617726437
DIS3L	15q22.31	0.034626	0.499838	0.617726437
LINC00671	17q21.31	-0.03459	0.500284	0.618239058
OR51G2	11p15.4	-0.03458	0.500384	0.61832436
EVPL	17q25.1	-0.03457	0.500513	0.618411668
NT5C1A	1p34.2	-0.03457	0.500516	0.618411668
HAPLN3	15q26.1	-0.03456	0.500711	0.618585679
RXFP4	1q22	-0.03456	0.500719	0.618585679
SNORA6	3p22.1	0.034552	0.500757	0.618594695
USP29	19q13.43	0.034547	0.500813	0.618594695
SNORA71B	20q11.23	0.034547	0.500819	0.618594695
OSCAR	19q13.42	-0.03454	0.50085	0.618594695
PYCR1	17q25.3	-0.03454	0.500922	0.618645588
PIGG	4p16.3	0.034536	0.500956	0.618650311
SNW1	14q24.3	0.03453	0.501031	0.618704502
ZNF787	19q13.43	0.034527	0.501068	0.618712523
EXTL3	8p21.1	-0.03449	0.501576	0.619301089
SIX5	19q13.32	0.034482	0.501627	0.619325595
SSX9P	Xp11.23	-0.03447	0.501767	0.619460095
KIAA2026	9p24.1	0.034448	0.502041	0.619727192
KCNQ1	11p15.5-p15.4	-0.03445	0.50206	0.619727192
GMPR2	14q12	-0.03445	0.502076	0.619727192
EPHX1	1q42.12	-0.03443	0.502215	0.619860112
DCSTAMP	8q22.3	-0.03443	0.502262	0.619860112
ADAM22	7q21.12	-0.03443	0.502276	0.619860112
LINC00310	21q22.11	-0.03442	0.502348	0.619909964
ZNF540	19q13.12	-0.0344	0.502592	0.620173162
GCHFR	15q15.1	-0.03439	0.502728	0.620303298
CLIC6	21q22.12	0.034387	0.502803	0.620355607
MADD	11p11.2	0.034385	0.502833	0.620355607
C5ORF52	5q33.3	0.034367	0.503049	0.620583814
NDUFS3	11p11.2	-0.03436	0.503197	0.620714956
ZDHHC8P1	22q11.23	0.034352	0.503234	0.620714956
PDYN	20p13	-0.03435	0.503248	0.620714956

GYPA	4q31.21	0.034348	0.503291	0.620730283
BRK1	3p25.3	0.03434	0.503392	0.620816267
FBN2	5q23.3	-0.03433	0.503572	0.620999266
PCGEM1	2q32.3	0.034312	0.503737	0.621165392
FGR	1p35.3	0.034304	0.503834	0.621246417
LVRN	5q23.1	-0.03425	0.504463	0.621983349
DMTN	8p21.3	-0.03422	0.504828	0.622395709
KIR2DL1	19q13.42	0.03419	0.505261	0.622891365
RHOBTB3	5q15	-0.03418	0.505341	0.622950568
SALL1	16q12.1	0.034178	0.505405	0.622991592
CMAHP	6p22.3	-0.03415	0.505764	0.623396453
AGA	4q34.3	-0.03414	0.50584	0.623450713
EID3	12q23.3	-0.03414	0.505891	0.623475115
PSIP1	9p22.3	-0.03414	0.505923	0.62347653
TMEM70	8q21.11	-0.03412	0.506071	0.623616286
TMEM215	9p21.1	-0.03412	0.506099	0.623616286
ARR3	Xq13.1	0.034116	0.506184	0.623683748
ALB	4q13.3	-0.03411	0.506303	0.623792058
TGFBR3	1p22.1	-0.03408	0.506575	0.624088639
GFRAL	6p12.1	-0.03408	0.506612	0.624095555
TOB2P1	6p22.1	-0.03405	0.506964	0.624490062
THAP6	4q21.1	0.034035	0.507191	0.624731406
WDTC1	1p36.11	0.034022	0.507347	0.624885012
HP	16q22.2	0.034015	0.507445	0.624968263
ANKRD36B	2q11.2	-0.034	0.507576	0.625091227
CALML5	10p15.1	0.033997	0.50766	0.625151522
TGM3	20p13	0.033995	0.507688	0.625151522
TGM1	14q12	0.033984	0.507828	0.625285536
GCDH	19p13.13	-0.03395	0.508288	0.625813522
DYSF	2p13.2	-0.03393	0.508471	0.626000347
ITPK1-AS1	14q32.12	0.033925	0.508568	0.62608093
LINC01465	12q14.1	-0.03391	0.508764	0.62628457
EPN1	19q13.42	-0.0339	0.508872	0.626378639
SMAP1	6q13	0.033893	0.508969	0.626459453
FLT3LG	19q13.33	-0.03388	0.509085	0.626563471
PPP1R10	6p21.33	0.033874	0.509206	0.626655503
NEMF	14q21.3	0.033872	0.509222	0.626655503
MMP23A	1p36.33	-0.03386	0.509436	0.626880428
CDC25C	5q31.2	0.03382	0.509871	0.627377487
SPATA5L1	15q21.1	-0.03381	0.509977	0.627468282
C5ORF47	5q35.2	-0.03381	0.510029	0.627494089
CDKL4	2p22.1	-0.0338	0.51008	0.627518733
SUCO	1q24.3	-0.03379	0.510306	0.627757269
EHMT1-IT1	9q34.3	-0.03378	0.510357	0.627782594
HOXC12	12q13.13	-0.03377	0.510454	0.627840614
GRWD1	19q13.33	-0.03377	0.510467	0.627840614
MID1	Xp22.2	0.033758	0.510653	0.628030129
LOC285847	6p21.31	-0.03376	0.510684	0.628030129
NTN5	19q13.33	-0.03375	0.510742	0.628062716
RHOXF1	Xq24	0.033741	0.510869	0.628180931
ZC3HAV1L	7q34	-0.03372	0.511077	0.628395446
DNAJB12	10q22.1	0.033722	0.511107	0.628395446
SNORA71C	20q11.23	-0.03372	0.511142	0.628400402
PDE6G	17q25.3	0.033712	0.511226	0.62846522
SLCO5A1	8q13.3	0.033705	0.511321	0.628543461
ZNF17	19q13.43	-0.0337	0.511439	0.628649247
KRT4	12q13.13	-0.03368	0.511575	0.628757901
CYP2S1	19q13.2	0.033683	0.51159	0.628757901

PGLYRP4	1q21.3	-0.03368	0.511623	0.628759798
POTED	21q11.2	-0.03367	0.511175	0.628877127
ATP1B4	Xq24	-0.03366	0.511842	0.628952213
TEX10	9q31.1	-0.03366	0.511898	0.628981853
ELMO1	7p14.2-p14.1	0.033628	0.512289	0.62939255
PHETA2	22q13.2	0.033627	0.512295	0.62939255
LINC01547	21q22.3	0.033619	0.512395	0.629476762
LRR1	14q21.3	-0.03361	0.512508	0.629577575
CYP4F30P	2q21.1	0.033605	0.512568	0.629607798
STUB1	16p13.3	-0.0336	0.512627	0.629607798
KIF16B	20p12.1	0.033601	0.512627	0.629607798
HBP1	7q22.3	-0.03359	0.512711	0.629668192
CPO	2q33.3	-0.03359	0.512739	0.629668192
C8ORF37	8q22.1	0.033586	0.512814	0.629720987
CTSL	9q21.33	-0.03358	0.512908	0.62979859
FAM3C	7q31.31	-0.03358	0.512941	0.629799814
IGSF5	21q22.2	0.033565	0.51307	0.629920084
SCARNA8	9p22.1	-0.03354	0.513412	0.63030086
KIAA1107	1p22.1	-0.03351	0.513774	0.630706689
INTS2	17q23.2	-0.0335	0.513877	0.630794259
TMEM51	1p36.21	-0.03347	0.514212	0.631167565
TRIM6-TRIM34	11p15.4	-0.03347	0.514285	0.631198067
TTY7	Yp11.2	-0.03347	0.5143	0.631198067
AUNIP	1p36.11	-0.03346	0.514367	0.631240919
CACNA1F	Xp11.23	-0.03346	0.5144	0.631243568
ZNF609	15q22.31	0.033441	0.514635	0.631492525
LTB	6p21.33	0.033431	0.514759	0.631588449
OR4N2	14q11.2	-0.03343	0.514776	0.631588449
MBLAC2	5q14.3	-0.0334	0.515103	0.631951427
C19ORF25	19p13.3	-0.0334	0.515168	0.63196359
BEST4	1p34.1	0.033398	0.515176	0.63196359
SNX22	15q22.31	-0.03339	0.515231	0.631991529
POU1F1	3p11.2	0.033378	0.515431	0.63219868
HIST1H3I	6p22.1	0.03337	0.515522	0.632271326
DEFB4A	8p23.1	0.033364	0.515607	0.632336579
NPAS3	14q13.1	-0.03336	0.515674	0.632339536
SLC5A7	2q12.3	-0.03336	0.515682	0.632339536
ACTL7B	9q31.3	-0.03336	0.515709	0.632339536
LCE3E	1q21.3	-0.03335	0.51577	0.632339536
TAF1	3p14.1	-0.03335	0.515778	0.632339536
CAMK1D	10p13	-0.03335	0.5158	0.632339536
VWA5B2	3q27.1	0.033346	0.51583	0.632339536
ZNF395	8p21.1	0.033342	0.515887	0.632345599
ATG12	5q22.3	0.03334	0.515908	0.632345599
YIPF7	4p12	-0.03334	0.51593	0.632345599
TMEM8A	16p13.3	-0.03333	0.516068	0.632476757
HAS1	19q13.41	-0.03332	0.516178	0.632497151
SNX18	5q11.2	-0.03332	0.51618	0.632497151
UNC45B	17q12	0.033318	0.51618	0.632497151
CD34	1q32.2	-0.03331	0.51625	0.632544648
RTP1	3q27.3	-0.03331	0.516285	0.632548091
SNX9	6q25.3	0.033307	0.516323	0.632556993
PLP1	Xq22.2	-0.0333	0.51641	0.632589282
TNFRSF8	1p36.22	0.0333	0.516413	0.632589282
MELTF	3q29	-0.0333	0.516451	0.632597118
DUSP13	10q22.2	-0.03329	0.516518	0.632640176
PIP4P1	14q11.2	-0.03328	0.516692	0.63281553
HLA-L	6p22.1	0.033268	0.516813	0.632924716

FAM238B	10p12.1	-0.03326	0.516893	0.632983747
SAMD12	8q24.11-q24.12	0.033243	0.517129	0.633234607
SOCS7	17q12	-0.03323	0.517347	0.633461877
ZDHHC2	8p22	0.033223	0.517382	0.633466375
SPANXN4	Xq27.3	-0.03322	0.517445	0.633504625
APOE	19q13.32	-0.03321	0.517564	0.633611704
DEFB124	20q11.21	-0.0332	0.517705	0.633746004
CXCL9	4q21.1	0.033185	0.517863	0.633900042
MMRN2	10q23.2	-0.03318	0.517904	0.633911186
CARD14	17q25.3	0.033167	0.518086	0.634083139
PGM2L1	11q13.4	-0.03317	0.518107	0.634083139
IMPAD1	8q12.1	0.033147	0.518344	0.634333778
PRAC2	17q21.32	-0.03313	0.518517	0.634507039
ONECUT1	15q21.3	-0.03312	0.518741	0.634741718
HIST1H4L	6p22.1	0.033111	0.518794	0.634768783
ZFAND6	15q25.1	-0.03311	0.518855	0.634804185
LEPROT	1p31.3	0.033096	0.518986	0.634904133
ERMP1	9p24.1	0.033094	0.519005	0.634904133
EPHB3	3q27.1	0.033092	0.519032	0.634904133
NOP14-AS1	4p16.3	0.033082	0.519165	0.635028403
DFFA	1p36.22	-0.03307	0.519315	0.635172649
COASY	17q21.2	-0.03307	0.519366	0.635176088
TPCN2	11q13.3	0.033064	0.519386	0.635176088
NXPE3	3q12.3	0.033062	0.519413	0.635176088
GNB3	12p13.31	-0.03303	0.519865	0.635689773
SPPL2C	17q21.31	0.033014	0.520022	0.635843223
LRP1B	2q22.1-q22.2	0.032936	0.52101	0.63701311
C16ORF90	16p13.3	-0.03293	0.521049	0.637021239
ZNF429	19p12	-0.03292	0.521169	0.637129822
PCDHAC1	5q31.3	0.032917	0.521243	0.63718077
PDE7B	6q23.3	0.032911	0.521328	0.637245296
MC2R	18p11.21	-0.0329	0.521432	0.637333808
SNTG1	8q11.21	-0.03289	0.521563	0.637455241
LAMTOR5	1p13.3	0.03289	0.521595	0.637455241
JDP2	14q24.3	-0.03287	0.521889	0.637750856
CFAP77	9q34.13	-0.03287	0.5219	0.637750856
FOXJ3	1p34.2	-0.03286	0.521938	0.637758498
CST13P	20p11.21	0.032856	0.522021	0.637820802
INTS11	1p36.33	0.032848	0.522127	0.637910681
SUZ12	17q11.2	-0.03284	0.522189	0.637948438
RC3H1	1q25.1	0.032838	0.522245	0.637977833
GRM6	5q35.3	-0.03282	0.522421	0.63815357
RETREG2	2q35	-0.03282	0.522481	0.638167226
ZNF25	10p11.21	-0.03282	0.522503	0.638167226
TENT4A	5p15.31	-0.03282	0.522528	0.638167226
NSMF	9q34.3	0.032812	0.522577	0.638188315
NMBR	6q24.1	-0.03279	0.522799	0.638420907
ALG14	1p21.3	-0.03278	0.522924	0.638533885
HSPA13	21q11.2	0.032781	0.522967	0.638548302
EXOC6B	2p13.2	0.032771	0.523101	0.638672755
PAPOLA	14q32.2	0.032756	0.523284	0.638749021
LGSN	6q12	0.032756	0.523287	0.638749021
SYCP3	12q23.2	0.032755	0.523305	0.638749021
HOOK2	19p13.13	0.032753	0.523323	0.638749021
TXNDC8	9q31.3	-0.03275	0.523323	0.638749021
ZNF99	19p12	-0.03273	0.523626	0.639079928
PIWIL1	12q24.33	0.032724	0.523701	0.639132548
OR52N1	11p15.4	0.032715	0.523815	0.63923285



STPG2	4q22.3-q23	-0.0327	0.524014	0.639436507
HIST1H2AC	6p22.2	-0.03269	0.52412	0.639527273
RBAKDN	7p22.1	-0.03268	0.524296	0.6397023
PRDM7	16q24.3	-0.03267	0.52438	0.639765749
MYBPC2	19q13.33	-0.03265	0.524652	0.640059412
VWF	12p13.31	0.032633	0.524851	0.640262217
PRUNE1	1q21.3	0.032627	0.524922	0.640309989
SPINK7	5q32	0.032617	0.525053	0.640431054
LINC00852	3p25.3	-0.0326	0.52531	0.640705941
LOC553137	6q21	0.032592	0.525373	0.640743245
EPC1	10p11.22	0.032575	0.525592	0.640971757
LINC01312	6q23.2	-0.03256	0.525778	0.641158704
TMED6	16q22.1	-0.03255	0.525855	0.641181866
RNF20	9q31.1	-0.03255	0.525861	0.641181866
CER1	9p22.3	0.032545	0.525976	0.641277422
ERMAP	1p34.2	-0.03254	0.526003	0.641277422
PSD2	5q31.2	0.032528	0.526185	0.641460307
CALCOCO1	12q13.13	-0.03252	0.526335	0.6416034
VTA1	6q24.1-q24.2	0.032507	0.526458	0.641714637
SCARNA11	12p13.31	0.032495	0.526604	0.641842177
GTF2H2	5q13.2	0.032491	0.526652	0.641842177
PATE1	11q24.2	-0.03249	0.526659	0.641842177
BRDT	1p22.1	-0.03248	0.526807	0.641984341
CACNA1A	19p13.13	0.032476	0.526848	0.641994346
CRISP2	6p12.3	0.032461	0.527044	0.642192806
TRHR	8q23.1	0.032458	0.527075	0.642192806
DVL2	17p13.1	-0.03245	0.527121	0.64221046
IRGM	5q33.1	0.032444	0.527258	0.642338046
LIFR	5p13.1	0.032434	0.527387	0.642456358
FAHD1	16p13.3	0.03243	0.527434	0.642474075
CCDC105	19p13.12	-0.03241	0.527635	0.642680413
CHST9	18q11.2	-0.03238	0.528029	0.643121376
HTR4	5q32	-0.03237	0.52815	0.643229143
FZD3	8p21.1	-0.03237	0.528191	0.643239988
FLJ37201	10q23.31	-0.03236	0.528272	0.643285843
SNTG2	2p25.3	0.032363	0.528293	0.643285843
RHBDD1	2q36.3	-0.03236	0.528375	0.643315058
OR1L1	9q33.2	-0.03236	0.528381	0.643315058
BRD2	6p21.32	0.032345	0.528518	0.64344217
UFL1	6q16.1	-0.03234	0.528628	0.643536756
PGP	16p13.3	-0.03233	0.528691	0.643548772
TRPV2	17p11.2	0.032331	0.528702	0.643548772
USP32P2	17p11.2	0.032319	0.528844	0.643683444
CDK15	2q33.1	0.032313	0.52892	0.643736211
DYTN	2q33.3	-0.0323	0.529068	0.643877219
DUSP23	1q23.2	0.032299	0.529105	0.643881267
TMEM81	1q32.1	-0.0323	0.529136	0.643881267
PELI3	11q13.2	-0.03228	0.529342	0.644092925
IL1F10	2q14.1	0.032257	0.52964	0.64439916
ZFP62	5q35.3	0.032256	0.529658	0.64439916
PRODH2	19q13.12	0.03225	0.529728	0.644445679
HIST1H3J	6p22.1	-0.03224	0.529805	0.644499976
PAQR9	3q23	0.032238	0.529886	0.644544506
FZD2	17q21.31	0.032235	0.529927	0.644544506
CCL4L1	17q12	0.032234	0.529938	0.644544506
OR5AU1	14q11.2	-0.03223	0.530039	0.644628684
TNFSF18	1q25.1	-0.03221	0.530269	0.644868983
ANGPTL7	1p36.22	-0.0322	0.530311	0.644880266

DNAI1	9p13.3	-0.03218	0.530672	0.645240337
SP110	2q37.1	0.032175	0.530689	0.645240337
TAS2R43	12p13.2	-0.03217	0.530703	0.645240337
SAG	2q37.1	-0.03217	0.530812	0.645318176
THAP4	2q37.3	-0.03216	0.530832	0.645318176
SEPTIN6	Xq24	-0.03215	0.530945	0.645416152
MYCBP	1p34.3	0.032134	0.531212	0.645678866
CEP152	15q21.1	-0.03213	0.531256	0.645678866
PLA2G2E	1p36.13	-0.03213	0.531258	0.645678866
COPE	19p13.11	0.032127	0.531297	0.645687639
LOC202181	5q35.3	0.032122	0.531363	0.645728748
KIAA1958	9q32	-0.03212	0.531443	0.645770123
OR1J4	9q33.2	-0.03211	0.531462	0.645770123
FAM98A	2p22.3	-0.03211	0.531545	0.645832003
NTSR2	2p25.1	0.032105	0.531586	0.645842692
ACKR1	1q23.2	-0.03209	0.531713	0.645887981
PCDHGA12	5q31.3	-0.03209	0.531747	0.645887981
REEP6	19p13.3	0.032092	0.531751	0.645887981
KBTBD13	15q22.31	0.032091	0.531759	0.645887981
ARG2	14q24.1	-0.03209	0.531784	0.645887981
RIMS4	20q13.12	-0.03207	0.531994	0.64610302
HPSE2	10q24.2	0.032064	0.532112	0.64618931
ACOXL	2q13	0.032062	0.532129	0.64618931
BDNF-AS	11p14.1	-0.03205	0.532269	0.64632005
ROPN1L	5p15.2	0.032009	0.532814	0.646942658
IRF7	11p15.5	0.032003	0.532889	0.646994604
ZNRF4	19p13.3	0.031989	0.533072	0.647176524
S100A11	1q21.3	0.031966	0.533358	0.647485263
CAPN12	19q13.2	-0.03196	0.533491	0.647606739
MUC12	7q22.1	-0.03195	0.533551	0.647641154
HHIPL2	1q41	0.031947	0.5336	0.647661322
PWAR4	15q11.2	-0.03194	0.533644	0.647674621
SPP2	2q37.1	-0.03194	0.53375	0.647741982
FRA10AC1	10q23.33	0.031935	0.533764	0.647741982
MYBPC3	11p11.2	0.031931	0.533813	0.647762723
PALB2	16p12.2	-0.03192	0.533973	0.647917967
TUBA3FP	22q11.21	-0.03189	0.534394	0.648371926
DIP2C	10p15.3	0.031884	0.534412	0.648371926
CDKN2AIP	4q35.1	0.031868	0.534625	0.648590611
CCNA1	13q13.3	-0.03186	0.534732	0.648680646
CSF2RA	Xp22.33 and Yp11.2	-0.03185	0.534846	0.648754257
SNAR-C4	19q13.33	0.031849	0.534857	0.648754257
CCDC42	17p13.1	0.031845	0.53492	0.648776026
NEIL3	4q34.3	0.031843	0.53494	0.648776026
MARCO	2q14.2	-0.03183	0.535097	0.648926833
OR2AK2	1q44	0.031824	0.535181	0.648990505
YRDC	1p34.3	-0.03182	0.535246	0.649014087
SLC22A7	6p21.1	0.031818	0.535266	0.649014087
TSGA10IP	11q13.1	0.031793	0.535583	0.64935928
MRGPRD	11q13.3	-0.03178	0.535711	0.649475318
NBPF6	1p13.3	-0.03178	0.535761	0.649496476
ALG11	13q14.3	0.031765	0.535946	0.649681346
BLID	11q24.1	-0.03176	0.536046	0.64976386
LINC00575	4q21.22	-0.03175	0.536122	0.649815896
CLEC4F	2p13.3	-0.03175	0.536181	0.649832399
OAS1	12q24.13	0.031745	0.5362	0.649832399
C1ORF159	1p36.33	-0.03174	0.536301	0.649915384
LGI1	10q23.33	-0.03171	0.536614	0.650226445

LINC00336	6p21.31	-0.03171	0.536639	0.650226445
PRNT	20p13	-0.03171	0.536655	0.650226445
BCYRN1	2p21	0.031706	0.536699	0.650236627
FCGR3A	1q23.3	0.031704	0.536729	0.650236627
KLHL11	17q21.2	0.031697	0.536817	0.65030456
SUCNR1	3q25.1	0.031685	0.536965	0.650444469
DOCK3	3p21.2	-0.03168	0.537073	0.650535943
SCARNA17	18q21.1	-0.03163	0.537635	0.651177303
COQ8B	19q13.2	-0.03163	0.53767	0.651179875
MPL	1p34.2	0.031618	0.537836	0.651341741
PECAM1	17q23.3	-0.03162	0.537869	0.651342606
KRTAP9-2	17q21.2	-0.0316	0.538092	0.651572775
ARC	8q24.3	-0.03158	0.538304	0.651754451
PODXL2	3q21.3	0.031581	0.538307	0.651754451
TNFRSF9	1p36.23	0.031576	0.538376	0.651770675
LYPD2	8q24.3	0.031574	0.538403	0.651770675
TAS2R30	12p13.2	0.031572	0.538418	0.651770675
UBE2M	19q13.43	-0.03155	0.538723	0.652100101
TAGLN3	3q13.2	-0.03154	0.538798	0.652151683
FANCM	14q21.2	0.031538	0.538858	0.652183547
XAGE3	Xp11.22	-0.03154	0.538889	0.652183547
PTRH1	9q34.11	0.031529	0.538973	0.652246088
ERO1B	1q42.3	0.031526	0.539016	0.652258711
RAD51AP2	2p24.2	-0.03152	0.5391	0.652320578
NKAPL	6p22.1	-0.03151	0.539202	0.652404686
BATF	14q24.3	-0.0315	0.539346	0.652539774
TNFRSF1B	1p36.22	0.031493	0.539444	0.652617805
PMS2P4	7q11.21	-0.03148	0.539613	0.65275709
AZIN2	1p35.1	0.031479	0.539624	0.65275709
A2M	12p13.31	-0.03146	0.539899	0.653049934
PRKACG	9q21.11	-0.03145	0.539987	0.65306231
CSRP1	1q32.1	0.031449	0.540012	0.65306231
SLC22A14	3p22.2	-0.03145	0.540014	0.65306231
RNF165	18q21.1	0.031447	0.540039	0.65306231
TRIML1	4q35.2	-0.03144	0.540115	0.653110366
GMNN	6p22.3	0.031436	0.540179	0.653110366
MS4A3	11q12.1	0.031434	0.540195	0.653110366
STRBP	9q33.3	-0.03143	0.540209	0.653110366
RNASE13	14q11.2	0.031421	0.540367	0.653254698
RRH	4q25	0.031418	0.540409	0.653254698
SYT16	14q23.2	-0.03142	0.540444	0.653254698
TPRN	9q34.3	-0.03141	0.540459	0.653254698
IFNL3	19q13.2	-0.0314	0.540586	0.653357979
CACNA2D3	3p21.1-p14.3	-0.0314	0.54061	0.653357979
NHS	Xp22.2-p22.13	-0.0314	0.540648	0.653362833
FABP7	6q22.31	0.031397	0.540679	0.653362833
CLUU1	12q22	0.031392	0.540743	0.653394013
ZMYM1	1p34.3	0.03139	0.54077	0.653394013
RNF5	6p21.32	-0.03138	0.540937	0.653527431
ALOX12P2	17p13.1	0.031375	0.540965	0.653527431
ASB16-AS1	17q21.31	-0.03137	0.540979	0.653527431
TAS2R40	7q34	-0.03137	0.541039	0.653561466
SAV1	14q22.1	0.031365	0.541087	0.653579463
SERTAD1	19q13.2	0.031356	0.541212	0.653686704
RSPO1	1p34.3	-0.03135	0.541241	0.653686704
CLN6	15q23	-0.03133	0.541548	0.654002344
CCDC189	16p11.2	0.031328	0.541568	0.654002344
BLOC1S6	15q21.1	0.031323	0.541637	0.654028364

SCN4B	11q23.3	-0.03132	0.541668	0.654028364
MAP4K5	14q22.1	-0.03132	0.541687	0.654028364
BRCA1	17q21.31	0.031312	0.541776	0.65409633
TFEB	6p21.1	0.031295	0.541996	0.65432205
LOC606724	16p11.2	0.031271	0.542303	0.654625843
	9-Mar 12q14.1	-0.03127	0.542313	0.654625843
MMRN1	4q22.1	0.031264	0.542399	0.654690198
ANO5	11p14.3	0.031259	0.542456	0.654720242
ZNF354A	5q35.3	-0.03124	0.542726	0.655006022
HEPACAM	11q24.2	-0.03123	0.542884	0.655157176
FCGR3B	1q23.3	0.031222	0.542934	0.655178896
TVP23A	16p13.13	0.031203	0.543181	0.655407008
CIDEA	18p11.21 18	-0.0312	0.543189	0.655407008
CSAG2	Xq28	-0.03117	0.543669	0.655947129
PILRA	7q22.1	0.03116	0.543735	0.655986658
ESRP1	8q22.1	-0.03116	0.543802	0.656027776
ZYG11B	1p32.3	0.031135	0.544064	0.656304073
AGRP	16q22.1	-0.03111	0.544331	0.656587579
PHKA1	Xq13.1	-0.0311	0.544529	0.65678628
OR2B11	1q44	0.031096	0.544563	0.656787963
CRTC2	1q21.3	0.031082	0.544755	0.656957473
OR2T33	1q44	0.031078	0.544797	0.656957473
EIF3I	1p35.2	-0.03108	0.544802	0.656957473
ZNF703	8p11.23	-0.03106	0.544997	0.657153225
GPR119	Xq26.1	-0.03106	0.545079	0.657212853
NDUFB3	2q33.1	-0.03103	0.545393	0.657551508
TAF9	5q13.2	0.031006	0.545736	0.657925567
PIWIL3	22q11.23	0.031001	0.545804	0.657967879
EEF1A1	6q13	-0.03099	0.545895	0.658001832
TSTD2	9q22.33	-0.03099	0.545898	0.658001832
MAF	16q23.2	-0.03098	0.546026	0.658116945
LINC00488	3q13.13	0.03098	0.546076	0.658137471
FBXL21P	5q31.1	-0.03095	0.546401	0.658489403
PYDC2	3q28	-0.03094	0.546543	0.658587531
S1PR2	19p13.2	0.030943	0.546548	0.658587531
KLHDC1	14q21.3	-0.03091	0.54696	0.659035888
PLA2G2F	1p36.12	0.030909	0.546986	0.659035888
GEMIN8P4	1p22.2	0.030897	0.547152	0.659195432
UBLCP1	5q33.3	0.030893	0.547194	0.65920626
MYPOP	19q13.32	-0.03089	0.547244	0.659227184
AP2M1	3q27.1	-0.03088	0.547333	0.659295225
CHRNA1	17p13.1	-0.03085	0.5478	0.659817692
SCRN2	17q21.32	-0.03084	0.54792	0.659877536
CNGA3	2q11.2	-0.03084	0.54793	0.659877536
PMP22	17p12	0.030835	0.547956	0.659877536
CDKL5	Xp22.13	-0.03083	0.547981	0.659877536
SPAG9	17q21.33	-0.03081	0.548281	0.660188899
HRH2	5q35.2	0.030808	0.548306	0.660188899
SNORA22	7q11.21	-0.0308	0.548381	0.660239768
PRDM15	21q22.3	-0.03078	0.548633	0.660472742
MYL6	12q13.2	0.030782	0.548642	0.660472742
C12ORF50	12q21.32	-0.03078	0.548674	0.660472742
PFN1P2	1p11.2	-0.03077	0.548812	0.660537387
SEMA3E	7q21.11	-0.03077	0.54882	0.660537387
RBM17	10p15.1	-0.03077	0.548826	0.660537387
TMEM100	17q22	-0.03075	0.549073	0.660778289
SPANXN3	Xq27.3	0.030747	0.549092	0.660778289
COX6A2	16p11.2	0.030731	0.549301	0.660955779

UNCX	7p22.3	0.030731	0.549306	0.660955779
STX5	11q12.3	0.030716	0.549503	0.661125337
CHD8	14q11.2	0.030714	0.549526	0.661125337
MCCD1	6p21.33	-0.03071	0.549546	0.661125337
PRKCI	3q26.2	0.030697	0.54975	0.661325021
GPRIN2	10q11.22	0.030694	0.549778	0.661325021
CDK2	12q13.2	-0.03066	0.55019	0.661780488
ATF7IP2	16p13.2-p13.13	-0.03065	0.550313	0.66188899
NUF2	1q23.3	-0.03065	0.550366	0.661913258
ACAA1	3p22.2	-0.03063	0.55068	0.662250909
ACLY	17q21.2	-0.03062	0.550772	0.662322355
TIMP1	Xp11.3	-0.03059	0.551148	0.66273424
SNORA38B	17q24.2	0.030564	0.551471	0.663082531
HIST1H3D	6p22.2	-0.03056	0.551526	0.663109787
BBIP1	10q25.2	-0.03054	0.551796	0.663393694
CXADRP2	15q11.2	0.03053	0.551924	0.663501705
BCO2	11q23.1	0.030523	0.552015	0.663501705
GXYLT1	12q12	-0.03052	0.55202	0.663501705
NDUFB6	9p21.1	-0.03052	0.552045	0.663501705
IL20	1q32.1	0.030519	0.55206	0.663501705
GAD2	10p12.1	-0.03052	0.552084	0.663501705
ASB14	3p14.3	-0.0305	0.552275	0.663691607
PTPN23	3p21.31	-0.03049	0.552389	0.663788341
OR56A3	11p15.4	-0.03045	0.55291	0.664373884
DYNLT3	Xp11.4	-0.03045	0.552946	0.664378262
MAD2L1BP	6p21.1	0.030437	0.553132	0.664561083
FAM106A	17p11.2	0.030433	0.553182	0.66458108
GRK2	11q13.2	-0.03041	0.55348	0.664899771
IGSF3	1p13.1	-0.0304	0.553567	0.664931949
GPR52	1q25.1	-0.0304	0.553582	0.664931949
BPIFA2	20q11.21	0.030401	0.553606	0.664931949
ZNF833P	19p13.2	-0.03039	0.553736	0.665047345
DDX20	1p13.2	-0.03036	0.554109	0.665456356
KIF23	15q23	0.030359	0.554146	0.665460336
SSX1	Xp11.23	-0.03035	0.554255	0.665518432
MCHR1	22q13.2	-0.03035	0.554261	0.665518432
CT47A2	Xq24	0.03033	0.554529	0.665800229
FAHD2A	2q11.1	-0.03032	0.554722	0.665992768
FAM25BP	10q11.22	0.030297	0.554956	0.666233814
IAPP	12p12.1	0.03029	0.555056	0.666301353
H3F3AP5	Xp11.22	0.030288	0.555079	0.666301353
STXBP4	17q22	-0.03028	0.555157	0.666354722
JAGN1	3p25.3	0.030265	0.555381	0.666577118
DNAJC21	5p13.2	0.030263	0.555409	0.666577118
RACK1	5q35.3	-0.03025	0.555521	0.666672265
CIP2A	3q13.13	0.030238	0.555735	0.666876077
POC1A	3p21.2	0.030236	0.555758	0.666876077
TRIM63	1p36.11	0.030233	0.555796	0.666882343
SDSL	12q24.13	-0.03022	0.555914	0.666965626
PBXIP1	1q21.3	-0.03022	0.555932	0.666965626
ATPAF1	1p33	-0.03022	0.555972	0.66697016
OPA1	3q29	0.030217	0.556003	0.66697016
CDK2AP2	11q13.2	-0.03021	0.556132	0.667085574
FBXL13	7q22.1	-0.0302	0.556203	0.667130034
JAZF1	7p15.2-p15.1	-0.0302	0.556282	0.667184678
IFI6	1p35.3	0.030183	0.556456	0.667354143
IFNG	12q15	0.03018	0.556494	0.667359044
DNAJC10	2q32.1	0.030176	0.556538	0.667372178

DPRX	19q13.42	0.030139	0.557024	0.667914891
KLHL33	14q11.2	0.030127	0.557177	0.668059048
MAGEE2	Xq13.3	-0.03012	0.557217	0.668066885
BRF2	8p11.23	-0.03011	0.557425	0.668276544
C11ORF54	11q21	0.030052	0.55817	0.669128995
PRRC2B	9q34.13	-0.03005	0.558243	0.669133959
GSTCD	4q24	0.030045	0.558255	0.669133959
SLC35E2A	1p36.33	-0.03004	0.558274	0.669133959
DENND5B	12p11.21	0.030015	0.558647	0.669540292
MRPL43	10q24.31	0.02998	0.55911	0.670054982
ADAT1	16q23.1	-0.02997	0.55918	0.670099469
RO60	1q31.2	0.029966	0.559299	0.670188442
THAP7-AS1	22q11.21	0.029964	0.559321	0.670188442
SLFN11	17q12	-0.02996	0.559395	0.670236312
DPYS	8q22.3	0.029929	0.559785	0.67061454
MTFMT	15q22.31	0.029926	0.559821	0.67061454
ZNF705D	8p23.1	0.029924	0.559846	0.67061454
KLRC2	12p13.2	-0.02992	0.559857	0.67061454
ZNF823	19p13.2	-0.02992	0.559898	0.67061454
XRCC6P5	Xq22.1	0.029919	0.559911	0.67061454
LRTM2	12p13.33	-0.02988	0.560469	0.671212817
SLC26A8	6p21.31	0.029876	0.560478	0.671212817
DALRD3	3p21.31	-0.02987	0.560514	0.671215363
C14ORF119	14q11.2	0.029862	0.560652	0.671341086
KCNJ15	21q22.13-q22.2	-0.02986	0.560747	0.671414066
PRAMEF9	1p36.21	0.029849	0.560835	0.671479317
IL27	16p12.1-p11.2	-0.02983	0.561093	0.671748146
HNRNPUL1	19q13.2	-0.0298	0.561515	0.672134225
TCEAL8	Xq22.1	-0.0298	0.561515	0.672134225
C3ORF84	3p21.31	0.029797	0.561516	0.672134225
CYYR1	21q21.3	-0.02978	0.561741	0.672363516
ACY1	3p21.2	-0.02977	0.56186	0.672465577
SNORA18	11q21	-0.02976	0.561985	0.672575089
TRMT44	4p16.1	0.029758	0.562024	0.672581641
SNORA81	3q27.3	-0.02972	0.562466	0.673068826
SCARNA27	6p24.3	0.029722	0.562498	0.673068826
ZNF557	19p13.2	0.029717	0.562563	0.673084764
ATG5	6q21	-0.02972	0.562579	0.673084764
AGO1	1p34.3	-0.02971	0.562667	0.673149575
OR2A5	7q35	-0.02971	0.562714	0.673165663
APOA1	11q23.3	0.02969	0.562925	0.673374499
PDSS1	10p12.1	0.029687	0.562955	0.673374499
USP30	12q24.11	-0.02968	0.563106	0.673513094
CFAP45	1q23.2	0.029673	0.56314	0.673513094
ZFYVE16	5q14.1	0.029668	0.563213	0.673513094
DTX2	7q11.23	-0.02967	0.563239	0.673513094
CAPZA2	7q31.2	-0.02966	0.563293	0.673513094
CNNM3	2q11.2	-0.02966	0.563293	0.673513094
MTDH	8q22.1	-0.02966	0.563307	0.673513094
HBG1	11p15.4	0.029657	0.563359	0.673535674
SNORA61	1p35.3	0.029653	0.563405	0.673550313
FAM160B1	10q25.3	0.029644	0.563531	0.673660089
FAM167A-AS1	8p23.1	0.029633	0.56367	0.673782927
TSFM	12q14.1	0.029631	0.563701	0.673782927
UBE4A	11q23.3	-0.02962	0.563888	0.673966314
SV2C	5q13.3	-0.02961	0.563953	0.674003685
ACTN1	14q24.1 14q22-q24	-0.02959	0.564177	0.674231467
FCHSD2	11q13.4	-0.02959	0.564245	0.674272559

OR1Q1	9q33.2	-0.02958	0.564331	0.674335218
NDUFS5	1p34.3	-0.02957	0.564478	0.674469956
SMDT1	22q13.2	0.029564	0.564577	0.674548324
XKR7	20q11.21	-0.02955	0.564728	0.674688219
C17ORF77	17q25.1	-0.02955	0.564797	0.674731001
RPP25L	9p13.3	-0.02954	0.564906	0.674820712
DCAF10	9p13.2	-0.02953	0.565005	0.674899084
PSME4	2p16.2	-0.02953	0.565053	0.674916448
FCN2	9q34.3	-0.02952	0.565095	0.674925768
STIM1	11p15.4	0.029519	0.56517	0.674954987
KIF22	16p11.2	-0.02952	0.565187	0.674954987
NDUFA1	Xq24	-0.02951	0.565261	0.674976163
PSAP	10q22.1	0.029511	0.565272	0.674976163
LINC02685	11p11.2	-0.02951	0.565328	0.675003353
TRIM37	17q22	-0.0295	0.565442	0.675099006
TACR1	2p12	-0.02949	0.565617	0.675248038
RBM46	4q32.1	-0.02948	0.565634	0.675248038
FBXO43	8q22.2	-0.02947	0.565837	0.675440006
B3GLCT	13q12.3	0.029465	0.565885	0.675440006
NUDT17	1q21.1	0.029464	0.565896	0.675440006
FOXN3-AS2	14q32.11	-0.02946	0.565973	0.675491019
AQP12A	2q37.3	-0.02943	0.566368	0.675895447
SPCS1	3p21.1	-0.02943	0.566379	0.675895447
SPATA17	1q41	-0.0294	0.566805	0.676363738
ACTN3	11q13.2	-0.02938	0.567002	0.676544248
TAF1L	9p21.1	-0.02938	0.567024	0.676544248
TAS2R39	7q34	0.029371	0.567119	0.67661703
CISD3	17q12	-0.02937	0.567192	0.676640368
ID2	2p25.1	0.029365	0.567206	0.676640368
LCE2A	1q21.3	0.029354	0.56735	0.676771394
GGNBP1	6p21.31	0.029343	0.567492	0.67690045
ZNF561	19p13.2	0.029331	0.567657	0.677056955
ZNF837	19q13.43	-0.02932	0.567823	0.677215035
SUPT5H	19q13.2	-0.02931	0.567985	0.677341719
UCHL5	1q31.2	0.029303	0.568019	0.677341719
NDUFAB1	16p12.2	-0.0293	0.568031	0.677341719
PCDH15	10q21.1	0.0293	0.568067	0.677344858
ARL15	5q11.2	-0.02928	0.568372	0.67766813
AGPAT2	9q34.3	0.029241	0.568845	0.678160859
IMP3	15q24.2	-0.02924	0.568853	0.678160859
AKR1C4	10p15.1	-0.02923	0.568981	0.678272184
TBATA	10q22.1	-0.02918	0.569609	0.678965546
RTN4RL1	17p13.3	-0.02918	0.56963	0.678965546
LTA4H	12q23.1	0.029178	0.569676	0.678980283
SLC27A1	19p13.11	0.02917	0.569782	0.679065496
ZNF223	19q13.31	-0.02915	0.569998	0.679283134
ABCE1	4q31.21	-0.02914	0.570141	0.679412498
TOPORS	9p21.1	0.029125	0.570371	0.679590053
FAM186A	12q13.12	0.029125	0.570374	0.679590053
VPS8	3q27.2	-0.02912	0.570391	0.679590053
IL21	4q27	-0.02911	0.570541	0.679706159
NEK9	14q24.3	-0.02911	0.570557	0.679706159
DHX33	17p13.2	0.029098	0.570734	0.679821223
SRSF11	1p31.1	-0.0291	0.570742	0.679821223
IL1RAPL1	Xp21.3-p21.2	-0.0291	0.570755	0.679821223
GABRR3	3q11.2	0.029063	0.571193	0.680302597
FAM9B	Xp22.31	0.029046	0.571417	0.68031876
ACTRT2	1p36.32	-0.02904	0.571547	0.68031876

RBMY1A3P	Yp11.2	-0.02904	0.571547	0.68031876
FAM197Y2	Yp11.2	-0.02904	0.571547	0.68031876
TFAP2D	6p12.3	-0.02904	0.571547	0.68031876
KRTAP20-4	21q22.11	-0.02904	0.571547	0.68031876
TSPY4	Yp11.2	-0.02904	0.571547	0.68031876
CBLL2	Xp22.11	-0.02904	0.571547	0.68031876
DEFB107A	8p23.1	-0.02904	0.571547	0.68031876
PRAMEF22	1p36.21	-0.02904	0.571547	0.68031876
NOLC1	10q24.32	-0.02903	0.571601	0.680342593
AMDHD2	16p13.3	0.029016	0.571817	0.680560261
GPATCH4	1q22-q23.1	-0.029	0.571969	0.680682519
ADIPOQ	3q27.3	-0.029	0.571988	0.680682519
HIST1H3H	6p22.1	0.028996	0.572091	0.680764978
SNORA64	16p13.3	-0.02897	0.572377	0.681064012
PRH2	12p13.2	-0.02897	0.572474	0.681138944
JMJD8	16p13.3	0.02894	0.572822	0.681510158
TMEM259	19p13.3	0.028938	0.572854	0.681510158
NEFL	8p21.2	0.028934	0.572905	0.681530233
ACSM2A	16p12.3	-0.02893	0.57302	0.681589178
PLPPR2	19p13.2	-0.02893	0.573022	0.681589178
CSN1S1	4q13.3	-0.02892	0.573108	0.681627722
BAGE	21p11.1	-0.02892	0.573132	0.681627722
SLC4A1	17q21.31	0.028914	0.573174	0.681627722
PTPN14	1q32.3-q41	0.028913	0.573191	0.681627722
NCALD	8q22.3	-0.02891	0.573239	0.681645003
LINC00319	21q22.3	0.028902	0.573332	0.681687336
SIRPD	20p13	0.028901	0.573343	0.681687336
SC5D	11q23.3-q24.1	-0.0289	0.573411	0.681727423
FRMD1	6q27	-0.02889	0.573535	0.681834486
PPP5C	19q13.32	0.028863	0.573845	0.682162895
REXO1	19p13.3	-0.02886	0.573897	0.682183567
SNCB	5q35.2	-0.02884	0.57411	0.682396364
SCRT2	20p13	-0.02884	0.574201	0.682464593
AANAT	17q25.1	0.028814	0.574504	0.682783509
C2ORF83	2q36.3	-0.0288	0.574645	0.682905436
SLC43A3	11q12.1	0.028801	0.574674	0.682905436
GNAL	18p11.21	-0.02877	0.575052	0.683313618
OSBPL8	12q21.2	0.028766	0.575135	0.683371698
ELOVL3	10q24.32	0.028761	0.5752	0.683408365
CBWD1	9p24.3	0.028758	0.575247	0.683423209
LIMS1	2q12.3	0.028742	0.575461	0.683637668
CLK2P1	7p15.3	-0.02873	0.575576	0.683733127
NCF4	22q12.3	0.028725	0.575687	0.683825188
DGCR9	22q11.21	0.028684	0.576228	0.68442723
PPP2R1A	19q13.41	-0.02868	0.5763	0.684471884
HOOK1	1p32.1	0.028671	0.576406	0.684557159
NEK8	17q11.2	-0.02866	0.576498	0.684625425
MTMR9	8p23.1	0.028658	0.576581	0.684683485
CTRB1	16q23.1	0.028619	0.577095	0.685253304
CFHR3	1q31.3	-0.02861	0.577176	0.68530615
OR1J1	9q33.2	-0.02861	0.577208	0.68530615
GOLGA2P10	15q25.2	-0.02859	0.577461	0.685565667
PDGFRA	4q12	-0.02858	0.577613	0.685695611
PTH2R	2q34	-0.02858	0.57765	0.685695611
STX1B	16p11.2	-0.02858	0.577673	0.685695611
USP28	11q23.2	-0.02857	0.577722	0.685712831
CASP2	7q34	0.028565	0.577816	0.685770939
APIP	11p13	-0.02856	0.577868	0.685770939



B3GALNT2	1q42.3	-0.02856	0.57792	0.685770939
NME3	16p13.3	-0.02856	0.57794	0.685770939
MKRN3	15q11.2	-0.02856	0.577942	0.685770939
CHIC2	4q12	0.02853	0.57828	0.686130955
BAGE2	21p11.2	0.028518	0.578436	0.686276119
MGAT4C	12q21.31-q21.32	-0.02849	0.578782	0.686645822
UPK3A	22q13.31	0.028475	0.579009	0.686874054
BUB1	2q13	0.028469	0.57909	0.686930095
AP2A2	11p15.5	0.028465	0.579145	0.686954107
TFPI	2q32.1	-0.02844	0.579469	0.687295003
ZMYM6	1p34.3	0.028438	0.579501	0.687295003
RBM14	11q13.2	-0.02843	0.579647	0.687417946
TCEAL9	Xq22.2	0.028425	0.579673	0.687417946
IPO4	14q12	-0.02842	0.579774	0.687496448
TM6SF2	19p13.11	-0.02839	0.580085	0.687793266
KHDRBS1	1p35.2	-0.02839	0.580101	0.687793266
TOX4	14q11.2	0.028391	0.580127	0.687793266
SPRYD4	12q13.3	0.028378	0.580305	0.687963745
LINC01634	22q11.21	-0.02837	0.580391	0.688004909
ARHGEF38	4q24	0.02837	0.580409	0.688004909
RNF122	8p12	0.028363	0.580512	0.688086844
RIPK4	21q22.3	-0.02835	0.580696	0.688264145
CENPN	16q23.2	-0.02833	0.580883	0.688424567
MRPL19	2p12	-0.02833	0.5809	0.688424567
HSPA8	11q24.1	0.028328	0.580972	0.688469005
SLC6A9	1p34.1	-0.02831	0.581202	0.688700839
IDH3B	20p13	-0.02829	0.581464	0.688970184
SUN2	22q13.1	0.028283	0.581582	0.689069148
LINC00298	2p25.1	-0.02828	0.581651	0.689111056
GPER1	7p22.3	0.028264	0.581826	0.689277306
CD58	1p13.1	0.028262	0.581861	0.689277433
FAM171A1	10p13	0.028242	0.582125	0.689550236
YIPF6	Xq12-q13.1	-0.02824	0.582186	0.689581029
CACNA1G	17q21.33	-0.02823	0.58222	0.689581029
PIK3R4	3q22.1	0.028225	0.58235	0.689693762
BACH2	6q15	-0.02822	0.582469	0.689794416
ITGAD	16p11.2	0.02821	0.582546	0.689844854
PRAMEF11	1p36.21	-0.02819	0.582772	0.690071116
DISP3	1p36.22	-0.02816	0.583183	0.690516724
ITGAX	16p11.2	0.028143	0.583441	0.69078199
BRCA2	13q13.1	-0.02812	0.583724	0.691075421
FLJ36000	17p11.2	-0.02812	0.583769	0.691088637
OR13C3	9q31.1	0.028107	0.583923	0.691230052
BSX	11q24.1	-0.02809	0.584102	0.691401111
TLL1	4q32.3	0.028089	0.584173	0.691443634
KCNAB3	17p13.1	0.028082	0.584268	0.691515259
ATG10	5q14.1-q14.2	0.028077	0.584326	0.691543263
KCNMA1	10q22.3	0.028062	0.584528	0.691741223
KIAA1217	10p12.2-p12.1	0.028057	0.584594	0.691778824
KCNK3	2p23.3	-0.02804	0.584873	0.692067459
HIST1H3A	6p22.2	0.028032	0.584934	0.692099032
LINC00574	6q27	-0.02803	0.584976	0.692108089
PUM1	1p35.2	0.028018	0.585128	0.692246544
MAJIN	11q13.1	-0.02801	0.585172	0.692258177
DROSHA	5p13.3	-0.028	0.585312	0.692311767
WASHC4	12q23.3	-0.028	0.585318	0.692311767
PNPO	17q21.32	-0.028	0.58533	0.692311767
GPR87	3q25.1	-0.028	0.585373	0.692311767

FOXF2	6p25.3	-0.028	0.58539	0.692311767
NR1D1	17q21.1	-0.02797	0.585781	0.692733254
FGD6	12q22	0.027952	0.586008	0.692960304
CCDC28B	1p35.2	0.027947	0.586068	0.692991069
NT5M	17p11.2	-0.02794	0.58623	0.693141306
PDZD9	16p12.2	-0.02793	0.586303	0.693186369
MTMR14	3p25.3	-0.02791	0.586614	0.693513497
RNASE10	14q11.2	-0.0279	0.58668	0.693549994
C14ORF178	14q24.3	-0.02788	0.586927	0.693776546
OCM2	7q21.3	-0.02788	0.586977	0.693776546
OXSM	3p24.2	0.027877	0.587007	0.693776546
LOC220729	3q29	0.027877	0.58701	0.693776546
FADD	11q13.3	-0.02787	0.587143	0.693892662
EML4	2p21	0.02786	0.587238	0.693964391
ISL2	15q24.3	-0.02786	0.587277	0.693969515
FPGS	9q34.11	0.027852	0.587345	0.69400883
ZNF341	20q11.22	-0.02784	0.587446	0.694027194
MED13L	12q24.21	0.027844	0.58746	0.694027194
OR56B4	11p15.4	-0.02784	0.58747	0.694027194
SPHKAP	2q36.3	0.027841	0.587499	0.694027194
TNNT3	11p15.5	-0.02783	0.587582	0.6940844
B4GALT3	1q23.3	-0.02783	0.587651	0.694125076
KRTAP9-8	17q21.2	-0.02782	0.587712	0.694135377
KLHL12	1q32.1	-0.02782	0.587729	0.694135377
GDF7	2p24.1	-0.02782	0.587767	0.694138832
JMY	5q14.1	0.027806	0.587969	0.694336856
RBM22	5q33.1	0.027799	0.588062	0.694405163
CMTM5	14q11.2	-0.02777	0.588413	0.694779094
PCDHGB7	5q31.3	-0.02777	0.588471	0.694806376
SERPINB13	18q21.33	-0.02776	0.588536	0.694841976
RTRAF	14q22.1	0.027757	0.588617	0.694896921
TAOK1	17q11.2	0.027752	0.588686	0.694920853
TMEM248	7q11.21	-0.02775	0.588707	0.694920853
LYRM2	6q15	0.027744	0.588802	0.694992576
PVRIG	7q22.1	0.027684	0.589607	0.69590111
NLRP2	19q13.42	0.027671	0.589784	0.696069752
LINC00189	21q21.3	0.027663	0.589889	0.696102657
SGCZ	8p22	0.027662	0.589906	0.696102657
PBX3	9q33.3	-0.02766	0.589916	0.696102657
GBP6	1p22.2	-0.02764	0.590179	0.696371482
SNORD10	17p13.1	-0.02761	0.590566	0.696786912
COMMD3	10p12.2	0.027604	0.590684	0.696885149
GJC2	1q42.13	0.027569	0.59115	0.697394471
RRBP1	20p12.1	0.027566	0.591191	0.697401258
MAB21L3	1p13.1	-0.02756	0.591333	0.697527664
ARHGAP4	Xq28	0.027543	0.591504	0.697688362
FLACC1	2q33.1	-0.02753	0.591634	0.697800262
MBD4	3q21.3	0.027522	0.591788	0.697941289
NAF1	4q32.2	-0.02752	0.591869	0.697995941
SUCLG1	2p11.2	-0.0275	0.592067	0.698187391
CCDC78	16p13.3	-0.0275	0.59211	0.698197582
PGK1	Xq21.1	-0.02749	0.59222	0.698286434
KLK13	19q13.41	0.027462	0.592588	0.698679426
RCOR3	1q32.2-q32.3	-0.02746	0.592648	0.698686393
ASPHD1	16p11.2	-0.02746	0.592664	0.698686393
SRSF5	14q24.1	0.027446	0.592812	0.698797088
MZT2B	2q21.1	-0.02744	0.59283	0.698797088
MT1L	16q13	-0.02744	0.592863	0.698797088

OR10G7	11q24.2	0.027432	0.592991	0.69890744
OR2C3	1q44	0.027422	0.593133	0.698993764
PAK6	15q15.1	0.027422	0.593134	0.698993764
PTCRA	6p21.1	0.027408	0.593325	0.699176938
BAALC	8q22.3	-0.0274	0.593411	0.69923734
TMC7	16p12.3	0.027392	0.593544	0.6993527
MPV17L2	19p13.11	-0.02738	0.593676	0.699447863
GABRB1	4p12	-0.02738	0.593694	0.699447863
GAR1	4q25	-0.02737	0.593866	0.699609015
SKP2	5p13.2	-0.02736	0.593939	0.699653397
ID2B	3p14.2	-0.02735	0.594043	0.699721631
PI4K2A	10q24.2	-0.02735	0.594066	0.699721631
OVCH2	11p15.4	0.027345	0.594172	0.699786443
AZI2	3p24.1	0.027344	0.594191	0.699786443
SPATA6L	9p24.2-p24.1	0.027336	0.594287	0.699858192
PSG7	19q13.31	0.027322	0.594479	0.700043522
KCNK4	11q13.1	-0.02731	0.594674	0.700231616
RAB37	17q25.1	-0.02729	0.594868	0.700419048
SPATA16	3q26.31	-0.02726	0.595283	0.700843214
APOOL	Xq21.1	0.027261	0.595299	0.700843214
SPACA9	9q34.13	0.027257	0.595357	0.700870473
UBN1	16p13.3	-0.02725	0.595432	0.70091827
HEXA	15q23	0.027245	0.59552	0.700979758
GDF15	19p13.11	0.02722	0.595863	0.701342495
CDC37	19p13.2	0.027209	0.596005	0.701434661
IFT172	2p23.3	0.027209	0.596011	0.701434661
TP53	17p13.1	0.027184	0.59634	0.701780337
OR5T1	11q12.1	-0.02718	0.596423	0.701836645
CEBPG	19q13.11	0.027176	0.596459	0.701838257
UGGT1	2q14.3	-0.02716	0.596663	0.70203672
AGMO	7p21.2	-0.02715	0.59679	0.702108331
SOWAHC	2q13	0.027151	0.596794	0.702108331
ASGR2	17p13.1	-0.02714	0.596914	0.702208915
FGF2	4q28.1	-0.02713	0.597018	0.702261671
SLC66A1L	3q25.32	-0.02713	0.597056	0.702261671
BBC3	19q13.32	-0.02713	0.597088	0.702261671
SPHK1	17q25.1	-0.02713	0.5971	0.702261671
AMY1A	1p21.1	-0.02712	0.597194	0.702331779
KIF18A	11p14.1	-0.02711	0.597297	0.702412035
SSU72	1p36.33	0.027084	0.597696	0.70283997
OR51B2	11p15.4	0.027081	0.597735	0.702844284
INPP4B	4q31.21	-0.02708	0.597798	0.702865838
LINC00305	18q22.1	-0.02707	0.597824	0.702865838
OR10J1	1q23.2	0.027066	0.597938	0.702958376
TOMM70	3q12.2	0.027061	0.598011	0.703003544
WNT2B	1p13.2	0.027054	0.598107	0.703071711
LBX2	2p13.1	0.027051	0.598139	0.703071711
CISD1	10q21.1	0.027045	0.598224	0.703129769
MRPL46	15q25.3	0.027038	0.598326	0.703208208
GINS4	8p11.21	0.027035	0.598361	0.703208208
LINC00494	20q13.13	0.027012	0.598671	0.703531122
CALHM2	10q24.33	-0.02701	0.598722	0.70355038
C5AR2	19q13.32	0.02699	0.598977	0.703808005
CASTOR3	7q22.1	0.026984	0.599056	0.703841018
CKB	14q32.33	-0.02698	0.599075	0.703841018
KLKP1	19q13.33	-0.02698	0.599167	0.70386806
PEX1	7q21.2	-0.02698	0.599168	0.70386806
XCL1	1q24.2	-0.02693	0.599821	0.704593317

ACVR2A	2q22.3-q23.1	0.026918	0.599947	0.704700282
LARS2	3p21.31	-0.0269	0.600154	0.704902287
VASH1	14q24.3	-0.02687	0.600534	0.705306562
LINC02381	12q13.13	-0.02687	0.60058	0.705320052
MOV10	1p13.2	-0.02687	0.60063	0.705336971
BCL2A1	15q25.1	0.026864	0.600674	0.705347034
TUBB	6p21.33	-0.02685	0.60091	0.705569419
RGPD1	2p11.2	0.026845	0.600934	0.705569419
LINC00235	16p13.3	-0.02683	0.601088	0.705709192
WDR49	3q26.1	0.026831	0.601126	0.705712093
LINC00242	6q27	0.026819	0.601291	0.705865248
PCBD2	5q31.1	0.026816	0.601328	0.705866777
C7ORF57	7p12.3	-0.02681	0.601393	0.705901798
NFXL1	4p12	0.026793	0.601635	0.706126167
FGF6	12p13.32	-0.02679	0.601655	0.706126167
OR52W1	11p15.4	-0.02678	0.601874	0.706342467
FLJ34503	6q21	-0.02675	0.602271	0.706766187
NFIX	19p13.13	0.02672	0.602628	0.707113376
S100A8	1q21.3	-0.02672	0.602637	0.707113376
OR4D11	11q12.1	0.026714	0.602718	0.707166591
WDFY2	13q14.3	-0.02667	0.603245	0.707744139
MRPS5	2q11.1	-0.02665	0.60352	0.707990656
ISCA2	14q24.3	-0.02665	0.603526	0.707990656
ZP4	1q43	-0.02664	0.603774	0.70823995
SENP3	17p13.1	-0.02663	0.603854	0.7082921
HMGA1	6p21.31	0.026623	0.603947	0.708360451
CEP170P1	4q26	-0.02662	0.603992	0.708371417
ANGPTL5	11q22.1	-0.02662	0.604045	0.708391611
PCDH11Y	Yp11.2	0.026595	0.604328	0.708682838
NECAB2	16q23.3	-0.02659	0.604462	0.708798037
TRHDE-AS1	12q21.1	0.02656	0.604806	0.709160189
TAC4	17q21.33	0.026552	0.604914	0.7092455
MTERF2	12q23.3	-0.02653	0.605256	0.709580194
MYO5A	15q21.2	-0.02653	0.605271	0.709580194
SWT1	1q25.3	0.026519	0.60537	0.709655418
HELB	12q14.3 12q	0.026511	0.605476	0.709728129
MRPL55	1q42.13	-0.02651	0.605537	0.709728129
PAPOLB	7p22.1	0.026506	0.605539	0.709728129
ATG9A	2q35	-0.02647	0.605968	0.710104027
RSKR	17q11.2	-0.02647	0.606024	0.710104027
CXORF58	Xp22.11	-0.02647	0.606065	0.710104027
TRAFD1	12q24.13	0.026467	0.606068	0.710104027
CENPO	2p23.3	-0.02647	0.606071	0.710104027
NYAP2	2q36.3	0.026461	0.606154	0.710104027
TENT5D	Xq21.1	-0.02646	0.606168	0.710104027
HCRT	17q21.2	-0.02646	0.606171	0.710104027
SLC25A42	19p13.11	-0.02646	0.606211	0.710104027
CGA	6q14.3	0.026457	0.606214	0.710104027
SEC23A	14q21.1	0.026452	0.606279	0.710138426
CCDC127	5p15.33	-0.02644	0.606478	0.710330388
RIT1	1q22	0.026429	0.606596	0.710426205
RPL3L	16p13.3	-0.02641	0.606865	0.710699975
RPS15AP10	1p34.1	-0.0264	0.60696	0.710728968
OR4D5	11q24.1	-0.0264	0.60696	0.710728968
PSMB2	1p34.3	-0.02639	0.607112	0.710864431
RAB15	14q23.3	-0.02638	0.607305	0.711028597
HMGN3	6q14.1	-0.02638	0.607323	0.711028597
MRPS25	3p25.1	-0.02636	0.607537	0.71123777

MYL7	7p13	-0.02632	0.608019	0.711738252
KLHDC9	1q23.3	-0.02632	0.608058	0.711738252
PDCD10	3q26.1	-0.02632	0.608071	0.711738252
HTATSF1	Xq26.3	-0.02631	0.608183	0.711827214
LINC00486	2p22.3	0.026298	0.608382	0.712018558
PPP1R2C	Xp11.3	0.02628	0.608619	0.712214367
PRF1	10q22.1	0.02628	0.60862	0.712214367
CSNK1A1P1	15q14	-0.02627	0.608739	0.712312248
ZNF219	14q11.2	-0.02626	0.608943	0.712509143
FAM124B	2q36.2	-0.02625	0.609003	0.71252881
LCE2D	1q21.3	0.026249	0.609042	0.71252881
CIB3	19p13.11	0.026245	0.609093	0.71252881
POM121L4P	22q11.21	-0.02624	0.609102	0.71252881
GAS6	13q34	0.026239	0.609184	0.712582818
OR4E2	14q11.2	0.026225	0.609365	0.712752436
PVALEF	17q25.3	-0.02622	0.609457	0.712818983
LPXN	11q12.1	0.026204	0.609657	0.713011228
FBXL4	6q16.1-q16.2	-0.0262	0.609722	0.713045202
PHF1	6p21.32	0.026181	0.609969	0.713292274
ATP23	12q14.1	0.026177	0.610022	0.713312496
PRAM1	19p13.2	0.026167	0.610157	0.713428961
CTDSP2	12q14.1	-0.02616	0.610224	0.713466368
NYAP1	7q22.1	0.02615	0.610392	0.713554523
TBL1Y	Yp11.2	-0.02615	0.610401	0.713554523
SESTD1	2q31.2	0.026149	0.610407	0.713554523
HHATL	3p22.1	-0.02614	0.61059	0.713727358
SLC16A8	22q13.1	-0.02613	0.610636	0.713739186
PRIM1	12q13.3	-0.02611	0.610918	0.714027671
TADA1	1q24.1	-0.0261	0.611054	0.714144142
TSC2	16p13.3	-0.02609	0.611151	0.714215921
SCAMP3	1q22	0.026089	0.611233	0.714270509
PRY2	Yq11.223	0.026069	0.611499	0.71451721
STK24	13q32.2	-0.02607	0.611516	0.71451721
CHDH	3p21.1	-0.02606	0.611607	0.714582111
CLK2	1q22	-0.02605	0.611764	0.714695791
ST8SIA6	10p12.33	-0.02605	0.611776	0.714695791
OR2AG1	11p15.4	-0.02604	0.611931	0.71480058
FPR2	19q13.41	0.026037	0.611937	0.71480058
IFNL1	19q13.2	-0.02603	0.612096	0.714929306
TAFA2	12q14.1	-0.02602	0.612127	0.714929306
RNH1	11p15.5	0.026018	0.612193	0.714929306
RFPL1S	22q12.2	-0.02601	0.612251	0.714929306
ZNF70	22q11.23	0.026014	0.612255	0.714929306
ATP12A	13q12.12 13q12.1-q12.3	0.026013	0.612261	0.714929306
KRTAP2-2	17q21.2	0.026007	0.612355	0.714996742
WDFY3-AS2	4q21.23	-0.026	0.612418	0.71502877
SLC22A20P	11q13.1	-0.02599	0.612629	0.715234156
ERCC6L2	9q22.32	-0.02598	0.612702	0.71527748
CLDN17	21q21.3	0.025978	0.61275	0.715291271
TRIM35	8p21.2	0.025973	0.612814	0.715310124
SLC23A2	20p13	0.025969	0.612867	0.715310124
ZNF518A	10q24.1	0.025969	0.612873	0.715310124
SEMA4A	1q22	-0.02596	0.612988	0.715402515
FAM117B	2q33.2	0.025948	0.613156	0.715525412
PRX	19q13.2	0.025947	0.613165	0.715525412
CYP4B1	1p33	0.025941	0.613248	0.715581556
ZNF385D	3p24.3	-0.02593	0.613456	0.715782033
ZEB2	2q22.3	-0.02592	0.613559	0.715861034

SERTAD4-AS1	1q32.2	0.025882	0.614059	0.716402184
CHTOP	1q21.3	0.025874	0.614164	0.716463223
CLRN1	3q25.1	-0.02587	0.614183	0.716463223
OR2V2	5q35.3	0.025869	0.614237	0.716484828
KCNN1	19p13.11	-0.02586	0.61437	0.716597458
GABRQ	Xq28	-0.02585	0.614497	0.716695998
CHIT1	1q32.1	0.025848	0.614526	0.716695998
POGZ	1q21.3	0.025843	0.614591	0.716730867
GABARAPL2	16q23.1	-0.02583	0.614792	0.71692301
LINC00303	1q32.1	-0.02577	0.615587	0.717795908
GSTO2	10q25.1	0.025769	0.615612	0.717795908
NKX2-4	20p11.22	-0.02576	0.615671	0.717822555
TRIM27	6p22.1	-0.02576	0.615751	0.717865591
CLDN25	11q23.2	0.025757	0.615779	0.717865591
EEF1AKMT2	10q26.13	-0.02575	0.615854	0.717910922
ALG10	12p11.1	0.025744	0.615957	0.717989569
PRELID1	5q35.3	0.025727	0.616191	0.718219632
CAMK2N1	1p36.12	-0.02571	0.616359	0.718373995
MAGEA1	Xq28	-0.02571	0.616436	0.718421981
VPS52	6p21.32	0.025697	0.616592	0.718562248
FAM166B	9p13.3	-0.02569	0.616652	0.718589537
KHDRBS2	6q11.1	0.025689	0.616706	0.718611219
FKBP4	12p13.33	0.025671	0.616947	0.718823212
NXNL1	19p13.11	0.025671	0.61696	0.718823212
BCLAF1	6q23.3	0.025652	0.617218	0.719082876
APOA4	11q23.3	-0.02565	0.617288	0.719088218
ASTN1	1q25.2	-0.02565	0.617295	0.719088218
STEAP4	7q21.12	0.02564	0.617381	0.71914671
KRT84	12q13.13	-0.02563	0.617522	0.719269145
ART1	11p15.4	0.02562	0.617653	0.719380254
CNR1	6q15	-0.02561	0.617737	0.719435486
C8ORF58	8p21.3	0.025609	0.617798	0.719464735
FOLH1	11p11.12	-0.02559	0.618046	0.719712065
OR12D2	6p22.1	0.025576	0.618254	0.719911939
OR51B4	11p15.4	-0.02557	0.618293	0.719915984
LTB4R	14q12	-0.02554	0.618753	0.720409416
SCARNA9	11q21	-0.02553	0.618831	0.720448428
LENEP	1q21.3	-0.02553	0.618858	0.720448428
PRSS54	16q21	-0.02553	0.618903	0.720458648
HCG9	6p22.1	-0.02551	0.619099	0.720633924
HSP90AA1	14q32.31	-0.02551	0.619126	0.720633924
RXFP3	5p13.2	-0.02549	0.619424	0.720939571
GJA8	1q21.2	0.025473	0.619679	0.721159181
ECM1	1q21.2	0.025472	0.619685	0.721159181
MAN1C1	1p36.11	-0.02546	0.6198	0.72125161
OR8K3	11q12.1	-0.02546	0.619862	0.72128134
RTN2	19q13.32	0.025456	0.61991	0.721295242
RPS4Y2	Yq11.223	0.025432	0.620237	0.721633713
SMAGP	12q13.13	-0.02542	0.620342	0.721714345
VCX2	Xp22.31	0.025419	0.620415	0.721756823
SPECC1L	22q11.23	0.025416	0.620455	0.721761406
ABCB10	1q42.13	0.025412	0.620511	0.721784936
SPDYE2	7q22.1	-0.0254	0.62061	0.721858139
CHST8	19q13.11	-0.02538	0.621006	0.722277472
CD200	3q13.2	0.025362	0.621195	0.722437179
RHOG	11p15.4	0.025361	0.621216	0.722437179
GJA10	6q15	0.025357	0.62127	0.722458215
CRISPLD2	16q24.1	-0.02535	0.621308	0.722460097

CTIF	18q21.1	-0.02533	0.621574	0.722728267
OR6C65	12q13.2	-0.02532	0.621779	0.722843606
RPL26	17p13.1	0.02532	0.621779	0.722843606
ZMIZ1-AS1	10q22.3	0.02532	0.621782	0.722843606
OAF	11q23.3	0.025298	0.622081	0.723078936
NAA35	9q21.33	0.025296	0.622108	0.723078936
GPR132	14q32.33	-0.0253	0.622118	0.723078936
MPP3	17q21.31	0.025295	0.622129	0.723078936
OR2D3	11p15.4	-0.02529	0.622188	0.72310634
YY1	14q32.2	0.025279	0.622342	0.723243118
ATG3	3q13.2	0.025274	0.622413	0.723283855
KRTAP10-2	21q22.3	0.025259	0.622623	0.723485185
ABHD16A	6p21.33	0.025243	0.622843	0.723681763
KCNS3	2p24.2	0.025241	0.622864	0.723681763
PDPR	16q22.1	0.025231	0.623007	0.723805213
VHL	3p25.3	0.025228	0.62305	0.723813179
TNKS2	10q23.32	0.025223	0.623108	0.723838422
MATN4	20q13.12	0.025193	0.623528	0.724285176
PIRT	17p12	-0.02517	0.623795	0.724552896
PADI4	1p36.13	-0.02517	0.623863	0.7245896
PARP8	5q11.1	0.025146	0.624179	0.724914881
KPNA7	7q22.1	-0.02514	0.624219	0.724919156
SRPRA	11q24.2	-0.02513	0.624357	0.725026671
ZDHHC1	16q22.1	0.025131	0.624384	0.725026671
SMC4	3q25.33	0.025127	0.624434	0.725043273
EIF2B2	14q24.3	0.025116	0.624586	0.72517709
LARP1	5q33.2	0.025097	0.62485	0.725441954
LOC729609	Xp22.12	-0.02508	0.625024	0.725582006
EMC7	15q14	-0.02508	0.625043	0.725582006
ATF5	19q13.33	0.025076	0.625141	0.725653756
SLC30A8	8q24.11	0.025068	0.625248	0.725725211
NLRP12	19q13.42	-0.02507	0.625275	0.725725211
SFI1	22q12.2	0.025057	0.6254	0.725827615
CYFIP2	5q33.3	0.025051	0.625486	0.725885566
TFAP2C	20q13.31	-0.02505	0.62555	0.725917435
HMG20A	15q24.3	-0.02503	0.625721	0.726073892
TAPBPL	12p13.31	0.02503	0.625771	0.726090455
SUPV3L1	10q22.1	0.025016	0.625973	0.726282913
RNF112	17p11.2	0.025012	0.626021	0.726284306
VPS37C	11q12.2	-0.02501	0.626051	0.726284306
DCAF7	17q23.3	-0.02501	0.626083	0.726284306
FAM184B	4p15.32-p15.31	-0.02498	0.626499	0.726724534
TLR4	9q33.1	-0.02497	0.626628	0.726831349
C8ORF74	8p23.1	0.024948	0.626908	0.727114758
KRTAP5-8	11q13.4	-0.02493	0.627108	0.727304407
SMG1P2	16p11.2	-0.02492	0.627312	0.72747861
SNORA52	11p15.5	0.024917	0.627331	0.72747861
ATXN10	22q13.31	-0.02488	0.627883	0.728076891
HTR3D	3q27.1	-0.02486	0.628133	0.72813733
NF1P2	15q11.2	0.024855	0.62819	0.72813733
LOC100287704	7q11.21	0.024855	0.62819	0.72813733
OR52E6	11p15.4	0.024855	0.62819	0.72813733
OR51B6	11p15.4	0.024855	0.62819	0.72813733
POM121L12	7p12.1	0.024855	0.62819	0.72813733
TNP1	2q35	0.024855	0.62819	0.72813733
CCDC61	19q13.32	0.024848	0.628291	0.728212517
RIT2	18q12.3	-0.02484	0.628402	0.728298592
SNORA38	6p21.33	-0.02483	0.628601	0.728487356

FOXR1	11q23.3	0.024816	0.628727	0.728591758
NTN3	16p13.3	-0.0248	0.628973	0.728834092
ALPL	1p36.12	-0.02476	0.629569	0.729482541
ELFN2	22q13.1	-0.02475	0.629668	0.729555241
RBMS2	12q13.3	-0.02473	0.629944	0.729833219
ZNF408	11p11.2	-0.02472	0.630061	0.729925682
IARS	9q22.31	-0.02471	0.630231	0.730071835
DCTN1-AS1	2p13.1	0.024703	0.630293	0.730071835
RBP5	12p13.31	0.024703	0.630296	0.730071835
NKX2-1	14q13.3	0.024693	0.630432	0.730186902
PIGQ	16p13.3	-0.02469	0.630511	0.730236034
TSC1	9q34.13	-0.02468	0.630576	0.730269783
MYO3B	2q31.1	0.024679	0.63063	0.730289041
RAB20	13q34	-0.02468	0.630681	0.730306198
GAB3	Xq28	0.024665	0.630821	0.730384052
DGKH	13q14.11	0.024665	0.630821	0.730384052
CTRC	1p36.21	-0.02465	0.630976	0.73052086
PRM2	16p13.13	-0.02465	0.631066	0.730583517
SCGB2A2	11q12.3	-0.02464	0.631177	0.730669987
UBALD2	17q25.1	-0.02463	0.631277	0.7307435
TRIM55	8q13.1	0.024626	0.631369	0.730784745
LINC01300	8q24.3	0.024624	0.631386	0.730784745
FARS2	6p25.1	0.024619	0.631462	0.730830907
TMEM87B	2q13	-0.0246	0.631716	0.731082221
CDC6	17q21.2	0.024583	0.631964	0.731326647
NKAIN3	8q12.3	-0.02457	0.63217	0.731523099
MUC7	4q13.3	0.024542	0.632524	0.731882505
P2RX6	22q11.21	0.02454	0.632554	0.731882505
HSFY2	Yq11.222	-0.02453	0.63266	0.731950457
HAVCR1	5q33.3	0.024531	0.632689	0.731950457
INIP	9q32	-0.02453	0.632722	0.731950457
ECH1	19q13.2	0.024522	0.632803	0.732001453
PRKCD	3p21.1	-0.02452	0.632865	0.732031721
ZXDC	3q21.3	0.024506	0.63303	0.732150962
NAP1L5	4q22.1 4q21-q22	0.024505	0.633042	0.732150962
THOC1	18p11.32	0.024485	0.633323	0.732392825
TPT1	13q14.13	-0.02448	0.633358	0.732392825
CTSL3P	9q21.33	-0.02448	0.633361	0.732392825
CT47A6	Xq24	0.024474	0.633479	0.732486962
CMAS	12p12.1	0.024459	0.633681	0.732678875
C4ORF50	4p16.1	0.024455	0.63374	0.732704672
ARL5B	10p12.31	0.024445	0.633881	0.732825766
MAGEB4	Xp21.2	0.024433	0.634042	0.732969092
ARHGAP10	4q31.23	0.02443	0.634079	0.7329692
POLDIP3	22q13.2	0.024402	0.634473	0.733383021
PDE2A	11q13.4	-0.02436	0.635119	0.734087296
CCDC174	3p25.1	-0.02435	0.635185	0.73409591
TLE3	15q23	-0.02435	0.6352	0.73409591
ZNF836	19q13.41	0.024328	0.635508	0.734393102
AFTPH	2p14	-0.02433	0.635541	0.734393102
TBC1D26	17p12	-0.02432	0.635567	0.734393102
ARHGAP42	11q22.1	0.024318	0.635646	0.734415044
INPP4A	2q11.2	-0.02431	0.635703	0.734415044
PTGES3	12q13.3 12	-0.02431	0.635726	0.734415044
ODAPH	4q21.1	0.024311	0.635733	0.734415044
PITX3	10q24.32	0.024291	0.636009	0.734691397
CALB2	16q22.2	-0.02428	0.636133	0.734792372
C11ORF94	11p11.2	0.024278	0.636197	0.734794617



UTS2B	3q28	0.024277	0.636208	0.734794617
RRAS2	11p15.2	-0.02427	0.636298	0.734856222
DCTN3	9p13.3	-0.02423	0.636912	0.735522663
SETD9	5q11.2	0.024219	0.637023	0.735564884
DFFB	1p36.32	0.024216	0.637053	0.735564884
RLF	1p34.2	-0.02422	0.637059	0.735564884
MAK	6p24.2	0.024205	0.637215	0.735703252
ZBTB46	20q13.33	0.024201	0.637273	0.735727298
ACOT6	14q24.3	0.024197	0.637318	0.735737611
HAPLN4	19p13.11	-0.02418	0.637542	0.735953739
CHAT	10q11.23	0.024159	0.637855	0.736271593
MAP1LC3B	16q24.2	-0.02415	0.637921	0.736306387
UTRN	6q24.2	0.02415	0.637972	0.736322751
FOLR3	11q13.4	-0.02414	0.638063	0.736384792
BPGM	7q33	-0.02414	0.638158	0.736421866
PSRC1	1p13.3	0.024136	0.638173	0.736421866
GPR68	14q32.11	-0.02413	0.638206	0.736421866
NCMAP	1p36.11	-0.02413	0.638242	0.736421866
DNAAF1	16q24.1	0.024118	0.638418	0.736543581
BMPR1B	4q22.3	0.024116	0.638455	0.736543581
SCNN1D	1p36.33	-0.02412	0.638458	0.736543581
MAX	14q23.3	0.024106	0.638584	0.7366464
IDUA	4p16.3	-0.0241	0.638737	0.736779931
MMP1	11q22.2	0.02409	0.638818	0.736779931
ACCSL	11p11.2	0.024089	0.638833	0.736779931
LY86-AS1	6p25.1	0.024088	0.638847	0.736779931
GABRG3	15q12	0.024083	0.638908	0.736808471
LOC100271832	2p22.3	-0.02408	0.638979	0.73684739
SERPINC1	1q25.1	0.024074	0.639034	0.736868637
CAMSAP1	9q34.3	0.024052	0.639342	0.737181883
FAM170B	10q11.23	-0.02404	0.639536	0.737362606
PPP2R1B	11q23.1	0.024033	0.6396	0.737394427
DDRKG1	20p13	-0.02402	0.639729	0.737458545
KIR2DS4	19q13.42	0.024024	0.63973	0.737458545
LINC00410	13q31.3	-0.02402	0.639802	0.737499599
MAP7D3	Xq26.3	-0.024	0.640087	0.737784908
GATA3	10p14	0.02399	0.640201	0.737873906
CCER1	12q21.33	0.023969	0.640503	0.738180159
OOSP2	11q12.1	-0.02395	0.640782	0.738459036
DLK2	6p21.1	0.02394	0.64091	0.738519436
HSCB	22q12.1	0.023939	0.64091	0.738519436
PTOV1	19q13.33	-0.02394	0.640945	0.738519436
PPP1R3A	7q31.1	-0.02393	0.641029	0.738573897
LINC01020	5p15.32	-0.02393	0.641096	0.738608152
TRAPPC6B	14q21.1	0.02392	0.641188	0.738672197
TRAF6	11p12	-0.02391	0.641365	0.738833826
ODF3	11p15.5	0.023898	0.641487	0.738896285
TTLL7	1p31.1	0.023896	0.641512	0.738896285
SNORA2A	12q13.11	0.023895	0.64153	0.738896285
GATM	15q21.1	0.02388	0.641733	0.739087634
KMT2D	12q13.12	0.023856	0.642071	0.739376066
TKTL1	Xq28	-0.02386	0.642084	0.739376066
MATR3	5q31.2	0.023854	0.642101	0.739376066
PROS1	3q11.1	0.023852	0.642132	0.739376066
PRG3	11q12.1	0.023848	0.642186	0.739395921
FARP2	2q37.3	-0.02384	0.642288	0.739470962
LINC00934	12q24.23	-0.02384	0.642342	0.739490599
APBB3	5q31.3	-0.02383	0.642423	0.739541615

LCE3C	1q21.3	0.023813	0.642672	0.739785431
ATXN2	12q24.12	-0.02381	0.642784	0.739871804
TXN	9q31.3	-0.02379	0.642979	0.740054199
IL18BP	11q13.4	-0.02379	0.643036	0.740069489
LGI2	4p15.2	-0.02379	0.643066	0.740069489
C15ORF54	15q14	-0.02377	0.643282	0.740275734
GTF2H2B	5q13.2	-0.02375	0.643581	0.740571697
SLC23A3	2q35	0.023746	0.643614	0.740571697
DGCR6	22q11.21 22q11	-0.02374	0.643701	0.740593886
GIN3	16q21	-0.02374	0.643707	0.740593886
SEBOX	17q11.2	-0.02374	0.643765	0.74061816
MYNN	3q26.2	-0.02373	0.643833	0.740621104
LOC642929	9q21.11	-0.02373	0.643841	0.740621104
MDH2	7q11.23	-0.02372	0.643948	0.740700554
USH1G	17q25.1	-0.02371	0.644167	0.740910005
SCYL3	1q24.2	0.023688	0.644417	0.741155326
ZNF695	1q44	-0.02367	0.644628	0.741355042
MBL2	10q21.1	0.023646	0.645011	0.741715741
KRTAP4-4	17q21.2	-0.02365	0.645015	0.741715741
AGFG1	2q36.3	-0.02364	0.645109	0.741781152
SNIP1	1p34.3	0.02363	0.645233	0.741880496
MCAT	22q13.2	0.023625	0.645302	0.741917526
COMMD8	4p12	0.023621	0.645359	0.741940709
XKR4	8q12.1	-0.02362	0.645406	0.741952097
FZD4	11q14.2	0.023602	0.645627	0.742154591
EVX1	7p15.2	-0.0236	0.645689	0.742154591
MLF1	3q25.32	-0.0236	0.645693	0.742154591
RADIL	7p22.1	0.023592	0.645763	0.742191632
PRRT1	6p21.32	0.023588	0.645826	0.742221718
SEC22A	3q21.1	-0.02357	0.646049	0.74243529
ABCG4	11q23.3	-0.02357	0.64612	0.742467789
B3GAT2	6q13	-0.02356	0.646151	0.742467789
TTLL5	14q24.3	0.023548	0.64638	0.742688288
ANKRD30BL	2q21.2	-0.02354	0.646536	0.742824654
SLC34A3	9q34.3	-0.02352	0.64678	0.743062761
LYPD4	19q13.2	-0.02351	0.646978	0.743247255
PIGV	1p36.11	0.023489	0.647203	0.743460879
ZNF791	19p13.13	0.023486	0.647254	0.743460879
MON1B	16q23.1	-0.02348	0.647275	0.743460879
ZNF417	19q13.43	0.023476	0.647384	0.743534888
STEAP1B	7p15.3	-0.02347	0.647414	0.743534888
DEFB135	8p23.1	-0.02346	0.64759	0.743694159
GRTP1	13q34	0.023456	0.647667	0.743739388
MRPS21	1q21.2	0.023453	0.647704	0.743739388
HNRNPC	14q11.2	0.023432	0.648011	0.744049963
MORF4	4q34.1	0.02342	0.648172	0.744192102
TICAM2	5q22.3	-0.02342	0.648234	0.74422099
GPX8	5q11.2	-0.0234	0.648394	0.744361817
KCNE2	21q22.11	0.023388	0.648624	0.744562794
AR	Xq12	-0.02339	0.648644	0.744562794
BAIAP2-DT	17q25.3	-0.02338	0.648793	0.74469099
USP45	6q16.2	-0.02337	0.648925	0.744800714
RGS22	8q22.2	-0.02333	0.649473	0.745386429
NKX1-2	10q26.13	-0.02329	0.649936	0.745731629
RBMY1A1	Yq11.223	0.023294	0.649943	0.745731629
AMY2A	1p21.1	0.023294	0.649946	0.745731629
GUCY2EP	11q13.5	-0.02329	0.649955	0.745731629
PSG8	19q13.2	0.02329	0.649993	0.745731629

AGAP1	2q37.2	0.02329	0.649997	0.745731629
DNAJB7	22q13.2	-0.02328	0.650147	0.745860543
PRAMEF1	1p36.21	0.023271	0.650266	0.745936082
SYF2	1p36.11	-0.02327	0.650287	0.745936082
ADORA1	1q32.1	0.023264	0.650358	0.745956013
LINC00515	21q21.3	0.023263	0.650379	0.745956013
RGPD6	2q13	0.023255	0.650483	0.746033013
PRSS57	19p13.3	-0.02325	0.650567	0.746086688
MIMT1	19q13.43	0.023241	0.650688	0.746182275
ZNF410	14q24.3	-0.02323	0.6509	0.746383073
SERPINA13P	14q32.13	0.023185	0.651474	0.746966394
AQP11	11q14.1	0.023184	0.651484	0.746966394
SPRR2F	1q21.3	-0.02318	0.651524	0.746970322
MOBP	3p22.1	0.023167	0.651715	0.747146347
ANKS1A	6p21.31	-0.02316	0.651831	0.747236668
MAP1LC3B2	12q24.22	0.023155	0.651889	0.747259749
C3ORF22	3q21.3	0.023145	0.652037	0.747362758
SLC11A1	2q35	-0.02314	0.652061	0.747362758
TNNI3K	1p31.1	0.023139	0.652121	0.747362758
HDHD5-AS1	22q11.1	-0.02314	0.652128	0.747362758
SNORA10	16p13.3	-0.0231	0.652717	0.747994885
SAMD8	10q22.2	0.02309	0.652808	0.748040985
C4ORF45	4q32.1	0.023088	0.652832	0.748040985
LPAR6	13q14.2	-0.02307	0.653086	0.74829012
SCRN3	2q31.1	-0.02305	0.653359	0.748559342
SEMA6B	19p13.3	0.023047	0.653404	0.748568528
STRADB	2q33.1	0.023033	0.653607	0.748758012
TTY16	Yp11.2	-0.023	0.654111	0.749292263
BIRC6	2p22.3	0.022977	0.654388	0.749567073
CALN1	7q11.22	-0.02296	0.654605	0.749772376
LATS2	13q12.11	0.022941	0.654894	0.750060639
TECTB	10q25.2	0.022925	0.655126	0.750283436
CFAP54	12q23.1	0.022916	0.655246	0.750378045
ABCA8	17q24.2	0.022912	0.655305	0.750402354
ENPP1	6q23.2	0.022903	0.655427	0.750468662
SNORA26	4q12	-0.0229	0.655438	0.750468662
TPGS1	19p13.3	0.0229	0.655482	0.750476312
WBP11P1	18q12.1	-0.02288	0.655712	0.750695893
GSDMC	8q24.21	0.022881	0.655748	0.750695893
CTXN3	5q23.2	0.022871	0.655886	0.750785667
FAM168A	11q13.4	0.022869	0.655912	0.750785667
TCEANC2	1p32.3	0.022867	0.655939	0.750785667
TAX1BP1	7p15.2	0.022858	0.656073	0.750895413
ST6GALNAC3	1p31.1	0.022842	0.656294	0.751105761
DNAJC25-GNG10	9q31.3	0.022833	0.65642	0.751207034
TMEM62	15q15.2	0.022819	0.656621	0.751394679
SPEF1	20p13	0.022814	0.656682	0.751420579
ZSWIM2	2q32.1	0.022811	0.656734	0.751437786
SLC12A1	15q21.1	-0.02279	0.657059	0.751766347
ZNF876P	4p16.3	-0.02277	0.657293	0.751991803
PTPRU	1p35.3	0.022768	0.657334	0.751995489
PRB2	12p13.2	0.022761	0.657435	0.752068331
SLC7A9	19q13.11	-0.02274	0.65776	0.752396507
ZNF684	1p34.2	0.022734	0.657815	0.752416704
CRKL	22q11.21	-0.02273	0.657932	0.752507386
HSP90B3P	1p22.1	0.022696	0.658354	0.752946891
KLHL9	9p21.3	-0.02265	0.658958	0.753587432
OR2T4	1q44	-0.02265	0.658989	0.753587432

NUTM2G	9q22.33	-0.02264	0.659085	0.753653811
SOX3	Xq27.1	-0.02263	0.659274	0.753827012
EIF4EBP2	10q22.1	0.022627	0.65932	0.753836039
ABCB5	7p21.1	-0.02261	0.659496	0.753994274
RAB3D	19p13.2	0.022612	0.659538	0.754000008
ZFAND2B	2q35	-0.0226	0.65966	0.754095883
ARRDC1-AS1	9q34.3	-0.0226	0.659727	0.754129243
LHB	19q13.33	-0.02258	0.659987	0.754383895
ZBTB18	1q44	0.022571	0.660119	0.754491172
TNNT2	1q32.1	-0.02256	0.660209	0.754551641
PAF1	19q13.2	0.022555	0.66034	0.754658604
GAPVD1	9q33.3	0.022544	0.660502	0.754784351
RALB	2q14.2	-0.02254	0.660526	0.754784351
CRHR2	7p14.3	-0.02253	0.66068	0.754905231
SCARF1	17p13.3	0.022528	0.660723	0.754905231
MCM6	2q21.3	-0.02253	0.660745	0.754905231
RWDD2A	6q14.1	-0.02252	0.660845	0.754976782
DNAH3	16p12.3	0.022492	0.661225	0.755367901
TBC1D23	3q12.1-q12.2	0.022486	0.661313	0.755425555
SELENON	1p36.11	-0.02248	0.661365	0.755436648
ZHX1	8q24.13	0.02248	0.661398	0.755436648
KLRG1	12p13.31	0.022451	0.661811	0.755864217
FASTKD1	2q31.1	0.022439	0.661976	0.755952563
OCM	7p22.1	-0.02244	0.662001	0.755952563
ASB11	Xp22.2	0.022437	0.662001	0.755952563
UNC119B	12q24.31	0.022434	0.662046	0.755961107
TCF12	15q21.3	0.022413	0.662341	0.756254996
KIF4A	Xq13.1	-0.02241	0.662448	0.756310868
CABS1	4q13.3	-0.0224	0.662466	0.756310868
LRRC10	12q15	0.022399	0.662541	0.756353383
SMC1A	Xp11.22	0.022392	0.662649	0.756355806
GPNMB	7p15.3	-0.02239	0.662682	0.756355806
LILRA2	19q13.42	0.022389	0.662684	0.756355806
FOXB1	15q22.2	-0.02239	0.662694	0.756355806
LIPC	15q21.3	-0.02239	0.662739	0.756363662
ULK3	15q24.1	0.022376	0.662862	0.756419096
PRO0628	20q12	-0.02238	0.662863	0.756419096
RNF222	17p13.1	0.022371	0.662934	0.756457478
AASS	7q31.32	0.022359	0.663108	0.756565682
PREX1	20q13.13	-0.02236	0.663142	0.756565682
LCE2C	1q21.3	0.022357	0.663142	0.756565682
KCNIP4	4p15.31-p15.2	0.022352	0.663212	0.756584522
C6ORF141	6p12.3	-0.02235	0.663261	0.756584522
JPH4	14q11.2	0.022347	0.663272	0.756584522
SLC26A4-AS1	7q22.3	-0.02233	0.663465	0.756740465
SHISA3	4p13	0.022332	0.663485	0.756740465
IRGC	19q13.31	0.022327	0.66356	0.756783887
ROBO4	11q24.2	-0.02232	0.66373	0.75693374
MRGPRX4	11p15.1	0.022303	0.663905	0.757053109
PRSS58	7q34	0.0223	0.663938	0.757053109
TCF23	2p23.3	0.0223	0.663948	0.757053109
GLB1L3	11q25	-0.0223	0.663997	0.75705422
ATXN3L	Xp22.2	0.022294	0.664033	0.75705422
MSR1	8p22	0.02229	0.664083	0.75705422
APOBEC3G	22q13.1	-0.02229	0.664112	0.75705422
OR13G1	1q44	0.022286	0.664138	0.75705422
EIF4E2	2q37.1	-0.02228	0.664205	0.757087621
SCYL1	11q13.1	-0.02227	0.664327	0.75713055

ALOX12	17p13.1	0.022269	0.66438	0.75713055
ASB2	14q32.12	-0.02227	0.664392	0.75713055
C12ORF75	12q23.3	0.022268	0.664394	0.75713055
SLC12A7	5p15.33	-0.02226	0.664534	0.757247177
BRD3	9q34.2	-0.02225	0.66472	0.757393231
LRRN2	1q32.1	-0.02224	0.664753	0.757393231
RETN	19p13.2	0.022241	0.664775	0.757393231
C6ORF203	6q21	0.022234	0.664878	0.757437769
CCL15-CCL14	17q12	0.022233	0.66489	0.757437769
EMC3	3p25.3	0.022226	0.664988	0.757505973
SLC25A10	17q25.3	-0.02222	0.665061	0.757546209
C16ORF78	16q12.1	-0.02222	0.66511	0.757558905
RWDD2B	21q21.3	0.022197	0.665396	0.757841933
MYL5	4p16.3	-0.02217	0.66582	0.758281484
TBC1D3G	17q12	-0.02214	0.66617	0.758637333
RUSC1-AS1	1q22	-0.02213	0.66632	0.758764797
CDCA7L	7p15.3	-0.02212	0.666476	0.758898795
SMARCA5	4q31.21	0.022116	0.666543	0.758916702
GTPBP8	3q13.2	-0.02211	0.666567	0.758916702
TACO1	17q23.3	-0.0221	0.66675	0.75907207
GPR84	12q13.13	-0.0221	0.666804	0.75907207
MICOS10	1p36.13	0.022097	0.666818	0.75907207
ZNF589	3p21.31	-0.02209	0.666882	0.759081562
RAD54L2	3p21.2	0.02209	0.666915	0.759081562
C16ORF58	16p11.2	-0.02209	0.66694	0.759081562
PARP12	7q34	0.022085	0.666991	0.759097461
PTPN9	15q24.2	-0.02207	0.667156	0.759241852
PRR25	16p13.3	-0.02205	0.667485	0.759563895
SLC13A2	17q11.2	0.022047	0.667528	0.759563895
TMX3	18q22.1	0.022045	0.667553	0.759563895
OR3A1	17p13.3	-0.02203	0.667812	0.759811005
CCDC157	22q12.2	-0.02202	0.667846	0.759811005
VAV1	19p13.3	0.02202	0.66791	0.75984078
NCAPG2	7q36.3	0.022007	0.668096	0.759997579
UHRF1BP1	6p21.31	0.022005	0.668124	0.759997579
SPAAR	9p13.3	0.022001	0.668174	0.760011664
RP1L1	8p23.1	-0.02197	0.668632	0.760489674
KIF9	3p21.31	0.021946	0.668955	0.760812903
KRTAP11-1	21q22.11	-0.02193	0.669244	0.761098392
STEAP2	7q21.13	0.021921	0.669321	0.761143425
FAM173A	16p13.3	0.021887	0.669798	0.761632206
IMPG1	6q14.1	0.021885	0.669827	0.761632206
CD24	6q21	-0.02187	0.669991	0.761774773
ASCL4	12q23.3	-0.02185	0.67036	0.762124442
ATN1	12p13.31	-0.02185	0.670374	0.762124442
TRUB1	10q25.3	-0.02183	0.670602	0.762340156
SNORA21	17q12	-0.02182	0.670782	0.762502035
LOC643387	2q37.3	0.021811	0.670873	0.762561229
SORCS1	10q25.1	0.021807	0.670928	0.762580919
BMP6	6p24.3	-0.0218	0.670978	0.762594619
MFSD2B	2p23.3	-0.02177	0.671388	0.762977352
ZDHHC18	1p36.11	-0.02177	0.671391	0.762977352
STAG3L1	7q11.23	-0.02176	0.67159	0.76312159
PDILT	16p12.3	0.02176	0.671594	0.76312159
LOC440896	9p11.2	0.021752	0.671718	0.763218453
BLOC1S2	10q24.31	0.021747	0.671789	0.763256115
PIM2	Xp11.23	0.021737	0.671924	0.763365783
CYP2E1	10q26.3	-0.02172	0.672099	0.763522198

ANKRD20A9P	13q11	0.021712	0.672277	0.763680694
ECE1	1p36.12	0.021699	0.672471	0.763858204
LINC00895	22q11.21	0.021695	0.672529	0.763880569
LOR	1q21.3	-0.02168	0.672748	0.764085217
ZNF524	19q13.42	0.021665	0.672955	0.764277624
LINC00161	21q21.3	-0.02166	0.673093	0.764391214
OR51S1	11p15.4	-0.02163	0.673438	0.764739251
TNFSF11	13q14.11	-0.02161	0.673758	0.765054547
SARM1	17q11.2	0.021604	0.673825	0.765054547
KRTAP21-2	21q22.11	0.021603	0.67383	0.765054547
KRTAP5-3	11p15.5	-0.02156	0.674431	0.765693241
POU5F1	6p21.33	-0.02155	0.674585	0.765824532
CRYGD	2q33.3	0.021508	0.675185	0.766462418
DIRC3	2q35	-0.0215	0.675307	0.766557294
RMST	12q23.1 12q21	0.021486	0.675501	0.766734133
PEBP4	8p21.3	-0.02146	0.675823	0.767056798
PRIMPOL	4q35.1	0.021457	0.675919	0.767079536
ATP6V1E1	22q11.21	-0.02146	0.675922	0.767079536
LILRB3	19q13.42	0.021454	0.675958	0.767079536
CAMP	3p21.31	0.021432	0.676275	0.767382561
SUPT20HL1	Xp22.11	0.02143	0.676302	0.767382561
OR51F1	11p15.4	0.021423	0.676403	0.767431329
NMT2	10p13	-0.02142	0.676455	0.767431329
SPATA32	17q21.31	-0.02142	0.676476	0.767431329
GTF2I	7q11.23	-0.02142	0.676498	0.767431329
SRPRB	3q22.1	-0.02141	0.676557	0.76745399
SPTA1	1q23.1	-0.0214	0.676786	0.767670857
PCDHA5	5q31.3	-0.02139	0.676928	0.767689581
SIAH2	3q25.1	0.021386	0.676931	0.767689581
BMP3	4q21.21	0.021384	0.67695	0.767689581
KCTD13	16p11.2	0.021383	0.676974	0.767689581
PLA2G2C	1p36.12	0.021381	0.676994	0.767689581
PSMD8	19q13.2	-0.02136	0.677299	0.767991961
HECW2	2q32.3	0.021356	0.677345	0.768000688
RAX2	19p13.3	-0.02134	0.677521	0.768155783
BAD	11q13.1	0.021326	0.677778	0.768404496
MMP3	11q22.2	-0.02132	0.677923	0.768524586
LINC00926	15q21.3	-0.02131	0.677984	0.768550723
LOC399815	10q26.13	-0.02129	0.678287	0.768851166
OR52H1	11p15.4	0.021285	0.678358	0.768888126
HPN-AS1	19q13.11-q13.12	-0.02128	0.67844	0.768936969
SMNDC1	10q25.2	-0.02127	0.678552	0.769020697
PRRC2A	6p21.33	-0.02126	0.67866	0.769099024
POLE2	14q21.3	-0.02125	0.678813	0.76922957
ZCCHC9	5q14.1	-0.02124	0.679004	0.769387696
PNMA3	Xq28	-0.02124	0.67903	0.769387696
DDX3Y	Yq11.221	0.021233	0.679106	0.769430913
COA7	1p32.3	0.021216	0.679354	0.769668196
SLC22A8	11q12.3	0.021204	0.679516	0.769786534
KCND1	Xp11.23	0.021203	0.679535	0.769786534
TRIAP1	12q24.31	-0.0212	0.679578	0.769791735
GOLIM4	3q26.2	-0.02119	0.679729	0.769918792
CCDC40	17q25.3	0.021178	0.679895	0.770063257
NTPCR	1q42.2	0.021159	0.680159	0.770319148
IZUMO4	19p13.3	0.021151	0.680282	0.77041487
SRPX	Xp11.4	-0.02114	0.680381	0.770482732
OR5AC2	3q11.2	0.021139	0.680454	0.77052212
CCL16	17q12	-0.02112	0.680677	0.770730872

RASSF2	20p13	0.021112	0.680833	0.770858536
SSX5	Xp11.23	0.021107	0.680903	0.770858536
COA6	1q42.2	-0.02111	0.680907	0.770858536
DEAF1	11p15.5	0.021104	0.680944	0.770858536
PPP1R17	7p14.3	-0.02109	0.681098	0.770954739
RGSL1	1q25.3	-0.02109	0.681106	0.770954739
MAP2K2	19p13.3	0.021086	0.681211	0.771030749
SLC35B1	17q21.33	-0.02108	0.681331	0.77112297
TMEM94	17q25.1	0.021066	0.681491	0.771260457
DPAGT1	11q23.3	0.021062	0.68155	0.771283034
DIPK1C	18q22.3	0.021046	0.681772	0.771491371
SAA4	11p15.1	0.021028	0.68204	0.771728424
CNOT3	19q13.42	-0.02102	0.682088	0.771728424
SPDYE1	7p13	-0.02102	0.682131	0.771728424
KLHL34	Xp22.12	-0.02102	0.682136	0.771728424
NRADDP	3p21.31	0.021011	0.682272	0.771839137
PRRT4	7q32.1	-0.021	0.682402	0.771912783
F2RL3	19p13.11	-0.021	0.682415	0.771912783
UQCRQ	5q31.1	0.020997	0.682485	0.771949273
LYPLA2P1	6p21.32	-0.02098	0.682676	0.772121567
SMIM24	19p13.3	0.020974	0.682806	0.772186462
CYP1B1	2p22.2	-0.02097	0.682861	0.772186462
ANKRD20A20P	9q13	0.020969	0.68288	0.772186462
TBC1D3P1-DHX40P1	17q23.1	0.020968	0.682888	0.772186462
PERM1	1p36.33	-0.02094	0.68324	0.772509266
LOC284441	19p12	0.020942	0.683271	0.772509266
GPN2	1p36.11	0.02094	0.683289	0.772509266
HIST1H2BI	6p22.2	-0.02093	0.683488	0.772690335
HJURP	2q37.1	-0.02092	0.683539	0.772704092
POM121L8P	22q11.21	-0.02092	0.683599	0.772728356
KBTBD4	11p11.2	0.020896	0.683924	0.773052138
ALK	2p23.2-p23.1	-0.02088	0.684128	0.773239102
DNAH8	6p21.2	0.020865	0.684371	0.773470669
NPAT	11q22.3	-0.02086	0.684438	0.773502832
NEDD1	12q23.1	-0.02085	0.684571	0.773586195
ZNF827	4q31.21-q31.22	-0.02085	0.684589	0.773586195
TUBBP6	7p11.2	-0.02084	0.684658	0.773620233
FAM49A	2p24.2	0.020841	0.684716	0.773641673
EIF1AY	Yq11.223	0.020823	0.68497	0.773885235
HOXC13	12q13.13	-0.02082	0.685034	0.773914367
NRTN	19p13.3	-0.0208	0.685252	0.774116743
SCAPER	15q24.3	-0.0208	0.685332	0.774163636
ZBTB16	11q23.2	0.020778	0.685607	0.774430502
FPR1	19q13.41	0.020769	0.685736	0.774532592
UBE2L3	22q11.21	0.020763	0.685835	0.774600379
RANBP9	6p23	0.020758	0.685906	0.774602766
FOXP2	7q31.1	0.020757	0.685914	0.774602766
PRPH	12q13.12	0.020753	0.685971	0.774622911
OR4F21	8p23.3	-0.02075	0.686012	0.774625878
MYOT	5q31.2	-0.02073	0.68636	0.774975482
ZAN	7q22.1	0.020723	0.686402	0.77497909
PSMB11	14q11.2	-0.02068	0.687063	0.775542705
FBXO47	17q12 17q12	-0.02067	0.687092	0.775542705
P2RX6P	22q11.21	0.020674	0.687103	0.775542705
HIST1H2AL	6p22.1	-0.02067	0.687119	0.775542705
C9ORF85	9q21.13	0.020673	0.687124	0.775542705
IQUB	7q31.32	0.020672	0.687134	0.775542705
SLC5A2	16p11.2	0.020666	0.687217	0.775592427

FAM207A	21q22.3	0.020663	0.687263	0.775601473
OR4M2	15q11.2	0.020633	0.687698	0.776048767
LRGUK	7q33	0.020628	0.687761	0.77607547
LRRC27	10q26.3	-0.02061	0.68797	0.776268095
SYNE1	6q25.2	0.020602	0.688131	0.776405535
HECTD4	12q24.13	0.020587	0.688356	0.776616149
MRGPRE	11p15.4	0.020571	0.688583	0.776800435
PML	15q24.1	0.02057	0.688597	0.776800435
TOR1A	9q34.11	-0.02053	0.689169	0.777387122
OR2C1	16p13.3	-0.02053	0.689196	0.777387122
CYP11A1	15q24.1	-0.02052	0.689261	0.777387122
C1ORF158	1p36.21	-0.02052	0.689273	0.777387122
SLC25A51P4	11p15.1	-0.02052	0.689332	0.777409871
PRAMEF18	1p36.21	-0.02051	0.689449	0.777498993
CLDND2	19q13.41	-0.02048	0.689845	0.777865114
SLX4	16p13.3	0.020482	0.689852	0.777865114
SKP1	5q31.1	0.020474	0.689969	0.77795376
FCN1	9q34.3	-0.02047	0.690072	0.778026323
SHE	1q21.3	0.02046	0.69017	0.778092708
LINC01734	20q12	-0.02045	0.690312	0.778208712
SFT2D1	6q27	0.020443	0.690418	0.77828393
OR6T1	11q24.1	-0.02044	0.6905	0.778332577
COLEC12	18p11.32	-0.02043	0.690575	0.77837407
MRTFB	16p13.12	-0.02042	0.690801	0.778584695
MYADML	2p22.3	0.020394	0.691128	0.778908874
MIEF1	22q13.1	0.020389	0.691197	0.778943219
WDR24	16p13.3	-0.02038	0.691277	0.778960132
SENP7	3q12.3	-0.02038	0.69129	0.778960132
ZNF230	19q13.31	0.020366	0.691531	0.77914872
SCN10A	3p22.2	-0.02037	0.691535	0.77914872
RTN1	14q23.1	0.020359	0.691621	0.779176849
LRRD1	7q21.2	-0.02036	0.691638	0.779176849
C2ORF50	2p25.1	-0.02035	0.691824	0.779306956
CCDC38	12q23.1	-0.02034	0.691848	0.779306956
PCNX3	11q13.1	-0.02034	0.691902	0.779306956
LINC00705	10p15.1	0.020339	0.691909	0.779306956
TMEM52	1p36.33	-0.02031	0.692394	0.779810005
DAOA	13q33.2 13q34	-0.0203	0.69249	0.779873712
LRRC58	3q13.33	-0.02029	0.692605	0.779959341
F13B	1q31.3	0.020281	0.692753	0.780025905
ZBTB8OS	1p35.1	-0.02028	0.692815	0.780025905
SMG1	16p12.3	-0.02028	0.692822	0.780025905
GPR37L1	1q32.1	-0.02027	0.692837	0.780025905
CEP120	5q23.2	-0.02027	0.692859	0.780025905
TONSL	8q24.3	-0.02026	0.693082	0.780233014
MBD3L5	19p13.2	0.020245	0.69326	0.780389958
SULT1C4	2q12.3	-0.02023	0.693419	0.780484858
COG3	13q14.13	0.020234	0.693422	0.780484858
ANKRD2	10q24.2	-0.02022	0.693623	0.780667299
GAA	17q25.3	0.020217	0.693667	0.780672499
AVPR1A	12q14.2	0.020202	0.693887	0.780826716
DHX16	6p21.33	0.020201	0.693899	0.780826716
ZBTB14	18p11.31	0.020199	0.693921	0.780826716
IL17B	5q32	-0.02019	0.694017	0.780891444
LPAR3	1p22.3	-0.02019	0.694061	0.780896253
OACYLP	18q21.32	0.020181	0.69418	0.780986899
PLD6	17p11.2	-0.02018	0.694228	0.780996302
SH3BP5	3p25.1	0.020154	0.694578	0.781346306



NPC1	18q11.2	0.020144	0.69472	0.781443279
SARS2	19q13.2	0.020142	0.694742	0.781443279
ARHGDI1A	17q25.3	0.020135	0.694841	0.781510936
KCNS2	8q22.2	0.020108	0.695242	0.781893749
ZFP3	17p13.2	-0.02011	0.69526	0.781893749
UTP11	1p34.3	-0.0201	0.695315	0.781907036
SLC35E3	12q15	0.0201	0.695349	0.781907036
SVPE1	9q31.3	-0.02008	0.695638	0.782187337
PTPN6	12p13.31	-0.02007	0.695771	0.782293331
PRSS36	16p11.2	0.020053	0.696035	0.782545758
SLC7A1	13q12.3	-0.02004	0.696165	0.782648265
C6ORF47	6p21.33	0.020038	0.696243	0.782680669
HOXA13	7p15.2	0.020036	0.696272	0.782680669
GUCY2F	Xq22.3-q23	0.02003	0.69636	0.782735733
OR5P2	11p15.4	0.019994	0.696878	0.783245517
MGARP	4q31.1	0.019993	0.696892	0.783245517
PLA2G6	22q13.1	-0.01998	0.697027	0.783353938
CXCR2	2q35	-0.01996	0.697303	0.78362025
TSSK1B	5q22.2	0.01996	0.697375	0.78365636
ABHD14A	3p21.2	0.01994	0.697657	0.783929959
APOL5	22q12.3	0.019933	0.697755	0.783937515
RING1	6p21.32	-0.01993	0.697772	0.783937515
LRRC4B	19q13.33	-0.01993	0.697782	0.783937515
SLC27A5	19q13.43	-0.01992	0.697927	0.78405744
MAT1A	10q22.3	-0.01992	0.698007	0.784103157
SORL1	11q24.1	-0.0199	0.698253	0.78433565
OR52B4	11p15.4	0.019892	0.698342	0.784379622
BIRC8	19q13.42	-0.01989	0.698371	0.784379622
UHRF1BP1L	12q23.1	-0.01987	0.698648	0.784609695
DGCR10	22q11.21	0.019871	0.698654	0.784609695
LDHAL6A	11p15.1	-0.01983	0.699199	0.785177501
IER2	19p13.13	-0.01982	0.699343	0.785295857
C18ORF21	18q12.2	-0.01982	0.699409	0.785325081
HECTD2	10q23.32	-0.01981	0.699514	0.785399651
CTNND2	5p15.2	0.019802	0.699648	0.78549429
HNRNPCL2	1p36.21	-0.0198	0.699711	0.78549429
SPDYE6	7q22.1	-0.0198	0.699716	0.78549429
RFPL4B	6q21	-0.01977	0.70016	0.785948492
OR51G1	11p15.4	0.019745	0.700472	0.786210303
C11ORF40	11p15.4	-0.01974	0.700472	0.786210303
OR7A10	19p13.12	-0.01973	0.700679	0.786399096
TMEM88	17p13.1	-0.01973	0.700731	0.786413018
CYB561D1	1p13.3	-0.01972	0.70086	0.786513756
UBE2N	12q22	-0.01971	0.700919	0.786535973
CORO7	16p13.3	-0.0197	0.701143	0.786743104
HSPA1L	6p21.33	0.019685	0.701339	0.786866701
CCM2L	20q11.21	-0.01968	0.701364	0.786866701
EZH1P	Xp11.22	-0.01968	0.701371	0.786866701
GGN	19q13.2	0.019675	0.701475	0.786939707
DYRK3	1q32.1	0.019665	0.701631	0.787070465
RHOBTB2	8p21.3	0.019662	0.701672	0.787071736
TSTD1	1q23.3	-0.01966	0.701746	0.787075904
PM20D1	1q32.1	0.019656	0.701754	0.787075904
OR9Q2	11q12.1	0.019652	0.701816	0.787101806
LRRC8D	1p22.2	-0.01963	0.702095	0.787349752
ADH7	4q23	-0.01963	0.702137	0.787349752
LINC00205	21q22.3	0.019626	0.702188	0.787349752
CENPL	1q25.1	-0.01962	0.702219	0.787349752

DAZ3	Yq11.23	-0.01962	0.702238	0.787349752
LY6D	8q24.3	-0.01962	0.702273	0.787349752
TREM1	6p21.1	-0.01962	0.702331	0.787370493
SDK1	7p22.2	-0.01961	0.702415	0.787420595
TARS2	1q21.2	0.019603	0.702527	0.787502087
CHST15	10q26.13	-0.01959	0.702639	0.787583577
MALT1	18q21.32	0.019589	0.702723	0.787633673
PDK1	2q31.1	0.019578	0.702879	0.787738489
KRT16	17q21.2	-0.01958	0.702895	0.787738489
CAGE1	6p24.3	0.019567	0.703039	0.787827401
NPPC	2q37.1	0.019566	0.703053	0.787827401
PLD3	19q13.2	-0.01953	0.703632	0.78843178
OTOP1	4p16.3	-0.01951	0.703879	0.788622259
SPINK9	5q32	0.019509	0.703881	0.788622259
MYOG	1q32.1	-0.0195	0.70401	0.788687906
PAQR5	15q23	-0.0195	0.704018	0.788687906
LINC01226	1p35.2	-0.01946	0.704528	0.789215313
CD93	20p11.21	0.019447	0.704772	0.789417273
CNKSR1	1p36.11	-0.01945	0.704788	0.789417273
HECA	6q24.1	0.019438	0.704912	0.789512695
MRPS16	10q22.2	-0.01943	0.705068	0.789643009
SLC47A1	17p11.2	-0.01942	0.705124	0.78966166
PCNX4	14q23.1	0.019413	0.705274	0.789784991
ERG28	14q24.3	0.019399	0.705475	0.789965881
UBE2Q2P2	15q25.2	-0.01939	0.705615	0.79007859
ZFP91-CNTF	11q12.1	-0.01937	0.705825	0.790202109
TUFM	16p11.2	0.019374	0.705828	0.790202109
SVOPL	7q34	-0.01937	0.705846	0.790202109
MAGEA8	Xq28	0.019369	0.705905	0.790202109
OR13C5	9q31.1	0.019368	0.705922	0.790202109
FCSK	16q22.1	-0.01936	0.706028	0.790276079
PRKAR2A	3p21.31	-0.01935	0.706209	0.790415693
FCAR	19q13.42	-0.01935	0.706232	0.790415693
ABCA17P	16p13.3	-0.01934	0.706355	0.790510237
IL22	12q15	-0.01932	0.706565	0.790683262
UNC93B1	11q13.2	0.019322	0.706589	0.790683262
PBRM1	3p21.1	-0.0193	0.706845	0.790828879
CDK7	5q13.2	0.019304	0.706848	0.790828879
CLDND1	3q11.2	0.019304	0.706851	0.790828879
RIBC2	22q13.31	0.019302	0.706885	0.790828879
C1ORF94	1p35.1	0.019299	0.706917	0.790828879
IFNA10	9p21.3	0.019284	0.707144	0.79103864
TROAP	12q13.12	-0.01928	0.707197	0.791054358
OR10C1	6p22.1	0.019249	0.707643	0.791426531
SYT9	11p15.4	-0.01925	0.707661	0.791426531
OR7G2	19p13.2	0.019247	0.70768	0.791426531
PRSS27	16p13.3	0.019244	0.707716	0.791426531
LYRM9	17q11.2	-0.01924	0.707727	0.791426531
CASTOR2	7q11.23	-0.01922	0.708092	0.791734561
NPPB	1p36.22	-0.01922	0.708124	0.791734561
	2-Mar 19p13.2	-0.01921	0.708142	0.791734561
GSX2	4q12	0.019213	0.708161	0.791734561
ATP8B2	1q21.3	-0.0192	0.708333	0.791845213
ANKRD34B	5q14.1	-0.0192	0.708339	0.791845213
OR51Q1	11p15.4	-0.01919	0.708451	0.791926503
MMGT1	Xq26.3	-0.01919	0.708545	0.791987018
FCGR2C	1q23.3	0.019184	0.708595	0.791998635
TEPP	16q21	-0.01917	0.708742	0.792118281

NLRP13	19q13.43	0.01917	0.708791	0.792129151
BOD1L1	4p15.33	0.01916	0.708932	0.792242793
KRTAP17-1	17q21.2	0.019148	0.709105	0.792391884
PPAT	4q12	-0.01914	0.709294	0.792559061
DUSP10	1q41	0.01912	0.709522	0.792763723
UPF1	19p13.11	0.019117	0.709566	0.792763723
CDK1	10q21.2	0.019112	0.709631	0.792763723
SAGE1	Xq26.3	-0.01911	0.709636	0.792763723
TREM2	6p21.1	0.019106	0.709713	0.792805449
FBXO39	17p13.1	0.019082	0.710074	0.793164358
HES7	17p13.1	-0.01907	0.710286	0.793301857
NCAM1	11q23.2	-0.01907	0.7103	0.793301857
TYW3	1p31.1	0.019065	0.710316	0.793301857
FRMPD1	9p13.2	-0.01904	0.710666	0.793649321
NELL2	12q12	-0.01903	0.710884	0.793848037
CHRNA6	8p11.21	0.019013	0.711067	0.794008638
KCNRG	13q14.2	0.019002	0.711228	0.794143699
DDX21	10q22.1	0.018993	0.711362	0.794249479
AKR1C2	10p15.1	-0.01898	0.711562	0.794427217
GRK4	4p16.3	0.018976	0.711605	0.794427217
SSH1	12q24.11	-0.01897	0.71164	0.794427217
LINC00112	21q22.3	-0.01897	0.711683	0.794430511
MMP27	11q22.2	0.018963	0.711796	0.794482808
MFSD10	4p16.3	-0.01896	0.711809	0.794482808
ASCL1	12q23.2	-0.01895	0.711928	0.794534907
ENO2	12p13.31	0.018953	0.711941	0.794534907
GLDN	15q21.2	-0.01895	0.711975	0.794534907
CDH10	5p14.2-p14.1	-0.01895	0.712017	0.794537087
OR1N2	9q33.2	-0.01894	0.712075	0.794557388
TMEM133	11q22.1	-0.01894	0.712194	0.794646313
LINC01205	3q13.13	-0.01889	0.712841	0.795323958
DMRTA1	9p21.3	-0.01888	0.713019	0.795477895
OSTCP1	6q25.3	-0.01885	0.7134	0.795858604
SMIM19	8p11.21	0.018839	0.713601	0.796039431
SPR	2p13.2	-0.01882	0.713805	0.796195079
INPP5A	10q26.3	0.018824	0.71382	0.796195079
IQCH	15q23	0.01882	0.713867	0.796203092
RPS23	5q14.2	-0.0188	0.714102	0.796420529
ADA2	22q11.1	0.0188	0.714168	0.796449478
ZNF286A	17p12	0.018787	0.714356	0.796614556
EEF1A1P9	4q24	-0.01874	0.715019	0.797285348
SNORD89	2q11.2	-0.01874	0.715057	0.797285348
CRX	19q13.33	0.018736	0.715088	0.797285348
YIPF2	19p13.2	0.018734	0.715116	0.797285348
SSX6P	Xp11.23	0.018698	0.715651	0.797836538
ABHD17A	19p13.3	0.018677	0.715946	0.798121815
GMNC	3q28	-0.01867	0.715986	0.798122039
GPX5	6p22.1	0.018667	0.716095	0.798198474
APLP1	19q13.12	-0.01865	0.716285	0.798365659
BCCIP	10q26.2	0.018648	0.716379	0.798426006
ASZ1	7q31.2	-0.01864	0.716432	0.798440548
FEV	2q35	0.018635	0.716568	0.798547572
PCDHB8	5q31.3	0.018616	0.716836	0.798802543
ABCC11	16q12.1	0.018612	0.716896	0.798824525
COX7B2	4p12	-0.0186	0.717029	0.798927623
UBAP2	9p13.3	0.0186	0.717068	0.798927623
MC5R	18p11.21	0.01858	0.717358	0.799206235
COG1	17q25.1	-0.01857	0.717498	0.799317152

FUT5	19p13.3	0.018555	0.717727	0.799495567
ADAM3A	8p11.22	-0.01855	0.717749	0.799495567
KDM5D	Yq11.223	0.018552	0.717778	0.799495567
CUL9	6p21.1	0.018544	0.717886	0.799541829
DHDH	19q13.33	-0.01854	0.717899	0.799541829
CCL3L1	17q21.1	-0.01852	0.718286	0.799928484
SLX4IP	20p12.2	-0.01851	0.718394	0.799964809
KRT82	12q13.13	-0.01851	0.718399	0.799964809
INO80D	2q33.3	-0.0185	0.718507	0.8000362
TPH2	12q21.1	-0.0185	0.718543	0.8000362
IFIT3	10q23.31	0.018494	0.718611	0.800067736
DTX4	11q12.1	0.018469	0.718987	0.800442334
PKDCC	2p21	-0.01846	0.719097	0.800520077
AQP9	15q21.3	-0.01844	0.719408	0.800821353
BMPER	7p14.3	0.018434	0.719486	0.800864098
DRD3	3q13.31	0.018431	0.719532	0.800870199
TBCA	5q14.1	0.018425	0.719621	0.800925328
C2ORF27B	2q21.2	-0.01842	0.719714	0.800983748
KANK3	19p13.2	-0.01838	0.72023	0.801513919
HCG22	6p21.33	-0.01837	0.720351	0.801602997
PLA2G4F	15q15.1	-0.01837	0.72039	0.801602997
LINC01599	14q21.3	0.018367	0.720469	0.801646297
ADAMTS1	21q21.3	0.018353	0.720676	0.801831796
ACTR10	14q23.1	0.018343	0.72082	0.801947939
NBPF22P	5q14.3	-0.01834	0.72086	0.80194796
SLC6A18	5p15.33	-0.01833	0.721066	0.802131933
NR2C1	12q22	0.018297	0.721489	0.802522487
FSCB	14q21.2	-0.01829	0.721533	0.802522487
HBM	16p13.3	0.018293	0.721541	0.802522487
SNX29P2	16p11.2	-0.01829	0.721577	0.802522487
KLHL30	2q37.3	-0.01828	0.721778	0.802701418
ASB17	1p31.1	-0.01824	0.722375	0.803294583
HJV	1q21.1	0.018233	0.722418	0.803294583
KEL	7q34	0.018232	0.722432	0.803294583
PTTG2	4p14	-0.01822	0.722652	0.803495319
LINC00244	7q36.3	0.018204	0.722847	0.803667306
CFAP53	18q21.1	-0.0182	0.722947	0.803733584
LENG8	19q13.42	-0.01818	0.723136	0.803898539
ZNF211	19q13.43	0.018179	0.723208	0.803898539
TOMM20L	14q23.1	0.018179	0.723216	0.803898539
SOS1	2p22.1	-0.01817	0.723349	0.804002449
TNFAIP1	17q11.2	-0.01813	0.723925	0.804587616
FAM222B	17q11.2	0.018128	0.723956	0.804587616
TEF	22q13.2	0.018121	0.724063	0.804620634
PDCD4-AS1	10q25.2	-0.01812	0.724066	0.804620634
TXLNGY	Yq11.222-q11.223	-0.01811	0.724159	0.804679265
GP6	19q13.42	-0.01811	0.724259	0.804745638
FYTTD1	3q29	-0.01809	0.72456	0.805035341
MAGIX	Xp11.23	-0.01808	0.724626	0.80506407
IL9	5q31.1	-0.01808	0.724687	0.805069106
LDHA	11p15.1	0.018076	0.724711	0.805069106
DIRAS3	1p31.3	-0.01806	0.724994	0.805338944
PYCARD	16p11.2	-0.01805	0.725048	0.805353701
KLHL35	11q13.4	0.018029	0.725406	0.805707438
DRC7	16q21	-0.01803	0.72545	0.805711895
MCM3AP-AS1	21q22.3	-0.01802	0.725538	0.805720178
CYP26B1	2p13.2	0.01802	0.725538	0.805720178
C22ORF42	22q12.3	0.018006	0.725739	0.805898421

TRIP10	19p13.3	-0.01798	0.72608	0.806231926
HDHD5	22q11.1	-0.01798	0.726143	0.806257128
CDK16	Xp11.3	-0.01794	0.726703	0.80682483
GLYCTK	3p21.2	-0.01794	0.726735	0.80682483
SLFN12	17q12	-0.01792	0.726958	0.807028296
MRPL22	5q33.2	-0.01792	0.727016	0.807048217
AP1G2	14q11.2	-0.01791	0.727094	0.807089143
NMRK2	19p13.3	-0.0179	0.727283	0.807210217
IL17RE	3p25.3	0.017898	0.727323	0.807210217
OCLNP1	5q13.2	-0.0179	0.727324	0.807210217
LINC00160	21q22.12	-0.01789	0.727409	0.807256081
OR4M1	14q11.2	0.017887	0.727486	0.807256081
BPIFA4P	20q11.21	-0.01789	0.727486	0.807256081
SIGLEC14	19q13.41	0.017883	0.727536	0.807267458
RASA4	7q22.1	-0.01787	0.727683	0.807384917
CASP12	11q22.3	-0.01785	0.72803	0.807725934
HIST1H2BN	6p22.1	-0.01785	0.728084	0.807740968
LRCH1	13q14.13-q14.2	0.017837	0.728215	0.807841386
PIK3CA	3q26.32	0.017827	0.72835	0.807946936
SPIN4	Xq11.1	-0.01782	0.728445	0.807990255
CREB3L4	1q21.3	-0.01782	0.72847	0.807990255
LOC340357	8p23.1-p22	-0.0178	0.728714	0.808215616
LOC100129055	10p11.1	0.0178	0.728759	0.80822076
HCN1	5p12	-0.0178	0.728807	0.808229266
DUPD1	10q22.2	-0.01778	0.729038	0.808440983
ISCA1P1	5q12.1	-0.01777	0.729198	0.808573865
PTCHD3	10p12.1	-0.01774	0.7296	0.808974597
ARSF	Xp22.33	0.017722	0.729892	0.809253396
FOXR2	Xp11.21	-0.01771	0.730003	0.809290719
BATF3	1q32.3	-0.01771	0.730027	0.809290719
IFNA13	9p21.3	0.017712	0.730047	0.809290719
IL17A	6p12.2	0.017676	0.730575	0.809831958
PDPK1	16p13.3	-0.01766	0.730743	0.809893867
C17ORF49	17p13.1	-0.01766	0.730753	0.809893867
VPS33B	15q26.1	-0.01766	0.730769	0.809893867
CSNK1A1L	13q13.3	-0.01766	0.730793	0.809893867
DNAI2	17q25.1	0.017657	0.730845	0.809906686
KRT6A	12q13.13	-0.01765	0.730891	0.809913254
PICALM	11q14.2	0.017644	0.731037	0.810029474
SPATC1	8q24.3	0.017641	0.731081	0.810033639
PLVAP	19p13.11	-0.01763	0.731172	0.810073935
UPP2	2q24.1	0.017632	0.731219	0.810073935
C10ORF99	10q23.1	-0.01763	0.731239	0.810073935
NKTR	3p22.1	-0.0176	0.731627	0.810459068
STEAP3	2q14.2	0.017592	0.731807	0.810552345
LPL	8p21.3	0.017589	0.731841	0.810552345
ALG1	16p13.3	-0.01759	0.731854	0.810552345
PIGA	Xp22.2	-0.01759	0.731889	0.810552345
SLC36A3	5q33.1	-0.01758	0.731913	0.810552345
THEMIS2	1p35.3	0.017581	0.731955	0.81055365
IFNGR2	21q22.11	0.017566	0.732176	0.81075349
SEPTIN3	22q13.2	-0.01756	0.732236	0.810775072
RSBN1L	7q11.23	0.017557	0.732315	0.810817625
LINC00442	13q12.11	-0.01755	0.732433	0.810838497
C9ORF57	9q21.13	0.017547	0.732462	0.810838497
PGPEP1	19p13.11	0.017545	0.732485	0.810838497
ZNF257	19p12	-0.01754	0.732549	0.810838497
VWC2L	2q34-q35	-0.01754	0.732585	0.810838497

PP12613	4q27	-0.01754	0.732614	0.810838497
KRTAP9-9	17q21.2	0.017536	0.732617	0.810838497
TRPV1	17p13.2	-0.01753	0.7327	0.810875557
SELENOW	19q13.33	0.017528	0.732732	0.810875557
CDK6	7q21.2	0.017497	0.733186	0.811333916
LIPE	19q13.2	-0.01749	0.733332	0.81144356
CD1A	1q23.1	0.017485	0.733366	0.81144356
OR1G1	17p13.3	-0.01748	0.733473	0.811516542
NUP133	1q42.13	-0.01747	0.733559	0.811546742
NID2	14q22.1	-0.01747	0.733591	0.811546742
FAM71C	12q23.1	0.017468	0.733622	0.811546742
OR52N5	11p15.4	-0.01746	0.733732	0.81162373
CCDC168	13q33.1	-0.01745	0.733873	0.81163519
RNF31	14q12	0.017449	0.733891	0.81163519
GPC5	13q31.3	-0.01745	0.733901	0.81163519
NUPR1	16p11.2	-0.01745	0.733916	0.81163519
PINX1	8p23.1	-0.01745	0.733947	0.81163519
ATP2B4	1q32.1	0.017443	0.733985	0.81163519
GSG1	12p13.1	0.017434	0.734118	0.811707407
DDX54	12q24.13	-0.01743	0.734143	0.811707407
RIOX2	3q11.2	-0.01742	0.73426	0.811707407
CXCL5	4q13.3	-0.01742	0.734265	0.811707407
OR1S2	11q12.1	0.017422	0.734294	0.811707407
OR7G3	19p13.2	0.017422	0.734294	0.811707407
IGSF21	1p36.13	0.017415	0.734397	0.811776589
CBR4	4q32.3	0.017412	0.734447	0.811786682
WDR89	14q23.2	0.017409	0.734491	0.811790774
PTTG3P	8q13.1	0.017396	0.734676	0.811907187
GUSBP2	6p22.2	-0.0174	0.734677	0.811907187
KRT86	12q13.13	-0.01739	0.734758	0.811951922
HMGXB3	5q32	0.017378	0.734933	0.812100481
PRRG3	Xq28	-0.01736	0.735214	0.8123658
SIX4	14q23.1	0.017342	0.735474	0.812581902
UTY	Yq11.221	-0.01734	0.735491	0.812581902
EFCAB6	22q13.2-q13.31	-0.01734	0.735537	0.812587954
ODF1	8q22.3	-0.01732	0.735734	0.812760858
R3HCC1L	10q24.2	0.017315	0.735866	0.812818128
LIN28A	1p36.11	0.017315	0.735867	0.812818128
CD109	6q13	0.017294	0.736169	0.813107431
PEX11G	19p13.2	-0.01729	0.736267	0.813170858
PRTN3	19p13.3	0.017277	0.736423	0.813297657
CHML	1q43	-0.01726	0.736742	0.81360507
MLF2	12p13.31	0.017239	0.736976	0.813818688
BMS1P1	10q11.22	0.017221	0.737245	0.814070736
OR11L1	1q44	-0.01721	0.737343	0.814133982
ACTR3BP2	2p11.1	0.017208	0.737444	0.814200883
MSN	Xq12	-0.0172	0.737609	0.814337808
ERC2-IT1	3p14.3	0.017187	0.737744	0.814442438
ELK3	12q23.1	-0.01717	0.737922	0.814593862
SDHAF3	7q21.3	-0.01717	0.737992	0.814625817
SST	3q27.3	-0.01713	0.738541	0.815187737
C4ORF17	4q23	0.017108	0.738908	0.815539195
FBXO32	8q24.13	0.017106	0.738941	0.815539195
CUL2	10p11.21	0.017083	0.73927	0.815830179
FAM86EP	4p16.3	-0.01708	0.739286	0.815830179
ADPGK	15q24.1	-0.01707	0.73946	0.815915931
CTDSP1	2q35	0.017069	0.739483	0.815915931
KRTAP9-4	17q21.2	0.017067	0.739512	0.815915931

KIF27	9q21.32	0.017066	0.739527	0.815915931
NDUFA12	12q22	0.017026	0.740119	0.816524411
UGT1A3	2q37.1	-0.01702	0.74023	0.816602151
OR2H1	6p22.1	0.01701	0.740345	0.816683445
FMO4	1q24.3	-0.017	0.740477	0.816784361
MFSD11	17q25.1-q25.2	0.016984	0.740737	0.81702594
CCNB2	15q22.2	0.016979	0.740808	0.817059562
URB1	21q22.11	-0.01696	0.741041	0.817271449
ACOT13	6p22.3	-0.01695	0.741206	0.817408179
OCLM	1q31.1	0.016931	0.741518	0.817707035
RPL41	12q13.2	0.016926	0.741586	0.817737557
SNAR-G1	19q13.33	-0.01692	0.741682	0.81776984
DOCK4	7q31.1	-0.01692	0.741697	0.81776984
OSCP1	1p34.3	-0.01691	0.741792	0.817829667
DPY19L1	7p14.2	0.016908	0.741856	0.817837896
ADSS	1q44	0.016903	0.741922	0.817837896
ARID2	12q12	0.016903	0.741922	0.817837896
ITGB3	17q21.32	-0.01689	0.74209	0.817953715
OOEP	6q13	-0.01689	0.742109	0.817953715
BNC1	15q25.2	-0.01688	0.742225	0.818036964
OR6F1	1q44	0.016872	0.742385	0.818168119
CCT6B	17q12	0.016857	0.742598	0.818337538
LOC400940	2p25.2	-0.01686	0.742621	0.818337538
MAG	19q13.12	-0.01684	0.742796	0.818485163
CDCA3	12p13.31	-0.01682	0.743086	0.818737768
LMO1	11p15.4	-0.01682	0.743107	0.818737768
PRAMEF12	1p36.21	0.016772	0.743853	0.8195148
LHX9	1q31.3	0.016751	0.744167	0.819810596
GNRHR2	1q21.1	0.016746	0.744244	0.819810596
ZNF398	7q36.1	0.016746	0.744244	0.819810596
BFAR	16p13.12	-0.0167	0.744971	0.820566074
LOC100128288	17p13.1	0.016683	0.745161	0.820730731
PRO0611	1p35.2	0.016679	0.745226	0.820752666
ENPP2	8q24.12	0.016676	0.745266	0.820752666
H6PD	1p36.22	0.016674	0.745304	0.820752666
LOC284788	20p11.21	0.016666	0.745411	0.820788586
RHD	1p36.11	0.016664	0.745442	0.820788586
EPHB4	7q22.1	0.016663	0.74546	0.820788586
SOCS4	14q22.3	-0.01666	0.745561	0.820855327
LRRTM2	5q31.2	0.016645	0.745723	0.820987819
SVIP	11p14.3	0.016642	0.745773	0.820997525
RNASE9	14q11.2	0.016636	0.745866	0.821011358
IL10	1q32.1	-0.01663	0.745926	0.821011358
OR2AT4	11q13.4	-0.01663	0.745952	0.821011358
VAMP4	1q24.3	-0.01663	0.745962	0.821011358
DZIP3	3q13.13	-0.01663	0.74599	0.821011358
COL18A1-AS1	21q22.3	-0.0166	0.746342	0.821320281
CCDC158	4q21.1	-0.0166	0.746353	0.821320281
TNS2	12q13.13	-0.01658	0.746683	0.821637947
OR2F2	7q35	-0.01657	0.746852	0.821779757
CNFN	19q13.2	0.016538	0.747302	0.822229317
MICAL1	6q21	0.016534	0.747362	0.82225057
TACSTD2	1p32.1	0.016495	0.747944	0.822845198
PRM1	16p13.13	-0.01647	0.748303	0.823195064
ANKRD33	12q13.13	0.016467	0.748347	0.823198262
PXT1	6p21.31	-0.01646	0.748443	0.823258973
TAF1A	1q41	-0.01645	0.748557	0.823339213
TFDP3	Xq26.2	-0.01644	0.748769	0.823460565

CELA2B	1p36.21	-0.01644	0.74879	0.823460565
TBC1D3H	17q12	0.016437	0.748791	0.823460565
GEM	8q22.1	-0.01642	0.749003	0.823647898
SART3	12q23.3	-0.01641	0.749254	0.823878912
MAP3K10	19q13.2	-0.0164	0.749324	0.823910607
ZNF215	11p15.4	0.01639	0.749486	0.824043706
HEXIM1	17q21.31	0.016369	0.749798	0.824320388
MLH3	14q24.3	-0.01637	0.74982	0.824320388
ARSG	17q24.2	0.016318	0.750552	0.825069372
RTCA	1p21.2	0.016316	0.750585	0.825069372
TBC1D22A	22q13.31	0.016313	0.750625	0.825069372
APLP2	11q24.3	-0.01631	0.750711	0.825094237
AFAP1	4p16.1	0.016306	0.75073	0.825094237
OSMR	5p13.1	-0.0163	0.750797	0.8251224
UQCR11	19p13.3	0.016293	0.75093	0.825224001
NME1-NME2	17q21.33	-0.01629	0.751032	0.825290628
DST	6p12.1	-0.01628	0.751128	0.825333313
GRB2	17q25.1	0.016277	0.751159	0.825333313
COQ6	14q24.3	0.016274	0.751204	0.825333313
FBXW4	10q24.32	0.016272	0.751236	0.825333313
TNR	1q25.1	-0.01626	0.751472	0.825487702
OR9Q1	11q12.1	-0.01625	0.751491	0.825487702
ARHGEF39	9p13.3	-0.01625	0.7515	0.825487702
GTF2H3	12q24.31	0.016238	0.751732	0.825555561
DKFZP434H168	16q13	-0.01623	0.751782	0.825555561
UGT2B10	4q13.2	-0.01623	0.751785	0.825555561
NUDT13	10q22.2	-0.01623	0.751804	0.825555561
CSF3R	1p34.3	0.016232	0.751822	0.825555561
TFAMP1	7p22.3	0.016228	0.751878	0.825555561
CD300LD	17q25.1	-0.01623	0.751883	0.825555561
DCAF8	1q23.2	0.016228	0.751892	0.825555561
SSR4P1	21q22.3	0.016215	0.752073	0.825709545
TAF15	17q12	-0.0162	0.752274	0.825880985
LRIT1	10q23.1	-0.0162	0.752312	0.825880985
KCNH1	1q32.2	0.016183	0.752555	0.826103247
NDUFA2	5q31.3	0.016175	0.752669	0.826112716
LOC643923	11q22.3	-0.01617	0.752678	0.826112716
LSM11	5q33.3	0.016172	0.752713	0.826112716
AGRN	1p36.33	0.016171	0.752729	0.826112716
PFN3	5q35.3	0.016161	0.752875	0.826227106
HOXB9	17q21.32	0.016157	0.752942	0.826256348
OR4N3P	15q11.2	0.016151	0.753029	0.826306478
SLC25A53	Xq22.2	-0.01615	0.753098	0.826337001
CCDC103	17q21.31	0.016119	0.753505	0.826695957
OR52R1	11p15.4	0.016118	0.753508	0.826695957
HMOX2	16p13.3	-0.01609	0.753876	0.827021169
MTVR2	17q22	0.016093	0.753887	0.827021169
PPY2P	17q11.2	0.016084	0.754019	0.82708934
NPBWR2	20q13.33	-0.01608	0.754032	0.82708934
OPN3	1q43	-0.01608	0.754073	0.827089531
ARL17B	17q21.31	-0.01607	0.754269	0.827258237
ZIM2	19q13.43	0.016023	0.754921	0.827928735
KRT72	12q13.13	0.016015	0.755031	0.827995322
TMA16	4q32.2	0.016013	0.755065	0.827995322
LINC00092	9q22.32	0.015992	0.755382	0.828297894
PMP2	8q21.13	-0.01599	0.755427	0.82830197
RGL3	19p13.2	-0.01598	0.755623	0.828433626
MCOLN2	1p22.3	-0.01597	0.755642	0.828433626



DNTT	10q24.1	0.015972	0.755671	0.828433626
SHROOM1	5q31.1	0.015965	0.755782	0.828509776
PCDH11X	Xq21.31	0.015957	0.755895	0.828588767
HIST1H1A	6p22.2	0.015953	0.75595	0.8286034
MGRN1	16p13.3	-0.01595	0.755999	0.828611417
COL11A2	6p21.32	-0.01592	0.756378	0.828971692
REXO1L1P	8q21.2	-0.01592	0.75645	0.828971692
PRRG2	19q13.33	-0.01592	0.756452	0.828971692
STATH	4q13.3	-0.0159	0.756784	0.829223727
TUBA3C	13q12.11	-0.0159	0.756809	0.829223727
OR5H6	3q11.2	-0.01589	0.756832	0.829223727
GMFG	19q13.2	0.015892	0.756854	0.829223727
HKDC1	10q22.1	-0.01589	0.756889	0.829223727
SEPTIN9	17q25.3	0.015876	0.757099	0.829409037
NT5C3A	7p14.3	-0.01587	0.757217	0.829489556
PIGF	2p21	-0.01587	0.757256	0.829489556
ELANE	19p13.3	0.015861	0.757313	0.829506726
CCDC63	12q24.11	-0.01585	0.757413	0.829571549
PTPDC1	9q22.32	-0.01585	0.757498	0.829584176
DNA2	10q21.3	-0.01585	0.757508	0.829584176
CACNG2	22q12.3	0.01584	0.757635	0.829677844
CASP4	11q22.3	0.015837	0.757677	0.829678655
GOLGA2P3Y	Yq11.23	0.015828	0.757808	0.829731244
C11ORF21	11p15.5	0.015828	0.757815	0.829731244
HNF1A-AS1	12q24.31	-0.01583	0.757849	0.829731244
DNAJC9	10q22.2	-0.01581	0.758111	0.82993753
CDKL3	5q31.1	-0.01581	0.75812	0.82993753
SELENBP1	1q21.3	0.015792	0.758347	0.830140245
PUSL1	1p36.33	0.015782	0.758487	0.830248615
DCST1	1q21.3	-0.01577	0.758607	0.830334285
PPM1J	1p13.2	-0.01577	0.758649	0.830334285
SIGIRR	11p15.5	0.015761	0.758797	0.830451408
C7ORF33	7q36.1	-0.01574	0.759056	0.830689372
SLC17A6	11p14.3	0.015733	0.75922	0.830822884
NDST2	10q22.2	0.015714	0.759493	0.831076979
HAUS1	18q21.1	-0.0157	0.759777	0.831342584
GPIHBP1	8q24.3	-0.01569	0.759851	0.831346101
SFXN3	10q24.31	-0.01569	0.759864	0.831346101
ABHD15	17q11.2	0.015684	0.759944	0.831388045
AURKB	17p13.1	-0.01568	0.760049	0.83142078
PCDH17	13q21.1	0.015676	0.760065	0.83142078
OR13H1	Xq26.2	-0.01567	0.760098	0.83142078
KLHDC7B	22q13.33	0.015663	0.760249	0.831513884
HNRNPA1	12q13.13	-0.01566	0.760266	0.831513884
RPAP2	1p22.1	-0.01565	0.760413	0.83162919
FGFR1OP2	12p11.23	-0.01564	0.760551	0.831734011
COPS7A	12p13.31	0.015631	0.760723	0.831877261
OR4F29	1p36.33	0.015613	0.760995	0.832128996
PNLIP	10q25.3	-0.01561	0.761097	0.832195081
ZNF597	16p13.3	-0.01558	0.761482	0.832516603
PIGB	15q21.3	0.015578	0.761516	0.832516603
CHMP6	17q25.3	0.015578	0.761516	0.832516603
C1ORF229	1q44	-0.01557	0.761671	0.832628364
SH2B1	16p11.2	-0.01557	0.761701	0.832628364
DNAAF4	15q21.3	-0.01555	0.761992	0.832900871
OR1N1	9q33.2	-0.01554	0.762041	0.832904033
EPHX4	1p22.1	-0.01554	0.762129	0.832904033
CAPNS2	16q12.2	-0.01554	0.762144	0.832904033

MUSK	9q31.3	0.015532	0.762194	0.832904033
RCVRN	17p13.1	-0.01553	0.762203	0.832904033
CFL1	11q13.1	-0.01552	0.762372	0.833043907
KRT79	12q13.13	-0.01551	0.762579	0.833224393
KIF26A	14q32.33	-0.01549	0.762849	0.833473543
RTN4RL2	11q12.1	-0.01548	0.762901	0.833485694
TRIM62	1p35.1	-0.01547	0.763098	0.833655114
ERICH1	8p23.3	-0.01546	0.763338	0.833787642
TM9SF2	13q32.3	0.015455	0.763348	0.833787642
MANF	3p21.2	-0.01545	0.763351	0.833787642
ALMS1	2p13.1	-0.01545	0.763386	0.833787642
C2CD6	2q33.1	-0.01545	0.763485	0.8338504
RETREG3	17q21.2	-0.01544	0.7636	0.833910986
TRPV3	17p13.2	-0.01544	0.763624	0.833910986
NOMO2	16p12.3	-0.01543	0.763776	0.834031928
SOX2-OT	3q26.33	-0.01542	0.763908	0.83413086
DEFB103A	8p23.1	0.015402	0.764138	0.83433595
SMIM20	4p15.2	-0.01539	0.764355	0.834527758
USP10	16q24.1	-0.01538	0.764416	0.834548637
TOLLIP	11p15.5	0.01538	0.764461	0.834552049
FRG2DP	16p11.1	-0.01537	0.764573	0.834611359
SNORA36A	Xq28	-0.01537	0.764637	0.834611359
OR11H4	14q11.2	-0.01537	0.764659	0.834611359
EEF1DP3	13q13.1	0.015365	0.764682	0.834611359
N6AMT1	21q21.3	0.015349	0.764925	0.834831069
ATG2A	11q13.1	-0.01534	0.765066	0.834939245
POTEH	22q11.1	-0.01534	0.76512	0.83495296
MTX1	1q22	-0.01533	0.765197	0.834991467
KMT5B	11q13.2	0.015316	0.765411	0.835179979
BICDL1	12q24.23	-0.01531	0.765552	0.835284561
BASP1	5p15.1	-0.0153	0.765591	0.835284561
OPRM1	6q25.2	-0.01528	0.765956	0.83558718
NBEA	13q13.3	-0.01528	0.765968	0.83558718
IP6K3	6p21.31	-0.01528	0.765993	0.83558718
ETNPPL	4q25	-0.01526	0.766169	0.835710118
FAM149B1	10q22.2	-0.01526	0.766189	0.835710118
HPS5	11p15.1	0.015252	0.766356	0.83584621
WFDC2	20q13.12	0.015247	0.766429	0.835849469
ULK2	17p11.2	0.015247	0.766442	0.835849469
DDX23	12q13.12	0.015239	0.766554	0.835926181
C5ORF38	5p15.33	-0.01522	0.766831	0.836100425
CNN2	19p13.3	0.01522	0.766836	0.836100425
AKR1C1	10p15.1	-0.01522	0.766839	0.836100425
ZBTB48	1p36.31	0.01521	0.76698	0.836204935
DNAJC17	15q15.1	-0.01521	0.767019	0.836204935
NDUFB1	14q32.12	0.015202	0.767102	0.836205822
RTL4	Xq23	-0.0152	0.767116	0.836205822
KIAA0408	6q22.33	0.015199	0.767145	0.836205822
CELF2	10p14	-0.01519	0.767214	0.836235861
DMBT1P1	10q26.13	0.015169	0.767599	0.836610305
CCDC27	1p36.32	-0.01516	0.767735	0.83671221
DYNLT1	6q25.3	0.015146	0.767932	0.836881402
SLITRK2	Xq27.3	0.015133	0.768132	0.837053788
ZDHHHC5	11q12.1	0.015127	0.768223	0.837108069
FAM170A	5q23.1	-0.01512	0.768375	0.837227739
EPOR	19p13.2	0.015113	0.768425	0.83723694
TRIM50	7q11.23	0.015104	0.768561	0.837339358
OR8B8	11q24.2	0.015099	0.768637	0.837358684

DDX17	22q13.1	0.015097	0.768662	0.837358684
LINC00691	3p24.2	-0.01505	0.769352	0.838063918
RDH8	19p13.2	0.01503	0.76966	0.83833936
TGFB1	19q13.2	-0.01503	0.769688	0.83833936
MAOB	Xp11.3	-0.01502	0.769749	0.838360119
LIPN	10q23.31	0.015005	0.770036	0.838626731
FCGR2B	1q23.3	0.015	0.770115	0.838667031
PABPC1L2B	Xq13.2	0.014971	0.770546	0.839068214
SNX29	16p13.13-p13.12	0.014969	0.770567	0.839068214
CEP104	1p36.32	0.014951	0.77084	0.839319466
ARMH4	14q23.1	0.01494	0.771013	0.839462435
MANEA	6q16.1	0.014932	0.771128	0.839542062
TAS2R3	7q34	0.014928	0.771181	0.839542062
TDRP	8p23.3	-0.01493	0.771212	0.839542062
GAS8-AS1	16q24.3	0.014916	0.771368	0.83966702
NR1I2	3q13.33	-0.01491	0.77142	0.839677791
ITGAV	2q32.1	-0.01489	0.771686	0.839922013
RFX1	19p13.12	-0.01489	0.771778	0.839975885
NEMP2	2q32.2	-0.01486	0.772166	0.840350815
SHTN1	10q25.3	0.014859	0.772206	0.840350815
CT45A4	Xq26.3	-0.01485	0.772314	0.840393709
C16ORF92	16p11.2	0.014851	0.77233	0.840393709
CDK20	9q22.1	-0.01483	0.772713	0.84076563
TIMM13	19p13.3	-0.01482	0.772835	0.840852682
GLT1D1	12q24.33	0.014787	0.773288	0.841299432
GRPEL1	4p16.1	0.014776	0.773449	0.841428423
FAM219B	15q24.1-q24.2	0.014767	0.773587	0.841532914
CORT	1p36.22	0.014762	0.773662	0.841568647
SLC35F3	1q42.2	0.014746	0.773892	0.84177374
GFOD1	6p23	0.014743	0.773943	0.841783493
KRT25	17q21.2	0.014739	0.773996	0.84179548
SNORA48	17p13.1	0.014703	0.774539	0.842340233
DEFB109B	8p23.1	0.014688	0.774759	0.842505275
NBPF3	1p36.12	0.014687	0.774775	0.842505275
C2ORF80	2q33.3	-0.01467	0.775023	0.842728657
SELP	1q24.2	-0.01466	0.775141	0.842811956
HORMAD1	1q21.3	0.014641	0.775468	0.84299598
CYP2A6	19q13.2	0.014637	0.775527	0.84299598
MBD3L1	19p13.2	0.014634	0.775563	0.84299598
KRTAP19-8	21q22.11	0.014634	0.775563	0.84299598
OR1A1	17p13.3	-0.01463	0.775563	0.84299598
TEX47	7q21.13	0.014634	0.775563	0.84299598
DCLK2	4q31.23-q31.3	0.014619	0.77579	0.843197296
ZGRF1	4q25	0.014615	0.775861	0.843207067
FBXO45	3q29	-0.01461	0.775884	0.843207067
LIPT2	11q13.4	-0.01458	0.776356	0.843674742
C5ORF63	5q23.2	-0.01457	0.776475	0.843758202
DUX4L6	4q35.2	0.014557	0.776716	0.843974196
RGS8	1q25.3	0.014552	0.7768	0.844020143
LCE1A	1q21.3	-0.01454	0.776925	0.844109991
PLPP1	5q11.2	0.014538	0.777005	0.844151388
POU5F2	5q15	0.014514	0.777365	0.844496722
SNORA3A	11p15.4	-0.01451	0.777482	0.844569089
OR2L13	1q44	-0.0145	0.777516	0.844569089
MED7	5q33.3	0.014491	0.7777	0.84463413
HBBP1	11p15.4	-0.01449	0.777729	0.84463413
SIX3	2p21	0.014489	0.777737	0.84463413
IDI2	10p15.3	-0.01449	0.777745	0.84463413

TAS2R7	12p13.2	0.014474	0.777962	0.844804458
LINC01002	19p13.3	0.014472	0.777986	0.844804458
PGAM5	12q24.33	0.014455	0.778247	0.845041542
BIRC2	11q22.2	0.014449	0.778327	0.845083039
NAPRT	8q24.3	0.014441	0.778459	0.845180414
DGCR2	22q11.21	-0.01443	0.778552	0.845185323
APOC1P1	19q13.32	0.014432	0.778593	0.845185323
USH1C	11p15.1	-0.01443	0.778652	0.845185323
ASXL2	2p23.3	0.014426	0.778675	0.845185323
LST1	6p21.33	0.014426	0.778675	0.845185323
B3GNT3	19p13.11	-0.01442	0.778726	0.845195386
MPP7	10p12.1	0.014416	0.778822	0.84525433
GRAMD2B	5q23.2	0.014409	0.778932	0.845327238
PCDHGB3	5q31.3	0.014393	0.779172	0.845541764
ELOA3	18q21.1	-0.01439	0.779261	0.845580607
DMRT2	9p24.3	0.014385	0.779292	0.845580607
PCAT4	4q21.21	0.01438	0.779365	0.845614153
ACTR2	2p14	-0.01437	0.779447	0.845656818
LOC100133050	5q21.1	0.014367	0.779556	0.845729774
ACVR1C	2q24.1	-0.01436	0.779633	0.845767683
SMAD5-AS1	5q31.1	-0.01436	0.779698	0.845792359
SPATA31D4	9q21.32	-0.01435	0.77987	0.845930777
OR1L4	9q33.2	0.014343	0.77991	0.845930777
AKR1C6P	10p15.1	0.014314	0.780347	0.846358876
CHSY1	15q26.3	-0.01429	0.780718	0.846715106
ELP1	9q31.3	0.014279	0.780876	0.846805765
LINC00620	3p25.1	0.014276	0.780924	0.846805765
CNMD	13q14.3	-0.01427	0.78096	0.846805765
SOX15	17p13.1	0.014273	0.780971	0.846805765
OR52A5	11p15.4	-0.01426	0.781119	0.846858499
OR5K2	3q11.2	-0.01426	0.781143	0.846858499
LMNB2	19p13.3	-0.01426	0.781146	0.846858499
REXO5	16p12.3	0.014222	0.781729	0.847444511
NKX6-1	4q21.23	0.014215	0.781837	0.847515964
CLEC18A	16q22.1	0.014188	0.782228	0.847893911
ZNF710	15q26.1	-0.01418	0.782386	0.848011909
ILDR2	1q24.1	0.014175	0.782432	0.848011909
FAM74A4	9q12	0.01417	0.782507	0.848011909
SPANXN1	Xq27.3	-0.01417	0.782507	0.848011909
IFNA8	9p21.3	0.014153	0.782761	0.84824004
PP7080	5p15.33	0.01415	0.782802	0.84824004
RASSF7	11p15.5	-0.01415	0.782869	0.848267458
C9ORF139	9q34.3	-0.01414	0.782923	0.848279421
RFC5	12q24.23	0.014125	0.783182	0.848514294
LINC01124	2q31.1	-0.01412	0.783248	0.848539921
NRXN1	2p16.3	-0.01412	0.783297	0.848546691
PPARG	3p25.2	-0.0141	0.783569	0.848795498
POU4F2	4q31.22	0.014078	0.783885	0.849071956
HIST1H2AG	6p22.1	-0.01408	0.783909	0.849071956
GASK1B	4q32.1	-0.01406	0.784178	0.84931755
NPNT	4q24	-0.01405	0.784365	0.849474105
SRI	7q21.12	0.014034	0.784545	0.849602171
FBXO4	5p13.1	0.014032	0.784568	0.849602171
OR2G6	1q44	-0.01402	0.784695	0.84968734
KCNK16	6p21.2	-0.01402	0.784731	0.84968734
SNORA55	1p34.3	0.014017	0.784792	0.849707388
SCOC	4q31.1	0.014013	0.784848	0.849722128
GAGE8	Xp11	0.014004	0.784997	0.849830721

PLCZ1	12p12.3	-0.014	0.785034	0.849830721
CLPTM1L	5p15.33	-0.01399	0.785235	0.849973301
ZNF226	19q13.31	0.013987	0.785252	0.849973301
PSG2	19q13.31	-0.01398	0.785293	0.849973301
KRT14	17q21.2	0.013975	0.785428	0.850073313
GYPE	4q31.21	0.013963	0.785607	0.850221757
COMTD1	10q22.2	-0.01395	0.785738	0.850317965
ALAD	9q32	-0.01394	0.785942	0.850490742
TCAIM	3p21.31	0.013936	0.786013	0.850490742
SHQ1	3p13	-0.01393	0.786026	0.850490742
MAPT	17q21.31	-0.01392	0.786261	0.850670474
PGLYRP2	19p13.12	0.013917	0.786293	0.850670474
RFX3	9p24.2	-0.01392	0.786319	0.850670474
CXORF66	Xq27.1	-0.01391	0.786368	0.850677523
OGA	10q24.32	-0.01391	0.786429	0.850697224
COQ8A	1q42.13	0.013903	0.786506	0.850735025
ZFY	Yp11.2	-0.0139	0.786578	0.850766571
CDK18	1q32.1	-0.01388	0.786858	0.851023478
IL13	5q31.1	0.013858	0.78718	0.851325665
HIST2H2AC	1q21.2	-0.01385	0.787287	0.851395668
DNAH11	7p15.3	0.013837	0.787498	0.85157242
COX4I1	16q24.1	0.013834	0.787535	0.85157242
KLF8	Xp11.21	-0.01383	0.787632	0.851631129
GKN1	2p13.3	0.013813	0.787853	0.851823577
SCARNA22	4p16.3	0.013809	0.787917	0.851846797
PSEN2	1q42.13	-0.0138	0.788013	0.851904944
GSTM1	1p13.3	0.013786	0.78826	0.852125608
DDX11	12p11.21	-0.01378	0.788413	0.852245658
NT5DC1	6q22.1	0.013772	0.788465	0.852255491
RPS4Y1	Yp11.2	-0.01375	0.78882	0.852592871
ARMS2	10q26.13	-0.01374	0.789008	0.852742093
RAB11FIP5	2p13.2	0.013734	0.789043	0.852742093
INTS12	4q24	-0.01373	0.789108	0.852765867
C12ORF71	12p11.23	-0.01372	0.789235	0.852857747
OR5V1	6p22.1	-0.01371	0.789468	0.853062791
COL5A3	19p13.2	-0.0137	0.789518	0.853070965
RBBP5	1q32.1	0.013697	0.789598	0.853112174
TNFSF12	17p13.1	-0.01367	0.789928	0.853335635
BNIP1	1q21.3	-0.01367	0.789942	0.853335635
TRIM60	4q32.3	0.013671	0.789978	0.853335635
ZNF322P1	9q22.33	-0.01367	0.790015	0.853335635
HMGN5	Xq21.1	0.013669	0.790018	0.853335635
PMCH	12q23.2	-0.01366	0.790117	0.8533964
MYMK	9q34.2	0.013647	0.790342	0.853557398
SCARNA3	1q25.1	0.013646	0.790351	0.853557398
KCNH4	17q21.2	-0.01364	0.790482	0.85365247
SLC8A3	14q24.2	0.013632	0.79056	0.853690423
TMPRSS7	3q13.2	-0.01363	0.790635	0.853725564
CELA3B	1p36.12	0.013619	0.790761	0.853815955
ZNF280D	15q21.3	0.013607	0.790945	0.853968637
MGAT4B	5q35.3	0.013603	0.791007	0.853988879
P4HTM	3p21.31 3p21.3	0.013563	0.791601	0.854584736
ZFYVE19	15q15.1	0.013481	0.792833	0.855868148
RHO	3q22.1	-0.01348	0.792921	0.855916793
NHLH2	1p13.1	0.013467	0.793042	0.85600125
CD320	19p13.2	-0.01345	0.793366	0.856305607
ALS2CL	3p21.31	0.013442	0.793415	0.856311811
IPO9	1q32.1	0.013424	0.793687	0.856558833

EHD4	15q15.1	-0.01341	0.793861	0.856701145
NAGK	2p13.3	-0.0134	0.79412	0.856934202
HMHB1	5q31.3	0.013389	0.794222	0.856998237
POLR3A	10q22.3	-0.01338	0.794369	0.85706443
OIP5	15q15.1	-0.01338	0.794369	0.85706443
CMC2	16q23.2	0.013355	0.794728	0.857397869
ARHGAP8	22q13.31	0.013353	0.794764	0.857397869
KHDC3L	6q13	0.013344	0.794887	0.857485093
GLTPD2	17p13.2	0.013337	0.794993	0.857553231
CRTC1	19p13.11	-0.01332	0.79521	0.857740938
FYN	6q21	-0.01331	0.795469	0.857931237
MSI2	17q22	-0.01331	0.795472	0.857931237
BEND7	10p13	0.013288	0.795731	0.858164241
CDKL2	4q21.1	0.013282	0.795823	0.858217382
TTR	18q12.1	-0.01328	0.795882	0.858217561
ZNF527	19q13.12	-0.01328	0.795909	0.858217561
OR5B17	11q12.1	-0.01324	0.796445	0.858714928
DLC1	8p22	-0.01324	0.796456	0.858714928
CLK3	15q24.1	-0.01322	0.796767	0.858996207
CDH22	20q13.12	0.013217	0.796803	0.858996207
CYTH2	19q13.33	-0.01321	0.796958	0.85910298
OR2L2	1q44	-0.0132	0.796988	0.85910298
BARHL2	1p22.2	-0.0132	0.797131	0.859184822
TAS1R1	1p36.31	0.013194	0.79715	0.859184822
IGSF11	3q13.32	-0.01318	0.797285	0.859275964
RHOXF2B	Xq24	-0.01318	0.797351	0.859275964
HNRNPA0	5q31.2	0.01318	0.797363	0.859275964
VSTM1	19q13.42	-0.01317	0.79754	0.859381595
CFAP97D1	17q21.31	0.013167	0.797547	0.859381595
MSTO1	1q22	-0.01316	0.797648	0.859444311
SLC16A2	Xq13.2	0.013135	0.798033	0.859813296
AFG1L	6q21	0.013125	0.798189	0.859923168
NBEAL2	3p21.31	-0.01312	0.798221	0.859923168
IFNA2	9p21.3	-0.01312	0.798271	0.859931135
SPRY3	Xq28 and Yq12	-0.01311	0.798357	0.859977179
LINC02112	5p15.31-p15.2	0.013104	0.798496	0.860057347
ST3GAL1	8q24.22	0.013099	0.798574	0.860057347
CEACAM16	19q13.31-q13.32	0.013099	0.798584	0.860057347
DENND2A	7q34	0.013097	0.798603	0.860057347
PSG6	19q13.31	-0.01308	0.798811	0.860191602
GSTO1	10q25.1	-0.01308	0.798814	0.860191602
GNB2	7q22.1	-0.01308	0.798862	0.860197678
H1FNT	12q13.11	-0.01306	0.799174	0.860486807
CYP8B1	3p22.1	-0.01305	0.799241	0.86051287
TMPRSS11BNL	4q13.2	0.013047	0.799352	0.860586037
LIM2	19q13.41	0.01304	0.799471	0.860667639
TTY14	Yq11.222	-0.01303	0.799637	0.860800645
ENAM	4q13.3	0.01302	0.799769	0.860896681
EPB42	15q15.2	0.012992	0.800187	0.861299466
OR56A4	11p15.4	-0.01298	0.800341	0.861419639
AP1S1	7q22.1	0.012971	0.800499	0.861542878
ZMPSTE24	1p34.2	0.012949	0.800833	0.861855901
RBMY2EP	Yq11.223	0.012946	0.80088	0.861858143
NOC2LP2	2q21.1	-0.01294	0.800943	0.861858143
RPGRIP1	14q11.2	0.012939	0.800983	0.861858143
LHX1	17q12	0.012938	0.801007	0.861858143
FAM205BP	9p13.3	0.012913	0.801378	0.862211031
TDRD10	1q21.3	-0.0129	0.801567	0.862334031

NETO2	16q12.1	-0.0129	0.801578	0.862334031
GHSR	3q26.31	0.012894	0.801656	0.862371274
CARD18	11q22.3	-0.01288	0.801808	0.862446212
PLEKHA1	10q26.13	0.012884	0.801812	0.862446212
MIR9-3HG	15q26.1	0.01287	0.80203	0.862634319
TMED10P1	8q24.3	-0.01285	0.802353	0.862896696
INTS6L	Xq26.3	0.012848	0.80236	0.862896696
KRTAP19-5	21q22.11	-0.01284	0.802412	0.862906489
LOC646471	1p36.11	0.012835	0.802545	0.863002833
CORO1B	11q13.2	-0.01283	0.802697	0.863120422
HES1	3q29	-0.01282	0.802743	0.86312291
ARPC3	12q24.11	0.012817	0.802821	0.863160275
C1ORF68	1q21.3	-0.01281	0.802957	0.863260451
SHFL	19p13.2	-0.0128	0.803064	0.863329159
TMEM69	1p34.1	-0.01279	0.803161	0.86338744
PRLR	5p13.2	0.012787	0.803275	0.863463154
ADCYAP1	18p11.32	-0.01278	0.80336	0.863508667
SCN9A	2q24.3	-0.01277	0.803594	0.863713948
AADACP1	3q25.1	0.012758	0.803716	0.863798335
PTH	11p15.3	0.012745	0.803907	0.86395762
KCNJ13	2q37.1	0.012709	0.804454	0.864498536
ZNF274	19q13.43	-0.01271	0.804508	0.864510205
SIAH3	13q14.13	-0.01269	0.804684	0.86465348
CASC1	12p12.1	0.012685	0.804806	0.864737829
RAB3C	5q11.2	-0.01268	0.804907	0.864800271
OR7E91P	2p13.3	-0.01267	0.805036	0.864890291
DEPP1	10q11.21	0.012667	0.805077	0.864890291
ARFIP2	11p15.4	-0.01265	0.805413	0.865204847
ZNF225	19q13.31	-0.01262	0.805758	0.865528105
ZNF747	16p11.2	-0.01262	0.805813	0.865529437
ZBED3	5q13.3	0.012617	0.805845	0.865529437
CCDC70	13q14.3	-0.01261	0.805899	0.86554064
PRR22	19p13.3	0.012596	0.806157	0.865771382
TMEM139	7q34	0.012585	0.806316	0.865895834
CRLF3	17q11.2	0.012569	0.806556	0.866107467
TBC1D2B	15q24.3-q25.1	-0.01253	0.807196	0.86674809
TTYH3	7p22.3	0.012523	0.807251	0.866760914
SOX9	17q24.3	-0.0125	0.807576	0.867034176
CCL14	17q12	-0.0125	0.807593	0.867034176
BAHCC1	17q25.3	0.012493	0.807716	0.867120243
BECN1	17q21.31	0.012465	0.808125	0.867513229
OR52L1	11p15.4	-0.01243	0.80864	0.868019123
A1CF	10q11.23	0.012424	0.808751	0.868091572
PPP2R3C	14q13.2	-0.01241	0.808941	0.868125689
CHD2	15q26.1	-0.01241	0.80897	0.868125689
ATRNL1	10q25.3	-0.01241	0.808976	0.868125689
MORN4	10q24.2	0.012408	0.808987	0.868125689
CGB8	19q13.33	-0.01241	0.808999	0.868125689
VN1R10P	6p22.1	-0.01239	0.809215	0.868310762
POTEM	14q11.2	-0.01238	0.809427	0.868491488
CCL1	17q12	0.01237	0.809569	0.868564103
INTU	4q28.1	0.012369	0.809581	0.868564103
SLC5A9	1p33	-0.01236	0.809646	0.868587325
PTPRQ	12q21.31	0.012328	0.810195	0.86912972
TMEM202	15q23-q24.1	-0.01231	0.810449	0.869354913
CLCN4	Xp22.2	-0.01227	0.811103	0.870010242
LYPLAL1	1q41	-0.01226	0.81124	0.870068957
LINC00271	6q23.3	-0.01226	0.811256	0.870068957

ADIG	20q11.23	-0.01226	0.811288	0.870068957
REC114	15q24.1	-0.01225	0.811445	0.870190052
SMC3	10q25.2	-0.01223	0.811702	0.870419083
NHEJ1	2q35	-0.01222	0.811906	0.870592229
FKBP2	11q13.1	0.012208	0.812011	0.870657237
DENND4C	9p22.1	-0.0122	0.812134	0.870743169
METAP2	12q22	0.012195	0.812216	0.870783754
MIOX	22q13.33	0.012182	0.812402	0.870936878
FLNC	7q32.1	0.012174	0.812528	0.87098409
PRXL2A	10q23.1	-0.01217	0.81257	0.87098409
SNX14	6q14.3	0.01217	0.812593	0.87098409
C4ORF51	4q31.21	-0.01216	0.812674	0.87098409
KRTAP10-1	21q22.3	0.012163	0.812687	0.87098409
DCLRE1A	10q25.3	-0.01216	0.812707	0.87098409
SLC8A1	2p22.1	-0.01216	0.812759	0.870993276
SHOC1	9q31.3	-0.01215	0.812899	0.871068571
DEFB125	20p13	-0.01215	0.812916	0.871068571
CCDC88A	2p16.1	0.012139	0.813055	0.871170751
MXD4	4p16.3	0.012122	0.813312	0.871399609
SAMD13	1p31.1	-0.01211	0.813512	0.87156742
DDX59	1q32.1	-0.0121	0.813683	0.871703866
CYB5R3	22q13.2	0.012076	0.814005	0.872002441
SPRED3	19q13.2	-0.01206	0.814224	0.872190389
CECR2	22q11.1-q11.21	0.012058	0.814276	0.872191987
ARSD	Xp22.33	0.012055	0.814328	0.872191987
HIST1H4A	6p22.2	0.012049	0.814414	0.872191987
HIST1H2AM	6p22.1	-0.01205	0.814435	0.872191987
TRIM68	11p15.4	0.012046	0.814468	0.872191987
EZH2	7q36.1	-0.01204	0.814487	0.872191987
HIGD2B	15q24.1	0.012023	0.814814	0.872495035
DNAJC5B	8q13.1	0.012004	0.815091	0.872739371
UBE2U	1p31.3	-0.012	0.815129	0.872739371
CALR	19p13.13	0.011996	0.81522	0.872789809
KLHL18	3p21.31	0.011992	0.815275	0.872802417
PMF1	1q22	-0.01199	0.815379	0.872867316
CLEC4GP1	19p13.2	-0.01198	0.815426	0.87287021
OR2J3	6p22.1	-0.01198	0.815504	0.872907995
LSM12	17q21.31	-0.01196	0.81579	0.873166569
KIAA0087	7p15.2	-0.01195	0.815865	0.873200914
OR52B6	11p15.4	-0.01195	0.815946	0.873240283
CLEC2B	12p13.31	-0.01193	0.816226	0.873493666
URAD	13q12.2	-0.01192	0.81631	0.873537101
HHLA1	8q24.22	0.011901	0.816655	0.873833837
FAM138D	12p13.33	0.0119	0.816675	0.873833837
OR4C15	11q11	0.011896	0.816728	0.873844173
SLITRK5	13q31.2	0.011887	0.816865	0.873903741
DPP9	19p13.3	0.011887	0.816871	0.873903741
DDHD2	8p11.23	-0.01187	0.817122	0.874125432
SH2D3C	9q34.11	-0.01186	0.817282	0.874249525
TMEM131L	4q31.3	-0.01183	0.81766	0.874607133
TCERG1	5q32	-0.01183	0.817731	0.874637114
KLRA1P	12p13.2	0.011789	0.818347	0.875249186
TMC6	17q25.3	0.01178	0.818487	0.875350071
ZIC3	Xq26.3	-0.01178	0.818529	0.875350071
SNORA47	5q13.3	-0.01176	0.818779	0.875570833
STARD10	11q13.4	0.011724	0.819338	0.876121934
CELFL1	11p11.2	-0.01171	0.819602	0.87635754
TNXB	6p21.33-p21.32	-0.01169	0.819834	0.876558278



HSDL2	9q32	0.011681	0.819981	0.876668366
SRSF8	11q21	-0.01167	0.82015	0.876802853
CCR1	3p21.31	-0.01165	0.820447	0.877073303
ATXN7L1	7q22.3	-0.01164	0.820659	0.877253092
CENPH	5q13.2	-0.01163	0.820708	0.877258576
UTP14C	13q14.3	-0.01163	0.82078	0.877288452
IFIT5	10q23.31	0.011614	0.821001	0.877478692
REV3L	6q21	0.011609	0.82107	0.877505074
OR14I1	1q44	0.011595	0.821287	0.877690646
AHCTF1	1q44	0.011586	0.821419	0.877784426
COX11	17q22	-0.01158	0.821579	0.877908406
LRRC56	11p15.5	-0.01156	0.821752	0.878046325
TRIM43	2q11.1	0.011555	0.821889	0.878146581
SUSD2	22q11.23	0.011549	0.82199	0.878207108
C10ORF120	10q26.13	0.011528	0.822309	0.878482908
RPS6KB1	17q23.1	-0.01153	0.822336	0.878482908
RAB42	1p35.3	0.011517	0.822476	0.878585941
OPN4	10q23.2	-0.01151	0.82259	0.878661233
MOG	6p22.1	0.011503	0.822685	0.878689356
LINC01140	1p22.3	0.011502	0.822705	0.878689356
SH3BGRL	Xq21.1	-0.01148	0.823067	0.879029394
UCP2	11q13.4	0.011461	0.823318	0.879204034
C2ORF69	2q33.1	0.011461	0.823318	0.879204034
NOTCH2NLA	1q21.1	-0.01145	0.823475	0.87932446
TTC31	2p13.1	-0.01143	0.823752	0.879573848
NGB	14q24.3	-0.01143	0.823864	0.879646391
CYP4F8	19p13.12	-0.01142	0.823935	0.879675096
RMI2	16p13.13	-0.01142	0.824004	0.879678165
GGT3P	22q11.21	-0.01141	0.824053	0.879678165
ATOH7	10q21.3 10q21.3-q22.1	-0.01141	0.82407	0.879678165
RIMS1	6q13	-0.0114	0.824194	0.879763885
FIGLA	2p13.3	0.011399	0.824255	0.879782037
HELZ	17q24.2	0.01139	0.824392	0.879881807
ZNF224	19q13.31	-0.01137	0.82474	0.88020604
SCN11A	3p22.2	-0.01136	0.824898	0.880327592
F9	Xq27.1	-0.01133	0.825286	0.880661579
SFTA1P	10p14	-0.01133	0.825333	0.880661579
OLIG2	21q22.11	0.011328	0.825343	0.880661579
TEX36	10q26.13	0.011323	0.825406	0.880682085
DERA	12p12.3	-0.01128	0.826084	0.881315117
HACD1	10p12.33	-0.01128	0.826087	0.881315117
SNORA77	1q32.1	0.011271	0.826209	0.881398284
CDA	1p36.12	0.011265	0.826296	0.881444253
GGCX	2p11.2	-0.01125	0.826486	0.881590799
ZNF467	7q36.1	0.01125	0.826522	0.881590799
SLC9C1	3q13.2	-0.01124	0.826637	0.881667105
UMODL1-AS1	21q22.3	-0.01124	0.826709	0.881697219
RNPC3	1p21.1	-0.01123	0.826799	0.881741258
VAR52	6p21.33	0.011228	0.826848	0.881741258
NPHP3-AS1	3q22.1	0.011226	0.826883	0.881741258
COL4A3	2q36.3	0.011221	0.826966	0.881782804
BTG4	11q23.1	0.011214	0.827067	0.881843613
TEX55	3q13.32	0.011211	0.827116	0.881848541
CRY1	12q23.3	0.011196	0.827335	0.882035794
CARNS1	11q13.2	0.011177	0.827633	0.882305866
SH3D21	1p34.3	0.011173	0.827688	0.882318126
FAAH	1p33	0.01117	0.827734	0.882319935
GRM1	6q24.3	-0.01117	0.82781	0.882353758

PRDM14	8q13.3	-0.01115	0.828105	0.882621112
EDNRB	13q22.3	-0.01112	0.828455	0.882947159
CIZ1	9q34.11	-0.0111	0.828767	0.883232882
POFUT2	21q22.3	-0.01108	0.829126	0.883569111
ENDOU	12q13.11	0.011069	0.829276	0.883681915
ROBO3	11q24.2	0.011063	0.829362	0.883692841
ARID5B	10q21.2	-0.01106	0.829375	0.883692841
YY2	Xp22.12	0.011054	0.829493	0.883771239
BLM	15q26.1	-0.01104	0.829715	0.883961109
NPM1	5q35.1	0.011012	0.830134	0.884344316
EIF4A3	17q25.3	-0.01101	0.830163	0.884344316
ATG14	14q22.3	-0.011	0.830317	0.88446101
MRPL24	1q23.1	0.010989	0.830483	0.884591633
ACAT1	11q22.3	-0.01098	0.830618	0.884669374
BPIFB4	20q11.21	0.010973	0.830726	0.884669374
FEN1	11q12.2	0.010971	0.830758	0.884669374
TRAF4	17q11.2	0.010971	0.830765	0.884669374
ADHFE1	8q13.1	-0.01097	0.830777	0.884669374
ADGRV1	5q14.3	-0.01096	0.830897	0.884749664
DKK4	8p11.21	0.010945	0.831148	0.884969649
AP3M1	10q22.2	0.010934	0.831324	0.885110441
DBNL	7p13	0.010916	0.831589	0.885345507
SYNGR1	22q13.1	-0.01091	0.831654	0.885368093
SCART1	10q26.3	0.010876	0.832207	0.885884528
KCNG4	16q24.1	0.010874	0.832228	0.885884528
ARHGEF10L	1p36.13	0.01087	0.832286	0.885899092
LINC00667	18p11.31	-0.01085	0.832603	0.886189857
C1ORF194	1p13.3	-0.01085	0.832664	0.886206839
LINC01091	4q28.1	0.010826	0.83296	0.88647527
OTOS	2q37.3	0.010804	0.833302	0.886753116
ADAM7	8p21.2	-0.0108	0.83331	0.886753116
GRIA4	11q22.3	-0.01078	0.833625	0.887041243
ALKAL2	2p25.3	0.010772	0.833783	0.887162524
BICRAL	6p21.1	-0.01076	0.833926	0.887267196
COL19A1	6q13	0.010758	0.833998	0.887297203
EPB41L4B	9q31.3	0.010748	0.834148	0.88732942
SOX2	3q26.33	-0.01075	0.834151	0.88732942
MTO1	6q13	0.010747	0.834161	0.88732942
PLEKHH3	17q21.2	0.010742	0.834233	0.887358904
RP2	Xp11.3	0.010733	0.834378	0.887435021
OR2A25	7q35	-0.01073	0.834394	0.887435021
ZCWPW2	3p24.1	0.010723	0.834525	0.887495854
TDRD9	14q32.33	-0.01072	0.834559	0.887495854
GALC	14q31.3	0.010719	0.834584	0.887495854
CDC42SE1	1q21.3	-0.01071	0.834731	0.887605408
SKINT1L	1p33	0.010697	0.834929	0.887768748
GPN3	12q24.11	-0.01069	0.835042	0.887841908
PDE6C	10q23.33	0.010684	0.835118	0.887875694
CDCP2	1p32.3	-0.01067	0.83527	0.887990255
SNORA53	12q23.1	0.010665	0.835409	0.888090598
FITM1	14q12	0.010659	0.835497	0.888100591
RNPEPL1	2q37.3	0.010659	0.835507	0.888100591
GLP2R	17p13.1	0.010648	0.835667	0.888221856
TAS2R50	12p13.2	-0.01064	0.835735	0.888221856
ATG16L2	11q13.4	0.010641	0.835773	0.888221856
NAA60	16p13.3	-0.01064	0.835799	0.888221856
SERTAD3	19q13.2	-0.01061	0.836283	0.888689876
USP32P1	17p11.2	-0.0106	0.836356	0.888719302

GSG1L	16p12.1	-0.0106	0.836459	0.888781578
CREB3L3	19p13.3	0.010589	0.836564	0.888846977
ESRRB	14q24.3	0.010581	0.836687	0.88893012
TIAL1	10q26.11	-0.01057	0.836929	0.88913979
ATAD3A	1p36.33	-0.01056	0.83706	0.889231846
GAGE2E	Xp11.23	0.01055	0.83716	0.889291387
EGFEM1P	3q26.2	-0.01054	0.837265	0.889355541
PCSK2	20p12.1	-0.01051	0.837794	0.889870544
MIR600HG	9q33.3	0.010499	0.837938	0.889903533
CDH20	18q21.33	0.010495	0.837991	0.889903533
ASIC5	4q32.1	-0.01049	0.838026	0.889903533
KCNQ1DN	11p15.4 11p15.5	-0.01049	0.838033	0.889903533
COQ10A	12q13.3	0.01049	0.838076	0.889903533
HOXB3	17q21.32	0.010489	0.838092	0.889903533
NLRP1	17p13.2	-0.01049	0.838138	0.889905069
GRM4	6p21.31	-0.01047	0.838332	0.890064279
FGF7P6	9q13	0.010469	0.838386	0.890074294
FCGR1CP	1q21.1	-0.01047	0.838441	0.890085378
GEMIN2	14q21.1	0.010456	0.83859	0.890170209
CRYBG2	1p36.11	-0.01045	0.83861	0.890170209
SAA1	11p15.1	-0.01044	0.838775	0.890298716
CHAD	17q21.33	0.010419	0.839149	0.890648066
HPCAL1	2p25.1	0.010399	0.839462	0.890933239
PTCD2	5q13.2	-0.0104	0.839511	0.890938216
ANKRD30A	10p11.21	-0.01039	0.839666	0.890968082
OR52B2	11p15.4	0.010385	0.839672	0.890968082
SLC46A1	17q11.2	0.010381	0.839728	0.890968082
TMOD1	9q22.33	-0.01038	0.839751	0.890968082
LAT	16p11.2	-0.01038	0.839774	0.890968082
PPFIBP2	11p15.4	-0.01038	0.839806	0.890968082
GHRL	3p25.3	-0.01036	0.840066	0.891195785
PACRG-AS1	6q26	0.010346	0.840268	0.891337791
PRDX6	1q25.1	0.010345	0.840288	0.891337791
CYP4A22	1p33	0.01033	0.840517	0.891533089
MTCL1	18p11.22	0.010324	0.840603	0.891577277
HAO1	20p12.3	0.01032	0.840667	0.891597983
TM4SF19	3q29	-0.01031	0.840826	0.891706904
OLFM1	9q34.3	-0.01031	0.840859	0.891706904
SNORA2B	12q13.11	-0.0103	0.840931	0.891736134
CGB2	19q13.33	-0.01029	0.841095	0.891863163
RNF19A	8q22.2	0.01027	0.841417	0.892156476
RBMXL2	11p15.4	-0.01026	0.841575	0.892276703
FRMPD2B	10q11.22	0.010256	0.841631	0.892289761
KLK7	19q13.41	-0.01025	0.841727	0.89231182
ADGRG3	16q21	0.010249	0.841741	0.89231182
CXCR1	2q35	0.010217	0.842239	0.892791674
CLDN14	21q22.13	-0.01021	0.842384	0.892898921
HS3ST2	16p12.2	0.010199	0.842504	0.892978312
ABCB6	2q35	-0.01019	0.842598	0.893030449
SPATA31D5P	9q21.32	-0.01019	0.842665	0.893054649
ATP13A1	19p13.11	0.010185	0.842713	0.893057638
PTCHD4	6p12.3	0.010172	0.84291	0.893219279
MAPT-IT1	17q21.31	0.010169	0.842969	0.893235073
AGBL3	7q33	0.010123	0.843662	0.893921749
ADAD2	16q24.1	-0.01012	0.843742	0.893958928
TTY1B	Yp11.2	-0.01011	0.843831	0.894006552
PER4	7p21.3	-0.0101	0.843977	0.89411393
UPK1A	19q13.12	-0.0101	0.844048	0.894141977

LOC729603	6q25.3	-0.01008	0.844357	0.894421415
MYCBP2	13q22.3	0.010073	0.844432	0.894454087
ZNF286B	17p11.2	-0.01005	0.844721	0.894712736
C18ORF54	18q21.2	0.010046	0.844836	0.894775697
CCL17	16q21	-0.01004	0.84487	0.894775697
TMEM14EP	3q25.2	-0.01004	0.844925	0.894787126
FOXD2-AS1	1p33	-0.01001	0.84542	0.89526404
SERPINE3	13q14.3	0.009996	0.845606	0.895403939
MC4R	18q21.32	-0.00999	0.845642	0.895403939
PRSS37	7q34	-0.00998	0.845848	0.895574452
CYP11B1	8q24.3	0.009955	0.846222	0.895923653
SLC25A29	14q32.2	0.009948	0.846337	0.895997331
EGR4	2p13.2	0.009943	0.846416	0.896034121
ARL5C	17q12	-0.00993	0.846628	0.896181173
CXADRP3	18p11.21	0.009924	0.846699	0.896181173
C2ORF70	2p23.3	-0.00992	0.846727	0.896181173
LLPH	12q14.3	0.009922	0.846734	0.896181173
SEC61B	9q22.33	0.0099	0.847066	0.896484909
OSM	22q12.2	-0.00989	0.847227	0.896593347
TCP10L	21q22.11	0.009887	0.847258	0.896593347
SLC44A5	1p31.1	-0.00988	0.847309	0.896597835
TRIB1	8q24.13	-0.00988	0.847351	0.896597835
TMX4	20p12.3	-0.00987	0.847493	0.896699922
NPAP1	15q11.2	0.009864	0.847618	0.896751153
CCT8	21q21.3	0.009863	0.847631	0.896751153
SUPT16H	14q11.2	0.009853	0.847785	0.896867127
RTL9	Xq23	-0.00984	0.847958	0.897002915
PTGDS	9q34.3	-0.00983	0.848169	0.897155935
GAB1	4q31.21	0.009826	0.848192	0.897155935
FBXW7	4q31.3	0.00982	0.848284	0.897205857
KHDC1	6q13	-0.0098	0.848647	0.897542363
LDLRAD4	18p11.21	-0.00977	0.848981	0.897847819
SLC19A1	21q22.3	-0.00977	0.849047	0.897867682
LSM1	8p11.23	0.009767	0.84909	0.897867682
NPHS1	19q13.12	0.009746	0.849423	0.898172707
SPATA19	11q25	-0.00974	0.849528	0.898191094
SACS	13q12.12	-0.00974	0.84953	0.898191094
CLIC1	6p21.33	-0.00974	0.849579	0.8981958
RRP1B	21q22.3	0.009726	0.849727	0.898304747
ZNF732	4p16.3	-0.00972	0.849796	0.898330069
GPR78	4p16.1	0.009708	0.850003	0.89846829
DOCK9	13q32.3	0.009705	0.850043	0.89846829
OR2B3	6p22.1	-0.0097	0.850061	0.89846829
ABCA6	17q24.2-q24.3	-0.00968	0.850486	0.898869531
PP2D1	3p24.3	0.009667	0.85062	0.898964025
BEND5	1p33	0.009659	0.850744	0.899047619
SNED1	2q37.3	-0.00965	0.850927	0.899193476
FHL5	6q16.1	-0.0096	0.85158	0.899835682
STOX2	4q35.1	-0.00959	0.851741	0.899958946
VPREB1	22q11.22	-0.00955	0.852455	0.90066597
MYT1L-AS1	2p25.3	-0.00954	0.852517	0.900683993
MYADM	19q13.42	0.009532	0.852676	0.900804511
ZYG11A	1p32.3	-0.00953	0.852752	0.900836833
SDR16C6P	8q12.1	0.009524	0.852806	0.900846353
MGC15885	15q22.2	0.00951	0.853019	0.901023832
H3F3C	12p11.21	-0.00951	0.853088	0.901048755
SLC25A30	13q14.13	0.009449	0.853953	0.901915036
LAMB2P1	3p21.31	0.009443	0.854047	0.901966497

LEMD1	1q32.1	-0.00944	0.854105	0.901980248
ATP1A3	19q13.2	-0.00943	0.854219	0.902053806
METTL16	17p13.3	0.009427	0.854285	0.902075732
FAM237A	2q33.3	0.009409	0.854562	0.902320014
TSGA13	7q32.2	-0.0094	0.854698	0.90241643
LIX1L	1q21.1	0.009387	0.854897	0.902579257
EIF4G3	1p36.12	0.009379	0.855026	0.902664756
VTI1A	10q25.2	-0.00938	0.855068	0.902664756
RSF1	11q14.1	-0.00936	0.855371	0.902936795
GGT1	22q11.23	-0.00931	0.856151	0.903712625
LRIT3	4q25	0.009292	0.856353	0.90382337
OR11H6	14q11.2	-0.00929	0.856369	0.90382337
ING3	7q31.31	-0.00929	0.856391	0.90382337
EDRF1	10q26.2	0.009252	0.856964	0.90438028
DRAXIN	1p36.22	-0.00921	0.857649	0.905055121
TEX13B	Xq22.3	0.009189	0.857928	0.905302336
CST8	20p11.21	0.00917	0.858212	0.905554292
ZNF436	1p36.12	0.009167	0.858265	0.905562067
TTN	2q31.2	-0.00915	0.858486	0.90574717
SPAG6	10p12.2	0.009142	0.858643	0.905865535
PDE4A	19p13.2	-0.00913	0.858808	0.905951489
FAM189B	1q22	0.009131	0.858815	0.905951489
FANCG	9p13.3	0.009122	0.858957	0.905992481
MTMR7	8p22	0.009121	0.858963	0.905992481
FAM86B3P	8p23.1	-0.00912	0.85899	0.905992481
COPS2	15q21.1	-0.00911	0.859187	0.906153213
ACTRT1	Xq25	-0.0091	0.859322	0.906248112
FER	5q21.3	0.009092	0.859416	0.906299208
HOXC11	12q13.13	0.009071	0.859733	0.906556777
CCDC62	12q24.31	-0.00907	0.859751	0.906556777
SERINC1	6q22.31	0.009058	0.859935	0.906703163
ZNF544	19q13.43	-0.00905	0.860077	0.906792691
GALP	19q13.43	-0.00905	0.860113	0.906792691
SLC9A9	3q24	0.009043	0.860156	0.906792691
ZSCAN30	18q12.2	0.009038	0.860241	0.906834765
ELSPBP1	19q13.33	-0.00903	0.860286	0.906834765
HNRNPA1L2	13q14.3	-0.00902	0.860535	0.907018539
CD5	11q12.2	0.009018	0.860551	0.907018539
CALB1	8q21.3	0.009004	0.860756	0.907187018
DCAF5	14q24.1	0.008998	0.860854	0.907242572
SLC22A15	1p13.1	-0.00898	0.861125	0.907479601
MCTP1	5q15	0.008974	0.861217	0.907529088
FAM13B	5q31.2	0.008949	0.861602	0.90788765
C21ORF62	21q22.11	-0.00894	0.861795	0.907925725
IMMT	2p11.2 2	-0.00893	0.861823	0.907925725
OR1B1	9q33.2	-0.00893	0.861889	0.907925725
EIF4H	7q11.23	0.008924	0.861978	0.907925725
LHFPL4	3p25.3	0.008924	0.861979	0.907925725
MKRN1	7q34	0.008924	0.861982	0.907925725
KIAA0556	16p12.1	0.008923	0.861995	0.907925725
CCDC93	2q14.1	-0.00892	0.862001	0.907925725
TPM4	19p13.12-p13.11	-0.00892	0.862054	0.907933523
LINC02800	1p36.11	0.008911	0.862189	0.907989135
INHBC	12q13.3	0.00891	0.862198	0.907989135
UCMA	10p13	-0.0089	0.862358	0.908109971
SNORA5B	7p13	0.008868	0.862837	0.908566991
ZPLD1	3q12.3	0.008854	0.863058	0.908751596
SLFN14	17q12	-0.00884	0.863261	0.908917418

HSF5	17q22	-0.00883	0.863479	0.909038357
PMCHL1	5p14.3	-0.00882	0.863503	0.909038357
SCGB1A1	11q12.3	-0.00882	0.863512	0.909038357
SARS	1p13.3	-0.00881	0.863696	0.90918455
TMEM190	19q13.42	-0.0088	0.863947	0.909393895
CNGA4	11p15.4	0.008789	0.864054	0.909393895
COQ7	16p12.3	0.008785	0.864108	0.909393895
GPR88	1p21.2	0.008785	0.864114	0.909393895
C3ORF49	3p14.1	-0.00878	0.864122	0.909393895
CDNF	10p13	-0.00878	0.864184	0.909411483
SYNGR3	16p13.3	0.008769	0.864362	0.909469397
LOC392196	8p23.1	0.008768	0.864368	0.909469397
C1ORF198	1q42.2	-0.00877	0.864375	0.909469397
NAIP	5q13.2	0.008758	0.864533	0.909586284
SSMEM1	7q32.2	0.008753	0.864601	0.909586284
UBE2J2	1p36.33	0.008752	0.864622	0.909586284
GLYAT	11q12.1	-0.00873	0.864916	0.909821101
FTMT	5q23.1	0.00873	0.864948	0.909821101
SLC43A1	11q12.1	-0.00873	0.864982	0.909821101
PRIMA1	14q32.12	0.008723	0.865066	0.909861527
APOC4	19q13.32	0.008712	0.865236	0.909969149
EWSR1	22q12.2	-0.00871	0.865259	0.909969149
AP2S1	19q13.32	0.008692	0.865539	0.910190553
HTR3A	11q23.2	0.00869	0.86556	0.910190553
IL31	12q24.31	-0.00868	0.865661	0.910248426
CAMKK2	12q24.31	0.008674	0.865813	0.910360731
NUDT9	4q22.1	-0.00866	0.865998	0.910462821
PLBD2	12q24.13	0.008662	0.866001	0.910462821
FOXB2	9q21.2	-0.00864	0.866368	0.910769575
HSPA4	5q31.1	0.008637	0.866384	0.910769575
IDH2	15q26.1	0.008626	0.866549	0.910895179
GPR151	5q32	0.008616	0.866708	0.91101424
CFHR1	1q31.3	-0.0086	0.867001	0.91115758
SNORA31	13q14.13	-0.0086	0.867002	0.91115758
APOC3	11q23.3	-0.0086	0.867006	0.91115758
SNAR-C3	19q13.33	-0.00859	0.867026	0.91115758
DARS2	1q25.1	-0.00857	0.86739	0.911492602
OSBPL9	1p32.3	0.00856	0.867562	0.911609279
FOXI2	10q26.2	-0.00856	0.867592	0.911609279
CCR10	17q21.2	0.008536	0.867928	0.91189583
PID1	2q36.3	-0.00853	0.867988	0.91189583
NLRP14	11p15.4	0.008531	0.868002	0.91189583
A1BG-AS1	19q13.43	-0.00851	0.868314	0.91217646
NUP210L	1q21.3	-0.00848	0.868743	0.912578639
RIOK2	5q15	0.008479	0.868796	0.912587
SPTLC1	9q22.31	0.008476	0.868852	0.912598087
CHIA	1p13.2	0.008471	0.868918	0.912613561
ANKRD18DP	3q29	0.008469	0.868958	0.912613561
PKP4	2q24.1	0.008465	0.869021	0.912631323
ADD3	10q25.1-q25.2	0.008457	0.869136	0.912704801
CREBBP	16p13.3	-0.00843	0.869549	0.913090274
THBD	20p11.21	-0.00842	0.869661	0.913160266
TTLL8	22q13.33	-0.00841	0.869841	0.913301504
CDC45	22q11.21	0.008391	0.870157	0.913431732
TSPAN4	11p15.5	-0.00839	0.870157	0.913431732
FETUB	3q27.3	0.008389	0.870185	0.913431732
ATP1B3	3q23	-0.00839	0.870206	0.913431732
GTPBP6	Xp22.33 and Yp11.31	0.008386	0.870223	0.913431732

SHC1	1q21.3	0.008385	0.870239	0.913431732
ADORA2A	22q11.23	0.00835	0.870774	0.913945325
SLC24A4	14q32.12	0.008335	0.871016	0.914117021
IFNAR2	21q22.11	0.008333	0.871038	0.914117021
NAA50	3q13.31	0.008331	0.871075	0.914117021
C19ORF71	19p13.3	-0.00833	0.871121	0.914117634
KCTD14	11q14.1	-0.00832	0.871118	0.914119497
GOLGA2P6	10p11.23	0.008319	0.871259	0.914119497
TFB2M	1q44	-0.00832	0.871259	0.914119497
NCAPH	2q11.2	-0.00831	0.871362	0.914179031
DDOST	1p36.12	-0.00828	0.871831	0.914623169
SGK2	20q13.12	0.008276	0.871923	0.91467228
OR2T5	1q44	0.008262	0.872132	0.914843713
PRSS1	7q34	-0.00826	0.872213	0.914879904
TRPM7	15q21.2	-0.00825	0.872267	0.914888887
CD72	9p13.3	0.008237	0.872516	0.915102547
GATA4	8p23.1	0.008231	0.872613	0.915156245
TMEM95	17p13.1	-0.00822	0.872731	0.915231981
ADARB1	21q22.3	0.008212	0.872904	0.915365862
CYB561A3	11q12.2	0.008206	0.87299	0.915408006
LOC100128573	19p13.2	-0.0082	0.873094	0.915468487
KCTD11	17p13.1	-0.00818	0.873377	0.915640029
ANKRD20A3	9q21.11	-0.00818	0.873403	0.915640029
IGFBP2	2q35	-0.00818	0.873407	0.915640029
FBLN7	2q13-q14.1	-0.00817	0.873486	0.915640029
SDCCAG8	1q43-q44	0.008174	0.873486	0.915640029
CALHM4	6q22.1	0.008167	0.873594	0.915653953
IGFL3	19q13.32	-0.00817	0.873613	0.915653953
KRT76	12q13.13	0.008164	0.873636	0.915653953
LMNTD2	11p15.5	-0.00815	0.873797	0.915773881
ASMTL	Xp22.33 and Yp11.2	-0.00814	0.873991	0.915792231
HLA-F-AS1	6p22.1	0.008141	0.873995	0.915792231
TRIM49	11q14.3	0.008139	0.874012	0.915792231
TAAR5	6q23.2	0.00813	0.874152	0.915792231
OR2M2	1q44	0.00813	0.874152	0.915792231
OR8H1	11q12.1	-0.00813	0.874152	0.915792231
OR7D2	19p13.2	-0.00813	0.87417	0.915792231
CACNG7	19q13.42	0.008126	0.874224	0.915792231
LOC100130264	20p11.23	0.008125	0.874226	0.915792231
UTS2R	17q25.3	-0.00811	0.874389	0.915915334
PPIL6	6q21	-0.0081	0.8746	0.916088133
PRDM16-DT	1p36.32	0.008091	0.874751	0.916190709
C11ORF52	11q23.1	0.008086	0.874831	0.916190709
HVCN1	12q24.11	0.008083	0.874874	0.916190709
CAT	11p13	0.008083	0.87488	0.916190709
PMCHL2	5q13.2	0.008065	0.875154	0.916390645
FFAR1	19q13.12	0.008064	0.875163	0.916390645
PPP2R5D	6p21.1	0.008038	0.875568	0.916766854
GALR1	18q23	-0.00802	0.875825	0.916987698
INE2	Xp22.2	0.007988	0.876335	0.917467512
WDFY1	2q36.1	-0.00799	0.876375	0.917467512
TESK1	9p13.3	-0.00793	0.87729	0.918361906
CRLF2	Xp22.33 and Yp11.2	0.007924	0.877323	0.918361906
RCC1	1p35.3	-0.00792	0.877366	0.918361906
FANCA	16q24.3	-0.00792	0.877413	0.918362364
MASP2	1p36.22	-0.0079	0.877734	0.918626302
TMEM175	4p16.3	-0.0079	0.877757	0.918626302
ISCU	12q23.3	-0.00788	0.877925	0.918733685

TRDN	6q22.31	-0.00787	0.878091	0.918733685
FOXRED1	11q24.2	-0.00787	0.878134	0.918733685
DMRTB1	1p32.3	-0.00787	0.878163	0.918733685
SNORA16A	1p35.3	-0.00787	0.878167	0.918733685
HTR5A	7q36.2	-0.00787	0.878196	0.918733685
CTNNAL1	9q31.3	-0.00787	0.878197	0.918733685
PXK	3p14.3	-0.00786	0.878226	0.918733685
POTEG	14q11.2	-0.00785	0.87846	0.918930101
LRRC55	11q12.1	0.007845	0.878532	0.91895733
WHRN	9q32	-0.00784	0.87863	0.918977618
PHC3	3q26.2	-0.00784	0.878643	0.918977618
TERB1	16q22.1	-0.00783	0.878819	0.91905892
POU3F3	2q12.1	-0.00783	0.878824	0.91905892
POM121L2	6p22.1	-0.00782	0.878881	0.91905892
SKAP2	7p15.2	0.007821	0.878904	0.91905892
BCORP1	Yq11.222	-0.00781	0.879079	0.91919365
SUMF1	3p26.1	0.007803	0.879176	0.919246552
CA3	8q21.2	-0.00779	0.879391	0.919423363
MRPL4	19p13.2	-0.00778	0.879549	0.919526217
AGAP7P	10q11.22	-0.00778	0.879581	0.919526217
FAM131B	7q34	0.00777	0.879678	0.919580236
GLIPR2	9p13.3	-0.00777	0.879728	0.919584116
C5ORF24	5q31.1	0.007701	0.880749	0.920602971
PRAMEF8	1p36.21	-0.0077	0.880798	0.920606776
HIST1H2BE	6p22.2	-0.00769	0.880972	0.920701551
ATP6V1G3	1q31.3	-0.00769	0.880981	0.920701551
MAGI2	7q21.11	-0.00768	0.881032	0.920706476
EFCAB5	17q11.2	0.007665	0.881305	0.920929753
CCT8L2	22q11.1	0.007663	0.881337	0.920929753
PLEKHN1	1p36.33	-0.00765	0.881531	0.921071702
GOLGA6C	15q24.2	-0.00765	0.881587	0.921071702
MIR1-1HG	20q13.33	-0.00764	0.881637	0.921071702
MPZL2	11q23.3	-0.00764	0.881657	0.921071702
ICA1	7p21.3	0.007636	0.881746	0.921117001
MARVELD1	10q24.2	0.007619	0.882011	0.921345525
LTN1	21q21.3	0.007613	0.8821	0.921390811
IL13RA2	Xq23	-0.00761	0.882217	0.921464669
FMOD	1q32.1	0.007601	0.882289	0.921491743
MT1F	16q13	0.007593	0.882405	0.921564673
HTN1	4q13.3	-0.00757	0.882692	0.921815943
MRAP	21q22.11	0.007562	0.882882	0.921925148
ZBTB38	3q23	0.007562	0.882888	0.921925148
ZNF845	19q13.42	0.007551	0.883057	0.922053356
CCDC117	22q12.1	-0.00754	0.883165	0.922078182
FNDC3A	13q14.2	-0.00754	0.883173	0.922078182
TDRD3	13q21.2	-0.00753	0.883365	0.922230564
ITIH6	Xp11.22	0.007523	0.88348	0.92230244
ASTL	2q11.2	-0.00752	0.883554	0.922325105
RELT	11q13.4	0.007516	0.883597	0.922325105
RAB3GAP2	1q41	-0.00751	0.88364	0.922325105
ZC3H6	2q14.1	0.007508	0.883716	0.922356511
CDK5RAP2	9q33.2	-0.0075	0.883842	0.92239564
CAPSL	5p13.2	-0.0075	0.883845	0.92239564
TTC5	14q11.2	0.007494	0.883924	0.922429987
TNFSF13B	13q33.3	0.007485	0.884063	0.922527021
POLQ	3q13.33	-0.00746	0.884527	0.922962645
CPAMD8	19p13.11	0.007441	0.884737	0.923133939
ANKRD20A4	9q13	0.00743	0.88491	0.923266458



KRTAP10-5	21q22.3	-0.0074	0.885329	0.923655584
ZHX3	20q12	-0.0074	0.885381	0.923661611
GLYR1	16p13.3	-0.00738	0.885673	0.923917517
MYO9B	19p13.11	0.007377	0.885732	0.923931579
PAPPA2	1q25.2	0.007372	0.885798	0.923952295
PPP3R1	2p14	0.007364	0.885921	0.924032242
TIPIN	15q22.31	-0.00736	0.885971	0.924035934
APOM	6p21.33	-0.00733	0.886421	0.924457596
C1ORF162	1p13.2	0.007327	0.886494	0.924464418
HBG2	11p15.4	-0.00733	0.88652	0.924464418
FOLH1B	11q14.3	-0.0073	0.88693	0.924842066
IQCF2	3p21.2	-0.0073	0.886979	0.924842066
FAM107A	3p14.3-p14.2	-0.00729	0.887021	0.924842066
NPHP4	1p36.31	0.007276	0.887276	0.925059868
TUBA3E	2q21.1	0.007267	0.887426	0.925167752
USP25	21q21.1	-0.00726	0.887498	0.925194952
EFNB1	Xq13.1	0.007234	0.887935	0.925496142
GH2	17q23.3	0.007232	0.887954	0.925496142
TTC41P	12q23.3	0.007231	0.88797	0.925496142
SETD2	3p21.31	-0.00723	0.887972	0.925496142
IDNK	9q21.32	0.007221	0.888127	0.925610275
OR11H1	22q11.1	0.007201	0.888435	0.925882919
ACAD10	12q24.12	0.007196	0.888512	0.925914482
NPC2	14q24.3	0.007181	0.88875	0.926114914
KAAG1	6p22.3	0.007169	0.888931	0.926254822
CARD19	9q22.31	-0.00716	0.889138	0.926422518
PLBD1	12p13.1	0.007137	0.88942	0.926667807
AMFR	16q13	-0.00713	0.889572	0.926740831
SNX8	7p22.3	0.007126	0.889595	0.926740831
SNX7	1p21.3	-0.00712	0.88967	0.926740831
RPL3	22q13.1	-0.00712	0.889675	0.926740831
SNORA69	Xq24	0.007106	0.889893	0.926920207
FAM193B	5q35.3	-0.0071	0.889986	0.926968925
ENG	9q34.11	0.007083	0.890258	0.927203783
CCDC17	1p34.1	-0.00708	0.890341	0.927241859
ACTL8	1p36.13	-0.00706	0.89056	0.927421447
KDR	4q12	-0.00703	0.891004	0.927822074
PARP15	3q21.1	-0.00703	0.891037	0.927822074
ITIH5	10p14	-0.007	0.891495	0.928250182
TMEM134	11q13.2	-0.00699	0.891657	0.928371062
MICAL2	11p15.3	-0.00699	0.89171	0.928378027
FAM215A	17q21.31	-0.00697	0.89199	0.928621208
TMEM120B	12q24.31	0.006962	0.892111	0.928657769
ARID4B	1q42.3	-0.00696	0.892118	0.928657769
GIPC2	1p31.1	0.006954	0.892241	0.928737198
ACBD4	17q21.31	0.006947	0.89234	0.928792464
OR7E24	19p13.2	0.006933	0.892566	0.928979787
ERCC5	13q33.1	-0.00691	0.892887	0.929265342
ATP5MC1	17q21.32	0.006908	0.892954	0.929286073
RC3H2	9q33.2	-0.0069	0.893109	0.929358587
LYPLA2	1p36.11	-0.0069	0.893116	0.929358587
DCAF1	3p21.2	0.006891	0.893209	0.929406917
RPS6KC1	1q32.3	-0.00688	0.893415	0.929572561
KCNV1	8q23.2	0.006862	0.893649	0.929768541
AURKC	19q13.43	-0.00685	0.893917	0.929999134
UBXN2B	8q12.1	0.006819	0.894317	0.930346241
NOBOX	7q35	0.006817	0.894344	0.930346241
ERAP2	5q15	-0.00681	0.894423	0.930379934

EIF4ENIF1	22q12.2	-0.0068	0.894579	0.930466142
R3HDM4	19p13.3	0.006801	0.894599	0.930466142
IL24	1q32.1	0.006796	0.894681	0.930503366
ACSM5	16p12.3	-0.00677	0.89512	0.930912289
MBNL1-AS1	3q25.1	0.006736	0.895597	0.931359562
PRDX2	19p13.13	-0.0067	0.896091	0.931825248
USP19	3p21.31	0.006693	0.896264	0.931932029
FIP1L1	4q12	0.006691	0.896287	0.931932029
OR52I1	11p15.4	0.006687	0.896353	0.93195255
OR5M11	11q12.1	-0.00668	0.896437	0.931966766
C12ORF40	12q12	0.00668	0.89646	0.931966766
TUBB7P	4q35.2	0.006672	0.896583	0.932022999
KDM5A	12p13.33	0.006671	0.896607	0.932022999
BASP1-AS1	5p15.1	0.006662	0.896738	0.932110878
CLEC5A	7q34	0.006642	0.89704	0.932307153
BAG6	6p21.33	0.006642	0.897044	0.932307153
LOC143666	11p15.5	0.006641	0.897067	0.932307153
C5ORF64	5q12.1	0.006634	0.897165	0.932344898
CREBRF	5q35.1	-0.00663	0.897196	0.932344898
MOCS2	5q11.2	-0.00661	0.897614	0.932731014
OR1K1	9q33.2	0.006599	0.897712	0.932783918
TERB2	15q21.1	0.006591	0.897838	0.932866898
ULBP3	6q25.1	-0.00658	0.897933	0.932916859
MVK	12q24.11	0.00657	0.898152	0.933096031
LOC407835	7q32.1	0.006566	0.898212	0.933109691
KRTAP8-1	21q22.11	-0.00655	0.898465	0.933285118
PSMD2	3q27.1	0.006549	0.898484	0.933285118
SNX13	7p21.1	-0.00655	0.898521	0.933285118
FAM167B	1p35.2	0.006534	0.898716	0.933440108
EIF4EBP1	8p11.23	0.006515	0.899008	0.933678686
OR5K1	3q11.2	0.006513	0.899039	0.933678686
GJD3	17q21.2	-0.00651	0.899138	0.933683641
KPNB1	17q21.32	-0.00651	0.899145	0.933683641
ZBED2	3q13.13	-0.0065	0.899184	0.933683641
KMO	1q43	-0.00648	0.899528	0.933983658
ZNF18	17p12	0.006479	0.899566	0.933983658
LOXHD1	18q21.1	0.006468	0.899735	0.934055192
ADAM20	14q24.2	-0.00647	0.899744	0.934055192
CHD5	1p36.31	-0.00646	0.899804	0.934055192
KMT2E	7q22.3	0.006462	0.899825	0.934055192
STAT1	2q32.2	0.006459	0.899868	0.934055192
HCFC1	Xq28	0.006456	0.899921	0.934061916
BZW1	2q33.1	-0.00644	0.900177	0.934244981
CD300E	17q25.1	-0.00644	0.900191	0.934244981
ZNF136	19p13.2	0.006417	0.900522	0.934474806
SCARNA4	1q22	-0.00642	0.900545	0.934474806
CYP4A11	1p33	-0.00641	0.900552	0.934474806
C3	19p13.3	-0.00639	0.900864	0.934749926
DHRS3	1p36.21	0.006381	0.901067	0.934911651
RPF1	1p22.3	-0.00638	0.901127	0.934925227
RAB2A	8q12.1-q12.2	0.006372	0.901206	0.934959473
PMS2P9	7q11.23	0.00636	0.901395	0.935107278
SEC14L1P1	11p11.2	-0.00635	0.901593	0.935263911
RAB40B	17q25.3	-0.00631	0.902119	0.935761461
CDC40	6q21	0.006307	0.902219	0.935816337
APLNR	11q12.1	-0.0063	0.902382	0.935936656
MAFB	20q12	0.006286	0.902531	0.935983535
RABGGTB	1p31.1	-0.00628	0.902574	0.935983535

CNTF	11q12.1	0.006275	0.902707	0.935983535
OR2M5	1q44	-0.00627	0.902754	0.935983535
OR511	11q12.1	-0.00627	0.902754	0.935983535
OR8B12	11q24.2	-0.00627	0.902754	0.935983535
OR4C16	11q11	-0.00627	0.902754	0.935983535
GNPDA2	4p12	0.006259	0.90296	0.936148189
MBIP	14q13.3	0.00625	0.903096	0.936240907
ZC3H4	19q13.32	-0.00624	0.903212	0.936312958
SNORA54	11p15.4	0.006236	0.903308	0.936322082
RBM23	14q11.2	0.006234	0.903332	0.936322082
LMBRD1	6q13	-0.00623	0.903375	0.936322082
SYCN	19q13.2	0.00623	0.903408	0.936322082
TBC1D3C	17q12	0.006204	0.9038	0.936679909
IGLL3P	22q11.23	-0.00618	0.904143	0.93698712
C7ORF71	7p15.2	0.006176	0.904233	0.937031239
VT11B	14q24.1	0.006168	0.904355	0.937109495
LOC100130238	12q24.33	-0.00615	0.904572	0.937285843
PRSS3P2	7q34	0.00615	0.904633	0.937301051
UBE2F	2q37.3	-0.00614	0.904724	0.937346121
HEG1	3q21.2	0.006128	0.904979	0.937562666
LUZP2	11p14.3	0.006124	0.905041	0.937578333
ZC2HC1B	6q24.2	-0.00612	0.905126	0.937617864
SFTPC	8p21.3	0.006114	0.905188	0.937633358
MBD6	12q13.3	-0.0061	0.905345	0.937700497
ADCY8	8q24.22	-0.0061	0.905347	0.937700497
RP1	8q11.23-q12.1	0.006097	0.905448	0.937753192
TNFRSF10C	8p21.3	0.006095	0.905491	0.937753192
NADSYN1	11q13.4	-0.00609	0.905574	0.937790725
BEX3	Xq22.2	-0.00607	0.905817	0.937993417
COX16	14q24.2	-0.00606	0.906099	0.938237387
MYOZ2	4q26	-0.00603	0.906484	0.93858727
CASC2	10q26.11	0.006022	0.906604	0.938620814
MIR7-3HG	19p13.3	0.006022	0.90661	0.938620814
EML6	2p16.1	0.005998	0.90698	0.938895864
BTG2	1q32.1	0.005998	0.906983	0.938895864
PPP4R1L	20q13.32	-0.006	0.907016	0.938895864
LTBR	12p13.31	0.005984	0.907203	0.93901153
PPP4R4	14q32.12-q32.13	0.005982	0.907222	0.93901153
NDUFA7	19p13.2	-0.00595	0.907658	0.939414198
ODF2	9q34.11	-0.00594	0.907927	0.93962325
MFSD5	12q13.13	0.005935	0.907954	0.93962325
SLITRK1	13q31.1	0.005927	0.908073	0.939697778
SLC25A1	22q11.21	0.0059	0.908489	0.940079931
GLT6D1	9q34.3	-0.00589	0.908628	0.940175492
C8A	1p32.2	-0.00589	0.908724	0.940225841
LOC100190986	16p12.2	-0.00587	0.908924	0.940384787
CRB2	9q33.3	-0.00586	0.909087	0.940504735
NKX2-6	8p21.2	0.005855	0.909185	0.940555018
KRTAP10-8	21q22.3	-0.00585	0.909261	0.940555018
MDFIC	7q31.1-q31.2	0.005849	0.909277	0.940555018
MTHFD2	2p13.1	0.005824	0.909676	0.940919099
BAZ2B	2q24.2	-0.00581	0.909925	0.941128416
NR3C1	5q31.3	0.005798	0.910068	0.941227679
ANKRD11	16q24.3	-0.00578	0.910337	0.941457605
AZU1	19p13.3	0.00577	0.910496	0.941573276
PARPBP	12q23.2	-0.00576	0.91061	0.941642332
TCAF1	7q35	0.005754	0.91075	0.941738125
LINC02396	12q13.12	0.005729	0.911128	0.942072592

SMPD1	11p15.4	0.005723	0.911225	0.942072592
GDPD1	17q22	0.005722	0.911237	0.942072592
METAP1	4q23	0.005721	0.911265	0.942072592
FAM72A	1q32.1	-0.00572	0.911308	0.942072592
DVL1	1p36.33	0.005702	0.911548	0.942271476
ANXA7	10q22.2	0.005699	0.911598	0.942274406
FAM157B	9q34.3	-0.0057	0.911649	0.942278748
CDK17	12q23.1	0.005677	0.91194	0.942531188
ZNF611	19q13.41	-0.00567	0.91211	0.942657847
C1ORF146	1p22.1	0.005655	0.912271	0.94277622
PLA2G7	6p12.3	0.00565	0.912353	0.942789465
SLC7A13	8q21.3	0.005647	0.912404	0.942789465
HIGD1C	12q13.12	0.005646	0.912425	0.942789465
LINC00643	14q23.2	-0.00562	0.912764	0.943045381
HIST1H3B	6p22.2	-0.00562	0.912834	0.943045381
SNORA80A	21q22.11	-0.00562	0.912856	0.943045381
ARHGAP28	18p11.31	0.005617	0.912862	0.943045381
PNKP	19q13.33	0.005588	0.913321	0.943422261
INTS7	1q32.3	0.005588	0.913321	0.943422261
FNBP1L	1p22.1	0.005576	0.9135	0.943559143
ATP4B	13q34	0.005568	0.913625	0.943595814
GATB	4q31.3	-0.00557	0.91363	0.943595814
NXNL2	9q22.1	0.005562	0.91372	0.943640649
LINC00470	18p11.32	-0.00556	0.913778	0.943651458
DDX41	5q35.3	-0.00554	0.914066	0.943870766
CP	3q24-q25.1	-0.00554	0.914085	0.943870766
MCM4	8q11.21	0.005513	0.914475	0.944225054
STH	17q21.31	0.005501	0.914661	0.944364708
ZNF148	3q21.2	-0.0055	0.914704	0.944364708
CCL3	17q12	-0.00549	0.914774	0.944388157
LOC728554	5q35.3	0.005485	0.914907	0.944445609
SERPINA11	14q32.13	-0.00548	0.914965	0.944445609
LELP1	1q21.3	-0.00548	0.914971	0.944445609
SNAR-E	19q13.32	0.005473	0.915088	0.944517398
EFNA3	1q21.3	0.005453	0.915397	0.944786975
CSH2	17q23.3	-0.00545	0.915492	0.944836393
MEOX1	17q21.31	-0.00544	0.915636	0.944908756
ZNF132	19q13.43	0.005436	0.915656	0.944908756
OR6N1	1q23.1	-0.00542	0.91594	0.945153057
LOC388955	2p15	0.00539	0.916381	0.94555991
ST8SIA5	18q21.1	0.005382	0.916493	0.945626029
FAM166A	9q34.3	-0.00536	0.916856	0.94595224
LCE3D	1q21.3	0.005351	0.916981	0.945964991
NBPF4	1p13.3	-0.00535	0.917053	0.945964991
CHAC1	15q15.1	-0.00534	0.91707	0.945964991
KIF2B	17q22	0.005343	0.917105	0.945964991
OR6Q1	11q12.1	0.005343	0.917105	0.945964991
RABIF	1q32.1	0.005328	0.917337	0.946155467
HELT	4q35.1	0.005321	0.917438	0.946211437
GPR63	6q16.1	-0.00529	0.917849	0.94658663
HIST2H3C	1q21.2	-0.00529	0.91793	0.946619915
GNPTG	16p13.3	0.005281	0.918062	0.946619915
RAD18	3p25.3	0.00528	0.918069	0.946619915
LINC01881	2q37.3	-0.00528	0.918071	0.946619915
C16ORF71	16p13.3	0.005271	0.918207	0.946711874
ADAT3	19p13.3	0.005263	0.918345	0.946765049
GADD45A	1p31.3	-0.00526	0.918392	0.946765049
ATP6V0E1	5q35.1	0.005254	0.918478	0.946765049

SLC35G3	17q12	0.005253	0.918488	0.946765049
PCDHB9	5q31.3	0.005253	0.918495	0.946765049
SCP2D1	20p11.23	0.005248	0.918563	0.946786085
PKMYT1	16p13.3	0.005219	0.919024	0.947213116
TMEM150B	19q13.42	0.005196	0.919367	0.947517758
BARHL1	9q34.13	-0.00519	0.919512	0.947618394
BAALC-AS2	8q22.3	-0.00518	0.919689	0.947748308
POLR2L	11p15.5	-0.00517	0.919773	0.947748308
SNORA80E	1q22	-0.00517	0.91978	0.947748308
CASP6	4q25	-0.00516	0.919966	0.94785985
SLC22A5	5q31.1	0.005157	0.919983	0.94785985
ZC3H7B	22q13.2	0.005149	0.920103	0.947934438
PZP	12p13.31	0.005146	0.92015	0.947934438
FAM205A	9p13.3	0.005124	0.92048	0.948206718
KCTD21	11q14.1	0.005123	0.920509	0.948206718
SAFB2	19p13.3	-0.00511	0.920666	0.948297047
NELFB	9q34.3	-0.00511	0.920706	0.948297047
ZNF516	18q23	-0.00511	0.920739	0.948297047
TARM1	19q13.42	0.005101	0.920839	0.948330584
DPPA3	12p13.31	-0.0051	0.920866	0.948330584
RAD54L	1p34.1	-0.00507	0.921395	0.948826262
SOST	17q21.31	0.005045	0.921711	0.949102842
FEZF2	3p14.2	0.00503	0.921938	0.949288391
ANKHD1	5q31.3	-0.00501	0.922297	0.949609105
PREX2	8q13.2	0.005003	0.922354	0.949618336
GPR158	10p12.1	0.004986	0.922617	0.949840537
AOC2	17q21.31	0.004968	0.922897	0.950079793
CHRM5	15q14	0.004954	0.923117	0.950257585
RAB3GAP1	2q21.3	0.004946	0.923243	0.950338682
ADCY4	14q12	-0.00493	0.923456	0.950509241
ATP1A1	1p13.1	-0.00493	0.92354	0.950546105
AKAP14	Xq24	0.004912	0.923773	0.9507374
PNN	14q21.1	0.004898	0.923989	0.950906012
DAZAP1	19p13.3	-0.00489	0.924076	0.950906012
HIST2H2AA3	1q21.2	-0.00489	0.924079	0.950906012
OR4K1	14q11.2	0.004878	0.92429	0.951025671
KRTAP19-3	21q22.11	-0.00488	0.92429	0.951025671
KRTAP13-2	21q22.11	-0.00487	0.92441	0.951099762
PCDHGC4	5q31.3	0.004861	0.924559	0.951162109
SDHAP1	3q29	-0.00486	0.924565	0.951162109
C12ORF65	12q24.31	0.004841	0.924865	0.951421674
DNAJB4	1p31.1	-0.00484	0.924919	0.951427634
LARP7	4q25	-0.00483	0.925078	0.951543248
FABP9	8q21.13	-0.0048	0.925465	0.951891734
SNORA28	14q32.32	0.004797	0.925543	0.951922982
GALNT2	1q42.13	0.004777	0.925851	0.95218547
ODF3L1	15q24.2	0.004775	0.925893	0.95218547
SRSF4	1p35.3	0.004733	0.926531	0.952746584
TRPC2	11p15.4	0.004733	0.926534	0.952746584
PRG1	19q13.31	-0.00473	0.926617	0.952772749
AMD1	6q21	-0.00473	0.926654	0.952772749
LYZL1	10p12.1-p11.23	-0.00472	0.926746	0.952818352
RBM34	1q42.3	-0.00467	0.927561	0.953606735
LBX2-AS1	2p13.1	0.004641	0.927954	0.953900785
AWAT2	Xq13.1	0.004641	0.927958	0.953900785
EN1	2q14.2	-0.00464	0.928029	0.953900785
ANLN	7p14.2	0.004636	0.928037	0.953900785
FAIM	3q22.3	0.004624	0.928231	0.954050495

TENM3-AS1	4q34.3	-0.00461	0.928374	0.95408866
DLG2	11q14.1	-0.00461	0.92842	0.95408866
FOXN4	12q24.11	0.004611	0.928425	0.95408866
COLEC10	8q24.12	-0.00461	0.928458	0.95408866
SLC27A6	5q23.3	0.004586	0.928818	0.954376619
DNMBP	10q24.2	0.004585	0.928834	0.954376619
ZFX	Xp22.11	-0.00458	0.92889	0.954378
PKD1L1	7p12.3	0.004578	0.92893	0.954378
TRARG1	17p13.3	0.004548	0.929405	0.95481655
ADAMTS20	12q12	0.004542	0.929497	0.954830301
FKBP11	12q13.12	-0.00454	0.929514	0.954830301
ZBED4	22q13.33	0.004513	0.929947	0.955196524
TRIM51	11q12.1	-0.00451	0.929966	0.955196524
LCN1	9q34.3	0.004503	0.930102	0.95528796
ASCL3	11p15.4	0.004498	0.930171	0.955309301
SRPK2	7q22.3	-0.00448	0.930447	0.955543975
MGC27382	1p31.1	-0.00446	0.930791	0.955847932
P4HA1	10q22.1	0.004453	0.930867	0.955854025
TMED3	15q25.1	-0.00445	0.930894	0.955854025
NR2E1	6q21	-0.00445	0.930961	0.955854025
USP17L6P	4p16.1	0.004446	0.930988	0.955854025
CACNG8	19q13.42	0.004437	0.931114	0.955934966
TAS2R16	7q31.32 7q31	0.004414	0.931482	0.956214793
OR4K17	14q11.2	0.004414	0.931482	0.956214793
GTF3C6	6q21	0.004402	0.931667	0.956355633
RUNX3	1p36.11	0.004392	0.931814	0.956442388
NRP1	10p11.22	0.00439	0.931847	0.956442388
SLC35D2	9q22.32	-0.00438	0.932074	0.956623818
DNASE1L2	16p13.3	-0.00437	0.932141	0.956623818
EARS2	16p12.2	-0.00437	0.932167	0.956623818
SERPINI2	3q26.1	0.004355	0.932393	0.956806413
DHRS4L1	14q11.2	0.004344	0.932559	0.956883889
APLN	Xq26.1	-0.00434	0.932564	0.956883889
DMC1	22q13.1	0.00434	0.932627	0.956899853
SNTB2	16q22.1	-0.00431	0.933094	0.95732977
SNORA62	3p22.1	0.004304	0.933173	0.957361375
PAQR4	16p13.3	0.0043	0.933248	0.957389044
BMS1P2	10q11.22	-0.00428	0.933594	0.957655722
ITPR1	3p26.1	-0.00428	0.933611	0.957655722
FKBP8	19p13.11	-0.00427	0.933694	0.957655722
LINC00710	10p14	-0.00427	0.933742	0.957655722
CCR3	3p21.31	0.004266	0.933762	0.957655722
MSS51	10q22.2	-0.00426	0.933794	0.957655722
PLEKHM3	2q33.3	0.00426	0.933858	0.957671659
CYP27B1	12q14.1	0.004256	0.933921	0.957687594
SNORA24	4q26	0.004241	0.934152	0.957841875
FRG2	4q35.2	-0.00424	0.934183	0.957841875
OR5J2	11q12.1	-0.00423	0.934249	0.957841875
CELA2A	1p36.21	-0.00423	0.934263	0.957841875
RAB4B	19q13.2	0.004225	0.934408	0.957909802
TPRX1	19q13.33	-0.00422	0.934425	0.957909802
TCTN3	10q24.1	0.004218	0.934515	0.957952937
MAP3K14	17q21.31	0.004213	0.934588	0.957979111
MID2	Xq22.3	0.004201	0.934772	0.958118084
PAK2	3q29	0.004193	0.934898	0.958170411
CDH5	16q21	0.004192	0.934918	0.958170411
FKSG29	13q32.3	-0.00418	0.935121	0.958253207
RASAL2	1q25.2	-0.00418	0.935148	0.958253207

MCMBP	10q26.11	-0.00418	0.935165	0.958253207
TREML3P	6p21.1	-0.00417	0.93519	0.958253207
PCBP2	12q13.13	0.004153	0.935515	0.958536982
CCDC146	7q11.23	-0.00415	0.935629	0.958604127
ZBTB41	1q31.3	0.004134	0.935819	0.958749859
TASOR2	10p15.1	0.00412	0.936026	0.958848736
XPC	3p25.1	0.004119	0.936042	0.958848736
PALMD	1p21.2	-0.00412	0.936059	0.958848736
LACC1	13q14.11	-0.0041	0.936406	0.959155011
CLCF1	11q13.2	-0.00407	0.936859	0.959570594
IL2	4q27	0.004051	0.937092	0.959760085
WNT8B	10q24.31	-0.00405	0.937157	0.959776783
SNORA16B	1q32.3	-0.00404	0.937212	0.959784532
SPANXN2	Xq27.3	0.004018	0.937611	0.960144196
LEPR	1p31.3	0.004012	0.937707	0.960192894
TBC1D3B	17q12	-0.00401	0.937763	0.96020187
F11	4q35.2	0.003984	0.938138	0.960536471
UBXN11	1p36.11	0.003977	0.938244	0.960595529
GRPEL2	5q32	-0.00394	0.938884	0.961182851
TSPAN32	11p15.5	-0.00393	0.938913	0.961182851
RTN3	11q13.1	0.003915	0.939201	0.961428401
OR5E1P	11p15.4	0.003908	0.939317	0.961497694
HMGXB4	22q12.3	0.003901	0.939422	0.96155552
PARP4	13q12.12	-0.00389	0.939598	0.961687372
PITHD1	1p36.11	0.003885	0.939668	0.961709937
ADPRHL2	1p34.3	0.003875	0.939825	0.961821283
BMS1P4	10q22.2	-0.00387	0.939922	0.961871158
RBP4	10q23.33	-0.00385	0.940156	0.962046009
UAP1L1	9q34.3	-0.00385	0.940189	0.962046009
MLANA	9p24.1	0.003847	0.940267	0.962076298
OBSCN	1q42.13	-0.00384	0.940359	0.962121824
MANCR	10p15.1	-0.00383	0.940451	0.962166576
OR10G9	11q24.2	-0.00383	0.940564	0.962232683
CRP	1q23.2	0.00382	0.940682	0.962293606
ROS1	6q22.1	0.003817	0.940719	0.962293606
HCCS	Xp22.2	-0.00381	0.9408	0.96232165
OR5P3	11p15.4	0.003809	0.940843	0.96232165
KDM8	16p12.1	-0.0038	0.941003	0.962436562
LINC00632	Xq27.1	-0.00378	0.941256	0.962646035
DHFR2	3q11.2	0.003772	0.941417	0.962736177
ACIN1	14q11.2	-0.00377	0.94144	0.962736177
PEX6	6p21.1	0.00376	0.941614	0.962864469
TRMT1L	1q25.3	0.003753	0.941721	0.962924503
BTN2A3P	6p22.2	0.003748	0.941794	0.96295041
MZF1	19q13.43	0.003732	0.942038	0.963150331
TMEM132D	12q24.33	-0.00372	0.94221	0.963276975
PRKCE	2p21	-0.00372	0.942305	0.963324944
LOC145474	14q24.2	-0.00371	0.942438	0.96341254
PHACTR2-AS1	6q24.2	-0.00369	0.942668	0.963597582
SIGLEC15	18q12.3	0.003683	0.942798	0.963663849
C1GALT1	7p22.1-p21.3	0.003681	0.942829	0.963663849
HNRNPA1P33	10q11.22	0.003646	0.943369	0.964167287
UNC45A	15q26.1	-0.00364	0.943526	0.964278408
PCSK1	5q15	-0.00363	0.9436	0.964304183
MND1	4q31.3	-0.00361	0.94389	0.964507687
MBLAC1	7q22.1	0.003613	0.943895	0.964507687
PRR11	17q22	0.0036	0.944087	0.964654591
LINC01973	17q25.3	-0.00358	0.944412	0.964937583

YARS	1p35.1	0.003557	0.944751	0.965234835
QARS	3p21.31	-0.00355	0.944898	0.965275101
GTSE1-DT	22q13.31	-0.00355	0.9449	0.965275101
KRT12	17q21.2	0.003543	0.94498	0.965275101
TDRD12	19q13.11	0.003541	0.945001	0.965275101
PSMA6	14q13.2	0.003539	0.945032	0.965275101
RBMXL1	1p22.2	0.003521	0.945322	0.965484282
SUMO1P1	20q13.2	-0.00352	0.945335	0.965484282
IL31RA	5q11.2	-0.00352	0.945381	0.965484282
PHLDB1	11q23.3	0.003502	0.945616	0.965674809
F2R	5q13.3	-0.00349	0.945763	0.965775567
ACTL9	19p13.2	0.00348	0.945943	0.965852822
ACAA2	18q21.1	-0.00348	0.945973	0.965852822
AIFM2	10q22.1	-0.00348	0.945983	0.965852822
CCL7	17q12	-0.00346	0.946312	0.966108814
NTRK2	9q21.33	0.003455	0.94633	0.966108814
KRTAP10-3	21q22.3	0.003449	0.946425	0.966156544
LHX8	1p31.1	0.003445	0.946487	0.966169794
CLK4	5q35.3	0.003433	0.946684	0.966281874
CBLN2	18q22.3	-0.00343	0.946765	0.966281874
HLA-DQB1	6p21.32	0.003427	0.946768	0.966281874
DEFB1	8p23.1	0.003426	0.946791	0.966281874
CCL8	17q12	-0.00342	0.946863	0.966281874
SMIM21	18q23	0.00342	0.946886	0.966281874
ZNF805	19q13.43	-0.00342	0.946938	0.96628583
MDN1	6q15	-0.00341	0.947092	0.96635563
OR2G2	1q44	0.003406	0.947103	0.96635563
CX3CL1	16q21	0.003382	0.947469	0.966539809
THNSL1	10p12.1	0.003376	0.947556	0.966539809
CNOT1	16q21	0.003376	0.947562	0.966539809
ZNF700	19p13.2	0.003376	0.947562	0.966539809
PPP1CB	2p23.2	-0.00337	0.947582	0.966539809
FUCA2	6q24.2	-0.00337	0.947646	0.966539809
GABRB3	15q12	-0.00337	0.947649	0.966539809
EME2	16p13.3	-0.00337	0.947687	0.966539809
DECR1	8q21.3	0.003364	0.947743	0.966539809
COMMD4	15q24.2	-0.00336	0.947766	0.966539809
AHSP	16p11.2	0.003348	0.947992	0.966721172
TCHP	12q24.11	-0.00334	0.94806	0.966741005
ALKBH7	19p13.3	0.003317	0.948477	0.967053217
CBLIF	11q12.1	-0.00332	0.948507	0.967053217
STEAP1	7q21.13	-0.00331	0.948517	0.967053217
SLC22A9	11q12.3	0.003312	0.948562	0.967053217
DENND3	8q24.3	-0.00331	0.948607	0.967053217
RNGTT	6q15	-0.00329	0.948821	0.967221848
CLYBL	13q32.3	-0.00327	0.949158	0.96751641
GUSBP3	5q13.2	-0.00325	0.949542	0.967858597
PATL1	11q12.1	0.003245	0.949599	0.967867211
CABP5	19q13.33	-0.00324	0.949671	0.967891209
RNF2	1q25.3	0.003228	0.949856	0.968030766
KREMEN2	16p13.3	0.003217	0.950033	0.968161879
IDI2-AS1	10p15.3	0.003207	0.950177	0.968258954
COL6A6	3q22.1	0.003204	0.95023	0.968264278
TRAPPC1	17p13.1	-0.00317	0.950801	0.968796771
STX6	1q25.3	-0.00316	0.950872	0.968818942
MOAP1	14q32.12	-0.00312	0.951479	0.969388954
RSRC1	3q25.32	-0.00311	0.95165	0.969513177
TOR1AIP1	1q25.2	-0.0031	0.951855	0.969673114



AWAT1	Xq13.1	0.003092	0.951974	0.969722474
CFI	4q25	0.00309	0.952	0.969722474
SNORA32	11q21	0.00307	0.952308	0.969986348
LINC00839	10q11.21	-0.00307	0.952381	0.970006553
CETN1	18p11.32	-0.00306	0.952459	0.970006553
ATF7IP	12p13.1	0.003059	0.952473	0.970006553
CASP8AP2	6q15	-0.00305	0.952608	0.970094993
GTF2IRD1P1	7q11.21	-0.00304	0.952736	0.970127959
KCNA4	11p14.1	-0.00304	0.952745	0.970127959
C4ORF46	4q32.1	0.003035	0.952852	0.970127959
WWP1	8q21.3	0.003034	0.952862	0.970127959
KRT3	12q13.13	0.003033	0.952883	0.970127959
POLR3G	5q14.3	-0.00302	0.953016	0.970213981
ISCA1	9q21.33	-0.00302	0.953086	0.970236073
HOTAIR	12q13.13	-0.00299	0.953492	0.970572657
HPX	11p15.4	0.002992	0.953514	0.970572657
NUS1	6q22.1	0.002986	0.953621	0.970582971
C16ORF82	16p12.1	-0.00299	0.953621	0.970582971
MCRIP2	16p13.3	0.002979	0.953717	0.970632082
ARNT2	15q25.1	0.002966	0.953918	0.970786735
B4GALT7	5q35.3	-0.00294	0.954359	0.971117434
HTR1E	6q14.3	0.002938	0.954361	0.971117434
TEKT1	17p13.1	-0.00294	0.954388	0.971117434
KLF1	19p13.13	-0.00292	0.954667	0.97131848
SLC35F5	2q14.1	-0.00292	0.954683	0.97131848
C1ORF189	1q21.3	-0.00291	0.954857	0.971427115
SGK3	8q13.1	-0.0029	0.954887	0.971427115
RUFY2	10q21.3	0.002896	0.95501	0.97147456
TNFAIP2	14q32.32	-0.00289	0.95503	0.97147456
CXCL10	4q21.1	0.00289	0.9551	0.971496581
PKNOX2	11q24.2	0.002882	0.955232	0.971581324
HOXD8	2q31.1	0.002878	0.955294	0.971594983
ATP8A2	13q12.13	-0.00287	0.955413	0.971666552
PSPN	19p13.3	0.00285	0.955724	0.971827356
CAVIN4	9q31.1	-0.00285	0.955734	0.971827356
PACRGL	4p15.31	0.002846	0.955785	0.971827356
CSF2	5q31.1	0.002845	0.955796	0.971827356
CBWD5	9q21.11	0.002844	0.955814	0.971827356
CACNA2D2	3p21.31	-0.00283	0.955986	0.97195284
TRPC7	5q31.1	0.002823	0.956142	0.972062374
TCTEX1D1	1p31.3	-0.00281	0.95629	0.972163108
MORC1	3q13.13	-0.0028	0.956529	0.972343527
SNORA14B	1q42.3	0.002796	0.956564	0.972343527
FZD1	7q21.13	-0.00279	0.956637	0.97236842
PNKD	2q35	0.002769	0.956988	0.972675649
SULT6B1	2p22.2	0.00276	0.957114	0.972745955
LINC00158	21q21.2	-0.00276	0.957154	0.972745955
SLBP	4p16.3	0.002748	0.957312	0.97285695
RAB10	2p23.3	0.002733	0.957543	0.973012873
TICRR	15q26.1	0.002732	0.957563	0.973012873
FKBP1B	2p23.3	0.002724	0.957686	0.973081198
C20ORF173	20q11.22	0.002721	0.957727	0.973081198
C5ORF58	5q35.1	0.002701	0.958031	0.973340289
TRPM1	15q13.3	-0.00268	0.958329	0.973593444
ERICH6B	13q14.13	-0.00268	0.958425	0.973642244
HIVEP2	6q24.2	-0.00266	0.958599	0.973769011
RNF126P1	17q22	0.002644	0.958921	0.974009656
CDT1	16q24.3	0.002643	0.958933	0.974009656

MREG	2q35	0.002629	0.959157	0.974187663
PRDM5	4q27	-0.00261	0.959429	0.97440109
URGCP	7p13	-0.00261	0.959464	0.97440109
IFI44L	1p31.1	0.0026	0.959598	0.974465165
ZNF587	19q13.43	0.002599	0.959625	0.974465165
PRAMEF6	1p36.21	-0.00257	0.960021	0.97481811
SEZ6	17q11.2	-0.00256	0.960284	0.975002138
OR4F15	15q26.3	-0.00256	0.960299	0.975002138
CEP128	14q31.1	-0.00255	0.960437	0.97506783
TBC1D3P2	17q23.2	-0.00254	0.9605	0.97506783
GTF2H2C	5q13.2	-0.00254	0.96051	0.97506783
NLGN2	17p13.1	-0.00252	0.960794	0.975306773
BPTF	17q24.2	-0.00252	0.960885	0.975348935
SPATA48	7p12.2	-0.00251	0.961014	0.975431041
WDR6	3p21.31	0.002495	0.961229	0.975599462
LINC00661	19p13.12	-0.00249	0.961356	0.975679295
OR6M1	11q24.1	0.002481	0.961445	0.975720159
ZNF554	19p13.3	-0.00247	0.961553	0.975780146
ATXN1L	16q22.2	-0.00244	0.962041	0.976206937
FANCI	15q26.1	0.002441	0.962071	0.976206937
MYOCD	17p12	-0.00243	0.962208	0.976296522
ZDHHC20	13q12.11	0.002422	0.962368	0.976409837
MANSC1	12p13.2	-0.00241	0.962549	0.976543489
NKX6-3	8p11.21	0.002391	0.962843	0.976792181
PEMT	17p11.2	0.002388	0.962893	0.976793803
PDXP	22q13.1	0.002376	0.963082	0.976935895
GOLGA8IP	15q11.2	-0.00237	0.963166	0.976971068
CLEC4E	12p13.31	0.002354	0.963426	0.977186072
LPAR2	19p13.11	-0.00235	0.963532	0.977243447
CCDC151	19p13.2	-0.00234	0.963641	0.977304709
PGLYRP1	19q13.32	-0.00234	0.963705	0.977315328
KATNBL1	15q14	-0.00233	0.963749	0.977315328
OR52N2	11p15.4	0.002317	0.963996	0.977475341
NPPA	1p36.22	0.002317	0.964004	0.977475341
TAS2R9	12p13.2	0.002311	0.964086	0.977508421
MRS2	6p22.3	-0.00225	0.965073	0.978459529
PHEX	Xp22.11	-0.00224	0.965185	0.978523794
NKX2-3	10q24.2	-0.00223	0.965295	0.978537997
CPSF6	12q15	-0.00223	0.965297	0.978537997
PCDHGA11	5q31.3	-0.00223	0.96541	0.978553641
NASP	1p34.1	0.002225	0.965424	0.978553641
C14ORF28	14q21.2	0.002222	0.965467	0.978553641
RBPJ	4p15.2	0.002219	0.965524	0.978553641
XKR3	22q11.1	0.002217	0.965556	0.978553641
APOA5	11q23.3	-0.00221	0.965723	0.978673346
FOXC1	6p25.3	0.002199	0.965825	0.978726652
PSMA4	15q25.1	-0.00219	0.966035	0.978890547
XAGE1B	Xp11.22	-0.00218	0.966129	0.978936124
PMPCA	9q34.3	-0.00216	0.966457	0.979218296
CAMK1G	1q32.2	0.002133	0.966852	0.979522999
PLSCR2	3q24	0.002127	0.966941	0.979522999
SLC6A16	19q13.33	-0.00213	0.966948	0.979522999
PELI2	14q22.3	0.002126	0.966962	0.979522999
LCTL	15q22.31	-0.00212	0.967002	0.979522999
DPPA5	6q13	-0.00209	0.967469	0.979845952
HIST1H4F	6p22.2	0.002092	0.967495	0.979845952
HNRNPK	9q21.32	-0.00209	0.967496	0.979845952
CCDC51	3p21.31	0.00209	0.967517	0.979845952

KEAP1	19p13.2	-0.00206	0.967958	0.980206271
KCTD4	13q14.12-q14.13	0.002061	0.96797	0.980206271
TSBP1	6p21.32	0.002036	0.968366	0.980557721
TRIML2	4q35.2	0.002029	0.968469	0.980579966
TRIM23	5q12.3	-0.00203	0.968486	0.980579966
LRRC37A4P	17q21.31	0.002011	0.968757	0.98080459
IKBIP	12q23.1	0.002005	0.968846	0.980837441
SMURF1	7q22.1	-0.002	0.968887	0.980837441
TSSK4	14q12	-0.00199	0.969026	0.980848979
BABAM2-AS1	2p23.2	0.001992	0.969045	0.980848979
CT45A2	Xq26.3	-0.00199	0.969049	0.980848979
ARHGAP27P1	17q24.1	0.001989	0.969095	0.980848979
LRRC24	8q24.3	0.001948	0.969723	0.981433392
GSDMD	8q24.3	-0.00195	0.96977	0.981433392
ZBBX	3q26.1	-0.00194	0.969852	0.981466861
NWD1	19p13.11	0.001935	0.969929	0.981494663
SDHAP2	3q29	-0.00193	0.970079	0.981597597
CEND1	11p15.5	0.001919	0.970186	0.981656235
OR2A12	7q35	0.001912	0.970286	0.981707754
ZNF687	1q21.3	-0.00191	0.970365	0.981738079
DCAF16	4p15.31	0.001902	0.970444	0.981743075
PTX3	3q25.32	0.001896	0.970531	0.981743075
WDR87	19q13.13	-0.00189	0.970632	0.981743075
FAM182A	20p11.1	-0.00189	0.970642	0.981743075
NIBAN1	1q25.3	-0.00189	0.970646	0.981743075
FAM90A7P	8p23.1	-0.00189	0.970664	0.981743075
MMP21	10q26.2	-0.00188	0.970825	0.981856165
TENT5B	1p36.11	-0.00185	0.971176	0.982161537
HSPA1A	6p21.33	0.001846	0.971318	0.982255663
PPP1R3G	6p25.1	0.001827	0.971616	0.982507016
LINC02249	15q13.2	0.001815	0.971788	0.982631809
SBF1	22q13.33	0.001811	0.97185	0.982642215
SEPTIN10	2q13	-0.00181	0.971897	0.982642215
OR10V1	11q12.1	0.001781	0.972317	0.983017577
GFAP	17q21.31	0.001778	0.972366	0.983017577
OR1L8	9q33.2	0.00177	0.972493	0.983095839
KPNA2	17q24.2	0.00173	0.973117	0.983648923
TRIM29	11q23.3	-0.00173	0.973171	0.983648923
GRM7	3p26.1	-0.00172	0.973197	0.983648923
GAL3ST3	11q13.1	0.001722	0.973236	0.983648923
EPHA1	7q34-q35	-0.0017	0.973509	0.983874557
CCNI2	5q31.1	0.00169	0.973743	0.98406149
FOXO4	Xq13.1	-0.00169	0.97381	0.984079426
SILC1	2p25.2	-0.00166	0.97427	0.984483637
THOC3	5q35.2	0.001653	0.974308	0.984483637
SSH3	11q13.2	-0.00165	0.974402	0.984528584
IGSF8	1q23.2	-0.00164	0.974475	0.98453322
KCNJ5	11q24.3	0.001641	0.974505	0.98453322
PCNX1	14q24.2	0.001626	0.974726	0.98464853
AURKAIP1	1p36.33	0.001626	0.974726	0.98464853
SMU1	9p21.1	0.001624	0.974766	0.98464853
CLRN2	4p15.32	0.001615	0.9749	0.984734494
DPRXP4	17q11.2	0.001603	0.975093	0.984879045
AGAP11	10q23.2	0.001598	0.975171	0.984908266
RASGRP2	11q13.1	0.001588	0.975328	0.984958559
LDHC	11p15.1	0.001587	0.975341	0.984958559
PAPSS1	4q25	0.001585	0.975368	0.984958559
REPS2	Xp22.2	-0.00158	0.975485	0.9850271

PEX19	1q23.2	0.001565	0.975676	0.985169931
OR6K3	1q23.1	0.001546	0.975976	0.985394764
PTMAP11	9q22.33	-0.00154	0.975997	0.985394764
ZNF33B	10q11.21	0.001531	0.976201	0.985551072
ZNF79	9q33.3	0.00152	0.976378	0.985680347
ANKRD54	22q13.1	-0.0015	0.976612	0.985867008
SHPRH	6q24.3	-0.0015	0.976716	0.98590622
MAGEB10	Xp21.3	0.001496	0.97675	0.98590622
IL5	5q31.1	0.001485	0.976924	0.985968523
LINC00599	8p23.1	0.001484	0.976941	0.985968523
KCNK15	20q13.12	-0.00148	0.976976	0.985968523
ALPK2	18q21.31-q21.32	-0.00148	0.97702	0.985968523
FSCN3	7q32.1	-0.00148	0.977058	0.985968523
GORASP2	2q31.1	-0.00147	0.977151	0.986013003
KCNC3	19q13.33	-0.00142	0.97787	0.98668894
TREH	11q23.3	-0.00141	0.978084	0.986832501
FAM111B	11q12.1	0.001408	0.978111	0.986832501
VPS50	7q21.2-q21.3	-0.0014	0.978188	0.98683703
OCIAD1	4p11	-0.0014	0.978228	0.98683703
CATIP	2q35	0.001397	0.978286	0.98683703
VCP	9p13.3	-0.00139	0.978332	0.98683703
ZNF778	16q24.3	-0.00139	0.978362	0.98683703
TMPRSS15	21q21.1	-0.00138	0.978487	0.986914035
ZNF628	19q13.42	-0.00137	0.97873	0.987065617
KCNAB1	3q25.31	-0.00137	0.978756	0.987065617
PCDHA1	5q31.3	-0.00137	0.978785	0.987065617
ZNF592	15q25.3	0.001349	0.979037	0.987269938
SULT1E1	4q13.3	0.001335	0.979251	0.98743519
CALHM1	10q24.33	-0.00133	0.979375	0.987485066
PPIL4	6q25.1	-0.00133	0.979399	0.987485066
OPN1MW	Xq28	-0.00132	0.979495	0.987500178
IFNA21	9p21.3	0.001318	0.979512	0.987500178
SIRT4	12q24.23-q24.31	0.001314	0.979579	0.987518039
AASDH	4q12	-0.00131	0.979636	0.987525656
STK32B	4p16.2	-0.00129	0.97992	0.987738168
TEK	9p21.2	-0.00129	0.980021	0.987738168
C11ORF88	11q23.1	0.001285	0.980026	0.987738168
ZKSCAN1	7q22.1	0.001284	0.980044	0.987738168
POU4F3	5q32	0.001263	0.980369	0.988015721
SNORA11	Xp11.21	0.001254	0.980507	0.988074469
ZNF491	19p13.2	-0.00125	0.980526	0.988074469
SP8	7p21.1	0.00125	0.980577	0.988076451
FGFR1OP	6q27	0.001234	0.980827	0.988278395
CCL3L3	17q12	0.001222	0.981013	0.988416119
INSL6	9p24.1	-0.00121	0.981244	0.988558762
PDE6B	4p16.3	0.001205	0.981273	0.988558762
ATF1	12q13.12	0.001198	0.981382	0.988558762
FAM71F1	7q32.1	0.00119	0.9815	0.988558762
OPN1SW	7q32.1	-0.00119	0.981576	0.988558762
RNASE2	14q11.2	-0.00118	0.9816	0.988558762
HOXB1	17q21.32	0.001183	0.981619	0.988558762
FAM89A	1q42.2	-0.00118	0.981633	0.988558762
GPATCH3	1p36.11	-0.00118	0.981636	0.988558762
NLN	5q12.3	0.001178	0.981687	0.988558762
DKFZP434L192	7p11.2	0.001176	0.981725	0.988558762
SLC17A2	6p22.2	-0.00117	0.981747	0.988558762
TSHZ2	20q13.2	0.001164	0.981906	0.988662248
KRTAP27-1	21q22.11	-0.00116	0.981948	0.988662248

CX3CR1	3p22.2	-0.00116	0.982006	0.988670666
MRS2P2	12q21.1	0.001152	0.982103	0.988679961
OTOL1	3q26.1	0.001151	0.982114	0.988679961
SCGB1D1	11q12.3	-0.00114	0.982334	0.988851475
LINC00602	6q27	0.001128	0.982472	0.988940487
IFITM4P	6p22.1	-0.00112	0.982554	0.988973873
AMOT	Xq23	0.001112	0.98271	0.989081296
SLC10A1	14q24.1	-0.0011	0.982828	0.989149934
SPACA5	Xp11.23	0.001083	0.983174	0.989448401
SNORA49	12q24.33	0.001059	0.983535	0.989747664
C17ORF100	17p13.1	-0.00106	0.98357	0.989747664
EPHB6	7q34	-0.00105	0.983664	0.989792191
NPVF	7p15.3	-0.00102	0.984145	0.990226649
STK11	19p13.3	0.00101	0.984309	0.990342366
DNAJB11	3q27.3	0.000968	0.984948	0.990935489
PROX2	14q24.3	0.000949	0.985243	0.991150681
ANP32A-IT1	15q23	-0.00095	0.985261	0.991150681
OR10AD1	12q13.11	-0.00094	0.985348	0.991177941
INTS4P2	7q11.21	0.000939	0.985407	0.991177941
UBQLN4	1q22	0.000937	0.985437	0.991177941
ALMS1P1	2p13.1	-0.00093	0.985538	0.991230316
ANKS6	9q22.33	-0.00093	0.985607	0.991249991
OR4D6	11q12.1	0.00091	0.985851	0.991406137
GPT2	16q11.2	0.00091	0.985862	0.991406137
MYBBP1A	17p13.2	0.000899	0.986022	0.991453966
CXCL8	4q13.3	-0.0009	0.986056	0.991453966
NATD1	17p11.2	-0.00089	0.986103	0.991453966
HIST1H2BL	6p22.1	-0.00089	0.986142	0.991453966
ZNF91	19p12	-0.00089	0.9862	0.991453966
KIF18B	17q21.31	-0.00089	0.986206	0.991453966
VSIG10	12q24.23	-0.00088	0.98628	0.99147819
OR2B6	6p22.1	-0.00086	0.986625	0.991775356
DEDD2	19q13.2	-0.00085	0.986782	0.991883104
WDR90	16p13.3	-0.00084	0.986875	0.991927481
CT55	Xq26.3	0.000816	0.987318	0.992322245
BTNL2	6p21.32	-0.0008	0.987637	0.992446424
ACER1	19p13.3	0.000795	0.987637	0.992446424
S1PR1	1p21.2	-0.00079	0.987672	0.992446424
DAZ1	Yq11.223	-0.00079	0.987691	0.992446424
CADM3	1q23.2	-0.00079	0.987695	0.992446424
ATP5PD	17q25.1	0.000789	0.987739	0.992446424
NR1I3	1q23.3	0.000777	0.987923	0.992502103
GLRA1	5q33.1	-0.00078	0.987934	0.992502103
ETV1	7p21.2	-0.00078	0.987943	0.992502103
SASS6	1p21.2	0.000772	0.988006	0.992516177
MIS18A	21q22.11	-0.00074	0.988518	0.992980605
SLC2A7	1p36.23	-0.00074	0.988572	0.992984472
SSPN	12p12.1	0.000725	0.988729	0.993052994
FKTN	9q31.2	-0.00072	0.988739	0.993052994
NLGN4X	Xp22.32-p22.31	-0.00072	0.988799	0.993063679
CCDC18	1p22.1	0.000704	0.989064	0.993279325
LINC00314	21q21.3	0.000697	0.989168	0.993334838
SH3KBP1	Xp22.12	-0.00069	0.989244	0.993361143
HMGNA4	6p22.2	-0.00068	0.989448	0.993442851
PTGES2	9q34.11	0.000677	0.989472	0.993442851
TPTE	21p11.2	-0.00068	0.989474	0.993442851
SLC25A3P1	1p32.3	-0.00067	0.989624	0.99354279
UGT2A1	4q13.3	0.000658	0.989773	0.993642872

NOXO1	16p13.3	0.00065	0.989903	0.99372406
KLHDC10	7q32.2	0.000576	0.991054	0.994786885
CD302	2q24.2	0.000573	0.991091	0.994786885
SNORA7B	3q21.3	0.000572	0.991111	0.994786885
LINC01566	16p11.1	0.000564	0.991235	0.994861365
WNT10B	12q13.12	-0.00055	0.991474	0.995040381
MR1	1q25.3	0.000546	0.991513	0.995040381
FRZB	2q32.1	-0.00054	0.991603	0.995040564
MICA	6p21.33	0.000534	0.991707	0.995040564
CTBP1	4p16.3	-0.00053	0.991724	0.995040564
IL1R1	2q11.2-q12.1	-0.00053	0.991754	0.995040564
SNRNP25	16p13.3	0.000526	0.991821	0.995040564
PCDHGC5	5q31.3	-0.00053	0.991839	0.995040564
THAP5	7q31.1	0.000524	0.991861	0.995040564
LY96	8q21.11	0.000517	0.991958	0.995088061
PATE4	11q24.2	0.00051	0.992076	0.995156533
OTUD3	1p36.13	-0.0005	0.992266	0.995267439
TBCD	17q25.3	0.000496	0.992286	0.995267439
OTULINL	5p15.2	0.000487	0.99243	0.995361897
CLCC1	1p13.3	0.000478	0.992573	0.995456346
ALX4	11p11.2	0.00047	0.992693	0.995526292
GUCY2GP	10q25.2	0.000455	0.992923	0.99570723
CLEC1B	12p13.31-p13.2	-0.00044	0.993207	0.995941764
ZNF573	19q13.12	0.000429	0.993328	0.996013543
SMG1P5	16p11.2	-0.00043	0.99339	0.996025744
ZNRD1ASP	6p22.1	0.000418	0.99351	0.99609665
MEIOB	16p13.3	0.000414	0.993567	0.996103269
ARAF	Xp11.3	-0.00041	0.993671	0.996141615
ZNF442	19p13.2	-0.00041	0.993704	0.996141615
NOC2L	1p36.33	-0.00039	0.993872	0.996259458
CCDC69	5q33.1	-0.00038	0.994052	0.996390705
ZFAT-AS1	8q24.22	-0.00038	0.994159	0.996448121
HAUS8	19p13.11	-0.00037	0.994226	0.996465361
MYH8	17p13.1	0.000366	0.994304	0.996469584
TM2D2	8p11.22	-0.00036	0.99433	0.996469584
BCAS2	1p13.2	-0.00036	0.994397	0.996486785
LCN6	9q34.3	-0.00036	0.994449	0.996489309
CDKN3	14q22.2	-0.00034	0.994715	0.996705581
GPR137C	14q22.1	-0.00032	0.995029	0.996970857
ZNF613	19q13.41	0.00031	0.99518	0.997005607
AQP4	18q11.2	-0.00031	0.995186	0.997005607
CCL18	17q12	0.000308	0.995213	0.997005607
LLGL1	17p11.2	0.000302	0.995307	0.997049591
POLR2E	19p13.3	-0.00029	0.995568	0.99725485
SLC1A3	5p13.2	0.000282	0.995612	0.99725485
CD200R1L	3q13.2	-0.00028	0.995707	0.997279101
TMEM87A	15q15.1	-0.00027	0.995735	0.997279101
FBXO22	15q24.2	-0.00026	0.996023	0.997517423
SSX7	Xp11.22	0.00024	0.996277	0.997631694
CCDC126	7p15.3	0.000239	0.996277	0.997631694
PRR18	6q27	-0.00024	0.996287	0.997631694
RASL11A	13q12.2	-0.00023	0.996502	0.99779704
UNC80	2q34	-0.00021	0.996669	0.997909058
OR4X2	11p11.2	-0.00021	0.996762	0.997909058
GPR148	2q21.1	-0.00021	0.996765	0.997909058
MOK	14q32.31	-0.00021	0.996813	0.997909058
XRCC3	14q32.33	0.000193	0.997007	0.998053454
FBXO42	1p36.13	-0.00016	0.997539	0.998513684

TTY18	Yp11.2	0.000152	0.997631	0.998513684
ENPP7	17q25.3	0.00015	0.997662	0.998513684
ARSK	5q15	-0.00015	0.997666	0.998513684
ZNF185	Xq28	-0.00014	0.997753	0.998550853
SYNPO	5q33.1	0.000129	0.997987	0.998697886
DSPP	4q22.1	0.000129	0.998	0.998697886
MYH1	17p13.1	-0.00012	0.998098	0.998746654
CENPV	17p11.2	0.000114	0.998222	0.998820028
GAL3ST4	7q22.1	0.000109	0.998309	0.998857173
TMEM196	7p21.1	#####	0.998569	0.999068344
PLAC4	21q22.2	#####	0.998784	0.999216298
RXRB	6p21.32	#####	0.998817	0.999216298
AMTN	4q13.3	6.18E-05	0.999039	0.999341065
KRT78	12q13.13	6.17E-05	0.999042	0.999341065
CIAO2A	15q22.31	#####	0.999128	0.999377846
PLAA	9p21.2	5.26E-05	0.999182	0.999381483
TTY9B	Yq11.222	4.31E-05	0.99933	0.999479981
CLEC18C	16q22.1	#####	0.999449	0.99954842
CACNG3	16p12.1	#####	0.999657	0.999707254
SLCO1C1	12p12.2	#####	0.999916	0.999916176

**Part 5****Coexpression genes of IQGAP3 in Colorectal Adenocarcinoma**

<b>Correlated Gene</b>	<b>Cytoband</b>	<b>Spearman</b>	<b>p-Value</b>	<b>q-Value</b>
CENPF	1q41	0.724128	2.71E-63	5.44E-59
KIF14	1q32.1	0.680229	3.29E-53	3.29E-49
ASPM	1q31.3	0.672726	1.17E-51	7.78E-48
MKI67	10q26.2	0.648177	6.77E-47	3.39E-43
ESPL1	12q13.13	0.63914	2.99E-45	1.20E-41
WDR62	19q13.12	0.632073	5.30E-44	1.77E-40
KIFC1	6p21.32	0.627868	2.83E-43	8.11E-40
CHTF18	16p13.3	0.626368	5.12E-43	1.28E-39
WDR90	16p13.3	0.624459	1.08E-42	2.41E-39
POLQ	3q13.33	0.623514	1.56E-42	2.87E-39
KIF18B	17q21.31	0.623493	1.58E-42	2.87E-39
POLE	12q24.33	0.615918	2.89E-41	4.82E-38
SPAG5	17q11.2	0.608472	4.67E-40	7.19E-37
HJURP	2q37.1	0.600555	8.31E-39	1.19E-35
TROAP	12q13.12	0.598063	2.02E-38	2.70E-35
KIF24	9p13.3	0.59316	1.14E-37	1.42E-34
TICRR	15q26.1	0.588647	5.44E-37	6.41E-34
DTL	1q32.3	0.580441	8.80E-36	9.79E-33
CCNF	16p13.3	0.578751	1.55E-35	1.63E-32
KIF11	10q23.33	0.574515	6.25E-35	6.26E-32
ZGRF1	4q25	0.572439	1.23E-34	1.17E-31
DDX12P	12p13.31	0.572112	1.37E-34	1.25E-31
GTSE1	22q13.31	0.570876	2.04E-34	1.78E-31
EXO1	1q43	0.569993	2.72E-34	2.27E-31
PRC1	15q26.1	0.569844	2.85E-34	2.29E-31
C21ORF58	21q22.3	0.568316	4.66E-34	3.59E-31
PKMYT1	16p13.3	0.563044	2.49E-33	1.85E-30
KNTC1	12q24.31	0.559835	6.81E-33	4.87E-30
FAM72D	1q21.1	0.556297	2.04E-32	1.41E-29
INCENP	11q12.3	0.555207	2.85E-32	1.90E-29
NSD2	4p16.3	0.552811	5.92E-32	3.83E-29
TACC3	4p16.3	0.549954	1.41E-31	8.80E-29
CENPE	4q24	0.548937	1.91E-31	1.16E-28
PLK1	16p12.2	0.546196	4.34E-31	2.55E-28
SHCBP1	16q11.2	0.545364	5.55E-31	3.06E-28
TCF19	6p21.33	0.545352	5.57E-31	3.06E-28
CHAF1A	19p13.3	0.545305	5.65E-31	3.06E-28
RUSC1-AS1	1q22	0.544145	7.97E-31	4.20E-28
NEK2	1q32.3	0.542637	1.24E-30	6.38E-28
KIF2C	1p34.1	0.538195	4.54E-30	2.27E-27
CIT	12q24.23	0.536813	6.77E-30	3.31E-27
FANCI	15q26.1	0.533884	1.57E-29	7.49E-27
YPEL5	2p23.1	-0.53345	1.78E-29	8.27E-27
GEN1	2p24.2	0.532768	2.16E-29	9.82E-27
FANCA	16q24.3	0.531525	3.07E-29	1.37E-26
SPC24	19p13.2	0.530115	4.58E-29	1.99E-26
UHRF1	19p13.3	0.529422	5.56E-29	2.37E-26
NUF2	1q23.3	0.528778	6.67E-29	2.78E-26
CCDC150	2q33.1	0.524635	2.12E-28	8.65E-26
BRCA1	17q21.31	0.524265	2.34E-28	9.39E-26
E2F2	1p36.12	0.52392	2.58E-28	1.01E-25
E2F8	11p15.1	0.523076	3.26E-28	1.25E-25
CDCA8	1p34.3	0.522196	4.15E-28	1.57E-25
LIG1	19q13.33	0.521791	4.64E-28	1.72E-25
RECQL4	8q24.3	0.521537	4.97E-28	1.81E-25



LOC642846	12p13.31	0.520699	6.25E-28	2.24E-25
DNMT1	19p13.2	0.517054	1.68E-27	5.91E-25
FOXM1	12p13.33	0.516925	1.74E-27	6.02E-25
MCM10	10p13	0.515369	2.65E-27	8.99E-25
CEP55	10q23.33	0.514447	3.39E-27	1.12E-24
MCM3	6p12.2	0.514421	3.42E-27	1.12E-24
KIF20A	5q31.2	0.514032	3.79E-27	1.22E-24
TTC13	1q42.2	0.509541	1.25E-26	3.97E-24
DAZAP1	19p13.3	0.505127	3.96E-26	1.24E-23
MELK	9p13.2	0.505023	4.07E-26	1.25E-23
PIF1	15q22.31	0.504549	4.60E-26	1.40E-23
UBE2T	1q32.1	0.502993	6.88E-26	2.06E-23
ODF2	9q34.11	0.502569	7.67E-26	2.26E-23
FANCD2	3p25.3	0.502376	8.07E-26	2.34E-23
KIF23	15q23	0.500383	1.34E-25	3.85E-23
LMNB2	19p13.3	0.499546	1.67E-25	4.70E-23
MASTL	10p12.1	0.499101	1.86E-25	5.19E-23
HCN3	1q22	0.498543	2.15E-25	5.90E-23
RAD54L	1p34.1	0.498217	2.33E-25	6.32E-23
AFG3L1P	16q24.3	0.497394	2.88E-25	7.68E-23
ANLN	7p14.2	0.496991	3.18E-25	8.39E-23
ARHGAP33	19q13.12	0.495866	4.23E-25	1.10E-22
PCNT	21q22.3	0.495604	4.52E-25	1.16E-22
KIF4A	Xq13.1	0.492402	1.01E-24	2.55E-22
XRCC2	7q36.1	0.492208	1.06E-24	2.65E-22
POLD1	19q13.33	0.492093	1.09E-24	2.68E-22
C17ORF53	17q21.31	0.492052	1.10E-24	2.68E-22
DOT1L	19p13.3	0.491499	1.26E-24	3.04E-22
EZH2	7q36.1	0.491342	1.31E-24	3.12E-22
NCAPG	4p15.31	0.488272	2.80E-24	6.59E-22
NCAPG2	7q36.3	0.486835	3.98E-24	9.26E-22
CDT1	16q24.3	0.486274	4.56E-24	1.05E-21
DONSON	21q22.11	0.486234	4.61E-24	1.05E-21
CKAP2L	2q14.1	0.485226	5.89E-24	1.32E-21
FAM72A	1q32.1	0.484617	6.83E-24	1.52E-21
NUP188	9q34.11	0.484199	7.56E-24	1.66E-21
ZWINT	10q21.1	0.480993	1.64E-23	3.56E-21
DNAJB9	7q31.1 14q24.2-q24.3	-0.48082	1.70E-23	3.67E-21
ZNF695	1q44	0.480698	1.76E-23	3.74E-21
LAPTM4A	2p24.1	-0.48054	1.83E-23	3.85E-21
BUB1B	15q15.1	0.479281	2.46E-23	5.14E-21
ZNF367	9q22.32 9q22.32	0.4791	2.57E-23	5.31E-21
CAPN15	16p13.3	0.476607	4.65E-23	9.50E-21
CEP152	15q21.1	0.476492	4.78E-23	9.67E-21
PASK	2q37.3	0.476441	4.84E-23	9.69E-21
SMC4	3q25.33	0.476138	5.19E-23	1.03E-20
RACGAP1	12q13.12	0.47603	5.33E-23	1.05E-20
CCDC18	1p22.1	0.475001	6.79E-23	1.32E-20
TONSL	8q24.3	0.47444	7.75E-23	1.49E-20
ITPR3	6p21.31	0.471541	1.52E-22	2.91E-20
NFATC2IP	16p11.2	0.47094	1.75E-22	3.31E-20
NCAPH	2q11.2	0.470216	2.07E-22	3.88E-20
PRCP	11q14.1	-0.4691	2.68E-22	4.97E-20
CENPL	1q25.1	0.46907	2.70E-22	4.97E-20
HASPIN	17p13.2	0.468704	2.94E-22	5.35E-20
KIF22	16p11.2	0.468596	3.01E-22	5.44E-20
TOP2A	17q21.2	0.468514	3.07E-22	5.49E-20
ARHGAP11B	15q13.2	0.468422	3.14E-22	5.56E-20

TTK	6q14.1	0.467999	3.46E-22	6.07E-20
CDCA3	12p13.31	0.46734	4.02E-22	7.01E-20
KIF20B	10q23.31	0.466173	5.25E-22	9.07E-20
BLM	15q26.1	0.465621	5.96E-22	1.02E-19
ARHGAP11A	15q13.3	0.465134	6.66E-22	1.13E-19
SRRT	7q22.1	0.465081	6.74E-22	1.13E-19
MTFR2	6q23.3	0.464789	7.20E-22	1.20E-19
BUB1	2q13	0.46412	8.38E-22	1.39E-19
TRIM11	1q42.13	0.4639	8.81E-22	1.45E-19
NCAPD2	12p13.31	0.463607	9.42E-22	1.53E-19
PTBP1	19p13.3	0.46258	1.19E-21	1.92E-19
ASF1B	19p13.12	0.461146	1.64E-21	2.63E-19
DDX11	12p11.21	0.46014	2.06E-21	3.27E-19
SNAPC4	9q34.3	0.458837	2.75E-21	4.34E-19
KNL1	15q15.1	0.458662	2.86E-21	4.48E-19
FAM72B	1p11.2	0.458069	3.26E-21	5.00E-19
RUSC1	1q22	0.458067	3.27E-21	5.00E-19
TCERG1	5q32	0.458059	3.27E-21	5.00E-19
CDK1	10q21.2	0.456953	4.18E-21	6.35E-19
NCAPD3	11q25	0.456851	4.28E-21	6.44E-19
CDCA5	11q13.1	0.455776	5.43E-21	8.11E-19
SGO1	3p24.3	0.454653	6.95E-21	1.03E-18
HAUS5	19q13.12	0.453053	9.87E-21	1.45E-18
PLK4	4q28.1	0.452309	1.16E-20	1.70E-18
E2F7	12q21.2	0.452205	1.19E-20	1.72E-18
MMS22L	6q16.1	0.451189	1.48E-20	2.12E-18
IDI2-AS1	10p15.3	0.45118	1.49E-20	2.12E-18
MDC1	6p21.33	0.450438	1.75E-20	2.48E-18
TIMELESS	12q13.3	0.449869	1.97E-20	2.78E-18
AHCTF1	1q44	0.449705	2.05E-20	2.85E-18
NUSAP1	15q15.1	0.449702	2.05E-20	2.85E-18
SKA3	13q12.11	0.448852	2.46E-20	3.40E-18
ILF3	19p13.2	0.446225	4.32E-20	5.93E-18
FKBP7	2q31.2	-0.44433	6.47E-20	8.82E-18
MYO19	17q12	0.444087	6.82E-20	9.23E-18
DENND4B	1q21.3	0.44252	9.51E-20	1.28E-17
WDR34	9q34.11	0.442367	9.82E-20	1.31E-17
ATAD2	8q24.13	0.441477	1.18E-19	1.57E-17
ZNF833P	19p13.2	0.4404	1.49E-19	1.96E-17
AARS2	6p21.1	0.44032	1.51E-19	1.98E-17
STIL	1p33	0.439724	1.71E-19	2.23E-17
BCAS3	17q23.2	-0.43817	2.37E-19	3.06E-17
IPO9	1q32.1	0.437206	2.89E-19	3.71E-17
CENPI	Xq22.1	0.437145	2.93E-19	3.74E-17
ATAD5	17q11.2	0.436407	3.41E-19	4.33E-17
RRM2B	8q22.3	-0.43569	3.96E-19	4.98E-17
ORC6	16q11.2	0.433914	5.71E-19	7.15E-17
LMNB1	5q23.2	0.433557	6.14E-19	7.64E-17
DNA2	10q21.3	0.433465	6.26E-19	7.74E-17
PSRC1	1p13.3	0.433223	6.58E-19	8.08E-17
C1ORF35	1q42.13	0.432224	8.07E-19	9.86E-17
ERLEC1	2p16.2	-0.43214	8.22E-19	9.97E-17
NDC80	18p11.32	0.43139	9.57E-19	1.15E-16
FEN1	11q12.2	0.430058	1.25E-18	1.50E-16
SUGP2	19p13.11	0.429524	1.40E-18	1.67E-16
MAP3K21	1q42.2	0.429383	1.44E-18	1.70E-16
CKAP5	11p11.2	0.42766	2.04E-18	2.40E-16
EME1	17q21.33	0.427596	2.06E-18	2.41E-16

RNF11	1p32.3	-0.42565	3.05E-18	3.55E-16
BRCA2	13q13.1	0.42382	4.39E-18	5.08E-16
AUNIP	1p36.11	0.423414	4.75E-18	5.47E-16
LENG8	19q13.42	0.422743	5.43E-18	6.21E-16
CCNA2	4q27	0.42252	5.67E-18	6.46E-16
ACAP3	1p36.33	0.421708	6.66E-18	7.54E-16
CIP2A	3q13.13	0.421222	7.33E-18	8.25E-16
PROSER3	19q13.12	0.420418	8.59E-18	9.61E-16
C2ORF48	2p25.1	0.420368	8.67E-18	9.65E-16
KIAA0895L	16q22.1	0.420226	8.92E-18	9.87E-16
AGAP6	10q11.23	0.420093	9.15E-18	1.01E-15
ADAM15	1q21.3	0.42	9.32E-18	1.02E-15
CDC25C	5q31.2	0.41982	9.66E-18	1.05E-15
KIF15	3p21.31	0.419423	1.04E-17	1.13E-15
SMC2	9q31.1	0.419021	1.13E-17	1.21E-15
FANCG	9p13.3	0.419009	1.13E-17	1.21E-15
CENPN	16q23.2	0.41881	1.18E-17	1.25E-15
TELO2	16p13.3	0.41876	1.19E-17	1.26E-15
TEDC2	16p13.3	0.418722	1.20E-17	1.26E-15
GOLGA2P5	12q23.1	0.417208	1.61E-17	1.69E-15
UBXN11	1p36.11	0.417123	1.63E-17	1.70E-15
KHDC4	1q22	0.417091	1.64E-17	1.71E-15
TMPO-AS1	12q23.1	0.41698	1.68E-17	1.73E-15
DIAPH3	13q21.2	0.416128	1.98E-17	2.04E-15
RBM15	1p13.3	0.415925	2.06E-17	2.10E-15
TENT4A	5p15.31	0.415923	2.06E-17	2.10E-15
LY6G5B	6p21.33	0.415756	2.13E-17	2.15E-15
DBF4B	17q21.31 17q21	0.41561	2.19E-17	2.20E-15
SH3BGRL	Xq21.1	-0.41538	2.29E-17	2.29E-15
SEC31B	10q24.31	0.4151	2.42E-17	2.41E-15
TTF2	1p13.1	0.41441	2.76E-17	2.73E-15
DUSP19	2q32.1	-0.41439	2.77E-17	2.73E-15
KIF18A	11p14.1	0.413939	3.02E-17	2.97E-15
DDX39B	6p21.33	0.413742	3.14E-17	3.07E-15
C1ORF112	1q24.2	0.412971	3.64E-17	3.54E-15
PHF19	9q33.2	0.412747	3.80E-17	3.68E-15
CHTOP	1q21.3	0.412271	4.16E-17	4.01E-15
RSKR	17q11.2	0.411646	4.69E-17	4.49E-15
TCOF1	5q32-q33.1	0.411481	4.84E-17	4.62E-15
CENPW	6q22.32	0.410891	5.41E-17	5.14E-15
MYBL2	20q13.12	0.410828	5.48E-17	5.14E-15
ZNF789	7q22.1	0.410822	5.49E-17	5.14E-15
HNRNPA2B1	7p15.2	0.410817	5.49E-17	5.14E-15
MSH5	6p21.33	0.410649	5.67E-17	5.28E-15
NEMP1	12q13.3	0.410116	6.27E-17	5.82E-15
ATAD3B	1p36.33	0.409188	7.48E-17	6.90E-15
E2F1	20q11.22	0.409157	7.52E-17	6.90E-15
RNF13	3q25.1	-0.40914	7.55E-17	6.90E-15
IFT46	11q23.3	-0.40884	7.99E-17	7.27E-15
LRP8	1p32.3	0.408301	8.84E-17	8.01E-15
HDGF	1q23.1	0.408015	9.33E-17	8.42E-15
CLK2	1q22	0.407732	9.84E-17	8.84E-15
BMT2	7q31.1	-0.40734	1.06E-16	9.47E-15
ACVR1	2q24.1	-0.40732	1.06E-16	9.47E-15
LIN9	1q42.12	0.406869	1.16E-16	1.03E-14
RRM1	11p15.4	0.406816	1.17E-16	1.03E-14
TXNDC15	5q31.1	-0.40675	1.18E-16	1.04E-14
CTSO	4q32.1	-0.40607	1.34E-16	1.18E-14

CEP170B	14q32.33	0.405635	1.46E-16	1.27E-14
HBP1	7q22.3	-0.40464	1.76E-16	1.52E-14
AURKB	17p13.1	0.404571	1.78E-16	1.54E-14
CKS1B	1q21.3	0.403976	1.99E-16	1.71E-14
CDC45	22q11.21	0.403872	2.03E-16	1.73E-14
BRICD5	16p13.3	0.403346	2.23E-16	1.90E-14
HMGB2	4q34.1	0.403014	2.38E-16	2.02E-14
PIDD1	11p15.5	0.402836	2.46E-16	2.07E-14
FANCC	9q22.32	0.402627	2.55E-16	2.15E-14
CDC7	1p22.1	0.402509	2.61E-16	2.19E-14
DLGAP5	14q22.3	0.402246	2.74E-16	2.28E-14
MSTO1	1q22	0.401902	2.92E-16	2.42E-14
YBX2	17p13.1	0.40099	3.45E-16	2.86E-14
PAXIP1	7q36.2	0.400426	3.83E-16	3.16E-14
ORC1	1p32.3	0.400365	3.87E-16	3.18E-14
SNRNP70	19q13.33	0.400218	3.98E-16	3.25E-14
CEP78	9q21.2	0.39947	4.56E-16	3.71E-14
EME2	16p13.3	0.39893	5.04E-16	4.08E-14
CDC25A	3p21.31	0.39866	5.29E-16	4.26E-14
XRCC3	14q32.33	0.39866	5.29E-16	4.26E-14
NEIL3	4q34.3	0.397749	6.25E-16	5.00E-14
ZNF692	1q44	0.397677	6.33E-16	5.05E-14
LTB4R2	14q12	0.397491	6.55E-16	5.20E-14
ERCC6L	Xq13.1	0.397367	6.69E-16	5.29E-14
HNRNPU-AS1	-	0.397359	6.70E-16	5.29E-14
KLHL17	1p36.33	0.396649	7.63E-16	5.99E-14
CENPA	2p23.3	0.396493	7.85E-16	6.14E-14
SEC62	3q26.2	-0.39575	8.98E-16	7.00E-14
MST1R	3p21.31	0.39563	9.17E-16	7.12E-14
AGAP4	10q11.22	0.395369	9.61E-16	7.43E-14
GABARAPL1	12p13.2	-0.39507	1.01E-15	7.81E-14
CCNB2	15q22.2	0.394712	1.08E-15	8.30E-14
HCFC1	Xq28	0.393662	1.31E-15	9.99E-14
CLSPN	1p34.3	0.393372	1.38E-15	1.05E-13
RBM14	11q13.2	0.393138	1.44E-15	1.09E-13
ARHGEF39	9p13.3	0.392994	1.47E-15	1.11E-13
CENPO	2p23.3	0.392967	1.48E-15	1.11E-13
CHAF1B	21q22.12-q22.13	0.392722	1.55E-15	1.16E-13
CLASRP	19q13.32	0.392663	1.56E-15	1.17E-13
IGFBP7	4q12	-0.3926	1.58E-15	1.18E-13
C9ORF163	9q34.3	0.392385	1.64E-15	1.22E-13
SMPD4	2q21.1	0.392331	1.66E-15	1.23E-13
PLPP1	5q11.2	-0.39178	1.83E-15	1.35E-13
FAM193B	5q35.3	0.391546	1.91E-15	1.40E-13
TPM3	1q21.3	0.391271	2.00E-15	1.47E-13
CDC20	1p34.2	0.391237	2.02E-15	1.47E-13
ACTR10	14q23.1	-0.3908	2.18E-15	1.58E-13
CGRRF1	14q22.2	-0.38996	2.53E-15	1.83E-13
UBQLN4	1q22	0.389573	2.71E-15	1.95E-13
SRRM2	16p13.3	0.389337	2.83E-15	2.03E-13
MATN3	2p24.1	-0.38909	2.95E-15	2.11E-13
PTTG1	5q33.3	0.388993	3.00E-15	2.14E-13
MXD3	5q35.3	0.388827	3.09E-15	2.20E-13
A2M-AS1	12p13.31	-0.38878	3.12E-15	2.20E-13
FAM111B	11q12.1	0.388722	3.15E-15	2.22E-13
NDOR1	9q34.3	0.388577	3.23E-15	2.27E-13
ZMYND19	9q34.3	0.387786	3.71E-15	2.60E-13
SPOP	17q21.33	-0.38756	3.87E-15	2.70E-13

ZNF598	16p13.3	0.387158	4.15E-15	2.88E-13
CHD1L	1q21.1	0.386947	4.30E-15	2.98E-13
DNAJC9	10q22.2	0.386762	4.45E-15	3.07E-13
DUSP11	2p13.1	-0.38675	4.45E-15	3.07E-13
TAF5	10q24.33	0.386502	4.65E-15	3.19E-13
PRDM15	21q22.3	0.385483	5.56E-15	3.80E-13
CENPJ	13q12.12-q12.13	0.385231	5.81E-15	3.96E-13
FAM156A	Xp11.22	0.385068	5.98E-15	4.06E-13
WDR27	6q27	0.38482	6.24E-15	4.22E-13
NACC1	19p13.13	0.384607	6.48E-15	4.37E-13
CEP295	11q21	0.384533	6.56E-15	4.41E-13
CDC6	17q21.2	0.383241	8.21E-15	5.50E-13
SERPINI1	3q26.1	-0.38302	8.53E-15	5.69E-13
CCSAP	1q42.13	0.382539	9.27E-15	6.17E-13
FAM229B	6q21	-0.38241	9.48E-15	6.29E-13
KMT2B	19q13.12	0.382301	9.66E-15	6.39E-13
TRIP13	5p15.33	0.38155	1.10E-14	7.24E-13
PIK3IP1	22q12.2	-0.38152	1.11E-14	7.26E-13
PNN	14q21.1	0.381456	1.12E-14	7.31E-13
C1ORF159	1p36.33	0.381382	1.13E-14	7.38E-13
DGCR8	22q11.21	0.381252	1.16E-14	7.53E-13
FGF14	13q33.1	-0.38118	1.17E-14	7.60E-13
SKA1	18q21.1	0.381032	1.20E-14	7.77E-13
POC1A	3p21.2	0.380663	1.28E-14	8.25E-13
PLEKHA3	2q31.2	-0.38038	1.34E-14	8.63E-13
PGP	16p13.3	0.380235	1.38E-14	8.82E-13
NKTR	3p22.1	0.380206	1.39E-14	8.84E-13
INTS3	1q21.3	0.380125	1.40E-14	8.93E-13
GABPB2	1q21.3	0.380038	1.43E-14	9.04E-13
CD59	11p13	-0.37996	1.44E-14	9.13E-13
CCNB1	5q13.2	0.37989	1.46E-14	9.21E-13
CDK2	12q13.2	0.379778	1.49E-14	9.36E-13
PPP1R26	9q34.3	0.379752	1.50E-14	9.37E-13
ATG16L2	11q13.4	0.379618	1.53E-14	9.56E-13
TCEAL7	Xq22.2	-0.37933	1.61E-14	1.00E-12
POLA2	11q13.1	0.379077	1.68E-14	1.04E-12
THOP1	19p13.3	0.37896	1.71E-14	1.06E-12
DYNC112	2q31.1	-0.37864	1.81E-14	1.12E-12
MIGA2	9q34.11	0.378506	1.85E-14	1.14E-12
TOPBP1	3q22.1	0.378383	1.89E-14	1.16E-12
TRAIP	3p21.31	0.378366	1.90E-14	1.16E-12
TTC33	5p13.1	-0.37782	2.08E-14	1.27E-12
SLX4	16p13.3	0.377797	2.09E-14	1.27E-12
BRIP1	17q23.2	0.377695	2.13E-14	1.29E-12
DEPDC1B	5q12.1	0.377594	2.16E-14	1.31E-12
SPDL1	5q35.1	0.376688	2.52E-14	1.52E-12
LOC150776	2q21.1	0.376621	2.55E-14	1.53E-12
BMPR2	2q33.1-q33.2	-0.37658	2.57E-14	1.54E-12
CCDC90B	11q14.1	-0.37643	2.63E-14	1.57E-12
SLC7A5P2	16p12.2	0.376432	2.63E-14	1.57E-12
PPRC1	10q24.32	0.376213	2.73E-14	1.62E-12
RRM2	2p25.1	0.376103	2.79E-14	1.65E-12
OLFML3	1p13.2	-0.37605	2.81E-14	1.66E-12
RAD51	15q15.1	0.376004	2.83E-14	1.66E-12
FDPSP2	7q11.23	0.375895	2.89E-14	1.69E-12
NASP	1p34.1	0.375752	2.96E-14	1.73E-12
RCCD1	15q26.1	0.375662	3.00E-14	1.75E-12
DHFR	5q14.1	0.375334	3.17E-14	1.84E-12

GTPBP3	19p13.11	0.374451	3.68E-14	2.13E-12
VARS	6p21.33	0.374371	3.73E-14	2.15E-12
MND1	4q31.3	0.37432	3.76E-14	2.16E-12
TUBB4B	9q34.3	0.374266	3.80E-14	2.18E-12
TUBA1A	12q13.12	-0.37394	4.01E-14	2.29E-12
ZNF37BP	10q11.21	0.372585	5.03E-14	2.87E-12
TEDC1	14q32.33	0.37197	5.57E-14	3.17E-12
CCHCR1	6p21.33	0.371849	5.69E-14	3.23E-12
PNRC1	6q15	-0.37176	5.77E-14	3.26E-12
SAPCD1	6p21.33	0.371368	6.16E-14	3.48E-12
HAUS8	19p13.11	0.371005	6.54E-14	3.68E-12
SRSF2	17q25.1	0.370861	6.70E-14	3.76E-12
UBE2S	19q13.42	0.370809	6.76E-14	3.78E-12
PAQR4	16p13.3	0.370788	6.79E-14	3.78E-12
SAPCD2	9q34.3	0.370772	6.80E-14	3.78E-12
CPQ	8q22.1	-0.3703	7.36E-14	4.08E-12
QSOX2	9q34.3	0.370284	7.38E-14	4.08E-12
GPR155	2q31.1	-0.37012	7.57E-14	4.18E-12
BDH2	4q24	-0.36989	7.88E-14	4.34E-12
SNHG12	1p35.3	0.36967	8.17E-14	4.48E-12
SPC25	2q24.3	0.369473	8.44E-14	4.62E-12
RNF180	5q12.3	-0.36945	8.47E-14	4.62E-12
AGAP5	10q22.2	0.369394	8.55E-14	4.65E-12
EID1	15q21.1	-0.36927	8.72E-14	4.73E-12
CLN5	13q22.3	-0.36908	9.00E-14	4.87E-12
LEPROT	1p31.3	-0.36897	9.17E-14	4.95E-12
NALCN	13q32.3-q33.1	-0.36884	9.36E-14	5.04E-12
SNRPA	19q13.2	0.368378	1.01E-13	5.43E-12
SFSWAP	12q24.33	0.367738	1.12E-13	6.01E-12
PEX12	17q12	-0.36736	1.20E-13	6.38E-12
ASB16	17q21.31	0.367065	1.25E-13	6.68E-12
ZNF169	9q22.32	0.366325	1.41E-13	7.52E-12
ECT2	3q26.31	0.365776	1.55E-13	8.20E-12
ARL8B	3p26.1	-0.36548	1.62E-13	8.58E-12
RTKN2	10q21.2	0.364662	1.86E-13	9.78E-12
ATL1	14q22.1	-0.36412	2.03E-13	1.07E-11
URB2	1q42.13	0.363977	2.07E-13	1.09E-11
ANKS6	9q22.33	0.363584	2.21E-13	1.16E-11
UBAP2L	1q21.3	0.363475	2.25E-13	1.17E-11
TMEM151B	6p21.1	0.363086	2.40E-13	1.25E-11
C5ORF15	5q31.1	-0.36237	2.69E-13	1.39E-11
ARHGAP27P1	17q24.1	0.362219	2.75E-13	1.43E-11
PDE1A	2q32.1	-0.36199	2.86E-13	1.47E-11
YIPF1	1p32.3	-0.36197	2.87E-13	1.48E-11
CDCA2	8p21.2	0.361931	2.89E-13	1.48E-11
MCM2	3q21.3	0.361913	2.89E-13	1.48E-11
STRIP2	7q32.1	0.361862	2.92E-13	1.49E-11
TPX2	20q11.21	0.361805	2.94E-13	1.50E-11
TMEM106B	7p21.3	-0.36157	3.06E-13	1.55E-11
PLPP3	1p32.2	-0.36101	3.34E-13	1.69E-11
ITIH3	3p21.1	-0.36085	3.43E-13	1.73E-11
SASS6	1p21.2	0.360836	3.44E-13	1.74E-11
ALDH16A1	19q13.33	0.360527	3.62E-13	1.82E-11
INPP5E	9q34.3	0.360429	3.67E-13	1.84E-11
SERINC1	6q22.31	-0.36027	3.77E-13	1.89E-11
MGP	12p12.3	-0.35991	3.99E-13	1.99E-11
NUCKS1	1q32.1	0.359494	4.26E-13	2.12E-11
EXOSC2	9q34.12	0.359314	4.39E-13	2.18E-11

RNPEP	1q32.1	0.359097	4.54E-13	2.25E-11
GBA2	9p13.3	0.358715	4.83E-13	2.39E-11
OSBPL7	17q21.32	0.358636	4.89E-13	2.41E-11
ALDH1A3	15q26.3	-0.35859	4.92E-13	2.42E-11
GATAD2A	19p13.11	0.358354	5.11E-13	2.51E-11
PRR11	17q22	0.358282	5.17E-13	2.53E-11
SNHG3	1p35.3	0.358166	5.27E-13	2.57E-11
TK1	17q25.3	0.358155	5.28E-13	2.57E-11
RAB30	11q14.1	-0.35801	5.40E-13	2.63E-11
IPPK	9q22.31	0.357639	5.73E-13	2.78E-11
SLC35A5	3q13.2	-0.35732	6.02E-13	2.91E-11
KBTBD3	11q22.3	-0.35708	6.26E-13	3.02E-11
KPNA2	17q24.2	0.357074	6.26E-13	3.02E-11
BTD	3p25.1	-0.35701	6.32E-13	3.04E-11
LTB4R	14q12	0.356873	6.47E-13	3.10E-11
GLE1	9q34.11	0.356735	6.61E-13	3.16E-11
RHOT2	16p13.3	0.356497	6.86E-13	3.27E-11
SUV39H1	Xp11.23	0.356111	7.29E-13	3.47E-11
TMEM201	1p36.22	0.355997	7.42E-13	3.52E-11
SMG5	1q22	0.355867	7.58E-13	3.59E-11
CCDC189	16p11.2	0.355403	8.15E-13	3.85E-11
MCRIP1	17q25.3	-0.35535	8.21E-13	3.87E-11
TERT	5p15.33	0.355177	8.45E-13	3.97E-11
SDF2	17q11.2	-0.35513	8.52E-13	3.99E-11
RAVER1	19p13.2	0.355119	8.52E-13	3.99E-11
NCK1	3q22.3	-0.35498	8.71E-13	4.07E-11
WASH7P	1p36.33	0.354955	8.75E-13	4.07E-11
TENM2	5q34	-0.35487	8.87E-13	4.12E-11
AZI2	3p24.1	-0.35485	8.89E-13	4.12E-11
CES1	16q12.2	-0.35468	9.13E-13	4.22E-11
MZF1	19q13.43	0.354532	9.35E-13	4.31E-11
PRRC2A	6p21.33	0.354259	9.76E-13	4.49E-11
FAM189B	1q22	0.354149	9.93E-13	4.56E-11
RFWD3	16q23.1	0.354029	1.01E-12	4.63E-11
PILRB	7q22.1	0.353974	1.02E-12	4.66E-11
SMARCA4	19p13.2	0.353846	1.04E-12	4.75E-11
HMGA1	6p21.31	0.353441	1.11E-12	5.05E-11
SDC2	8q22.1	-0.35338	1.12E-12	5.08E-11
EPRS	1q41	0.353188	1.15E-12	5.23E-11
PI4KAP1	22q11.21	0.353168	1.16E-12	5.23E-11
BARD1	2q35	0.352869	1.21E-12	5.47E-11
TRAM1	8q13.3	-0.35286	1.21E-12	5.47E-11
EDC4	16q22.1	0.352775	1.23E-12	5.52E-11
NVL	1q42.11	0.352468	1.29E-12	5.78E-11
XPO6	16p12.1	0.352362	1.31E-12	5.86E-11
SSPN	12p12.1	-0.35206	1.38E-12	6.14E-11
CLUH	17p13.3	0.351784	1.44E-12	6.39E-11
FBF1	17q25.1	0.351172	1.58E-12	7.01E-11
MCM4	8q11.21	0.351099	1.60E-12	7.07E-11
NCLN	19p13.3	0.351017	1.62E-12	7.13E-11
CCDC78	16p13.3	0.351014	1.62E-12	7.13E-11
SLC66A3	2p25.1	-0.35015	1.85E-12	8.13E-11
TES	7q31.2	-0.3498	1.95E-12	8.57E-11
BEND3	6q21	0.349305	2.11E-12	9.23E-11
CMTM3	16q22.1	-0.34927	2.12E-12	9.26E-11
ATAD3A	1p36.33	0.349127	2.16E-12	9.44E-11
TMEM47	Xp21.1	-0.34839	2.42E-12	1.06E-10
LOH12CR2	12p13.2	-0.34823	2.48E-12	1.08E-10

COX7A1	19q13.12	-0.3482	2.50E-12	1.08E-10
KNSTRN	15q15.1	0.348172	2.51E-12	1.08E-10
PRICKLE4	6p21.1	0.347431	2.81E-12	1.21E-10
GABARAP	17p13.1	-0.34711	2.95E-12	1.27E-10
CNN3	1p21.3	-0.34709	2.96E-12	1.27E-10
PLCXD1	Xp22.33 and Yp11.32-p11.31	0.34701	2.99E-12	1.28E-10
C4ORF3	4q26	-0.34698	3.01E-12	1.29E-10
UCK2	1q24.1	0.346835	3.07E-12	1.31E-10
PKP3	11p15.5	0.346453	3.26E-12	1.39E-10
PLEKHA6	1q32.1	0.346276	3.35E-12	1.42E-10
CEP85	1p36.11	0.346131	3.42E-12	1.45E-10
PLEKHH1	14q24.1	0.346045	3.47E-12	1.47E-10
HOOK2	19p13.13	0.345789	3.61E-12	1.52E-10
HMMR	5q34	0.345585	3.72E-12	1.57E-10
PCYOX1	2p13.3	-0.34554	3.74E-12	1.58E-10
ITGBL1	13q33.1	-0.34538	3.84E-12	1.61E-10
TMEM59	1p32.3	-0.34537	3.84E-12	1.61E-10
DCST2	1q21.3	0.345245	3.92E-12	1.64E-10
PIMREG	17p13.2	0.345227	3.93E-12	1.64E-10
SF3B4	1q21.2	0.344918	4.12E-12	1.71E-10
C1D	2p14	-0.34488	4.14E-12	1.72E-10
OAZ2	15q22.31	-0.34462	4.31E-12	1.79E-10
ZNF385B	2q31.2-q31.3	-0.3442	4.59E-12	1.90E-10
BMS1P4	10q22.2	0.344183	4.60E-12	1.90E-10
SAFB	19p13.3	0.343956	4.76E-12	1.96E-10
KRI1	19p13.2	0.343931	4.78E-12	1.96E-10
HELLS	10q23.33	0.343659	4.98E-12	2.04E-10
RAD51AP1	12p13.32	0.34359	5.03E-12	2.06E-10
ZFH4-AS1	8q21.13	-0.34352	5.08E-12	2.08E-10
APBP2	17q23.2	-0.34328	5.27E-12	2.15E-10
HNRNPU	1q44	0.343277	5.27E-12	2.15E-10
MAPK8IP3	16p13.3	0.343197	5.34E-12	2.17E-10
TRAF2	9q34.3	0.343107	5.41E-12	2.19E-10
CFAP44	3q13.2	0.343052	5.45E-12	2.21E-10
WDR76	15q15.3	0.34294	5.55E-12	2.24E-10
MIR100HG	11q24.1	-0.34278	5.68E-12	2.29E-10
REXO5	16p12.3	0.342345	6.07E-12	2.44E-10
RERG	12p12.3	-0.34219	6.21E-12	2.49E-10
PEX2	8q21.13	-0.34218	6.22E-12	2.49E-10
UCKL1-AS1	20q13.33	0.342013	6.38E-12	2.54E-10
STAM2	2q23.3	-0.34201	6.38E-12	2.54E-10
MDM4	1q32.1	0.342001	6.39E-12	2.54E-10
FXVD6	11q23.3	-0.34197	6.42E-12	2.55E-10
PATL1	11q12.1	0.341925	6.46E-12	2.56E-10
PHLDA3	1q32.1	-0.34165	6.73E-12	2.66E-10
CEP131	17q25.3	0.341452	6.94E-12	2.74E-10
MAP6	11q13.5	-0.34137	7.02E-12	2.77E-10
LARP4B	10p15.3	0.341102	7.31E-12	2.88E-10
ITM2B	13q14.2	-0.34072	7.74E-12	3.04E-10
CBX5	12q13.13	0.340685	7.78E-12	3.05E-10
KIFC2	8q24.3	0.340629	7.84E-12	3.07E-10
IGFBP3	7p12.3	-0.34059	7.89E-12	3.08E-10
PRR22	19p13.3	0.340534	7.96E-12	3.10E-10
CNTN4	3p26.3-p26.2	-0.34053	7.96E-12	3.10E-10
GAS8-AS1	16q24.3	0.340495	8.00E-12	3.11E-10
ASMTL-AS1	Xp22.33 and Yp11.2	0.340466	8.04E-12	3.11E-10
MCM5	22q12.3	0.339896	8.75E-12	3.38E-10
LMBRD1	6q13	-0.33974	8.95E-12	3.45E-10



MICU3	8p22	-0.33936	9.48E-12	3.65E-10
SPACA4	19q13.33	0.339273	9.60E-12	3.69E-10
GTDC1	2q22.3	-0.33927	9.61E-12	3.69E-10
BBS9	7p14.3	-0.33925	9.63E-12	3.69E-10
TCHP	12q24.11	0.33917	9.75E-12	3.72E-10
SNORA8	11q21	0.339148	9.78E-12	3.73E-10
CDK16	Xp11.3	0.33912	9.82E-12	3.74E-10
DLEU2	13q14.2	0.339025	9.96E-12	3.78E-10
FHOD1	16q22.1	0.33898	1.00E-11	3.80E-10
CHKB-CPT1B	22q13.33	0.338692	1.05E-11	3.96E-10
LARP6	15q23	-0.33851	1.07E-11	4.06E-10
ANP32E	1q21.2	0.338342	1.10E-11	4.15E-10
RNF126	19p13.3	0.338334	1.10E-11	4.15E-10
CDC37	19p13.2	0.338252	1.12E-11	4.20E-10
ZNF318	6p21.1	0.337813	1.19E-11	4.47E-10
SRSF1	17q22	0.337768	1.20E-11	4.49E-10
DHX9	1q25.3	0.337683	1.21E-11	4.54E-10
ARL15	5q11.2	-0.33741	1.26E-11	4.71E-10
RFC5	12q24.23	0.337353	1.28E-11	4.75E-10
AGAP7P	10q11.22	0.336683	1.41E-11	5.22E-10
PYCR2	1q42.12	0.33668	1.41E-11	5.22E-10
KMT5A	12q24.31	0.336661	1.41E-11	5.23E-10
PCLAF	15q22.31	0.336594	1.43E-11	5.27E-10
ITGAV	2q32.1	-0.33653	1.44E-11	5.31E-10
LY96	8q21.11	-0.33649	1.45E-11	5.33E-10
SDHAP1	3q29	0.336212	1.51E-11	5.54E-10
SUGCT	7p14.1	-0.336	1.56E-11	5.71E-10
MPPED2	11p14.1	-0.33599	1.56E-11	5.71E-10
LOC100190986	16p12.2	0.335926	1.57E-11	5.75E-10
MPP3	17q21.31	0.335786	1.61E-11	5.86E-10
ELMOD2	4q31.1	-0.33568	1.63E-11	5.94E-10
SGO2	2q33.1	0.335534	1.67E-11	6.06E-10
ADGRL1	19p13.12	0.335512	1.67E-11	6.06E-10
KLF16	19p13.3	0.335262	1.73E-11	6.28E-10
RAP1A	1p13.2	-0.33502	1.80E-11	6.50E-10
PAN2	12q13.3	0.334891	1.83E-11	6.61E-10
NAP1L3	Xq21.32	-0.33484	1.84E-11	6.64E-10
FGF1	5q31.3	-0.33478	1.86E-11	6.69E-10
PDGFD	11q22.3	-0.33472	1.88E-11	6.74E-10
WDR5	9q34.2	0.334709	1.88E-11	6.74E-10
NPHP4	1p36.31	0.334521	1.93E-11	6.91E-10
PLN	6q22.31	-0.33424	2.01E-11	7.19E-10
SLC6A7	5q32	0.333995	2.09E-11	7.44E-10
CERS5	12q13.12	-0.33361	2.21E-11	7.85E-10
LBR	1q42.12	0.333538	2.23E-11	7.92E-10
TM2D1	1p31.3	-0.33343	2.27E-11	8.03E-10
GLRB	4q32.1	-0.33341	2.27E-11	8.04E-10
TUBA1B	12q13.12	0.333358	2.29E-11	8.09E-10
HOPX	4q12	-0.33307	2.39E-11	8.41E-10
GPX7	1p32.3	-0.33301	2.41E-11	8.48E-10
CDK5RAP2	9q33.2	0.332978	2.42E-11	8.50E-10
IGHMBP2	11q13.3	0.332956	2.43E-11	8.51E-10
ARHGAP19	10q24.1	0.332926	2.44E-11	8.53E-10
CYBRD1	2q31.1	-0.33288	2.45E-11	8.57E-10
NECAB1	8q21.3	-0.33277	2.49E-11	8.70E-10
TOP3B	22q11.22	0.332604	2.55E-11	8.90E-10
PDGFC	4q32.1	-0.33257	2.57E-11	8.92E-10
PWWP3B	Xq22.3	-0.33244	2.61E-11	9.07E-10

C2CD2L	11q23.3	0.332328	2.66E-11	9.21E-10
MOXD1	6q23.2	-0.3323	2.67E-11	9.22E-10
TRIM14	9q22.33	0.332297	2.67E-11	9.22E-10
TOMM40	19q13.32	0.332278	2.68E-11	9.23E-10
OIP5	15q15.1	0.332263	2.68E-11	9.23E-10
TNFSF12	17p13.1	-0.33198	2.80E-11	9.61E-10
EWSR1	22q12.2	0.331749	2.89E-11	9.91E-10
KLHDC1	14q21.3	-0.33143	3.03E-11	1.04E-09
TLCD5	11q23.3	-0.33142	3.03E-11	1.04E-09
PLCB3	11q13.1	0.331399	3.04E-11	1.04E-09
ELAVL1	19p13.2	0.331075	3.19E-11	1.09E-09
SEC16A	9q34.3	0.330929	3.25E-11	1.11E-09
GINS3	16q21	0.330789	3.32E-11	1.13E-09
MICALL2	7p22.3	0.330621	3.40E-11	1.15E-09
RFC4	3q27.3	0.330583	3.42E-11	1.16E-09
AKR7L	1p36.13 1p35-p36.1	0.330544	3.44E-11	1.16E-09
LRRC45	17q25.3	0.330445	3.49E-11	1.18E-09
FH	1q43	0.33039	3.52E-11	1.18E-09
FAM114A2	5q33.2	-0.33036	3.53E-11	1.19E-09
GMPS	3q25.31	0.330206	3.61E-11	1.21E-09
GABARAPL2	16q23.1	-0.32973	3.86E-11	1.29E-09
DCLK1	13q13.3	-0.32964	3.92E-11	1.31E-09
SAMD1	19p13.12	0.329619	3.93E-11	1.31E-09
FBXO3	11p13	-0.3296	3.94E-11	1.31E-09
CENPM	22q13.2	0.329564	3.96E-11	1.32E-09
TSPAN31	12q14.1	-0.32948	4.01E-11	1.33E-09
RCAN2	6p12.3	-0.32947	4.01E-11	1.33E-09
CCDC32	15q15.1	-0.32939	4.06E-11	1.34E-09
TMEM259	19p13.3	0.329178	4.18E-11	1.38E-09
LRCH2	Xq23	-0.32914	4.20E-11	1.39E-09
LINC00115	1p36.33	0.329138	4.21E-11	1.39E-09
DDX51	12q24.33	0.329112	4.22E-11	1.39E-09
BIRC2	11q22.2	-0.32901	4.29E-11	1.41E-09
BIRC5	17q25.3	0.328976	4.31E-11	1.41E-09
D2HGDH	2q37.3	0.328732	4.46E-11	1.46E-09
CDK5RAP3	17q21.32	0.328565	4.57E-11	1.49E-09
DNAJC11	1p36.31	0.328547	4.58E-11	1.49E-09
CSNK1G2-AS1	19p13.3	0.328392	4.68E-11	1.52E-09
ZNF626	19p12	-0.32828	4.76E-11	1.55E-09
ADAT2	6q24.2	0.328275	4.76E-11	1.55E-09
OCLM	1q31.1	0.328195	4.82E-11	1.56E-09
CADM1	11q23.3	-0.32814	4.85E-11	1.57E-09
NUDT10	Xp11.22	-0.32806	4.91E-11	1.58E-09
ARL6IP5	3p14.1	-0.32794	5.00E-11	1.61E-09
DNAJB4	1p31.1	-0.32792	5.01E-11	1.61E-09
HNMT	2q22.1	-0.32785	5.06E-11	1.63E-09
PRKN	6q26	-0.32783	5.07E-11	1.63E-09
WBP1	2p13.1	-0.32783	5.08E-11	1.63E-09
SFRP4	7p14.1	-0.32772	5.15E-11	1.65E-09
LDLRAD4	18p11.21	-0.32729	5.47E-11	1.75E-09
TAF5L	1q42.13	0.327263	5.50E-11	1.75E-09
TAF1C	16q24.1	0.327252	5.51E-11	1.75E-09
DSE	6q22.1	-0.32718	5.56E-11	1.77E-09
KATNB1	16q21	0.327078	5.65E-11	1.79E-09
RDH13	19q13.42	0.327001	5.71E-11	1.81E-09
CROCCP2	1p36.13	0.326887	5.80E-11	1.84E-09
RECK	9p13.3	-0.32679	5.88E-11	1.86E-09
MCM7	7q22.1	0.326615	6.03E-11	1.90E-09

GUSBP11	22q11.23	0.326608	6.04E-11	1.90E-09
SUZ12P1	17q11.2	0.326596	6.05E-11	1.90E-09
PDXDC2P-NPIP14P	16q22.1	0.32651	6.12E-11	1.92E-09
MXRA7	17q25.1	-0.32639	6.23E-11	1.95E-09
PBXIP1	1q21.3	-0.32613	6.45E-11	2.02E-09
FANCB	Xp22.2	0.325971	6.61E-11	2.06E-09
KIF21B	1q32.1	0.325803	6.76E-11	2.11E-09
DCN	12q21.33	-0.32579	6.78E-11	2.11E-09
CCNO	5q11.2	0.325706	6.86E-11	2.13E-09
DPYSL3	5q32	-0.32562	6.94E-11	2.15E-09
PARP1	1q42.12	0.325494	7.07E-11	2.19E-09
AKAP8	19p13.12	0.325476	7.08E-11	2.19E-09
H2AFX	11q23.3	0.325402	7.16E-11	2.21E-09
CREBL2	12p13.1	-0.32527	7.30E-11	2.25E-09
PNPLA8	7q31.1	-0.32525	7.32E-11	2.25E-09
AGER	6p21.32	0.32523	7.33E-11	2.26E-09
CLN6	15q23	0.324911	7.67E-11	2.36E-09
DEPDC1	1p31.3	0.324785	7.81E-11	2.40E-09
C2ORF42	2p13.3	-0.32456	8.06E-11	2.47E-09
NBEAL2	3p21.31	0.324502	8.13E-11	2.48E-09
CPED1	7q31.31	-0.32448	8.15E-11	2.49E-09
ANAPC2	9q34.3	0.324366	8.28E-11	2.53E-09
BMS1	10q11.21	0.324234	8.44E-11	2.57E-09
GPI	19q13.11	0.324215	8.46E-11	2.57E-09
TMEM130	7q22.1	-0.32399	8.74E-11	2.65E-09
ZNF519	18p11.21	0.323893	8.85E-11	2.68E-09
DHRS7	14q23.1	-0.32382	8.95E-11	2.71E-09
ANGPT1	8q23.1	-0.32375	9.04E-11	2.73E-09
EDIL3	5q14.3	-0.32352	9.33E-11	2.81E-09
FBXL5	4p15.32	-0.32337	9.53E-11	2.87E-09
FIGNL1	7p12.2	0.323302	9.62E-11	2.89E-09
PSAP	10q22.1	-0.3231	9.90E-11	2.97E-09
EP400P1	12q24.33	0.32309	9.91E-11	2.97E-09
ANKRD36B	2q11.2	0.322777	1.04E-10	3.10E-09
CLIC4	1p36.11	-0.32253	1.07E-10	3.20E-09
ASPN	9q22.31	-0.32239	1.09E-10	3.26E-09
SAFB2	19p13.3	0.322329	1.10E-10	3.28E-09
INTS7	1q32.3	0.322287	1.11E-10	3.30E-09
CNOT3	19q13.42	0.322234	1.12E-10	3.32E-09
UBE2C	20q13.12	0.321669	1.21E-10	3.59E-09
CHIC2	4q12	-0.32157	1.22E-10	3.63E-09
REXO1	19p13.3	0.321365	1.26E-10	3.72E-09
CIR1	2q31.1	-0.32136	1.26E-10	3.72E-09
AOX1	2q33.1	-0.32125	1.28E-10	3.78E-09
RASL11B	4q12	-0.32119	1.29E-10	3.81E-09
PSMC3IP	17q21.2	0.321085	1.31E-10	3.85E-09
TNFSF11	13q14.11	-0.32107	1.31E-10	3.85E-09
NOC4L	12q24.33	0.321055	1.32E-10	3.86E-09
LAD1	1q32.1	0.321003	1.33E-10	3.88E-09
CARD14	17q25.3	0.320488	1.42E-10	4.16E-09
OMD	9q22.31	-0.32031	1.46E-10	4.26E-09
SLC29A2	11q13.2	0.320281	1.47E-10	4.27E-09
SPRN	10q26.3	0.320231	1.48E-10	4.30E-09
CCNL2	1p36.33	0.320004	1.52E-10	4.43E-09
C11ORF58	11p15.2	-0.31976	1.58E-10	4.57E-09
LHX4	1q25.2	0.319757	1.58E-10	4.57E-09
AURKAP1	1q41	0.319744	1.58E-10	4.57E-09
TSSK3	1p35.1	0.319715	1.58E-10	4.58E-09

PCDHB3	5q31.3	-0.31943	1.65E-10	4.76E-09
FAM171B	2q32.1	-0.31933	1.67E-10	4.82E-09
LOC220729	3q29	0.319306	1.68E-10	4.82E-09
MYLK	3q21.1	-0.3193	1.68E-10	4.82E-09
CCPG1	15q21.3	-0.31922	1.70E-10	4.87E-09
IQCE	7p22.3	0.319184	1.71E-10	4.89E-09
ANKMY1	2q37.3	0.318977	1.76E-10	5.02E-09
EHMT2	6p21.33	0.318528	1.87E-10	5.33E-09
GASK1A	3p22.1	-0.3185	1.88E-10	5.35E-09
ADGRD1	12q24.33	-0.31843	1.89E-10	5.39E-09
DNASE1L2	16p13.3	0.318332	1.92E-10	5.46E-09
HIP1R	12q24.31	0.31832	1.92E-10	5.46E-09
ATP6V1E1	22q11.21	-0.31828	1.93E-10	5.48E-09
C19ORF71	19p13.3	0.318118	1.98E-10	5.60E-09
ZNF276	16q24.3	0.317934	2.03E-10	5.73E-09
CHEK1	11q24.2	0.317829	2.06E-10	5.80E-09
ESCO2	8p21.1	0.317823	2.06E-10	5.80E-09
INE1	Xp11.3	0.317809	2.06E-10	5.80E-09
C1S	12p13.31	-0.31781	2.06E-10	5.80E-09
LAYN	11q23.1	-0.3178	2.06E-10	5.80E-09
PABPC5	Xq21.31	-0.31766	2.10E-10	5.90E-09
FAM89B	11q13.1	-0.31761	2.12E-10	5.93E-09
TPR	1q31.1	0.31753	2.14E-10	5.99E-09
HNRNPM	19p13.2	0.317473	2.16E-10	6.03E-09
ZNF687	1q21.3	0.317392	2.18E-10	6.09E-09
LIFR	5p13.1	-0.31738	2.19E-10	6.09E-09
GUCY1B1	4q32.1	-0.31716	2.25E-10	6.27E-09
HNRNPAB	5q35.3	0.316994	2.30E-10	6.40E-09
LTBP1	2p22.3	-0.31694	2.32E-10	6.43E-09
FUS	16p11.2	0.31694	2.32E-10	6.43E-09
PRELP	1q32.1	-0.31692	2.33E-10	6.44E-09
AMIGO3	3p21.31	0.316755	2.38E-10	6.58E-09
RAB34	17q11.2	-0.31674	2.39E-10	6.58E-09
EFEMP1	2p16.1	-0.31673	2.39E-10	6.58E-09
TANK	2q24.2	-0.31654	2.45E-10	6.74E-09
ASH1L-AS1	1q22	0.31629	2.54E-10	6.97E-09
NOL12	22q13.1	0.31625	2.55E-10	7.00E-09
GNG11	7q21.3	-0.31618	2.58E-10	7.06E-09
PDLIM3	4q35.1	-0.3159	2.68E-10	7.32E-09
KCNQ5	6q13	-0.31588	2.68E-10	7.33E-09
BBS12	4q27	-0.31584	2.70E-10	7.36E-09
NEGR1	1p31.1	-0.31581	2.71E-10	7.38E-09
TMEM127	2q11.2	-0.31572	2.74E-10	7.46E-09
CASP2	7q34	0.315614	2.78E-10	7.56E-09
CUL9	6p21.1	0.315569	2.80E-10	7.60E-09
ENPP2	8q24.12	-0.31554	2.81E-10	7.62E-09
USP31	16p12.2	0.315513	2.82E-10	7.64E-09
SDHAP2	3q29	0.315439	2.85E-10	7.70E-09
KCTD3	1q41	0.315417	2.86E-10	7.72E-09
ZCRB1	12q12	-0.31521	2.94E-10	7.92E-09
USP21	1q23.3	0.315196	2.95E-10	7.93E-09
SLC9A5	16q22.1	0.31507	3.00E-10	8.06E-09
RORA	15q22.2	-0.31491	3.06E-10	8.23E-09
AURKA	20q13.2	0.314863	3.08E-10	8.26E-09
PKIG	20q13.12	-0.31483	3.10E-10	8.29E-09
KIF4B	5q33.2	0.314774	3.12E-10	8.34E-09
TRIM41	5q35.3	0.314655	3.17E-10	8.47E-09
SMIM10	Xq26.3	-0.31462	3.18E-10	8.49E-09

PUS1	12q24.33	0.314538	3.22E-10	8.58E-09
CLUHP3	16p11.2	0.314488	3.24E-10	8.63E-09
CHST14	15q15.1	-0.31446	3.26E-10	8.65E-09
SNORA7B	3q21.3	0.314326	3.32E-10	8.79E-09
PABPC4L	4q28.3	-0.3143	3.32E-10	8.81E-09
NPIP5	16p12.2	0.314096	3.42E-10	9.05E-09
DEPP1	10q11.21	-0.31401	3.46E-10	9.14E-09
CCDC14	3q21.1	0.313973	3.48E-10	9.18E-09
FBXO5	6q25.2	0.313857	3.53E-10	9.31E-09
PAXX	9q34.3	0.313694	3.61E-10	9.50E-09
RBM43	2q23.3	-0.31353	3.69E-10	9.68E-09
CTBS	1p22.3	-0.31353	3.69E-10	9.68E-09
PFAS	17p13.1	0.313526	3.69E-10	9.68E-09
ZDHHC15	Xq13.3	-0.31342	3.75E-10	9.80E-09
SH3BP2	4p16.3	0.31342	3.75E-10	9.80E-09
SHISA4	1q32.1	-0.31336	3.78E-10	9.86E-09
BBS10	12q21.2	-0.31332	3.80E-10	9.90E-09
SPDYE1	7p13	0.313303	3.81E-10	9.92E-09
RAD9A	11q13.2	0.313237	3.84E-10	9.99E-09
SCARB2	4q21.1	-0.3132	3.86E-10	1.00E-08
ZNF287	17p11.2	-0.31314	3.89E-10	1.01E-08
CLU	8p21.1	-0.31314	3.89E-10	1.01E-08
VAMP5	2p11.2	-0.31311	3.91E-10	1.01E-08
KLHL4	Xq21.31	-0.31299	3.97E-10	1.03E-08
ZKSCAN7	3p21.31	-0.31287	4.04E-10	1.04E-08
RNASE6	14q11.2	-0.31278	4.09E-10	1.05E-08
LSS	21q22.3	0.312703	4.13E-10	1.06E-08
TMEM100	17q22	-0.31267	4.14E-10	1.06E-08
GULP1	2q32.1-q32.2	-0.31267	4.15E-10	1.06E-08
CENPK	5q12.3	0.312636	4.17E-10	1.07E-08
PPP1CB	2p23.2	-0.31262	4.18E-10	1.07E-08
AGA	4q34.3	-0.31261	4.18E-10	1.07E-08
ANGPTL1	1q25.2	-0.3126	4.19E-10	1.07E-08
B3GNT2	2p15	-0.31256	4.21E-10	1.07E-08
LINC01000	7q32.1	0.312365	4.32E-10	1.10E-08
PLSCR4	3q24	-0.31232	4.35E-10	1.11E-08
HSPA13	21q11.2	-0.31227	4.38E-10	1.11E-08
RGCC	13q14.11	-0.31223	4.40E-10	1.12E-08
RRP12	10q24.1	0.312202	4.42E-10	1.12E-08
SUV39H2	10p13	0.311917	4.59E-10	1.16E-08
SLC45A1	1p36.23	-0.3119	4.60E-10	1.16E-08
JAM2	21q21.3	-0.31172	4.71E-10	1.19E-08
CRISPLD1	8q21.13	-0.31169	4.73E-10	1.19E-08
RBMS1	2q24.2	-0.31168	4.74E-10	1.19E-08
CRYAB	11q23.1	-0.31166	4.75E-10	1.19E-08
ABRAXAS1	4q21.23	-0.31149	4.86E-10	1.22E-08
ID4	6p22.3	-0.31117	5.07E-10	1.27E-08
ECRG4	2q12.2	-0.31115	5.09E-10	1.28E-08
DPT	1q24.2	-0.31109	5.13E-10	1.28E-08
TYMS	18p11.32	0.310971	5.21E-10	1.30E-08
TP53INP1	8q22.1	-0.31087	5.28E-10	1.32E-08
NREP	5q22.1	-0.31086	5.29E-10	1.32E-08
MAP1LC3B	16q24.2	-0.31078	5.34E-10	1.33E-08
ADH5	4q23	-0.31078	5.34E-10	1.33E-08
ZNF826P	19p12	-0.31068	5.42E-10	1.35E-08
ATP2A1	16p11.2	0.310577	5.49E-10	1.36E-08
CDKN3	14q22.2	0.310481	5.56E-10	1.38E-08
NFYC-AS1	1p34.2	0.310466	5.57E-10	1.38E-08

GPC6	13q31.3-q32.1	-0.3104	5.62E-10	1.39E-08
C11ORF74	11p12	-0.31038	5.64E-10	1.39E-08
PKN3	9q34.11	0.310349	5.66E-10	1.40E-08
EPHA3	3p11.1	-0.31033	5.67E-10	1.40E-08
FANCE	6p21.31	0.310298	5.70E-10	1.40E-08
DARS2	1q25.1	0.310279	5.71E-10	1.40E-08
NATD1	17p11.2	-0.3102	5.77E-10	1.42E-08
STRA6	15q24.1	-0.31004	5.90E-10	1.45E-08
CCNE2	8q22.1	0.309998	5.93E-10	1.45E-08
OSTM1	6q21	-0.30999	5.94E-10	1.45E-08
TMOD4	1q21.3	0.309935	5.98E-10	1.46E-08
RMI2	16p13.13	0.309913	6.00E-10	1.46E-08
LOC100133331	1p36.33	0.309858	6.04E-10	1.47E-08
HCG27	6p21.33	0.309847	6.05E-10	1.47E-08
YOD1	1q32.1	0.309806	6.09E-10	1.48E-08
ATR	3q23	0.309691	6.18E-10	1.50E-08
PPP1R2	3q29	-0.30957	6.28E-10	1.52E-08
SNHG1	11q12.3	0.30951	6.33E-10	1.53E-08
PPARGC1B	5q32	0.30941	6.42E-10	1.55E-08
LOC155060	7q36.1	0.309396	6.43E-10	1.55E-08
CRY2	11p11.2	-0.30938	6.44E-10	1.55E-08
DOK5	20q13.2	-0.30934	6.47E-10	1.56E-08
PRKG2	4q21.21	-0.30926	6.55E-10	1.58E-08
MFGE8	15q26.1	-0.30923	6.57E-10	1.58E-08
NUP107	12q15	0.309162	6.63E-10	1.59E-08
PLA2G5	1p36.13	-0.30914	6.65E-10	1.59E-08
BRI3BP	12q24.31	0.309109	6.68E-10	1.60E-08
FRZB	2q32.1	-0.30893	6.84E-10	1.64E-08
TNFSF4	1q25.1	-0.30878	6.98E-10	1.67E-08
FEZ1	11q24.2	-0.30874	7.02E-10	1.67E-08
LONP1	19p13.3	0.308696	7.06E-10	1.68E-08
FAXDC2	5q33.2	-0.30869	7.06E-10	1.68E-08
C6ORF136	6p21.33	0.308663	7.09E-10	1.69E-08
RBM10	Xp11.3	0.3086	7.15E-10	1.70E-08
ANO4	12q23.1	-0.30857	7.17E-10	1.70E-08
FSTL1	3q13.33	-0.30854	7.20E-10	1.71E-08
ATXN2L	16p11.2	0.308428	7.31E-10	1.73E-08
UBE2W	8q21.11	-0.30831	7.43E-10	1.76E-08
MTBP	8q24.12	0.308304	7.43E-10	1.76E-08
SNHG4	5q31.2	0.308235	7.50E-10	1.77E-08
NUP205	7q33	0.308212	7.52E-10	1.77E-08
STX8	17p13.1	-0.30815	7.59E-10	1.79E-08
LINC00896	22q11.21	0.30811	7.63E-10	1.79E-08
FZR1	19p13.3	0.308086	7.65E-10	1.80E-08
NNMT	11q23.2	-0.30807	7.67E-10	1.80E-08
MYL9	20q11.23	-0.30798	7.76E-10	1.82E-08
ATP6V0E1	5q35.1	-0.30795	7.79E-10	1.82E-08
EMCN	4q24	-0.30791	7.83E-10	1.83E-08
EFNB3	17p13.1	-0.30788	7.86E-10	1.84E-08
C5ORF34	5p12	0.307802	7.94E-10	1.85E-08
PRRT2	16p11.2	0.307777	7.97E-10	1.86E-08
ENOX1	13q14.11	-0.30752	8.24E-10	1.92E-08
ANKRD65	1p36.33	-0.3075	8.27E-10	1.92E-08
CLEC3B	3p21.31	-0.30742	8.35E-10	1.94E-08
RARB	3p24.2	-0.30739	8.38E-10	1.94E-08
PTGIS	20q13.13	-0.30737	8.41E-10	1.95E-08
RNASEH2A	19p13.13	0.307359	8.42E-10	1.95E-08
NPC2	14q24.3	-0.30732	8.46E-10	1.95E-08

ZNF677	19q13.42	-0.30726	8.53E-10	1.97E-08
DOHH	19p13.3	0.307207	8.59E-10	1.98E-08
PLCH1	3q25.31	0.307099	8.72E-10	2.01E-08
FXVD1	19q13.12	-0.30701	8.82E-10	2.03E-08
RRAGA	9p22.1	-0.307	8.83E-10	2.03E-08
RBM7	11q23.2	-0.30698	8.86E-10	2.03E-08
NRM	6p21.33	0.306908	8.94E-10	2.05E-08
LINC00894	Xq28	0.306848	9.01E-10	2.06E-08
C1ORF226	1q23.3	0.306636	9.26E-10	2.12E-08
ZNF121	19p13.2	0.306604	9.30E-10	2.12E-08
SNRNP48	6p24.3	0.306584	9.33E-10	2.13E-08
PLSCR3	17p13.1	-0.30654	9.38E-10	2.14E-08
TMEM167B	1p13.3	-0.30652	9.41E-10	2.14E-08
UNC50	2q11.2	-0.30621	9.80E-10	2.23E-08
ZNF627	19p13.2	-0.30618	9.83E-10	2.23E-08
SLC9A9	3q24	-0.30594	1.02E-09	2.30E-08
CTPS1	1p34.2	0.305911	1.02E-09	2.31E-08
CALCRL	2q32.1	-0.30588	1.02E-09	2.32E-08
SPDYE6	7q22.1	0.30572	1.05E-09	2.36E-08
PRKD1	14q12	-0.30565	1.05E-09	2.38E-08
BCL2L12	19q13.33	0.305577	1.06E-09	2.40E-08
CRADD	12q22	-0.30543	1.09E-09	2.45E-08
DCAF15	19p13.12	0.305401	1.09E-09	2.45E-08
CCDC115	2q21.1	-0.30523	1.11E-09	2.50E-08
DND1	5q31.3	0.305171	1.12E-09	2.52E-08
FBXL8	16q22.1	0.30484	1.17E-09	2.63E-08
SELENOM	22q12.2	-0.30482	1.18E-09	2.63E-08
APOD	3q29	-0.30465	1.20E-09	2.69E-08
SLC16A2	Xq13.2	-0.30463	1.20E-09	2.69E-08
KHSRP	19p13.3	0.30457	1.21E-09	2.71E-08
NUP214	9q34.13	0.304549	1.22E-09	2.72E-08
TMPO	12q23.1	0.304436	1.24E-09	2.75E-08
NPIPA1	16p13.11	0.304287	1.26E-09	2.80E-08
BUB3	10q26.13	0.304284	1.26E-09	2.80E-08
NSUN5P1	7q11.23	0.304172	1.28E-09	2.84E-08
SPDYE5	7q11.23	0.304038	1.30E-09	2.89E-08
ACOX1	17q25.1	-0.30403	1.30E-09	2.89E-08
SLC24A3	20p11.23	-0.30402	1.31E-09	2.89E-08
NAA40	11q13.1	0.303952	1.32E-09	2.91E-08
STMN2	8q21.13	-0.30385	1.33E-09	2.95E-08
GPR1	2q33.3	-0.30383	1.34E-09	2.95E-08
TRABD	22q13.33	0.303791	1.34E-09	2.96E-08
SKP1	5q31.1	-0.30376	1.35E-09	2.97E-08
SGCE	7q21.3	-0.30361	1.38E-09	3.03E-08
EIF1B	3p22.1	-0.30357	1.38E-09	3.04E-08
ZNF277	7q31.1	-0.30345	1.41E-09	3.08E-08
MIR17HG	13q31.3	0.303304	1.43E-09	3.14E-08
TARBP1	1q42.2	0.30318	1.46E-09	3.19E-08
TNPO2	19p13.13	0.303038	1.48E-09	3.24E-08
CCN2	6q23.2	-0.30298	1.50E-09	3.27E-08
GLT8D2	12q23.3	-0.30295	1.50E-09	3.27E-08
ESRP2	16q22.1	0.302921	1.51E-09	3.28E-08
BMPR1B	4q22.3	-0.30286	1.52E-09	3.30E-08
ILK	11p15.4	-0.30283	1.52E-09	3.32E-08
H2AFZ	4q23	0.30275	1.54E-09	3.34E-08
ATRAID	2p23.3	-0.30272	1.55E-09	3.35E-08
SUSD5	3p22.3	-0.30269	1.55E-09	3.37E-08
RHOQ	2p21	-0.30254	1.58E-09	3.43E-08

ATP13A1	19p13.11	0.302421	1.61E-09	3.48E-08
ETNK2	1q32.1	-0.30228	1.64E-09	3.54E-08
GAP43	3q13.31	-0.30222	1.65E-09	3.56E-08
RNF185	22q12.2	-0.3022	1.65E-09	3.57E-08
HSF4	16q22.1	0.302092	1.68E-09	3.61E-08
MSRB3	12q14.3	-0.30208	1.68E-09	3.61E-08
PCDHB4	5q31.3	-0.30208	1.68E-09	3.61E-08
SURF6	9q34.2	0.301937	1.71E-09	3.67E-08
FERMT2	14q22.1	-0.3018	1.74E-09	3.73E-08
CDC42EP3	2p22.2	-0.30178	1.75E-09	3.74E-08
C1QTNF7	4p15.32	-0.30178	1.75E-09	3.74E-08
SPAST	2p22.3	-0.30159	1.79E-09	3.83E-08
PIK3C2B	1q32.1	0.301569	1.79E-09	3.83E-08
LINC00685	Xp22.33 and Yp11.31	0.301543	1.80E-09	3.84E-08
CPXM2	10q26.13	-0.30151	1.81E-09	3.85E-08
ARMCX1	Xq22.1	-0.30147	1.82E-09	3.87E-08
CPSF6	12q15	0.301351	1.85E-09	3.92E-08
NOM1	7q36.3	0.301305	1.86E-09	3.94E-08
CDRT15P1	17p12	0.301229	1.87E-09	3.98E-08
CHRNA10	11p15.4	0.30122	1.88E-09	3.98E-08
EHMT1	9q34.3	0.301059	1.92E-09	4.06E-08
PRICKLE1	12q12	-0.301	1.93E-09	4.09E-08
TBC1D24	16p13.3	0.300764	1.99E-09	4.21E-08
ECM2	9q22.31	-0.30071	2.01E-09	4.23E-08
SCLT1	4q28.2	0.300638	2.02E-09	4.27E-08
ANKZF1	2q35	0.300629	2.03E-09	4.27E-08
BNIP1	1q21.3	0.300617	2.03E-09	4.27E-08
NEAT1	11q13.1	0.300582	2.04E-09	4.28E-08
NCKAP5	2q21.2	-0.30042	2.08E-09	4.37E-08
LRP5L	22q11.23	0.300396	2.09E-09	4.38E-08
IDS	Xq28	-0.30031	2.11E-09	4.42E-08
ISG20L2	1q23.1	0.300242	2.13E-09	4.46E-08
AHI1	6q23.3	0.30017	2.15E-09	4.49E-08
FASN	17q25.3	0.29983	2.24E-09	4.69E-08
CS	12q13.3	0.299808	2.25E-09	4.70E-08
ANKRD36	2q11.2	0.299799	2.25E-09	4.70E-08
CTSF	11q13.2	-0.29974	2.27E-09	4.73E-08
POLD3	11q13.4	0.299566	2.32E-09	4.83E-08
EXOSC10	1p36.22	0.299345	2.39E-09	4.96E-08
IGFBP4	17q21.2	-0.29931	2.40E-09	4.98E-08
DTYMK	2q37.3	0.299239	2.42E-09	5.02E-08
ASCC1	10q22.1	-0.29918	2.44E-09	5.05E-08
C1R	12p13.31	-0.29909	2.47E-09	5.11E-08
PIGY	4q22.1	-0.29905	2.48E-09	5.13E-08
SCUBE2	11p15.4	-0.29903	2.49E-09	5.13E-08
F2R	5q13.3	-0.29899	2.50E-09	5.15E-08
SKA2	17q22	0.298987	2.50E-09	5.15E-08
TMEM45A	3q12.2	-0.29894	2.52E-09	5.18E-08
NUP62CL	Xq22.3	0.298806	2.56E-09	5.26E-08
PRPF3	1q21.2	0.298687	2.60E-09	5.34E-08
CAPZA2	7q31.2	-0.29866	2.61E-09	5.35E-08
RGS9	17q24.1	-0.29851	2.66E-09	5.45E-08
SNX27	1q21.3	0.298419	2.69E-09	5.51E-08
SYT11	1q22	-0.29833	2.72E-09	5.56E-08
VEGFB	11q13.1	-0.29828	2.74E-09	5.59E-08
F10	13q34	-0.29824	2.75E-09	5.62E-08
HEATR1	1q43	0.298157	2.78E-09	5.67E-08
MAD2L1	4q27	0.298143	2.79E-09	5.67E-08



YJEFN3	19p13.11	0.298044	2.82E-09	5.74E-08
CASD1	7q21.3	-0.29803	2.83E-09	5.74E-08
DDX39A	19p13.12	0.298016	2.83E-09	5.75E-08
MAGED2	Xp11.21	-0.29799	2.84E-09	5.76E-08
CCDC80	3q13.2	-0.29796	2.85E-09	5.78E-08
PPP1R2B	5q33.3	-0.29789	2.88E-09	5.82E-08
HACD4	9p21.3	-0.29782	2.90E-09	5.87E-08
CFAP157	9q34.11	0.297787	2.91E-09	5.89E-08
PRCC	1q23.1	0.297768	2.92E-09	5.90E-08
GGA1	22q13.1	0.297641	2.97E-09	5.99E-08
WDHD1	14q22.2-q22.3	0.297475	3.03E-09	6.11E-08
BPGM	7q33	-0.29746	3.04E-09	6.12E-08
FAM81A	15q22.2	0.297441	3.05E-09	6.12E-08
MEF2C	5q14.3	-0.29744	3.05E-09	6.12E-08
KLHDC8B	3p21.31	-0.29741	3.06E-09	6.13E-08
CDKN2D	19p13.2	0.297316	3.09E-09	6.20E-08
PPP1R3C	10q23.32	-0.29723	3.13E-09	6.25E-08
TCF3	19p13.3	0.297231	3.13E-09	6.25E-08
CORIN	4p12	-0.29723	3.13E-09	6.25E-08
ZC3H11A	1q32.1	0.297171	3.15E-09	6.29E-08
AHSA2P	2p15	0.297105	3.18E-09	6.34E-08
KLHL24	3q27.1	-0.29698	3.23E-09	6.43E-08
ADM5	19q13.33	0.296932	3.25E-09	6.47E-08
LIMD1	3p21.31	0.29691	3.26E-09	6.48E-08
MIR600HG	9q33.3	0.296908	3.26E-09	6.48E-08
ANXA6	5q33.1	-0.29688	3.27E-09	6.50E-08
ARL14EP	11p14.1	-0.29685	3.29E-09	6.51E-08
F13A1	6p25.1	-0.29683	3.29E-09	6.52E-08
FBXO8	4q34.1	-0.29666	3.36E-09	6.65E-08
LY86	6p25.1	-0.29666	3.36E-09	6.65E-08
TAGLN2	1q23.2	0.29661	3.38E-09	6.69E-08
PAIP1	5p12	-0.29654	3.41E-09	6.74E-08
PLAC9	10q22.3	-0.2964	3.48E-09	6.85E-08
PPP2R2B	5q32	-0.29636	3.49E-09	6.88E-08
ANKRD23	2q11.2	0.296332	3.51E-09	6.90E-08
GPR3	1p36.11	0.296268	3.53E-09	6.94E-08
ARRDC3	5q14.3	-0.29626	3.54E-09	6.94E-08
FAM133A	Xq21.32	-0.29625	3.54E-09	6.95E-08
PACRG	6q26	-0.2962	3.57E-09	6.99E-08
GUCY1A1	4q32.1	-0.29615	3.59E-09	7.02E-08
BICDL2	16p13.3	0.296102	3.61E-09	7.06E-08
BHMT2	5q14.1	-0.29595	3.68E-09	7.19E-08
S1PR3	9q22.1	-0.29594	3.69E-09	7.20E-08
AKT1S1	19q13.33	0.295923	3.69E-09	7.20E-08
ZEB1	10p11.22	-0.29591	3.70E-09	7.20E-08
RAI2	Xp22.13	-0.2958	3.75E-09	7.30E-08
CHRD1	Xq23	-0.29577	3.76E-09	7.32E-08
HSPB2	11q23.1	-0.29574	3.78E-09	7.34E-08
NRF1	7q32.2	0.295726	3.79E-09	7.35E-08
TYK2	19p13.2	0.295619	3.84E-09	7.44E-08
OLFML1	11p15.4	-0.2956	3.84E-09	7.45E-08
NOC2L	1p36.33	0.29557	3.86E-09	7.47E-08
MAGEH1	Xp11.21	-0.29541	3.94E-09	7.61E-08
GLIPR2	9p13.3	-0.29539	3.95E-09	7.62E-08
EBLN2	3p13	0.295389	3.95E-09	7.62E-08
ZFPM2	8q23.1	-0.29534	3.97E-09	7.66E-08
IGFBP6	12q13.13	-0.29531	3.99E-09	7.68E-08
AMZ2P1	17q24.1	-0.29528	4.01E-09	7.71E-08

MTA2	11q12.3	0.29519	4.05E-09	7.78E-08
CPT1B	22q13.33	0.295184	4.05E-09	7.78E-08
ENTR1	9q34.3	0.295165	4.06E-09	7.79E-08
RANGAP1	22q13.2	0.295159	4.07E-09	7.79E-08
ADPRH	3q13.33	-0.29488	4.21E-09	8.07E-08
FAM111A	11q12.1	0.294815	4.25E-09	8.12E-08
DACT1	14q23.1	-0.29479	4.26E-09	8.13E-08
MRPL55	1q42.13	0.29479	4.26E-09	8.13E-08
RARRES2	7q36.1	-0.29477	4.27E-09	8.15E-08
FRMD6	14q22.1	-0.29467	4.33E-09	8.24E-08
MIR99AHG	21q21.1	-0.29466	4.33E-09	8.24E-08
ST13	22q13.2	-0.2946	4.36E-09	8.28E-08
TAGLN	11q23.3	-0.2946	4.36E-09	8.28E-08
SPDYE7P	7q11.23	0.294599	4.36E-09	8.28E-08
GCN1	12q24.23	0.294564	4.38E-09	8.31E-08
PJA2	5q21.3	-0.29454	4.39E-09	8.32E-08
SH3GLB1	1p22.3	-0.29454	4.40E-09	8.32E-08
CLEC2B	12p13.31	-0.29452	4.41E-09	8.33E-08
CES1P1	16q12.2	-0.29439	4.48E-09	8.46E-08
GOLGA2P7	15q25.2	0.294335	4.51E-09	8.51E-08
RBM33	7q36.3	0.294224	4.57E-09	8.63E-08
OTUD3	1p36.13	0.294191	4.59E-09	8.65E-08
ZNF165	6p22.1	0.294136	4.63E-09	8.71E-08
RACGAP1P	12q12	0.294117	4.64E-09	8.72E-08
KCNJ14	19q13.33	0.293933	4.74E-09	8.91E-08
RTN4	2p16.1	-0.29393	4.74E-09	8.91E-08
TMEM86B	19q13.42	0.29389	4.77E-09	8.95E-08
CSAD	12q13.13	0.29381	4.82E-09	9.03E-08
LMO3	12p12.3	-0.29371	4.88E-09	9.14E-08
ABI3BP	3q12.2	-0.29362	4.94E-09	9.23E-08
CX3CR1	3p22.2	-0.29343	5.05E-09	9.44E-08
APOBEC3C	22q13.1	-0.29341	5.07E-09	9.46E-08
LOC283731	15q24.1	-0.2934	5.07E-09	9.46E-08
UBE2B	5q31.1	-0.29321	5.19E-09	9.67E-08
WDR4	21q22.3	0.29314	5.24E-09	9.75E-08
TUBGCP6	22q13.33	0.293113	5.26E-09	9.78E-08
C11ORF68	11q13.1	-0.2931	5.27E-09	9.79E-08
KLF17	1p34.1	-0.29301	5.33E-09	9.89E-08
LINC01140	1p22.3	-0.29299	5.34E-09	9.90E-08
DNHD1	11p15.4	0.292974	5.35E-09	9.91E-08
HSPB8	12q24.23	-0.29287	5.42E-09	1.00E-07
FAM174A	5q21.1	-0.29286	5.43E-09	1.00E-07
ARMH4	14q23.1	-0.29281	5.46E-09	1.01E-07
LRRC32	11q13.5	-0.29279	5.47E-09	1.01E-07
PALLD	4q32.3	-0.29273	5.51E-09	1.02E-07
FEZ2	2p22.2	-0.29267	5.55E-09	1.02E-07
LUM	12q21.33	-0.29263	5.59E-09	1.03E-07
TRA2B	3q27.2	0.292622	5.59E-09	1.03E-07
ACIN1	14q11.2	0.29253	5.66E-09	1.04E-07
ABCG1	21q22.3	-0.29252	5.66E-09	1.04E-07
SLC8A1	2p22.1	-0.29243	5.72E-09	1.05E-07
SMIM30	7q31.1	-0.29239	5.75E-09	1.05E-07
ALKBH6	19q13.12	0.292389	5.76E-09	1.05E-07
KCTD18	2q33.1	-0.29239	5.76E-09	1.05E-07
FCER1A	1q23.2	-0.29232	5.81E-09	1.06E-07
CALD1	7q33	-0.29202	6.02E-09	1.10E-07
TNFAIP8L3	15q21.2	-0.29197	6.07E-09	1.11E-07
ATP6AP2	Xp11.4	-0.29191	6.11E-09	1.11E-07

CENPT	16q22.1	0.291804	6.19E-09	1.13E-07
POLD2	7p13	0.291772	6.22E-09	1.13E-07
ASAH1	8p22	-0.29174	6.24E-09	1.13E-07
CALHM5	6q22.1	-0.29171	6.26E-09	1.14E-07
LHFPL6	13q13.3-q14.11	-0.29167	6.30E-09	1.14E-07
MBNL2	13q32.1	-0.29161	6.34E-09	1.15E-07
WBP1L	10q24.32	-0.2916	6.35E-09	1.15E-07
ZNF365	10q21.2	-0.29159	6.36E-09	1.15E-07
IQCC	1p35.2	0.291566	6.38E-09	1.15E-07
SGTB	5q12.3	-0.2914	6.51E-09	1.18E-07
SPPL2B	19p13.3	0.291347	6.55E-09	1.18E-07
TPST1	7q11.21	-0.29132	6.57E-09	1.18E-07
ZWILCH	15q22.31	0.2912	6.67E-09	1.20E-07
PRSS23	11q14.2	-0.29103	6.81E-09	1.23E-07
OGN	9q22.31	-0.29103	6.81E-09	1.23E-07
CYYR1	21q21.3	-0.29093	6.90E-09	1.24E-07
EVA1A	2p12	-0.29087	6.95E-09	1.25E-07
CNRIP1	2p14	-0.29087	6.95E-09	1.25E-07
ELOVL4	6q14.1	-0.29058	7.21E-09	1.29E-07
DNAJC18	5q31.2	-0.29048	7.30E-09	1.31E-07
CNTN1	12q12	-0.29044	7.34E-09	1.31E-07
GAPDHS	19q13.12	0.290429	7.34E-09	1.31E-07
EDNRA	4q31.22-q31.23	-0.2904	7.37E-09	1.31E-07
PPIL2	22q11.21	0.290342	7.42E-09	1.32E-07
GINS2	16q24.1	0.290314	7.45E-09	1.33E-07
FOXN3	14q31.3-q32.11	-0.29028	7.48E-09	1.33E-07
DPH7	9q34.3	0.290224	7.53E-09	1.34E-07
ECEL1	2q37.1	-0.29012	7.63E-09	1.36E-07
RBP1	3q23	-0.29001	7.73E-09	1.37E-07
CCNDBP1	15q15.2	-0.28996	7.79E-09	1.38E-07
ANO8	19p13.11	0.289927	7.81E-09	1.38E-07
GMNN	6p22.3	0.289909	7.83E-09	1.39E-07
NSUN5P2	7q11.23	0.289828	7.91E-09	1.40E-07
SFI1	22q12.2	0.289814	7.92E-09	1.40E-07
PKP4	2q24.1	0.289808	7.93E-09	1.40E-07
MCM6	2q21.3	0.289768	7.97E-09	1.41E-07
SERPING1	11q12.1	-0.28972	8.01E-09	1.41E-07
JAM3	11q25	-0.28954	8.19E-09	1.44E-07
GNG2	14q22.1	-0.28954	8.19E-09	1.44E-07
PARVA	11p15.3	-0.28954	8.20E-09	1.44E-07
YIPF5	5q31.3	-0.28953	8.21E-09	1.44E-07
TCF4	18q21.2	-0.2895	8.24E-09	1.45E-07
NOL6	9p13.3	0.28949	8.25E-09	1.45E-07
WLS	1p31.3	-0.28946	8.28E-09	1.45E-07
PHYHIPL	10q21.1	-0.28943	8.31E-09	1.45E-07
TSPAN2	1p13.2	-0.28943	8.31E-09	1.45E-07
COQ10B	2q33.1	-0.28942	8.32E-09	1.45E-07
LMAN1L	15q24.1	0.289295	8.45E-09	1.47E-07
ZNF628	19q13.42	0.289183	8.56E-09	1.49E-07
IARS	9q22.31	0.289178	8.57E-09	1.49E-07
APP	21q21.3	-0.28913	8.62E-09	1.50E-07
HERC2P2	15q11.2	0.28905	8.70E-09	1.51E-07
PLAT	8p11.21	-0.28901	8.75E-09	1.52E-07
CASQ2	1p13.1	-0.28884	8.93E-09	1.55E-07
SCX	8q24.3	0.288759	9.02E-09	1.57E-07
ISM1	20p12.1	-0.28875	9.04E-09	1.57E-07
PAPOLG	2p16.1	-0.28863	9.17E-09	1.59E-07
PKNOX2	11q24.2	-0.28862	9.18E-09	1.59E-07

LAMP5	20p12.2	-0.28859	9.21E-09	1.59E-07
LOC100132287	1p36.33	0.288541	9.27E-09	1.60E-07
HEXA	15q23	-0.28851	9.30E-09	1.61E-07
RASSF8	12p12.1	-0.28846	9.36E-09	1.61E-07
TP53TG1	7q21.12	-0.28846	9.36E-09	1.61E-07
TPST2	22q12.1	-0.28845	9.38E-09	1.61E-07
TRIM34	11p15.4	-0.28839	9.44E-09	1.62E-07
LCA5	6q14.1	-0.28837	9.46E-09	1.63E-07
DHX40	17q23.1	-0.28832	9.52E-09	1.63E-07
SELENOF	1p22.3	-0.28829	9.55E-09	1.64E-07
ABCA7	19p13.3	0.288258	9.60E-09	1.65E-07
NAP1L2	Xq13.2	-0.28819	9.68E-09	1.66E-07
LARP1	5q33.2	0.287774	1.02E-08	1.74E-07
EVI2A	17q11.2	-0.28776	1.02E-08	1.74E-07
CEP128	14q31.1	0.287681	1.03E-08	1.76E-07
ZNF624	17p11.2	-0.28764	1.04E-08	1.77E-07
MAP3K7CL	21q21.3	-0.28757	1.04E-08	1.78E-07
RERGL	12p12.3	-0.28739	1.07E-08	1.82E-07
ANKRD6	6q15	-0.28729	1.08E-08	1.84E-07
PRR5-ARHGAP8	22q13.31	0.287268	1.08E-08	1.84E-07
LIPA	10q23.31	-0.28721	1.09E-08	1.85E-07
KPNB1	17q21.32	0.287169	1.10E-08	1.86E-07
GLIPR1	12q21.2	-0.28716	1.10E-08	1.86E-07
HIST2H3C	1q21.2	0.287113	1.10E-08	1.87E-07
TUSC3	8p22	-0.2871	1.11E-08	1.87E-07
UCHL5	1q31.2	0.286919	1.13E-08	1.91E-07
FDPS	1q22	0.286863	1.14E-08	1.93E-07
LRRC4C	11p12	-0.28673	1.16E-08	1.95E-07
SAT2	17p13.1	-0.28666	1.17E-08	1.97E-07
PRKAR1A	17q24.2	-0.28665	1.17E-08	1.97E-07
NRBP1	2p23.3	-0.28661	1.17E-08	1.98E-07
GINM1	6q25.1	-0.28658	1.18E-08	1.99E-07
PODN	1p32.3	-0.28655	1.18E-08	1.99E-07
KRT222	17q21.2	-0.28645	1.20E-08	2.01E-07
DIAPH1	5q31.3	0.28644	1.20E-08	2.01E-07
TBC1D10B	16p11.2	0.286415	1.20E-08	2.02E-07
ATAT1	6p21.33	0.286343	1.21E-08	2.03E-07
HEBP1	12p13.1	-0.28631	1.22E-08	2.04E-07
MFSD2B	2p23.3	0.2863	1.22E-08	2.04E-07
PGR	11q22.1	-0.2862	1.23E-08	2.07E-07
EFHD1	2q37.1	-0.28616	1.24E-08	2.07E-07
RFTN1	3p24.3	-0.28611	1.25E-08	2.08E-07
CDK10	16q24.3	0.28582	1.29E-08	2.16E-07
MTHFD1	14q23.3	0.285797	1.30E-08	2.16E-07
NUDT11	Xp11.22	-0.28564	1.32E-08	2.20E-07
PMP22	17p12	-0.28554	1.34E-08	2.23E-07
ACVR2A	2q22.3-q23.1	-0.28548	1.35E-08	2.24E-07
GSTM5	1p13.3	-0.28545	1.35E-08	2.25E-07
FIBIN	11p14.2	-0.28535	1.37E-08	2.27E-07
PHRF1	11p15.5	0.28533	1.37E-08	2.28E-07
TJAP1	6p21.1	0.285262	1.38E-08	2.29E-07
AGTR1	3q24	-0.28523	1.39E-08	2.30E-07
NTN4	12q22	-0.28522	1.39E-08	2.30E-07
FNDC4	2p23.3	-0.28518	1.40E-08	2.31E-07
GRIN2D	19q13.33	0.285163	1.40E-08	2.31E-07
BAALC	8q22.3	-0.28516	1.40E-08	2.31E-07
GDF10	10q11.22	-0.28514	1.40E-08	2.32E-07
SNAP23	15q15.1-q15.2	-0.28506	1.42E-08	2.34E-07

STON1	2p16.3	-0.28496	1.43E-08	2.36E-07
ADAMTSL3	15q25.2	-0.2849	1.44E-08	2.38E-07
FHL1	Xq26.3	-0.28488	1.45E-08	2.38E-07
SCPEP1	17q22	-0.28485	1.45E-08	2.39E-07
CCDC91	12p11.22	-0.28478	1.47E-08	2.41E-07
NUDT5	10p14	0.284682	1.48E-08	2.43E-07
ANKRD35	1q21.1	-0.28464	1.49E-08	2.44E-07
SLC35F5	2q14.1	-0.28462	1.50E-08	2.45E-07
CLSTN2	3q23	-0.28461	1.50E-08	2.45E-07
TMEM120B	12q24.31	0.284406	1.53E-08	2.51E-07
CNTD2	19q13.2	0.284396	1.54E-08	2.51E-07
ZBTB7B	1q21.3	0.284361	1.54E-08	2.52E-07
C1RL	12p13.31	-0.28431	1.55E-08	2.53E-07
CRBN	3p26.2	-0.28423	1.57E-08	2.56E-07
DZIP1	13q32.1	-0.28413	1.59E-08	2.58E-07
RBM17	10p15.1	0.284046	1.60E-08	2.61E-07
ZNF767P	7q36.1	0.283973	1.62E-08	2.63E-07
LRP12	8q22.3	-0.28387	1.64E-08	2.66E-07
NDN	15q11.2	-0.28384	1.64E-08	2.67E-07
SYS1	20q13.12	-0.28382	1.65E-08	2.67E-07
WASHC3	12q23.2	-0.28382	1.65E-08	2.67E-07
ARF1	1q42.13	0.28379	1.65E-08	2.68E-07
THAP1	8p11.21	-0.28378	1.66E-08	2.68E-07
YPEL2	17q22	-0.28369	1.67E-08	2.70E-07
FSCN2	17q25.3	0.283645	1.68E-08	2.72E-07
ZNF8	19q13.43	0.283562	1.70E-08	2.74E-07
DIXDC1	11q23.1	-0.28347	1.72E-08	2.77E-07
PCDHB5	5q31.3	-0.28345	1.72E-08	2.77E-07
SNX29P2	16p11.2	0.283406	1.73E-08	2.79E-07
GADD45A	1p31.3	-0.28339	1.73E-08	2.79E-07
MMADHC	2q23.2	-0.28337	1.74E-08	2.80E-07
NUP43	6q25.1	0.283359	1.74E-08	2.80E-07
FAM120A	9q22.31	0.283346	1.74E-08	2.80E-07
FAM110B	8q12.1	-0.28334	1.75E-08	2.80E-07
DXO	6p21.33	0.283285	1.76E-08	2.81E-07
NELFB	9q34.3	0.283281	1.76E-08	2.81E-07
FBXO45	3q29	0.283263	1.76E-08	2.82E-07
MRRF	9q33.2	0.283249	1.76E-08	2.82E-07
ST3GAL3	1p34.1	-0.2831	1.80E-08	2.87E-07
TNFSF10	3q26.31	-0.28309	1.80E-08	2.87E-07
HPGDS	4q22.3	-0.28303	1.81E-08	2.89E-07
UVSSA	4p16.3	0.283008	1.82E-08	2.89E-07
HAUS7	Xq28	0.282937	1.83E-08	2.92E-07
APOBEC3F	22q13.1	-0.2827	1.89E-08	3.00E-07
MEIS3P1	17p12	-0.28266	1.89E-08	3.01E-07
MFAP2	1p36.13	-0.28264	1.90E-08	3.01E-07
TAF2	12q14.1	-0.28253	1.92E-08	3.05E-07
GALNT17	7q11.22	-0.28234	1.97E-08	3.12E-07
EXD3	9q34.3	0.282319	1.97E-08	3.13E-07
YTHDF3	8q12.3	-0.28229	1.98E-08	3.13E-07
OST4	2p23.3	-0.28225	1.99E-08	3.14E-07
TNFRSF14-AS1	1p36.32	0.282248	1.99E-08	3.14E-07
CKAP2	13q14.3	0.282094	2.03E-08	3.20E-07
FAM71D	14q23.3	0.282046	2.04E-08	3.22E-07
ISLR	15q24.1	-0.28199	2.05E-08	3.24E-07
FBXO32	8q24.13	-0.28183	2.09E-08	3.29E-07
LINC00847	5q35.3	-0.28183	2.09E-08	3.29E-07
MRPL9	1q21.3	0.281817	2.09E-08	3.30E-07

LINC02381	12q13.13	-0.28178	2.10E-08	3.31E-07
ZNF497	19q13.43	0.281715	2.12E-08	3.33E-07
VXN	8q13.1	-0.28162	2.14E-08	3.37E-07
RAB8B	15q22.2	-0.28146	2.19E-08	3.43E-07
HCFC2	12q23.3	-0.2814	2.20E-08	3.45E-07
TCEAL8	Xq22.1	-0.28132	2.22E-08	3.48E-07
MIER1	1p31.3	-0.28129	2.23E-08	3.49E-07
PPT1	1p34.2	-0.28128	2.23E-08	3.49E-07
LEMD2	6p21.31	0.281245	2.24E-08	3.50E-07
NRXN3	14q24.3-q31.1	-0.28113	2.27E-08	3.55E-07
DROSHA	5p13.3	0.281108	2.28E-08	3.56E-07
PPP1R3E	14q11.2	0.281042	2.30E-08	3.58E-07
TMEM98	17q11.2	-0.28092	2.33E-08	3.63E-07
LAMP2	Xq24	-0.28076	2.38E-08	3.70E-07
ZNF296	19q13.32	0.280702	2.39E-08	3.72E-07
GNG12	1p31.3	-0.28067	2.40E-08	3.73E-07
PRRC2C	1q24.3	0.280608	2.42E-08	3.76E-07
GREM1	15q13.3	-0.28058	2.43E-08	3.76E-07
CTRL	16q22.1	0.280546	2.44E-08	3.78E-07
DHX16	6p21.33	0.280537	2.44E-08	3.78E-07
FAM107A	3p14.3-p14.2	-0.2805	2.45E-08	3.79E-07
PTK7	6p21.1	-0.28049	2.46E-08	3.80E-07
VKORC1	16p11.2	-0.28048	2.46E-08	3.80E-07
TINF2	14q12	-0.28048	2.46E-08	3.80E-07
FILIP1L	3q12.1	-0.28047	2.46E-08	3.80E-07
KERA	12q21.33	-0.28043	2.47E-08	3.81E-07
RDX	11q22.3	-0.28041	2.48E-08	3.82E-07
TMEM30A	6q14.1	-0.28027	2.52E-08	3.88E-07
NDE1	16p13.11	0.280251	2.52E-08	3.88E-07
CREBRF	5q35.1	-0.28025	2.53E-08	3.88E-07
GSDME	7p15.3	-0.28021	2.54E-08	3.90E-07
VCAM1	1p21.2	-0.28016	2.55E-08	3.91E-07
SFRP5	10q24.2	-0.28016	2.55E-08	3.91E-07
PEG3	19q13.43	-0.28013	2.56E-08	3.93E-07
TNN	1q25.1	-0.2801	2.57E-08	3.94E-07
DYNC111	7q21.3	-0.28009	2.57E-08	3.94E-07
FAM200A	7q22.1	-0.28008	2.58E-08	3.94E-07
DOK6	18q22.2	-0.28005	2.59E-08	3.95E-07
NUP210	3p25.1	0.280042	2.59E-08	3.95E-07
GPATCH4	1q22-q23.1	0.280013	2.60E-08	3.96E-07
SPATA33	16q24.3	0.280009	2.60E-08	3.96E-07
LRRC14	8q24.3	0.279967	2.61E-08	3.98E-07
CYP27A1	2q35	-0.27996	2.61E-08	3.98E-07
FNBP4	11p11.2	0.279888	2.64E-08	4.01E-07
VEGFC	4q34.3	-0.27984	2.65E-08	4.03E-07
DNPH1	6p21.1	0.279777	2.67E-08	4.06E-07
PCNX3	11q13.1	0.279592	2.73E-08	4.14E-07
EPDR1	7p14.1	-0.27948	2.77E-08	4.20E-07
RCC1	1p35.3	0.279391	2.80E-08	4.24E-07
FBLN5	14q32.12	-0.27938	2.80E-08	4.24E-07
LDB2	4p15.32	-0.27935	2.81E-08	4.25E-07
SCAF4	21q22.11	0.279325	2.82E-08	4.26E-07
RHPN1	8q24.3	0.279263	2.84E-08	4.29E-07
TRMT1	19p13.13	0.279259	2.84E-08	4.29E-07
KCNJ8	12p12.1	-0.27918	2.87E-08	4.32E-07
TFDP1	13q34	0.279127	2.89E-08	4.35E-07
GPR75	2p16.2	0.27906	2.91E-08	4.38E-07
PI16	6p21.2	-0.279	2.93E-08	4.40E-07

ADAM23	2q33.3	-0.279	2.93E-08	4.40E-07
TRIM26	6p22.1	0.278998	2.93E-08	4.40E-07
RBM6	3p21.31	0.278943	2.95E-08	4.43E-07
CYP7B1	8q12.3	-0.27891	2.96E-08	4.44E-07
KCNE4	2q36.1	-0.27889	2.97E-08	4.45E-07
CCNE1	19q12	0.27884	2.98E-08	4.47E-07
DSEL	18q22.1	-0.27883	2.99E-08	4.47E-07
CLIP4	2p23.2	-0.27881	2.99E-08	4.48E-07
RBM25	14q24.2	0.278801	3.00E-08	4.48E-07
SOCS5	2p21	-0.2788	3.00E-08	4.48E-07
	2-Mar 19p13.2	-0.27861	3.07E-08	4.58E-07
NXPH3	17q21.33	-0.27856	3.08E-08	4.60E-07
TSC22D3	Xq22.3	-0.27853	3.10E-08	4.61E-07
CNTF	11q12.1	0.278497	3.11E-08	4.63E-07
HTR7	10q23.31	-0.27848	3.11E-08	4.63E-07
ACTA2	10q23.31	-0.27839	3.15E-08	4.68E-07
CDKN1C	11p15.4	-0.27827	3.19E-08	4.74E-07
CCDC85C	14q32.2	0.278259	3.20E-08	4.75E-07
SCART1	10q26.3	0.278253	3.20E-08	4.75E-07
SEMA3E	7q21.11	-0.27821	3.21E-08	4.76E-07
SRI	7q21.12	-0.27817	3.23E-08	4.79E-07
RFTN2	2q33.1	-0.27809	3.26E-08	4.83E-07
NIPIB3	16p12.2	0.277985	3.30E-08	4.88E-07
CKS2	9q22.2	0.277901	3.33E-08	4.93E-07
HOXD11	2q31.1	-0.27789	3.34E-08	4.93E-07
CAVIN2	2q32.3	-0.27788	3.34E-08	4.94E-07
PIGK	1p31.1	-0.27784	3.36E-08	4.95E-07
ZDHHC23	3q13.31	0.277827	3.36E-08	4.96E-07
TRAM1L1	4q26	-0.27781	3.37E-08	4.96E-07
DDIAS	11q14.1	0.277803	3.37E-08	4.96E-07
MCM3AP-AS1	21q22.3	0.277764	3.39E-08	4.98E-07
NFKBID	19q13.12	0.277746	3.40E-08	4.99E-07
FAM172A	5q15	-0.27773	3.40E-08	5.00E-07
PAQR6	1q22	0.277723	3.41E-08	5.00E-07
GGTA1P	9q33.2	-0.27771	3.41E-08	5.00E-07
TMEM204	16p13.3	-0.27769	3.42E-08	5.01E-07
FGL2	7q11.23	-0.27766	3.43E-08	5.02E-07
SDC4	20q13.12	-0.27763	3.44E-08	5.04E-07
LINC00628	1q32.1	0.277552	3.47E-08	5.08E-07
PCDHB6	5q31.3	-0.27754	3.48E-08	5.08E-07
CMTM4	16q21-q22.1	0.277523	3.49E-08	5.09E-07
CAMSAP3	19p13.2	0.277523	3.49E-08	5.09E-07
PBK	8p21.1	0.277488	3.50E-08	5.10E-07
EDEM2	20q11.22	-0.27746	3.51E-08	5.12E-07
MFAP5	12p13.31	-0.27741	3.53E-08	5.14E-07
CENPH	5q13.2	0.277333	3.57E-08	5.19E-07
CYS1	2p25.1	-0.27732	3.57E-08	5.19E-07
FOXK1	7p22.1	0.277127	3.65E-08	5.30E-07
TBC1D19	4p15.2	-0.27708	3.67E-08	5.33E-07
PARPBP	12q23.2	0.277068	3.68E-08	5.33E-07
PDCD11	10q24.33	0.277053	3.68E-08	5.34E-07
PALMD	1p21.2	-0.27703	3.70E-08	5.35E-07
HAND2	4q34.1	-0.27702	3.70E-08	5.35E-07
EIF4G1	3q27.1	0.276975	3.72E-08	5.38E-07
C3	19p13.3	-0.27695	3.73E-08	5.39E-07
NOP2	12p13.31	0.276949	3.73E-08	5.39E-07
RMI1	9q21.32	0.276889	3.76E-08	5.42E-07
CRELD1	3p25.3	-0.27688	3.76E-08	5.42E-07

CCDC184	12q13.11	-0.27687	3.76E-08	5.42E-07
FBXL19	16p11.2	0.276832	3.78E-08	5.44E-07
ZNF436	1p36.12	-0.27681	3.79E-08	5.46E-07
CTSK	1q21.3	-0.27675	3.82E-08	5.49E-07
RTL5	Xq13.1	-0.27669	3.85E-08	5.53E-07
EAPP	14q13.1	-0.27664	3.87E-08	5.55E-07
LRRC17	7q22.1	-0.27662	3.88E-08	5.56E-07
NLRC5	16q13	0.27659	3.89E-08	5.57E-07
HYAL2	3p21.31	-0.27659	3.89E-08	5.57E-07
HSD17B6	12q13.3	-0.27647	3.94E-08	5.65E-07
BASP1	5p15.1	-0.27639	3.98E-08	5.69E-07
RAD18	3p25.3	0.276377	3.99E-08	5.70E-07
ASIC3	7q36.1	0.27632	4.02E-08	5.74E-07
ACP2	11p11.2 11p12-p11	-0.27614	4.10E-08	5.86E-07
UHRF1BP1	6p21.31	0.276124	4.11E-08	5.86E-07
CDKN2C	1p32.3	0.275984	4.18E-08	5.95E-07
HEY1	8q21.13	-0.27598	4.18E-08	5.95E-07
TSPAN9	12p13.33-p13.32	-0.27585	4.24E-08	6.04E-07
SRSF12	6q15	-0.27571	4.31E-08	6.13E-07
DACT3	19q13.32	-0.2757	4.32E-08	6.14E-07
CCDC71L	7q22.3	-0.27562	4.36E-08	6.19E-07
SMIM1	1p36.32	-0.27557	4.38E-08	6.22E-07
HTR2B	2q37.1	-0.27555	4.39E-08	6.23E-07
IGF1	12q23.2	-0.27554	4.40E-08	6.23E-07
AMH	19p13.3	0.27554	4.40E-08	6.23E-07
MAB21L1	13q13.3	-0.27543	4.45E-08	6.30E-07
ARHGEF11	1q23.1	0.275432	4.45E-08	6.30E-07
COL8A2	1p34.3	-0.27532	4.51E-08	6.38E-07
SRSF10	1p36.11	0.275317	4.51E-08	6.38E-07
LMOD1	1q32.1	-0.27531	4.52E-08	6.38E-07
FABP4	8q21.13	-0.27529	4.53E-08	6.38E-07
PAK6	15q15.1	0.275286	4.53E-08	6.39E-07
DIRC3	2q35	-0.27519	4.58E-08	6.45E-07
TNS4	17q21.2	0.275187	4.58E-08	6.45E-07
C14ORF28	14q21.2	-0.27513	4.61E-08	6.49E-07
TSPYL5	8q22.1	-0.27506	4.65E-08	6.54E-07
SV2B	15q26.1	-0.27504	4.66E-08	6.55E-07
FGF7	15q21.2	-0.27501	4.68E-08	6.56E-07
TCEAL9	Xq22.2	-0.27501	4.68E-08	6.56E-07
ZNF142	2q35	0.274983	4.69E-08	6.58E-07
MOCS1	6p21.2	-0.27493	4.72E-08	6.62E-07
LETM1	4p16.3	0.274861	4.76E-08	6.66E-07
ADCY6	12q13.12	0.274838	4.77E-08	6.68E-07
LINGO2	9p21.2-p21.1	-0.27474	4.83E-08	6.75E-07
NFU1	2p13.3	-0.27472	4.84E-08	6.76E-07
APH1B	15q22.2	-0.2747	4.85E-08	6.77E-07
GNB4	3q26.33	-0.2746	4.90E-08	6.84E-07
SERPINF1	17p13.3	-0.27456	4.93E-08	6.87E-07
INTS1	7p22.3	0.274545	4.94E-08	6.88E-07
DNM2	19p13.2	0.274517	4.96E-08	6.90E-07
XPO5	6p21.1	0.274428	5.01E-08	6.96E-07
SUSD4	1q41	-0.27437	5.04E-08	7.00E-07
C5ORF24	5q31.1	-0.27432	5.07E-08	7.04E-07
PLA1A	3q13.33	-0.27432	5.07E-08	7.04E-07
SGCD	5q33.2-q33.3	-0.27431	5.07E-08	7.04E-07
PCDH10	4q28.3	-0.27428	5.09E-08	7.06E-07
TUBG1	17q21.2	0.274276	5.10E-08	7.06E-07
ZNF672	1q44	0.274181	5.15E-08	7.13E-07



MDN1	6q15	0.274176	5.16E-08	7.13E-07
CYP2D7	22q13.2	0.274121	5.19E-08	7.17E-07
SALL2	14q11.2	-0.27402	5.25E-08	7.25E-07
ISCU	12q23.3	-0.27397	5.28E-08	7.29E-07
RIBC2	22q13.31	0.273879	5.34E-08	7.36E-07
GLT8D1	3p21.1	-0.27384	5.36E-08	7.39E-07
ZNF362	1p35.1	-0.27374	5.42E-08	7.47E-07
ISLR2	15q24.1	-0.27369	5.45E-08	7.50E-07
SHISA2	13q12.13	-0.27369	5.46E-08	7.50E-07
ADPRM	17p13.1	-0.27366	5.48E-08	7.53E-07
TMEM169	2q35	-0.27363	5.49E-08	7.54E-07
ZNF335	20q13.12	0.273596	5.51E-08	7.57E-07
ICAM2	17q23.3	-0.2735	5.58E-08	7.65E-07
SOS2	14q21.3	-0.27343	5.62E-08	7.70E-07
PAM	5q21.1	-0.27343	5.62E-08	7.70E-07
TRIM22	11p15.4	-0.27339	5.65E-08	7.73E-07
PIGQ	16p13.3	0.273358	5.67E-08	7.75E-07
C3ORF18	3p21.31	-0.27334	5.68E-08	7.77E-07
KRTAP5-1	11p15.5	0.273197	5.77E-08	7.89E-07
STK11	19p13.3	0.273181	5.79E-08	7.90E-07
DLG5	10q22.3	0.273168	5.79E-08	7.90E-07
HSD11B1	1q32.2	-0.27317	5.80E-08	7.90E-07
COMP	19p13.11	-0.27315	5.81E-08	7.91E-07
LRRN3	7q31.1	-0.27312	5.83E-08	7.94E-07
NOX4	11q14.3	-0.27311	5.84E-08	7.94E-07
TM2D3	15q26.3	-0.27296	5.94E-08	8.07E-07
CRYBB1	22q12.1	-0.27291	5.97E-08	8.11E-07
TBC1D9	4q31.21	-0.27289	5.98E-08	8.13E-07
NDUFS2	1q23.3	0.272863	6.00E-08	8.14E-07
JRK	8q24.3	0.272811	6.04E-08	8.19E-07
C8ORF34	8q13.2	-0.2728	6.04E-08	8.19E-07
PLA2G4C	19q13.33	-0.2728	6.05E-08	8.19E-07
FLRT2	14q31.3	-0.27274	6.09E-08	8.24E-07
NDFIP1	5q31.3	-0.27272	6.10E-08	8.25E-07
NUP62	19q13.33	0.272683	6.13E-08	8.28E-07
METTL24	6q21	-0.27264	6.16E-08	8.32E-07
TRIM6	11p15.4	-0.27262	6.17E-08	8.33E-07
EDA2R	Xq12	-0.2726	6.19E-08	8.34E-07
GYPC	2q14.3	-0.27259	6.20E-08	8.35E-07
LINC00482	17q25.3	0.272559	6.22E-08	8.37E-07
ITM2A	Xq21.1	-0.27254	6.23E-08	8.38E-07
TMEM182	2q12.1	-0.27251	6.25E-08	8.41E-07
SHMT2	12q13.3	0.272487	6.27E-08	8.42E-07
ANKH	5p15.2	-0.27242	6.32E-08	8.48E-07
CCL14	17q12	-0.27242	6.32E-08	8.48E-07
ZC2HC1A	8q21.13	-0.27227	6.43E-08	8.62E-07
GNPTG	16p13.3	-0.27225	6.45E-08	8.64E-07
MTPAP	10p11.23	0.272209	6.47E-08	8.67E-07
HADHB	2p23.3	-0.27218	6.49E-08	8.69E-07
SESN3	11q21	-0.27217	6.50E-08	8.70E-07
GPRASP2	Xq22.1	-0.27211	6.54E-08	8.75E-07
AOAH	7p14.2	-0.27209	6.56E-08	8.77E-07
CLIC2	Xq28	-0.27204	6.60E-08	8.81E-07
AKAP12	6q25.1	-0.27197	6.65E-08	8.87E-07
GABARAPL3	15q26.1	-0.27196	6.66E-08	8.88E-07
SKIV2L	6p21.33	0.27195	6.67E-08	8.88E-07
CAV2	7q31.2	-0.27192	6.69E-08	8.91E-07
TIMP1	Xp11.3	-0.27191	6.69E-08	8.91E-07

MRS2	6p22.3	0.271898	6.71E-08	8.92E-07
MAP2	2q34	-0.27185	6.74E-08	8.96E-07
CCDC126	7p15.3	-0.27177	6.80E-08	9.04E-07
SNHG10	14q32.13	0.271698	6.86E-08	9.11E-07
SETDB1	1q21.3	0.271598	6.94E-08	9.21E-07
CSNK1G2	19p13.3	0.271587	6.95E-08	9.21E-07
SLFNL1	1p34.2	0.271506	7.02E-08	9.29E-07
SRRM1	1p36.11	0.271456	7.06E-08	9.34E-07
C21ORF91	21q21.1	-0.27137	7.12E-08	9.42E-07
BEX4	Xq22.1	-0.27132	7.17E-08	9.47E-07
NSMCE3	15q13.1	-0.27126	7.22E-08	9.54E-07
C7	5p13.1	-0.27124	7.24E-08	9.55E-07
C18ORF32	18q21.1	-0.27123	7.24E-08	9.55E-07
FAM43B	1p36.12	-0.27121	7.26E-08	9.57E-07
POU5F1	6p21.33	0.271193	7.27E-08	9.58E-07
TIMP2	17q25.3	-0.27117	7.29E-08	9.60E-07
RFC3	13q13.2	0.271071	7.38E-08	9.71E-07
SMO	7q32.1	-0.27106	7.39E-08	9.72E-07
NRK	Xq22.3	-0.27103	7.41E-08	9.74E-07
CHMP3	2p11.2	-0.27093	7.50E-08	9.84E-07
PTGER3	1p31.1	-0.27092	7.50E-08	9.85E-07
RASSF1	3p21.31	0.270898	7.52E-08	9.87E-07
AP3D1	19p13.3	0.270891	7.53E-08	9.87E-07
PNMA8A	19q13.32	-0.27086	7.55E-08	9.89E-07
MAT2B	5q34	-0.27086	7.56E-08	9.89E-07
OGFOD2	12q24.31	0.270855	7.56E-08	9.89E-07
ENTHD1	22q13.1	-0.27082	7.59E-08	9.93E-07
SPSB1	1p36.22	-0.27074	7.66E-08	1.00E-06
PRR14L	22q12.2	0.270741	7.66E-08	1.00E-06
SPARC	5q33.1	-0.27068	7.72E-08	1.01E-06
ANTXR1	2p13.3	-0.27064	7.75E-08	1.01E-06
ZNF843	16p11.2	-0.27064	7.75E-08	1.01E-06
NACAD	7p13	-0.27062	7.77E-08	1.01E-06
TNFSF18	1q25.1	-0.27057	7.81E-08	1.02E-06
PCDH7	4p15.1	-0.27055	7.83E-08	1.02E-06
SPOCK3	4q32.3	-0.27053	7.85E-08	1.02E-06
FGFR1OP	6q27	0.27049	7.88E-08	1.02E-06
CCT3	1q22	0.270485	7.89E-08	1.02E-06
IARS2	1q41	0.270476	7.90E-08	1.02E-06
SNX6	14q13.1	-0.27046	7.91E-08	1.03E-06
CLDN11	3q26.2	-0.27045	7.92E-08	1.03E-06
MED22	9q34.2	0.270434	7.93E-08	1.03E-06
TMEM50A	1p36.11	-0.27039	7.98E-08	1.03E-06
KLHDC2	14q21.3	-0.27039	7.98E-08	1.03E-06
DTWD1	15q21.2	-0.27038	7.99E-08	1.03E-06
CYP3A7	7q22.1	-0.27036	8.00E-08	1.03E-06
TBL3	16p13.3	0.27032	8.04E-08	1.04E-06
MVD	16q24.2	0.270318	8.04E-08	1.04E-06
TSC1	9q34.13	0.270216	8.13E-08	1.05E-06
GON4L	1q22	0.270211	8.14E-08	1.05E-06
GINS4	8p11.21	0.270205	8.14E-08	1.05E-06
ADAMTS13	9q34.2	0.270115	8.23E-08	1.06E-06
LRRN2	1q32.1	-0.27003	8.31E-08	1.07E-06
PTN	7q33	-0.27003	8.31E-08	1.07E-06
CLK2P1	7p15.3	0.269974	8.36E-08	1.07E-06
WIPF1	2q31.1	-0.26994	8.39E-08	1.08E-06
TARDBP	1p36.22	0.269889	8.44E-08	1.08E-06
SLF1	5q15	0.269848	8.48E-08	1.09E-06

HERPUD1	16q13	-0.26983	8.50E-08	1.09E-06
ADD2	2p13.3	-0.26975	8.58E-08	1.10E-06
TIMP3	22q12.3	-0.26974	8.58E-08	1.10E-06
ITPK1-AS1	14q32.12	0.269736	8.59E-08	1.10E-06
BMS1P2	10q11.22	0.269732	8.60E-08	1.10E-06
SLC16A4	1p13.3	-0.26969	8.63E-08	1.10E-06
FGF13	Xq26.3-q27.1	-0.26969	8.63E-08	1.10E-06
CORO2B	15q23	-0.26968	8.65E-08	1.10E-06
SPART	13q13.3	-0.26957	8.75E-08	1.11E-06
LOC729603	6q25.3	0.269519	8.81E-08	1.12E-06
NSUN2	5p15.31	0.269509	8.82E-08	1.12E-06
C19ORF12	19q12	-0.26944	8.89E-08	1.13E-06
PURG	8p12	-0.26933	9.00E-08	1.14E-06
ALOX5AP	13q12.3	-0.26924	9.09E-08	1.15E-06
PCMTD1	8q11.23	-0.26909	9.25E-08	1.17E-06
NOXA1	9q34.3	0.26905	9.29E-08	1.18E-06
TUBGCP2	10q26.3	0.269046	9.29E-08	1.18E-06
LDOC1	Xq27.1	-0.26902	9.32E-08	1.18E-06
PRODH	22q11.21	0.268912	9.44E-08	1.19E-06
GCK	7p13	-0.26885	9.50E-08	1.20E-06
INMT	7p14.3	-0.26885	9.51E-08	1.20E-06
STX10	19p13.13	0.268758	9.60E-08	1.21E-06
STAG3L3	7q11.23	0.268734	9.63E-08	1.22E-06
DHRS3	1p36.21	-0.26872	9.65E-08	1.22E-06
COMMD1	2p15	-0.26869	9.68E-08	1.22E-06
SCRG1	4q34.1	-0.26867	9.70E-08	1.22E-06
GIGYF1	7q22.1	0.268651	9.72E-08	1.22E-06
SULT1A3	16p11.2	0.268617	9.76E-08	1.23E-06
SMARCA1	Xq25-q26.1	-0.26846	9.94E-08	1.25E-06
SETD1A	16p11.2	0.268429	9.97E-08	1.25E-06
DPP9	19p13.3	0.268417	9.98E-08	1.25E-06
SNORD1C	17q25.1	0.268408	9.99E-08	1.25E-06
FBRSL1	12q24.33	0.268391	1.00E-07	1.26E-06
CGNL1	15q21.3	-0.26839	1.00E-07	1.26E-06
AASDHPPT	11q22.3	-0.26832	1.01E-07	1.26E-06
CRAMP1	16p13.3	0.268321	1.01E-07	1.26E-06
AIF1	6p21.33	-0.26829	1.01E-07	1.27E-06
SULF1	8q13.2-q13.3	-0.26827	1.02E-07	1.27E-06
ZFAND6	15q25.1	-0.26825	1.02E-07	1.27E-06
ZCWPW2	3p24.1	-0.26824	1.02E-07	1.27E-06
ZNF781	19q13.12	-0.26822	1.02E-07	1.28E-06
ACSS3	12q21.31	-0.26812	1.03E-07	1.29E-06
POGLUT2	13q33.1	-0.26809	1.04E-07	1.29E-06
LMNA	1q22	0.268074	1.04E-07	1.29E-06
SNX17	2p23.3	-0.26801	1.05E-07	1.30E-06
RND2	17q21.31	-0.26796	1.05E-07	1.31E-06
SMC1A	Xp11.22	0.267894	1.06E-07	1.32E-06
PPP1R21	2p16.3	-0.26787	1.06E-07	1.32E-06
TYRP1	9p23	-0.26786	1.06E-07	1.32E-06
PPM1G	2p23.3	0.26785	1.06E-07	1.32E-06
TGFBR1	9q22.33	-0.26775	1.08E-07	1.34E-06
DDX54	12q24.13	0.267746	1.08E-07	1.34E-06
ANKRD11	16q24.3	0.26768	1.09E-07	1.34E-06
PTGES2-AS1	9q34.11	0.267594	1.10E-07	1.36E-06
ZBTB18	1q44	0.267558	1.10E-07	1.36E-06
TRIM10	6p22.1	0.267523	1.10E-07	1.37E-06
GDPD1	17q22	-0.26745	1.11E-07	1.38E-06
DLG2	11q14.1	-0.26742	1.12E-07	1.38E-06

TCF7L1	2p11.2	-0.26742	1.12E-07	1.38E-06
MMP15	16q21	0.267373	1.12E-07	1.39E-06
PABPN1	14q11.2	0.267368	1.12E-07	1.39E-06
GPT2	16q11.2	0.267315	1.13E-07	1.39E-06
DCLRE1B	1p13.2	0.267309	1.13E-07	1.39E-06
COG4	16q22.1	0.267301	1.13E-07	1.39E-06
PTGES2	9q34.11	0.267288	1.13E-07	1.39E-06
TRIM28	19q13.43	0.267287	1.13E-07	1.39E-06
UBLCP1	5q33.3	-0.26727	1.14E-07	1.40E-06
DKK3	11p15.3	-0.2672	1.15E-07	1.41E-06
UBTD2	5q35.1	-0.26712	1.16E-07	1.42E-06
TASOR2	10p15.1	0.267085	1.16E-07	1.42E-06
LINC01089	12q24.31	0.26705	1.17E-07	1.43E-06
MSANTD4	11q22.3	-0.26701	1.17E-07	1.43E-06
ARGLU1	13q33.3	0.267003	1.17E-07	1.43E-06
FAM228B	2p23.3	-0.26693	1.18E-07	1.44E-06
EXT2	11p11.2	-0.26691	1.18E-07	1.45E-06
DUSP5P1	1q42.13	0.266857	1.19E-07	1.45E-06
TMEM255A	Xq24	-0.26686	1.19E-07	1.45E-06
HSPB7	1p36.13	-0.26686	1.19E-07	1.45E-06
CDO1	5q22.3	-0.26683	1.19E-07	1.46E-06
CDK14	7q21.13	-0.26682	1.20E-07	1.46E-06
NEFH	22q12.2	-0.2668	1.20E-07	1.46E-06
IGFBP5	2q35	-0.26671	1.21E-07	1.47E-06
SLIT2	4p15.31	-0.26669	1.21E-07	1.48E-06
TMEM200C	18p11.31	-0.26661	1.22E-07	1.49E-06
AKT2	19q13.2	0.266496	1.24E-07	1.51E-06
GRK2	11q13.2	0.266476	1.24E-07	1.51E-06
RAD54B	8q22.1	0.266463	1.24E-07	1.51E-06
CFL2	14q13.1	-0.26642	1.25E-07	1.52E-06
IFRD2	3p21.31	0.26638	1.26E-07	1.52E-06
GAS2L3	12q23.1	0.266298	1.27E-07	1.54E-06
LAMTOR3	4q23	-0.26629	1.27E-07	1.54E-06
GHR	5p13.1-p12	-0.26623	1.28E-07	1.55E-06
DFFB	1p36.32	0.26622	1.28E-07	1.55E-06
APOBEC3G	22q13.1	-0.26615	1.29E-07	1.56E-06
NRADDP	3p21.31	0.266148	1.29E-07	1.56E-06
MAMDC4	9q34.3	0.266094	1.30E-07	1.57E-06
FMO2	1q24.3	-0.26606	1.30E-07	1.57E-06
CSGALNACT1	8p21.3	-0.26604	1.31E-07	1.57E-06
THBS4	5q14.1	-0.26597	1.32E-07	1.59E-06
OSBPL9	1p32.3	-0.26596	1.32E-07	1.59E-06
KLHL38	8q24.13	-0.26593	1.32E-07	1.59E-06
PCDHB12	5q31.3	-0.26593	1.32E-07	1.59E-06
LINC00235	16p13.3	0.265915	1.32E-07	1.59E-06
HELQ	4q21.23	-0.26591	1.32E-07	1.59E-06
A2M	12p13.31	-0.26582	1.34E-07	1.61E-06
HNRNPF	10q11.21	0.265745	1.35E-07	1.62E-06
TJP2	9q21.11	0.265731	1.35E-07	1.62E-06
NEXMIF	Xq13.3	-0.26564	1.37E-07	1.64E-06
GPX8	5q11.2	-0.26564	1.37E-07	1.64E-06
LINC00922	16q21	-0.26562	1.37E-07	1.64E-06
RCN1	11p13	-0.26561	1.37E-07	1.64E-06
CNIH3	1q42.12	-0.26559	1.37E-07	1.64E-06
PHYHD1	9q34.11	-0.26555	1.38E-07	1.65E-06
C2ORF74	2p15	-0.26551	1.38E-07	1.65E-06
CTSB	8p23.1	-0.26549	1.39E-07	1.66E-06
FBLN1	22q13.31	-0.26543	1.40E-07	1.67E-06

JAZF1	7p15.2-p15.1	-0.26542	1.40E-07	1.67E-06
CEACAM21	19q13.2	-0.2654	1.40E-07	1.67E-06
SYMPK	19q13.32	0.265325	1.41E-07	1.68E-06
BICC1	10q21.1	-0.26532	1.42E-07	1.68E-06
METTL9	16p12.2	-0.26531	1.42E-07	1.68E-06
EFR3A	8q24.22	-0.26523	1.43E-07	1.70E-06
LINC00893	Xq28	0.265071	1.46E-07	1.73E-06
RAB31	18p11.22	-0.26506	1.46E-07	1.73E-06
RFC2	7q11.23	0.265061	1.46E-07	1.73E-06
XG	Xp22.33	-0.26505	1.46E-07	1.73E-06
ZBTB43	9q33.3	0.265048	1.46E-07	1.73E-06
CDK17	12q23.1	-0.26504	1.46E-07	1.73E-06
RELT	11q13.4	0.265018	1.46E-07	1.73E-06
HLA-DPB1	6p21.32	-0.26501	1.46E-07	1.73E-06
ZNF501	3p21.31	-0.26484	1.49E-07	1.76E-06
ATRIP	3p21.31	0.264841	1.49E-07	1.76E-06
ZNF667	19q13.43	-0.26483	1.50E-07	1.77E-06
AOC3	17q21.31	-0.26479	1.50E-07	1.77E-06
KIF17	1p36.12	-0.26473	1.51E-07	1.78E-06
MAP3K4	6q26	0.264687	1.52E-07	1.79E-06
ING5	2q37.3	0.264613	1.53E-07	1.80E-06
DGKD	2q37.1	0.264601	1.53E-07	1.81E-06
PGM5	9q21.11	-0.26452	1.55E-07	1.82E-06
ST6GALNAC3	1p31.1	-0.2644	1.57E-07	1.84E-06
PDSS1	10p12.1	0.264281	1.59E-07	1.87E-06
LANCL1	2q34	-0.26424	1.60E-07	1.88E-06
RABL6	9q34.3	0.264178	1.61E-07	1.89E-06
IL34	16q22.1	-0.26418	1.61E-07	1.89E-06
GTPBP4	10p15.3	0.264101	1.62E-07	1.90E-06
APBB1	11p15.4	-0.26396	1.65E-07	1.93E-06
SRSF8	11q21	-0.26373	1.69E-07	1.98E-06
FLVCR1	1q32.3	0.263718	1.69E-07	1.98E-06
RCC2	1p36.13	0.263709	1.69E-07	1.98E-06
ZNF542P	19q13.43	-0.26369	1.70E-07	1.98E-06
ACSF2	17q21.33	-0.26366	1.70E-07	1.99E-06
ZFYVE1	14q24.2	-0.26365	1.71E-07	1.99E-06
MTFR1L	1p36.11	-0.26364	1.71E-07	1.99E-06
PPP5C	19q13.32	0.26355	1.72E-07	2.01E-06
GNG10	9q31.3	-0.26348	1.74E-07	2.03E-06
HSPBP1	19q13.42	0.263455	1.74E-07	2.03E-06
STX5	11q12.3	-0.2634	1.75E-07	2.04E-06
HIRA	22q11.21	0.263359	1.76E-07	2.05E-06
FGFR1	8p11.23	-0.26334	1.76E-07	2.05E-06
TWSG1	18p11.22	-0.26328	1.78E-07	2.07E-06
POLE2	14q21.3	0.263244	1.78E-07	2.07E-06
SMPD1	11p15.4	-0.26322	1.79E-07	2.08E-06
HHIP	4q31.21	-0.26316	1.80E-07	2.09E-06
ADGRL4	1p31.1	-0.26315	1.80E-07	2.09E-06
MFRP	11q23.3	-0.26314	1.80E-07	2.09E-06
SEMA3D	7q21.11	-0.26309	1.81E-07	2.10E-06
DPH3	3p25.1	-0.26307	1.82E-07	2.10E-06
GTF2B	1p22.2	-0.26305	1.82E-07	2.11E-06
PDZRN4	12q12	-0.26302	1.83E-07	2.12E-06
C8ORF48	8p22	-0.26299	1.84E-07	2.12E-06
E4F1	16p13.3	0.262947	1.84E-07	2.13E-06
PRND	20p13	-0.26286	1.86E-07	2.15E-06
MAPK10	4q21.3	-0.2628	1.87E-07	2.16E-06
RGS5	1q23.3	-0.26271	1.89E-07	2.18E-06

C9ORF129	9q22.31	0.262688	1.90E-07	2.19E-06
RUVBL2	19q13.33	0.262517	1.93E-07	2.23E-06
KCNMB2	3q26.32	-0.26241	1.96E-07	2.25E-06
PGAM5	12q24.33	0.262408	1.96E-07	2.25E-06
ATP1A2	1q23.2	-0.26238	1.96E-07	2.26E-06
SNAP91	6q14.2	-0.26236	1.97E-07	2.26E-06
BTNL9	5q35.3	0.262363	1.97E-07	2.26E-06
SYNPO2	4q26	-0.26234	1.97E-07	2.26E-06
STX6	1q25.3	0.262343	1.97E-07	2.26E-06
CYP1B1	2p22.2	-0.2623	1.98E-07	2.27E-06
NCKAP5L	12q13.12	-0.26227	1.99E-07	2.28E-06
ZNF853	7p22.1	-0.26226	1.99E-07	2.28E-06
CACTIN	19p13.3	0.262198	2.00E-07	2.29E-06
DIRAS2	9q22.2	-0.26211	2.02E-07	2.31E-06
SNHG20	17q25.2	0.262084	2.03E-07	2.32E-06
LOC646471	1p36.11	0.262033	2.04E-07	2.33E-06
NPR3	5p13.3	-0.26197	2.05E-07	2.34E-06
XPNPEP1	10q25.1	0.261972	2.05E-07	2.34E-06
NTRK3	15q25.3	-0.26195	2.06E-07	2.35E-06
MORF4L1	15q25.1	-0.26193	2.06E-07	2.35E-06
TBC1D31	8q24.13	0.261835	2.09E-07	2.38E-06
GPN1	2p23.3	-0.2618	2.09E-07	2.38E-06
EFEMP2	11q13.1	-0.26172	2.11E-07	2.40E-06
TRIM23	5q12.3	-0.26171	2.11E-07	2.40E-06
RGS7BP	5q12.3	-0.26165	2.13E-07	2.42E-06
NOLC1	10q24.32	0.261627	2.13E-07	2.42E-06
TBC1D23	3q12.1-q12.2	-0.26155	2.15E-07	2.44E-06
TMEM87B	2q13	-0.2615	2.16E-07	2.45E-06
PLCL1	2q33.1	-0.26148	2.17E-07	2.46E-06
SRSF7	2p22.1	0.261419	2.18E-07	2.47E-06
MRAS	3q22.3	-0.26133	2.20E-07	2.50E-06
DSCC1	8q24.12	0.261329	2.20E-07	2.50E-06
SYNGR1	22q13.1	-0.26128	2.22E-07	2.51E-06
RCBTB2	13q14.2	-0.26126	2.22E-07	2.51E-06
HP1BP3	1p36.12	0.26126	2.22E-07	2.51E-06
TMEM128	4p16.3	-0.26125	2.22E-07	2.51E-06
PALM	19p13.3	-0.26118	2.24E-07	2.53E-06
NR3C1	5q31.3	-0.26115	2.25E-07	2.54E-06
MFAP4	17p11.2	-0.26104	2.27E-07	2.57E-06
PLA2G15	16q22.1	-0.26096	2.30E-07	2.59E-06
TMEM150A	2p11.2	-0.26093	2.30E-07	2.59E-06
B4GALNT1	12q13.3	-0.26089	2.31E-07	2.60E-06
PPEF1	Xp22.13	-0.26089	2.31E-07	2.60E-06
SYNPO	5q33.1	-0.26089	2.31E-07	2.60E-06
RGL1	1q25.3	-0.26083	2.33E-07	2.62E-06
NR2F6	19p13.11	0.26077	2.34E-07	2.63E-06
STAU2	8q21.11	-0.26074	2.35E-07	2.64E-06
TNFRSF25	1p36.31	0.260739	2.35E-07	2.64E-06
MARCKS	6q21	-0.26073	2.35E-07	2.64E-06
CCL2	17q12	-0.26069	2.36E-07	2.65E-06
SOX4	6p22.3	-0.26068	2.37E-07	2.65E-06
ABAT	16p13.2	-0.26063	2.38E-07	2.67E-06
NECAP2	1p36.13	-0.2606	2.39E-07	2.67E-06
PCDHB7	5q31.3	-0.26059	2.39E-07	2.67E-06
PNISR	6q16.2	0.260544	2.40E-07	2.69E-06
RRP1	21q22.3	0.260525	2.41E-07	2.69E-06
PFKP	10p15.2	0.260502	2.41E-07	2.70E-06
SNX18	5q11.2	-0.26044	2.43E-07	2.71E-06

MYOZ1	10q22.2	-0.26042	2.44E-07	2.72E-06
GPR34	Xp11.4	-0.26042	2.44E-07	2.72E-06
P2RY11	19p13.2	0.260258	2.48E-07	2.76E-06
WNT8B	10q24.31	0.260241	2.48E-07	2.77E-06
DUBR	3q13.12	-0.26022	2.49E-07	2.77E-06
SELENOT	3q25.1	-0.2602	2.50E-07	2.78E-06
UBE2Q2P2	15q25.2	0.260185	2.50E-07	2.78E-06
MBD3	19p13.3	0.26013	2.52E-07	2.79E-06
UBXN6	19p13.3	-0.2601	2.52E-07	2.80E-06
EBAG9	8q23.2	-0.26006	2.53E-07	2.81E-06
DHX34	19q13.32	0.260003	2.55E-07	2.83E-06
DNAJB5	9p13.3	-0.26	2.55E-07	2.83E-06
WNT3	17q21.31-q21.32	0.259994	2.55E-07	2.83E-06
ZC3H4	19q13.32	0.259992	2.55E-07	2.83E-06
CTHRC1	8q22.3	-0.25995	2.56E-07	2.84E-06
ING4	12p13.31	-0.25995	2.57E-07	2.84E-06
STRN4	19q13.32	0.259938	2.57E-07	2.84E-06
KCNT2	1q31.3	-0.2599	2.58E-07	2.85E-06
CASP8AP2	6q15	0.259893	2.58E-07	2.85E-06
LIMS2	2q14.3	-0.25988	2.59E-07	2.85E-06
CAMSAP1	9q34.3	0.259879	2.59E-07	2.85E-06
TBCEL	11q23.3	-0.25986	2.59E-07	2.86E-06
DENND5A	11p15.4	-0.25985	2.59E-07	2.86E-06
RSRP1	1p36.11	0.259844	2.60E-07	2.86E-06
MYCT1	6q25.2	-0.25981	2.61E-07	2.87E-06
NR2F1-AS1	5q15	-0.25975	2.62E-07	2.88E-06
HNRNPD	4q21.22	0.25969	2.64E-07	2.90E-06
SH3BGR	21q22.2	-0.25963	2.66E-07	2.92E-06
HMGX2	1p36.11	0.259549	2.68E-07	2.94E-06
DVL1	1p36.33	0.259507	2.69E-07	2.95E-06
FAM124B	2q36.2	-0.25943	2.72E-07	2.98E-06
ZFX4	8q21.13	-0.25941	2.72E-07	2.98E-06
PPP2R3C	14q13.2	-0.2594	2.72E-07	2.98E-06
THSD7B	2q22.1	-0.25938	2.73E-07	2.99E-06
S1PR1	1p21.2	-0.25937	2.73E-07	2.99E-06
RAMP2	17q21.2	-0.25929	2.76E-07	3.02E-06
PDLIM4	5q31.1	-0.25926	2.77E-07	3.02E-06
CEP112	17q24.1	-0.25923	2.78E-07	3.03E-06
IFT20	17q11.2	-0.25919	2.79E-07	3.04E-06
STK38L	12p11.23	-0.25918	2.79E-07	3.04E-06
ARL5A	2q23.3	-0.25918	2.79E-07	3.04E-06
ANP32A-IT1	15q23	0.259174	2.79E-07	3.04E-06
NBEA	13q13.3	-0.25915	2.80E-07	3.05E-06
TCTN3	10q24.1	-0.25913	2.81E-07	3.06E-06
RRAGC	1p34.3	-0.25911	2.81E-07	3.06E-06
LMLN	3q29	0.259079	2.82E-07	3.07E-06
EEF1AKNMT	1q24.3	0.259073	2.82E-07	3.07E-06
RBKS	2p23.2	-0.25901	2.84E-07	3.09E-06
UFSP2	4q35.1	-0.25897	2.85E-07	3.10E-06
BMF	15q15.1	-0.25892	2.87E-07	3.11E-06
DMGDH	5q14.1	-0.25892	2.87E-07	3.11E-06
GTF2H4	6p21.33	0.258906	2.88E-07	3.12E-06
SLC25A37	8p21.2	0.258869	2.89E-07	3.13E-06
RAB33A	Xq26.1	-0.25883	2.90E-07	3.14E-06
GPR85	7q31.1	-0.2588	2.91E-07	3.15E-06
MAP3K10	19q13.2	0.258728	2.93E-07	3.17E-06
SPATA7	14q31.3	-0.25873	2.93E-07	3.17E-06
ANKRD29	18q11.2	-0.25872	2.93E-07	3.17E-06

DHRS12	13q14.3	-0.25871	2.94E-07	3.17E-06
BST1	4p15.32	-0.25868	2.95E-07	3.18E-06
P2RY14	3q25.1	-0.25865	2.96E-07	3.19E-06
BORA	13q21.33	0.258606	2.97E-07	3.20E-06
MFSD14A	1p21.2	-0.25857	2.98E-07	3.21E-06
MYL6B	12q13.2	-0.25854	2.99E-07	3.22E-06
C6ORF141	6p12.3	0.258537	2.99E-07	3.22E-06
ITGB6	2q24.2	-0.25835	3.05E-07	3.29E-06
GOLPH3	5p13.3	-0.25835	3.06E-07	3.29E-06
TRIM5	11p15.4	-0.25825	3.09E-07	3.32E-06
LYNX1	8q24.3	-0.25824	3.09E-07	3.32E-06
ZMAT3	3q26.32	-0.25822	3.10E-07	3.33E-06
DPP6	7q36.2	-0.25813	3.13E-07	3.36E-06
INHBA-AS1	7p14.1	-0.25809	3.14E-07	3.37E-06
POP1	8q22.2	0.257863	3.22E-07	3.45E-06
MEOX2	7p21.2	-0.2578	3.24E-07	3.48E-06
KIAA1522	1p35.1	0.257747	3.26E-07	3.49E-06
TRIM66	11p15.4	0.257706	3.28E-07	3.51E-06
RSPO3	6q22.33	-0.2576	3.31E-07	3.54E-06
CST1	20p11.21	-0.25758	3.32E-07	3.55E-06
SNX3	6q21	-0.25757	3.33E-07	3.55E-06
TXLNB	6q24.1	-0.25738	3.39E-07	3.62E-06
GOLGA6L10	15q25.2	0.257371	3.40E-07	3.63E-06
RAB18	10p12.1	-0.25735	3.41E-07	3.63E-06
TMEM121	14q32.33	-0.25734	3.41E-07	3.63E-06
GMFG	19q13.2	-0.25731	3.42E-07	3.64E-06
FLAD1	1q21.3	0.257283	3.43E-07	3.65E-06
ATP1B2	17p13.1	-0.25726	3.44E-07	3.66E-06
PLPP7	9q34.13	-0.25723	3.45E-07	3.67E-06
TCEA2	20q13.33	-0.25718	3.47E-07	3.69E-06
FZD1	7q21.13	-0.25713	3.49E-07	3.71E-06
SCN9A	2q24.3	-0.25713	3.49E-07	3.71E-06
ARHGEF25	12q13.3	-0.25708	3.51E-07	3.72E-06
SLC35G2	3q22.3	-0.25705	3.52E-07	3.73E-06
TMEM119	12q23.3	-0.25703	3.52E-07	3.74E-06
CTNNB1	3p22.1	-0.25702	3.53E-07	3.74E-06
CRTAC1	10q24.2	-0.257	3.54E-07	3.75E-06
KCNMA1	10q22.3	-0.25696	3.55E-07	3.76E-06
ARRDC1	9q34.3	0.256918	3.57E-07	3.78E-06
MOSPD1	Xq26.3	-0.2569	3.57E-07	3.78E-06
ABHD13	13q33.3	-0.25687	3.59E-07	3.79E-06
CST2	20p11.21	-0.25685	3.60E-07	3.80E-06
LYSMD3	5q14.3	-0.25683	3.60E-07	3.81E-06
FAM83H	8q24.3	0.256809	3.61E-07	3.81E-06
CHL1	3p26.3	-0.2568	3.61E-07	3.81E-06
PRKACB	1p31.1	-0.25676	3.63E-07	3.83E-06
MAN1C1	1p36.11	-0.25674	3.64E-07	3.83E-06
TTLL1	22q13.2	-0.25674	3.64E-07	3.83E-06
GAPT	5q11.2	-0.2567	3.65E-07	3.85E-06
CLEC2L	7q34	-0.25668	3.66E-07	3.85E-06
GLI1	12q13.3	-0.25663	3.68E-07	3.87E-06
DCTN2	12q13.3	-0.25659	3.70E-07	3.89E-06
PPP6R1	19q13.42	0.256572	3.70E-07	3.89E-06
CFH	1q31.3	-0.25654	3.72E-07	3.90E-06
TEK	9p21.2	-0.25651	3.73E-07	3.91E-06
SEC61A2	10p14	0.256508	3.73E-07	3.91E-06
CCL21	9p13.3	-0.25649	3.74E-07	3.92E-06
KLC2	11q13.2	0.256442	3.76E-07	3.94E-06



ACOT7	1p36.31	0.25627	3.83E-07	4.01E-06
MCC	5q22.2	-0.25626	3.83E-07	4.01E-06
SMG1P3	16p12.2	0.256163	3.87E-07	4.05E-06
CLDN20	6q25.3	0.256129	3.89E-07	4.06E-06
MSH2	2p21-p16.3	0.256119	3.89E-07	4.07E-06
AQP1	7p14.3	-0.25609	3.90E-07	4.07E-06
CRTC2	1q21.3	0.256044	3.92E-07	4.09E-06
CAMKK1	17p13.2	0.256027	3.93E-07	4.10E-06
CDKN2B	9p21.3	-0.25603	3.93E-07	4.10E-06
RBMS3	3p24.1	-0.25599	3.94E-07	4.11E-06
NME9	3q22.3	0.255951	3.96E-07	4.13E-06
LGALS1	22q13.1	-0.25595	3.96E-07	4.13E-06
VAV3	1p13.3	-0.25594	3.96E-07	4.13E-06
SEPTIN4	17q22	-0.25594	3.97E-07	4.13E-06
SRGAP3	3p25.3	-0.25585	4.00E-07	4.16E-06
KCNK3	2p23.3	-0.25582	4.02E-07	4.18E-06
TM2D2	8p11.22	-0.25581	4.02E-07	4.18E-06
IFNGR2	21q22.11	-0.25573	4.05E-07	4.21E-06
STXBP3	1p13.3	-0.25562	4.10E-07	4.26E-06
ECPAS	9q31.3	0.25558	4.12E-07	4.28E-06
USP43	17p13.1	0.25557	4.13E-07	4.28E-06
COPZ2	17q21.32	-0.25557	4.13E-07	4.28E-06
HTRA3	4p16.1	-0.25556	4.13E-07	4.28E-06
OPCML	11q25	-0.25555	4.13E-07	4.28E-06
NEURL4	17p13.1	0.255515	4.15E-07	4.29E-06
MSC	8q13.3	-0.25547	4.17E-07	4.31E-06
PMEPA1	20q13.31	-0.25544	4.19E-07	4.32E-06
INTS11	1p36.33	0.255379	4.21E-07	4.35E-06
UBB	17p11.2	-0.25537	4.22E-07	4.35E-06
ZDHHHC11	5p15.33	0.255366	4.22E-07	4.35E-06
GTSF1	12q13.13	-0.25534	4.23E-07	4.36E-06
PHYHIP	8p21.3	-0.25532	4.24E-07	4.37E-06
SFRP1	8p11.21	-0.25528	4.26E-07	4.39E-06
TIPIN	15q22.31	0.255255	4.27E-07	4.40E-06
POLB	8p11.21	-0.25523	4.28E-07	4.40E-06
CIRBP-AS1	19p13.3	0.255232	4.28E-07	4.40E-06
AKAP6	14q12	-0.25523	4.28E-07	4.40E-06
RBBP6	16p12.1	0.255128	4.33E-07	4.45E-06
CERS4	19p13.2	-0.25504	4.37E-07	4.49E-06
MBOAT1	6p22.3	0.255008	4.38E-07	4.50E-06
HOXB3	17q21.32	0.254995	4.39E-07	4.50E-06
FBXL6	8q24.3	0.254988	4.39E-07	4.50E-06
MAPK15	-	0.254892	4.44E-07	4.55E-06
DRAM2	1p13.3	-0.25481	4.48E-07	4.59E-06
GIMAP7	7q36.1	-0.2548	4.48E-07	4.59E-06
CRHBP	5q13.3	-0.25471	4.53E-07	4.63E-06
SPSB4	3q23	-0.25469	4.54E-07	4.64E-06
ARSB	5q14.1	-0.25467	4.54E-07	4.65E-06
ELMO1	7p14.2-p14.1	-0.25464	4.56E-07	4.66E-06
GOLGA2P10	15q25.2	0.254597	4.58E-07	4.68E-06
GEM	8q22.1	-0.25454	4.61E-07	4.71E-06
PRICKLE2	3p14.1	-0.25443	4.67E-07	4.76E-06
THBS2	6q27	-0.2544	4.68E-07	4.77E-06
UBAP2	9p13.3	0.254357	4.70E-07	4.79E-06
GASK1B	4q32.1	-0.25433	4.71E-07	4.80E-06
CD68	17p13.1	-0.2543	4.73E-07	4.81E-06
KIF5A	12q13.3	-0.25429	4.73E-07	4.82E-06
KCNAB1	3q25.31	-0.25426	4.75E-07	4.83E-06

CNN1	19p13.2	-0.25425	4.76E-07	4.83E-06
GPM6A	4q34.2	-0.25421	4.77E-07	4.85E-06
MDFIC	7q31.1-q31.2	-0.25409	4.84E-07	4.91E-06
PPFIA3	19q13.33	0.254078	4.84E-07	4.91E-06
NT5DC3	12q23.3	0.254078	4.84E-07	4.91E-06
BCAN	1q23.1	0.254073	4.84E-07	4.91E-06
REM1	20q11.21	-0.25407	4.84E-07	4.91E-06
BYSL	6p21.1	0.254021	4.87E-07	4.94E-06
FAM83D	20q11.23	0.25401	4.88E-07	4.94E-06
RGMA	15q26.1	-0.25394	4.91E-07	4.97E-06
HEYL	1p34.2	-0.25393	4.92E-07	4.98E-06
ELP1	9q31.3	0.253765	5.01E-07	5.06E-06
ABHD8	19p13.11	-0.25372	5.03E-07	5.08E-06
HAGHL	16p13.3	0.25362	5.09E-07	5.14E-06
SPEN	1p36.21-p36.13	0.253519	5.14E-07	5.19E-06
TSG101	11p15.1	-0.25344	5.19E-07	5.23E-06
MAMDC2	9q21.12	-0.25342	5.19E-07	5.24E-06
KIAA0825	5q15	-0.25341	5.20E-07	5.24E-06
FAM155A	13q33.3	-0.25341	5.20E-07	5.24E-06
ANO3	11p14.3-p14.2	-0.25313	5.36E-07	5.40E-06
SEPTIN5	22q11.21	-0.2531	5.38E-07	5.41E-06
GOLGA6L9	15q25.2	0.25306	5.40E-07	5.43E-06
SEPTIN2	2q37.3	-0.25304	5.41E-07	5.44E-06
SCN1B	19q13.11	-0.25302	5.42E-07	5.45E-06
LINC00312	3p25.3	-0.253	5.43E-07	5.45E-06
CC2D1A	19p13.12	0.252922	5.48E-07	5.50E-06
BACH1	21q21.3	-0.25292	5.48E-07	5.50E-06
CD3EAP	19q13.32	0.252898	5.49E-07	5.51E-06
ABCC10	6p21.1	0.25288	5.50E-07	5.52E-06
DIPK1A	1p22.1	-0.25286	5.52E-07	5.52E-06
IRF3	19q13.33	0.252855	5.52E-07	5.52E-06
BMS1P1	10q11.22	0.252854	5.52E-07	5.52E-06
GNAI2	3p21.31	-0.25285	5.52E-07	5.52E-06
MAF	16q23.2	-0.25284	5.52E-07	5.52E-06
ANK2	4q25-q26	-0.2528	5.55E-07	5.54E-06
TAFA5	22q13.32	-0.25278	5.56E-07	5.56E-06
CD81	11p15.5	-0.25272	5.60E-07	5.59E-06
AAMDC	11q14.1	-0.25264	5.65E-07	5.63E-06
UBE2QL1	5p15.31	-0.25262	5.66E-07	5.64E-06
TRIM27	6p22.1	0.252601	5.67E-07	5.65E-06
APMAP	20p11.21	-0.25258	5.68E-07	5.66E-06
ELN	7q11.23	-0.25257	5.69E-07	5.67E-06
MAZ	16p11.2	0.252535	5.71E-07	5.68E-06
PFDN5	12q13.13	-0.25246	5.75E-07	5.72E-06
ACYP2	2p16.2	-0.25244	5.76E-07	5.73E-06
PHKG2	16p11.2	0.252418	5.78E-07	5.74E-06
WTIP	19q13.11	-0.25234	5.82E-07	5.79E-06
UCHL1	4p13	-0.25232	5.84E-07	5.80E-06
ATP10D	4p12	-0.2523	5.85E-07	5.81E-06
TSC22D1	13q14.11	-0.25227	5.87E-07	5.82E-06
E2F4	16q22.1	0.252255	5.88E-07	5.83E-06
SECISBP2L	15q21.1	-0.25224	5.89E-07	5.83E-06
GSN	9q33.2	-0.25222	5.90E-07	5.85E-06
APC2	19p13.3	0.252198	5.92E-07	5.86E-06
NUP50	22q13.31	0.252185	5.92E-07	5.86E-06
FMO3	1q24.3	-0.25214	5.95E-07	5.88E-06
IKBIP	12q23.1	-0.25213	5.96E-07	5.89E-06
NMUR1	2q37.1	-0.25212	5.96E-07	5.89E-06

TMEM143	19q13.33	0.252103	5.98E-07	5.90E-06
INSIG2	2q14.1-q14.2	-0.25208	5.99E-07	5.91E-06
MAT2A	2p11.2	0.252043	6.01E-07	5.93E-06
CLEC14A	14q21.1	-0.252	6.04E-07	5.96E-06
PROC	2q14.3	-0.25196	6.06E-07	5.98E-06
LMCD1	3p25.3	-0.25193	6.08E-07	5.99E-06
NINJ2	12p13.33	-0.25188	6.11E-07	6.02E-06
JMJD7-PLA2G4B	15q15.1	0.251875	6.12E-07	6.02E-06
DRD2	11q23.2	-0.25186	6.13E-07	6.03E-06
PIWIL1	12q24.33	0.251824	6.15E-07	6.05E-06
ETS1	11q24.3	-0.25176	6.19E-07	6.09E-06
HLA-DPA1	6p21.32	-0.25173	6.22E-07	6.10E-06
TERF2IP	16q23.1	-0.25166	6.26E-07	6.15E-06
NRAS	1p13.2	-0.25162	6.29E-07	6.17E-06
YY1AP1	1q22	0.251609	6.30E-07	6.17E-06
BCAM	19q13.32	-0.25155	6.34E-07	6.21E-06
ST13P4	13q14.2	-0.25146	6.39E-07	6.27E-06
YPEL3	16p11.2	-0.25141	6.43E-07	6.30E-06
AMOTL1	11q21	-0.25137	6.46E-07	6.32E-06
GIMAP4	7q36.1	-0.25137	6.46E-07	6.32E-06
TMEM150C	4q21.22	-0.25134	6.48E-07	6.34E-06
KCNV2	9p24.2	0.251333	6.48E-07	6.34E-06
NDUFS7	19p13.3	0.2513	6.51E-07	6.36E-06
AXL	19q13.2	-0.25125	6.54E-07	6.39E-06
E2F3	6p22.3	0.251175	6.59E-07	6.43E-06
MZF1-AS1	19q13.43	0.251174	6.59E-07	6.43E-06
POLR3A	10q22.3	0.251168	6.60E-07	6.43E-06
C1ORF54	1q21.2	-0.25114	6.61E-07	6.45E-06
ARL4C	2q37.1	-0.25113	6.62E-07	6.45E-06
CCDC8	19q13.32	-0.25108	6.66E-07	6.48E-06
TP73	1p36.32	0.250898	6.79E-07	6.60E-06
TPP1	11p15.4	-0.25089	6.79E-07	6.61E-06
NUDT1	7p22.3	0.250853	6.82E-07	6.63E-06
CDCA4	14q32.33	0.250781	6.87E-07	6.68E-06
SRF	6p21.1	0.250665	6.96E-07	6.76E-06
LEFTY2	1q42.12	-0.25064	6.97E-07	6.77E-06
DDX55	12q24.31	0.250626	6.98E-07	6.78E-06
HDGFL2	19p13.3	0.250624	6.99E-07	6.78E-06
ALS2CL	3p21.31	0.250599	7.00E-07	6.79E-06
NKAPL	6p22.1	-0.25059	7.01E-07	6.79E-06
ZBTB4	17p13.1	-0.25056	7.03E-07	6.81E-06
REEP5	5q22.2	-0.25054	7.05E-07	6.82E-06
NGFR	17q21.33	-0.25048	7.10E-07	6.86E-06
SLC25A27	6p12.3	0.250419	7.14E-07	6.90E-06
RNF130	5q35.3	-0.25041	7.15E-07	6.91E-06
GLIPR1L2	12q21.2	-0.25032	7.22E-07	6.97E-06
LRRN4CL	11q12.3	-0.25028	7.24E-07	6.99E-06
ZSCAN2	15q25.2	-0.25027	7.25E-07	7.00E-06
LRRC15	3q29	-0.25024	7.28E-07	7.02E-06
PELI2	14q22.3	-0.2502	7.30E-07	7.04E-06
TNRC18	7p22.1	0.25016	7.34E-07	7.07E-06
CRIPT	2p21	-0.25015	7.34E-07	7.07E-06
SELENOP	5p12	-0.25015	7.35E-07	7.07E-06
PI4KAP2	22q11.21	0.250116	7.37E-07	7.09E-06
TLR7	Xp22.2	-0.2501	7.39E-07	7.10E-06
CCDC57	17q25.3	0.25001	7.45E-07	7.16E-06
VIM	10p13	-0.25	7.46E-07	7.17E-06
PPP2R5D	6p21.1	0.249986	7.47E-07	7.18E-06

CTU1	19q13.41	0.249861	7.57E-07	7.27E-06
RPL32P3	3q21.3	0.249805	7.61E-07	7.31E-06
SCARNA5	2q37.1	-0.24979	7.63E-07	7.32E-06
HTR7P1	12p13.1	-0.24977	7.64E-07	7.33E-06
ARPC5L	9q33.3	0.249651	7.74E-07	7.41E-06
SNCA	4q22.1	-0.24959	7.78E-07	7.46E-06
TIAL1	10q26.11	0.249578	7.80E-07	7.46E-06
RSPH1	21q22.3	0.249569	7.81E-07	7.47E-06
S100A4	1q21.3	-0.24954	7.83E-07	7.49E-06
RXFP1	4q32.1	-0.24948	7.88E-07	7.53E-06
CST4	20p11.21	-0.24938	7.96E-07	7.60E-06
SPOCK1	5q31.2	-0.24937	7.97E-07	7.61E-06
OCIAD1	4p11	-0.24936	7.98E-07	7.61E-06
NPTX1	17q25.3	-0.24932	8.01E-07	7.65E-06
ABCC9	12p12.1	-0.24929	8.04E-07	7.66E-06
CHERP	19p13.11	0.249287	8.04E-07	7.66E-06
ERCC1	19q13.32	-0.24926	8.06E-07	7.68E-06
HAND2-AS1	4q34.1	-0.2492	8.11E-07	7.72E-06
POGK	1q24.1	0.249163	8.14E-07	7.75E-06
SPCS3	4q34.2	-0.24916	8.15E-07	7.75E-06
PRDM6	5q23.2	-0.24915	8.15E-07	7.75E-06
MXRA8	1p36.33	-0.24914	8.17E-07	7.76E-06
C11ORF52	11q23.1	-0.24913	8.17E-07	7.77E-06
RAB1A	2p14	-0.249	8.28E-07	7.87E-06
ZNF454	5q35.3	-0.24898	8.30E-07	7.88E-06
GPR183	13q32.3	-0.24896	8.32E-07	7.89E-06
TMEM200B	1p35.3	-0.24896	8.32E-07	7.89E-06
RMDN2	2p22.2	-0.24893	8.35E-07	7.91E-06
CDCA7L	7p15.3	0.248921	8.35E-07	7.91E-06
IL1R1	2q11.2-q12.1	-0.2489	8.37E-07	7.93E-06
HERPUD2	7p14.2	-0.24889	8.38E-07	7.93E-06
NAGK	2p13.3	-0.24881	8.45E-07	8.00E-06
FOXC2	16q24.1	-0.2488	8.46E-07	8.00E-06
PRKG1	10q11.23-q21.1	-0.24879	8.47E-07	8.00E-06
ACSM5	16p12.3	-0.24866	8.58E-07	8.11E-06
LTBP3	11q13.1	-0.24863	8.61E-07	8.13E-06
MORC2	22q12.2	0.248603	8.64E-07	8.15E-06
C14ORF132	14q32.2	-0.24859	8.64E-07	8.15E-06
ADAMTSL1	9p22.2-p22.1	-0.24853	8.71E-07	8.21E-06
ATG13	11p11.2	-0.24849	8.74E-07	8.24E-06
TTC30A	2q31.2	-0.24847	8.76E-07	8.25E-06
TTLL4	2q35	0.248458	8.77E-07	8.25E-06
LSAMP	3q13.31	-0.24845	8.77E-07	8.26E-06
SLC22A17	14q11.2	-0.24837	8.85E-07	8.32E-06
RBM20	10q25.2	-0.24832	8.89E-07	8.36E-06
SNX10	7p15.2	-0.24832	8.90E-07	8.36E-06
LST1	6p21.33	-0.24826	8.95E-07	8.40E-06
NHLRC4	16p13.3	-0.24821	9.00E-07	8.45E-06
VEZF1	17q22	-0.2482	9.00E-07	8.45E-06
NRBF2	10q21.3	-0.24814	9.06E-07	8.50E-06
AKR7A2P1	1p13.2	0.248028	9.17E-07	8.60E-06
MAP4K3	2p22.1	-0.24802	9.18E-07	8.60E-06
SIT1	9p13.3	-0.24799	9.21E-07	8.62E-06
GFPT2	5q35.3	-0.24797	9.23E-07	8.64E-06
SLC19A1	21q22.3	0.247957	9.24E-07	8.64E-06
CXCL12	10q11.21	-0.24793	9.26E-07	8.66E-06
CDH2	18q12.1	-0.24782	9.37E-07	8.76E-06
LINC02447	4p16.1	-0.2478	9.39E-07	8.78E-06

INF2	14q32.33	0.247777	9.41E-07	8.79E-06
CD63	12q13.2	-0.24775	9.44E-07	8.81E-06
BOC	3q13.2	-0.24774	9.44E-07	8.81E-06
PPM1M	3p21.2	-0.2477	9.49E-07	8.85E-06
COMTD1	10q22.2	0.247696	9.49E-07	8.85E-06
HTR2A	13q14.2	-0.24768	9.51E-07	8.86E-06
SPARCL1	4q22.1	-0.24767	9.52E-07	8.86E-06
PLEKHO2	15q22.31	-0.24765	9.54E-07	8.88E-06
MYBBP1A	17p13.2	0.247575	9.61E-07	8.94E-06
NEXN	1p31.1	-0.24757	9.61E-07	8.94E-06
LPCAT2	16q12.2	-0.24757	9.62E-07	8.94E-06
HIST1H2BO	6p22.1	0.247497	9.69E-07	9.00E-06
HSPA14	10p13	0.247465	9.72E-07	9.03E-06
IMPDH1	7q32.1	0.247453	9.73E-07	9.04E-06
ITPR1	3p26.1	-0.24743	9.75E-07	9.05E-06
PMS2P9	7q11.23	0.247426	9.76E-07	9.05E-06
RETREG2	2q35	-0.2474	9.78E-07	9.07E-06
CD1C	1q23.1	-0.24738	9.81E-07	9.09E-06
POPDC2	3q13.33	-0.24728	9.91E-07	9.18E-06
LINC00324	17p13.1	-0.24726	9.93E-07	9.19E-06
LRRC55	11q12.1	-0.24724	9.95E-07	9.21E-06
LAT2	7q11.23	-0.24723	9.96E-07	9.22E-06
TRAK2	2q33.1	-0.24721	9.98E-07	9.23E-06
DCST1	1q21.3	0.24719	1.00E-06	9.25E-06
CCDC88C	14q32.11-q32.12	0.247141	1.01E-06	9.29E-06
SPIN2A	Xp11.21	-0.24711	1.01E-06	9.31E-06
SSRP1	11q12.1	0.247099	1.01E-06	9.32E-06
SCOC	4q31.1	-0.24708	1.01E-06	9.33E-06
DLEU2L	1p31.3	0.246948	1.03E-06	9.46E-06
VRK1	14q32.2	0.24691	1.03E-06	9.49E-06
PPP1R15B	1q32.1	0.246909	1.03E-06	9.49E-06
CAB39L	13q14.2	-0.24682	1.04E-06	9.57E-06
SIPA1	11q13.1	-0.24682	1.04E-06	9.57E-06
BPI	20q11.23	-0.24678	1.04E-06	9.60E-06
PUSL1	1p36.33	0.246777	1.04E-06	9.60E-06
HMGB3	Xq28	0.246771	1.04E-06	9.60E-06
UGP2	2p15	-0.24675	1.05E-06	9.61E-06
CASC15	6p22.3	-0.24675	1.05E-06	9.61E-06
ZIK1	19q13.43	-0.24672	1.05E-06	9.64E-06
CST3	20p11.21	-0.24671	1.05E-06	9.64E-06
APLP2	11q24.3	-0.24666	1.06E-06	9.69E-06
OR2B6	6p22.1	0.246641	1.06E-06	9.71E-06
QKI	6q26	-0.24662	1.06E-06	9.73E-06
LBH	2p23.1	-0.24661	1.06E-06	9.73E-06
PFDN2	1q23.3	0.246607	1.06E-06	9.73E-06
ARHGAP15	2q22.2-q22.3	-0.24658	1.07E-06	9.75E-06
LUC7L3	17q21.33	0.246567	1.07E-06	9.76E-06
SLC4A2	7q36.1	0.24655	1.07E-06	9.77E-06
CPA4	7q32.2	-0.24651	1.07E-06	9.81E-06
PHF21A	11p11.2	-0.24649	1.08E-06	9.82E-06
ACKR3	2q37.3	-0.24635	1.09E-06	9.96E-06
WNT2	7q31.2	-0.24633	1.09E-06	9.98E-06
VIPR2	7q36.3	-0.24632	1.09E-06	9.99E-06
ABCA1	9q31.1	-0.24631	1.10E-06	9.99E-06
GOLGA7	8p11.21	-0.2463	1.10E-06	9.99E-06
BECN1	17q21.31	-0.24628	1.10E-06	1.00E-05
ZNF436-AS1	1p36.12	0.24627	1.10E-06	1.00E-05
PPIP5K1	15q15.3	0.246229	1.11E-06	1.01E-05

STARD3NL	7p14.1	-0.24622	1.11E-06	1.01E-05
HHAT	1q32.2	-0.24616	1.11E-06	1.01E-05
MORN1	1p36.32	0.246125	1.12E-06	1.02E-05
GPBAR1	2q35	-0.24599	1.13E-06	1.03E-05
GOLGA3	12q24.33	0.245985	1.13E-06	1.03E-05
CFI	4q25	-0.24597	1.13E-06	1.03E-05
SCN7A	2q24.3	-0.24587	1.15E-06	1.04E-05
GTF2IRD2P1	7q11.23	-0.24585	1.15E-06	1.04E-05
MCM8	20p12.3	0.245813	1.15E-06	1.05E-05
THY1	11q23.3	-0.24581	1.15E-06	1.05E-05
TFR2	7q22.1	0.24577	1.16E-06	1.05E-05
CACYBP	1q25.1	0.245754	1.16E-06	1.05E-05
NAPSB	19q13.33	-0.24571	1.17E-06	1.05E-05
KLHL7	7p15.3	-0.24561	1.18E-06	1.06E-05
CHMP5	9p13.3	-0.24558	1.18E-06	1.07E-05
OS9	12q13.3-q14.1	-0.24553	1.19E-06	1.07E-05
CRMP1	4p16.2	-0.24552	1.19E-06	1.07E-05
UBL3	13q12.3	-0.24551	1.19E-06	1.07E-05
FNDC1	6q25.3	-0.24551	1.19E-06	1.07E-05
ST8SIA1	12p12.1	-0.24549	1.19E-06	1.08E-05
MYOZ3	5q33.1	-0.24548	1.19E-06	1.08E-05
RNF170	8p11.21	-0.24545	1.20E-06	1.08E-05
CHN1	2q31.1	-0.24542	1.20E-06	1.08E-05
CCNI	4q21.1	-0.24536	1.21E-06	1.09E-05
FN1	2q35	-0.24532	1.21E-06	1.09E-05
PCDHB10	5q31.3	-0.24532	1.21E-06	1.09E-05
VPS11	11q23.3	-0.24531	1.21E-06	1.09E-05
TM6SF1	15q25.2	-0.24523	1.22E-06	1.10E-05
ATF2	2q31.1	-0.24522	1.23E-06	1.10E-05
MB21D2	3q29	-0.24521	1.23E-06	1.10E-05
LRRC29	16q22.1	-0.24518	1.23E-06	1.11E-05
PIWIL2	8p21.3	-0.24516	1.23E-06	1.11E-05
LINC02800	1p36.11	0.245136	1.24E-06	1.11E-05
LOC728392	17p13.2	-0.24511	1.24E-06	1.11E-05
LMAN2L	2q11.2	-0.24509	1.24E-06	1.11E-05
MN1	22q12.1	-0.24503	1.25E-06	1.12E-05
GMPR2	14q12	-0.24503	1.25E-06	1.12E-05
CELF1	11p11.2	0.244989	1.26E-06	1.12E-05
BEND6	6p12.1	-0.24494	1.26E-06	1.13E-05
EFCAB1	8q11.21	-0.24492	1.26E-06	1.13E-05
MFSD13A	10q24.32	0.244915	1.27E-06	1.13E-05
UMPS	3q21.2	0.244841	1.28E-06	1.14E-05
MSLNL	16p13.3	0.244817	1.28E-06	1.14E-05
SLC35E3	12q15	-0.24481	1.28E-06	1.14E-05
U2AF2	19q13.42	0.244793	1.28E-06	1.14E-05
CCDC121	2p23.3	-0.24476	1.29E-06	1.15E-05
LINC00882	3q13.12	-0.24472	1.29E-06	1.15E-05
EGR2	10q21.3	-0.24472	1.29E-06	1.15E-05
ZSCAN31	6p22.1 6p22.3-p22.1	-0.24461	1.31E-06	1.16E-05
GJA5	1q21.2	-0.24451	1.32E-06	1.17E-05
AARD	8q24.11	-0.24451	1.32E-06	1.17E-05
TMBIM4	12q14.3	-0.24449	1.32E-06	1.17E-05
DIO2	14q31.1	-0.24444	1.33E-06	1.18E-05
CEACAM22P	19q13.31	0.244427	1.33E-06	1.18E-05
RBPMS2	15q22.31	-0.24441	1.33E-06	1.18E-05
MIS18A	21q22.11	0.244402	1.33E-06	1.18E-05
KIF3C	2p23.3	-0.2444	1.33E-06	1.18E-05
PCDHB18P	5q31.3	-0.24438	1.34E-06	1.19E-05

HNF1A-AS1	12q24.31	0.244303	1.35E-06	1.19E-05
LOXL4	10q24.2	-0.24429	1.35E-06	1.19E-05
RSPO1	1p34.3	-0.24417	1.37E-06	1.21E-05
TARS2	1q21.2	0.244166	1.37E-06	1.21E-05
GAMT	19p13.3	-0.24413	1.37E-06	1.21E-05
PLD4	14q32.33	-0.24408	1.38E-06	1.22E-05
JPH4	14q11.2	-0.24407	1.38E-06	1.22E-05
NAALADL1	11q13.1	-0.24406	1.38E-06	1.22E-05
OSTC	4q25	-0.244	1.39E-06	1.23E-05
PCYT1B	Xp22.11	-0.24397	1.39E-06	1.23E-05
NRXN2	11q13.1	-0.24393	1.40E-06	1.24E-05
ARHGEF16	1p36.32	0.243917	1.40E-06	1.24E-05
PTHLH	12p11.22	-0.24385	1.41E-06	1.24E-05
ACACA	17q12	0.243849	1.41E-06	1.24E-05
NCALD	8q22.3	-0.2438	1.42E-06	1.25E-05
CASP4	11q22.3	-0.2438	1.42E-06	1.25E-05
DIP2A	21q22.3	0.243696	1.43E-06	1.26E-05
TMEM52B	12p13.2	-0.24364	1.44E-06	1.27E-05
SKP2	5p13.2	0.243586	1.45E-06	1.27E-05
PFN1P2	1p11.2	0.243578	1.45E-06	1.28E-05
FBXL7	5p15.1	-0.24355	1.46E-06	1.28E-05
NCR3LG1	11p15.1	0.243545	1.46E-06	1.28E-05
EP400	12q24.33	0.243533	1.46E-06	1.28E-05
ACBD6	1q25.2-q25.3	0.243511	1.46E-06	1.28E-05
CALU	7q32.1	-0.24351	1.46E-06	1.28E-05
PRIMA1	14q32.12	-0.2435	1.46E-06	1.28E-05
MRPS2	9q34.3	0.243478	1.47E-06	1.28E-05
ERG	21q22.2	-0.24343	1.47E-06	1.29E-05
TSPAN6	Xq22.1	-0.24342	1.47E-06	1.29E-05
VSTM4	10q11.23	-0.24329	1.49E-06	1.31E-05
FGF2	4q28.1	-0.24322	1.51E-06	1.32E-05
GAK	4p16.3	0.243215	1.51E-06	1.32E-05
MTVR2	17q22	0.243185	1.51E-06	1.32E-05
RNF122	8p12	-0.24316	1.51E-06	1.32E-05
SAMD11	1p36.33	-0.24315	1.52E-06	1.32E-05
TMEM123	11q22.2	-0.2431	1.52E-06	1.33E-05
TUBB	6p21.33	0.24304	1.53E-06	1.34E-05
PIEZO1	16q24.3	0.242943	1.55E-06	1.35E-05
METTL3	14q11.2	0.242933	1.55E-06	1.35E-05
TLCD3B	16p11.2	0.242932	1.55E-06	1.35E-05
SART3	12q23.3	0.242883	1.56E-06	1.36E-05
TNK2	3q29	0.242874	1.56E-06	1.36E-05
SUSD6	14q24.1	-0.24285	1.56E-06	1.36E-05
ARHGAP28	18p11.31	-0.24281	1.57E-06	1.37E-05
NRGN	11q24.2	0.242778	1.57E-06	1.37E-05
STMN1	1p36.11	0.242751	1.58E-06	1.37E-05
AP1G2	14q11.2	0.24275	1.58E-06	1.37E-05
ADCY2	5p15.31	-0.24274	1.58E-06	1.37E-05
SYNDIG1	20p11.21	-0.24269	1.59E-06	1.38E-05
ARGFXP2	17q11.2	0.242692	1.59E-06	1.38E-05
HS2ST1	1p22.3	-0.24266	1.59E-06	1.38E-05
ARL2BP	16q13	-0.24263	1.60E-06	1.39E-05
PRXL2C	9q22.33	-0.24262	1.60E-06	1.39E-05
TAS2R14	12p13.2	0.242594	1.60E-06	1.39E-05
MARK2	11q13.1	0.242572	1.61E-06	1.39E-05
SYDE1	19p13.12	-0.24257	1.61E-06	1.39E-05
CCAR1	10q21.3	0.242565	1.61E-06	1.39E-05
BNC2	9p22.3-p22.2	-0.24256	1.61E-06	1.39E-05

KCNIP2	10q24.32	0.242545	1.61E-06	1.39E-05
ZXDC	3q21.3	0.242514	1.62E-06	1.40E-05
TM4SF18	3q25.1	-0.24251	1.62E-06	1.40E-05
WSCD2	12q23.3	-0.24249	1.62E-06	1.40E-05
NUAK1	12q23.3	-0.24245	1.63E-06	1.40E-05
EIF2B5	3q27.1	0.242421	1.63E-06	1.41E-05
MSTO2P	1q22	0.242408	1.64E-06	1.41E-05
KDSR	18q21.33	-0.24241	1.64E-06	1.41E-05
MERTK	2q13	-0.24236	1.64E-06	1.41E-05
PMPCA	9q34.3	0.242339	1.65E-06	1.42E-05
TRPM8	2q37.1	-0.2423	1.65E-06	1.42E-05
ITFG1	16q12.1	-0.24224	1.66E-06	1.43E-05
SLC25A44	1q22	0.242233	1.66E-06	1.43E-05
DAB2	5p13.1	-0.24222	1.67E-06	1.43E-05
DCLRE1C	10p13	0.2421	1.69E-06	1.45E-05
VPS13A	9q21.2	0.242056	1.69E-06	1.45E-05
NHSL1	6q24.1	0.242029	1.70E-06	1.46E-05
EDRF1	10q26.2	0.242011	1.70E-06	1.46E-05
MS4A6A	11q12.2	-0.24198	1.71E-06	1.46E-05
TOM1	22q12.3	-0.24198	1.71E-06	1.46E-05
ZDHHC4	7p22.1	-0.24177	1.74E-06	1.49E-05
B3GNT4	12q24.31	0.241751	1.75E-06	1.50E-05
ANKRD52	12q13.3	0.241739	1.75E-06	1.50E-05
SP100	2q37.1	-0.24171	1.76E-06	1.50E-05
VAT1	17q21.31	-0.24162	1.77E-06	1.51E-05
TCEAL4	Xq22.2	-0.24155	1.78E-06	1.52E-05
PSMG3	7p22.3	0.241544	1.78E-06	1.53E-05
FOXS1	20q11.21	-0.24152	1.79E-06	1.53E-05
RTL8B	Xq26.3	-0.24148	1.80E-06	1.53E-05
GYS1	19q13.33	0.241465	1.80E-06	1.54E-05
ARL1	12q23.2	-0.2414	1.81E-06	1.55E-05
LTBP2	14q24.3	-0.24133	1.82E-06	1.55E-05
CFAP73	12q24.13	0.24128	1.83E-06	1.56E-05
BRAT1	7p22.3	0.241211	1.85E-06	1.57E-05
GAS8	16q24.3	0.241178	1.85E-06	1.58E-05
PPP2R3B	Xp22.33 and Yp11.31	0.241104	1.87E-06	1.59E-05
PCDHB16	5q31.3	-0.24107	1.87E-06	1.59E-05
PPAN	19p13.2	0.241066	1.87E-06	1.59E-05
UQCC2	6p21.31	0.241034	1.88E-06	1.60E-05
CACNA2D1	7q21.11	-0.24103	1.88E-06	1.60E-05
PCDHA7	5q31.3	-0.24102	1.88E-06	1.60E-05
GNRH1	8p21.2	0.24101	1.88E-06	1.60E-05
OGT	Xq13.1	0.240953	1.89E-06	1.61E-05
SORBS1	10q24.1	-0.24095	1.90E-06	1.61E-05
ACADM	1p31.1	-0.24089	1.91E-06	1.62E-05
MINPP1	10q23.2	-0.24087	1.91E-06	1.62E-05
SCAMP3	1q22	0.240848	1.92E-06	1.62E-05
PLS3	Xq23	-0.24079	1.93E-06	1.63E-05
VCAN	5q14.2-q14.3	-0.24079	1.93E-06	1.63E-05
ACAD9	3q21.3	0.240681	1.95E-06	1.65E-05
VOPP1	7p11.2	-0.24062	1.96E-06	1.66E-05
WIPI1	17q24.2	-0.24061	1.96E-06	1.66E-05
ASB6	9q34.11	0.240581	1.97E-06	1.66E-05
GPR65	14q31.3	-0.24058	1.97E-06	1.66E-05
PRIM1	12q13.3	0.240512	1.98E-06	1.67E-05
CYP11A1	15q24.1	-0.24047	1.99E-06	1.68E-05
ZNF714	19p12	0.240366	2.01E-06	1.70E-05
CRLF1	19p13.11	-0.24035	2.01E-06	1.70E-05



PPP1R14A	19q13.2	-0.24035	2.01E-06	1.70E-05
EIF3B	7p22.3	0.24034	2.02E-06	1.70E-05
PA2G4	12q13.2	0.240312	2.02E-06	1.70E-05
LINC00924	15q26.2	-0.24029	2.03E-06	1.71E-05
LINC01002	19p13.3	0.240263	2.03E-06	1.71E-05
ETFRF1	12p12.1	-0.24025	2.03E-06	1.71E-05
TOR2A	9q34.11	0.240221	2.04E-06	1.72E-05
SBF1	22q13.33	0.240211	2.04E-06	1.72E-05
CCL19	9p13.3	-0.24021	2.04E-06	1.72E-05
MIB2	1p36.33	0.240186	2.05E-06	1.72E-05
PNKP	19q13.33	0.240137	2.06E-06	1.73E-05
UBTD1	10q24.1-q24.2	-0.24013	2.06E-06	1.73E-05
SNAI2	8q11.21	-0.24012	2.06E-06	1.73E-05
RUNX1T1	8q21.3	-0.2401	2.07E-06	1.73E-05
HMCN1	1q25.3-q31.1	-0.23996	2.09E-06	1.76E-05
P2RY12	3q25.1	-0.23992	2.10E-06	1.76E-05
USP49	6p21.1	0.23992	2.10E-06	1.76E-05
GADL1	3p24.1-p23	-0.2399	2.11E-06	1.76E-05
STPG3	9q34.3	0.239787	2.13E-06	1.78E-05
POGZ	1q21.3	0.239781	2.13E-06	1.78E-05
GRN	17q21.31	-0.23977	2.13E-06	1.78E-05
TUB	11p15.4	-0.23977	2.13E-06	1.78E-05
POLH	6p21.1	0.239719	2.15E-06	1.79E-05
CPE	4q32.3	-0.23966	2.16E-06	1.80E-05
SLC26A1	4p16.3	0.239654	2.16E-06	1.80E-05
AGO2	8q24.3	0.239528	2.19E-06	1.82E-05
SERINC4	15q15.3	0.23946	2.20E-06	1.84E-05
GIMAP6	7q36.1	-0.23944	2.21E-06	1.84E-05
EARS2	16p12.2	0.239432	2.21E-06	1.84E-05
TEPSIN	17q25.3	0.2394	2.22E-06	1.85E-05
DNAJB2	2q35	-0.23939	2.22E-06	1.85E-05
C1QTNF8	16p13.3	0.239357	2.23E-06	1.85E-05
ENOSF1	18p11.32	0.239355	2.23E-06	1.85E-05
ATP13A2	1p36.13	0.239341	2.23E-06	1.85E-05
C3ORF38	3p11.1	-0.23932	2.23E-06	1.86E-05
PGRMC2	4q28.2	-0.23931	2.23E-06	1.86E-05
FAM13C	10q21.1	-0.2393	2.24E-06	1.86E-05
NOC2LP2	2q21.1	0.239281	2.24E-06	1.86E-05
ADCY5	3q21.1	-0.23923	2.25E-06	1.87E-05
AJM1	9q34.3	0.239223	2.26E-06	1.87E-05
PDZD4	Xq28	-0.2392	2.26E-06	1.87E-05
GRK6	5q35.3	0.239134	2.28E-06	1.89E-05
MED25	19q13.33	0.239113	2.28E-06	1.89E-05
ERMAP	1p34.2	-0.23905	2.29E-06	1.90E-05
GFRA1	10q25.3	-0.23897	2.31E-06	1.91E-05
SBNO2	19p13.3	0.238964	2.31E-06	1.91E-05
PPP2R3A	3q22.2-q22.3	-0.23887	2.34E-06	1.93E-05
RPS10P7	1q32.1	0.238847	2.34E-06	1.94E-05
NOG	17q22	-0.23881	2.35E-06	1.94E-05
ZNF700	19p13.2	0.238802	2.35E-06	1.94E-05
ZMAT5	22q12.2	-0.23878	2.36E-06	1.95E-05
MLLT11	1q21.3	-0.23865	2.39E-06	1.97E-05
MAP3K9	14q24.2	0.238628	2.39E-06	1.97E-05
ENO3	17p13.2	0.238509	2.42E-06	2.00E-05
COL10A1	6q22.1	-0.23843	2.44E-06	2.01E-05
MLKL	16q23.1	0.238385	2.45E-06	2.02E-05
PSORS1C2	6p21.33	0.238384	2.45E-06	2.02E-05
PDGFRA	4q12	-0.23834	2.46E-06	2.03E-05

RGS4	1q23.3	-0.23832	2.47E-06	2.03E-05
ASNSD1	2q32.2	-0.23828	2.48E-06	2.04E-05
ARMCX2	Xq22.1	-0.23817	2.51E-06	2.06E-05
AZIN2	1p35.1	-0.23814	2.51E-06	2.07E-05
HNRNPL	19q13.2	0.238135	2.51E-06	2.07E-05
TIMM44	19p13.2	0.238132	2.52E-06	2.07E-05
TRAP1	16p13.3	0.238127	2.52E-06	2.07E-05
PTGFR	1p31.1	-0.23802	2.54E-06	2.09E-05
RNFT1	17q23.1	-0.238	2.55E-06	2.09E-05
TCEAL1	Xq22.2	-0.23799	2.55E-06	2.09E-05
HIST1H3B	6p22.2	0.237908	2.57E-06	2.11E-05
ABCB8	7q36.1	0.237907	2.57E-06	2.11E-05
CALCR	7q21.3	-0.23783	2.59E-06	2.12E-05
PLXNA1	3q21.3	0.237784	2.60E-06	2.13E-05
CABIN1	22q11.23	0.237775	2.61E-06	2.13E-05
FIGN	2q24.3	-0.23771	2.62E-06	2.15E-05
NCAPH2	22q13.33	0.237706	2.62E-06	2.15E-05
RPS6KL1	14q24.3	0.237677	2.63E-06	2.15E-05
ZNF582	19q13.43	-0.23763	2.65E-06	2.16E-05
CKMT1B	15q15.3	0.237603	2.65E-06	2.16E-05
ADRB2	5q32	-0.23756	2.66E-06	2.17E-05
CDK11A	1p36.33	0.237454	2.69E-06	2.20E-05
ZNF841	19q13.41	0.237405	2.70E-06	2.20E-05
ZNF300P1	5q33.1	-0.2374	2.70E-06	2.20E-05
RASL12	15q22.31	-0.2374	2.70E-06	2.20E-05
AP1S2	Xp22.2	-0.23739	2.71E-06	2.21E-05
POMC	2p23.3	-0.23735	2.72E-06	2.21E-05
HOXD10	2q31.1	-0.2373	2.73E-06	2.22E-05
SGCA	17q21.33	-0.23729	2.74E-06	2.23E-05
CTSL	9q21.33	-0.23725	2.75E-06	2.23E-05
TSHZ3	19q12	-0.23724	2.75E-06	2.23E-05
FNTA	8p11.21	-0.23723	2.75E-06	2.24E-05
FBXL20	17q12	-0.23707	2.80E-06	2.27E-05
CDH11	16q21	-0.23698	2.82E-06	2.29E-05
REC8	14q12	0.236968	2.82E-06	2.29E-05
TMTC1	12p11.22	-0.23686	2.85E-06	2.32E-05
USP51	Xp11.21	-0.23684	2.86E-06	2.32E-05
SFRP2	4q31.3	-0.23684	2.86E-06	2.32E-05
CAV1	7q31.2	-0.23681	2.87E-06	2.32E-05
SCHIP1	3q25.32-q25.33	-0.2368	2.87E-06	2.33E-05
SMG9	19q13.31	0.236712	2.90E-06	2.35E-05
AGTPBP1	9q21.33	0.23669	2.90E-06	2.35E-05
IRF2	4q35.1	-0.23669	2.90E-06	2.35E-05
VARS2	6p21.33	0.236661	2.91E-06	2.35E-05
TLR1	4p14	-0.23666	2.91E-06	2.35E-05
TSPY26P	20q11.21	-0.23664	2.92E-06	2.36E-05
FANCM	14q21.2	0.236472	2.97E-06	2.40E-05
SCN2B	11q23.3	-0.23645	2.97E-06	2.40E-05
CCDC85A	2p16.1	-0.23644	2.98E-06	2.40E-05
MID1IP1	Xp11.4	0.236409	2.99E-06	2.41E-05
ZNF521	18q11.2	-0.23641	2.99E-06	2.41E-05
CDC42BPG	11q13.1	0.236403	2.99E-06	2.41E-05
SEZ6L	22q12.1	-0.23638	2.99E-06	2.41E-05
VAMP8	2p11.2	-0.23636	3.00E-06	2.42E-05
HTRA1	10q26.13	-0.23635	3.00E-06	2.42E-05
FBLN7	2q13-q14.1	-0.23632	3.01E-06	2.42E-05
HRH1	3p25.3	-0.23632	3.01E-06	2.42E-05
KCTD11	17p13.1	-0.23625	3.03E-06	2.44E-05

SRP14P1	12p13.31	-0.23622	3.04E-06	2.45E-05
DHX37	12q24.31	0.236206	3.05E-06	2.45E-05
HVCN1	12q24.11	-0.23618	3.05E-06	2.45E-05
SEPTIN10	2q13	-0.23617	3.06E-06	2.45E-05
FZD7	2q33.1	-0.23609	3.08E-06	2.47E-05
DDIT4L	4q24	-0.23609	3.08E-06	2.47E-05
GTF2IRD2	7q11.23	-0.23607	3.09E-06	2.48E-05
SELENOO	22q13.33	0.236029	3.10E-06	2.48E-05
BBS1	11q13.2	-0.23596	3.12E-06	2.50E-05
FASTK	7q36.1	0.235958	3.12E-06	2.50E-05
OSBPL8	12q21.2	-0.2359	3.14E-06	2.51E-05
PLEKHO1	1q21.2	-0.23588	3.15E-06	2.52E-05
F8	Xq28	-0.23583	3.16E-06	2.53E-05
PAX1	20p11.22	-0.23582	3.16E-06	2.53E-05
TMEM230	20p13-p12.3	-0.2358	3.17E-06	2.54E-05
RNF7	3q23	-0.23575	3.19E-06	2.55E-05
GJA1	6q22.31	-0.23572	3.20E-06	2.55E-05
BCAP29	7q22.3	-0.23571	3.20E-06	2.55E-05
EMP3	19q13.33	-0.2357	3.20E-06	2.56E-05
TAX1BP3	17p13.2	-0.23567	3.21E-06	2.56E-05
GPC1	2q37.3	-0.23565	3.22E-06	2.57E-05
CGGBP1	3p11.1	-0.23563	3.22E-06	2.57E-05
CYSLTR1	Xq21.1	-0.23561	3.23E-06	2.57E-05
NUTM1	15q14	0.235599	3.23E-06	2.58E-05
ADAMTSL2	9q34.2	-0.23558	3.24E-06	2.58E-05
RGS19	20q13.33	-0.23552	3.26E-06	2.59E-05
CX3CL1	16q21	-0.23549	3.27E-06	2.60E-05
MDP1	14q12	-0.23547	3.28E-06	2.60E-05
TMEM35A	Xq22.1	-0.23542	3.29E-06	2.62E-05
CDK3	17q25.1	0.235346	3.32E-06	2.63E-05
CYP2U1	4q25	-0.23534	3.32E-06	2.64E-05
GREM2	1q43	-0.23533	3.32E-06	2.64E-05
PCDHA3	5q31.3	-0.23527	3.34E-06	2.65E-05
LIPC	15q21.3	-0.23524	3.35E-06	2.66E-05
RNF181	2p11.2	-0.23524	3.35E-06	2.66E-05
IZUMO4	19p13.3	0.235209	3.36E-06	2.66E-05
DENND1A	9q33.3	0.235154	3.38E-06	2.68E-05
SHOC2	10q25.2	-0.23508	3.40E-06	2.69E-05
MRPL33	2p23.2	-0.23505	3.41E-06	2.70E-05
TUBGCP4	15q15.3	0.235015	3.43E-06	2.71E-05
PRRC2B	9q34.13	0.235005	3.43E-06	2.71E-05
TCEAL3	Xq22.2	-0.23495	3.45E-06	2.73E-05
CLIP3	19q13.12	-0.2349	3.47E-06	2.74E-05
MEAF6	1p34.3	-0.2349	3.47E-06	2.74E-05
CORO2A	9q22.33	0.234877	3.47E-06	2.74E-05
RNF150	4q31.21	-0.23486	3.48E-06	2.75E-05
ITGA11	15q23	-0.23485	3.48E-06	2.75E-05
NPTXR	22q13.1	-0.2348	3.50E-06	2.76E-05
ASB2	14q32.12	-0.23472	3.53E-06	2.78E-05
RSPO2	8q23.1	-0.23471	3.53E-06	2.78E-05
JAKMIP2	5q32	-0.2347	3.53E-06	2.78E-05
C16ORF89	16p13.3	-0.23468	3.54E-06	2.79E-05
TCTE3	6q27	0.234643	3.55E-06	2.80E-05
ARNT2	15q25.1	-0.23457	3.58E-06	2.82E-05
LSP1P5	1q21.1	-0.23449	3.61E-06	2.84E-05
SYT2	1q32.1	0.234467	3.62E-06	2.84E-05
UBE2E2	3p24.3	-0.23446	3.62E-06	2.84E-05
AIFM2	10q22.1	0.234429	3.63E-06	2.85E-05

LPXN	11q12.1	-0.23438	3.65E-06	2.86E-05
EYA2	20q13.12	-0.23427	3.69E-06	2.89E-05
PHACTR3	20q13.32-q13.33	-0.23426	3.69E-06	2.89E-05
DLG3	Xq13.1	0.234262	3.69E-06	2.89E-05
C9ORF116	9q34.3	0.234256	3.69E-06	2.89E-05
SLITRK4	Xq27.3	-0.2342	3.71E-06	2.91E-05
MOAP1	14q32.12	-0.23418	3.72E-06	2.91E-05
NBPF11	1q21.2	0.23415	3.73E-06	2.92E-05
XPNPEP2	Xq26.1	-0.23411	3.75E-06	2.93E-05
SIGMAR1	9p13.3	0.234061	3.76E-06	2.94E-05
EML1	14q32.2	-0.23405	3.77E-06	2.95E-05
ST6GALNAC5	1p31.1	-0.23402	3.78E-06	2.95E-05
SEMA3C	7q21.11	-0.23401	3.78E-06	2.96E-05
FAM32A	19p13.11	-0.23396	3.80E-06	2.97E-05
KIAA1755	20q11.23	-0.23392	3.81E-06	2.98E-05
SMIM14	4p14	-0.2339	3.82E-06	2.99E-05
CST5	20p11.21	-0.23383	3.85E-06	3.00E-05
CSGALNACT2	10q11.21	-0.23381	3.86E-06	3.01E-05
INPPL1	11q13.4	0.233808	3.86E-06	3.01E-05
C1RL-AS1	12p13.31	0.233799	3.86E-06	3.01E-05
ZNF878	19p13.2	0.233776	3.87E-06	3.02E-05
INHBB	2q14.2	-0.23377	3.87E-06	3.02E-05
MAB21L2	4q31.3	-0.23376	3.87E-06	3.02E-05
SLC25A22	11p15.5	0.233749	3.88E-06	3.02E-05
FES	15q26.1	-0.23375	3.88E-06	3.02E-05
PNMA8B	19q13.32	-0.23374	3.88E-06	3.02E-05
ANKRD9	14q32.31	0.233707	3.90E-06	3.03E-05
CEP83	12q22	0.23368	3.91E-06	3.04E-05
EEF1AKMT3	12q14.1	-0.23367	3.91E-06	3.04E-05
UNC5B	10q22.1	-0.23362	3.93E-06	3.05E-05
FAP	2q24.2	-0.23354	3.96E-06	3.07E-05
ZNF660	3p21.31	-0.23353	3.96E-06	3.07E-05
FAM180A	7q33	-0.23351	3.97E-06	3.08E-05
ESR1	6q25.1-q25.2	-0.23351	3.97E-06	3.08E-05
GALNT13	2q23.3-q24.1	-0.23351	3.97E-06	3.08E-05
ART4	12p12.3	-0.2335	3.97E-06	3.08E-05
PDGFRL	8p22	-0.23344	4.00E-06	3.10E-05
PAPSS1	4q25	-0.23343	4.00E-06	3.10E-05
SMIM7	19p13.11	-0.23332	4.05E-06	3.13E-05
TWIST1	7p21.1	-0.2333	4.05E-06	3.14E-05
LINC00479	21q22.3	0.233285	4.06E-06	3.14E-05
MPDZ	9p23	-0.23326	4.07E-06	3.14E-05
STAC2	17q12	-0.23326	4.07E-06	3.15E-05
SRM	1p36.22	0.233217	4.09E-06	3.16E-05
AMZ2	17q24.2	-0.23317	4.10E-06	3.17E-05
SEMA3G	3p21.1	-0.23316	4.11E-06	3.17E-05
RASSF7	11p15.5	0.233143	4.12E-06	3.18E-05
ITGB1	10p11.22	-0.23309	4.14E-06	3.19E-05
MAP9	4q32.1	-0.23304	4.16E-06	3.20E-05
SIRT4	12q24.23-q24.31	-0.23301	4.17E-06	3.21E-05
MAFB	20q12	-0.23299	4.18E-06	3.22E-05
ERP27	12p12.3	-0.23298	4.18E-06	3.22E-05
DMRTA1	9p21.3	-0.23293	4.20E-06	3.23E-05
LOC202181	5q35.3	0.232925	4.20E-06	3.23E-05
CHEK2	22q12.1	0.23288	4.22E-06	3.25E-05
PSMG4	6p25.2	0.232872	4.23E-06	3.25E-05
TEF	22q13.2	-0.23283	4.24E-06	3.26E-05
LRRC56	11p15.5	0.232741	4.28E-06	3.29E-05

IQCA1	2q37.2-q37.3	-0.23273	4.28E-06	3.29E-05
BVES	6q21	-0.23267	4.31E-06	3.31E-05
TRIM52	5q35.3	0.23264	4.32E-06	3.32E-05
PLXDC2	10p12.31	-0.23262	4.33E-06	3.32E-05
CHRNE	17p13.2	-0.23259	4.35E-06	3.33E-05
ARHGAP20	11q22.3-q23.1	-0.23256	4.36E-06	3.34E-05
DSCAML1	11q23.3	-0.23255	4.36E-06	3.34E-05
RGN	Xp11.3	-0.23253	4.37E-06	3.35E-05
NLGN4X	Xp22.32-p22.31	-0.23251	4.38E-06	3.35E-05
DBF4	7q21.12	0.232491	4.39E-06	3.36E-05
BRD8	5q31.2	0.232466	4.40E-06	3.36E-05
FCGR2B	1q23.3	-0.23244	4.41E-06	3.37E-05
POMT2	14q24.3	0.232424	4.42E-06	3.38E-05
ARRDC1-AS1	9q34.3	0.232328	4.46E-06	3.41E-05
URAHP	16q24.3	0.23231	4.46E-06	3.41E-05
PPFIA4	1q32.1	0.232285	4.48E-06	3.42E-05
ATP6V1H	8q11.23	-0.23225	4.49E-06	3.43E-05
P4HA3	11q13.4	-0.23219	4.52E-06	3.45E-05
CD52	1p36.11	-0.23217	4.52E-06	3.45E-05
USP44	12q22	-0.23217	4.53E-06	3.45E-05
TMEM59L	19p13.11	-0.23213	4.54E-06	3.46E-05
ZFC3H1	12q21.1	0.232041	4.58E-06	3.49E-05
RPS6KA4	11q13.1	0.232001	4.60E-06	3.50E-05
VGLL3	3p12.1	-0.23198	4.61E-06	3.51E-05
NF2	22q12.2	0.231972	4.61E-06	3.51E-05
APOC2	19q13.32	-0.23192	4.64E-06	3.53E-05
CD9	12p13.31	-0.23181	4.68E-06	3.56E-05
LITAF	16p13.13	-0.23171	4.73E-06	3.60E-05
COL26A1	7q22.1	-0.23164	4.76E-06	3.62E-05
TRIM25	17q22	0.231599	4.78E-06	3.63E-05
GCA	2q24.2	-0.23158	4.79E-06	3.64E-05
CNOT8	5q33.2	-0.23158	4.79E-06	3.64E-05
EVC2	4p16.2	-0.23153	4.82E-06	3.65E-05
ARSK	5q15	-0.23152	4.82E-06	3.66E-05
FBXO41	2p13.2	0.231434	4.86E-06	3.68E-05
INSYN1	15q24.1	-0.23143	4.86E-06	3.68E-05
DEPDC5	22q12.2-q12.3	0.231428	4.86E-06	3.68E-05
TMEM74	8q23.1	-0.23142	4.87E-06	3.69E-05
ENSA	1q21.3	0.231345	4.90E-06	3.71E-05
TMEM86A	11p15.1	-0.2313	4.92E-06	3.73E-05
MMP13	11q22.2	-0.23129	4.93E-06	3.73E-05
C1ORF131	1q42.2	0.231282	4.93E-06	3.73E-05
EPPK1	8q24.3	0.231257	4.94E-06	3.74E-05
STOM	9q33.2	-0.23119	4.98E-06	3.76E-05
GCOM1	15q21.3	-0.23119	4.98E-06	3.76E-05
KLHL28	14q21.2	-0.23114	5.00E-06	3.78E-05
FBXO2	1p36.22	-0.23112	5.01E-06	3.78E-05
BEND5	1p33	-0.23112	5.01E-06	3.78E-05
KCND2	7q31.31	-0.23111	5.01E-06	3.78E-05
PIIF	10q22.3	0.2311	5.02E-06	3.78E-05
TIMMDC1	3q13.33	-0.23107	5.04E-06	3.80E-05
TUBA1C	12q13.12	0.231048	5.05E-06	3.80E-05
KBTBD4	11p11.2	-0.23102	5.06E-06	3.81E-05
KCTD16	5q31.3	-0.231	5.07E-06	3.82E-05
SPIN1	9q22.1	-0.23096	5.09E-06	3.83E-05
AQP6	12q13.12	0.230859	5.14E-06	3.86E-05
RBP7	1p36.22	-0.23085	5.14E-06	3.87E-05
BORCS7	10q24.32	-0.23085	5.14E-06	3.87E-05

PECAM1	17q23.3	-0.23084	5.15E-06	3.87E-05
SLC23A3	2q35	0.230721	5.21E-06	3.91E-05
YPEL1	22q11.21-q11.22	-0.23072	5.21E-06	3.91E-05
TMEM190	19q13.42	0.230655	5.24E-06	3.93E-05
PWP2	21q22.3	0.230638	5.25E-06	3.94E-05
NAV3	12q21.2	-0.23064	5.25E-06	3.94E-05
CPN2	3q29	-0.23063	5.25E-06	3.94E-05
GOLGA8A	15q14	0.230623	5.26E-06	3.94E-05
LONRF2	2q11.2	-0.23061	5.27E-06	3.94E-05
EDNRB	13q22.3	-0.23059	5.27E-06	3.95E-05
SEC22B	1p12	-0.23058	5.28E-06	3.95E-05
TMEM233	12q24.23	-0.23058	5.28E-06	3.95E-05
KCNK2	1q41	-0.23057	5.28E-06	3.95E-05
PRR7	5q35.3	0.230553	5.29E-06	3.96E-05
TPRN	9q34.3	0.230552	5.29E-06	3.96E-05
MMP11	22q11.23	-0.23051	5.32E-06	3.97E-05
SNX11	17q21.32	-0.23044	5.35E-06	4.00E-05
CDH19	18q22.1	-0.23043	5.35E-06	4.00E-05
ASB3	2p16.2	-0.23041	5.37E-06	4.01E-05
IZUMO1	19q13.33	0.23038	5.38E-06	4.01E-05
DUSP12	1q23.3	0.230357	5.39E-06	4.02E-05
SLITRK3	3q26.1	-0.23032	5.41E-06	4.03E-05
C10ORF12	10q24.1	0.230306	5.42E-06	4.04E-05
SET	9q34.11	0.230302	5.42E-06	4.04E-05
SEPTIN7	7p14.2	-0.23027	5.44E-06	4.05E-05
TYROBP	19q13.12	-0.23026	5.44E-06	4.05E-05
JTB	1q21.3	0.230211	5.47E-06	4.07E-05
EPB41L4A-DT	5q22.2	-0.2302	5.48E-06	4.07E-05
SCN3A	2q24.3	-0.23016	5.50E-06	4.09E-05
HDAC9	7p21.1	-0.23011	5.52E-06	4.10E-05
PLXNA3	Xq28	0.230103	5.53E-06	4.11E-05
U2AF1	21q22.3	0.23006	5.55E-06	4.12E-05
CNNM4	2q11.2	0.230045	5.56E-06	4.13E-05
CNR1	6q15	-0.23002	5.57E-06	4.14E-05
ZNF25	10p11.21	-0.22997	5.60E-06	4.15E-05
OLFML2B	1q23.3	-0.22995	5.61E-06	4.16E-05
KMT5C	19q13.42	0.22992	5.63E-06	4.17E-05
MLEC	12q24.31	0.229914	5.63E-06	4.17E-05
THUMPD3-AS1	3p25.3	0.229901	5.64E-06	4.17E-05
MALAT1	11q13.1	0.229869	5.65E-06	4.19E-05
SENP5	3q29	0.229846	5.67E-06	4.19E-05
FAM220A	7p22.1	-0.22983	5.68E-06	4.20E-05
ZNF324B	19q13.43	0.229783	5.70E-06	4.22E-05
XPO1	2p15	0.229767	5.71E-06	4.22E-05
CLDN5	22q11.21	-0.22971	5.74E-06	4.24E-05
CEP192	18p11.21	0.229679	5.76E-06	4.25E-05
FGF10	5p12	-0.22962	5.79E-06	4.27E-05
GALNS	16q24.3	-0.22962	5.79E-06	4.27E-05
HLCS	21q22.13	0.229616	5.79E-06	4.27E-05
ZC3H10	12q13.2	-0.22962	5.79E-06	4.27E-05
PXDC1	6p25.2	-0.22961	5.79E-06	4.27E-05
TRIM61	4q32.3	-0.22956	5.82E-06	4.29E-05
CALM3	19q13.32	0.22955	5.83E-06	4.30E-05
ARL4D	17q21.31	-0.22952	5.85E-06	4.31E-05
CEP89	19q13.11	0.229505	5.85E-06	4.31E-05
WIZ	19p13.12	0.229469	5.88E-06	4.32E-05
WWC2-AS2	4q35.1	-0.22947	5.88E-06	4.32E-05
THYN1	11q25	-0.22943	5.90E-06	4.34E-05

CASZ1	1p36.22	0.229417	5.90E-06	4.34E-05
TMEM179B	11q12.3	-0.22937	5.93E-06	4.36E-05
FAM20B	1q25.2	0.229356	5.94E-06	4.36E-05
ARPC2	2q35	-0.22932	5.96E-06	4.38E-05
SERPINF2	17p13.3	-0.22929	5.97E-06	4.38E-05
ANAPC13	3q22.2	-0.22929	5.98E-06	4.38E-05
LPAR4	Xq21.1	-0.22924	6.01E-06	4.41E-05
MSR1	8p22	-0.22916	6.05E-06	4.44E-05
SDHAF2	11q12.2	-0.22914	6.06E-06	4.44E-05
TOR4A	9q34.3	0.22914	6.06E-06	4.44E-05
ABCB4	7q21.12	-0.22914	6.07E-06	4.44E-05
RBM12B-AS1	8q22.1	0.2291	6.09E-06	4.46E-05
FBXL18	7p22.1	0.229044	6.12E-06	4.48E-05
OSMR	5p13.1	-0.22901	6.14E-06	4.49E-05
NUP153	6p22.3	0.228996	6.15E-06	4.50E-05
AMIGO2	12q13.11	-0.22897	6.17E-06	4.51E-05
IBA57	1q42.13	0.228958	6.17E-06	4.51E-05
CABCOCO1	10q21.2	-0.2289	6.20E-06	4.53E-05
NKX3-2	4p15.33	-0.2289	6.21E-06	4.53E-05
MAN2A2	15q26.1	0.228833	6.24E-06	4.56E-05
FAM3C	7q31.31	-0.22881	6.26E-06	4.57E-05
DOCK6	19p13.2	0.228731	6.31E-06	4.60E-05
SNORA81	3q27.3	0.228698	6.33E-06	4.61E-05
SFPQ	1p34.3	0.228652	6.35E-06	4.63E-05
CDK11B	1p36.33	0.228636	6.36E-06	4.64E-05
EPC2	2q23.1	-0.22859	6.39E-06	4.66E-05
BEX1	Xq22.1 Xq22	-0.22857	6.40E-06	4.66E-05
DDHD2	8p11.23	-0.22854	6.42E-06	4.67E-05
PCDHB15	5q31.3	-0.22853	6.43E-06	4.68E-05
NSMF	9q34.3	0.22849	6.45E-06	4.69E-05
MLLT1	19p13.3	0.228481	6.46E-06	4.70E-05
FBXL17	5q21.3	-0.22845	6.48E-06	4.71E-05
RAB33B	4q31.1	-0.22842	6.50E-06	4.72E-05
TNFSF13B	13q33.3	-0.22842	6.50E-06	4.72E-05
RNF139	8q24.13	-0.22841	6.50E-06	4.72E-05
GGCT	7p14.3	0.228384	6.52E-06	4.73E-05
FXVD2	11q23.3	-0.22834	6.55E-06	4.75E-05
ADAMTS3	4q13.3	-0.22831	6.56E-06	4.76E-05
FOXRED1	11q24.2	0.228303	6.57E-06	4.76E-05
ZNF222	19q13.31	-0.22828	6.59E-06	4.77E-05
NCAM2	21q21.1	-0.22826	6.60E-06	4.78E-05
HLA-DOA	6p21.32	-0.22823	6.61E-06	4.79E-05
CCN5	20q13.12	-0.22822	6.62E-06	4.79E-05
C1ORF74	1q32.2	0.228191	6.64E-06	4.81E-05
PKD2	4q22.1	-0.22816	6.66E-06	4.82E-05
CIZ1	9q34.11	0.228156	6.66E-06	4.82E-05
MOB3C	1p33	-0.22815	6.66E-06	4.82E-05
EIF4A2	3q27.3	-0.22813	6.68E-06	4.83E-05
PLP1	Xq22.2	-0.22812	6.69E-06	4.83E-05
SERPINE2	2q36.1	-0.22804	6.74E-06	4.87E-05
NGF	1p13.2	-0.22803	6.74E-06	4.87E-05
MAL	2q11.1	-0.22798	6.77E-06	4.89E-05
SEC31A	4q21.22	-0.22797	6.78E-06	4.89E-05
ZMAT4	8p11.21	-0.22796	6.79E-06	4.89E-05
BCL2L1	20q11.21	-0.22794	6.80E-06	4.90E-05
ERI2	16p12.3	0.227875	6.84E-06	4.93E-05
RRP7BP	22q13.2	0.227852	6.86E-06	4.94E-05
CILP	15q22.31	-0.22784	6.87E-06	4.94E-05

ZFYVE27	10q24.2	0.227836	6.87E-06	4.94E-05
GPRC5B	16p12.3	-0.22779	6.90E-06	4.96E-05
FBXL3	13q22.3	-0.22779	6.90E-06	4.96E-05
TAZ	Xq28	0.227772	6.91E-06	4.97E-05
PHOSPHO2	2q31.1	-0.22776	6.92E-06	4.97E-05
CCDC77	12p13.33	0.227747	6.93E-06	4.98E-05
TLR3	4q35.1	-0.22765	6.99E-06	5.02E-05
TRPM5	11p15.5	0.22761	7.02E-06	5.04E-05
RDH14	2p24.2	-0.22758	7.04E-06	5.05E-05
CCDC89	11q14.1	-0.22757	7.05E-06	5.05E-05
CSRNP2	12q13.12	-0.22757	7.05E-06	5.05E-05
DUSP26	8p12	-0.22756	7.05E-06	5.05E-05
HIGD1B	17q21.31	-0.22754	7.06E-06	5.06E-05
GDE1	16p12.3	-0.22751	7.08E-06	5.08E-05
CYP2W1	7p22.3	-0.22747	7.11E-06	5.10E-05
SEPTIN8	5q31.1	0.227453	7.12E-06	5.10E-05
KCNMB1	5q35.1	-0.22745	7.13E-06	5.10E-05
AMACR	5p13.2	-0.22745	7.13E-06	5.10E-05
IL13RA1	Xq24	-0.22742	7.15E-06	5.11E-05
PCDH9	13q21.32	-0.22739	7.17E-06	5.13E-05
POLRMT	19p13.3	0.227364	7.18E-06	5.14E-05
MORN5	9q33.2	-0.22733	7.21E-06	5.15E-05
PRKCQ	10p15.1	-0.22733	7.21E-06	5.15E-05
LOC374443	12p13.31	-0.22732	7.22E-06	5.15E-05
PLD3	19q13.2	-0.2273	7.23E-06	5.16E-05
RNF212	4p16.3	-0.2273	7.23E-06	5.16E-05
FBXO27	19q13.2	-0.22729	7.23E-06	5.16E-05
ADGRB3	6q12-q13	-0.22729	7.23E-06	5.16E-05
LIF	22q12.2	0.227277	7.24E-06	5.16E-05
TGFB3	14q24.3	-0.22726	7.26E-06	5.17E-05
OSBPL6	2q31.2	-0.22721	7.29E-06	5.19E-05
BGN	Xq28	-0.22721	7.29E-06	5.19E-05
ASB16-AS1	17q21.31	0.227191	7.30E-06	5.20E-05
BHLHE22	8q12.3	-0.22713	7.34E-06	5.22E-05
BBS4	15q24.1	-0.22713	7.34E-06	5.22E-05
TGM1	14q12	0.227128	7.35E-06	5.22E-05
SCN4B	11q23.3	-0.22706	7.39E-06	5.25E-05
SLC22A13	3p22.2	0.22706	7.40E-06	5.25E-05
NBPF9	1q21.2	0.227043	7.41E-06	5.26E-05
BACH2	6q15	-0.22704	7.41E-06	5.26E-05
MROH6	8q24.3	0.227	7.44E-06	5.28E-05
ZMYND12	1p34.2	-0.22698	7.45E-06	5.28E-05
CYP3A4	7q22.1	-0.22694	7.48E-06	5.31E-05
WWC2	4q35.1	-0.22691	7.50E-06	5.32E-05
TMEM183A	1q32.1	0.22681	7.57E-06	5.37E-05
ERN2	16p12.2	0.226785	7.59E-06	5.38E-05
PRMT2	21q22.3	-0.22677	7.60E-06	5.38E-05
HLA-DQB2	6p21.32	-0.22672	7.64E-06	5.41E-05
WFIKKN1	16p13.3	0.226706	7.65E-06	5.41E-05
C19ORF57	19p13.12	0.226696	7.66E-06	5.42E-05
CDK18	1q32.1	0.22668	7.67E-06	5.42E-05
HNRNPH1	5q35.3	0.226667	7.68E-06	5.43E-05
TP53INP2	20q11.22	-0.22663	7.70E-06	5.44E-05
CEP68	2p14	-0.22656	7.76E-06	5.48E-05
PRIMPOL	4q35.1	-0.22655	7.76E-06	5.48E-05
EXPH5	11q22.3	0.226507	7.79E-06	5.50E-05
AKT3	1q43-q44	-0.22648	7.81E-06	5.51E-05
CASC4	15q15.3	-0.22647	7.82E-06	5.51E-05



GHDC	17q21.2	-0.22642	7.86E-06	5.54E-05
TBCD	17q25.3	0.226366	7.90E-06	5.57E-05
MAP1A	15q15.3	-0.22636	7.91E-06	5.57E-05
ADAMTS16	5p15.32	-0.22631	7.94E-06	5.59E-05
RAD23A	19p13.13	0.225984	8.19E-06	5.77E-05
HKDC1	10q22.1	0.225891	8.26E-06	5.82E-05
CHST10	2q11.2	-0.22587	8.27E-06	5.82E-05
TNFAIP6	2q23.3	-0.2258	8.33E-06	5.86E-05
LAMTOR1	11q13.4	-0.22568	8.42E-06	5.92E-05
PAK4	19q13.2	0.225683	8.43E-06	5.92E-05
SMIM20	4p15.2	-0.22568	8.43E-06	5.92E-05
NBDY	Xp11.21	-0.22565	8.45E-06	5.94E-05
HEY2	6q22.31	-0.22563	8.47E-06	5.94E-05
SETBP1	18q12.3	-0.22563	8.47E-06	5.94E-05
FBLN2	3p25.1	-0.22562	8.48E-06	5.95E-05
CADM3	1q23.2	-0.22561	8.48E-06	5.95E-05
TMEM63A	1q42.12	0.225601	8.49E-06	5.95E-05
SH2B1	16p11.2	0.225585	8.50E-06	5.96E-05
COL14A1	8q24.12	-0.22558	8.51E-06	5.96E-05
RBL1	20q11.23	0.225515	8.56E-06	6.00E-05
NCAM1	11q23.2	-0.22549	8.58E-06	6.01E-05
MSANTD2	11q24.2	0.225479	8.59E-06	6.01E-05
CLPP	19p13.3	0.225451	8.61E-06	6.03E-05
AP1S3	2q36.1	0.225426	8.63E-06	6.04E-05
MEDAG	13q12.3	-0.22542	8.64E-06	6.04E-05
ARHGAP39	8q24.3	0.225271	8.76E-06	6.12E-05
SUN1	7p22.3	0.225264	8.77E-06	6.12E-05
DIRAS3	1p31.3	-0.22524	8.79E-06	6.14E-05
CHN2	7p14.3	-0.22521	8.81E-06	6.15E-05
C11ORF1	11q23.1	-0.22518	8.84E-06	6.17E-05
ACER2	9p22.1	-0.22511	8.89E-06	6.20E-05
MAGI2	7q21.11	-0.2251	8.90E-06	6.21E-05
TAOK2	16p11.2	0.225056	8.94E-06	6.23E-05
TNS1	2q35	-0.22504	8.96E-06	6.24E-05
DHH	12q13.12	-0.22503	8.96E-06	6.24E-05
PRSS35	6q14.2	-0.22499	8.99E-06	6.26E-05
RELN	7q22.1	-0.22498	9.00E-06	6.27E-05
ANKRA2	5q13.2	-0.22496	9.02E-06	6.28E-05
PROZ	13q34	0.224957	9.02E-06	6.28E-05
CD1E	1q23.1	-0.22493	9.04E-06	6.29E-05
LINC01119	2p21	-0.2249	9.07E-06	6.31E-05
AMMECR1	Xq23	0.224876	9.09E-06	6.32E-05
AFF3	2q11.2	-0.22487	9.10E-06	6.32E-05
EPHA5	4q13.1-q13.2	-0.22485	9.12E-06	6.33E-05
CATSPERB	14q32.12	0.224839	9.12E-06	6.34E-05
RFPL1S	22q12.2	-0.22483	9.13E-06	6.34E-05
PRDM10	11q24.3	0.224827	9.13E-06	6.34E-05
CCNG2	4q21.1	-0.2248	9.16E-06	6.35E-05
DHRX	Xp22.33 and Yp11.2	-0.22479	9.16E-06	6.35E-05
C21ORF62-AS1	21q22.11	-0.22478	9.17E-06	6.36E-05
NTNG1	1p13.3	-0.22477	9.18E-06	6.36E-05
PAQR7	1p36.11	-0.22476	9.19E-06	6.37E-05
FBXO33	14q21.1	-0.22474	9.21E-06	6.38E-05
PRPF4	9q32	0.224733	9.21E-06	6.38E-05
C3ORF35	3p22.2	0.224716	9.23E-06	6.39E-05
ZNF354B	5q35.3	0.224678	9.26E-06	6.41E-05
ELK4	1q32.1	0.224626	9.31E-06	6.44E-05
TBC1D3H	17q12	0.2246	9.33E-06	6.45E-05

CHRNA3	15q25.1	-0.22456	9.36E-06	6.47E-05
CDH24	14q11.2	0.224476	9.44E-06	6.52E-05
ABCB10	1q42.13	0.224448	9.46E-06	6.54E-05
FMOD	1q32.1	-0.22444	9.47E-06	6.54E-05
GNS	12q14.3	-0.22442	9.49E-06	6.55E-05
PHETA2	22q13.2	-0.22442	9.49E-06	6.55E-05
FYTTD1	3q29	-0.22432	9.58E-06	6.61E-05
C1GALT1C1L	2p21	-0.22431	9.59E-06	6.61E-05
ABCB6	2q35	0.22431	9.59E-06	6.61E-05
TNFAIP8L2	1q21.3	-0.22428	9.62E-06	6.63E-05
GNAO1	16q13	-0.22427	9.62E-06	6.63E-05
IYD	6q25.1	-0.22425	9.64E-06	6.64E-05
CTSD	11p15.5	-0.22422	9.67E-06	6.66E-05
LGI2	4p15.2	-0.2242	9.68E-06	6.66E-05
PINK1	1p36.12	-0.22418	9.71E-06	6.68E-05
ZNF37A	10p11.1	0.224126	9.75E-06	6.71E-05
LUC7L	16p13.3	0.224088	9.79E-06	6.73E-05
WDFY3-AS2	4q21.23	-0.22401	9.86E-06	6.77E-05
CCDC69	5q33.1	-0.224	9.87E-06	6.78E-05
POLR2M	15q21.3	-0.22398	9.89E-06	6.79E-05
SLC7A1	13q12.3	0.223963	9.90E-06	6.80E-05
DRAM1	12q23.2	-0.22395	9.92E-06	6.81E-05
ARMC6	19p13.11	0.223906	9.96E-06	6.83E-05
SYPL2	1p13.3	-0.2239	9.97E-06	6.83E-05
KLHL18	3p21.31	0.223869	9.99E-06	6.85E-05
GLB1L	2q35	-0.22386	1.00E-05	6.85E-05
SMCR5	-	0.22379	1.01E-05	6.90E-05
CAT	11p13	-0.22371	1.01E-05	6.95E-05
FHOD3	18q12.2	-0.22368	1.02E-05	6.96E-05
COL22A1	8q24.23-q24.3	-0.22367	1.02E-05	6.96E-05
EMILIN1	2p23.3	-0.22365	1.02E-05	6.98E-05
TRPV4	12q24.11	-0.22364	1.02E-05	6.98E-05
WFIKKN2	17q21.33	-0.22352	1.03E-05	7.06E-05
PLCD1	3p22.2	-0.22351	1.03E-05	7.06E-05
A4GALT	22q13.2	-0.22349	1.04E-05	7.08E-05
CAP2	6p22.3	-0.22348	1.04E-05	7.08E-05
CCNI2	5q31.1	0.223474	1.04E-05	7.08E-05
APCDD1	18p11.22	-0.22346	1.04E-05	7.08E-05
HTR3A	11q23.2	-0.22344	1.04E-05	7.10E-05
ZNF136	19p13.2	-0.22342	1.04E-05	7.11E-05
PKIB	6q22.31	-0.2234	1.04E-05	7.12E-05
ZNF20	19p13.2	-0.22337	1.05E-05	7.13E-05
RORB	9q21.13	-0.22336	1.05E-05	7.14E-05
MR1	1q25.3	-0.22335	1.05E-05	7.14E-05
BTF3L4	1p32.3	-0.22332	1.05E-05	7.16E-05
ROR2	9q22.31	-0.22327	1.06E-05	7.19E-05
GIPR	19q13.32	0.223214	1.06E-05	7.23E-05
DGKI	7q33	-0.2232	1.06E-05	7.23E-05
HMGB4	1p35.1	-0.2232	1.06E-05	7.23E-05
MTR	1q43	0.22311	1.07E-05	7.29E-05
ATG4B	2q37.3	0.223034	1.08E-05	7.34E-05
CDH23	10q22.1	-0.22302	1.08E-05	7.35E-05
GGT5	22q11.23	-0.22301	1.08E-05	7.35E-05
SNX7	1p21.3	-0.22298	1.09E-05	7.37E-05
PTPRT	20q12-q13.11	-0.22295	1.09E-05	7.39E-05
RNF183	9q32	0.22292	1.09E-05	7.41E-05
ZEB2	2q22.3	-0.22291	1.09E-05	7.41E-05
BFSP2	3q22.1	-0.22291	1.09E-05	7.41E-05

PARP2	14q11.2	0.222906	1.09E-05	7.41E-05
WWC1	5q34	0.222829	1.10E-05	7.46E-05
SLC25A28	10q24.2	0.222778	1.11E-05	7.49E-05
CSRP2	12q21.2	-0.22277	1.11E-05	7.49E-05
UBAC1	9q34.3	0.222763	1.11E-05	7.50E-05
SCN3B	11q24.1	-0.2227	1.11E-05	7.54E-05
LRRC3B	3p24.1	-0.22269	1.12E-05	7.54E-05
PCDHB2	5q31.3	-0.22267	1.12E-05	7.55E-05
NLGN1	3q26.31	-0.22266	1.12E-05	7.56E-05
HHIPL1	14q32.2	-0.22259	1.13E-05	7.60E-05
TIMM17A	1q32.1	0.222583	1.13E-05	7.61E-05
SLC25A39	17q21.31	0.222575	1.13E-05	7.61E-05
PPIEL	1p34.3	0.22255	1.13E-05	7.63E-05
WWTR1	3q25.1	-0.22251	1.13E-05	7.65E-05
LEF1	4q25	-0.22251	1.13E-05	7.65E-05
DGKB	7p21.2	-0.22249	1.14E-05	7.66E-05
NIM1K	5p12	-0.22244	1.14E-05	7.70E-05
LAPTM5	1p35.2	-0.2224	1.15E-05	7.72E-05
HDHD3	9q32	0.222382	1.15E-05	7.73E-05
LEPR	1p31.3	-0.22235	1.15E-05	7.75E-05
CHRD	3q27.1	-0.22232	1.15E-05	7.77E-05
ZNF787	19q13.43	0.222313	1.16E-05	7.77E-05
MNS1	15q21.3	0.222298	1.16E-05	7.78E-05
NTNG2	9q34.13	-0.22228	1.16E-05	7.79E-05
TLN2	15q22.2	0.222282	1.16E-05	7.79E-05
ATXN7L2	1p13.3	0.222279	1.16E-05	7.79E-05
AOC4P	17q21.31	-0.22227	1.16E-05	7.79E-05
BTG1	12q21.33	-0.22223	1.16E-05	7.82E-05
SLC2A12	6q23.2	-0.22222	1.17E-05	7.82E-05
ASPA	17p13.2	-0.22215	1.17E-05	7.87E-05
C5ORF46	5q32	-0.22213	1.18E-05	7.88E-05
FRG1	4q35.2	-0.22211	1.18E-05	7.90E-05
PDXDC1	16p13.11	0.222094	1.18E-05	7.90E-05
SMOC2	6q27	-0.22209	1.18E-05	7.91E-05
MTSS1	8q24.13	-0.22202	1.19E-05	7.95E-05
TRHDE	12q21.1	-0.22201	1.19E-05	7.95E-05
TAF1A	1q41	0.221894	1.20E-05	8.04E-05
BCAR3	1p22.1	-0.22172	1.22E-05	8.17E-05
HOXB5	17q21.32	0.221674	1.23E-05	8.20E-05
ZCCHC24	10q22.3	-0.22166	1.23E-05	8.21E-05
FOXF2	6p25.3	-0.22161	1.23E-05	8.24E-05
EVC	4p16.2	-0.22161	1.23E-05	8.24E-05
FAM214A	15q21.2-q21.3	-0.22159	1.24E-05	8.25E-05
PRKAG1	12q13.12	-0.22155	1.24E-05	8.28E-05
SEL1L	14q31.1	-0.22153	1.24E-05	8.30E-05
VSTM2L	20q11.23	-0.22152	1.24E-05	8.30E-05
TMEM145	19q13.2	0.221474	1.25E-05	8.33E-05
AKNAD1	1p13.3	-0.22147	1.25E-05	8.33E-05
DGKQ	4p16.3	0.221436	1.25E-05	8.36E-05
DAB2IP	9q33.2	0.221384	1.26E-05	8.39E-05
MITF	3p13	-0.22137	1.26E-05	8.40E-05
KDM2B	12q24.31	0.221368	1.26E-05	8.40E-05
RNF103	2p11.2	-0.22134	1.26E-05	8.42E-05
NCR3	6p21.33	-0.22131	1.27E-05	8.44E-05
CEP72	5p15.33	0.221283	1.27E-05	8.46E-05
TCEAL2	Xq22.1	-0.22124	1.28E-05	8.49E-05
HSD17B14	19q13.33	-0.22123	1.28E-05	8.50E-05
FCGRT	19q13.33	-0.22119	1.28E-05	8.53E-05

SNRPF	12q23.1	0.22118	1.28E-05	8.53E-05
GPX4	19p13.3	-0.22118	1.28E-05	8.53E-05
P2RX4	12q24.31	-0.22116	1.29E-05	8.54E-05
NOP58	2q33.1	0.221027	1.30E-05	8.64E-05
RASGRF1	15q25.1	-0.221	1.31E-05	8.66E-05
FAM210B	20q13.2	-0.22087	1.32E-05	8.76E-05
ARHGEF1	19q13.2	0.220868	1.32E-05	8.76E-05
TMEM97	17q11.2	0.220843	1.32E-05	8.78E-05
THSD7A	7p21.3	-0.2208	1.33E-05	8.81E-05
EBF1	5q33.3	-0.22079	1.33E-05	8.82E-05
DHCR24	1p32.3	0.220784	1.33E-05	8.82E-05
ACTN2	1q43	-0.22075	1.34E-05	8.84E-05
HAUS3	4p16.3	0.220712	1.34E-05	8.87E-05
SMAD7	18q21.1	-0.22067	1.35E-05	8.90E-05
TNFRSF11B	8q24.12	-0.22064	1.35E-05	8.92E-05
UBA6-AS1	4q13.2	-0.22062	1.35E-05	8.93E-05
CILP2	19p13.11	-0.22062	1.35E-05	8.93E-05
PAGR1	16p11.2	0.220601	1.35E-05	8.95E-05
DDX31	9q34.13	0.220563	1.36E-05	8.97E-05
EMC7	15q14	-0.22054	1.36E-05	8.99E-05
CACNB4	2q23.3	-0.22052	1.36E-05	9.00E-05
RAMP3	7p13	-0.22052	1.36E-05	9.00E-05
CD300C	17q25.1	-0.22051	1.37E-05	9.01E-05
BMERB1	16p13.11	-0.22047	1.37E-05	9.04E-05
CSDC2	22q13.2	-0.22046	1.37E-05	9.05E-05
SLC35F3	1q42.2	-0.22042	1.38E-05	9.07E-05
FLI1	11q24.3	-0.2204	1.38E-05	9.09E-05
RAB39B	Xq28	-0.22039	1.38E-05	9.09E-05
MAP1LC3C	1q43	-0.22036	1.38E-05	9.11E-05
CXCL17	19q13.2	0.220326	1.39E-05	9.14E-05
BTAF1	10q23.32	0.220276	1.40E-05	9.18E-05
FBXO17	19q13.2	-0.22018	1.41E-05	9.26E-05
TMEM63B	6p21.1	0.220141	1.41E-05	9.29E-05
MYOM1	18p11.31	-0.22012	1.41E-05	9.30E-05
TACR1	2p12	-0.22009	1.42E-05	9.33E-05
WDR55	5q31.3	0.220037	1.43E-05	9.37E-05
SNRNP25	16p13.3	0.220036	1.43E-05	9.37E-05
CROT	7q21.12	-0.22002	1.43E-05	9.38E-05
ATRNL1	10q25.3	-0.22	1.43E-05	9.39E-05
STK16	2q35	-0.21997	1.44E-05	9.42E-05
WRNIP1	6p25.2	0.219949	1.44E-05	9.43E-05
TUBB6	18p11.21	-0.21993	1.44E-05	9.44E-05
GRAMD2B	5q23.2	-0.21988	1.45E-05	9.48E-05
ADGRG2	Xp22.13	-0.21987	1.45E-05	9.49E-05
SOX13	1q32.1	0.219854	1.45E-05	9.50E-05
PIP4P2	8q21.3	-0.21982	1.46E-05	9.53E-05
CAVIN1	17q21.2	-0.21981	1.46E-05	9.53E-05
PLXNA4	7q32.3	-0.2198	1.46E-05	9.54E-05
CAPN8	1q41	0.219717	1.47E-05	9.61E-05
PDLIM2	8p21.3	-0.21971	1.47E-05	9.61E-05
ENPEP	4q25	-0.21967	1.48E-05	9.64E-05
CTBP2	10q26.13	0.219651	1.48E-05	9.65E-05
REEP2	5q31.2	-0.21965	1.48E-05	9.65E-05
U2SURP	3q23	0.219608	1.48E-05	9.69E-05
ITGA4	2q31.3	-0.2196	1.48E-05	9.69E-05
GATD1	11p15.5	0.219576	1.49E-05	9.71E-05
ABI1	10p12.1	-0.21956	1.49E-05	9.72E-05
TRPC3	4q27	-0.21956	1.49E-05	9.72E-05

RNF187	1q42.13	0.219538	1.49E-05	9.73E-05
PAIP2	5q31.2	-0.21937	1.52E-05	9.88E-05
LRRN1	3p26.2	-0.21937	1.52E-05	9.88E-05
ARFIP1	4q31.3	-0.21937	1.52E-05	9.88E-05
ZNF140	12q24.33	-0.21931	1.52E-05	9.93E-05
FAM13A-AS1	4q22.1	0.219299	1.53E-05	9.93E-05
KLRA1P	12p13.2	0.219261	1.53E-05	9.97E-05
FAM49A	2p24.2	-0.21925	1.53E-05	9.97E-05
DBX2	12q12	-0.21923	1.54E-05	9.99E-05
COL8A1	3q12.1	-0.21917	1.54E-05	0.0001
VWA5A	11q24.2	-0.21905	1.56E-05	0.000101
SNURF	15q11.2	-0.21903	1.56E-05	0.000102
SPP1	4q22.1	-0.21902	1.57E-05	0.000102
POU3F1	1p34.3	-0.2189	1.58E-05	0.000103
LONRF3	Xq24	0.218896	1.58E-05	0.000103
TLR4	9q33.1	-0.21888	1.59E-05	0.000103
TWF2	3p21.2	-0.21883	1.59E-05	0.000103
MLXIPL	7q11.23	0.218819	1.59E-05	0.000103
COMMD8	4p12	-0.21878	1.60E-05	0.000104
MYL3	3p21.31	-0.21875	1.60E-05	0.000104
HAMP	19q13.12	-0.21875	1.61E-05	0.000104
TMEM184C	4q31.23	-0.21873	1.61E-05	0.000104
DUS3L	19p13.3	0.218722	1.61E-05	0.000104
ADAMTS18	16q23.1	-0.21871	1.61E-05	0.000104
SYNRG	17q12	-0.2187	1.61E-05	0.000104
SLC34A3	9q34.3	0.218677	1.62E-05	0.000104
CNKSR2	Xp22.12	-0.21867	1.62E-05	0.000104
CCNJL	5q33.3	-0.21867	1.62E-05	0.000104
GAS1	9q21.33	-0.21866	1.62E-05	0.000105
ATP8B5P	9p13.3	-0.21853	1.64E-05	0.000106
MAP6D1	3q27.1	0.218527	1.64E-05	0.000106
ENKD1	16q22.1	0.218486	1.64E-05	0.000106
LRRIQ3	1p31.1	-0.21845	1.65E-05	0.000106
GNPDA2	4p12	-0.21838	1.66E-05	0.000107
B4GALT3	1q23.3	0.218327	1.67E-05	0.000108
SNORA18	11q21	0.218312	1.67E-05	0.000108
FBXL19-AS1	16p11.2	0.218288	1.67E-05	0.000108
HHIPL2	1q41	0.218282	1.67E-05	0.000108
FAM227B	15q21.2	-0.21828	1.68E-05	0.000108
LRFN4	11q13.2	0.218198	1.69E-05	0.000109
ALMS1	2p13.1	0.21817	1.69E-05	0.000109
NEFL	8p21.2	-0.21816	1.69E-05	0.000109
HS1BP3	2p24.1	-0.21814	1.70E-05	0.000109
PARP11	12p13.32	-0.21809	1.70E-05	0.00011
FAM120AOS	9q22.31	-0.21809	1.70E-05	0.00011
YIPF4	2p22.3	-0.21807	1.71E-05	0.00011
SRRD	22q12.1	-0.21802	1.72E-05	0.00011
CALHM2	10q24.33	-0.218	1.72E-05	0.00011
COPS8	2q37.3	-0.21794	1.73E-05	0.000111
WDR97	8q24.3	0.217937	1.73E-05	0.000111
LECT2	5q31.1	-0.21793	1.73E-05	0.000111
CNOT1	16q21	0.217925	1.73E-05	0.000111
LRRC23	12p13.31	-0.2179	1.73E-05	0.000111
ABHD4	14q11.2	-0.2179	1.73E-05	0.000111
PENK	8q12.1	-0.21788	1.74E-05	0.000111
ZNF555	19p13.3	-0.21786	1.74E-05	0.000111
AEBP1	7p13	-0.2178	1.75E-05	0.000112
NIBAN2	9q34.11	0.217787	1.75E-05	0.000112

TBC1D3	17q12	0.217775	1.75E-05	0.000112
THOC1	18p11.32	0.217726	1.76E-05	0.000113
HLA-DPB2	6p21.32	-0.21772	1.76E-05	0.000113
FST	5q11.2	-0.21772	1.76E-05	0.000113
ITGB8	7p21.1	-0.21764	1.78E-05	0.000113
CRIPAK	4p16.3	0.217617	1.78E-05	0.000114
SLX1B	16p11.2	0.217603	1.78E-05	0.000114
GIMAP5	7q36.1	-0.21758	1.79E-05	0.000114
SLC7A5P1	16p11.2	0.21757	1.79E-05	0.000114
SLC31A2	9q32	-0.21754	1.79E-05	0.000114
AP4S1	14q12	-0.21753	1.79E-05	0.000114
ARMCX6	Xq22.1	-0.21749	1.80E-05	0.000115
NTM	11q25	-0.21744	1.81E-05	0.000115
CREM	10p11.21	-0.21743	1.81E-05	0.000115
RANBP3L	5p13.2	-0.21741	1.81E-05	0.000116
PPP1R12C	19q13.42	0.217379	1.82E-05	0.000116
B3GAT2	6q13	0.217368	1.82E-05	0.000116
ANKS3	16p13.3	0.217368	1.82E-05	0.000116
FMO4	1q24.3	-0.21732	1.83E-05	0.000116
TCEAL5	Xq22.1	-0.21729	1.83E-05	0.000117
BABAM2	2p23.2	-0.21719	1.85E-05	0.000118
BCAT2	19q13.33	0.217183	1.85E-05	0.000118
RAB3GAP1	2q21.3	-0.21714	1.86E-05	0.000118
NPTN	15q24.1	-0.21714	1.86E-05	0.000118
HSCB	22q12.1	-0.21713	1.86E-05	0.000118
MRVI1	11p15.4	-0.21709	1.87E-05	0.000118
CCIN	9p13.3	-0.21705	1.87E-05	0.000119
GABRE	Xq28	0.217015	1.88E-05	0.000119
FBXO36	2q36.3	-0.21697	1.89E-05	0.00012
RIN1	11q13.2	0.216963	1.89E-05	0.00012
EXOC8	1q42.2	0.216944	1.89E-05	0.00012
CATSPER2	15q15.3	0.216922	1.90E-05	0.00012
SLC2A9	4p16.1	-0.21689	1.90E-05	0.00012
ANP32B	9q22.33	0.216854	1.91E-05	0.000121
COL25A1	4q25	-0.21684	1.91E-05	0.000121
CDH13	16q23.3	-0.21683	1.91E-05	0.000121
CEP350	1q25.2	0.216781	1.92E-05	0.000121
APBB3	5q31.3	0.216754	1.92E-05	0.000122
INO80E	16p11.2	0.216713	1.93E-05	0.000122
ZFP36L1	14q24.1	-0.21667	1.94E-05	0.000123
EVI5L	19p13.2	0.216648	1.94E-05	0.000123
FAM186A	12q13.12	0.216586	1.95E-05	0.000123
POLR3E	16p12.2	0.21657	1.96E-05	0.000124
PRR14	16p11.2	0.216569	1.96E-05	0.000124
SAC3D1	11q13.1	0.216553	1.96E-05	0.000124
LINC00265	7p14.1	0.216527	1.96E-05	0.000124
SNRPD1	18q11.2	0.216522	1.97E-05	0.000124
ESRRG	1q41	-0.21651	1.97E-05	0.000124
GABBR1	6p22.1	0.216502	1.97E-05	0.000124
GPR21	9q33.2	-0.21647	1.97E-05	0.000124
PYGO2	1q21.3	0.216418	1.98E-05	0.000125
RANBP1	22q11.21	0.216265	2.01E-05	0.000127
SHBG	17p13.1	-0.21626	2.01E-05	0.000127
LINC01126	2p21	0.216245	2.02E-05	0.000127
FBN1	15q21.1	-0.21619	2.03E-05	0.000127
GXYLT2	3p13	-0.21619	2.03E-05	0.000127
VIPAS39	14q24.3	-0.21618	2.03E-05	0.000127
EFS	14q11.2	-0.21617	2.03E-05	0.000127

WDR48	3p22.2	-0.21616	2.03E-05	0.000128
TMEM217	6p21.2	-0.21609	2.04E-05	0.000128
LINC01001	11p15.5	0.216073	2.05E-05	0.000128
EVI5	1p22.1	-0.21607	2.05E-05	0.000128
SNRPN	15q11.2	-0.21604	2.05E-05	0.000129
NDP	Xp11.3	-0.21598	2.06E-05	0.000129
RB1CC1	8q11.23	-0.21592	2.07E-05	0.00013
FNBP1	9q34.11	-0.21586	2.09E-05	0.000131
S100A16	1q21.3	0.215843	2.09E-05	0.000131
ZNF747	16p11.2	-0.21584	2.09E-05	0.000131
SARAF	8p12	-0.21582	2.09E-05	0.000131
FLT3LG	19q13.33	-0.2157	2.12E-05	0.000133
SOX6	11p15.2	-0.2157	2.12E-05	0.000133
PHLDB2	3q13.2	-0.21568	2.12E-05	0.000133
SCARNA12	12p13.31	0.215655	2.13E-05	0.000133
DYRK1B	19q13.2	-0.21563	2.13E-05	0.000133
KCNA1	12p13.32	-0.21563	2.13E-05	0.000133
LINC00092	9q22.32	-0.21561	2.13E-05	0.000133
FREM2	13q13.3	-0.21561	2.14E-05	0.000133
FAM160B1	10q25.3	-0.21555	2.15E-05	0.000134
LAMA4	6q21	-0.21554	2.15E-05	0.000134
PRXL2B	1p36.32	0.215473	2.16E-05	0.000135
KL	13q13.1	-0.21547	2.16E-05	0.000135
KRBA2	17p13.1	-0.21545	2.17E-05	0.000135
NDC1	1p32.3	0.215416	2.17E-05	0.000135
SMURF2	17q23.3-q24.1	-0.21539	2.18E-05	0.000136
MXD4	4p16.3	-0.21535	2.19E-05	0.000136
GRIK4	11q23.3	-0.21522	2.21E-05	0.000138
ZC3H18	16q24.2	0.215206	2.21E-05	0.000138
RGS18	1q31.2	-0.21519	2.22E-05	0.000138
COPS7B	2q37.1	0.215183	2.22E-05	0.000138
MAGEE1	Xq13.3	-0.21517	2.22E-05	0.000138
SCN11A	3p22.2	-0.21516	2.22E-05	0.000138
TTLL3	3p25.3	0.215067	2.24E-05	0.000139
DGKZ	11p11.2	0.215017	2.25E-05	0.00014
STYK1	12p13.2	0.214963	2.26E-05	0.000141
F12	5q35.3	0.214943	2.27E-05	0.000141
GTF2H1	11p15.1	-0.21491	2.27E-05	0.000141
SDSL	12q24.13	-0.2149	2.27E-05	0.000141
KCNQ4	1p34.2	0.214892	2.28E-05	0.000141
NOS1AP	1q23.3	0.21486	2.28E-05	0.000142
AKAP17A	Xp22.33 and Yp11.2	0.214849	2.29E-05	0.000142
PCSK9	1p32.3	0.214845	2.29E-05	0.000142
MYH11	16p13.11	-0.21484	2.29E-05	0.000142
GRPR	Xp22.2	-0.2148	2.30E-05	0.000142
POU2F1	1q24.2	0.214755	2.31E-05	0.000143
URB1-AS1	21q22.11	-0.21472	2.31E-05	0.000143
COG7	16p12.2	0.214705	2.32E-05	0.000143
PLEKHF2	8q22.1	-0.21469	2.32E-05	0.000144
KLHL5	4p14	-0.21466	2.33E-05	0.000144
TRIQQ	8q22.1	-0.21464	2.33E-05	0.000144
DNM1P35	15q24.2	0.21464	2.33E-05	0.000144
MYH14	19q13.33	0.214576	2.34E-05	0.000145
VAMP2	17p13.1	-0.21448	2.36E-05	0.000146
DEK	6p22.3	0.214414	2.38E-05	0.000147
CTNND2	5p15.2	-0.21439	2.38E-05	0.000147
C20ORF194	20p13	-0.21438	2.38E-05	0.000147
COPS4	4q21.22	-0.2143	2.40E-05	0.000148

SCAMP1	5q14.1	-0.21426	2.41E-05	0.000149
CRIP2	14q32.33	-0.21426	2.41E-05	0.000149
HDAC10	22q13.33	0.214257	2.41E-05	0.000149
PPP1R1C	2q31.3-q32.1	-0.21426	2.41E-05	0.000149
KCTD21	11q14.1	-0.21412	2.44E-05	0.00015
PCDHA10	5q31.3	-0.21411	2.44E-05	0.00015
JPT2	16p13.3	0.214079	2.45E-05	0.000151
MAPKAPK2	1q32.1	0.214076	2.45E-05	0.000151
ST8SIA4	5q21.1	-0.21405	2.46E-05	0.000151
MRPL4	19p13.2	0.214041	2.46E-05	0.000151
ADAM28	8p21.2	-0.21403	2.46E-05	0.000151
AFAP1	4p16.1	-0.21389	2.49E-05	0.000153
WHAMMP2	15q13.1	-0.21384	2.50E-05	0.000154
STK36	2q35	0.213763	2.52E-05	0.000155
C1QTNF2	5q33.3	-0.21374	2.52E-05	0.000155
SMG7	1q25.3	0.21369	2.54E-05	0.000156
CHRNA1	2q31.1	-0.2136	2.56E-05	0.000157
SPDYE2	7q22.1	0.213546	2.57E-05	0.000158
CCBE1	18q21.32	-0.21347	2.59E-05	0.000159
FGF12	3q28-q29	-0.21346	2.59E-05	0.000159
SLC12A6	15q14	-0.21346	2.59E-05	0.000159
RRAGB	Xp11.21	-0.21333	2.62E-05	0.000161
ABCA6	17q24.2-q24.3	-0.21331	2.62E-05	0.000161
TRIP4	15q22.31	-0.2133	2.63E-05	0.000161
DYNC2LI1	2p21	-0.21325	2.64E-05	0.000162
PTTG1IP	21q22.3	-0.21325	2.64E-05	0.000162
METTL17	14q11.2	0.213237	2.64E-05	0.000162
GORASP2	2q31.1	-0.2132	2.65E-05	0.000162
PSMD4	1q21.3	0.213174	2.66E-05	0.000162
PCDHA6	5q31.3	-0.21316	2.66E-05	0.000163
LINC01018	5p15.31	-0.21315	2.66E-05	0.000163
CH25H	10q23.31	-0.21313	2.67E-05	0.000163
BIN3-IT1	8p21.3	0.213112	2.67E-05	0.000163
DHX15	4p15.2	0.213094	2.67E-05	0.000163
SRPX2	Xq22.1	-0.21307	2.68E-05	0.000164
TSSK4	14q12	0.213012	2.69E-05	0.000164
PODNL1	19p13.12	-0.21299	2.70E-05	0.000165
RASSF2	20p13	-0.21299	2.70E-05	0.000165
GRP	18q21.32	-0.21297	2.70E-05	0.000165
TKT	3p21.1	0.212952	2.71E-05	0.000165
ODR4	1q31.1	0.212931	2.71E-05	0.000165
PLA2R1	2q24.2	-0.21293	2.71E-05	0.000165
FADS3	11q12.2	-0.21281	2.74E-05	0.000167
SGK3	8q13.1	-0.21277	2.75E-05	0.000168
ROBO1	3p12.3	-0.21276	2.76E-05	0.000168
DNAH1	3p21.1	0.212726	2.76E-05	0.000168
CCKBR	11p15.4	-0.21264	2.79E-05	0.000169
RFLNB	17p13.3	-0.21262	2.79E-05	0.00017
GRID1	10q23.1-q23.2	-0.21262	2.79E-05	0.00017
LSM4	19p13.11	0.212559	2.80E-05	0.00017
ASB5	4q34.2	-0.21255	2.81E-05	0.00017
TRPC1	3q23	-0.21253	2.81E-05	0.000171
NCL	2q37.1	0.212529	2.81E-05	0.000171
SNORA21	17q12	0.212474	2.83E-05	0.000172
MXRA5	Xp22.33	-0.21247	2.83E-05	0.000172
TPM2	9p13.3	-0.21247	2.83E-05	0.000172
PAICS	4q12	0.212459	2.83E-05	0.000172
RPRM	2q23.3	-0.21236	2.86E-05	0.000173



COPB1	11p15.2	-0.21228	2.88E-05	0.000174
MAPK8IP1	11p11.2	-0.21224	2.88E-05	0.000175
DERL2	17p13.2	-0.21224	2.89E-05	0.000175
RNF168	3q29	0.212236	2.89E-05	0.000175
ST3GAL5	2p11.2	-0.21218	2.90E-05	0.000176
B3GALT4	6p21.32	-0.21217	2.90E-05	0.000176
TGM2	20q11.23	-0.21215	2.91E-05	0.000176
STUM	1q42.12	-0.2121	2.92E-05	0.000177
CLMP	11q24.1	-0.2121	2.92E-05	0.000177
SPICE1	3q13.2	0.21209	2.92E-05	0.000177
RBM4	11q13.2	-0.21208	2.93E-05	0.000177
FILIP1	6q14.1	-0.21204	2.94E-05	0.000177
CNPY4	7q22.1	-0.21203	2.94E-05	0.000177
UBE2G2	21q22.3	0.212025	2.94E-05	0.000178
HLA-DRA	6p21.32	-0.21202	2.94E-05	0.000178
DUSP3	17q21.31	-0.212	2.95E-05	0.000178
FAM53B	10q26.13	0.211983	2.95E-05	0.000178
OPA3	19q13.32	0.211932	2.97E-05	0.000179
SPDY8P	7q11.23	0.21193	2.97E-05	0.000179
ACD	16q22.1	0.211883	2.98E-05	0.000179
HGS	17q25.3	0.211862	2.98E-05	0.00018
RNPS1	16p13.3	0.211857	2.98E-05	0.00018
BICDL1	12q24.23	0.211789	3.00E-05	0.000181
USP11	Xp11.3	-0.21178	3.00E-05	0.000181
CPEB1	15q25.2	-0.21176	3.01E-05	0.000181
GNB3	12p13.31	0.211757	3.01E-05	0.000181
GPR176	15q14-q15.1	-0.21173	3.02E-05	0.000181
PTPRM	18p11.23	-0.21173	3.02E-05	0.000182
AMN1	12p11.21	-0.21172	3.02E-05	0.000182
RABGEF1	7q11.21	-0.21168	3.03E-05	0.000182
RAB6A	11q13.4	-0.21166	3.04E-05	0.000183
MAPK4	18q21.1-q21.2	-0.21163	3.04E-05	0.000183
PEBP4	8p21.3	-0.21154	3.07E-05	0.000184
CSDE1	1p13.2	-0.21152	3.08E-05	0.000185
ARHGAP23	17q12	-0.21149	3.08E-05	0.000185
TLK1	2q31.1	-0.21144	3.10E-05	0.000186
MCM9	6q22.31	0.211409	3.11E-05	0.000186
SND1-IT1	7q32.1	0.211374	3.12E-05	0.000187
GATAD2B	1q21.3	0.211351	3.12E-05	0.000187
RAB2B	14q11.2	-0.21135	3.12E-05	0.000187
PCTP	17q22	-0.21134	3.12E-05	0.000187
IST1	16q22.2	-0.21134	3.12E-05	0.000187
EPYC	12q21.33	-0.21126	3.15E-05	0.000188
CLEC1A	12p13.2	-0.21125	3.15E-05	0.000188
CBX6	22q13.1	-0.21119	3.17E-05	0.000189
MBOAT7	19q13.42	0.211167	3.17E-05	0.00019
ACKR1	1q23.2	-0.21117	3.17E-05	0.00019
WNT6	2q35	-0.21116	3.18E-05	0.00019
KPNA5	6q22.1	-0.21115	3.18E-05	0.00019
UBE2Q2	15q24.2	-0.21115	3.18E-05	0.00019
GJA4	1p34.3	-0.21113	3.18E-05	0.00019
PPM1A	14q23.1	-0.21112	3.19E-05	0.00019
MAB21L4	2q37.3	-0.2111	3.19E-05	0.000191
CCR2	3p21.31	-0.21108	3.20E-05	0.000191
ADA2	22q11.1	-0.21105	3.21E-05	0.000191
HTT	4p16.3	0.211047	3.21E-05	0.000191
DYNLT3	Xp11.4	-0.21097	3.23E-05	0.000192
AKR1B1	7q33	-0.2109	3.25E-05	0.000193

IGSF21	1p36.13	-0.21085	3.26E-05	0.000194
ZDHHHC12	9q34.11	0.210767	3.29E-05	0.000196
GNMB	7p15.3	-0.2107	3.31E-05	0.000197
PHLDB1	11q23.3	-0.2107	3.31E-05	0.000197
TSPAN18	11p11.2	-0.21067	3.31E-05	0.000197
SLC24A1	15q22.31	-0.21067	3.31E-05	0.000197
ST3GAL6	3q12.1	-0.21067	3.32E-05	0.000197
WEE2-AS1	7q34	-0.21061	3.33E-05	0.000198
TRIM13	13q14.2	-0.21054	3.35E-05	0.000199
SNRPA1	15q26.3	0.210453	3.38E-05	0.000201
MAN1A1	6q22.31	-0.21044	3.38E-05	0.000201
MLC1	22q13.33	-0.21043	3.39E-05	0.000201
INA	10q24.33	-0.21041	3.39E-05	0.000201
PRPF4B	6p25.2	0.21041	3.39E-05	0.000201
PLXNB1	3p21.31	0.210409	3.39E-05	0.000201
ZC3HAV1L	7q34	0.210398	3.40E-05	0.000201
SLC22A4	5q31.1	-0.21038	3.40E-05	0.000202
ZNF814	19q13.43	0.210335	3.41E-05	0.000202
MOB1B	4q13.3	-0.21028	3.43E-05	0.000203
SORCS2	4p16.1	-0.21026	3.44E-05	0.000204
C11ORF54	11q21	-0.21015	3.47E-05	0.000206
MYL6	12q13.2	-0.21011	3.48E-05	0.000206
INTS6L	Xq26.3	0.210099	3.49E-05	0.000206
DPYD	1p21.3	-0.20997	3.52E-05	0.000209
MED26	19p13.11	0.209962	3.53E-05	0.000209
TWIST2	2q37.3	-0.20994	3.54E-05	0.000209
GSPT1	16p13.13	0.209905	3.55E-05	0.00021
NRXN1	2p16.3	-0.20989	3.55E-05	0.00021
PRRX1	1q24.2	-0.20987	3.56E-05	0.00021
SARS2	19q13.2	0.20985	3.56E-05	0.00021
ARIH2	3p21.31	0.209789	3.58E-05	0.000211
CRISPLD2	16q24.1	-0.20976	3.59E-05	0.000212
GNAI1	7q21.11	-0.20974	3.60E-05	0.000212
SLC38A4	12q13.11	-0.20974	3.60E-05	0.000212
LRIT3	4q25	0.209695	3.61E-05	0.000213
VEGFA	6p21.1	0.209684	3.61E-05	0.000213
TAP2	6p21.32	0.209627	3.63E-05	0.000214
SEMA7A	15q24.1	-0.20961	3.64E-05	0.000214
MMP16	8q21.3	-0.20959	3.64E-05	0.000215
SF1	11q13.1	0.209579	3.65E-05	0.000215
NUP93	16q13	0.209559	3.65E-05	0.000215
PDCD4-AS1	10q25.2	-0.20955	3.66E-05	0.000215
RPL23AP64	11q23.3	0.209538	3.66E-05	0.000215
ERGIC3	20q11.22	-0.20952	3.67E-05	0.000216
GDF6	8q22.1	-0.2095	3.67E-05	0.000216
ARL9	4q12	-0.2095	3.67E-05	0.000216
POU6F1	12q13.13	-0.20948	3.68E-05	0.000216
ANKK1	11q23.2	-0.20943	3.70E-05	0.000217
AK5	1p31.1	-0.20942	3.70E-05	0.000217
HCG4	6p22.1	-0.20939	3.71E-05	0.000218
SRGN	10q22.1	-0.20939	3.71E-05	0.000218
TMEM9B	11p15.4	-0.20938	3.71E-05	0.000218
SCLY	2q37.3	0.209371	3.72E-05	0.000218
SYNCRIP	6q14.3	0.2093	3.74E-05	0.000219
ANKHD1	5q31.3	0.209292	3.74E-05	0.000219
SUGT1P1	9p13.3	-0.20929	3.74E-05	0.000219
RPL36A	Xq22.1	0.209291	3.74E-05	0.000219
CERK	22q13.31	-0.20928	3.74E-05	0.000219

PDE6B	4p16.3	-0.20921	3.77E-05	0.000221
CPN1	10q24.2	-0.20916	3.79E-05	0.000222
SLC37A1	21q22.3	0.209152	3.79E-05	0.000222
DNAAF5	7p22.3	0.209132	3.79E-05	0.000222
REEP4	8p21.3	0.209062	3.82E-05	0.000223
PGM2L1	11q13.4	-0.20904	3.83E-05	0.000224
PCP4	21q22.2	-0.20901	3.84E-05	0.000224
BCHE	3q26.1	-0.20899	3.84E-05	0.000224
KRT40	17q21.2	-0.20898	3.84E-05	0.000225
SRP14	15q15.1	-0.20897	3.85E-05	0.000225
SUPT16H	14q11.2	0.208931	3.86E-05	0.000225
TRPM6	9q21.13	-0.20893	3.86E-05	0.000225
SPTAN1	9q34.11	0.208831	3.89E-05	0.000227
DNAJB6	7q36.3	-0.2088	3.90E-05	0.000228
ELL2	5q15	-0.20875	3.92E-05	0.000229
NIPSNAP2	7p11.2	-0.20874	3.93E-05	0.000229
FAM160A2	11p15.4	0.208722	3.93E-05	0.000229
HLA-DQA1	6p21.32	-0.20863	3.96E-05	0.000231
ASB14	3p14.3	0.208627	3.96E-05	0.000231
DPY19L4	8q22.1	-0.20858	3.98E-05	0.000232
CHPT1	12q23.2	-0.20849	4.01E-05	0.000234
ETFBKMT	12p11.21	-0.20835	4.06E-05	0.000236
TENM1	Xq25	-0.20832	4.07E-05	0.000237
SH2D3A	19p13.3	0.208307	4.08E-05	0.000237
SNX2	5q23.2	-0.20829	4.08E-05	0.000237
PTCHD4	6p12.3	-0.20828	4.08E-05	0.000237
MPV17	2p23.3	-0.20828	4.09E-05	0.000237
ISCA1	9q21.33	-0.20828	4.09E-05	0.000237
DDX43	6q13	-0.20827	4.09E-05	0.000238
GRAP	17p11.2	-0.20823	4.10E-05	0.000238
SERPINA5	14q32.13	-0.20823	4.11E-05	0.000238
PDCD4	10q25.2	-0.20821	4.11E-05	0.000239
FPGS	9q34.11	0.208193	4.12E-05	0.000239
DCSTAMP	8q22.3	-0.20818	4.12E-05	0.000239
MICAL1	6q21	0.20817	4.13E-05	0.000239
BZW1	2q33.1	-0.20816	4.13E-05	0.000239
P2RX7	12q24.31	-0.20815	4.13E-05	0.000239
SLFN11	17q12	-0.20814	4.14E-05	0.00024
SVBP	1p34.2	-0.20809	4.15E-05	0.000241
MYO5A	15q21.2	-0.20809	4.16E-05	0.000241
PIH1D1	19q13.33	0.208081	4.16E-05	0.000241
ECSCR	5q31.2	-0.20798	4.19E-05	0.000243
SAMD4B	19q13.2	0.207972	4.20E-05	0.000243
COMMD9	11p13	-0.20796	4.20E-05	0.000243
RPL23AP32	2p16.2	-0.20793	4.21E-05	0.000244
C4A	6p21.33	-0.20789	4.23E-05	0.000244
AQP2	12q13.12	0.207891	4.23E-05	0.000244
TCEAL6	Xq22.1	-0.20786	4.24E-05	0.000245
ARHGEF6	Xq26.3	-0.20786	4.24E-05	0.000245
NAA30	14q22.3	-0.20784	4.25E-05	0.000245
BCAT1	12p12.1	-0.2078	4.26E-05	0.000246
TRMT2A	22q11.21	0.207795	4.26E-05	0.000246
TET3	2p13.1	0.207791	4.26E-05	0.000246
ANKS1B	12q23.1	-0.20777	4.27E-05	0.000246
JHY	11q24.1	-0.20776	4.28E-05	0.000247
SERPINA4	14q32.13	-0.20775	4.28E-05	0.000247
HIST1H2AG	6p22.1	0.207728	4.29E-05	0.000247
WWP2	16q22.1	0.207727	4.29E-05	0.000247

PHYH	10p13	-0.20762	4.33E-05	0.000249
NTAN1	16p13.11	-0.20761	4.33E-05	0.000249
MARS	12q13.3	0.207594	4.34E-05	0.00025
MRGPRF	11q13.3	-0.20756	4.35E-05	0.00025
CD48	1q23.3	-0.20754	4.36E-05	0.000251
RNF182	6p23	-0.20748	4.38E-05	0.000252
UBE2E3	2q31.3	-0.20747	4.38E-05	0.000252
ANOS1	Xp22.31	-0.20747	4.38E-05	0.000252
ELF5	11p13	-0.2074	4.41E-05	0.000254
PAK3	Xq23	-0.20738	4.42E-05	0.000254
RAD52	12p13.33	0.20734	4.43E-05	0.000255
LDB3	10q23.2	-0.20734	4.44E-05	0.000255
MYL5	4p16.3	0.207326	4.44E-05	0.000255
RTN4RL1	17p13.3	-0.20732	4.44E-05	0.000255
IKBKE	1q32.1	0.207308	4.45E-05	0.000255
APOC1	19q13.32	-0.2072	4.49E-05	0.000257
PPP1R16A	8q24.3	0.207161	4.50E-05	0.000258
C1QTNF3	5p13.2	-0.20713	4.52E-05	0.000259
MSH6	2p16.3	0.207065	4.54E-05	0.00026
VPS9D1	16q24.3	0.207048	4.55E-05	0.00026
GIMAP2	7q36.1	-0.20702	4.56E-05	0.000261
SPINK1	5q32	-0.20698	4.57E-05	0.000262
SLC38A6	14q23.1	-0.20696	4.58E-05	0.000262
TTLL12	22q13.2	0.20695	4.59E-05	0.000262
NPAS3	14q13.1	-0.20686	4.62E-05	0.000264
MEIS1	2p14	-0.20685	4.63E-05	0.000264
CAPN10	2q37.3	0.206846	4.63E-05	0.000264
PBX1	1q23.3	-0.20685	4.63E-05	0.000264
SFXN2	10q24.32	0.206839	4.63E-05	0.000265
ZBED4	22q13.33	0.206809	4.64E-05	0.000265
SORBS2	4q35.1	-0.20678	4.66E-05	0.000266
PLPP4	10q26.12	-0.20674	4.67E-05	0.000267
SLC29A3	10q22.1	-0.20674	4.67E-05	0.000267
SNX33	15q24.2	-0.20671	4.68E-05	0.000267
CTR9	11p15.4	-0.20667	4.70E-05	0.000268
HAUS6	9p22.1	0.206658	4.70E-05	0.000268
NEU1	6p21.33	-0.20665	4.71E-05	0.000268
SPCS2	11q13.4	-0.20664	4.71E-05	0.000268
SGTA	19p13.3	0.206633	4.71E-05	0.000269
CTSZ	20q13.32	-0.20651	4.76E-05	0.000271
BDP1	5q13.2	0.206504	4.77E-05	0.000271
MAST3	19p13.11	0.206484	4.78E-05	0.000272
SPTB	14q23.3	0.206478	4.78E-05	0.000272
EBF3	10q26.3	-0.20646	4.78E-05	0.000272
RHOJ	14q23.2	-0.20645	4.79E-05	0.000272
SLF2	10q24.31	0.206439	4.79E-05	0.000273
TAB2	6q25.1	-0.20642	4.80E-05	0.000273
HGF	7q21.11	-0.20642	4.80E-05	0.000273
CNGA1	4p12	-0.20642	4.80E-05	0.000273
UBE2M	19q13.43	0.206418	4.80E-05	0.000273
CUEDC1	17q22	-0.20639	4.81E-05	0.000273
EXTL1	1p36.11	-0.20639	4.81E-05	0.000273
FHL5	6q16.1	-0.20638	4.82E-05	0.000273
CUBN	10p13	-0.20636	4.83E-05	0.000274
ADRA2A	10q25.2	-0.20631	4.85E-05	0.000275
NME5	5q31.2	-0.2063	4.85E-05	0.000275
GTPBP2	6p21.1	0.206294	4.85E-05	0.000275
POLI	18q21.2	-0.20628	4.86E-05	0.000275

IGF2	11p15.5	-0.20622	4.88E-05	0.000277
GPR146	7p22.3	-0.20621	4.89E-05	0.000277
HIST1H2AM	6p22.1	0.206177	4.90E-05	0.000278
RPS3A	4q31.3	-0.20617	4.91E-05	0.000278
GNGT2	17q21.32	-0.20614	4.92E-05	0.000278
CAD	2p23.3	0.206137	4.92E-05	0.000278
CDS2	20p12.3	-0.20612	4.93E-05	0.000279
RGS1	1q31.2	-0.20606	4.95E-05	0.00028
CCDC3	10p13	-0.20604	4.96E-05	0.00028
LYRM9	17q11.2	-0.20602	4.97E-05	0.000281
KCTD10	12q24.11	-0.20601	4.97E-05	0.000281
HIST1H4I	6p22.1	0.206004	4.98E-05	0.000281
GPX3	5q33.1	-0.206	4.98E-05	0.000281
PRPH2	6p21.1	-0.20599	4.98E-05	0.000281
TMEM135	11q14.2	-0.20598	4.99E-05	0.000281
STX1B	16p11.2	0.205947	5.00E-05	0.000282
SF3B3	16q22.1	0.205934	5.01E-05	0.000282
MEIS3	19q13.32	-0.20589	5.03E-05	0.000283
MIGA1	1p31.1	-0.20587	5.03E-05	0.000284
SLC6A8	Xq28	0.205858	5.04E-05	0.000284
AMFR	16q13	-0.20582	5.06E-05	0.000285
PCDHGC3	5q31.3	-0.20581	5.06E-05	0.000285
GALNT16	14q24.1	-0.20579	5.07E-05	0.000285
UST	6q25.1	-0.20569	5.11E-05	0.000288
RNASE2	14q11.2	-0.20569	5.11E-05	0.000288
NUP133	1q42.13	0.205691	5.11E-05	0.000288
BLOC1S3	19q13.32	0.205669	5.12E-05	0.000288
STX7	6q23.2	-0.20563	5.14E-05	0.000289
DDX41	5q35.3	0.205629	5.14E-05	0.000289
NUDT4	12q22	-0.20558	5.16E-05	0.00029
LPAR1	9q31.3	-0.20557	5.16E-05	0.00029
PPIC	5q23.2	-0.20553	5.18E-05	0.000291
ATP8B2	1q21.3	-0.20552	5.19E-05	0.000291
MAP2K5	15q23	-0.20547	5.21E-05	0.000292
MAP1B	5q13.2	-0.20544	5.23E-05	0.000293
HIST3H2BB	1q42.13	0.205438	5.23E-05	0.000293
DMRTC1B	Xq13.1	-0.20542	5.23E-05	0.000293
YAF2	12q12	-0.20539	5.25E-05	0.000294
OLR1	12p13.2	-0.20535	5.26E-05	0.000295
TBRG4	7p13	0.205258	5.31E-05	0.000297
GINS1	20p11.21	0.20525	5.31E-05	0.000297
NME7	1q24.2	-0.20524	5.31E-05	0.000298
OR10Q1	11q12.1	0.205239	5.32E-05	0.000298
PRKRA	2q31.2	-0.20523	5.32E-05	0.000298
ANXA5	4q27	-0.20522	5.32E-05	0.000298
SCT	11p15.5	-0.20519	5.34E-05	0.000299
ZSWIM7	17p12	-0.20518	5.34E-05	0.000299
TGFB1I1	16p11.2	-0.20518	5.34E-05	0.000299
ENPP5	6p21.1	-0.20516	5.35E-05	0.000299
LRRC49	15q23	-0.20515	5.35E-05	0.000299
TGFA	2p13.3	-0.20515	5.36E-05	0.000299
L3MBTL3	6q23.1	-0.20513	5.36E-05	0.000299
MDGA2	14q21.3	-0.20512	5.37E-05	0.0003
RHBDF1	16p13.3	0.205045	5.40E-05	0.000302
P3H1	1p34.2	-0.20503	5.41E-05	0.000302
FGD5	3p25.1	-0.20493	5.46E-05	0.000304
MFSD14B	9q22.32	0.204873	5.48E-05	0.000306
KCNAB3	17p13.1	0.204833	5.50E-05	0.000307

DECR1	8q21.3	-0.20483	5.51E-05	0.000307
KCNIP1	5q35.1	-0.20481	5.52E-05	0.000307
NEK1	4q33	-0.20475	5.54E-05	0.000309
SPAG7	17p13.2	-0.20474	5.55E-05	0.000309
APLF	2p13.3	-0.20473	5.55E-05	0.000309
GBP2	1p22.2	-0.20472	5.56E-05	0.000309
SNX16	8q21.13	-0.20471	5.56E-05	0.000309
SNAP25	20p12.2	-0.20471	5.56E-05	0.000309
PRPF19	11q12.2	0.2047	5.57E-05	0.000309
HNRNPR	1p36.12	0.204684	5.57E-05	0.00031
LOC541473	7q11.23	0.204668	5.58E-05	0.00031
RNF207	1p36.31	0.204668	5.58E-05	0.00031
TRIM45	1p13.1	0.204645	5.59E-05	0.000311
GM2A	5q33.1	-0.20463	5.60E-05	0.000311
ZFP1	16q23.1	-0.20461	5.61E-05	0.000311
FBXW2	9q33.2	0.204598	5.62E-05	0.000312
CENPP	9q22.31	0.204566	5.63E-05	0.000312
ASB8	12q13.11	-0.20454	5.64E-05	0.000313
BMI1	10p12.2	-0.20449	5.67E-05	0.000314
ZNF587	19q13.43	0.20447	5.68E-05	0.000315
RANBP17	5q35.1	0.204464	5.68E-05	0.000315
SGSM3	22q13.1	0.204408	5.71E-05	0.000316
SHE	1q21.3	-0.2044	5.71E-05	0.000316
FZD5	2q33.3	0.204372	5.72E-05	0.000317
LACTB	15q22.2	-0.20433	5.74E-05	0.000318
RRP1B	21q22.3	0.204295	5.76E-05	0.000319
FTL	19q13.33	-0.20428	5.77E-05	0.000319
CYFIP2	5q33.3	-0.20426	5.78E-05	0.00032
LINC01096	4p15.33	-0.20424	5.79E-05	0.00032
DMBX1	1p33	0.204236	5.79E-05	0.00032
ATP6V0D2	8q21.3	-0.20422	5.80E-05	0.000321
UXS1	2q12.2	-0.2042	5.81E-05	0.000321
DAZAP2	12q13.13	-0.2042	5.81E-05	0.000321
NUDT8	11q13.2	0.204172	5.82E-05	0.000322
LIX1L	1q21.1	-0.20415	5.83E-05	0.000322
MRPL2	6p21.1	0.204136	5.84E-05	0.000322
CCDC102A	16q21	-0.20412	5.85E-05	0.000323
CTTN	11q13.3	0.204076	5.87E-05	0.000324
SYNC	1p35.1	-0.20407	5.87E-05	0.000324
LGI3	8p21.3	-0.20405	5.88E-05	0.000324
CLEC11A	19q13.33	-0.20404	5.89E-05	0.000325
CCND3	6p21.1	0.203994	5.91E-05	0.000326
BAIAP2L2	22q13.1	0.203968	5.93E-05	0.000326
SLC12A4	16q22.1	-0.20387	5.97E-05	0.000329
PCDHGA3	5q31.3	-0.20381	6.00E-05	0.000331
THBS1	15q14	-0.2038	6.01E-05	0.000331
HEG1	3q21.2	-0.20378	6.02E-05	0.000331
TBX1	22q11.21	-0.20378	6.02E-05	0.000331
SERTAD4-AS1	1q32.2	-0.20374	6.04E-05	0.000332
TREM2	6p21.1	-0.20369	6.07E-05	0.000334
MILR1	17q23.3	-0.20368	6.07E-05	0.000334
PDE3A	12p12.2	-0.20368	6.07E-05	0.000334
KCNJ5	11q24.3	-0.20366	6.08E-05	0.000334
GBGT1	9q34.2	-0.20366	6.08E-05	0.000334
VAMP1	12p13.31	0.203655	6.09E-05	0.000334
DSTN	20p12.1	-0.20363	6.10E-05	0.000335
	1-Dec 9q33.1	-0.20361	6.11E-05	0.000335
TBC1D29P	17q11.2	0.203574	6.13E-05	0.000336

PPP3CB	10q22.2	-0.20355	6.14E-05	0.000337
SETD4	21q22.12	0.203535	6.15E-05	0.000337
TDRD9	14q32.33	-0.20352	6.15E-05	0.000337
LOC283922	16q23.1	0.203457	6.19E-05	0.000339
WDR73	15q25.2	0.203431	6.20E-05	0.00034
FARSA	19p13.13	0.203373	6.23E-05	0.000341
ZNF721	4p16.3	0.203372	6.23E-05	0.000341
LOX	5q23.1	-0.20328	6.28E-05	0.000344
CALML6	1p36.33	0.203277	6.28E-05	0.000344
SNORA71E	20q11.23	0.203255	6.30E-05	0.000344
NAP1L6	Xq13.2	-0.20325	6.30E-05	0.000344
ARCN1	11q23.3	-0.20324	6.31E-05	0.000345
FAM177A1	14q13.2	-0.20322	6.32E-05	0.000345
LRRK2	12q12	-0.20318	6.34E-05	0.000346
HLA-DRB6	6p21.32	-0.20318	6.34E-05	0.000346
FCAMR	1q32.1	0.203143	6.36E-05	0.000347
CCDC122	13q14.11	-0.20313	6.36E-05	0.000347
EGFL8	6p21.32	0.20313	6.36E-05	0.000347
THTPA	14q11.2	-0.20311	6.38E-05	0.000348
MMS19	10q24.1	0.203095	6.38E-05	0.000348
LRRC73	6p21.1	0.203078	6.39E-05	0.000349
GABRG2	5q34	-0.20307	6.40E-05	0.000349
ZBED1	Xp22.33 and Yp11.2	-0.20304	6.41E-05	0.00035
FBXL2	3p22.3	-0.20302	6.42E-05	0.00035
HAS2	8q24.13	-0.20296	6.45E-05	0.000352
TOR3A	1q25.2	0.202954	6.46E-05	0.000352
CD86	3q13.33	-0.20295	6.46E-05	0.000352
SF3A2	19p13.3	0.202919	6.48E-05	0.000353
MT1F	16q13	-0.20286	6.51E-05	0.000354
CAPN6	Xq23	-0.20279	6.55E-05	0.000356
ERICH5	8q22.2	-0.2027	6.60E-05	0.000359
STMP1	7q33	-0.20267	6.62E-05	0.00036
IGBP1	Xq13.1	-0.20265	6.63E-05	0.00036
CFHR1	1q31.3	-0.20262	6.64E-05	0.000361
PTCRA	6p21.1	-0.20259	6.66E-05	0.000362
DCAF12L2	Xq25	-0.20258	6.67E-05	0.000362
CLEC9A	12p13.2	-0.20256	6.68E-05	0.000363
EYA1	8q13.3	-0.20248	6.72E-05	0.000365
TAS2R4	7q34	0.202477	6.73E-05	0.000365
RAMAC	15q25.2	-0.20247	6.73E-05	0.000365
AXIN1	16p13.3	0.20234	6.80E-05	0.000369
POM121	7q11.23	0.202266	6.85E-05	0.000371
SYNGR4	19q13.33	0.202241	6.86E-05	0.000372
CD1A	1q23.1	-0.20222	6.87E-05	0.000373
MAP1LC3B2	12q24.22	-0.20222	6.88E-05	0.000373
CTF1	16p11.2	-0.20221	6.88E-05	0.000373
LTO1	11q13.3	0.202198	6.89E-05	0.000373
TGFB1	19q13.2	-0.20218	6.90E-05	0.000373
UROD	1p34.1	-0.20217	6.90E-05	0.000374
MBNL1	3q25.1-q25.2	-0.20212	6.93E-05	0.000375
HIST1H2BM	6p22.1	0.202091	6.95E-05	0.000376
HOXB6	17q21.32	0.202081	6.96E-05	0.000376
LRCH4	7q22.1	0.202046	6.98E-05	0.000377
TRIM7	5q35.3	0.202044	6.98E-05	0.000377
DAAM2	6p21.2	-0.20204	6.98E-05	0.000377
TP73-AS1	1p36.32	-0.202	7.01E-05	0.000378
TREH	11q23.3	-0.20194	7.04E-05	0.00038
DAND5	19p13.13	0.201938	7.04E-05	0.00038

PDZRN3	3p13	-0.20194	7.04E-05	0.00038
TTLL10	1p36.33	0.201906	7.06E-05	0.000381
RXRG	1q23.3	-0.20187	7.08E-05	0.000382
MYBL1	8q13.1	0.201852	7.09E-05	0.000382
DOCK4	7q31.1	-0.20177	7.14E-05	0.000385
NDST3	4q26	-0.20173	7.16E-05	0.000386
SMIM19	8p11.21	-0.20173	7.16E-05	0.000386
IGFL2	19q13.32	-0.20162	7.23E-05	0.000389
MED28	4p15.32	-0.20161	7.24E-05	0.00039
SETD6	16q21	0.201544	7.28E-05	0.000392
SRRM5	19q13.31	0.201544	7.28E-05	0.000392
DTX2P1-UPK3BP1-PMS2P11	7q11.23	0.201535	7.28E-05	0.000392
AMPH	7p14.1	-0.20152	7.29E-05	0.000392
TSHZ2	20q13.2	-0.20151	7.30E-05	0.000393
CHML	1q43	0.201468	7.32E-05	0.000394
CXCL3	4q13.3	0.20146	7.33E-05	0.000394
PIRT	17p12	-0.20146	7.33E-05	0.000394
SHISAL2A	1p32.3	-0.20145	7.34E-05	0.000394
EHD3	2p23.1	-0.20143	7.35E-05	0.000395
XRCC1	19q13.31	0.201394	7.37E-05	0.000396
TBC1D15	12q21.1	-0.20139	7.37E-05	0.000396
BMP6	6p24.3	-0.20139	7.37E-05	0.000396
ZSCAN21	7q22.1	-0.20139	7.37E-05	0.000396
EXTL2	1p21.2	-0.20134	7.40E-05	0.000397
PAXBP1	21q22.11	0.201258	7.46E-05	0.0004
LIN54	4q21.22	0.201258	7.46E-05	0.0004
WDR70	5p13.2	-0.20125	7.46E-05	0.0004
NUP85	17q25.1	0.201218	7.48E-05	0.000401
OPRL1	20q13.33	-0.20121	7.48E-05	0.000401
CCN4	8q24.22	-0.20115	7.52E-05	0.000403
STK32A	5q32	-0.2011	7.55E-05	0.000404
ACTL8	1p36.13	0.201083	7.57E-05	0.000405
PJA1	Xq13.1	-0.20108	7.57E-05	0.000405
MSN	Xq12	-0.20106	7.58E-05	0.000405
UBR4	1p36.13	0.201061	7.58E-05	0.000405
CENPBD1	16q24.3	-0.20104	7.60E-05	0.000406
FRS2	12q15	-0.20101	7.61E-05	0.000407
ZFR2	19p13.3	-0.20099	7.62E-05	0.000407
TMEFF2	2q32.3	-0.20099	7.63E-05	0.000408
CMYA5	5q14.1	-0.20098	7.63E-05	0.000408
TMEM80	11p15.5	0.200915	7.67E-05	0.00041
RFX1	19p13.12	0.200846	7.72E-05	0.000412
SPTA1	1q23.1	-0.20082	7.74E-05	0.000413
FAM20C	7p22.3	-0.20079	7.76E-05	0.000414
DHX30	3p21.31	0.200771	7.77E-05	0.000414
SLC35F1	6q22.2-q22.31	-0.20066	7.84E-05	0.000418
FCGR1A	1q21.2	-0.20065	7.84E-05	0.000418
SV2A	1q21.2	-0.20064	7.85E-05	0.000418
CLIC6	21q22.12	-0.20057	7.90E-05	0.000421
LOC391322	22q11.23	0.200554	7.91E-05	0.000421
CHPF	2q35	-0.20055	7.91E-05	0.000422
MMRN2	10q23.2	-0.20053	7.92E-05	0.000422
KCNA5	12p13.32	-0.20046	7.98E-05	0.000425
PHLPP2	16q22.2	0.200423	8.00E-05	0.000426
MGAT1	5q35.3	-0.2004	8.01E-05	0.000426
REEP1	2p11.2	-0.20031	8.07E-05	0.00043
TRIM15	6p22.1	0.200304	8.08E-05	0.00043
RAB7A	3q21.3	-0.2003	8.08E-05	0.00043



ANAPC7	12q24.11	0.200293	8.08E-05	0.00043
PSME4	2p16.2	0.200196	8.15E-05	0.000433
ARMCX3	Xq22.1	-0.20017	8.17E-05	0.000434
MPHOSPH9	12q24.31	0.200098	8.22E-05	0.000436
BTN2A3P	6p22.2	0.200053	8.25E-05	0.000438
CNEP1R1	16q12.1	-0.20005	8.25E-05	0.000438
H3F3B	17q25.1	-0.20005	8.25E-05	0.000438
A1BG	19q13.43	-0.20003	8.26E-05	0.000438
C11ORF71	11q23.2	-0.20001	8.28E-05	0.000439
IQGAP2	5q13.3	0.199987	8.29E-05	0.00044
HCST	19q13.12	-0.19998	8.30E-05	0.00044
AIP	11q13.2	-0.19997	8.31E-05	0.00044
WDR47	1p13.3	-0.19992	8.34E-05	0.000442
MAGEL2	15q11.2	-0.1999	8.35E-05	0.000442
UPK3BL1	7q22.1	0.199883	8.37E-05	0.000443
DAZL	3p24.3	-0.19987	8.38E-05	0.000443
TLR9	3p21.2	-0.19986	8.38E-05	0.000444
ADORA3	1p13.2	-0.19985	8.39E-05	0.000444
PCDHA2	5q31.3	-0.19984	8.39E-05	0.000444
TTC25	17q21.2	-0.19984	8.40E-05	0.000444
TMEM163	2q21.3	-0.19981	8.42E-05	0.000445
TCIRG1	11q13.2	0.199629	8.55E-05	0.000452
TSPAN33	7q32.1	-0.19956	8.59E-05	0.000454
SELP	1q24.2	-0.19954	8.61E-05	0.000455
EML2	19q13.32	0.199516	8.63E-05	0.000456
GDF5	20q11.22	-0.19951	8.63E-05	0.000456
ZNF804A	2q32.1	-0.1995	8.64E-05	0.000456
PTH1R	3p21.31	-0.19948	8.65E-05	0.000457
MRPS25	3p25.1	0.199472	8.66E-05	0.000457
RALYL	8q21.2	-0.19947	8.66E-05	0.000457
PDGFRB	5q32	-0.19946	8.66E-05	0.000457
SEMA4D	9q22.2	0.199461	8.67E-05	0.000457
IMPG1	6q14.1	0.199449	8.68E-05	0.000457
WRAP73	1p36.32	0.199446	8.68E-05	0.000457
FAT3	11q14.3	-0.19943	8.69E-05	0.000458
UNC80	2q34	-0.19943	8.69E-05	0.000458
PLEKHA7	11p15.2-p15.1	0.19941	8.70E-05	0.000458
PPCS	1p34.2	-0.1994	8.71E-05	0.000458
ZNF420	19q13.12	-0.19937	8.73E-05	0.00046
KCTD8	4p13	-0.19928	8.80E-05	0.000463
POSTN	13q13.3	-0.19927	8.81E-05	0.000463
GART	21q22.11	0.199255	8.82E-05	0.000464
ITCH	20q11.22	-0.19921	8.85E-05	0.000465
CMC2	16q23.2	0.199162	8.89E-05	0.000467
SHC4	15q21.1	-0.19916	8.89E-05	0.000467
PROB1	5q31.2	0.19913	8.91E-05	0.000468
LOC441666	10q11.21	-0.19911	8.92E-05	0.000468
FAM166A	9q34.3	0.199112	8.92E-05	0.000468
TXNDC2	18p11.22	-0.19911	8.92E-05	0.000468
LATS2	13q12.11	-0.1991	8.93E-05	0.000469
CD302	2q24.2	-0.1991	8.93E-05	0.000469
ZSCAN26	6p22.1	-0.19909	8.94E-05	0.000469
FGFR1OP2	12p11.23	-0.19909	8.94E-05	0.000469
GRIA4	11q22.3	-0.19908	8.95E-05	0.000469
PSMB4	1q21.3	0.199076	8.95E-05	0.000469
CMAHP	6p22.3	-0.19907	8.96E-05	0.000469
TNFRSF9	1p36.23	-0.199	9.00E-05	0.000472
TNFSF8	9q32-q33.1	-0.19897	9.03E-05	0.000473

GNAL	18p11.21	-0.19896	9.04E-05	0.000473
MCM3AP	21q22.3	0.198956	9.04E-05	0.000473
ATP10A	15q12	-0.19892	9.06E-05	0.000474
GATM	15q21.1	-0.19886	9.11E-05	0.000476
PRR16	5q23.1	-0.19886	9.11E-05	0.000476
COMMD7	20q11.21	-0.19885	9.12E-05	0.000477
PSD3	8p22	-0.19883	9.13E-05	0.000477
CCNL1	3q25.31	0.198818	9.14E-05	0.000478
DNAAF3	19q13.42	0.198816	9.15E-05	0.000478
TSKU	11q13.5	-0.19877	9.18E-05	0.000479
CXCL14	5q31.1	-0.19877	9.18E-05	0.000479
SSC5D	19q13.42	-0.19873	9.21E-05	0.000481
PGM1	1p31.3	-0.19873	9.21E-05	0.000481
ZNF655	7q22.1	-0.19872	9.22E-05	0.000481
INHBA	7p14.1	-0.1987	9.23E-05	0.000482
MID2	Xq22.3	-0.1987	9.23E-05	0.000482
CTSA	20q13.12	-0.1987	9.24E-05	0.000482
REXO4	9q34.2	0.198648	9.27E-05	0.000483
S100B	21q22.3	-0.19862	9.29E-05	0.000484
GZMB	14q12	-0.19861	9.30E-05	0.000484
C1ORF220	1q25.2	0.198609	9.30E-05	0.000484
NDUFA7	19p13.2	0.198538	9.36E-05	0.000487
RETREG1	5p15.1	-0.1985	9.39E-05	0.000489
DCP1B	12p13.33	-0.19849	9.39E-05	0.000489
OTUD1	10p12.2	-0.19846	9.42E-05	0.00049
LSP1	11p15.5	-0.19843	9.45E-05	0.000491
BET1	7q21.3	-0.19841	9.46E-05	0.000492
CALML3	10p15.1	-0.1984	9.47E-05	0.000492
TFPI	2q32.1	-0.19839	9.47E-05	0.000492
CETN4P	4q27	-0.19839	9.48E-05	0.000492
CACNA2D3	3p21.1-p14.3	-0.19835	9.50E-05	0.000494
ATP5F1EP2	13q12.2	-0.19834	9.52E-05	0.000494
EPS15L1	19p13.11	0.198333	9.52E-05	0.000494
CCL17	16q21	-0.19833	9.52E-05	0.000494
IL23A	12q13.3	-0.19832	9.53E-05	0.000495
SNHG15	7p13	0.198313	9.54E-05	0.000495
FCGR1B	1p11.2	-0.19826	9.58E-05	0.000497
CD53	1p13.3	-0.19824	9.59E-05	0.000497
ACTR3C	7q36.1	-0.19818	9.64E-05	0.0005
LUC7L2	7q34	0.198163	9.66E-05	0.0005
DDX19B	16q22.1	-0.19815	9.67E-05	0.000501
PGF	14q24.3	-0.19812	9.69E-05	0.000502
MAST2	1p34.1	0.198122	9.69E-05	0.000502
NFASC	1q32.1	-0.1981	9.70E-05	0.000502
ADGRL2	1p31.1	-0.1981	9.70E-05	0.000502
TCN2	22q12.2	-0.1981	9.71E-05	0.000502
GAL3ST4	7q22.1	-0.19807	9.73E-05	0.000503
ZBTB16	11q23.2	-0.19803	9.76E-05	0.000505
LYPD8	1q44	-0.19802	9.77E-05	0.000505
PHF24	9p13.3	-0.19801	9.78E-05	0.000505
LTB	6p21.33	-0.19799	9.80E-05	0.000506
SLC40A1	2q32.2	-0.19798	9.80E-05	0.000506
PID1	2q36.3	-0.19798	9.81E-05	0.000506
ENTPD1	10q24.1	-0.19797	9.81E-05	0.000507
TUBA3E	2q21.1	0.197923	9.85E-05	0.000508
PGGHG	11p15.5	0.197911	9.86E-05	0.000509
RBM8A	1q21.1	0.1979	9.87E-05	0.000509
C8ORF31	8q24.3	-0.19789	9.88E-05	0.00051

SOX5	12p12.1	-0.19788	9.88E-05	0.00051
C6ORF15	6p21.33	-0.19787	9.89E-05	0.00051
ZNF589	3p21.31	0.197867	9.89E-05	0.00051
GRIN1	9q34.3	0.197837	9.92E-05	0.000511
HIF3A	19q13.32	-0.1978	9.95E-05	0.000512
SELENOK	3p21.1	-0.1978	9.95E-05	0.000512
CENPU	4q35.1	0.197783	9.96E-05	0.000513
HAVCR2	5q33.3	-0.19776	9.98E-05	0.000514
SLC6A10P	16p11.2	0.197756	9.99E-05	0.000514
ZNF532	18q21.32	-0.19772	0.0001	0.000515
CC2D2A	4p15.32	-0.19767	0.000101	0.000517
MRPS34	16p13.3	0.197668	0.000101	0.000517
NFE2L2	2q31.2	-0.19766	0.000101	0.000517
B3GALNT2	1q42.3	0.197608	0.000101	0.000519
CCDC152	5p12	-0.19759	0.000101	0.00052
RNF146	6q22.33	-0.19757	0.000101	0.000521
SRSF3	6p21.31-p21.2	0.197564	0.000101	0.000521
LOC100240735	12q13.13	-0.19756	0.000101	0.000521
PCDHGA4	5q31.3	-0.19753	0.000102	0.000522
GBE1	3p12.2	-0.19747	0.000102	0.000525
SERTAD1	19q13.2	-0.19746	0.000102	0.000525
DNAJC4	11q13.1	-0.19746	0.000102	0.000525
SLC25A42	19p13.11	-0.19745	0.000102	0.000525
FAT4	4q28.1	-0.19743	0.000103	0.000526
ATXN1	6p22.3	-0.19739	0.000103	0.000527
EXOSC9	4q27	0.197388	0.000103	0.000527
KIF1A	2q37.3	-0.19739	0.000103	0.000527
COLEC12	18p11.32	-0.19736	0.000103	0.000528
STIM1	11p15.4	-0.19734	0.000103	0.000529
STK17A	7p13	-0.19728	0.000104	0.000532
SYT1	12q21.2	-0.19722	0.000104	0.000534
TNFRSF1A	12p13.31	-0.19721	0.000105	0.000535
AFMID	17q25.3	-0.1972	0.000105	0.000535
C12ORF42	12q23.2-q23.3	-0.19719	0.000105	0.000535
TTYH2	17q25.1	-0.19719	0.000105	0.000535
MARK1	1q41	-0.19718	0.000105	0.000535
SLC26A7	8q21.3	-0.19718	0.000105	0.000535
EMP2	16p13.13	0.19718	0.000105	0.000535
TMEM263	12q23.3	-0.19718	0.000105	0.000535
FRMD4A	10p13	-0.19709	0.000106	0.000539
SUPV3L1	10q22.1	0.197054	0.000106	0.00054
SYNDIG1L	14q24.3	-0.19702	0.000106	0.000541
RNFT2	12q24.22	0.196997	0.000106	0.000542
ZBTB47	3p22.1	-0.19697	0.000107	0.000543
CRIM1	2p22.2	-0.19691	0.000107	0.000546
NKX3-1	8p21.2	-0.19689	0.000107	0.000547
LOC399815	10q26.13	0.196849	0.000108	0.000548
PIGO	9p13.3	0.196805	0.000108	0.00055
FHL3	1p34.3	-0.19677	0.000108	0.000552
PDIA6	2p25.1	-0.19676	0.000108	0.000552
GALNT11	7q36.1 7q36.1	-0.19675	0.000109	0.000552
EXOSC3	9p13.2	0.196699	0.000109	0.000555
CPSF7	11q12.2	0.196666	0.000109	0.000556
PPOX	1q23.3	0.196628	0.00011	0.000558
LINC00889	Xq26.3	-0.19661	0.00011	0.000558
SIAH3	13q14.13	-0.19658	0.00011	0.000559
PDXK	21q22.3	0.19654	0.00011	0.000561
XAB2	19p13.2	0.196524	0.000111	0.000562

TNS3	7p12.3	-0.19651	0.000111	0.000562
TMEM51-AS1	1p36.21	0.196501	0.000111	0.000563
CHMP1B	18p11.21	-0.19649	0.000111	0.000563
C5	9q33.2	0.196474	0.000111	0.000563
ETV4	17q21.31	0.196468	0.000111	0.000564
TCF21	6q23.2	-0.19646	0.000111	0.000564
RYK	3q22.2	-0.19645	0.000111	0.000564
SNORA31	13q14.13	0.196414	0.000112	0.000566
ENPP1	6q23.2	-0.19638	0.000112	0.000567
C1ORF140	1q41	-0.19632	0.000112	0.00057
GNA11	19p13.3	0.196295	0.000113	0.000571
C20ORF144	20q11.22	0.196289	0.000113	0.000571
APBB2	4p14-p13	-0.19628	0.000113	0.000571
CD72	9p13.3	-0.19627	0.000113	0.000572
MANBA	4q24	-0.19626	0.000113	0.000572
MYOC	1q24.3	-0.19624	0.000113	0.000573
ARRDC3-AS1	5q14.3	0.196229	0.000113	0.000573
ITGB5	3q21.2	-0.19622	0.000113	0.000573
ATXN2	12q24.12	0.196214	0.000113	0.000573
COLEC11	2p25.3	-0.19621	0.000113	0.000574
GPR160	3q26.2	-0.19618	0.000114	0.000575
LUZP2	11p14.3	-0.19616	0.000114	0.000575
SPATA12	3p14.3	-0.19616	0.000114	0.000576
SMAD4	18q21.2	-0.19615	0.000114	0.000576
DNAJB14	4q23	-0.1961	0.000114	0.000578
UNC13B	9p13.3	0.196063	0.000115	0.00058
MFAP3	5q33.2	-0.19602	0.000115	0.000582
THBD	20p11.21	-0.19598	0.000116	0.000583
ATXN7	3p14.1	0.195971	0.000116	0.000584
ADD1	4p16.3	-0.19595	0.000116	0.000585
SARDH	9q34.2	-0.19592	0.000116	0.000586
HOXA2	7p15.2	0.19591	0.000116	0.000586
ATG4D	19p13.2	0.195909	0.000116	0.000586
KIT	4q12	-0.19589	0.000116	0.000587
ZNF561	19p13.2	-0.19585	0.000117	0.000588
GPR87	3q25.1	-0.19584	0.000117	0.000589
ANGPTL2	9q33.3	-0.19583	0.000117	0.000589
TUFM	16p11.2	0.195796	0.000117	0.000591
TP53BP2	1q41	0.195788	0.000117	0.000591
LRMDA	10q22.2-q22.3	-0.19578	0.000117	0.000591
SREK1	5q12.3	0.195748	0.000118	0.000592
TLL1	4q32.3	-0.19573	0.000118	0.000593
CDIP1	16p13.3	-0.19573	0.000118	0.000593
LINC00908	18q23	-0.1957	0.000118	0.000594
CLEC16A	16p13.13	0.195694	0.000118	0.000594
SLC38A2	12q13.11	-0.19569	0.000118	0.000594
IGSF9	1q23.2	0.195667	0.000119	0.000596
CCDC142	2p13.1	0.195649	0.000119	0.000596
CCDC61	19q13.32	0.195646	0.000119	0.000596
SLC28A3	9q21.32-q21.33	0.195637	0.000119	0.000597
CGB5	19q13.33	-0.19563	0.000119	0.000597
LILRA2	19q13.42	-0.1956	0.000119	0.000598
SPCS2P4	1p35.3	-0.19559	0.000119	0.000599
RWDD3	1p21.3	-0.19555	0.00012	0.0006
PTX3	3q25.32	-0.19552	0.00012	0.000602
MVK	12q24.11	0.195496	0.00012	0.000603
RIMS1	6q13	-0.19549	0.00012	0.000603
JAK1	1p31.3	-0.19546	0.000121	0.000604

SCG2	2q36.1	-0.19544	0.000121	0.000605
C2CD3	11q13.4	0.195425	0.000121	0.000605
ZNF569	19q13.12	-0.19542	0.000121	0.000605
TRRAP	7q22.1	0.195418	0.000121	0.000605
SIPA1L3	19q13.13-q13.2	0.195417	0.000121	0.000605
PRTG	15q21.3	-0.19539	0.000121	0.000606
FNDC3B	3q26.31	-0.19539	0.000121	0.000606
SIRPA	20p13	-0.19537	0.000121	0.000607
ARHGAP27	17q21.31	0.195366	0.000122	0.000607
ZNF564	19p13.2	-0.19536	0.000122	0.000608
GRAMD1C	3q13.31	-0.19532	0.000122	0.000609
MAGT1	Xq21.1	-0.19532	0.000122	0.000609
BTBD11	12q23.3	-0.19529	0.000122	0.000611
GLIS2	16p13.3	-0.19528	0.000122	0.000611
HNRNPUL1	19q13.2	0.195234	0.000123	0.000613
MTMR6	13q12.13	-0.19522	0.000123	0.000613
ATG7	3p25.3	-0.1952	0.000123	0.000614
ADCYAP1R1	7p14.3	-0.19519	0.000123	0.000615
NIBAN1	1q25.3	-0.19519	0.000123	0.000615
DMD	Xp21.2-p21.1	-0.19509	0.000124	0.000619
IQSEC1	3p25.2-p25.1	-0.19509	0.000124	0.000619
SPATA46	1q23.3	0.195087	0.000124	0.000619
PDE5A	4q26	-0.19507	0.000125	0.00062
MOCOS	18q12.2	0.195023	0.000125	0.000622
RPUSD1	16p13.3	0.19502	0.000125	0.000622
RPL23AP7	2q14.1	-0.195	0.000125	0.000623
NUP98	11p15.4	0.194978	0.000125	0.000624
SLC27A4	9q34.11	0.19497	0.000126	0.000624
IL12B	5q33.3	-0.19496	0.000126	0.000625
RAB9A	Xp22.2	-0.19495	0.000126	0.000625
TIGD7	16p13.3	-0.19494	0.000126	0.000625
DLC1	8p22	-0.19494	0.000126	0.000626
SNX21	20q13.12	-0.19492	0.000126	0.000626
C1ORF21	1q25.3	0.194909	0.000126	0.000627
VPS52	6p21.32	0.194856	0.000127	0.000629
CCDC178	18q12.1	-0.19483	0.000127	0.00063
GPSM3	6p21.32	-0.19483	0.000127	0.00063
GTF2A1L	2p16.3	-0.19478	0.000127	0.000632
UBE2D1	10q21.1	-0.19476	0.000128	0.000634
CYLD	16q12.1	-0.19475	0.000128	0.000634
LINC00662	19q11	-0.19475	0.000128	0.000634
ZNF208	19p12	-0.19473	0.000128	0.000634
TMEM87A	15q15.1	-0.19472	0.000128	0.000635
FERMT3	11q13.1	-0.19471	0.000128	0.000635
CHST11	12q23.3	-0.19468	0.000129	0.000637
DDN	12q13.12	0.194666	0.000129	0.000637
TSPAN4	11p15.5	-0.19466	0.000129	0.000637
RBM19	12q24.13-q24.21	0.194655	0.000129	0.000637
COX8A	11q13.1	0.194616	0.000129	0.000639
TBC1D32	6q22.31	-0.19461	0.000129	0.000639
SYNE1	6q25.2	-0.19459	0.000129	0.00064
FCER1G	1q23.3	-0.19453	0.00013	0.000643
ADH1B	4q23	-0.19442	0.000131	0.000649
VSIR	10q22.1	-0.19441	0.000131	0.000649
TMEM26	10q21.2	-0.19441	0.000131	0.000649
S100A14	1q21.3	0.194394	0.000132	0.00065
FAAP100	17q25.3	0.194392	0.000132	0.00065
SMARCD3	7q36.1	-0.19436	0.000132	0.000651

SORL1	11q24.1	-0.19433	0.000132	0.000653
FAM118A	22q13.31	0.194326	0.000132	0.000653
ADAMTS5	21q21.3	-0.19431	0.000132	0.000653
SPATA5L1	15q21.1	0.194275	0.000133	0.000655
GMEB2	20q13.33	0.194224	0.000133	0.000658
ZNF425	7q36.1	-0.19421	0.000134	0.000658
YAP1	11q22.1	-0.19421	0.000134	0.000658
GALNT15	3p25.1	-0.19416	0.000134	0.000661
MMP2	16q12.2	-0.19412	0.000135	0.000662
EMP1	12p13.1	-0.19412	0.000135	0.000662
RHOB	2p24.1	-0.19411	0.000135	0.000663
GPR88	1p21.2	-0.1941	0.000135	0.000663
SREBF2	22q13.2	0.194101	0.000135	0.000663
PHF23	17p13.1	-0.19407	0.000135	0.000665
LXN	3q25.32	-0.19403	0.000136	0.000666
KMT2D	12q13.12	0.194012	0.000136	0.000667
BEX2	Xq22.2	-0.19395	0.000136	0.000671
DNAJC5B	8q13.1	-0.19392	0.000137	0.000672
ZNF135	19q13.43	-0.19388	0.000137	0.000674
TMEM101	17q21.31	-0.19384	0.000138	0.000676
PCGF5	10q23.32	-0.19384	0.000138	0.000676
C19ORF47	19q13.2	0.193819	0.000138	0.000677
VPS41	7p14.1	-0.19376	0.000139	0.00068
BCS1L	2q35	0.193748	0.000139	0.00068
NRP2	2q33.3	-0.19375	0.000139	0.00068
CPZ	4p16.1	-0.19373	0.000139	0.000681
NMU	4q12	0.193681	0.000139	0.000684
RNF4	4p16.3	0.193603	0.00014	0.000688
CDON	11q24.2	-0.19355	0.000141	0.000691
SYCE2	19p13.13	0.193525	0.000141	0.000692
ARHGAP8	22q13.31	0.193523	0.000141	0.000692
HSD17B7P2	10p11.1	0.193495	0.000142	0.000693
ZNF473	19q13.33	0.193477	0.000142	0.000694
USP48	1p36.12	0.193463	0.000142	0.000695
USF1	1q23.3	0.193393	0.000143	0.000699
PALB2	16p12.2	0.193387	0.000143	0.000699
RRP36	6p21.1	0.193373	0.000143	0.000699
PROCA1	17q11.2	0.19336	0.000143	0.0007
SNORA50C	17q23.3	0.193355	0.000143	0.0007
EEF1E1	6p24.3	0.193347	0.000143	0.0007
DDR2	1q23.3	-0.1933	0.000144	0.000703
NPY1R	4q32.2	-0.19329	0.000144	0.000703
CERCAM	9q34.11	-0.19323	0.000145	0.000706
TLX1NB	10q24.31	0.193195	0.000145	0.000708
HGH1	8q24.3	0.193183	0.000145	0.000709
WDR17	4q34.2	-0.19314	0.000146	0.000711
GTF2IRD2B	7q11.23	-0.19308	0.000146	0.000714
CCDC86	11q12.2	0.193073	0.000146	0.000715
CBR4	4q32.3	-0.19303	0.000147	0.000717
ABRA	8q23.1	-0.19301	0.000147	0.000718
PRL	6p22.3	-0.19299	0.000147	0.000719
CTCF	20q13.31	0.192943	0.000148	0.000721
WHAMMP3	15q11.2	-0.19294	0.000148	0.000722
NOP9	14q12	0.192909	0.000148	0.000723
KIAA0556	16p12.1	0.192884	0.000149	0.000724
DTD2	14q12	-0.19288	0.000149	0.000724
DSN1	20q11.23	0.192872	0.000149	0.000725
BNIP3L	8p21.2	-0.19284	0.000149	0.000726

CHSY3	5q23.3	-0.19279	0.00015	0.000729
AAAS	12q13.13	0.19279	0.00015	0.000729
LYAR	4p16.3	0.192721	0.000151	0.000733
PAAF1	11q13.4	-0.19272	0.000151	0.000733
DYNC2H1	11q22.3	-0.19271	0.000151	0.000733
C12ORF74	12q22	-0.19271	0.000151	0.000733
PDF	16q22.1	0.192697	0.000151	0.000734
COL3A1	2q32.2	-0.19269	0.000151	0.000734
CNOT6	5q35.3	0.192672	0.000151	0.000735
ZFPM1	16q24.2	0.19267	0.000151	0.000735
HABP4	9q22.32	-0.19266	0.000151	0.000735
HIST1H4D	6p22.2	0.192652	0.000152	0.000735
MAEL	1q24.1	-0.19263	0.000152	0.000736
COQ3	6q16.2	0.192624	0.000152	0.000737
FAM163B	9q34.2	-0.1926	0.000152	0.000738
TADA2A	17q12	0.192594	0.000152	0.000738
RIMS2	8q22.3	-0.19259	0.000152	0.000738
PTTG3P	8q13.1	0.192578	0.000152	0.000739
NEK8	17q11.2	0.192569	0.000153	0.000739
FPGT	1p31.1	-0.19254	0.000153	0.00074
BCAS2	1p13.2	-0.19253	0.000153	0.000741
NUP155	5p13.2	0.192524	0.000153	0.000741
ZFP37	9q32	-0.19252	0.000153	0.000741
CORO7	16p13.3	0.192507	0.000153	0.000742
DIRC1	2q32.2	-0.1925	0.000153	0.000742
VLDLR	9p24.2	-0.19249	0.000153	0.000742
PKIA	8q21.13	-0.19248	0.000154	0.000743
ERO1B	1q42.3	-0.19243	0.000154	0.000745
PLOD2	3q24	-0.19243	0.000154	0.000745
PDPN	1p36.21	-0.19242	0.000154	0.000746
GSTCD	4q24	0.192414	0.000154	0.000746
PSMD10	Xq22.3	-0.19241	0.000155	0.000746
RNF14	5q31.3	-0.19238	0.000155	0.000748
SLC1A2	11p13	-0.19237	0.000155	0.000748
TSC2	16p13.3	0.192358	0.000155	0.000749
BTK	Xq22.1	-0.19235	0.000155	0.000749
ANKRD55	5q11.2	-0.19235	0.000155	0.000749
ADAR	1q21.3	0.192334	0.000155	0.00075
SNRK	3p22.1	-0.19232	0.000156	0.00075
FKBP15	9q32	0.192316	0.000156	0.00075
LPCAT4	15q14	0.192312	0.000156	0.00075
DHODH	16q22.2	0.192287	0.000156	0.000752
BCL2	18q21.33	-0.19228	0.000156	0.000752
SOX7	8p23.1	-0.19224	0.000157	0.000754
RTN1	14q23.1	-0.19219	0.000157	0.000757
SMARCAL1	2q35	-0.19218	0.000157	0.000758
SGCG	13q12.12	-0.19217	0.000158	0.000758
LINC00623	1p11.2	-0.19212	0.000158	0.000761
CHURC1	14q23.3	-0.1921	0.000158	0.000762
FAM216B	13q14.11	-0.1921	0.000158	0.000762
PERP	6q23.3	-0.19208	0.000159	0.000763
FA2H	16q23.1	0.192064	0.000159	0.000764
AKAP10	17p11.2	-0.19202	0.000159	0.000766
FBXW9	19p13.13	0.192006	0.00016	0.000767
MATK	19p13.3	-0.19199	0.00016	0.000767
PGBD2	1q44	0.191993	0.00016	0.000767
CD5	11q12.2	-0.19198	0.00016	0.000768
ACYP1	14q24.3	0.191952	0.00016	0.000769

KRT23	17q21.2	-0.1919	0.000161	0.000772
THRSP	11q14.1	-0.19189	0.000161	0.000773
SLC25A26	3p14.1	-0.19186	0.000161	0.000774
EMC3	3p25.3	-0.19183	0.000162	0.000776
NXN	17p13.3	-0.1918	0.000162	0.000778
ATG4C	1p31.3	-0.19177	0.000163	0.00078
CEP135	4q12	0.191763	0.000163	0.00078
GAS7	17p13.1	-0.19176	0.000163	0.00078
GK5	3q23	0.191726	0.000163	0.000782
FCGR1CP	1q21.1	-0.19172	0.000163	0.000782
JPH2	20q13.12	-0.19171	0.000164	0.000783
ABCD2	12q12	-0.1917	0.000164	0.000783
HNRNPA3	2q31.2	0.191694	0.000164	0.000783
CDC14A	1p21.2	-0.19165	0.000164	0.000785
MLLT6	17q12	0.191584	0.000165	0.00079
YPEL4	11q12.1	-0.19158	0.000165	0.00079
CNTRL	9q33.2	0.191543	0.000166	0.000792
FUT7	9q34.3	-0.1915	0.000166	0.000794
PTPRZ1	7q31.32	-0.19148	0.000167	0.000796
MATN2	8q22.1-q22.2	-0.19143	0.000167	0.000798
LTA	6p21.33	-0.19142	0.000167	0.000799
SPATA5	4q28.1	0.191413	0.000167	0.000799
SMTNL2	17p13.2	-0.1914	0.000168	0.0008
CPLX2	5q35.2	-0.19135	0.000168	0.000803
KLHDC4	16q24.2	0.191341	0.000168	0.000803
AQP7P3	9q21.11	-0.19125	0.00017	0.000809
CPM	12q15	-0.19122	0.00017	0.000811
IL10	1q32.1	-0.19121	0.00017	0.000811
SCRN3	2q31.1	-0.19121	0.00017	0.000811
CCNA1	13q13.3	-0.1912	0.00017	0.000812
MYORG	9p13.3	0.191168	0.000171	0.000813
LAIR1	19q13.42	-0.19114	0.000171	0.000815
HFM1	1p22.2	-0.19113	0.000171	0.000815
C10ORF25	10q11.21	-0.19112	0.000171	0.000816
RGS17	6q25.2	-0.19111	0.000172	0.000817
TLR2	4q31.3	-0.19109	0.000172	0.000817
PRPF31	19q13.42	0.191078	0.000172	0.000818
EPCAM	2p21	-0.19107	0.000172	0.000818
KLF10	8q22.3	-0.19104	0.000172	0.00082
TNFRSF19	13q12.12	-0.19102	0.000173	0.000821
PTGDS	9q34.3	-0.19102	0.000173	0.000821
GIMAP1	7q36.1	-0.19093	0.000174	0.000826
DDX46	5q31.1	0.190928	0.000174	0.000827
HDGFL3	15q25.2	-0.19093	0.000174	0.000827
MCMBP	10q26.11	0.190862	0.000175	0.000831
ST6GAL2	2q12.3	-0.19084	0.000175	0.000832
DCUN1D2	13q34	0.19084	0.000175	0.000832
HOMER3	19p13.11	-0.19076	0.000176	0.000837
DKK2	4q25	-0.19074	0.000177	0.000838
CROCCP3	1p36.13	0.190682	0.000177	0.000842
NCK2	2q12.2	-0.19066	0.000178	0.000843
C2CD4D	1q21.3	0.190647	0.000178	0.000844
GLB1	3p22.3	-0.19064	0.000178	0.000844
NIPSNAP3B	9q31.1	-0.19063	0.000178	0.000844
MORC4	Xq22.3	0.190593	0.000179	0.000847
SNORA6	3p22.1	0.190565	0.000179	0.000848
SMIM6	17q25.1	-0.19055	0.000179	0.000849
MEF2A	15q26.3	-0.19055	0.000179	0.000849



UGT8	4q26	0.190529	0.00018	0.00085
EAF2	3q13.33	-0.19045	0.000181	0.000855
EDA	Xq13.1	-0.19044	0.000181	0.000856
ACP5	19p13.2	-0.19044	0.000181	0.000856
LOC653653	17q23.1	-0.19035	0.000182	0.000862
MS4A7	11q12.2	-0.19034	0.000182	0.000862
ZNF271P	18q12.2	-0.19031	0.000183	0.000864
NBR1	17q21.31	-0.19031	0.000183	0.000864
KCNB1	20q13.13	-0.1903	0.000183	0.000864
PCDHA4	5q31.3	-0.1903	0.000183	0.000864
COMMD2	3q25.1	-0.1903	0.000183	0.000864
C11ORF42	11p15.4	0.190299	0.000183	0.000864
CYP24A1	20q13.2	-0.19029	0.000183	0.000864
MNDA	1q23.1	-0.19027	0.000183	0.000866
NKIRAS1	3p24.2	-0.19025	0.000184	0.000867
RARA	17q21.2	-0.19022	0.000184	0.000869
ZNF321P	19q13.41	0.190208	0.000184	0.000869
ATP6V0A4	7q34	-0.19014	0.000185	0.000873
PBX4	19p13.11	0.190143	0.000185	0.000873
ADAP1	7p22.3	0.190086	0.000186	0.000877
KIAA1210	Xq24	-0.19008	0.000186	0.000877
CYGB	17q25.1	-0.19007	0.000186	0.000877
FAM218A	4q32.3	-0.19007	0.000186	0.000877
PCOLCE	7q22.1	-0.19003	0.000187	0.00088
KCNK9	8q24.3	-0.19002	0.000187	0.000881
C7ORF31	7p15.3	-0.18996	0.000188	0.000884
CATSPER1	11q13.1	-0.18996	0.000188	0.000884
CPEB4	5q35.2	-0.18994	0.000188	0.000885
LRRC59	17q21.33	0.189921	0.000189	0.000887
ZNF835	19q13.43	-0.18988	0.000189	0.000889
NOL8	9q22.31	0.189872	0.000189	0.00089
RASSF4	10q11.21	-0.18987	0.000189	0.00089
MEX3D	19p13.3	0.189852	0.00019	0.000891
HMCES	3q21.3	0.189838	0.00019	0.000891
KLF8	Xp11.21	-0.18984	0.00019	0.000891
SLC7A11	4q28.3	0.189829	0.00019	0.000892
CYP26A1	10q23.33	-0.18981	0.00019	0.000892
RPSAP52	12q14.3	-0.18981	0.00019	0.000892
PGD	1p36.22	0.189803	0.00019	0.000893
CEL	9q34.13	-0.18977	0.000191	0.000895
TTLL13P	15q26.1	0.189759	0.000191	0.000895
GATA3	10p14	-0.18974	0.000191	0.000897
MTMR2	11q21	-0.18972	0.000192	0.000898
TMEM43	3p25.1	-0.1897	0.000192	0.000899
CAVIN3	11p15.4	-0.1897	0.000192	0.000899
CENPS	1p36.22	0.18967	0.000192	0.000901
AP4B1	1p13.2	0.189622	0.000193	0.000904
SLC24A4	14q32.12	-0.18961	0.000193	0.000905
SNORA59B	17p11.2	0.189602	0.000193	0.000905
OPRK1	8q11.23	-0.18959	0.000194	0.000906
PIEZO2	18p11.22-p11.21	-0.18958	0.000194	0.000906
NRARP	9q34.3	0.189508	0.000195	0.000911
SHISA7	19q13.42	0.1895	0.000195	0.000912
CD79B	17q23.3	-0.18948	0.000195	0.000913
SH3BP1	22q13.1	0.18948	0.000195	0.000913
WDR78	1p31.3	-0.18944	0.000196	0.000915
PSD	10q24.32	-0.18943	0.000196	0.000916
SHISA6	17p12	-0.1894	0.000197	0.000918

CGA	6q14.3	-0.18932	0.000198	0.000923
ARHGEF2	1q22	0.189283	0.000198	0.000926
UBAP1	9p13.3	-0.18919	0.0002	0.000932
NCBP1	9q22.33	0.189168	0.0002	0.000934
MS4A4A	11q12.2	-0.18914	0.000201	0.000936
TMUB2	17q21.31	-0.18909	0.000201	0.000939
TXNDC12	1p32.3	-0.18909	0.000201	0.000939
SPESP1	15q23	-0.18908	0.000202	0.00094
CZIB	1p32.3	-0.18907	0.000202	0.00094
CPNE8	12q12	-0.18906	0.000202	0.000941
ZNF570	19q13.12	-0.18906	0.000202	0.000941
MUL1	1p36.12	-0.18905	0.000202	0.000941
SNRPE	1q32.1	0.189008	0.000203	0.000944
SOST	17q21.31	-0.18898	0.000203	0.000946
ARHGAP18	6q22.33	-0.18895	0.000204	0.000948
LOC145783	15q21.3	-0.18893	0.000204	0.000949
LDLR	19p13.2	0.188863	0.000205	0.000954
C17ORF80	17q25.1	-0.18885	0.000205	0.000955
SNX4	3q21.2	-0.18885	0.000205	0.000955
MTA1	14q32.33	0.188834	0.000206	0.000955
SEC16B	1q25.2	0.18877	0.000207	0.00096
LILRA4	19q13.42	-0.18876	0.000207	0.000961
CCDC183-AS1	9q34.3	0.188744	0.000207	0.000962
HIST1H2BF	6p22.2	0.188727	0.000207	0.000963
ROM1	11q12.3	-0.18871	0.000208	0.000964
GRIN2A	16p13.2	-0.18868	0.000208	0.000966
CERS2	1q21.3	0.188676	0.000208	0.000966
MYLIP	6p22.3	-0.18864	0.000209	0.000968
USP10	16q24.1	0.188634	0.000209	0.000969
FKBPL	6p21.32	0.188629	0.000209	0.000969
TMED7-TICAM2	5q22.3	-0.18863	0.000209	0.000969
ARMCX5	Xq22.1	-0.18861	0.000209	0.00097
IFNAR2	21q22.11	-0.18861	0.000209	0.00097
FAM228A	2p23.3	-0.18859	0.00021	0.000971
SH3RF2	5q32	0.188588	0.00021	0.000971
ADGRB2	1p35.2	-0.18858	0.00021	0.000971
IRF2BPL	14q24.3	-0.18853	0.000211	0.000975
SLC25A19	17q25.1	0.188503	0.000211	0.000976
MST1P2	1p36.13	0.188499	0.000211	0.000976
TMEM273	10q11.23	-0.1885	0.000211	0.000976
HOXD8	2q31.1	-0.1885	0.000211	0.000976
CHRM2	7q33	-0.18847	0.000212	0.000978
IL22RA2	6q23.3	-0.18847	0.000212	0.000978
VGLL4	3p25.3-p25.2	-0.18843	0.000212	0.000981
GIMAP8	7q36.1	-0.18838	0.000213	0.000985
LUZP6	7q33	-0.18837	0.000213	0.000985
HAS2-AS1	8q24.13	-0.18836	0.000213	0.000985
LINC02716	11p11.2	-0.1883	0.000214	0.00099
CSF2RA	Xp22.33 and Yp11.2	-0.18829	0.000215	0.000991
RNF8	6p21.2	0.188286	0.000215	0.000991
DGKH	13q14.11	0.188233	0.000216	0.000995
CCL24	7q11.23	-0.18822	0.000216	0.000995
LRRC37A4P	17q21.31	0.188202	0.000216	0.000997
PGM5-AS1	9q21.11	-0.18817	0.000217	0.000999
ARF4	3p14.3	-0.18815	0.000217	0.001
CA14	1q21.2	0.188142	0.000217	0.001001
NRP1	10p11.22	-0.18813	0.000217	0.001001
PRAF2	Xp11.23	-0.18812	0.000217	0.001002

LINC01465	12q14.1	-0.18808	0.000218	0.001005
KAAG1	6p22.3	0.18807	0.000218	0.001005
KIDINS220	2p25.1	-0.18805	0.000219	0.001007
HIST1H2BL	6p22.1	0.18803	0.000219	0.001008
SCRIB	8q24.3	0.188009	0.000219	0.00101
TAF15	17q12	0.187998	0.00022	0.00101
GAS2	11p14.3	-0.18798	0.00022	0.001011
SGK1	6q23.2	-0.18798	0.00022	0.001011
RHEX	1q32.1	-0.18796	0.00022	0.001012
ELMO2	20q13.12	-0.18796	0.00022	0.001012
FAM181B	11q14.1	-0.18795	0.00022	0.001013
MTX1	1q22	0.187947	0.00022	0.001013
ARHGAP24	4q21.23-q21.3	-0.18793	0.000221	0.001014
PCDH19	Xq22.1	-0.18792	0.000221	0.001015
SLC1A3	5p13.2	-0.18789	0.000221	0.001017
TMEM60	7q11.23	-0.18784	0.000222	0.00102
AMDHD1	12q23.1	-0.18781	0.000223	0.001023
TIMM50	19q13.2	0.187806	0.000223	0.001023
IFT122	3q21.3-q22.1	0.187806	0.000223	0.001023
ATP8A2	13q12.13	-0.18775	0.000224	0.001027
CYTH2	19q13.33	0.187747	0.000224	0.001027
TVP23C	17p12	-0.18763	0.000226	0.001036
	1-Mar 1q41	0.187625	0.000226	0.001036
NUFIP2	17q11.2	0.187608	0.000226	0.001037
EMX1	2p13.2	0.187588	0.000227	0.001039
CD180	5q12.3	-0.18758	0.000227	0.00104
FLJ16779	20q13.33	-0.18756	0.000227	0.00104
UTRN	6q24.2	-0.18755	0.000228	0.001041
ACTR3	2q14.1	-0.18753	0.000228	0.001042
MTOR	1p36.22	0.187514	0.000228	0.001044
CCDC15	11q24.2	0.18746	0.000229	0.001048
LINC00472	6q13	-0.18745	0.000229	0.001049
PTRH1	9q34.11	0.187432	0.00023	0.00105
FAM161B	14q24.3	-0.18742	0.00023	0.001051
ZNF461	19q13.12	-0.18741	0.00023	0.001051
NRG2	5q31.2	-0.1874	0.00023	0.001051
ARL2	11q13.1	-0.18737	0.000231	0.001053
PDK4	7q21.3	-0.18737	0.000231	0.001053
GABRA3	Xq28	-0.18737	0.000231	0.001054
C3AR1	12p13.31	-0.18735	0.000231	0.001055
DMTF1	7q21.12	0.187319	0.000232	0.001057
JCAD	10p11.23	-0.18729	0.000232	0.00106
LIX1	5q15	-0.18726	0.000233	0.001062
ZNF215	11p15.4	0.187253	0.000233	0.001062
TRAPPC3	1p34.3	-0.18724	0.000233	0.001063
GPIHBP1	8q24.3	-0.18724	0.000233	0.001063
COL16A1	1p35.2	-0.18724	0.000233	0.001063
ZNF574	19q13.2	0.187154	0.000235	0.001069
BAZ1B	7q11.23	0.18715	0.000235	0.001069
RFESD	5q15	-0.18713	0.000235	0.001071
KCNK12	2p16.3	-0.18713	0.000235	0.001071
TCTEX1D4	1p34.1	0.187123	0.000235	0.001071
SLC7A3	Xq13.1	-0.18709	0.000236	0.001073
HCFC1R1	16p13.3	-0.18708	0.000236	0.001074
ARTN	1p34.1	0.187053	0.000237	0.001076
PLCB1	20p12.3	-0.18704	0.000237	0.001077
LTC4S	5q35.3	-0.18699	0.000238	0.00108
HIRIP3	16p11.2	0.186955	0.000238	0.001084

RCSD1	1q24.2	-0.18694	0.000239	0.001085
EPS8L2	11p15.5	0.186909	0.000239	0.001087
FGGY	1p32.1	-0.18691	0.000239	0.001087
GIT1	17q11.2	0.186903	0.000239	0.001087
ATP6V1G1	9q32	-0.18687	0.00024	0.001089
TMEM250	9q34.3	0.186856	0.00024	0.001091
CITED2	6q24.1	-0.18685	0.00024	0.001091
PKP2	12p11.21	0.186813	0.000241	0.001094
LRSAM1	9q33.3-q34.11	0.18681	0.000241	0.001094
LMO2	11p13	-0.18681	0.000241	0.001094
CCR1	3p21.31	-0.1868	0.000241	0.001094
THRB	3p24.2	-0.18678	0.000242	0.001095
HLA-DMB	6p21.32	-0.18678	0.000242	0.001095
TLL2	10q24.1	-0.18676	0.000242	0.001097
ZNF471	19q13.43	-0.18675	0.000242	0.001098
METTL26	16p13.3	0.186736	0.000242	0.001098
CXORF21	Xp21.2	-0.18672	0.000243	0.001099
CCDC130	19p13.13	0.186716	0.000243	0.0011
CLEC10A	17p13.1	-0.1867	0.000243	0.001101
SLC19A3	2q36.3	-0.18669	0.000243	0.001101
MCFD2	2p21	-0.18667	0.000244	0.001103
CYP27C1	2q14.3	-0.18666	0.000244	0.001103
SLC7A6	16q22.1	0.186589	0.000245	0.001109
FAM122B	Xq26.3	0.186586	0.000245	0.001109
DET1	15q26.1	-0.18655	0.000246	0.001112
RBP5	12p13.31	-0.18655	0.000246	0.001112
TRIM21	11p15.4	-0.18653	0.000246	0.001114
TNFAIP8L1	19p13.3	0.186492	0.000247	0.001116
TTC30B	2q31.2	-0.18649	0.000247	0.001117
	7-Mar 2q24.2	-0.18646	0.000248	0.001119
PIFO	1p13.2	-0.18645	0.000248	0.001119
ERGIC2	12p11.22	-0.18644	0.000248	0.00112
USP24	1p32.3	0.186429	0.000248	0.001121
LIMD2	17q23.3	-0.18642	0.000249	0.001122
MAGEA8	Xq28	0.186401	0.000249	0.001123
LOC143666	11p15.5	0.186381	0.000249	0.001124
SUMO1	2q33.1	-0.18638	0.000249	0.001124
VIP	6q25.2	-0.18637	0.000249	0.001124
THAP8	19q13.12	-0.18637	0.000249	0.001124
GSC	14q32.13	-0.18636	0.00025	0.001125
EYA4	6q23.2	-0.18635	0.00025	0.001126
SLIT3	5q34-q35.1	-0.18635	0.00025	0.001126
PCDHB14	5q31.3	-0.18634	0.00025	0.001126
DIS3L2	2q37.1	0.186319	0.00025	0.001128
SCARF2	22q11.21	-0.18629	0.000251	0.00113
NABP1	2q32.3	-0.18629	0.000251	0.00113
GCNA	Xq13.1	0.186175	0.000253	0.00114
FTH1P3	2p23.3	-0.18617	0.000253	0.00114
ELF1	13q14.11	-0.18612	0.000254	0.001144
RBM12B	8q22.1	0.186038	0.000256	0.001151
ZDHHC22	14q24.3	-0.18601	0.000257	0.001153
TMEM251	14q32.12	-0.186	0.000257	0.001154
PDE6G	17q25.3	-0.18598	0.000257	0.001156
ABI3	17q21.32	-0.18597	0.000257	0.001156
CHRD12	11q13.4	-0.18595	0.000258	0.001157
TUBB4A	19p13.3	0.185944	0.000258	0.001158
CROCC	1p36.13	0.185933	0.000258	0.001159
RAB42	1p35.3	-0.1859	0.000259	0.001162

IDUA	4p16.3	0.185874	0.000259	0.001164
FAM223B	Xq28	0.185809	0.000261	0.001169
GLIDR	9p12	-0.18579	0.000261	0.00117
DNAJC25-GNG10	9q31.3	0.185773	0.000261	0.001172
TPTEP2	22q13.1	0.185742	0.000262	0.001174
CELSR3	3p21.31	0.18569	0.000263	0.001179
HIST1H1E	6p22.2	0.185665	0.000264	0.001181
EOGT	3p14.1	-0.18564	0.000264	0.001183
CNP	17q21.2	-0.18563	0.000264	0.001184
PPP1R1A	12q13.2	-0.18562	0.000265	0.001184
GABRR1	6q15	-0.18562	0.000265	0.001184
AFP	4q13.3	-0.18559	0.000265	0.001186
PPP1R13B	14q32.33	0.185559	0.000266	0.001189
R3HDM1	2q21.3	0.185516	0.000267	0.001193
ARHGAP31	3q13.32-q13.33	-0.18546	0.000268	0.001198
PLEKHG7	12q22	-0.18546	0.000268	0.001198
HLX	1q41	-0.18545	0.000268	0.001198
EDEM3	1q25.3	0.185444	0.000268	0.001199
NETO1	18q22.3	-0.18544	0.000268	0.001199
TMEFF1	9q31.1	-0.18543	0.000268	0.001199
ENPP6	4q35.1	-0.18542	0.000269	0.0012
SLED1	4q35.1	0.18541	0.000269	0.001201
TEN1	17q25.1	-0.1854	0.000269	0.001201
TBC1D3B	17q12	0.185402	0.000269	0.001201
PDE7B	6q23.3	-0.18539	0.000269	0.001201
SMC3	10q25.2	0.18539	0.000269	0.001201
SLFN12	17q12	-0.18538	0.000269	0.001202
PCMTD2	20q13.33	-0.18535	0.00027	0.001205
MIER2	19p13.3	0.185339	0.00027	0.001205
HIST1H2AH	6p22.1	0.185321	0.000271	0.001207
CCDC71	3p21.31	-0.18529	0.000271	0.00121
POT1	7q31.33	-0.18528	0.000272	0.00121
STK11IP	2q35	0.185271	0.000272	0.001211
MBD5	2q23.1	-0.18527	0.000272	0.001211
DRC1	2p23.3	-0.18523	0.000273	0.001214
RNASE3	14q11.2	-0.18522	0.000273	0.001215
PLK5	19p13.3	0.185217	0.000273	0.001215
SLC2A14	12p13.31	-0.1852	0.000273	0.001216
SIX1	14q23.1	-0.1852	0.000273	0.001216
SERPINA10	14q32.13	-0.18519	0.000274	0.001216
FRAT2	10q24.1	0.185174	0.000274	0.001218
HIST1H1B	6p22.1	0.185133	0.000275	0.001221
ZNF699	19p13.2	-0.18512	0.000275	0.001222
ANKRD13D	11q13.2	0.185091	0.000276	0.001225
PRDX5	11q13.1	-0.18508	0.000276	0.001226
CCDC50	3q28	-0.18507	0.000276	0.001226
SELL	1q24.2	-0.18505	0.000277	0.001228
CCDC170	6q25.1	-0.18502	0.000277	0.00123
FYN	6q21	-0.18501	0.000277	0.001231
ZBTB10	8q21.13	-0.18501	0.000277	0.001231
WNT5B	12p13.33	-0.185	0.000278	0.001231
SEC11C	18q21.32	-0.18495	0.000279	0.001236
FOLR2	11q13.4	-0.18493	0.000279	0.001238
HDAC5	17q21.31	-0.1849	0.00028	0.00124
GLI3	7p14.1	-0.18483	0.000281	0.001247
LSP1P4	2p11.2	-0.18483	0.000281	0.001247
PUS10	2p16.1-p15	-0.18482	0.000281	0.001247
TMED1	19p13.2	-0.18479	0.000282	0.00125

FCGR2C	1q23.3	-0.18476	0.000283	0.001252
CCDC106	19q13.42	-0.18474	0.000283	0.001254
LAMB2	3p21.31	-0.1847	0.000284	0.001258
MFSD14C	9q22.33	0.184653	0.000285	0.001262
MIR22HG	17p13.3	-0.18465	0.000285	0.001262
NUTM2G	9q22.33	0.184555	0.000287	0.001271
ATP6V1C1	8q22.3	-0.18453	0.000288	0.001273
SAMSN1	21q11.2	-0.18452	0.000288	0.001273
MAGEE2	Xq13.3	-0.18452	0.000288	0.001273
FOXF1	16q24.1	-0.18452	0.000288	0.001273
FAM200B	4p15.32	-0.18452	0.000288	0.001273
C8G	9q34.3	0.18446	0.000289	0.001279
HLA-DRB1	6p21.32	-0.18445	0.00029	0.00128
LRRC8C	1p22.2	-0.18443	0.00029	0.001281
PLEKHM1P1	17q24.1	0.184422	0.00029	0.001282
RRNAD1	1q23.1	0.184415	0.00029	0.001282
DCDC2B	1p35.2	0.184412	0.000291	0.001282
SUMF1	3p26.1	-0.18441	0.000291	0.001282
RINL	19q13.2	-0.18431	0.000293	0.001292
EXD2	14q24.1	-0.1843	0.000293	0.001292
LPGAT1	1q32.3	0.184295	0.000293	0.001293
POLR3K	16p13.3	0.184271	0.000294	0.001295
ADCYAP1	18p11.32	-0.18426	0.000294	0.001296
FGF18	5q35.1	-0.18424	0.000294	0.001298
MNX1	7q36.3	0.18423	0.000295	0.001298
PDZK1P1	1q21.2	0.18422	0.000295	0.001299
MT1L	16q13	-0.18421	0.000295	0.001299
CALHM6	6q22.1	-0.18413	0.000297	0.001307
TLR10	4p14	-0.18412	0.000297	0.001308
SCP2	1p32.3	-0.18404	0.000299	0.001315
CD40	20q13.12	-0.18403	0.000299	0.001316
SHMT1	17p11.2	0.184015	0.0003	0.001318
RBM28	7q32.1	0.183994	0.0003	0.00132
ART5	11p15.4	-0.18399	0.0003	0.00132
TEX14	17q22	-0.18398	0.0003	0.001321
C19ORF48	19q13.33	0.183882	0.000303	0.00133
SNCAIP	5q23.2	-0.18383	0.000304	0.001335
LRRC25	19p13.11	-0.18383	0.000304	0.001335
AP1B1	22q12.2	0.183824	0.000304	0.001335
PLPPR4	1p21.3-p21.2	-0.18379	0.000305	0.001339
DHRS13	17q11.2	0.183767	0.000305	0.00134
PVRIG	7q22.1	0.183767	0.000305	0.00134
CACNA1A	19p13.13	-0.18376	0.000306	0.001341
SCARA3	8p21.1	-0.18375	0.000306	0.001342
ARSI	5q32	-0.18374	0.000306	0.001342
TMEM176B	7q36.1	-0.18372	0.000307	0.001344
FOXD4L1	2q14.1	0.183683	0.000307	0.001347
LCN6	9q34.3	-0.18368	0.000307	0.001348
POLA1	Xp22.11-p21.3	0.183668	0.000308	0.001348
CSTA	3q21.1	-0.18367	0.000308	0.001348
MED31	17p13.1	-0.18366	0.000308	0.001348
C17ORF100	17p13.1	-0.18366	0.000308	0.001348
LYL1	19p13.13	-0.18363	0.000309	0.001351
C5ORF63	5q23.2	0.183623	0.000309	0.001352
RARS2	6q15	-0.18361	0.000309	0.001353
NKAPD1	11q23.1	-0.1836	0.000309	0.001353
COL11A1	1p21.1	-0.1836	0.000309	0.001354
RAB3IL1	11q12.2-q12.3	-0.18359	0.00031	0.001354

KLRB1	12p13.31	-0.18358	0.00031	0.001354
UBE2F	2q37.3	-0.18357	0.00031	0.001356
CPXM1	20p13	-0.18355	0.00031	0.001357
GABRA2	4p12	-0.18354	0.000311	0.001358
TMEM19	12q21.1	-0.18351	0.000311	0.00136
NLRP9	19q13.42	0.183509	0.000311	0.001361
FAM117A	17q21.33	-0.18348	0.000312	0.001363
SCIMP	17p13.2	-0.18348	0.000312	0.001363
SLITRK5	13q31.2	-0.18345	0.000313	0.001366
GDPD5	11q13.4-q13.5	-0.18344	0.000313	0.001366
TPSAB1	16p13.3	-0.18342	0.000314	0.001368
SUMO1P3	1q23.2	-0.18342	0.000314	0.001368
SUCNR1	3q25.1	-0.18342	0.000314	0.001368
ANO5	11p14.3	-0.18341	0.000314	0.001368
LOC441204	7p15.2	-0.18337	0.000315	0.001372
TCTEX1D1	1p31.3	-0.18332	0.000316	0.001377
KCNK13	14q32.11	-0.18332	0.000316	0.001377
TSLP	5q22.1	-0.18332	0.000316	0.001377
NSG2	5q35.2	-0.18331	0.000316	0.001377
TEP1	14q11.2	0.183302	0.000316	0.001378
R3HDM2	12q13.3	0.183293	0.000317	0.001379
KREMEN2	16p13.3	0.18328	0.000317	0.00138
AQP5	12q13.12	0.183267	0.000317	0.001381
BRD2	6p21.32	0.183209	0.000319	0.001387
PFKFB2	1q32.1	0.183136	0.000321	0.001394
HBD	11p15.4	-0.18312	0.000321	0.001396
SCG3	15q21.2	-0.18305	0.000323	0.001403
SLCO4A1	20q13.33	0.183036	0.000323	0.001404
INKA1	3p21.31	-0.18302	0.000323	0.001406
APOLD1	12p13.1	-0.18301	0.000324	0.001406
PERM1	1p36.33	0.182992	0.000324	0.001408
ADAM22	7q21.12	-0.18297	0.000325	0.00141
RAB6C	2q21.1	-0.18296	0.000325	0.001411
RPS15AP10	1p34.1	0.182953	0.000325	0.001411
LILRA1	19q13.42	-0.18294	0.000325	0.001413
C1ORF162	1p13.2	-0.18291	0.000326	0.001415
TPSB2	16p13.3	-0.1829	0.000326	0.001416
KANK2	19p13.2	-0.1829	0.000326	0.001416
MRPL45	17q12	-0.18288	0.000327	0.001418
DNAH2	17p13.1	0.182854	0.000328	0.00142
CDH10	5p14.2-p14.1	-0.18284	0.000328	0.001422
SNHG9	16p13.3	0.182816	0.000329	0.001424
CYP2D6	22q13.2	0.182802	0.000329	0.001425
MED10	5p15.31	-0.18279	0.000329	0.001426
CCDC127	5p15.33	-0.18278	0.000329	0.001426
SOGA3	6q22.33	-0.18275	0.00033	0.001429
ESR2	14q23.2-q23.3	0.182713	0.000331	0.001434
TMCO6	5q31.3	0.182666	0.000332	0.001438
EXOG	3p22.2	0.18262	0.000333	0.001443
ANO6	12q12	-0.1826	0.000334	0.001445
GADD45B	19p13.3	-0.18258	0.000334	0.001447
GPRIN1	5q35.2	0.182575	0.000335	0.001447
CHODL	21q21.1	-0.18255	0.000335	0.00145
PYGO1	15q21.3	-0.18254	0.000336	0.00145
C2ORF27A	2q21.2	-0.18254	0.000336	0.00145
SLA	8q24.22	-0.18254	0.000336	0.00145
NOVA1	14q12	-0.18252	0.000336	0.001451
C10ORF91	10q26.3	0.182493	0.000337	0.001454

ORMDL3	17q21.1	-0.18249	0.000337	0.001455
CHMP6	17q25.3	-0.18245	0.000338	0.001459
NUTM2F	9q22.32	0.182442	0.000338	0.001459
CCN1	1p22.3	-0.18244	0.000338	0.001459
ELAVL4	1p33-p32.3	-0.18243	0.000338	0.00146
GGT7	20q11.22	-0.18242	0.000339	0.001461
RMDN1	8q21.3	-0.18236	0.00034	0.001467
DNAH9	17p12	-0.18236	0.00034	0.001467
ERBB4	2q34	-0.18235	0.000341	0.001468
CREBZF	11q14.1	0.182318	0.000341	0.001471
LOXL1	15q24.1	-0.18225	0.000343	0.001479
TMEM267	5p12	-0.18223	0.000344	0.00148
ANGPTL8	19p13.2	0.182153	0.000346	0.001488
MRPL40	22q11.21	-0.18215	0.000346	0.001488
HSH2D	19p13.11	0.18214	0.000346	0.001489
SMPD2	6q21	0.182136	0.000346	0.00149
TMSB15A	Xq22.1	-0.18206	0.000348	0.001497
MRFAP1L1	4p16.1	-0.18206	0.000348	0.001497
NCKAP1L	12q13.13-q13.2	-0.18204	0.000349	0.0015
BICRA	19q13.33	0.182024	0.000349	0.001501
PRELID3A	18p11.21	0.182011	0.000349	0.001502
UFL1	6q16.1	-0.18199	0.00035	0.001504
MOB4	2q33.1	-0.18197	0.00035	0.001506
MFSD1	3q25.32	-0.18196	0.000351	0.001507
FUNDC2	Xq28	-0.18195	0.000351	0.001508
DPYS	8q22.3	-0.18189	0.000353	0.001514
RPS2P32	7p15.3	-0.18189	0.000353	0.001514
CBLC	19q13.32	0.18185	0.000354	0.001518
AKT1	14q32.33	0.181825	0.000354	0.001521
MGAT2	14q21.3	-0.18176	0.000356	0.001528
HIST1H3J	6p22.1	0.181758	0.000356	0.001528
VSIG4	Xq12	-0.18173	0.000357	0.001531
GPER1	7p22.3	-0.18173	0.000357	0.001531
DLX5	7q21.3	-0.18172	0.000357	0.001532
ZNF671	19q13.43	-0.18169	0.000358	0.001535
PLEKHG4	16q22.1	0.181652	0.000359	0.001539
TJP3	19p13.3	0.181639	0.000359	0.00154
RAB37	17q25.1	-0.18162	0.00036	0.001542
ADH1A	4q23	-0.18162	0.00036	0.001542
EPN3	17q21.33	0.181609	0.00036	0.001543
ZNF674-AS1	Xp11.3	0.181534	0.000362	0.001551
CD28	2q33.2	-0.1815	0.000363	0.001555
RIN2	20p11.23	-0.18149	0.000364	0.001556
THAP6	4q21.1	-0.18148	0.000364	0.001556
KTN1-AS1	14q22.3	-0.18148	0.000364	0.001556
CD4	12p13.31	-0.18147	0.000364	0.001558
DCX	Xq23	-0.18146	0.000364	0.001558
CWC15	11q21	-0.18142	0.000365	0.001562
RTTN	18q22.2	0.18142	0.000366	0.001562
ZNF396	18q12.2	-0.18142	0.000366	0.001562
UTP15	5q13.2	0.181381	0.000367	0.001566
SYPL1	7q22.3	-0.18138	0.000367	0.001566
CTNNA2	2p12	-0.18135	0.000367	0.001569
GALC	14q31.3	-0.18133	0.000368	0.001571
EDN1	6p24.1	-0.18132	0.000368	0.001573
CPSF1	8q24.3	0.181293	0.000369	0.001575
VCX2	Xp22.31	0.181281	0.000369	0.001576
PIP4K2A	10p12.2	-0.18124	0.000371	0.001581



ATP5F1D	19p13.3	0.181237	0.000371	0.001581
HECW1	7p14.1-p13	-0.18122	0.000371	0.001582
CAPS2	12q21.1-q21.2	-0.18121	0.000371	0.001583
SH3RF3	2q13	-0.18121	0.000371	0.001583
GNL2	1p34.3	0.181191	0.000372	0.001585
TTC28	22q12.1	-0.18118	0.000372	0.001586
PCYT2	17q25.3	0.181141	0.000373	0.00159
TENM4	11q14.1	-0.18109	0.000375	0.001596
ITPKA	15q15.1	0.181084	0.000375	0.001596
GNPTAB	12q23.2	-0.18108	0.000375	0.001597
GLRX2	1q31.2	0.181074	0.000375	0.001597
CD83	6p23	-0.18107	0.000375	0.001597
HIST1H2AK	6p22.1	0.181064	0.000376	0.001597
SERINC3	20q13.12	-0.18106	0.000376	0.001598
HLA-DQB1	6p21.32	-0.18102	0.000377	0.001603
FAM83C	20q11.22	-0.18094	0.000379	0.001612
SPDYA	2p23.2	0.180927	0.000379	0.001613
BNC1	15q25.2	-0.18091	0.00038	0.001614
INPP4B	4q31.21	-0.18088	0.000381	0.001618
DAP3	1q22	0.180879	0.000381	0.001618
GIN1	5q21.1	-0.18082	0.000383	0.001625
TMEM140	7q33	-0.1808	0.000383	0.001626
BRD3	9q34.2	0.180797	0.000383	0.001627
HP	16q22.2	-0.18077	0.000384	0.00163
F2RL2	5q13.3	-0.18074	0.000385	0.001632
PDZD8	10q25.3-q26.11	0.180743	0.000385	0.001632
SLC22A20P	11q13.1	0.180725	0.000385	0.001634
EBP	Xp11.23	0.180709	0.000386	0.001636
VTI1A	10q25.2	0.180708	0.000386	0.001636
UAP1L1	9q34.3	0.180705	0.000386	0.001636
TAF7	5q31.3	-0.18067	0.000387	0.001639
SHISA9	16p13.12	-0.18067	0.000387	0.001639
CACNB3	12q13.12	0.180645	0.000388	0.001642
LINC00634	22q13.2	0.180639	0.000388	0.001643
PDE1B	12q13.2	-0.18063	0.000388	0.001644
NBEAP1	15q11.2	-0.18061	0.000389	0.001645
BFAR	16p13.12	-0.18061	0.000389	0.001645
DYNC1LI1	3p22.3	-0.1806	0.000389	0.001646
DHX38	16q22.2	0.180594	0.000389	0.001646
NDRG2	14q11.2	-0.18059	0.000389	0.001647
SELENOI	2p23.3	0.18058	0.00039	0.001647
MCTP1	5q15	-0.18057	0.00039	0.001648
LRRC70	5q12.1	-0.18054	0.000391	0.001652
GLI2	2q14.2	-0.18053	0.000391	0.001652
ARHGAP36	Xq26.1	-0.18053	0.000391	0.001653
ZNF676	19p12	-0.18051	0.000392	0.001654
WASF3	13q12.13	-0.18048	0.000393	0.001658
ALPG	2q37.1	0.18045	0.000393	0.001661
AIG1	6q24.2	-0.18044	0.000394	0.001662
L1CAM	Xq28	-0.18043	0.000394	0.001663
RASGRP3	2p22.3	-0.18041	0.000395	0.001665
HCK	20q11.21	-0.18041	0.000395	0.001665
FOXK2	17q25.3	0.180393	0.000395	0.001667
CWF19L2	11q22.3	-0.18039	0.000395	0.001667
DUS2	16q22.1	0.180356	0.000396	0.001671
UPK3B	7q11.2	0.180329	0.000397	0.001674
ABCF1	6p21.33	0.180317	0.000397	0.001675
PKD1	16p13.3	0.180285	0.000398	0.001679

EMX2OS	10q26.11	-0.18027	0.000399	0.00168
HIST1H3I	6p22.1	0.18027	0.000399	0.00168
SLC16A12	10q23.31	-0.18026	0.000399	0.001681
TLNRD1	15q25.1	0.180259	0.000399	0.001681
IGSF10	3q25.1	-0.18025	0.000399	0.001681
ACTC1	15q14	-0.18025	0.000399	0.001681
LOC100130987	11q13.2	0.180237	0.0004	0.001682
LINC00852	3p25.3	0.180222	0.0004	0.001684
HOXD9	2q31.1	-0.18022	0.0004	0.001684
ADGRF1	6p12.3 6	0.180215	0.000401	0.001684
MANBAL	20q11.23	-0.18018	0.000402	0.001688
MMP9	20q13.12	-0.18009	0.000404	0.001699
PPIL6	6q21	0.180059	0.000405	0.001703
LRR1	14q21.3	0.180054	0.000405	0.001703
NAT10	11p13	0.180045	0.000406	0.001704
SLC4A5	2p13.1	0.180012	0.000407	0.001708
SPOUT1	9q34.11	0.179981	0.000408	0.001712
EBI3	19p13.3	-0.17998	0.000408	0.001712
MUC1	1q22	0.179963	0.000408	0.001713
H3F3C	12p11.21	-0.17992	0.00041	0.001719
RAD9B	12q24.11	0.179912	0.00041	0.001719
DES	2q35	-0.17989	0.00041	0.001721
STX12	1p35.3	-0.17989	0.000411	0.001721
PRO0611	1p35.2	0.179854	0.000412	0.001725
RGS22	8q22.2	-0.17985	0.000412	0.001725
ULK2	17p11.2	-0.17983	0.000412	0.001728
FNDC5	1p35.1	-0.17982	0.000413	0.001729
CCDC28A	6q24.1	-0.17981	0.000413	0.00173
SERPINH1	11q13.5	-0.1798	0.000413	0.001731
TMBIM1	2q35	-0.17978	0.000414	0.001733
SMIM29	6p21.31	-0.17977	0.000414	0.001734
OTUB2	14q32.12	0.179769	0.000414	0.001734
INO80	15q15.1	0.179767	0.000414	0.001734
TNNI2	11p15.5	-0.17973	0.000415	0.001738
MMP14	14q11.2	-0.17973	0.000415	0.001738
ETAA1	2p14	-0.17973	0.000415	0.001738
LOC730668	22q13.31	0.179716	0.000416	0.001739
DLL4	15q15.1	-0.17971	0.000416	0.001739
RCN2	15q24.3	-0.1797	0.000416	0.00174
TEAD4	12p13.33	0.179696	0.000417	0.00174
PPIL3	2q33.1	-0.17969	0.000417	0.001741
MMP23B	1p36.33	-0.17966	0.000418	0.001745
BRPF1	3p25.3	0.179654	0.000418	0.001745
SPAG4	20q11.22	-0.17964	0.000418	0.001746
RREB1	6p24.3	0.179617	0.000419	0.001749
ACAT2	6q25.3	0.179588	0.00042	0.001752
MAP2K4	17p12	-0.17957	0.00042	0.001754
ZMAT2	5q31.3	-0.17954	0.000421	0.001758
IPO4	14q12	0.179535	0.000422	0.001758
UBE2D4	7p13	-0.17948	0.000423	0.001765
PCDHA12	5q31.3	-0.17945	0.000424	0.001769
SMC5	9q21.12	0.17944	0.000425	0.00177
C5ORF49	5p15.31	-0.17942	0.000425	0.001772
GPR162	12p13.31	-0.17942	0.000425	0.001772
B2M	15q21.1	-0.1794	0.000426	0.001774
SMYD2	1q32.3	0.179381	0.000427	0.001776
FIS1	7q22.1	-0.17936	0.000427	0.001778
SPI1	11p11.2	-0.1793	0.000429	0.001786

LZTS1	8p21.3	-0.1793	0.000429	0.001786
CST7	20p11.21	-0.17928	0.00043	0.001788
ILKAP	2q37.3	0.179283	0.00043	0.001788
RNF123	3p21.31	0.179278	0.00043	0.001788
ANO9	11p15.5	0.179275	0.00043	0.001788
STMN4	8p21.2	-0.17925	0.000431	0.00179
ZNF235	19q13.31	-0.17923	0.000432	0.001794
CD36	7q21.11	-0.17922	0.000432	0.001795
SERPINA7	Xq22.3	-0.17921	0.000432	0.001795
RPRD2	1q21.2	0.179187	0.000433	0.001798
FCHO2	5q13.2	-0.17916	0.000434	0.001801
ARL11	13q14.2	-0.17914	0.000434	0.001803
TBC1D9B	5q35.3	0.179116	0.000435	0.001806
PCNP	3q12.3	-0.1791	0.000436	0.001808
ZCCHC12	Xq24	-0.17904	0.000438	0.001816
EXOC5	14q22.3	-0.17904	0.000438	0.001816
SPIN4	Xq11.1	0.178989	0.000439	0.001822
OR51E2	11p15.4	-0.17895	0.000441	0.001828
FGF5	4q21.21	-0.17891	0.000442	0.001832
TIMM29	19p13.2	0.178877	0.000443	0.001836
LOC100130238	12q24.33	0.178855	0.000444	0.001839
C1GALT1C1	Xq24	-0.17883	0.000445	0.001842
POLR1C	6p21.1	0.178818	0.000445	0.001844
BAG6	6p21.33	0.178772	0.000447	0.001849
PLEKHN1	1p36.33	0.178771	0.000447	0.001849
GBP1P1	1p22.2	-0.17877	0.000447	0.001849
SAV1	14q22.1	-0.17876	0.000447	0.00185
THOC2	Xq25	0.178757	0.000447	0.00185
IGFBPL1	9p13.1	-0.17873	0.000448	0.001853
CD151	11p15.5	-0.17872	0.000448	0.001854
CD74	5q33.1	-0.1787	0.000449	0.001857
GAB3	Xq28	-0.1787	0.000449	0.001857
FAM225B	9q32	-0.17869	0.000449	0.001857
CEP250	20q11.22	0.178661	0.00045	0.001861
DACH1	13q21.33	-0.17863	0.000451	0.001865
PXMP2	12q24.33	0.178612	0.000452	0.001867
RAD23B	9q31.2	0.178595	0.000452	0.001869
PLA2G1B	12q24.31	-0.17859	0.000453	0.001869
BBS5	2q31.1	-0.17859	0.000453	0.001869
ZNF860	3p23-p22.3	0.178565	0.000454	0.001872
APBB1IP	10p12.1	-0.17855	0.000454	0.001874
ATP8B4	15q21.2	-0.1785	0.000456	0.00188
CDAN1	15q15.2	0.178495	0.000456	0.001881
SMARCAD1	4q22.3	-0.17845	0.000458	0.001888
LYVE1	11p15.4	-0.17843	0.000458	0.001889
AICDA	12p13.31	-0.17841	0.000459	0.001892
LTF	3p21.31	-0.17835	0.000461	0.0019
PRKDC	8q11.21	0.17833	0.000462	0.001902
LINC00654	20p12.3	-0.17832	0.000462	0.001903
ZNF788P	19p13.2	-0.17832	0.000462	0.001903
CLCN5	Xp11.23	0.178278	0.000463	0.001909
CA11	19q13.33	-0.17826	0.000464	0.001911
CCDC88A	2p16.1	-0.17825	0.000464	0.001912
GRWD1	19q13.33	0.178201	0.000466	0.001919
HPS5	11p15.1	-0.17819	0.000466	0.001919
MC5R	18p11.21	-0.17813	0.000468	0.001928
ANKRD53	2p13.3	-0.17813	0.000469	0.001928
RNF157	17q25.1	0.178101	0.00047	0.001931

KAT2A	17q21.2	0.178093	0.00047	0.001932
FYB1	5p13.1	-0.17808	0.00047	0.001934
TBC1D22B	6p21.2	0.178071	0.000471	0.001935
LSM1	8p11.23	-0.17803	0.000472	0.00194
ILF2	1q21.3	0.177983	0.000474	0.001946
EVI2B	17q11.2	-0.17798	0.000474	0.001946
MINDY3	10p13	-0.17798	0.000474	0.001946
OIT3	10q22.1	-0.17797	0.000474	0.001947
CCDC168	13q33.1	0.17796	0.000475	0.001948
TK2	16q21	-0.17794	0.000475	0.00195
PLA2G12B	10q22.1	-0.1779	0.000477	0.001956
IL3RA	Xp22.33 and Yp11.2	-0.17789	0.000477	0.001957
ZNF322	6p22.2	-0.17785	0.000478	0.001963
OCEL1	19p13.11	-0.17784	0.000479	0.001964
IFNAR1	21q22.11	-0.17782	0.00048	0.001966
EGOT	3p26.1	-0.17782	0.00048	0.001966
PABPC1L	20q13.12	0.177813	0.00048	0.001967
ZCCHC18	Xq22.2	-0.17779	0.000481	0.00197
SLC25A51	9p13.2-p13.1	0.177786	0.000481	0.00197
INAVA	1q32.1	0.177756	0.000482	0.001974
CCDC107	9p13.3	-0.17771	0.000483	0.00198
LIPE	19q13.2	0.177703	0.000484	0.001981
AS3MT	10q24.32	-0.17767	0.000485	0.001985
ITGA9	3p22.2	-0.17766	0.000485	0.001986
SULF2	20q13.12	-0.17766	0.000485	0.001987
NAALADL2	3q26.31	-0.17764	0.000486	0.001988
LYG1	2q11.2	0.177641	0.000486	0.001988
ABHD12	20p11.21	-0.17759	0.000488	0.001994
SORCS1	10q25.1	-0.17759	0.000488	0.001995
FFAR4	10q23.33	0.177568	0.000489	0.001998
SLC5A7	2q12.3	-0.17754	0.00049	0.002002
EPS8L3	1p13.3	0.177531	0.00049	0.002002
FUT4	11q21	0.177483	0.000492	0.002009
SOHLH2	13q13.3	-0.17746	0.000493	0.002012
PRDM12	9q34.12	0.17743	0.000494	0.002016
C1ORF50	1p34.2	-0.17741	0.000494	0.002019
NPY5R	4q32.2	-0.17738	0.000495	0.002022
SLC16A13	17p13.1	0.177368	0.000496	0.002024
TXNDC9	2q11.2	-0.17736	0.000496	0.002025
FBXO46	19q13.32	0.177356	0.000496	0.002025
PDGFA	7p22.3	-0.17733	0.000497	0.002029
FEZF1	7q31.32	0.177299	0.000499	0.002033
KLRG1	12p13.31	-0.17729	0.000499	0.002034
ZNF691	1p34.2	-0.17726	0.0005	0.002039
IFT52	20q13.12	-0.17725	0.0005	0.00204
RIC3	11p15.4	-0.17724	0.000501	0.002041
TOP3A	17p11.2	0.177233	0.000501	0.002041
TTC7B	14q32.11	-0.17722	0.000501	0.002042
EPAS1	2p21	-0.17722	0.000501	0.002042
PBOV1	6q23.3	0.177208	0.000502	0.002043
DGCR10	22q11.21	0.177186	0.000503	0.002046
CERKL	2q31.3	-0.17716	0.000504	0.00205
ARMC4	10p12.1	-0.17715	0.000504	0.002052
PANX1	11q21	-0.17712	0.000505	0.002055
MAML2	11q21	-0.17709	0.000506	0.002059
SMG1	16p12.3	0.177091	0.000506	0.002059
PPP1R13L	19q13.32	0.177083	0.000507	0.00206
IMPA1	8q21.13	-0.17707	0.000507	0.002061

PIK3C3	18q12.3	-0.17706	0.000507	0.002062
LOC283856	16q13	-0.17706	0.000508	0.002062
CAMLG	5q31.1	-0.17702	0.000509	0.002067
KIF5C	2q23.1-q23.2	-0.17699	0.00051	0.002072
TMEM216	11q12.2	-0.17699	0.00051	0.002072
NUPR1	16p11.2	-0.17687	0.000515	0.00209
DYNLRB2	16q23.2	-0.17686	0.000515	0.002091
HACL1	3p25.1	-0.17683	0.000516	0.002095
TIMM13	19p13.3	0.176781	0.000518	0.002102
DOCK10	2q36.2	-0.17677	0.000519	0.002104
TMEM158	3p21.31	-0.17675	0.000519	0.002106
UBL7	15q24.1	-0.17675	0.000519	0.002106
PRR34	22q13.31	-0.17673	0.00052	0.002109
FARSB	2q36.1	0.176724	0.00052	0.002109
BHLHB9	Xq22.1	-0.17672	0.00052	0.002109
CAPN7	3p25.1	-0.1767	0.000521	0.002111
ITPK1	14q32.12	0.1767	0.000521	0.002111
KRBA1	7q36.1	-0.17663	0.000524	0.002121
CRYM-AS1	16p12.2	0.176625	0.000524	0.002122
SCD5	4q21.22	-0.17662	0.000524	0.002122
PLA2G2D	1p36.12	-0.17661	0.000525	0.002123
KRCC1	2p11.2	-0.1766	0.000525	0.002125
PAPPA2	1q25.2	-0.17654	0.000527	0.002133
FTO	16q12.2	-0.17646	0.000531	0.002147
PSTPIP2	18q21.1 tdb7990	-0.17645	0.000531	0.002147
EPHX1	1q42.12	-0.17644	0.000531	0.002148
TCERG1L	10q26.3	-0.17644	0.000531	0.002148
TNFAIP3	6q23.3	-0.17642	0.000532	0.002151
HAND1	5q33.2	-0.1764	0.000533	0.002153
KCTD2	17q25.1	-0.17636	0.000534	0.002159
ABCB5	7p21.1	-0.17636	0.000535	0.00216
PA2G4P4	3q25.31	0.176347	0.000535	0.002161
BLOC1S6	15q21.1	-0.17634	0.000535	0.002162
MPPED1	22q13.2	-0.17631	0.000536	0.002166
SIRT6	19p13.3	0.176295	0.000537	0.002168
WDR60	7q36.3	0.176288	0.000537	0.002169
GPR137B	1q42.3	-0.17626	0.000539	0.002173
PCSK7	11q23.3	0.176122	0.000544	0.002195
YIF1B	19q13.2	0.176101	0.000545	0.002198
CNNM1	10q24.2	-0.17609	0.000545	0.002198
CYB5R1	1q32.1	-0.17604	0.000547	0.002207
PCDHGA12	5q31.3	-0.17603	0.000548	0.002207
RAB25	1q22	0.176028	0.000548	0.002208
KRTAP5-8	11q13.4	0.176009	0.000549	0.00221
PRR12	19q13.33	0.175981	0.00055	0.002215
GAPVD1	9q33.3	0.17593	0.000552	0.002223
PCOLCE2	3q23	-0.17591	0.000553	0.002226
TGFB2	1q41	-0.1759	0.000553	0.002227
GCNT4	5q13.3	-0.17588	0.000554	0.002229
CSTF3	11p13	0.175856	0.000555	0.002233
RIOX1	14q24.3	0.175818	0.000556	0.002239
AMPD2	1p13.3	0.175789	0.000558	0.002243
POLG	15q26.1	0.175784	0.000558	0.002243
IFI35	17q21.31	-0.17576	0.000559	0.002247
PCNX2	1q42.2	0.175753	0.000559	0.002248
LURAP1	1p34.1	-0.17572	0.000561	0.002253
SRSF11	1p31.1	0.175696	0.000562	0.002256
HIST2H2AB	1q21.2	0.175694	0.000562	0.002256

GNG7	19p13.3	-0.17567	0.000563	0.00226
SMARCD1	12q13.12	0.175666	0.000563	0.00226
ZNF563	19p13.2	-0.17566	0.000563	0.002261
EIF3E	8q23.1	-0.17565	0.000564	0.002262
BTBD10	11p15.3	-0.17562	0.000565	0.002267
CLCNKB	1p36.13	-0.1756	0.000566	0.002269
C9ORF24	9p13.3	0.175594	0.000566	0.002269
EPHB1	3q22.2	-0.17559	0.000566	0.002269
CD200R1	3q13.2	-0.17559	0.000566	0.002269
COL5A2	2q32.2	-0.17559	0.000566	0.002269
TMOD1	9q22.33	-0.17559	0.000566	0.002269
GRIK2	6q16.3	-0.17557	0.000567	0.002271
KIZ	20p11.23	-0.17555	0.000568	0.002274
LOC100132215	2p15	0.175549	0.000568	0.002274
PICK1	22q13.1	0.175429	0.000573	0.002294
ZNF32	10q11.21	-0.17541	0.000574	0.002297
CPNE9	3p25.3	-0.1754	0.000574	0.002298
FEM1B	15q23	-0.17534	0.000576	0.002307
CLECL1	12p13.31	-0.17532	0.000577	0.002311
GPR135	14q23.1	0.175292	0.000578	0.002314
PTGS1	9q33.2	-0.17529	0.000579	0.002314
SSH3	11q13.2	0.175281	0.000579	0.002316
KIAA0408	6q22.33	-0.17526	0.00058	0.002318
DPM2	9q34.11	0.175258	0.00058	0.002319
GYG1	3q24	-0.17523	0.000581	0.002323
SCAF1	19q13.33	0.175227	0.000581	0.002323
ISM2	14q24.3	-0.17521	0.000582	0.002326
POLR1A	2p11.2	0.175205	0.000582	0.002326
FCHSD2	11q13.4	-0.1752	0.000582	0.002326
C11ORF96	11p11.2	-0.17519	0.000583	0.002327
GBP6	1p22.2	-0.17518	0.000583	0.002328
SNTA1	20q11.21	-0.17517	0.000584	0.002329
CDC42BPB	14q32.32	0.175161	0.000584	0.002331
SHANK1	19q13.33	-0.17515	0.000585	0.002333
ANKRD16	10p15.1	0.175137	0.000585	0.002334
SAMD13	1p31.1	-0.17514	0.000585	0.002334
UHRF1BP1L	12q23.1	-0.17511	0.000586	0.002337
HNRNPLL	2p22.1	-0.1751	0.000587	0.002339
ITGB2	21q22.3	-0.17509	0.000587	0.00234
APOBEC3D	22q13.1	-0.17508	0.000588	0.002342
DCAF1	3p21.2	0.175074	0.000588	0.002342
NOP16	5q35.2	0.175044	0.000589	0.002347
CD300LF	17q25.1	-0.17504	0.000589	0.002347
OXT	20p13	-0.17496	0.000593	0.00236
PLEKHB1	11q13.4	-0.17496	0.000593	0.002361
WNT9B	17q21.32	-0.1749	0.000595	0.00237
TAC1	7q21.3	-0.17486	0.000597	0.002377
CFAP126	1q23.3	0.174856	0.000597	0.002377
CRTAP	3p22.3	-0.17485	0.000598	0.002377
NIT1	1q23.3	0.174849	0.000598	0.002377
BRINP2	1q25.2	-0.17484	0.000598	0.002379
ARSD	Xp22.33	-0.17481	0.000599	0.002382
CHRNA6	8p11.21	-0.17481	0.0006	0.002383
HOXA6	7p15.2	0.174771	0.000601	0.002389
CRYBB3	22q11.23	0.17477	0.000601	0.002389
TIMD4	5q33.3	-0.17475	0.000602	0.002392
REX1BD	19p13.11	0.174725	0.000603	0.002396
SEPTIN6	Xq24	-0.17471	0.000604	0.002397

CHST3	10q22.1	-0.1747	0.000604	0.002399
ALYREF	17q25.3	0.174677	0.000605	0.002403
CSMD2	1p35.1	-0.1746	0.000609	0.002415
ZBTB3	11q12.3	0.1746	0.000609	0.002415
HIC2	22q11.21	0.174587	0.000609	0.002417
RCOR1	14q32.31-q32.32	0.174564	0.00061	0.002421
ZFR	5p13.3	-0.17456	0.00061	0.002421
SGCB	4q12	-0.17454	0.000612	0.002425
ZNF578	19q13.41	-0.17452	0.000612	0.002427
LOC100126784	11p15.1	-0.17452	0.000612	0.002427
DCTD	4q35.1	-0.17449	0.000613	0.002431
EPHA6	3q11.2	-0.17449	0.000614	0.002431
HTATIP2	11p15.1	-0.17445	0.000615	0.002438
FAM95B1	9p11.2	0.174434	0.000616	0.00244
GARS	7p14.3	0.174417	0.000617	0.002443
IGSF5	21q22.2	-0.17437	0.000619	0.00245
FBL	19q13.2	0.17436	0.00062	0.002452
CA5BP1	Xp22.2	0.174339	0.00062	0.002455
PIK3R1	5q13.1	-0.17434	0.00062	0.002455
UGT2A3	4q13.2	-0.17425	0.000624	0.002469
MAOB	Xp11.3	-0.17425	0.000624	0.002469
KIAA0586	14q23.1	0.174243	0.000625	0.002471
SEMA6A	5q23.1	-0.17424	0.000625	0.002471
TP63	3q28	-0.17422	0.000626	0.002473
RRAGD	6q15	-0.1742	0.000627	0.002476
TYMSOS	18p11.32	0.174172	0.000628	0.002482
KCNJ15	21q22.13-q22.2	-0.17416	0.000629	0.002483
GNA13	17q24.1	-0.17416	0.000629	0.002483
SMS	Xp22.11	0.174146	0.000629	0.002485
TFEC	7q31.2	-0.17414	0.00063	0.002485
LINC01101	2q14.2	-0.17411	0.000631	0.002491
MRPL14	6p21.1	0.174105	0.000631	0.002491
SMG8	17q22	-0.1741	0.000632	0.002492
SLC28A1	15q25.3	-0.17405	0.000634	0.0025
LRRC52-AS1	1q23.3-q24.1	-0.17404	0.000634	0.002502
KCNH7	2q24.2	-0.17403	0.000635	0.002502
RBBP9	20p11.23	-0.17403	0.000635	0.002502
SNORA3B	11p15.4	0.174005	0.000636	0.002506
PFKL	21q22.3	0.173975	0.000637	0.002511
BTG2	1q32.1	-0.17397	0.000638	0.002512
RDM1	17q12	0.17392	0.00064	0.00252
PROS1	3q11.1	-0.17392	0.00064	0.00252
GOLGA4	3p22.2	0.173884	0.000641	0.002526
CREB1	2q33.3	-0.17387	0.000642	0.002527
PLXNC1	12q22	-0.17386	0.000643	0.002529
ARFGEF3	6q23.3-q24.1	0.173858	0.000643	0.002529
MYSM1	1p32.1	0.173818	0.000645	0.002536
TNNI3K	1p31.1	-0.17379	0.000646	0.00254
NPFF	12q13.13	0.173792	0.000646	0.00254
RUNX2	6p21.1	-0.17377	0.000647	0.002544
TMEM120A	7q11.23	-0.17376	0.000648	0.002546
EYA3	1p35.3	0.17371	0.00065	0.002554
ZNF324	19q13.43	0.173699	0.00065	0.002555
XPOT	12q14.2	0.173665	0.000652	0.002561
MIR9-3HG	15q26.1	-0.17365	0.000652	0.002563
ITPR2	12p11.23	-0.17365	0.000652	0.002563
RGS13	1q31.2	-0.17363	0.000654	0.002566
NRIP1	21q11.2-q21.1	-0.17362	0.000654	0.002567

GLS	2q32.2	-0.17359	0.000655	0.002572
CNTN2	1q32.1	-0.17359	0.000656	0.002573
LRP1	12q13.3	-0.17357	0.000656	0.002575
EIF3A	10q26.11	0.173555	0.000657	0.002578
DIP2C	10p15.3	-0.17352	0.000659	0.002585
POFUT1	20q11.21	-0.17344	0.000663	0.002599
PCDHGB5	5q31.3	-0.17337	0.000666	0.002612
LPIN3	20q12	0.173337	0.000668	0.002617
CSNK1G3	5q23.2	-0.17331	0.000669	0.002621
THAP5	7q31.1	-0.17331	0.000669	0.002621
HMGCR	5q13.3	0.173304	0.000669	0.002621
TMED5	1p22.1	-0.1733	0.000669	0.002621
NUDT9	4q22.1	-0.1733	0.00067	0.002622
CFAP45	1q23.2	0.173296	0.00067	0.002622
CST6	11q13.1	-0.17329	0.00067	0.002623
ADAMTS12	5p13.3-p13.2	-0.17323	0.000673	0.002634
AQP4	18q11.2	-0.1732	0.000674	0.002639
IL10RB	21q22.11	-0.17315	0.000677	0.002648
PCDH18	4q28.3	-0.17315	0.000677	0.002648
GATA6	18q11.2	0.173112	0.000679	0.002654
TUBA3D	2q21.1	0.173111	0.000679	0.002654
GGA2	16p12.2	0.173098	0.000679	0.002656
FAM149B1	10q22.2	-0.17309	0.00068	0.002656
NCF4	22q12.3	-0.17308	0.00068	0.002658
PRKCB	16p12.2-p12.1	-0.17308	0.00068	0.002659
VAC14	16q22.1-q22.2	0.173074	0.000681	0.002659
ABR	17p13.3	0.173066	0.000681	0.002659
SNAPC5	15q22.31	-0.17305	0.000682	0.002662
AAR2	20q11.23	-0.17305	0.000682	0.002662
SYT6	1p13.2	-0.17304	0.000682	0.002662
ANTXR2	4q21.21	-0.17304	0.000682	0.002663
ENO1	1p36.23	0.172949	0.000687	0.00268
SERF1A	5q13.2	-0.17294	0.000687	0.00268
PTPDC1	9q22.32	0.172917	0.000688	0.002685
SSTR2	17q25.1	-0.17286	0.000691	0.002696
GFPT1	2p13.3	0.172828	0.000693	0.002701
EXOSC8	13q13.3	0.172813	0.000694	0.002703
GNB5	15q21.2	-0.17281	0.000694	0.002703
UQCC3	11q12.3	0.172804	0.000694	0.002704
CD34	1q32.2	-0.17279	0.000695	0.002707
ARHGAP32	11q24.3	0.172769	0.000696	0.00271
SLC4A7	3p24.1	-0.17277	0.000696	0.00271
VWA3B	2q11.2	0.172767	0.000696	0.00271
RUVBL1	3q21.3	0.172747	0.000697	0.002713
CDCA7	2q31.1	0.172716	0.000699	0.002719
DLEC1	3p22.2	0.172702	0.000699	0.002721
MAFK	7p22.3	0.172667	0.000701	0.002727
EPHB6	7q34	-0.17266	0.000702	0.002728
LIPT1	2q11.2	-0.17266	0.000702	0.002728
APLP1	19q13.12	-0.17263	0.000703	0.002733
RWDD2B	21q21.3	-0.17262	0.000703	0.002734
SLC7A5	16q24.2	0.172615	0.000704	0.002735
LINC01587	4p16.2	-0.1726	0.000705	0.002738
MIR924HG	18q12.2-q12.3	0.172516	0.000709	0.002754
SEC23A	14q21.1	-0.1725	0.00071	0.002757
SYF2	1p36.11	-0.1725	0.00071	0.002757
NAA10	Xq28	0.172457	0.000712	0.002764
GRIA3	Xq25	-0.17245	0.000712	0.002764



WDPCP	2p15	-0.17245	0.000712	0.002765
ATRN	20p13	-0.17244	0.000713	0.002766
FCRLA	1q23.3	-0.17242	0.000714	0.002768
DNER	2q36.3	-0.17242	0.000714	0.002769
ETV1	7p21.2	-0.1724	0.000715	0.002772
RNF175	4q31.3	-0.17237	0.000716	0.002777
GZMK	5q11.2	-0.17237	0.000716	0.002777
LHFPL1	Xq23	-0.17237	0.000716	0.002777
EIF4G2	11p15.4	-0.17236	0.000717	0.002778
B3GALT2	1q31.2	-0.17236	0.000717	0.002778
POLR3GL	1q21.1	-0.17235	0.000717	0.002778
ALG11	13q14.3	0.172348	0.000717	0.002779
ALDH1B1	9p13.1	-0.17234	0.000718	0.00278
CPNE3	8q21.3	-0.17229	0.000721	0.00279
SLC14A1	18q12.3	-0.17226	0.000722	0.002795
TM6SF2	19p13.11	-0.17225	0.000723	0.002796
ELK3	12q23.1	-0.17222	0.000724	0.002801
TXN	9q31.3	0.172215	0.000724	0.002802
ZNF432	19q13.41	0.172203	0.000725	0.002804
ARSE	Xp22.33	-0.1722	0.000725	0.002804
MAP11	7q22.1	0.172193	0.000726	0.002805
PDE10A	6q27	-0.17219	0.000726	0.002806
DRD4	11p15.5	0.172148	0.000728	0.002813
ARHGFE3	3p14.3	-0.17214	0.000728	0.002814
ID3	1p36.12	-0.17214	0.000728	0.002814
FLJ44635	Xq13.1	-0.17212	0.00073	0.002818
TPM1	15q22.2	-0.17209	0.000731	0.002823
RANBP3	19p13.3	0.172074	0.000732	0.002826
LCTL	15q22.31	0.172045	0.000733	0.002831
FGD3	9q22.31	-0.17203	0.000734	0.002834
BMP3	4q21.21	-0.17199	0.000736	0.002841
WDR18	19p13.3	0.171956	0.000738	0.002848
LSG1	3q29	0.171936	0.000739	0.002851
TIGD6	5q32	-0.1719	0.000741	0.002858
CPOX	3q11.2	0.171897	0.000741	0.002858
NADK	1p36.33	0.171888	0.000742	0.00286
PTPRN	2q35	-0.17188	0.000742	0.002861
PSPC1	13q12.11	0.171868	0.000743	0.002863
SPEG	2q35	-0.17186	0.000743	0.002864
LMAN1	18q21.32	-0.17184	0.000744	0.002867
ZMIZ2	7p13	0.171801	0.000746	0.002875
TBCK	4q24	-0.1718	0.000747	0.002875
SNX15	11q13.1	-0.17177	0.000748	0.002881
KRTAP5-9	11q13.4	0.171755	0.000749	0.002883
C1QTNF9B	13q12.12	0.171752	0.000749	0.002883
FNDC3A	13q14.2	-0.17171	0.000752	0.002892
NR1H3	11p11.2	-0.1717	0.000752	0.002893
GOLGA8B	15q14	0.171629	0.000756	0.002907
AR	Xq12	-0.17163	0.000756	0.002907
CSTF2	Xq22.1	0.171624	0.000756	0.002907
WASH3P	15q26.3	0.171552	0.00076	0.002922
MAB21L3	1p13.1	-0.17145	0.000766	0.002943
APCDD1L	20q13.32	-0.17142	0.000767	0.002948
GDF11	12q13.2	-0.17142	0.000767	0.002948
KCNH6	17q23.3	-0.17141	0.000768	0.002948
STYXL1	7q11.23	-0.17141	0.000768	0.002948
MAML3	4q31.1	-0.17141	0.000768	0.002948
TMED7	5q22.3	-0.17141	0.000768	0.002948

CRACR2B	11p15.5	0.171358	0.000771	0.002958
WNT10A	2q35	-0.17135	0.000771	0.002959
SH2D1A	Xq25	-0.17134	0.000772	0.002962
HYI	1p34.2	-0.17133	0.000772	0.002962
C3ORF14	3p14.2	-0.17133	0.000772	0.002962
COA6	1q42.2	0.171328	0.000772	0.002962
CHGB	20p12.3	-0.17129	0.000774	0.002968
TRPM4	19q13.33	0.171294	0.000774	0.002968
SETMAR	3p26.1	-0.17129	0.000775	0.002968
NOS1	12q24.22	-0.17127	0.000775	0.002971
MKX	10p12.1	-0.17126	0.000776	0.002973
SH3BP5	3p25.1	-0.17123	0.000778	0.002979
KCNN1	19p13.11	-0.17123	0.000778	0.002979
ZC3H3	8q24.3	0.17121	0.000779	0.002982
DTX3	12q13.3	-0.17119	0.00078	0.002986
NSD1	5q35.3	0.171182	0.000781	0.002987
VAV1	19p13.3	-0.17116	0.000782	0.002991
NKAIN4	20q13.33	-0.17115	0.000782	0.002992
OGDHL	10q11.23	-0.17114	0.000783	0.002996
CCDC17	1p34.1	0.171098	0.000785	0.003003
KLHDC7A	1p36.13	-0.17106	0.000787	0.00301
TIE1	1p34.2	-0.17103	0.000789	0.003015
LYSMD4	15q26.3	0.171034	0.000789	0.003015
PCSK1N	Xp11.23	-0.17103	0.000789	0.003015
ZCCHC10	5q31.1	-0.17101	0.00079	0.00302
LCP1	13q14.13	-0.17098	0.000792	0.003026
RNF25	2q35	-0.17094	0.000794	0.003034
KCNS1	20q13.12	-0.17093	0.000795	0.003035
ADIPOR1	1q32.1	0.170919	0.000796	0.003037
CYP20A1	2q33.2	-0.17092	0.000796	0.003037
GABRB3	15q12	-0.17091	0.000796	0.003037
RAB36	22q11.23	0.1709	0.000797	0.003039
MROH1	8q24.3	0.17089	0.000797	0.003041
TBC1D5	3p24.3	-0.17089	0.000797	0.003041
RNASEK	17p13.1	-0.17086	0.000799	0.003046
RALB	2q14.2	-0.1708	0.000802	0.003058
GEMIN4	17p13.3	0.170768	0.000804	0.003065
HSDL1	16q24.1	-0.17076	0.000805	0.003066
GGH	8q12.3	-0.17075	0.000805	0.003068
OTOA	16p12.2 16p12.2	-0.17074	0.000806	0.003069
PCNA	20p12.3	0.17074	0.000806	0.003069
TAS2R5	7q34	0.170692	0.000809	0.003079
CPNE7	16q24.3	0.170656	0.000811	0.003087
MCEE	2p13.3	-0.17063	0.000812	0.003093
BIN2	12q13.13	-0.1706	0.000814	0.003097
UBE2Q1	1q21.3	0.1706	0.000814	0.003097
SEMA4G	10q24.31	0.170599	0.000814	0.003097
ZCCHC8	12q24.31	0.170588	0.000815	0.003099
LIMS3	2q13	-0.17058	0.000815	0.0031
KIF9	3p21.31	0.170579	0.000815	0.0031
BCL6B	17p13.1	-0.17056	0.000817	0.003104
SLC47A1	17p11.2	-0.17054	0.000818	0.003107
ADAMTS6	5q12.3	-0.17053	0.000818	0.003109
ABCA8	17q24.2	-0.17053	0.000818	0.003109
EIF4E3	3p13	-0.17052	0.000818	0.003109
ALG3	3q27.1	0.170504	0.00082	0.003113
FTH1	11q12.3	-0.17049	0.00082	0.003115
GGT8P	2p11.2	0.170461	0.000822	0.003121

DAXX	6p21.32	0.170435	0.000824	0.003127
DDX21	10q22.1	0.170433	0.000824	0.003127
NUP58	13q12.13	0.170411	0.000825	0.003131
TFAP4	16p13.3	0.1704	0.000826	0.003133
HCLS1	3q13.33	-0.17039	0.000826	0.003134
SASH3	Xq26.1	-0.17039	0.000826	0.003134
GTPBP1	22q13.1	0.170386	0.000827	0.003134
CNTNAP2	7q35-q36.1	0.170384	0.000827	0.003134
PCDHB11	5q31.3	-0.17038	0.000827	0.003134
ARHGAP25	2p13.3	-0.17038	0.000827	0.003134
AP1M2	19p13.2	0.170371	0.000827	0.003135
HS3ST3A1	17p12	-0.17036	0.000828	0.003138
	6-Mar 5p15.2	0.170345	0.000829	0.00314
SPPL2A	15q21.2	-0.17029	0.000832	0.003151
ZNF610	19q13.41	-0.17028	0.000833	0.003154
CTAGE1	18q11.2	-0.17026	0.000834	0.003158
MAGED1	Xp11.22	-0.17023	0.000836	0.003164
HMG2N2P46	15q21.1	0.170186	0.000839	0.003173
HLA-DMA	6p21.32	-0.17018	0.000839	0.003173
ST7-OT4	7q31.2	0.170177	0.000839	0.003173
PTPN23	3p21.31	0.170175	0.000839	0.003173
LOC93622	4p16.1	0.170174	0.000839	0.003173
CHI3L2	1p13.2	-0.17015	0.000841	0.003178
GOT1	10q24.2	0.170141	0.000841	0.003179
ZNF491	19p13.2	-0.17013	0.000842	0.003181
HIST1H4A	6p22.2	0.170122	0.000842	0.003182
CERS1	19p13.11	-0.17012	0.000843	0.003183
NOP14	4p16.3	0.170086	0.000845	0.00319
DENND2C	1p13.2	-0.17008	0.000845	0.003191
CAND2	3p25.2	-0.17007	0.000846	0.003193
RHBDL1	16p13.3	0.170059	0.000846	0.003194
NXT2	Xq23	-0.17004	0.000847	0.003197
IGSF6	16p12.2	-0.17	0.00085	0.003206
ANKRD54	22q13.1	0.169995	0.00085	0.003207
CSF1R	5q32	-0.16995	0.000853	0.003217
DIPK2B	Xp11.3	-0.16992	0.000855	0.003223
SLC16A7	12q14.1	-0.16991	0.000855	0.003224
	9-Mar 12q14.1	0.169909	0.000855	0.003224
ANKRD36BP1	1q24.2	0.169892	0.000856	0.003227
GPR68	14q32.11	-0.16987	0.000858	0.003232
CD164	6q21	-0.16985	0.000859	0.003236
PIK3CG	7q22.3	-0.16985	0.000859	0.003236
EHD2	19q13.33	-0.16982	0.000861	0.003243
UNC93B1	11q13.2	0.169791	0.000863	0.003248
TTC1	5q33.3	-0.16976	0.000864	0.003254
ACSBG2	19p13.3	0.169752	0.000865	0.003256
MAP2K7	19p13.2	0.169698	0.000868	0.003268
PRR23A	3q23	0.169685	0.000869	0.00327
DNAAF2	14q21.3	-0.16968	0.00087	0.003271
MGARP	4q31.1	-0.16966	0.000871	0.003274
ZBTB24	6q21	0.169619	0.000873	0.003284
TEX10	9q31.1	0.169587	0.000875	0.003291
ACTR2	2p14	-0.16955	0.000878	0.003299
CDKL5	Xp22.13	-0.16955	0.000878	0.003299
POLR2J4	7p13	0.169537	0.000878	0.003301
RAI14	5p13.2	-0.16953	0.000879	0.003301
PDC	1q31.1	0.169531	0.000879	0.003301
SLC25A10	17q25.3	0.169526	0.000879	0.003301

ZNF653	19p13.2	0.169525	0.000879	0.003301
ADGRA2	8p11.23	-0.16952	0.00088	0.003302
TRAT1	3q13.13	-0.1695	0.000881	0.003305
COL24A1	1p22.3	-0.16949	0.000881	0.003308
ZNF568	19q13.12	-0.16945	0.000884	0.003316
KCNK1	1q42.2	0.169448	0.000884	0.003316
TCF15	20p13	-0.16943	0.000885	0.00332
CTSH	15q25.1	-0.16942	0.000886	0.00332
APOB	2p24.1	-0.16941	0.000887	0.003324
MTCP1	Xq28	0.169352	0.00089	0.003336
COX11	17q22	-0.16928	0.000895	0.003353
SLC7A4	22q11.21	-0.16928	0.000895	0.003353
TBPL1	6q23.2	-0.16927	0.000895	0.003354
FDCSP	4q13.3 4q13	-0.16922	0.000898	0.003365
PNPLA4	Xp22.31	-0.16919	0.0009	0.003371
SPINK6	5q32	-0.16919	0.000901	0.003372
PPIH	1p34.2	0.169117	0.000905	0.003388
HSPA12A	10q25.3	-0.16909	0.000907	0.003393
HIST1H2AB	6p22.2	0.169093	0.000907	0.003393
EEFSEC	3q21.3	0.169057	0.000909	0.003401
TMPPE	3p22.3	0.169049	0.00091	0.003402
SPOCK2	10q22.1	-0.16903	0.000911	0.003405
CLEC5A	7q34	-0.169	0.000913	0.003414
CCDC154	16p13.3	0.168961	0.000915	0.003422
NTRK2	9q21.33	-0.16896	0.000916	0.003422
SUMF2	7p11.2	-0.16895	0.000916	0.003423
GSK3A	19q13.2	0.16891	0.000919	0.003432
SHISA3	4p13	-0.16891	0.000919	0.003432
TAPBPL	12p13.31	-0.16888	0.00092	0.003438
RAB2A	8q12.1-q12.2	-0.16887	0.000921	0.00344
RBPM5	8p12	-0.16885	0.000922	0.003444
EIF2D	1q32.1	0.168849	0.000923	0.003444
MMRN1	4q22.1	-0.16885	0.000923	0.003444
CPLX3	15q24.1	0.168844	0.000923	0.003444
ZNF280D	15q21.3	-0.16883	0.000924	0.003446
C20ORF204	20q13.33	0.168793	0.000926	0.003455
FLRT1	11q13.1	0.168766	0.000928	0.003461
TTN	2q31.2	0.168753	0.000929	0.003464
CSF1	1p13.3	-0.16873	0.000931	0.00347
DOCK5	8p21.2	0.168721	0.000931	0.00347
FPR3	19q13.41	-0.16872	0.000931	0.00347
HOOK3	8p11.21	-0.16871	0.000932	0.003471
MEX3B	15q25.2	-0.1687	0.000933	0.003475
CD14	5q31.3	-0.16868	0.000934	0.003479
C1QA	1p36.12	-0.16864	0.000936	0.003487
CCDC137	17q25.3	0.168614	0.000938	0.003493
ARHGDIB	12p12.3	-0.16859	0.00094	0.003498
SIGLEC7	19q13.41	-0.16857	0.000941	0.003501
TSPYL2	Xp11.22	-0.16856	0.000942	0.003505
PAFAH1B1	17p13.3	-0.16855	0.000942	0.003506
HCAR1	12q24.31	-0.16853	0.000944	0.003511
INPP5K	17p13.3	-0.16852	0.000944	0.003512
CKMT1A	15q15.3	0.168515	0.000945	0.003512
MAX	14q23.3	-0.16851	0.000945	0.003512
RRAS	19q13.33	-0.16848	0.000947	0.003519
NFKBIA	14q13.2	-0.16846	0.000948	0.003524
RNF144B	6p22.3	-0.16842	0.000951	0.003534
LAMB4	7q31.1	-0.16841	0.000952	0.003536

TMPRSS13	11q23.3	-0.16839	0.000953	0.00354
SVEP1	9q31.3	-0.16839	0.000953	0.00354
STYX	14q22.1	-0.16837	0.000954	0.003544
HMG1P1	20q13.31	0.168364	0.000955	0.003545
CLEC4G	19p13.2	-0.16835	0.000956	0.003549
TRIM4	7q22.1	-0.16833	0.000957	0.003552
TMEM52	1p36.33	0.168303	0.000959	0.003558
ENPP4	6p21.1	-0.16829	0.00096	0.003562
FAM161A	2p15	0.168272	0.000961	0.003565
ZNF839	14q32.31	0.168259	0.000962	0.003566
IRX6	16q12.2	-0.16826	0.000962	0.003566
SERPINE1	7q22.1	-0.16826	0.000962	0.003566
FBXL4	6q16.1-q16.2	-0.16826	0.000962	0.003566
MOBP	3p22.1	-0.16823	0.000964	0.003572
FMO1	1q24.3	-0.16823	0.000964	0.003572
KLF14	7q32.2	-0.16822	0.000965	0.003573
TMEM252	9q21.11	-0.16821	0.000966	0.003576
CD300A	17q25.1	-0.1682	0.000966	0.003577
MMP7	11q22.2	-0.16819	0.000967	0.003578
SNN	16p13.13	-0.16818	0.000968	0.003582
ARL17A	17q21.31	0.168167	0.000968	0.003584
C15ORF40	15q25.2	-0.16816	0.000969	0.003584
ARL6IP1	16p12.3	0.168159	0.000969	0.003584
QTRT2	3q13.31	0.168116	0.000972	0.003594
OSGEPL1	2q32.2	-0.16806	0.000976	0.003609
MYO5C	15q21.2	0.168053	0.000976	0.003609
SLC25A25	9q34.11	0.16803	0.000978	0.003615
MYO1A	12q13.3	0.168017	0.000979	0.003617
C1QB	1p36.12	-0.16801	0.000979	0.003618
ICAM1	19p13.2	-0.168	0.00098	0.00362
PLD5	1q43	-0.16799	0.000981	0.003623
ZBED3	5q13.3	0.167954	0.000983	0.003631
BACE1	11q23.3	-0.16793	0.000985	0.003636
NDUFV1	11q13.2	0.167925	0.000985	0.003637
IGSF22	11p15.1	-0.16792	0.000986	0.003638
FAM217B	20q13.33	-0.1679	0.000987	0.003641
CDC42	1p36.12	-0.16787	0.000989	0.003649
KDM5C	Xp11.22	0.167861	0.00099	0.003651
TMEM159	16p12.3	-0.16783	0.000992	0.003658
SRPX	Xp11.4	-0.16781	0.000993	0.003663
HIGD1A	3p22.1	-0.16778	0.000995	0.003669
HIST1H3H	6p22.1	0.167762	0.000997	0.003674
HEXA-AS1	15q23	-0.16775	0.000997	0.003674
GTF2IP1	7q11.23	-0.16775	0.000997	0.003674
TUBB8	10p15.3	0.167752	0.000997	0.003674
ABCA2	9q34.3	0.167727	0.000999	0.00368
COMMD10	5q23.1	-0.16771	0.001	0.003683
TMEM126A	11q14.1	-0.16769	0.001002	0.003689
LRRC74A	14q24.3	-0.16763	0.001006	0.003702
PACS1	11q13.1-q13.2	-0.16759	0.001009	0.003713
CD300LG	17q21.31	-0.16757	0.00101	0.003719
ANXA7	10q22.2	-0.16756	0.001011	0.00372
SLC2A10	20q13.12	-0.16753	0.001013	0.003727
CAPN13	2p23.1	-0.16752	0.001014	0.003729
ALKAL1	8q11.23	-0.16749	0.001016	0.003736
DAD1	14q11.2	-0.16743	0.001021	0.003752
HIST1H2AL	6p22.1	0.167409	0.001022	0.003756
GPR141	7p14.1	-0.16736	0.001025	0.003767

THOC3	5q35.2	0.167324	0.001028	0.003777
KCTD13	16p11.2	0.167284	0.001031	0.003787
GRHL3	1p36.11	0.167255	0.001033	0.003794
METTL25	12q21.31	-0.16723	0.001035	0.0038
C1ORF216	1p34.3	-0.16722	0.001035	0.003802
RFK	9q21.13	-0.16721	0.001037	0.003805
ZNF385A	12q13.13	-0.16718	0.001039	0.003812
BMX	Xp22.2	-0.16716	0.00104	0.003815
HIST1H3F	6p22.2	0.167149	0.001041	0.003819
CLC	19q13.2	-0.16713	0.001042	0.003824
TMTC3	12q21.32	-0.16708	0.001045	0.003835
NXPH2	2q22.1	-0.16706	0.001047	0.003841
ADAP2	17q11.2	-0.16705	0.001048	0.003841
GHRLOS	3p25.3	0.16699	0.001052	0.003858
RBM24	6p22.3	-0.16698	0.001053	0.00386
SLC9B1	4q24	-0.16695	0.001056	0.003869
TMED10	14q24.3	-0.16694	0.001056	0.003869
PPP3CC	8p21.3	-0.16694	0.001056	0.003869
ZDHHC6	10q25.2	0.166936	0.001056	0.003869
SLC2A3	12p13.31	-0.16694	0.001056	0.003869
SAE1	19q13.32	0.16692	0.001058	0.003872
C2ORF76	2q14.2	-0.16689	0.00106	0.00388
GLP2R	17p13.1	-0.16687	0.001061	0.003883
PITPNM3	17p13.2-p13.1	0.16686	0.001062	0.003886
HLA-DQA2	6p21.32	-0.16685	0.001063	0.00389
CHMP4B	20q11.22	-0.16684	0.001063	0.00389
CHST15	10q26.13	-0.16679	0.001068	0.003904
TMEM218	11q24.2	-0.16677	0.001069	0.003909
CBLN4	20q13.2	-0.16677	0.001069	0.003909
GABPA	21q21.3	-0.16676	0.00107	0.00391
CSNK2B	6p21.33	0.166722	0.001072	0.003919
LINC02693	17p11.2	-0.1667	0.001074	0.003924
UBQLN2	Xp11.21	-0.1667	0.001074	0.003925
MIIP	1p36.22	0.166695	0.001075	0.003925
APOE	19q13.32	-0.16665	0.001078	0.003936
ODAM	4q13.3	-0.16664	0.001079	0.003938
OSCP1	1p34.3	-0.16663	0.001079	0.003939
PWWP3A	19p13.3	0.166606	0.001081	0.003946
CLCN2	3q27.1	0.166601	0.001082	0.003947
HOXA9	7p15.2	0.166536	0.001087	0.003965
C1QC	1p36.12	-0.1665	0.001089	0.003973
VGLL2	6q22.1	-0.16648	0.001091	0.003978
NAA25	12q24.13	0.166441	0.001094	0.003989
SPATA4	4q34.2	-0.1664	0.001097	0.004
C2ORF72	2q37.1	0.166394	0.001097	0.004001
SLC8A3	14q24.2	-0.16633	0.001103	0.004019
TIMP4	3p25.2	-0.16629	0.001106	0.004029
ADCK5	8q24.3	0.166259	0.001108	0.004036
NKD1	16q12.1	-0.16624	0.001109	0.00404
LARP4	12q13.12	0.166226	0.001111	0.004044
MAML1	5q35.3	0.166194	0.001113	0.004053
PDCD1LG2	9p24.1	-0.16619	0.001114	0.004054
ZSCAN12P1	6p22.1	0.166175	0.001114	0.004057
RGS2	1q31.2	-0.16617	0.001115	0.004057
RUNX1	21q22.12	-0.16615	0.001116	0.004061
PFN2	3q25.1	-0.16614	0.001117	0.004065
GPX1	3p21.31	-0.16611	0.001119	0.004071
SF3B6	2p23.3	-0.16611	0.00112	0.004072

RELB	19q13.32	-0.16611	0.00112	0.004072
PRRG2	19q13.33	-0.1661	0.00112	0.004073
CHST1	11p11.2	-0.16608	0.001122	0.004078
FBXL16	16p13.3	0.166067	0.001123	0.004081
NXNL1	19p13.11	-0.16605	0.001125	0.004086
STXBP2	19p13.2	0.165977	0.00113	0.004105
TLR8	Xp22.2	-0.16592	0.001134	0.00412
EIF4EBP3	5q31.3	-0.16589	0.001137	0.004128
MPEG1	11q12.1	-0.16588	0.001138	0.004131
CCDC6	10q21.2	0.165869	0.001139	0.004133
CPA3	3q24	-0.16583	0.001142	0.004145
NSMCE2	8q24.13	-0.16582	0.001142	0.004145
ACTG2	2p13.1	-0.16574	0.001149	0.004169
METTL23	17q25.1	-0.16573	0.00115	0.004171
CHPF2	7q36.1	-0.16572	0.00115	0.004172
SLC25A38	3p22.1	-0.16571	0.001151	0.004175
RASA3	13q34	-0.16568	0.001154	0.004184
DNMT3B	20q11.21	0.165674	0.001154	0.004184
ADIPOQ	3q27.3	-0.16567	0.001155	0.004185
TMEM99	17q21.2	-0.16566	0.001155	0.004186
DCLK2	4q31.23-q31.3	-0.16566	0.001156	0.004186
FOLR1	11q13.4	-0.16563	0.001158	0.004194
MRC2	17q23.2	-0.16555	0.001164	0.004215
TMSB15B	Xq22.2	-0.16554	0.001165	0.004218
TRMT11	6q22.32	0.165484	0.00117	0.004234
CAMK4	5q22.1	-0.16548	0.00117	0.004234
RNASE1	14q11.2	-0.16548	0.00117	0.004234
TP53RK	20q13.12	-0.16548	0.00117	0.004234
STX11	6q24.2	-0.16548	0.00117	0.004234
WDR37	10p15.3	0.165464	0.001171	0.004237
TDRP	8p23.3	-0.16543	0.001174	0.004245
ASH1L	1q22	0.165432	0.001174	0.004245
SYNGAP1	6p21.32	0.165424	0.001175	0.004246
MGC16025	2q37.3	0.165408	0.001176	0.00425
ATP2B4	1q32.1	-0.1654	0.001177	0.004252
MFSD2A	1p34.2	0.165362	0.00118	0.004262
HOXB9	17q21.32	0.165355	0.00118	0.004264
TVP23B	17p11.2	-0.16535	0.001181	0.004265
RSL24D1	15q21.3	-0.16534	0.001182	0.004267
CCDC158	4q21.1	-0.16533	0.001183	0.00427
GTPBP6	Xp22.33 and Yp11.31	0.165307	0.001184	0.004275
XRCC5	2q35	-0.1653	0.001184	0.004275
SLU7	5q33.3	-0.16529	0.001185	0.004277
CRTAM	11q24.1	-0.16528	0.001186	0.004279
TFIP11	22q12.1	-0.16528	0.001186	0.004279
IL7R	5p13.2	-0.16528	0.001186	0.004279
SLC6A2	16q12.2	-0.16527	0.001187	0.00428
ADAM12	10q26.2	-0.16527	0.001187	0.00428
KLF9	9q21.12	-0.16525	0.001189	0.004287
TMEM65	8q24.13	-0.16523	0.001191	0.004291
SLK	10q24.33-q25.1	0.165212	0.001192	0.004296
KATNAL1	13q12.3	-0.16512	0.0012	0.004323
DCLRE1A	10q25.3	0.16511	0.001201	0.004325
RPL23AP82	22q13.33	-0.1651	0.001201	0.004327
TM4SF19	3q29	-0.16509	0.001203	0.00433
COASY	17q21.2	0.165052	0.001206	0.00434
KIAA1191	5q35.2	-0.16502	0.001208	0.004349
CELSR2	1p13.3	0.165013	0.001209	0.00435

SMARCD2	17q23.3	0.164995	0.00121	0.004355
CGB3	19q13.33	-0.16499	0.001211	0.004355
ETV3	1q23.1	0.164985	0.001211	0.004356
SNRNP27	2p13.3	-0.16497	0.001212	0.00436
DHFR2	3q11.2	-0.16492	0.001217	0.004376
FADS2	11q12.2	-0.16487	0.001221	0.004389
C19ORF54	19q13.2	0.164863	0.001221	0.00439
RENBP	Xq28	-0.16486	0.001222	0.00439
HLA-DRB5	6p21.32	-0.16483	0.001224	0.004398
ATP6V1G2	6p21.33	-0.16483	0.001225	0.004399
GLCE	15q23	-0.16482	0.001225	0.004399
ASGR2	17p13.1	-0.16477	0.001229	0.004415
FCSK	16q22.1	0.164692	0.001236	0.004438
NUDT15	13q14.2	0.164638	0.001241	0.004454
BTN2A2	6p22.2	-0.16463	0.001241	0.004455
P4HA2	5q31.1	-0.16462	0.001242	0.004458
MUC15	11p14.2	-0.1646	0.001244	0.004462
MARVELD1	10q24.2	-0.16459	0.001245	0.004465
ANKLE2	12q24.33	0.164522	0.001251	0.004486
ZNF225	19q13.31	-0.1645	0.001252	0.004491
TAGAP	6q25.3	-0.1645	0.001253	0.004493
LINC00173	12q24.22	0.164479	0.001255	0.004497
SERP2	13q14.11	-0.16447	0.001255	0.004498
ABHD17B	9q21.13	-0.16447	0.001256	0.004498
ULK3	15q24.1	0.164468	0.001256	0.004498
PARD6G	18q23	-0.16447	0.001256	0.004498
GHRL	3p25.3	-0.16442	0.001259	0.004511
ELF2	4q31.1	-0.16442	0.00126	0.004512
SH3GLB2	9q34.11	0.164387	0.001263	0.00452
SPATA20	17q21.33	-0.16436	0.001265	0.004527
IL21R	16p12.1	-0.16436	0.001265	0.004527
RGPD6	2q13	0.164356	0.001265	0.004527
ZNF304	19q13.43	-0.16434	0.001266	0.00453
TCAIM	3p21.31	-0.16434	0.001267	0.004531
BEX3	Xq22.2	-0.16434	0.001267	0.004532
PCDHGB4	5q31.3	-0.16429	0.001272	0.004546
SLC29A4	7p22.1	-0.16426	0.001274	0.004555
RECQL	12p12.1	-0.16425	0.001274	0.004555
WNT2B	1p13.2	-0.16423	0.001276	0.004561
UCN	2p23.3	0.164215	0.001278	0.004565
RUSC2	9p13.3	-0.1642	0.001279	0.004569
DNAJC28	21q22.11	-0.16419	0.00128	0.004573
AQP7P1	9q13	-0.16416	0.001283	0.004581
CRPPA	7p21.2	-0.16416	0.001283	0.004581
CD8B	2p11.2	-0.16415	0.001283	0.004581
CRHR1	17q21.31	-0.16415	0.001284	0.004581
M6PR	12p13.31	-0.16415	0.001284	0.004581
EVA1B	1p34.3	-0.16414	0.001284	0.004582
CHM	Xq21.2	-0.16413	0.001285	0.004585
PRNP	20p13	-0.16412	0.001286	0.004587
OMP	11q13.5	0.16411	0.001287	0.00459
CXCR4	2q22.1	-0.1641	0.001288	0.004592
GOLGA1	9q33.3	0.164092	0.001289	0.004594
THEM4	1q21.3	0.164042	0.001293	0.004609
FECH	18q21.31	-0.16396	0.001301	0.004636
CNTROB	17p13.1	0.163923	0.001304	0.004646
HEPN1	11q24.2	-0.1639	0.001306	0.004651
N4BP2L2-IT2	13q13.1	0.1639	0.001306	0.004651



CORT	1p36.22	0.163855	0.00131	0.004665
APOO	Xp22.11	0.163795	0.001316	0.004684
SREK1IP1	5q12.3	-0.16379	0.001316	0.004685
B3GALNT1	3q26.1	-0.16378	0.001317	0.004688
VPS4B	18q21.33	-0.16372	0.001323	0.004706
NCKAP1	2q32.1	-0.16371	0.001323	0.004709
CNIH4	1q42.11	0.163702	0.001324	0.00471
WNT11	11q13.5	-0.16369	0.001325	0.004714
STPG2	4q22.3-q23	-0.16367	0.001327	0.004718
ZNF621	3p22.1	0.163664	0.001327	0.00472
NEK6	9q33.3	0.163634	0.00133	0.004729
SPIC	12q23.2	-0.16362	0.001332	0.004733
PRSS16	6p22.1	0.163606	0.001333	0.004736
BBOF1	14q24.3	-0.1636	0.001334	0.004738
TNFRSF11A	18q21.33	0.163593	0.001334	0.004739
PCDHGB7	5q31.3	-0.16356	0.001337	0.004747
CCDC114	19q13.33	0.163502	0.001342	0.004767
KIF1B	1p36.22	0.163484	0.001344	0.004772
PMS2P3	7q11.23	0.163476	0.001345	0.004774
STAMBP	2p13.1	-0.16346	0.001347	0.004779
ZGLP1	19p13.2	0.163421	0.00135	0.00479
CD69	12p13.31	-0.16341	0.001351	0.004792
RHOT1	17q11.2	-0.16339	0.001352	0.004797
HS3ST2	16p12.2	-0.16338	0.001354	0.004802
PLCXD3	5p13.1	-0.16337	0.001354	0.004803
DDO	6q21	-0.16331	0.00136	0.004823
ZBED8	5q33.3	-0.16328	0.001363	0.00483
FATE1	Xq28	-0.16322	0.001369	0.00485
ZCWPW1	7q22.1	-0.16322	0.001369	0.00485
SNAPC1	14q23.2	-0.1632	0.00137	0.004854
METTL6	3p25.1	-0.16317	0.001374	0.004866
NEK4	3p21.1	0.163162	0.001374	0.004867
MYADM	19q13.42	-0.16314	0.001377	0.004874
DIRAS1	19p13.3	-0.1631	0.00138	0.004886
TIMM10B	11p15.4	-0.16308	0.001382	0.004891
BTBD1	15q25.2	-0.16308	0.001382	0.004891
LGALS1	2p14	-0.16307	0.001383	0.004894
SPAG8	9p13.3	0.163058	0.001384	0.004897
STOML1	15q24.1	-0.16305	0.001385	0.004898
SUSD1	9q31.3-q32	-0.16305	0.001385	0.004898
PLIN5	19p13.3	0.163035	0.001386	0.004902
STON1-GTF2A1L	2p16.3	-0.16303	0.001387	0.004904
ELMO3	16q22.1	0.163012	0.001389	0.004908
PCDHGA9	5q31.3	-0.16295	0.001394	0.004927
GCNT3	15q22.2	0.162924	0.001397	0.004936
HIST1H2BJ	6p22.1	0.16291	0.001398	0.00494
SHLD2P1	10q11.22	0.162903	0.001399	0.004942
SUDS3	12q24.23	0.162899	0.001399	0.004942
RAB5C	17q21.2	-0.16287	0.001402	0.004951
SMC6	2p24.2	0.162844	0.001405	0.004959
TTC39C	18q11.2	-0.16283	0.001406	0.004962
SCNN1D	1p36.33	0.16279	0.00141	0.004976
TMEM132B	12q24.31-q24.32	-0.16279	0.00141	0.004976
SELENOS	15q26.3	-0.16278	0.001411	0.004977
KIAA1549	7q34	0.162775	0.001411	0.004979
ACAA2	18q21.1	-0.16277	0.001412	0.004981
TMEM37	2q14.2	-0.16276	0.001413	0.004981
HTR4	5q32	-0.1627	0.001419	0.005002

SDCBP	8q12.1	-0.1627	0.001419	0.005002
EMB	5q11.1	-0.16269	0.001419	0.005002
BUD13	11q23.3	0.162688	0.00142	0.005003
PCDH15	10q21.1	-0.16268	0.001421	0.005006
PDGFB	22q13.1	-0.16267	0.001421	0.005006
NHEJ1	2q35	-0.16265	0.001423	0.005011
PLIN4	19p13.3	-0.16265	0.001423	0.005011
NOTUM	17q25.3	-0.16265	0.001424	0.005012
RAB6B	3q22.1	-0.16263	0.001425	0.005016
DUS1L	17q25.3	0.16263	0.001426	0.005017
HIST1H4J	6p22.1	-0.16259	0.00143	0.00503
TVP23A	16p13.13	0.162529	0.001436	0.00505
TMEM185A	Xq28	-0.16253	0.001436	0.00505
FAM238C	10p12.1	0.162499	0.001438	0.005058
NBPF7	1p12	0.162491	0.001439	0.00506
ASTN2	9q33.1	-0.16249	0.001439	0.00506
FBLIM1	1p36.21	-0.16248	0.00144	0.005062
TRAPPC3L	6q22.1	-0.16247	0.001441	0.005064
P2RY10	Xq21.1	-0.16245	0.001443	0.005071
TMEM81	1q32.1	0.162442	0.001444	0.005073
TMEM14C	6p24.2	-0.16242	0.001446	0.00508
SRRM3	7q11.23	-0.1624	0.001449	0.005087
CNPPD1	2q35	-0.16239	0.001449	0.005089
CIAO3	16p13.3	0.16238	0.00145	0.005091
SMARCE1	17q21.2	-0.16235	0.001453	0.005099
ZNF410	14q24.3	-0.16235	0.001453	0.005099
PKHD1L1	8q23.1-q23.2	-0.16234	0.001455	0.005104
JAML	11q23.3	-0.16228	0.00146	0.005121
ITGA2B	17q21.31	0.162281	0.00146	0.005121
CD3E	11q23.3	-0.16226	0.001463	0.005129
ASTN1	1q25.2	-0.16225	0.001463	0.00513
PPP1R3B	8p23.1	-0.16223	0.001465	0.005136
MARK4	19q13.32	-0.16218	0.001471	0.005155
TTLL6	17q21.32	0.162146	0.001474	0.005165
IRAK1	Xq28	0.162061	0.001482	0.005194
EMC9	14q12	0.162039	0.001485	0.005201
SCN4A	17q23.3	-0.16201	0.001487	0.00521
SLC39A11	17q24.3-q25.1	-0.16199	0.00149	0.005217
SHROOM3	4q21.1	0.16197	0.001492	0.005223
OAS3	12q24.13	0.161954	0.001493	0.005227
TLX1	10q24.31	0.161952	0.001494	0.005227
TOR1A	9q34.11	-0.16195	0.001494	0.005227
TRPS1	8q23.3	-0.16191	0.001498	0.00524
COL6A2	21q22.3	-0.16185	0.001504	0.005261
RAD51AP2	2p24.2	0.161808	0.001508	0.005275
KLHL32	6q16.1	-0.1618	0.001509	0.005278
GSTA4	6p12.2	-0.16178	0.001511	0.005283
PDZD2	5p13.3	-0.16177	0.001512	0.005285
DNAJA4	15q25.1	0.161767	0.001513	0.005287
SNX20	16q12.1	-0.16176	0.001513	0.005289
MCRIP2	16p13.3	0.161703	0.001519	0.005308
PIGP	21q22.13	-0.16169	0.001521	0.005313
RNF19A	8q22.2	-0.16168	0.001521	0.005314
ZFP82	19q13.12	-0.16163	0.001527	0.005331
EMD	Xq28	0.161605	0.001529	0.00534
NROB2	1p36.11	-0.16158	0.001532	0.005346
COP57A	12p13.31	-0.16158	0.001532	0.005347
APOL3	22q12.3	-0.16158	0.001532	0.005347

PUM3	9p24.2	0.161566	0.001533	0.00535
HRAS	11p15.5	0.161552	0.001535	0.005355
MTMR9	8p23.1	-0.16154	0.001536	0.005358
RAP1B	12q15	-0.1615	0.001541	0.005373
USP2	11q23.3	-0.16147	0.001543	0.005381
EVL	14q32.2	-0.16145	0.001546	0.005389
DTX1	12q24.13	-0.16144	0.001547	0.00539
STK35	20p13	0.161414	0.00155	0.0054
NAA15	4q31.1	0.161403	0.001551	0.005403
RAD54L2	3p21.2	0.161391	0.001552	0.005406
CUL5	11q22.3	-0.16139	0.001552	0.005406
PRKCH	14q23.1	-0.16138	0.001553	0.005407
ECHDC2	1p32.3	0.161355	0.001556	0.005417
FRMPD1	9p13.2	-0.16134	0.001557	0.00542
RNF121	11q13.4	-0.16134	0.001558	0.005421
HOXB8	17q21.32	0.161333	0.001558	0.005422
LRRC4	7q32.1	-0.16132	0.001559	0.005424
ZNF239	10q11.21	0.161312	0.00156	0.005428
CD226	18q22.2	-0.16127	0.001565	0.005444
TET1	10q21.3	-0.16122	0.00157	0.00546
SGIP1	1p31.3	-0.1612	0.001572	0.005467
C12ORF57	12p13.31	-0.16119	0.001573	0.005469
DARS	2q21.3	-0.16113	0.00158	0.005493
ZSWIM3	20q13.12	-0.16105	0.001588	0.00552
ATP2C2	16q24.1	0.161045	0.001589	0.00552
ZNF236	18q23	0.161042	0.001589	0.00552
CALCB	11p15.2	-0.16104	0.001589	0.00552
ELP2	18q12.2	-0.16103	0.001591	0.005524
SP110	2q37.1	-0.16103	0.001591	0.005524
ZNF416	19q13.43	-0.16099	0.001595	0.005536
TGFB1	5q31.1	-0.16098	0.001596	0.00554
BTF3P11	13q22.3	-0.16097	0.001597	0.005542
CREG1	1q24.2	-0.16096	0.001598	0.005546
COL28A1	7p21.3	0.160946	0.0016	0.00555
SOX17	8q11.23	-0.16094	0.0016	0.00555
CYB5R2	11p15.4	0.160934	0.001601	0.005551
HSD17B7	1q23.3	0.160934	0.001601	0.005551
KIAA0100	17q11.2	0.160932	0.001601	0.005551
BAK1	6p21.31	0.160917	0.001603	0.005556
FAM234B	12p13.1	-0.16091	0.001604	0.005557
PARP3	3p21.2	-0.16089	0.001606	0.005564
CAB39	2q37.1	-0.16087	0.001608	0.00557
RTL8C	Xq26.3	-0.16087	0.001608	0.00557
N4BP2L1	13q13.1	-0.16086	0.001609	0.005571
COL1A2	7q21.3	-0.16085	0.00161	0.005574
KCNK17	6p21.2	-0.16085	0.00161	0.005574
SEPTIN7P2	7p12.3	0.160795	0.001616	0.005595
NOS2	17q11.2	0.160775	0.001618	0.005601
DPP3	11q13.2	0.160774	0.001619	0.005601
RAB29	1q32.1	-0.16076	0.00162	0.005605
JKAMP	14q23.1	-0.16075	0.001621	0.005606
RHOV	15q15.1	0.160751	0.001621	0.005606
ABHD11	7q11.23	0.160748	0.001622	0.005607
ELOA3	18q21.1	0.160741	0.001622	0.005608
ZNF229	19q13.31	-0.16074	0.001623	0.005609
PLCG2	16q23.3	-0.16072	0.001624	0.005614
NCOA4	10q11.22	-0.16071	0.001626	0.005617
CLDN1	3q28	-0.16068	0.001629	0.005626

CUL3	2q36.2	-0.16066	0.001631	0.005633
ELOVL6	4q25	0.160655	0.001632	0.005635
RBM41	Xq22.3	0.160653	0.001632	0.005635
FAR1	11p15.3	0.160632	0.001634	0.005642
DLX3	17q21.33	-0.16062	0.001636	0.005647
PSAT1	9q21.2	0.160603	0.001637	0.005651
PURA	5q31.3	-0.16057	0.001641	0.005661
ESAM	11q24.2	-0.16056	0.001642	0.005666
ATXN7L3B	12q21.1	-0.16056	0.001643	0.005667
ADAT3	19p13.3	0.160546	0.001644	0.005669
WDR46	6p21.32	0.160544	0.001644	0.005669
EPS8	12p12.3	-0.16049	0.00165	0.005688
SSX6P	Xp11.23	0.160444	0.001655	0.005706
GPR84	12q13.13	-0.16044	0.001656	0.005706
PCDHGB1	5q31.3	-0.16041	0.001659	0.005716
PCDHGB6	5q31.3	-0.1604	0.001661	0.005722
CLEC4A	12p13.31	-0.16037	0.001664	0.005731
SAP30	4q34.1	0.16035	0.001666	0.005737
CLDN10	13q32.1	-0.16034	0.001667	0.00574
TRAF7	16p13.3	0.160337	0.001667	0.005741
COMMD6	13q22.2	-0.16029	0.001672	0.005756
NT5C3B	17q21.2	-0.16029	0.001673	0.005759
ISCA1P1	5q12.1	-0.16023	0.00168	0.005781
HSD17B11	4q22.1	-0.16022	0.00168	0.005781
SULT4A1	22q13.31	-0.16018	0.001685	0.005796
ZNF727	7q11.21	-0.16018	0.001685	0.005797
ZNF880	19q13.41	-0.16017	0.001686	0.005799
FAM20A	17q24.2	-0.16014	0.001689	0.005809
FRMPD4	Xp22.2	-0.16013	0.001692	0.005815
HS3ST5	6q21-q22.1	-0.16008	0.001697	0.005833
HSPB1P1	9q21.13	-0.16007	0.001698	0.005834
KLHL10	17q21.2	-0.16006	0.001699	0.005838
MAP3K13	3q27.2	0.160035	0.001702	0.005846
WNT7A	3p25.1	-0.16002	0.001703	0.00585
RSBN1	1p13.2	-0.15999	0.001707	0.005863
YARS	1p35.1	0.159936	0.001713	0.005883
ZNF585A	19q13.12	-0.15992	0.001715	0.005886
FAM163A	1q25.2	-0.1599	0.001717	0.005894
HS3ST4	16p12.1	-0.1599	0.001718	0.005895
BROX	1q41	0.159896	0.001718	0.005895
HUWE1	Xp11.22	0.159843	0.001724	0.005915
TPCN2	11q13.3	0.159827	0.001726	0.00592
PFDN6	6p21.32	0.159823	0.001726	0.005921
PRIM2	6p11.2	0.159795	0.00173	0.005931
XPC	3p25.1	-0.15978	0.001731	0.005935
PITPNM2	12q24.31	0.159766	0.001733	0.005941
MFAP3L	4q33	-0.15974	0.001736	0.005949
URB1	21q22.11	0.159729	0.001737	0.005953
ACTR8	3p21.1	-0.1597	0.00174	0.005962
SIMC1	5q35.2	0.159684	0.001743	0.005969
METTL7A	12q13.12	-0.15968	0.001743	0.005969
CCDC159	19p13.2	-0.15968	0.001744	0.005971
RBM48	7q21.2	-0.1596	0.001752	0.005999
SLC18A3	10q11.23	-0.15959	0.001754	0.006003
FERD3L	7p21.1	-0.15957	0.001756	0.006011
RPS25	11q23.3	-0.15956	0.001757	0.006012
SLC6A6	3p25.1	-0.15956	0.001758	0.006014
GLIS3	9p24.2	-0.15954	0.00176	0.006018

FAM81B	5q15	-0.15952	0.001762	0.006027
ZNF599	19q13.11	-0.15951	0.001763	0.006028
SFXN1	5q35.2	0.15951	0.001763	0.006028
ZBTB14	18p11.31	-0.15951	0.001764	0.006028
SDS	12q24.13	-0.1595	0.001764	0.00603
WASH2P	2q14.1	0.159478	0.001767	0.006038
PM20D1	1q32.1	-0.15948	0.001767	0.006038
PTPN5	11p15.1	-0.15947	0.001768	0.00604
FCF1	14q24.3	-0.15947	0.001769	0.00604
RTEL1	20q13.33	0.159455	0.00177	0.006043
BRINP1	9q33.1	-0.15945	0.00177	0.006043
SNCG	10q23.2	-0.15945	0.001771	0.006044
PCGF3	4p16.3	0.159435	0.001772	0.006049
MAGED4B	Xp11.22	-0.15942	0.001774	0.006054
PTPN11	12q24.13	0.159411	0.001775	0.006057
USP13	3q26.33	0.1594	0.001777	0.006061
FCER2	19p13.2	-0.15939	0.001778	0.006064
CITED1	Xq13.1	0.159363	0.001781	0.006074
RGS11	16p13.3	0.159354	0.001782	0.006075
ZNF260	19q13.12	-0.15935	0.001782	0.006075
PIGB	15q21.3	-0.15935	0.001783	0.006075
PCDHA11	5q31.3	-0.15934	0.001784	0.006078
ZNF709	19p13.2	-0.15932	0.001787	0.006087
CCDC66	3p14.3	0.159313	0.001787	0.006087
EZR	6q25.3	0.15931	0.001787	0.006087
TUBD1	17q23.1	-0.15931	0.001788	0.006087
ALKBH1	14q24.3	-0.15929	0.00179	0.006093
TMX3	18q22.1	-0.15926	0.001793	0.006105
PACS2	14q32.33	0.159243	0.001796	0.00611
UPF1	19p13.11	0.159243	0.001796	0.00611
FAM83E	19q13.33	0.15924	0.001796	0.006111
RPP25	15q24.2	0.15923	0.001797	0.006114
MBD6	12q13.3	0.159214	0.001799	0.006119
CHADL	22q13.2	-0.15919	0.001802	0.006127
CDS1	4q21.23	0.15918	0.001803	0.006131
TCL1A	14q32.13	-0.15917	0.001804	0.006134
SEPHS2	16p11.2	-0.15914	0.001808	0.006146
SLC35A4	5q31.3	0.159132	0.001809	0.006148
NFKBIE	6p21.1	-0.15912	0.00181	0.00615
RUBCN	3q29	0.159122	0.00181	0.00615
NDUFA5	7q31.32	-0.15911	0.001812	0.006155
LRRTM1	2p12	-0.15911	0.001812	0.006155
HOXA13	7p15.2	0.1591	0.001813	0.006156
TLE2	19p13.3	-0.15906	0.001818	0.006172
LPIN1	2p25.1	0.15902	0.001823	0.006187
CA9	9p13.3	0.158983	0.001827	0.006201
CDH5	16q21	-0.15898	0.001828	0.006202
GOLT1B	12p12.1	-0.15895	0.001831	0.006212
CFAP36	2p16.1	-0.15895	0.001831	0.006212
FAM50B	6p25.2	-0.15894	0.001832	0.006214
HELZ2	20q13.33	0.158921	0.001835	0.006222
PSORS1C3	6p21.33	0.158901	0.001837	0.006229
KRT36	17q21.2	-0.1589	0.001838	0.00623
TMEM68	8q12.1	-0.15889	0.001839	0.006233
TADA3	3p25.3	-0.15884	0.001845	0.006251
ZFP2	5q35.3	-0.15884	0.001845	0.006251
HMGN1	21q22.2	0.158815	0.001848	0.00626
TREX1	3p21.31	0.158788	0.001851	0.006271

LOC401463	8q12.3	-0.15876	0.001855	0.006283
RMND5B	5q35.3	0.158744	0.001857	0.006287
SCML1	Xp22.13	0.15874	0.001857	0.006288
FKTN	9q31.2	0.158736	0.001858	0.006288
GABRA5	15q12	-0.15871	0.001861	0.006299
NFE2L1	17q21.32	-0.1587	0.001862	0.0063
C11ORF87	11q22.3	-0.15867	0.001866	0.006314
C12ORF60	12p13.1-p12.3	-0.15867	0.001867	0.006314
MRPL50	9q31.1	0.158633	0.001871	0.006327
STAT5B	17q21.2	-0.15862	0.001872	0.00633
DCHS2	4q31.3	-0.15859	0.001876	0.006342
RPL7L1	6p21.1	0.158551	0.001881	0.006358
SLC22A16	6q21 6q21-q22.1	-0.15851	0.001887	0.006376
MAP3K6	1p36.11	0.158497	0.001888	0.006379
BMP1	8p21.3	-0.15848	0.00189	0.006384
C17ORF107	17p13.2	-0.15848	0.00189	0.006384
VPS54	2p15-p14	-0.15846	0.001892	0.00639
SETD5	3p25.3	0.158461	0.001893	0.00639
BET1P1	7q36.1	-0.15846	0.001893	0.006391
ASAP3	1p36.12	-0.15843	0.001896	0.006401
ERC2	3p14.3	-0.15839	0.001902	0.006418
SEMA4F	2p13.1	-0.15836	0.001905	0.006429
CD2	1p13.1	-0.15835	0.001906	0.006431
KCMF1	2p11.2	-0.15834	0.001907	0.006434
VASN	16p13.3	-0.15832	0.00191	0.006443
ABCA4	1p22.1	-0.15831	0.001912	0.006447
POLE3	9q32	0.158301	0.001913	0.00645
OLFM2	19p13.2	-0.1583	0.001914	0.00645
TSEN2	3p25.2	0.158293	0.001914	0.006451
TRAF6	11p12	-0.15828	0.001916	0.006457
PTPRC	1q31.3-q32.1	-0.15827	0.001917	0.006459
HAS1	19q13.41	-0.15827	0.001917	0.006459
TATDN3	1q32.3	-0.15826	0.001918	0.006461
CCL15-CCL14	17q12	-0.15821	0.001925	0.006482
C9ORF47	9q22.1	-0.15814	0.001934	0.006511
RPL31P11	1q23.3	-0.15811	0.001938	0.006523
UCKL1	20q13.33	0.158109	0.001938	0.006523
ABCC3	17q21.33	0.158101	0.001939	0.006524
SLBP	4p16.3	0.158101	0.001939	0.006524
MFSD4B	6q21	0.158065	0.001944	0.006539
PAPSS2	10q23.2-q23.31	0.158053	0.001945	0.006543
TMEM199	17q11.2	-0.15803	0.001949	0.006553
NANOS3	19p13.12	-0.15799	0.001953	0.006567
NACC2	9q34.3	0.157991	0.001953	0.006567
NR0B1	Xp21.2	-0.15799	0.001954	0.006567
PDCD10	3q26.1	-0.15798	0.001955	0.006571
ATG14	14q22.3	-0.15794	0.00196	0.006585
ZC3H12A	1p34.3	0.157936	0.00196	0.006586
GAB1	4q31.21	-0.15791	0.001963	0.006595
SUFU	10q24.32	-0.15789	0.001966	0.006602
DNAJC5G	2p23.3	0.157885	0.001967	0.006606
CD33	19q13.41	-0.15788	0.001968	0.006606
TAFA4	3p14.1	-0.15787	0.001969	0.006611
ATP6V1D	14q23.3	-0.15785	0.001971	0.006616
TRAPPC6B	14q21.1	-0.15781	0.001977	0.006635
DERA	12p12.3	-0.15779	0.001979	0.006641
RAB5A	3p24.3	-0.15772	0.001989	0.006671
ST8SIA2	15q26.1	-0.15772	0.001989	0.006672

GPC5	13q31.3	-0.15771	0.00199	0.006674
SIGLEC8	19q13.41	-0.1577	0.001991	0.006676
TRMU	22q13.31	0.157617	0.002003	0.006714
SPATS2L	2q33.1	-0.1576	0.002005	0.00672
SIRT7	17q25.3	0.157593	0.002006	0.006722
CP	3q24-q25.1	-0.15756	0.002011	0.006738
WASH5P	19p13.3	0.15752	0.002016	0.006753
KRT71	12q13.13	-0.15751	0.002017	0.006757
JDP2	14q24.3	-0.1575	0.002018	0.006759
OSR1	2p24.1	-0.15748	0.002021	0.006767
STAT3	17q21.2	-0.15747	0.002022	0.006771
SLAMF8	1q23.2	-0.15743	0.002028	0.006787
FUBP3	9q34.11-q34.12	0.157416	0.00203	0.006793
IGLON5	19q13.41	-0.1574	0.002032	0.006799
ARMC9	2q37.1	-0.1574	0.002032	0.0068
CENPQ	6p12.3	0.157384	0.002034	0.006804
PVALB	22q12.3	-0.15738	0.002035	0.006806
MMD	17q22	-0.15737	0.002036	0.006808
SWT1	1q25.3	-0.15736	0.002037	0.006811
GEMIN5	5q33.2	0.157352	0.002038	0.006814
CADM4	19q13.31	-0.15734	0.002041	0.00682
LGI1	10q23.33	-0.15733	0.002041	0.00682
ATP6V1B2	8p21.3	-0.15733	0.002041	0.00682
EHMT1-IT1	9q34.3	0.157309	0.002044	0.006829
DNAJA2	16q11.2	-0.15728	0.002048	0.00684
LY6D	8q24.3	-0.15724	0.002054	0.00686
NAA50	3q13.31	0.157231	0.002055	0.006861
USP30	12q24.11	-0.15722	0.002056	0.006864
AGBL2	11p11.2	-0.1572	0.002059	0.006872
ARID3C	9p13.3	0.157176	0.002063	0.006883
UPF3B	Xq24	0.157164	0.002064	0.006888
CRYBG2	1p36.11	0.157101	0.002073	0.006915
SPON2	4p16.3	-0.15709	0.002074	0.006919
ZNF772	19q13.43	-0.15708	0.002075	0.00692
SIVA1	14q32.33	0.157084	0.002075	0.00692
MRPL49	11q13.1	-0.15707	0.002077	0.006925
COX4I2	20q11.21	-0.15707	0.002077	0.006925
PCDHGA5	5q31.3	-0.15705	0.00208	0.006934
SOCS7	17q12	0.157019	0.002084	0.006945
GDPD3	16p11.2	0.157017	0.002085	0.006945
MEIS2	15q14	-0.15701	0.002086	0.006948
RPL26	17p13.1	-0.15698	0.00209	0.006959
JPT1	17q25.1	0.156966	0.002092	0.006965
AGAP11	10q23.2	0.156923	0.002098	0.006984
DEDD	1q23.3	0.156903	0.0021	0.006992
DBN1	5q35.3	-0.1569	0.002101	0.006992
ARRDC4	15q26.2	-0.15686	0.002107	0.007012
FCGR3A	1q23.3	-0.15685	0.002108	0.007013
SPTLC3	20p12.1	-0.15684	0.002109	0.007015
COA5	2q11.2	-0.15679	0.002116	0.007038
TMEM164	Xq23	0.156789	0.002116	0.007038
RRH	4q25	0.156764	0.00212	0.007049
FCN1	9q34.3	-0.15675	0.002121	0.007053
CTAGE9	6q23.2	0.156728	0.002125	0.007063
CARM1	19p13.2	0.156722	0.002126	0.007065
KATNBL1P6	6q24.3	-0.15672	0.002126	0.007065
SRPK1	6p21.31	0.15671	0.002128	0.007067
NEK7	1q31.3	-0.15671	0.002128	0.007067

PLA2G7	6p12.3	-0.15668	0.002132	0.007081
RHOBTB1	10q21.2	-0.15667	0.002133	0.007083
CSPP1	8q13.1-q13.2	0.156641	0.002137	0.007096
DPRXP4	17q11.2	0.156622	0.00214	0.007104
MAGOHB	12p13.2	0.156609	0.002142	0.007108
PTPN18	2q21.1	0.156608	0.002142	0.007108
RHBDL3	17q11.2	-0.1566	0.002142	0.007108
U2AF1L4	19q13.12	0.156604	0.002143	0.007108
CETN3	5q14.3	-0.15659	0.002145	0.007112
NAAA	4q21.1	-0.15659	0.002145	0.007112
NXPE3	3q12.3	-0.15659	0.002145	0.007112
ADRB3	8p11.23	-0.15656	0.002149	0.007126
ZNF134	19q13.43	-0.15655	0.002151	0.007128
MLLT3	9p21.3	-0.15654	0.002152	0.00713
EBF4	20p13	-0.15654	0.002152	0.00713
HMGXB3	5q32	0.156534	0.002153	0.007131
PTPN9	15q24.2	-0.15653	0.002153	0.007131
PLXNA2	1q32.2	0.15653	0.002153	0.007131
IQSEC3	12p13.33	-0.15653	0.002154	0.007131
PPP3R1	2p14	-0.15652	0.002155	0.007133
MMP8	11q22.2	-0.15652	0.002155	0.007133
KLHL41	2q31.1	-0.15651	0.002156	0.007137
COPA	1q23.2	0.1565	0.002157	0.007138
RELA	11q13.1	-0.1565	0.002158	0.007138
USP36	17q25.3	0.156486	0.002159	0.007144
HPCAL4	1p34.2	-0.15648	0.00216	0.007144
UBE2G1	17p13.2	-0.15647	0.002161	0.007148
APPL2	12q23.3	-0.15644	0.002166	0.00716
BDH1	3q29	0.156427	0.002168	0.007167
PGM5P2	9p11.2	-0.1564	0.002171	0.007176
SP4	7p15.3	-0.15638	0.002175	0.007189
PPP4R4	14q32.12-q32.13	-0.15636	0.002178	0.007195
FAM131A	3q27.1	-0.15634	0.002181	0.007205
TRIM17	1q42.13	0.156322	0.002183	0.007211
HIST2H2AC	1q21.2	0.156236	0.002196	0.007251
KIAA0355	19q13.11	-0.1562	0.0022	0.007264
ANKRD2	10q24.2	-0.1562	0.0022	0.007264
UBE2H	7q32.2	-0.15616	0.002207	0.007285
BCL2A1	15q25.1	-0.15615	0.002208	0.007287
SERPINA3	14q32.13	-0.15609	0.002216	0.007314
CHST7	Xp11.3	-0.15609	0.002217	0.007314
CSRNP3	2q24.3	-0.15607	0.002219	0.007321
DGCR9	22q11.21	0.156036	0.002225	0.007337
TSPAN10	17q25.3	-0.15604	0.002225	0.007337
RBM42	19q13.12	0.156026	0.002226	0.00734
LINC00663	19p13.11	-0.15598	0.002233	0.00736
EXOC3L4	14q32.32	0.15598	0.002233	0.00736
CHMP2B	3p11.2	-0.15595	0.002237	0.007373
FEM1A	19p13.3	0.155946	0.002238	0.007375
ANAPC1	2q13	0.155878	0.002248	0.007406
MIOS	7p21.3	0.155862	0.002251	0.007413
CBX2	17q25.3	0.155861	0.002251	0.007413
PTCHD1	Xp22.11	-0.15585	0.002252	0.007416
DRD1	5q35.2	-0.15581	0.002258	0.007434
PLPP5	8p11.23	-0.15581	0.002259	0.007434
SP2	17q21.32	0.155799	0.00226	0.007438
MARF1	16p13.11	-0.15577	0.002264	0.007449
RASSF6	4q13.3	-0.15575	0.002267	0.007458



SLC15A3	11q12.2	-0.15575	0.002267	0.007458
TMEM240	1p36.33	-0.15575	0.002267	0.007458
NUCB1	19q13.33	-0.15573	0.002271	0.007467
TANC2	17q23.2-q23.3	-0.15572	0.002271	0.007468
CYBB	Xp21.1-p11.4	-0.15572	0.002272	0.007469
ABCA9	17q24.2	-0.15568	0.002278	0.007488
MRPL37	1p32.3	0.155662	0.00228	0.007494
QRICH2	17q25.1	0.155661	0.002281	0.007494
ZNF883	9q32	-0.15563	0.002286	0.00751
CLDND1	3q11.2	-0.15561	0.002288	0.007515
ZDHHC17	12q21.2	-0.1556	0.002289	0.007519
WDR59	16q23.1	0.155562	0.002296	0.007538
SLC43A2	17p13.3	-0.15556	0.002297	0.00754
C9ORF152	9q31.3	0.15555	0.002297	0.007541
RHOH	4p14	-0.15554	0.002299	0.007547
EPN1	19q13.42	0.155447	0.002313	0.007591
H1FO	22q13.1	-0.15543	0.002316	0.007599
C20ORF96	20p13	0.155379	0.002324	0.007622
STRADA	17q23.3	-0.15538	0.002324	0.007623
CASTOR1	22q12.2	-0.15537	0.002325	0.007626
CLEC2A	12p13.31	-0.15536	0.002326	0.007626
BARX2	11q24.3	0.15535	0.002328	0.007632
OR10W1	11q12.1	0.155325	0.002332	0.007643
MEI1	22q13.2	-0.15531	0.002335	0.007651
DENND5B	12p11.21	-0.1553	0.002335	0.007651
RASL10B	17q12	-0.15529	0.002337	0.007656
PMVK	1q21.3	0.155279	0.002339	0.007662
NGB	14q24.3	-0.15526	0.002342	0.00767
FAM126A	7p15.3	-0.15525	0.002344	0.007674
WBP2	17q25.1	-0.15525	0.002344	0.007674
WDR88	19q13.11	0.155243	0.002344	0.007675
HGSNAT	8p11.21-p11.1	-0.15523	0.002347	0.007681
CUX1	7q22.1	-0.15522	0.002347	0.007682
NSUN5	7q11.23	0.155184	0.002354	0.007701
USP25	21q21.1	-0.15514	0.00236	0.007719
TMEM215	9p21.1	-0.15514	0.00236	0.007719
SS18L1	20q13.33	0.155118	0.002364	0.007731
MAGEA4	Xq28	-0.1551	0.002367	0.00774
AFF4	5q31.1	-0.15508	0.00237	0.007747
TNMD	Xq22.1	-0.15505	0.002374	0.007761
DLG4	17p13.1	-0.15504	0.002377	0.007767
WFDC1	16q24.1	-0.15503	0.002378	0.00777
MORF4	4q34.1	-0.15501	0.00238	0.007777
TRO	Xp11.21	-0.155	0.002383	0.007784
RRP9	3p21.2	0.154982	0.002385	0.00779
TFF3	21q22.3	-0.15498	0.002386	0.00779
CHRNA3	2q37.1	0.154977	0.002386	0.00779
MYOZ2	4q26	-0.15496	0.002388	0.007796
BAG3	10q26.11	0.154959	0.002389	0.007797
RETREG3	17q21.2	-0.15491	0.002397	0.007821
AIFM1	Xq26.1	0.154877	0.002402	0.007836
UBE2O	17q25.1	0.154868	0.002403	0.00784
TGFBR2	3p24.1	-0.15485	0.002407	0.00785
PCOTH	13q12.12	0.154837	0.002408	0.007853
BTLA	3q13.2	-0.15482	0.00241	0.007859
BCL2L13	22q11.21	-0.15481	0.002412	0.007863
ENTPD3	3p22.1	-0.15478	0.002416	0.007876
ABCB1	7q21.12	-0.15473	0.002425	0.007903

NLRX1	11q23.3	-0.15471	0.002428	0.00791
MRPL41	9q34.3	0.15467	0.002435	0.007932
ANGPTL7	1p36.22	-0.15466	0.002436	0.007935
DYDC2	10q23.1	-0.15465	0.002438	0.00794
ZNF354C	5q35.3	-0.15463	0.002441	0.00795
KCNJ13	2q37.1	0.15461	0.002444	0.007958
TPTE2P3	13q14.3	-0.1546	0.002446	0.007962
PLPPR1	9q31.1	-0.15459	0.002448	0.007968
SESN1	6q21	-0.15453	0.002457	0.007995
MBTPS1	16q23.3-q24.1	-0.15453	0.002457	0.007995
CDCP1	3p21.31	0.154527	0.002458	0.007995
RNF26	11q23.3	0.154498	0.002462	0.008009
NUDT12	5q21.2	-0.1545	0.002463	0.008009
TAS2R43	12p13.2	0.154476	0.002466	0.008018
ZNF2	2q11.1	-0.15447	0.002467	0.008021
CDH6	5p13.3	-0.15445	0.00247	0.00803
BRSK1	19q13.42	-0.15444	0.002472	0.008034
HOXA11-AS	7p15.2	0.154423	0.002474	0.008041
HBA1	16p13.3	0.154419	0.002475	0.008042
PGBD5	1q42.13	-0.1544	0.002478	0.00805
PRKAR2B	7q22.3	-0.15438	0.002481	0.008058
ARL3	10q24.32	-0.15438	0.002482	0.008059
IFI27L2	14q32.12	-0.15438	0.002482	0.008059
STK25	2q37.3	0.154372	0.002483	0.00806
ZNF76	6p21.31	0.154347	0.002487	0.008072
KCNB2	8q21.11	-0.15432	0.00249	0.008082
CD164L2	1p36.11	0.154286	0.002497	0.008102
BBOX1	11p14.2	-0.15428	0.002498	0.008105
CTTNBP2NL	1p13.2	-0.15428	0.002499	0.008105
ATOH8	2p11.2	-0.15426	0.002502	0.008113
SRCAP	16p11.2	0.154254	0.002502	0.008113
ZAR1L	13q13.1	0.154252	0.002502	0.008113
ZNF821	16q22.2	-0.1542	0.00251	0.008137
MGAT4C	12q21.31-q21.32	-0.1542	0.002511	0.008137
MOSPD2	Xp22.2	-0.1542	0.002511	0.008137
FZD4	11q14.2	-0.15418	0.002514	0.008144
PLEKHG5	1p36.31	0.154182	0.002514	0.008144
HSD11B1L	19p13.3	-0.15417	0.002516	0.008148
NAGA	22q13.2	-0.15417	0.002516	0.00815
JMJD1C	10q21.3	-0.15414	0.002521	0.008163
RAB3IP	12q15	0.154122	0.002524	0.008171
ANO10	3p22.1-p21.33	-0.15408	0.00253	0.00819
UOX	1p31.1	-0.15408	0.002531	0.008192
BEGAIN	14q32.2	0.154064	0.002533	0.008197
CLOCK	4q12	0.15406	0.002534	0.008198
UBE2Z	17q21.32	-0.15402	0.002541	0.00822
NLRC4	2p22.3	-0.15401	0.002542	0.008221
AK2	1p35.1	0.153986	0.002546	0.008234
OTX1	2p15	0.153965	0.00255	0.008244
CD3D	11q23.3	-0.15396	0.00255	0.008244
DDX58	9p21.1	-0.15394	0.002554	0.008256
S100A10	1q21.3	0.153924	0.002557	0.008262
ABCF3	3q27.1	0.153895	0.002562	0.008276
DCC	18q21.2	-0.15389	0.002562	0.008276
NUDC	1p36.11	0.153836	0.002571	0.008306
SYT9	11p15.4	-0.15376	0.002584	0.008345
SNAI1	20q13.13	-0.15376	0.002585	0.008347
AQP8	16p12.1	-0.15375	0.002585	0.008347

MAPK8IP1P2	17q21.31	-0.15375	0.002586	0.008347
KLHL3	5q31.2	-0.15373	0.002589	0.008356
EHBP1	2p15	-0.15371	0.002592	0.008364
PDP2	16q22.1	0.153704	0.002594	0.008368
NFKBIB	19q13.2	0.153703	0.002594	0.008368
FAIM2	12q13.12	0.153696	0.002595	0.00837
COG6	13q14.11	-0.15363	0.002606	0.008403
UBA6	4q13.2	0.153628	0.002607	0.008405
WDSUB1	2q24.2	-0.15361	0.00261	0.008415
NTS	12q21.31	-0.1536	0.002611	0.008417
RIOX2	3q11.2	0.153558	0.002619	0.008439
HMGCL	1p36.11	-0.15349	0.00263	0.008474
ECHDC1	6q22.33	-0.15349	0.002631	0.008475
GALNT10	5q33.2	-0.15345	0.002638	0.008497
IGSF11	3q13.32	-0.15339	0.002647	0.008526
SULT1C4	2q12.3	-0.15334	0.002657	0.008555
POU5F2	5q15	0.153324	0.002659	0.008559
MRPS12	19q13.2	0.153324	0.002659	0.008559
PTGIR	19q13.32	-0.15332	0.002659	0.008559
IL17C	16q24.2	0.153318	0.00266	0.00856
XPO4	13q12.11	0.153305	0.002662	0.008566
P2RY13	3q25.1	-0.15326	0.002669	0.008588
ZNF254	19p12	-0.15326	0.00267	0.008588
MAP1S	19p13.11	0.153255	0.002671	0.008589
EPB41L3	18p11.31	-0.15325	0.002671	0.008589
CLDN6	16p13.3	-0.15324	0.002673	0.008595
VAX2	2p13.3	-0.15323	0.002674	0.008597
ZNF678	1q42.13	0.153212	0.002678	0.008608
SPRYD3	12q13.13	-0.15316	0.002688	0.008639
FSTL5	4q32.2	-0.15313	0.002693	0.008651
PLXDC1	17q12	-0.15311	0.002696	0.008662
COMMD4	15q24.2	0.153057	0.002706	0.00869
SMG1P2	16p11.2	0.153052	0.002706	0.008692
ILRUN	6p21.31	0.153027	0.002711	0.008705
ME1	6q14.2	0.153001	0.002715	0.008718
SLC31A1	9q32	0.152995	0.002717	0.00872
RNF41	12q13.3	-0.15299	0.002717	0.00872
EEF1A1P9	4q24	-0.15295	0.002725	0.008745
DNAJC30	7q11.23	-0.15293	0.002727	0.00875
MLANA	9p24.1	0.15291	0.002731	0.008762
TRAFD1	12q24.13	-0.15288	0.002737	0.008776
UBXN4	2q21.3	-0.15288	0.002737	0.008776
MUSK	9q31.3	-0.15285	0.002742	0.008792
HMOX1	22q12.3	-0.15285	0.002742	0.008792
INS-IGF2	11p15.5	-0.15281	0.002749	0.008811
GPR89A	1q21.1	0.15281	0.002749	0.008811
NUDT7	16q23.1	-0.15279	0.002752	0.00882
SCG5	15q13.3	-0.15279	0.002753	0.00882
COMT	22q11.21	-0.15277	0.002756	0.008829
SNX9	6q25.3	-0.15277	0.002757	0.008829
ZBTB11-AS1	3q12.3	-0.15277	0.002757	0.008829
MAGED4	Xp11.22	-0.15275	0.00276	0.008838
PBLD	10q21.3	-0.1527	0.00277	0.008866
AKAP8L	19p13.12	0.152682	0.002772	0.008873
MYO16	13q33.3	-0.15262	0.002783	0.008908
TSN	2q14.3	-0.15258	0.002791	0.008932
UBXN1	11q12.3	-0.15255	0.002797	0.008948
DTNA	18q12.1	-0.15254	0.002798	0.008949

RHOXF2B	Xq24	0.152516	0.002802	0.008962
MUC4	3q29	0.152498	0.002806	0.00897
ADGRF5	6p12.3	-0.1525	0.002806	0.00897
ZNF600	19q13.41	0.152495	0.002806	0.00897
TMEM156	4p14	-0.15249	0.002807	0.008971
C1ORF94	1p35.1	-0.15248	0.002809	0.008975
CHST8	19q13.11	-0.15248	0.002809	0.008975
FDXACB1	11q23.1	-0.15247	0.002811	0.008978
WDFY4	10q11.23	-0.15247	0.002811	0.008978
EPHA2	1p36.13	0.152466	0.002811	0.008978
LY6H	8q24.3	-0.15247	0.002812	0.008978
ESRG	3p14.3 3p14.3	0.152456	0.002813	0.008982
UTS2B	3q28	-0.15244	0.002817	0.008991
EPM2A	6q24.3	-0.15243	0.002817	0.008992
PTPN21	14q31.3	-0.1524	0.002824	0.00901
DAD1P1	12p12.1	-0.1524	0.002824	0.00901
MTHFR	1p36.22	0.152364	0.00283	0.009028
CNNM2	10q24.32	-0.15236	0.002831	0.009031
TCP11L1	11p13	-0.15234	0.002834	0.009038
CCR4	3p22.3	-0.15233	0.002836	0.009043
TSEN54	17q25.1	0.152328	0.002837	0.009043
PCSK2	20p12.1	-0.15231	0.002841	0.009055
MYNN	3q26.2	-0.1523	0.002842	0.009057
CD300LB	17q25.1	-0.15228	0.002845	0.009065
RRAD	16q22.1	-0.15225	0.002852	0.009085
PCDHB9	5q31.3	-0.1522	0.00286	0.00911
MACROD2	20p12.1	-0.1522	0.002861	0.009111
ENPP3	6q23.2	-0.15218	0.002865	0.009122
PWWP2B	10q26.3	0.152166	0.002867	0.009127
RTCB	22q12.3	-0.15216	0.002867	0.009127
ALPK2	18q21.31-q21.32	-0.15214	0.002871	0.009139
KLRD1	12p13.2	-0.15213	0.002872	0.009141
MME	3q25.2	-0.15212	0.002876	0.00915
HIC1	17p13.3	-0.1521	0.002878	0.009157
MAP3K14-AS1	17q21.31	-0.15209	0.002881	0.009165
PCDHA5	5q31.3	-0.15206	0.002886	0.009179
JPH1	8q21.11	0.152015	0.002895	0.009203
NEPRO	3q13.2	-0.15202	0.002895	0.009203
SLC2A5	1p36.23	-0.152	0.002898	0.009212
ORAI3	16p11.2	-0.15199	0.002899	0.009214
MTMR11	1q21.2	0.151955	0.002906	0.009235
EMX2	10q26.11	-0.15192	0.002912	0.009253
OLAH	10p13	-0.15192	0.002913	0.009254
VPS33A	12q24.31	-0.1519	0.002916	0.009259
ZNF583	19q13.43	-0.1519	0.002916	0.009259
TMEM117	12q12	-0.1519	0.002916	0.009259
SC5D	11q23.3-q24.1	-0.1519	0.002916	0.009259
QPCTL	19q13.32	0.15189	0.002918	0.009264
ADORA2A	22q11.23	-0.15187	0.002922	0.009275
SCGN	6p22.2	-0.15184	0.002927	0.009288
TMEM25	11q23.3	-0.15183	0.00293	0.009297
CSRP1	1q32.1	-0.15182	0.002931	0.0093
NSUN6	10p12.31	0.151799	0.002935	0.009311
BCCIP	10q26.2	0.151795	0.002936	0.009312
C1ORF52	1p22.3	-0.15178	0.002938	0.009317
SLC24A2	9p22.1-p21.3	-0.15175	0.002944	0.009333
TXNL1	18q21.31	-0.15173	0.002948	0.009344
GPRASP1	Xq22.1	-0.15171	0.002953	0.009358

PYGM	11q13.1	-0.15171	0.002953	0.009359
MYOCD	17p12	-0.15168	0.002957	0.009369
CPA2	7q32.2	-0.15166	0.002961	0.00938
ALDH8A1	6q23.3	-0.15166	0.002962	0.00938
SLAMF1	1q23.3	-0.15165	0.002963	0.009384
KAT5	11q13.1	-0.15164	0.002966	0.009392
FOXN2	2p16.3	-0.15162	0.002969	0.0094
STARD8	Xq13.1	-0.1516	0.002973	0.009411
NME8	7p14.1	-0.15159	0.002975	0.009415
ARIH1	15q24.1	-0.15158	0.002978	0.009423
ISX	22q12.3	-0.15155	0.002982	0.009435
SYNM	15q26.3	-0.15155	0.002984	0.009439
YWHAQ	2p25.1	-0.15154	0.002984	0.009439
SRPK2	7q22.3	-0.15152	0.002989	0.009454
ARAP1	11q13.4	-0.1515	0.002992	0.00946
PEPD	19q13.11	-0.15149	0.002994	0.009466
CBX7	22q13.1	-0.15146	0.003	0.009481
ZNF205	16p13.3	0.151463	0.003	0.009481
KAZN	1p36.21	-0.15144	0.003005	0.009495
SERPINB8	18q22.1	-0.15142	0.003008	0.009501
IL10RA	11q23.3	-0.15142	0.003008	0.009501
TLCD3A	17p13.3	0.151386	0.003015	0.009521
FABP3	1p35.2	-0.15136	0.00302	0.009536
GJC1	17q21.31	-0.15134	0.003024	0.009549
EVPL	17q25.1	0.151278	0.003036	0.009584
TSPYL4	6q22.1	-0.15126	0.00304	0.009595
NTF3	12p13.31	-0.15125	0.003042	0.0096
CYB5D2	17p13.2	-0.15122	0.003047	0.009614
C17ORF77	17q25.1	-0.15122	0.003048	0.009616
MAN2B1	19p13.13	-0.15118	0.003055	0.009637
CXXC4	4q24	-0.15113	0.003064	0.009663
TP53I3	2p23.3	-0.15111	0.003069	0.009678
TICAM2	5q22.3	-0.15109	0.003073	0.009686
ZDHHC3	3p21.31	0.15109	0.003073	0.009686
GCNT2	6p24.3-p24.2	-0.15109	0.003073	0.009686
FAM227A	22q13.1	0.151004	0.00309	0.009736
KLHL9	9p21.3	-0.151	0.00309	0.009736
EPHA1	7q34-q35	0.150995	0.003092	0.00974
ONECUT3	19p13.3	0.150948	0.003101	0.009768
AKTIP	16q12.2	-0.15094	0.003103	0.009771
ZUP1	6q22.1	0.150937	0.003103	0.009771
VPS53	17p13.3	0.150916	0.003107	0.009783
VPS50	7q21.2-q21.3	-0.15091	0.003108	0.009785
ORC4	2q23.1	-0.1509	0.00311	0.009787
PLEK	2p14	-0.1509	0.003111	0.009791
GFAP	17q21.31	-0.15089	0.003112	0.009791
HERC5	4q22.1	-0.15087	0.003117	0.009805
SLC25A12	2q31.1	-0.15086	0.003118	0.009807
CD84	1q23.3	-0.15086	0.00312	0.009811
CCND1	11q13.3	-0.15084	0.003123	0.009819
TRIM36	5q22.3	0.15083	0.003125	0.009823
MDGA1	6p21.2	-0.15082	0.003127	0.009828
LINC00597	15q24.3	0.150782	0.003134	0.009851
PYHIN1	1q23.1	-0.15078	0.003135	0.009851
LINC00174	7q11.21	0.150766	0.003137	0.009858
ATP5IF1	1p35.3	0.150755	0.00314	0.009863
MUTYH	1p34.1	0.150752	0.00314	0.009864
PKHD1	6p12.3-p12.2	-0.15075	0.003142	0.009866

ZNF483	9q31.3	-0.15071	0.003148	0.009885
FAM86B3P	8p23.1	0.150709	0.003149	0.009886
VWA5B1	1p36.12	-0.1507	0.00315	0.009889
MARCO	2q14.2	-0.15069	0.003152	0.009893
MIOX	22q13.33	0.150689	0.003153	0.009894
PES1	22q12.2	0.150652	0.00316	0.009916
SLC39A14	8p21.3	-0.15065	0.003162	0.009917
SYNJ2	6q25.3	0.150645	0.003162	0.009917
RFPL4B	6q21	-0.15062	0.003167	0.009933
CREB3	9p13.3	-0.15062	0.003168	0.009934
PMP2	8q21.13	-0.1506	0.003171	0.009941
MAP3K2	2q14.3	-0.15056	0.003179	0.009963
OLFM1	9q34.3	-0.15056	0.003179	0.009963
RBM45	2q31.2	-0.15056	0.003179	0.009963
LMNTD2	11p15.5	0.150557	0.00318	0.009963
SLC9B2	4q24	-0.15055	0.003182	0.009968
UBALD1	16p13.3	0.150544	0.003182	0.009968
UTS2R	17q25.3	-0.15052	0.003188	0.009985
S100A3	1q21.3	-0.15049	0.003194	0.010001
TAF6L	11q12.3	0.150456	0.0032	0.01002
PFDN1	5q31.3	-0.15045	0.003202	0.010024
HIST1H4E	6p22.2	0.150441	0.003204	0.010027
MTHFD1L	6q25.1	0.150424	0.003207	0.010036
LINC01106	2q13	0.150397	0.003213	0.010051
LDLRAD3	11p13	-0.15039	0.003214	0.010053
PIGH	14q24.1	-0.15038	0.003216	0.010059
SIGLEC9	19q13.41	-0.15037	0.003218	0.010064
ARHGAP21	10p12.1 10p12.3	0.150356	0.003221	0.010069
FGF8	10q24.32	0.150356	0.003221	0.010069
TOX4	14q11.2	-0.15036	0.003221	0.010069
PDP1	8q22.1	-0.15034	0.003224	0.010077
GTF3C4	9q34.13	0.150328	0.003227	0.010082
GAPDH	12p13.31	0.150326	0.003227	0.010082
ALDOA	16p11.2	0.150325	0.003227	0.010082
DZIP3	3q13.13	-0.15027	0.003239	0.010117
ANKRD20A11P	21q11.2	0.150255	0.003242	0.010123
MBNL1-AS1	3q25.1	-0.15025	0.003242	0.010123
KDM1B	6p22.3	0.150253	0.003242	0.010123
CDNF	10p13	-0.15025	0.003244	0.010125
NELFA	4p16.3	0.150243	0.003245	0.010126
ALK	2p23.2-p23.1	-0.1502	0.003253	0.010152
LRFN5	14q21.1	-0.15018	0.003257	0.010162
LOC643387	2q37.3	0.150154	0.003263	0.010179
CHRNA5	15q25.1	0.150148	0.003264	0.010181
CASP12	11q22.3	-0.15014	0.003267	0.010188
ADGRB1	8q24.3	-0.15013	0.003268	0.01019
MTHFSD	16q24.1	0.150049	0.003285	0.010241
PLEKHA4	19q13.33	-0.15003	0.003288	0.01025
KCNE2	21q22.11	-0.15002	0.003291	0.010258
TRIP10	19p13.3	0.150013	0.003293	0.01026
RAB23	6p12.1-p11.2	-0.15	0.003296	0.010268
DPEP2	16q22.1	-0.14999	0.003298	0.010272
ZCCHC17	1p35.2	-0.14997	0.003301	0.010283
TUBA4A	2q35	0.149962	0.003303	0.010287
HAS3	16q22.1	0.149958	0.003304	0.010288
UBA1	Xp11.3	0.149951	0.003306	0.010291
L3MBTL1	20q13.12	0.149948	0.003306	0.010291
SOX10	22q13.1	-0.14994	0.003307	0.010291

VANGL2	1q23.2	-0.14994	0.003307	0.010291
PALM2-AKAP2	9q31.3	-0.14991	0.003314	0.010311
PTMAP11	9q22.33	0.149899	0.003317	0.010317
PPFIA2	12q21.31	-0.14989	0.003318	0.010319
CYBC1	17q25.3	-0.14987	0.003323	0.010334
C2ORF49	2q12.2	-0.14987	0.003323	0.010334
CFHR3	1q31.3	-0.1498	0.003337	0.010373
TTR	18q12.1	-0.1498	0.003337	0.010374
KIF21A	12q12	0.149797	0.003338	0.010375
CRYBA4	22q12.1	-0.14975	0.003348	0.010403
SLC25A23	19p13.3	0.149736	0.003351	0.010412
LINC01139	1q43	-0.14973	0.003353	0.010417
SNX1	15q22.31	-0.14971	0.003357	0.010428
CHST2	3q24	-0.1497	0.00336	0.010434
ZFAND5	9q21.13	-0.14964	0.003372	0.010471
SHROOM1	5q31.1	0.149618	0.003377	0.010481
CCM2L	20q11.21	-0.14962	0.003377	0.010481
FBH1	10p15.1	0.149616	0.003377	0.010481
PFKM	12q13.11	0.149597	0.003381	0.010492
VENTX	10q26.3	-0.14959	0.003384	0.010498
TMEM244	6q22.33	-0.14957	0.003387	0.010505
ANKRD7	7q31.31	-0.14954	0.003393	0.010525
TMEM132C	12q24.32-q24.33	-0.14953	0.003397	0.010534
FMN2	1q43	-0.14952	0.003398	0.010535
MAP7	6q23.3	0.149517	0.003399	0.010536
NMT2	10p13	-0.14951	0.003401	0.010542
LY6G6D	6p21.33	-0.14948	0.003406	0.010557
DPF2	11q13.1	-0.14946	0.00341	0.010566
CCDC92	12q24.31	-0.14944	0.003415	0.010581
CNTN3	3p12.3	-0.14944	0.003416	0.010582
NKX2-3	10q24.2	-0.14943	0.003417	0.010582
DUSP1	5q35.1	-0.14935	0.003434	0.010636
CD37	19q13.33	-0.14934	0.003437	0.010643
NPSR1-AS1	7p14.3	0.1493	0.003446	0.010668
BRD4	19p13.12	0.149241	0.003459	0.010706
PRKAB1	12q24.23	-0.14924	0.003459	0.010707
CFAP206	6q15	-0.14923	0.003461	0.010708
RAET1E	6q25.1	0.149215	0.003464	0.010719
SLC44A3	1p21.3	-0.14919	0.003469	0.010732
LRRTM4	2p12	-0.14919	0.00347	0.010732
TRIM65	17q25.1	0.149178	0.003473	0.010739
FPR1	19q13.41	-0.14917	0.003474	0.010741
ITIH5	10p14	-0.14917	0.003474	0.010741
OGFOD1	16q13	0.149143	0.00348	0.010758
EFCAB7	1p31.3	-0.14913	0.003484	0.010769
AKAP3	12p13.32	-0.14907	0.003497	0.010805
WDR7	18q21.31	-0.14899	0.003513	0.010855
ELAVL3	19p13.2	-0.14885	0.003546	0.010954
CDIPT	16p11.2	-0.14883	0.00355	0.010964
TFAP2A	6p24.3	0.148822	0.003552	0.01097
PHLDB3	19q13.31	-0.14882	0.003553	0.01097
NTN1	17p13.1	-0.14881	0.003555	0.010973
LRRC14B	5p15.33	-0.14881	0.003555	0.010973
SLTM	15q22.1	0.148806	0.003556	0.010974
SLC15A2	3q13.33	-0.14877	0.003564	0.010999
CCDC9	19q13.32	0.148711	0.003577	0.011037
RYBP	3p13	-0.14871	0.003579	0.011039
HJV	1q21.1	0.148688	0.003582	0.01105

XCL1	1q24.2	-0.14868	0.003584	0.011051
SELE	1q24.2	-0.14867	0.003585	0.011056
CRB1	1q31.3	-0.14866	0.00359	0.011067
DPEP1	16q24.3	-0.14858	0.003606	0.011116
PLBD1	12p13.1	-0.14857	0.003609	0.011124
CHKB	22q13.33	-0.14857	0.00361	0.011124
GDNF	5p13.2	-0.14856	0.003612	0.011128
ZNF423	16q12.1	-0.14855	0.003613	0.011128
TTC9B	19q13.2	0.148554	0.003613	0.011128
FAM13B	5q31.2	-0.14854	0.003615	0.011134
RPA4	Xq21.33	0.148492	0.003627	0.011168
RPL15	3p24.2	-0.14849	0.003628	0.011168
CYP11B2	8q24.3	-0.14849	0.003628	0.011168
GLRA2	Xp22.2	-0.14849	0.003629	0.011168
SOS1	2p22.1	-0.14848	0.003629	0.011168
PXN	12q24.23	0.148456	0.003636	0.011186
OOEP	6q13	-0.14843	0.003642	0.011203
ANKRD46	8q22.3	-0.14843	0.003642	0.011203
NODAL	10q22.1	-0.14842	0.003644	0.011205
MTURN	7p14.3	-0.14841	0.003646	0.011212
LCP2	5q35.1	-0.14839	0.00365	0.011222
PMM2	16p13.2	0.148346	0.003661	0.011254
LEP	7q32.1	-0.14834	0.003663	0.011259
THAP10	15q23	0.148323	0.003666	0.011267
PARD6G-AS1	18q23	0.148302	0.003671	0.01128
MXI1	10q25.2	-0.1483	0.003672	0.01128
C6ORF120	6q27	-0.14827	0.003679	0.0113
CNTNAP4	16q23.1	-0.14824	0.003685	0.011317
TRPV2	17p11.2	-0.14822	0.00369	0.01133
UPF2	10p14	0.148183	0.003699	0.011356
ZNF22	10q11.21	-0.14818	0.003699	0.011356
MIEF2	17p11.2	-0.14817	0.003703	0.011365
ZDHHC19	3q29	-0.14816	0.003703	0.011365
UGDH	4p14	-0.14814	0.003709	0.011382
NDUFAB1	16p12.2	0.148112	0.003716	0.011399
CCDC33	15q24.1	-0.1481	0.003718	0.011404
SLC27A6	5q23.3	-0.14809	0.00372	0.011409
IL22RA1	1p36.11	-0.14809	0.003721	0.011412
GMEB1	1p35.3	0.148068	0.003726	0.011423
CHCHD4	3p25.1	0.148064	0.003727	0.011424
GPBP1L1	1p34.1	-0.14806	0.003727	0.011424
DCAF8	1q23.2	0.148059	0.003728	0.011425
DCDC2	6p22.3	0.148049	0.00373	0.01143
CD276	15q24.1	-0.14803	0.003734	0.011439
RS1	Xp22.13	-0.148	0.003742	0.011461
FAHD2B	2q11.2	-0.148	0.003742	0.011462
PIGA	Xp22.2	0.147979	0.003747	0.011474
CUL4B	Xq24	-0.14795	0.003753	0.01149
SUPT5H	19q13.2	0.147939	0.003756	0.011499
SLC1A7	1p32.3	-0.14793	0.003758	0.011503
LOC256880	4q23	0.147923	0.00376	0.011505
SLC37A2	11q24.2	-0.14792	0.00376	0.011505
CD99	Xp22.33 and Yp11.2	-0.14792	0.003761	0.011505
SYT4	18q12.3	-0.14791	0.003764	0.011514
CD1D	1q23.1	-0.1479	0.003765	0.011514
COL2A1	12q13.11	-0.14789	0.003769	0.011526
CARMIL1	6p22.2	0.147875	0.003772	0.011532
YDJC	22q11.21	0.147872	0.003772	0.011532



AGMO	7p21.2	-0.14777	0.003798	0.011607
C14ORF119	14q11.2	-0.14776	0.003798	0.011607
CNTNAP3	9p12	-0.14776	0.0038	0.011609
VWA1	1p36.33	-0.14775	0.0038	0.011609
NRBP2	8q24.3	0.147755	0.0038	0.011609
CYB5A	18q22.3	-0.14773	0.003806	0.011623
PCF11	11q14.1	0.147731	0.003806	0.011623
ZNF511	10q26.3	0.147666	0.003822	0.011669
MAP7D1	1p34.3	-0.14766	0.003824	0.011675
ADGRG5	16q21	0.147642	0.003827	0.011683
CLEC7A	12p13.2	-0.1476	0.003837	0.011712
ZMYND10	3p21.31	0.147598	0.003838	0.011712
NEFM	8p21.2	-0.14759	0.00384	0.011715
AKR1C3	10p15.1	-0.14758	0.003842	0.01172
TAS2R19	12p13.2	0.147555	0.003849	0.011739
AMER3	2q21.1	-0.14753	0.003854	0.011754
CHRM4	11p11.2	-0.14753	0.003855	0.011755
HARBI1	11p11.2	-0.1475	0.003861	0.01177
PSMD1	2q37.1	0.147495	0.003863	0.011776
POGLUT1	3q13.33	-0.14749	0.003864	0.011777
DUSP22	6p25.3	-0.14747	0.003869	0.011791
ELOVL2	6p24.2	-0.14745	0.003874	0.011803
TTC5	14q11.2	-0.14741	0.003883	0.01183
NOTCH3	19p13.12	-0.14736	0.003897	0.01187
CYTH3	7p22.1	-0.14735	0.003898	0.011871
MVB12B	9q33.3	0.14735	0.003899	0.011871
ARHGAP22	10q11.22-q11.23	-0.14734	0.003902	0.01188
KCTD12	13q22.3	-0.1473	0.003911	0.011904
CDC25B	20p13	0.147282	0.003915	0.011916
SIGLEC17P	19q13.41	-0.14726	0.00392	0.01193
TMX1	14q22.1	-0.14722	0.003929	0.011956
ZFP62	5q35.3	0.147206	0.003934	0.011968
RNF148	7q31.32	0.147161	0.003945	0.011999
OLFML2A	9q33.3	-0.14716	0.003945	0.011999
KCTD5	16p13.3	0.147156	0.003946	0.012
ADRA1B	5q33.3	-0.14714	0.003951	0.012012
TMEM242	6q25.3	-0.14711	0.003958	0.01203
SCFD1	14q12	-0.14711	0.003958	0.01203
DEFB104A	8p23.1	-0.1471	0.00396	0.012035
SNHG7	9q34.3	0.147068	0.003968	0.012058
MRPS5	2q11.1	0.147052	0.003972	0.012068
AP1M1	19p13.11	-0.14705	0.003973	0.012068
ZBTB5	9p13.2	0.147042	0.003975	0.012072
ACLY	17q21.2	0.147029	0.003978	0.01208
PTCD1	7q22.1	0.147014	0.003982	0.012089
GTF3C3	2q33.1	-0.14698	0.003989	0.01211
CNOT10	3p22.3	0.146976	0.003991	0.012115
DUSP7	3p21.2	0.146946	0.003999	0.012135
LINC00304	16q24.3	0.146945	0.003999	0.012135
POLR2K	8q22.2	-0.14691	0.004007	0.012157
KCTD19	16q22.1	0.14691	0.004008	0.012157
STXBP4	17q22	-0.14691	0.004008	0.012157
BAZ2B	2q24.2	-0.14686	0.004021	0.012194
STK32B	4p16.2	-0.14684	0.004026	0.012206
PHOX2B	4p13	-0.14683	0.004027	0.01221
ZNF326	1p22.2	0.146821	0.00403	0.012216
NRROS	3q29	-0.14682	0.004032	0.012218
MC4R	18q21.32	-0.1468	0.004037	0.012232

ACRV1	11q24.2	0.146771	0.004043	0.012249
FANK1	10q26.2	0.146767	0.004044	0.012251
NANS	9q22.33	0.146755	0.004047	0.012257
CMKLR1	12q23.3	-0.14675	0.004047	0.012257
ATG16L1	2q37.1	0.14671	0.004058	0.012288
FAM86HP	3q22.1	0.146706	0.004059	0.012289
SYT16	14q23.2	-0.14671	0.00406	0.012289
SLC3A1	2p21	-0.1467	0.004061	0.012292
GAA	17q25.3	-0.14669	0.004064	0.012299
LPCAT3	12p13.31	-0.14667	0.004069	0.012312
WWP1	8q21.3	-0.14666	0.00407	0.012314
PCDHA8	5q31.3	-0.14664	0.004077	0.012332
TSPAN7	Xp11.4	-0.14662	0.004082	0.012347
ST7L	1p13.2	-0.14654	0.004102	0.012404
KAZALD1	10q24.31	0.146524	0.004106	0.012413
DACT2	6q27	-0.14652	0.004106	0.012413
GPLD1	6p22.3	-0.1465	0.004113	0.01243
CYP17A1	10q24.32	-0.14643	0.004131	0.012484
ARID4A	14q23.1	-0.14642	0.004134	0.01249
SLC38A11	2q24.3	-0.14641	0.004134	0.01249
ZFAND4	10q11.22	-0.14638	0.004144	0.012518
HSPB6	19q13.12	-0.14636	0.004148	0.012527
RMND5A	2p11.2	-0.14636	0.004149	0.012528
ZNF429	19p12	-0.14634	0.004153	0.012539
ARL10	5q35.2	-0.14633	0.004157	0.012548
IRX1	5p15.33	-0.14631	0.004161	0.01256
PPP2R2D	10q26.3	0.146304	0.004163	0.012563
ARHGEF17	11q13.4	-0.14627	0.004172	0.012587
PARVG	22q13.31	-0.14627	0.004172	0.012587
AACS	12q24.31	0.146266	0.004173	0.012588
ARNTL	11p15.3	-0.14626	0.004175	0.012591
CATSPER3	5q31.1	0.146215	0.004186	0.012624
KLKP1	19q13.33	-0.14619	0.004192	0.012637
FUZ	19q13.33	-0.14619	0.004192	0.012637
ATG5	6q21	-0.14618	0.004195	0.012646
MAP3K12	12q13.13	-0.14617	0.004198	0.012651
FZD8	10p11.21	-0.14616	0.0042	0.012655
RAMP2-AS1	17q21.2	-0.14615	0.004203	0.012663
PAMR1	11p13	-0.14615	0.004203	0.012663
OXR1	8q23.1	-0.14613	0.004208	0.012674
PWARSN	15q11.2	-0.14613	0.004208	0.012674
PTPA	9q34.11	0.146082	0.004221	0.01271
RAN	12q24.33	0.146078	0.004222	0.012711
CLEC12A	12p13.31	-0.14607	0.004225	0.012718
SSTR5	16p13.3	0.146049	0.00423	0.012731
CTDSP2	12q14.1	-0.14604	0.004232	0.012736
RWDD2A	6q14.1	-0.14602	0.004238	0.012751
MEOX1	17q21.31	-0.14602	0.004238	0.012751
ZNF540	19q13.12	-0.14601	0.00424	0.012753
PAFAH1B3	19q13.2	0.146008	0.004241	0.012754
BOLA3	2p13.1	0.145996	0.004244	0.012761
MAP3K20	2q31.1	-0.14599	0.004245	0.012762
MYOT	5q31.2	-0.14598	0.004247	0.012766
NDUFS6	5p15.33	0.145957	0.004254	0.012787
RNF144A	2p25.1	-0.14593	0.00426	0.012802
EEF1A1	6q13	-0.14591	0.004266	0.012817
COX7A2L	2p21	-0.1459	0.004268	0.012824
LINC00244	7q36.3	0.145887	0.004273	0.012835

PDE12	3p14.3	0.145834	0.004287	0.012875
TMEM192	4q32.3	-0.14583	0.004288	0.012875
RUNDC3B	7q21.12	-0.14583	0.004288	0.012875
ARHGEF12	11q23.3	-0.14581	0.004293	0.012887
TNXB	6p21.33-p21.32	-0.14579	0.004298	0.012901
ILDR1	3q13.33	-0.14577	0.004305	0.012919
TTBK1	6p21.1	0.145766	0.004305	0.012919
SNX32	11q13.1	-0.14576	0.004306	0.012919
RPP21	6p22.1	0.145704	0.004322	0.012965
IGFL1	19q13.32	-0.14568	0.004328	0.01298
PRKAA2	1p32.2	-0.14566	0.004333	0.012994
GLO1	6p21.2	0.145632	0.004341	0.013017
MCAM	11q23.3	-0.14561	0.004346	0.01303
DAAM1	14q23.1	-0.14558	0.004355	0.013055
SYT15	10q11.22	-0.14553	0.004369	0.013095
TMEM256	17p13.1	-0.14553	0.00437	0.013095
AK1	9q34.11	0.145514	0.004373	0.013103
MAPRE2	18q12.1-q12.2	-0.14551	0.004375	0.013108
DCUN1D1	3q26.33	-0.1455	0.004378	0.013114
CA5B	Xp22.2	-0.14545	0.00439	0.013146
CDH22	20q13.12	-0.14545	0.00439	0.013146
GSG1L	16p12.1	-0.14545	0.004391	0.013147
CEPT1	1p13.3	-0.14543	0.004396	0.013158
SEMA6C	1q21.3	-0.14539	0.004408	0.013194
RALGDS	9q34.13-q34.2	0.145383	0.004409	0.013195
ZBTB17	1p36.13	0.145361	0.004415	0.01321
LEO1	15q21.2	0.145354	0.004417	0.013215
TBXT	6q27	-0.14533	0.004423	0.013229
PRG4	1q31.1	-0.14533	0.004424	0.013233
DOK2	8p21.3	-0.14531	0.00443	0.013246
ATP1B1	1q24.2	0.1453	0.004432	0.013251
IKZF1	7p12.2	-0.14527	0.004441	0.013275
LINC00906	19q12	-0.14526	0.004443	0.01328
NELL2	12q12	-0.14524	0.004448	0.013294
TPCN1	12q24.13	0.14518	0.004465	0.013342
USP45	6q16.2	0.145144	0.004475	0.01337
DNAJC2	7q22.1	0.145131	0.004479	0.013379
FAM173A	16p13.3	0.14512	0.004482	0.013386
CD22	19q13.12	-0.1451	0.004486	0.013397
TRPV1	17p13.2	0.145103	0.004486	0.013397
TPH2	12q21.1	-0.1451	0.004488	0.013399
NUB1	7q36.1	-0.14509	0.004491	0.013406
NINJ1	9q22.31	-0.14508	0.004492	0.013406
PCDHB19P	5q31.3	-0.14508	0.004493	0.013409
LYRM2	6q15	-0.14506	0.004497	0.013419
LOC401052	3p25.3	0.145049	0.004501	0.013429
GLOD5	Xp11.23	-0.14503	0.004506	0.013442
HDX	Xq21.1	-0.14502	0.004509	0.013446
NKPD1	19q13.32	0.145003	0.004514	0.013461
ZNF559	19p13.2	-0.14497	0.004523	0.013486
PIGV	1p36.11	-0.14493	0.004533	0.013514
CCL7	17q12	-0.14493	0.004534	0.013514
GBP4	1p22.2	-0.14492	0.004537	0.013519
CDK5	7q36.1	-0.14492	0.004537	0.013519
OCLN	5q13.2	0.144904	0.004542	0.013533
SETD9	5q11.2	-0.1449	0.004544	0.013536
PLAA	9p21.2	0.144885	0.004547	0.013544
MRPL53	2p13.1	-0.14486	0.004553	0.01356

CDC37L1	9p24.1	-0.14485	0.004557	0.013568
HOXD13	2q31.1	-0.14484	0.004561	0.013578
ABCG2	4q22.1	-0.14483	0.004563	0.013581
IDE	10q23.33	0.144829	0.004563	0.013582
LRRC74B	22q11.21	0.144824	0.004565	0.013583
INPP1	2q32.2	0.144765	0.004582	0.013632
MYL2	12q24.11	-0.14475	0.004585	0.013639
KBTBD11	8p23.3	0.144745	0.004587	0.013644
ZNF213	16p13.3	0.144743	0.004588	0.013644
MINK1	17p13.2	0.144736	0.00459	0.013647
S1PR2	19p13.2	-0.14472	0.004593	0.013657
PTEN	10q23.31	-0.14471	0.004597	0.013664
LINC01599	14q21.3	0.144695	0.004601	0.013676
GPRC5C	17q25.1	-0.14466	0.004612	0.013705
RPS7	2p25.3	-0.1446	0.004628	0.013752
SFT2D3	2q14.3	-0.14458	0.004634	0.013767
XPNPEP3	22q13.2	0.144577	0.004635	0.013768
CLVS2	6q22.31	-0.14455	0.004641	0.013785
AGGF1	5q13.3	-0.14453	0.004647	0.013801
SDR39U1	14q12	0.144516	0.004653	0.013814
TPT1	13q14.13	-0.14451	0.004653	0.013815
UBE2J1	6q15	-0.14449	0.00466	0.013833
TCP1	6q25.3	0.144446	0.004673	0.013868
GRIPAP1	Xp11.23	0.144415	0.004682	0.013892
NFE2	12q13.13	-0.1444	0.004686	0.013902
KEAP1	19p13.2	0.144378	0.004692	0.01392
YEATS2	3q27.1	0.144299	0.004715	0.013986
GJB5	1p34.3	0.144289	0.004718	0.013992
CRYBG1	6q21	0.144281	0.004721	0.013998
PKNOX1	21q22.3	0.144254	0.004728	0.014018
FKBP4	12p13.33	0.144253	0.004729	0.014018
LILRB4	19q13.42	-0.14422	0.00474	0.014048
TNFSF12-TNFSF13	17p13.1	-0.14419	0.004747	0.014069
ADGRD2	9q33.3	0.144166	0.004754	0.014087
SMIM10L2B	Xq26.3	-0.14415	0.004759	0.014099
BRD3OS	9q34.2	-0.14413	0.004765	0.014112
KDM3B	5q31.2	0.144129	0.004765	0.014112
HES4	1p36.33	0.144128	0.004766	0.014112
CDC42SE2	5q31.1	-0.14412	0.004766	0.014113
HSPA12B	20p13	-0.14411	0.00477	0.014121
DNAJB7	22q13.2	0.144099	0.004774	0.01413
CCR8	3p22.1	-0.14406	0.004785	0.014162
TCF23	2p23.3	-0.14406	0.004787	0.014164
ITGA8	10p13	-0.14405	0.004787	0.014164
AGTR2	Xq23	-0.14404	0.00479	0.014171
ZFYVE16	5q14.1	-0.14404	0.004793	0.014174
TC2N	14q32.12	0.144034	0.004793	0.014174
TAF6	7q22.1	0.144032	0.004794	0.014174
GSTM4	1p13.3	0.14403	0.004794	0.014174
CLP1	11q12.1	-0.14403	0.004795	0.014175
USP1	1p31.3	0.144019	0.004798	0.01418
JMJD1C-AS1	10q21.3	-0.14401	0.004801	0.014188
IL1RAPL2	Xq22.3	-0.144	0.004802	0.01419
SPR	2p13.2	-0.14399	0.004806	0.014197
SPAG1	8q22.2	-0.14399	0.004806	0.014197
FLRT3	20p12.1	-0.14396	0.004814	0.014218
SMIM10L2A	Xq26.3	-0.14393	0.004823	0.014243
TMEM114	16p13.2	-0.14392	0.004826	0.01425

VASH2	1q32.3	-0.1439	0.004832	0.014264
SUGP1	19p13.11	0.143899	0.004833	0.014264
KCNA4	11p14.1	-0.1439	0.004833	0.014264
SPPL3	12q24.31	-0.14389	0.004837	0.014273
TRMT112	11q13.1	-0.14387	0.004842	0.014284
HGFAC	4p16.3	0.143868	0.004842	0.014285
LARGE2	11p11.2	-0.14385	0.004849	0.014302
MYH10	17p13.1	-0.14384	0.004851	0.014305
KNDC1	10q26.3	0.143799	0.004863	0.014339
ANKS1A	6p21.31	0.143797	0.004864	0.014339
RNASEH1	2p25.3	0.143791	0.004866	0.014342
MDH1	2p15	-0.14379	0.004867	0.014345
TENM3	4q34.3-q35.1	-0.14378	0.004869	0.014349
CDK2AP1	12q24.31	-0.14375	0.004878	0.014372
BTN3A3	6p22.2	-0.14375	0.004878	0.014372
CALY	10q26.3	-0.14374	0.004881	0.014378
EIF4EBP1	8p11.23	0.143725	0.004885	0.014388
C12ORF71	12p11.23	0.143702	0.004892	0.014407
RELL2	5q31.3	0.143691	0.004895	0.014414
LPAL2	6q25.3	-0.14368	0.004899	0.014422
TUBGCP3	13q34	0.143677	0.0049	0.014422
SIRPB1	20p13	-0.14366	0.004904	0.014433
BDNF-AS	11p14.1	-0.14363	0.004915	0.014464
SYNPR	3p14.2	-0.14359	0.004925	0.014489
GMDS	6p25.3	0.143581	0.004929	0.014499
HTRA4	8p11.22	-0.14357	0.004932	0.014507
PEX6	6p21.1	0.143564	0.004934	0.01451
WAS	Xp11.23	-0.14356	0.004937	0.014515
ANKRD50	4q28.1	-0.14353	0.004945	0.014537
GDF7	2p24.1	-0.14348	0.004959	0.014578
RXRA	9q34.2	0.143469	0.004963	0.014586
REPS1	6q24.1	0.143465	0.004964	0.014588
MPZL3	11q23.3	-0.14346	0.004965	0.014589
MYOM2	8p23.3	-0.14344	0.004972	0.014608
OPTN	10p13	-0.14342	0.004978	0.014622
AGXT	2q37.3	-0.1434	0.004985	0.014639
FOXD4	9p24.3	0.143388	0.004988	0.014646
KLRC3	12p13.2	-0.14337	0.004994	0.014661
ANKRD13B	17q11.2	0.14336	0.004996	0.014667
MAP3K5	6q23.3	0.14334	0.005002	0.014683
SMIM5	17q25.1	0.143335	0.005004	0.014684
CAMP	3p21.31	-0.14333	0.005004	0.014684
CCDC84	11q23.3	0.14333	0.005006	0.014686
ZNRD1ASP	6p22.1	0.143286	0.005019	0.014724
LDLRAP1	1p36.11	0.143283	0.00502	0.014724
OTUD7B	1q21.2	0.143258	0.005028	0.014744
LINC00652	20p11.23	-0.14325	0.005029	0.014745
NDFIP2	13q31.1	-0.14322	0.00504	0.014775
FBXO48	2p13.3	-0.1432	0.005047	0.014794
XKR8	1p35.3	-0.14318	0.005051	0.014804
SLC38A1	12q13.11	0.143179	0.005052	0.014805
RAG1	11p12	-0.14318	0.005053	0.014806
LINC00339	1p36.12	-0.14313	0.005068	0.014849
KAT2B	3p24.3	-0.14309	0.00508	0.014879
RNF38	9p13.2	-0.14309	0.005081	0.014881
TIAF1	17q11.2	0.143067	0.005087	0.014896
PSMD2	3q27.1	0.143062	0.005088	0.014898
C2ORF15	2q11.2	-0.14305	0.005092	0.014907

TIGAR	12p13.32	-0.14302	0.005101	0.014931
GPR35	2q37.3	0.143017	0.005102	0.014931
LGALS14	19q13.2	-0.14302	0.005103	0.014931
PTGES3	12q13.3 12	0.143007	0.005106	0.014938
MTHFD2	2p13.1	0.142995	0.005109	0.014947
GOLGA6L5P	15q25.2	0.142992	0.00511	0.014948
PDE2A	11q13.4	-0.14299	0.005112	0.01495
CCR7	17q21.2	-0.14297	0.005117	0.014963
SLC38A3	3p21.31	-0.14296	0.005119	0.014966
RNF165	18q21.1	-0.14292	0.005133	0.015005
SREBF1	17p11.2	0.142915	0.005135	0.015007
GPR82	Xp11.4	-0.1429	0.005138	0.015017
AOPEP	9q22.32	-0.1429	0.00514	0.01502
MSANTD1	4p16.3	0.142873	0.005148	0.015039
ETHE1	19q13.31	0.142851	0.005155	0.015057
SLC22A7	6p21.1	0.142848	0.005156	0.015058
NRCAM	7q31.1	-0.14281	0.005166	0.015086
TRIP6	7q22.1	-0.14281	0.005168	0.015089
TEX35	1q25.2	0.142807	0.005169	0.015089
MED17	11q21	-0.1428	0.005171	0.015093
SLC22A11	11q13.1	-0.14278	0.005178	0.015112
HECTD4	12q24.13	0.142699	0.005203	0.015182
NPTX2	7q22.1	-0.14269	0.005204	0.015184
HDAC11	3p25.1	-0.14268	0.005208	0.015194
FAM201A	9p13.1	0.142661	0.005215	0.015211
SFT2D2	1q24.2	0.142658	0.005216	0.015212
KLK5	19q13.41	-0.14262	0.005227	0.015241
TMEM232	5q22.1	-0.14261	0.005232	0.015253
EPS8L1	19q13.42	0.142606	0.005232	0.015253
FLT1	13q12.3	-0.1426	0.005234	0.015256
SMIM11A	21q22.11-q22.12	-0.1426	0.005236	0.015258
LZTR1	22q11.21 22q11.1-q11.2	0.142568	0.005245	0.015282
TNFSF14	19p13.3	-0.14256	0.005247	0.015285
KCNH2	7q36.1	-0.14252	0.005261	0.015325
AGBL5	2p23.3	-0.1425	0.005266	0.015338
HIKESHI	11q14.2	-0.14248	0.005274	0.015358
IL1RAP	3q28	-0.14244	0.005285	0.01539
PEA15	1q23.2	-0.14244	0.005287	0.015391
OR10A5	11p15.4	0.142421	0.005292	0.015405
PLVAP	19p13.11	-0.1424	0.005298	0.015419
LSM7	19p13.3	0.14237	0.005309	0.015447
PCDHAC1	5q31.3	-0.14237	0.005309	0.015447
FOXE3	1p33	0.142357	0.005313	0.015455
ZNF808	19q13.41	0.142346	0.005316	0.015464
CNKSR1	1p36.11	0.142324	0.005323	0.015483
RAB26	16p13.3	0.142258	0.005345	0.015543
HEXB	5q13.3	-0.14225	0.005349	0.015552
TMEM245	9q31.3	-0.14222	0.005357	0.015574
RAB11FIP2	10q26.11	-0.1422	0.005364	0.015591
SH3GL3	15q25.2	-0.14219	0.005367	0.015598
UVRAG	11q13.5	-0.14217	0.005372	0.015611
GPHN	14q23.3-q24.1	0.142171	0.005373	0.015612
SUSD2	22q11.23	-0.14217	0.005374	0.015613
OSBPL3	7p15.3	0.142137	0.005385	0.01564
CD27	12p13.31	-0.14213	0.005386	0.015641
ERAP1	5q15	-0.1421	0.005398	0.015674
LY9	1q23.3	-0.14209	0.005401	0.01568
NPIP13	16p11.2	0.142079	0.005403	0.015686

EPOP	17q12	0.142075	0.005405	0.015686
BHLHE41	12p12.1	-0.14207	0.005406	0.015686
FOXO1	13q14.11	-0.14207	0.005406	0.015686
LRRC28	15q26.3	-0.14207	0.005408	0.01569
PODXL2	3q21.3	0.142045	0.005415	0.015708
CDR1	Xq27.1	-0.14202	0.005422	0.015727
FBXW10	17p11.2	0.142018	0.005424	0.015727
PCDHB17P	5q31.3	-0.14202	0.005424	0.015727
UAP1	1q23.3	0.142003	0.005429	0.015739
TESPA1	12q13.2	-0.142	0.005431	0.015742
SNORA10	16p13.3	0.141979	0.005437	0.015757
ZNF646	16p11.2	0.141971	0.005439	0.015762
EPHB3	3q27.1	0.141952	0.005445	0.015776
SDC3	1p35.2	-0.14195	0.005446	0.015776
SCYL3	1q24.2	0.141944	0.005448	0.015781
HS6ST1	2q14.3	-0.14193	0.005454	0.015797
UTP25	1q32.2	0.1419	0.005463	0.015819
TMEM144	4q32.1	-0.14187	0.005471	0.015841
WDR31	9q32	0.141778	0.005503	0.015932
QTRT1	19p13.2	0.141774	0.005505	0.015934
ATP2B2	3p25.3	-0.14175	0.005513	0.015954
ZNF737	19p12	-0.14173	0.005519	0.015971
WEE1	11p15.4	0.141705	0.005528	0.015994
CLASP2	3p22.3	-0.1417	0.005531	0.016
ADH1C	4q23	-0.14168	0.005536	0.016011
VPS25	17q21.2	-0.14168	0.005538	0.016016
FGF9	13q12.11	-0.14163	0.005554	0.016061
SHROOM2	Xp22.2	-0.14161	0.005562	0.016079
DIO3	14q32.31	-0.1416	0.005563	0.016081
TUBGCP5	15q11.2	0.141565	0.005575	0.016114
STOX2	4q35.1	-0.14156	0.005578	0.01612
FJX1	11p13	-0.14155	0.00558	0.016123
CDH9	5p14.1	-0.14154	0.005582	0.016127
ASMTL	Xp22.33 and Yp11.2	-0.14153	0.005588	0.016142
RBM5	3p21.31	0.14151	0.005594	0.016157
DPY30	2p22.3	-0.14148	0.005605	0.016187
ZNF283	19q13.31	0.141468	0.005608	0.016193
VAMP4	1q24.3	-0.14143	0.005621	0.016227
SETD1B	12q24.31	0.141413	0.005627	0.016243
TIMM23	10q11.22	0.141402	0.005631	0.016251
SP3	2q31.1	-0.1414	0.005633	0.016253
CARTPT	5q13.2	-0.14139	0.005633	0.016253
SMCO3	12p12.3	-0.14139	0.005634	0.016253
PCDH11X	Xq21.31	-0.14138	0.005637	0.01626
PDIK1L	1p36.11	0.141381	0.005638	0.01626
DHRS4L1	14q11.2	-0.14137	0.005641	0.016267
FLJ42627	16p13.3	0.141339	0.005652	0.016297
BAZ2A	12q13.3	0.14133	0.005655	0.016303
CEBPB	20q13.13	-0.14131	0.005663	0.016322
FLJ42393	3q27.3	0.141288	0.00567	0.01634
STAT6	12q13.3	0.141278	0.005673	0.016348
DOLPP1	9q34.11	0.141267	0.005677	0.016357
SLCO3A1	15q26.1	-0.14125	0.005682	0.016368
PPP1R10	6p21.33	0.141221	0.005693	0.016398
NIPAL4	5q33.3	-0.14121	0.005697	0.016408
TNRC6A	16p12.1	0.141157	0.005715	0.016457
AKAP2	9q31.3	-0.14113	0.005726	0.016485
SLC26A2	5q32	-0.14112	0.005728	0.016491

CDKN1B	12p13.1	-0.14111	0.005733	0.0165
NKAPP1	Xq24	-0.14103	0.005759	0.016573
STRN3	14q12	-0.14102	0.005762	0.016581
TNFRSF14	1p36.32	0.141008	0.005767	0.016592
TRMT61A	14q32.33	0.141003	0.005769	0.016594
TOMM5	9p13.2	0.140987	0.005774	0.016608
CARMIL3	14q11.2	0.140947	0.005788	0.016645
TM9SF2	13q32.3	-0.14093	0.005793	0.016657
PNOC	8p21.1	-0.14092	0.005797	0.016667
ACR	22q13.33	-0.14091	0.005801	0.016675
PRKAA1	5p13.1	-0.14091	0.005803	0.016677
SH3BP5L	1q44	0.14088	0.005812	0.0167
PLAAT2	11q12.3	0.140879	0.005812	0.0167
SRGAP2	1q32.1	0.140875	0.005814	0.016702
MRTO4	1p36.13	0.140859	0.005819	0.016715
COMMD3	10p12.2	-0.14084	0.005827	0.016735
PPP1R12A	12q21.2-q21.31	-0.14083	0.005829	0.016735
CEMP1	16p13.3	0.140831	0.005829	0.016735
MRO	18q21.2	-0.14083	0.005829	0.016735
LGI4	19q13.12 19q13.11	-0.14082	0.005833	0.016742
KLF2	19p13.11	-0.14082	0.005833	0.016742
SP1	12q13.13	0.140799	0.00584	0.01676
HIST1H1D	6p22.2	0.140787	0.005845	0.01677
IDH3A	15q25.1	0.140762	0.005853	0.016792
STAT5A	17q21.2	-0.14076	0.005854	0.016792
ZNF622	5p15.1	-0.14076	0.005856	0.016793
NFATC1	18q23	-0.14075	0.005856	0.016793
IMPG2	3q12.3	-0.14075	0.005857	0.016793
ARMC1	8q13.1	-0.14072	0.005868	0.016821
KLHL13	Xq24	-0.14071	0.005871	0.016829
NEIL1	15q24.2	0.140681	0.005882	0.016857
TRARG1	17p13.3	-0.14066	0.005889	0.01687
SUZ12	17q11.2	0.140661	0.005889	0.01687
EEF1A2	20q13.33	-0.14066	0.00589	0.01687
MIR4435-2HG	2q13	-0.14066	0.00589	0.01687
PRPF39	14q21.2	0.140636	0.005898	0.016889
GRTP1	13q34	0.140636	0.005898	0.016889
WFDC9	20q13.12	-0.1406	0.005911	0.016922
WASH8P	12p13.33	0.140599	0.005911	0.016922
ST8SIA3	18q21.31	-0.14059	0.005916	0.016933
LCMT1	16p12.1	-0.14058	0.005919	0.016938
BBS2	16q13	-0.14057	0.005921	0.016942
BCKDHB	6q14.1	-0.14057	0.005922	0.016943
GALNT12	9q22.33	0.140522	0.005939	0.016988
VTA1	6q24.1-q24.2	-0.14051	0.005943	0.016999
CCDC157	22q12.2	0.140503	0.005946	0.017003
SPRY4	5q31.3	0.140494	0.005949	0.01701
FBXO11	2p16.3	-0.14047	0.005957	0.01703
DGKA	12q13.2	0.140462	0.00596	0.017038
SLC13A3	20q13.12	-0.14046	0.005962	0.017041
PSMB2	1p34.3	0.140425	0.005974	0.017071
CPSF4	7q22.1	0.140408	0.00598	0.017086
POP7	7q22.1	0.140403	0.005982	0.017089
WASHC5	8q24.13	-0.14038	0.00599	0.01711
TSHZ1	18q22.3	-0.14035	0.006003	0.017144
GTF2H5	6q25.3	-0.14033	0.006008	0.017156
PK2	17q21.33	-0.14032	0.006012	0.017167
KCNH1	1q32.2	-0.1403	0.006019	0.017184



DHX36	3q25.2	-0.1403	0.006021	0.017185
APLNR	11q12.1	-0.14029	0.006021	0.017185
ARHGAP29	1p22.1	-0.14029	0.006023	0.017188
BMPER	7p14.3	-0.14028	0.006026	0.017195
GAN	16q23.2	0.140244	0.006039	0.017229
MNT	17p13.3	0.140231	0.006044	0.01724
NPRL3	16p13.3	0.140228	0.006045	0.017241
THEMIS	6q22.33	-0.14022	0.006048	0.017246
TSR3	16p13.3	0.140213	0.00605	0.017251
TMEM108	3q22.1	-0.1402	0.006057	0.017267
IL15	4q31.21	-0.14017	0.006067	0.017294
ACP6	1q21.2	0.140154	0.006072	0.017306
ZNF57	19p13.3	0.14015	0.006074	0.017307
ARL6	3q11.2	-0.14014	0.006079	0.017319
RBPJ	4p15.2	-0.14013	0.00608	0.017319
POPDC3	6q21	-0.14011	0.006088	0.017341
CMTM5	14q11.2	-0.14011	0.00609	0.017343
ITGAM	16p11.2	-0.1401	0.006093	0.017351
TNNC2	20q13.12	-0.14001	0.006124	0.017433
NQO2	6p25.2	0.140013	0.006124	0.017433
PSTPIP1	15q24.3	-0.14	0.006128	0.017441
NAV1	1q32.1	-0.14	0.006128	0.017441
NR2C1	12q22	0.13998	0.006136	0.01746
LOC100129034	9q33.3	0.139962	0.006143	0.017477
FBXO4	5p13.1	-0.13993	0.006153	0.017503
CLYBL	13q32.3	-0.13992	0.006159	0.017518
MORN3	12q24.31	-0.13991	0.006161	0.017521
MICB	6p21.33	0.139879	0.006174	0.017555
KIAA1958	9q32	0.139848	0.006185	0.017584
UBASH3B	11q24.1	-0.13983	0.006192	0.017602
GALR1	18q23	-0.1398	0.006204	0.017634
COLGALT1	19p13.11	0.139793	0.006205	0.017635
CCDC93	2q14.1	0.13978	0.00621	0.017643
LY6G6E	6p21.33	-0.13978	0.00621	0.017643
PCSK1	5q15	-0.13978	0.006212	0.017643
GABRQ	Xq28	-0.13978	0.006212	0.017643
KIFAP3	1q24.2	-0.13975	0.006223	0.017671
PRKRIP1	7q22.1	0.1397	0.00624	0.017719
LARGE1	22q12.3	-0.13965	0.00626	0.017773
SUMO2	17q25.1	-0.13962	0.006269	0.017795
SPTBN1	2p16.2	0.139596	0.006279	0.017822
SLC6A20	3p21.31	0.139573	0.006288	0.017844
MARS2	2q33.1	0.139564	0.006291	0.017852
HMBS	11q23.3	0.139534	0.006303	0.017881
MTHFD2L	4q13.3	0.139525	0.006306	0.017888
IFFO1	12p13.31	-0.13952	0.006309	0.017895
XCL2	1q24.2	-0.13946	0.006332	0.017953
CNIH1	14q22.2	-0.13946	0.006332	0.017953
WAPL	10q23.2	0.139456	0.006332	0.017953
CRYZL1	21q22.11	-0.13944	0.006337	0.017965
ZYG11B	1p32.3	-0.13944	0.00634	0.017969
ZNF43	19p12	-0.13943	0.006344	0.017977
NUDT9P1	10q23.32	-0.13941	0.006351	0.017996
GPR171	3q25.1	-0.1394	0.006353	0.017998
FOXO4	Xq13.1	-0.13938	0.006362	0.018021
GTF3C2	2p23.3	0.139373	0.006364	0.018024
OR51I1	11p15.4	0.139366	0.006367	0.018029
ICMT	1p36.31	0.139332	0.006379	0.018063

UNKL	16p13.3	0.139323	0.006383	0.018069
ITK	5q33.3	-0.13932	0.006383	0.018069
DNTTIP1	20q13.12	-0.13931	0.006388	0.018079
PTPRR	12q15	-0.13929	0.006396	0.018099
GRIP1	12q14.3	-0.13929	0.006397	0.018099
INTS4P2	7q11.21	-0.13928	0.006399	0.018102
SPAAR	9p13.3	-0.13925	0.00641	0.01813
SCNN1G	16p12.2	-0.13925	0.00641	0.01813
NHSL2	Xq13.1	-0.13925	0.006412	0.018132
FLNA	Xq28	-0.13924	0.006416	0.018142
MBIP	14q13.3	-0.13922	0.006422	0.018157
NMRK1	9q21.13	-0.13921	0.006426	0.018162
USO1	4q21.1	-0.13921	0.006426	0.018162
CTSG	14q12	-0.1392	0.006431	0.018174
AGT	1q42.2	-0.13919	0.006433	0.018176
UACA	15q23	-0.13919	0.006436	0.018181
C16ORF72	16p13.2	-0.13918	0.006436	0.018181
GOSR2	17q21.32	-0.13917	0.006443	0.018194
SEBOX	17q11.2	0.139167	0.006443	0.018194
VMAC	19p13.3	-0.13913	0.006459	0.018236
WASHC4	12q23.3	-0.13912	0.00646	0.018236
UQCRBP1	Xp11.21	-0.13912	0.006462	0.018241
SNORD17	20p11.23	0.139112	0.006464	0.018243
RTL3	Xq21.1	-0.13911	0.006465	0.018243
SLC10A5	8q21.13	0.139107	0.006466	0.018243
CXADRP2	15q11.2	-0.13911	0.006467	0.018243
PHEX	Xp22.11	-0.1391	0.00647	0.01825
BOLA2	16p11.2	0.139089	0.006473	0.018256
FBXO7	22q12.3	-0.13907	0.00648	0.01827
COL15A1	9q22.33	-0.13907	0.00648	0.01827
TAS2R42	12p13.2	0.139032	0.006495	0.018308
LRRCC1	8q21.2	0.139032	0.006495	0.018308
MFSD5	12q13.13	-0.13902	0.006498	0.018314
NLK	17q11.2	-0.13902	0.006501	0.018319
LINC02210	17q21.31	0.139012	0.006503	0.018322
ALPP	2q37.1	0.139005	0.006505	0.018327
DMXL2	15q21.2	0.139003	0.006506	0.018327
HPX	11p15.4	0.138952	0.006526	0.01838
FANCD2OS	3p25.3	0.13894	0.006531	0.018391
SNRPC	6p21.31	0.138881	0.006554	0.018453
ACTN1	14q24.1 14q22-q24	-0.13888	0.006556	0.018455
SMOC1	14q24.2	-0.13887	0.006559	0.018463
LZTFL1	3p21.31	-0.13884	0.006571	0.018494
KYAT1	9q34.11	0.138828	0.006575	0.0185
C8ORF58	8p21.3	-0.13883	0.006575	0.0185
KRT39	17q21.2	-0.13882	0.006579	0.018509
NLRP12	19q13.42	-0.1388	0.006588	0.01853
PCDHGA7	5q31.3	-0.13878	0.006595	0.018547
PLCE1	10q23.33	0.138774	0.006596	0.018548
MED15	22q11.21	0.138764	0.0066	0.018557
HSPB9	17q21.2	-0.13872	0.006615	0.018597
OR2A7	7q35	0.13872	0.006617	0.018599
SLC6A9	1p34.1	0.138693	0.006628	0.018627
SUPT4H1	17q22	-0.13868	0.006634	0.018641
FAM107B	10p13	-0.13863	0.006654	0.018694
GUSBP2	6p22.2	0.138599	0.006665	0.018725
MASP1	3q27.3	-0.1386	0.006666	0.018725
TTC8	14q31.3	-0.13858	0.006674	0.018744

ZHX2	8q24.13	-0.13856	0.00668	0.018756
SERTM1	13q13.3	-0.13856	0.00668	0.018756
CTAGE4	7q35	0.138525	0.006695	0.018793
MPP2	17q21.31	-0.13852	0.006695	0.018793
DERL1	8q24.13	-0.13849	0.006709	0.018828
MRM2	7p22.3	0.138487	0.00671	0.018828
APAF1	12q23.1	0.138471	0.006716	0.018844
EMC2	8q23.1	-0.13843	0.006734	0.01889
RRAS2	11p15.2	-0.13842	0.006735	0.018892
SOD1	21q22.11	0.138399	0.006745	0.018916
TSPAN15	10q22.1	0.138367	0.006758	0.01895
TECTA	11q23.3	-0.13836	0.00676	0.018954
NKAIN1	1p35.2	-0.13836	0.006763	0.018959
CLDN2	Xq22.3	0.138341	0.006769	0.018972
CTBP1	4p16.3	0.13831	0.006781	0.019003
SEPHS1	10p13	0.138309	0.006782	0.019003
ZNF14	19p13.11	-0.13829	0.006788	0.019018
ZNF257	19p12	-0.13824	0.00681	0.019078
CALN1	7q11.22	-0.13823	0.006812	0.019079
WIF1	12q14.3	-0.13823	0.006813	0.019079
TTLL5	14q24.3	0.138228	0.006814	0.019082
ZNF366	5q13.2 5q13.2	-0.13818	0.006832	0.019128
CCDC82	11q21	-0.13818	0.006833	0.019128
TNFRSF8	1p36.22	-0.13818	0.006834	0.019129
PLEKHG6	12p13.31	-0.13816	0.00684	0.019141
AGL	1p21.2	-0.13816	0.00684	0.019141
EIF5	14q32.32	-0.13815	0.006845	0.01915
LINC00189	21q21.3	-0.13815	0.006846	0.01915
FOXRED2	22q12.3	0.138143	0.006849	0.019157
GJA9	1p34.3	0.138134	0.006852	0.019164
TPI1P2	7q32.1	-0.13812	0.006857	0.019173
PI4KB	1q21.3	0.138089	0.006871	0.01921
CDC42EP1	22q13.1	0.138062	0.006882	0.019238
PLPP2	19p13.3	0.138029	0.006895	0.019273
SNRPD3	22q11.23	0.137993	0.00691	0.019312
TACR3	4q24	0.137973	0.006919	0.019333
SH3D19	4q31.3	-0.13797	0.006921	0.019336
MANEA	6q16.1	-0.13796	0.006922	0.019338
SIAH1	16q12.1	-0.13795	0.006929	0.019354
MAGEF1	3q27.1	-0.13793	0.006935	0.019369
RAB11FIP4	17q11.2	0.137913	0.006943	0.019388
GOT2	16q21	0.137897	0.00695	0.019403
RPA3	7p21.3	0.137847	0.00697	0.019458
MBTD1	17q21.33	-0.13784	0.006973	0.019464
FUT9	6q16.1	-0.13782	0.006983	0.019488
SIRPB2	20p13	-0.1378	0.006988	0.019501
CD207	2p13.3	-0.13779	0.006996	0.019519
KIRREL1	1q23.1	-0.13777	0.007003	0.019537
PPIL1	6p21.2	0.137715	0.007025	0.019595
TMPRSS7	3q13.2	-0.13771	0.007027	0.019599
SPECC1	17p11.2	-0.1377	0.007032	0.019609
F2RL3	19p13.11	-0.13766	0.007049	0.019654
C4ORF46	4q32.1	0.137654	0.007051	0.019655
HMGCS1	5p12	0.137651	0.007052	0.019656
PTPRA	20p13	-0.13764	0.007056	0.019665
TMEM219	16p11.2	-0.13761	0.007067	0.019694
GP5	3q29	-0.13759	0.007076	0.019714
NECTIN4	1q23.3	0.137592	0.007077	0.019714

PNMA1	14q24.3	-0.13756	0.007091	0.01975
GZMM	19p13.3	-0.13754	0.007098	0.019769
MON1A	3p21.31	0.137506	0.007113	0.019806
SURF2	9q34.2	0.137471	0.007127	0.019844
SMIM26	20p11.23	-0.13747	0.007129	0.019846
ZKSCAN5	7q22.1	-0.13747	0.00713	0.019846
CRYBG3	3q11.2	0.137456	0.007134	0.019854
GUCY2C	12p12.3	-0.13745	0.007135	0.019855
MCU	10q22.1	0.137448	0.007137	0.019858
SCARA5	8p21.1	-0.13744	0.007139	0.019858
PI4KA	22q11.21	0.137443	0.007139	0.019858
SHISAL1	22q13.31	-0.13742	0.007147	0.019877
EFHB	3p24.3	-0.13741	0.007153	0.019891
PRB1	12p13.2	-0.1374	0.007157	0.019899
NABP2	12q13.3	0.137396	0.007159	0.019903
HIST1H3G	6p22.2	0.137307	0.007197	0.020005
PLRG1	4q31.3	-0.13729	0.007203	0.020018
ATP5F1C	10p14	0.137288	0.007205	0.020022
HNRNPA1L2	13q14.3	0.137281	0.007208	0.020027
RASD2	22q12.3	-0.13727	0.007214	0.020038
TXLNG	Xp22.2	0.137266	0.007214	0.020038
UGT2B15	4q13.2	-0.13727	0.007215	0.020038
ZFYVE28	4p16.3	0.137236	0.007228	0.02007
SIGLEC5	19q13.41	-0.13722	0.007235	0.020087
RAB39A	11q22.3	-0.13721	0.007236	0.020089
PDHA1	Xp22.12	0.137196	0.007244	0.020108
PICALM	11q14.2	-0.13719	0.007246	0.020109
TMEM246	9q31.1	0.137154	0.007263	0.020153
BTN2A1	6p22.2	0.137071	0.007298	0.02025
MTMR9LP	1p35.2	0.137017	0.007322	0.020312
USP8	15q21.2	-0.13698	0.007336	0.020348
TRPC4AP	20q11.22	-0.13698	0.007338	0.020351
ALLC	2p25.3	-0.13696	0.007345	0.020368
RNASE4	14q11.2	-0.13695	0.007352	0.020384
AIMP2	7p22.1	0.136943	0.007354	0.020387
PTH2R	2q34	-0.13694	0.007356	0.020389
FAM207A	21q22.3	0.136935	0.007357	0.020389
LINC00689	7q36.3	-0.13693	0.007358	0.020389
SEMA4B	15q26.1	0.136918	0.007365	0.020406
OVCA2	17p13.3	-0.13691	0.007367	0.020409
PHIP	6q14.1	0.136909	0.007368	0.02041
FAM114A1	4p14	-0.1369	0.007371	0.020416
ERCC2	19q13.32	0.136895	0.007375	0.020422
THSD4	15q23	-0.13689	0.007377	0.020425
LRRC42	1p32.3	-0.13688	0.007382	0.020437
L3MBTL2	22q13.2	0.13687	0.007385	0.020443
TRIM40	6p22.1	0.136849	0.007395	0.020466
GMPPB	3p21.31	0.136828	0.007404	0.020488
SMG1P1	16p12.2	0.13681	0.007412	0.020507
CYSLTR2	13q14.2	-0.13679	0.007421	0.020531
LCN10	9q34.3	-0.13677	0.007428	0.020547
DOCK8	9p24.3	-0.13677	0.00743	0.020548
ANAPC4	4p15.2	0.136764	0.007431	0.020548
PTPRVP	1q32.1	0.136764	0.007432	0.020548
BAZ1A	14q13.1-q13.2	0.13674	0.007442	0.020575
HAX1	1q21.3	0.136732	0.007446	0.020581
TSPAN11	12p11.21	-0.1367	0.007461	0.02062
LRRC43	12q24.31	-0.13667	0.007471	0.020646

AGO4	1p34.3	-0.13665	0.007481	0.020671
ELOA	1p36.11	0.136629	0.007491	0.020694
GPATCH2	1q41	0.136628	0.007491	0.020694
C9ORF135	9q21.12	-0.13658	0.007514	0.020753
C11ORF95	11q13.1	-0.13657	0.007519	0.020763
F3	1p21.3	0.136565	0.007519	0.020763
RASEF	9q21.32	0.136559	0.007522	0.020767
HIST1H2BH	6p22.2	0.136554	0.007524	0.02077
MAGEA9B	Xq28	-0.13655	0.007526	0.020772
TTC28-AS1	22q12.1	0.136538	0.007531	0.020784
OSGEP	14q11.2	0.136526	0.007537	0.020796
MROH8	20q11.23	-0.13648	0.007555	0.020844
GBF1	10q24.32	0.136481	0.007557	0.020845
USP47	11p15.3	-0.13647	0.00756	0.020853
NFRKB	11q24.3	0.136441	0.007575	0.020889
EXOC4	7q33	-0.13642	0.007586	0.020918
ADAMTS1	21q21.3	-0.1364	0.007593	0.020935
MED18	1p35.3	-0.13639	0.007599	0.020947
MGAT4A	2q11.2	-0.13638	0.007603	0.020957
G3BP1	5q33.1	0.136372	0.007605	0.020959
NYNRIN	14q12	-0.13636	0.00761	0.020968
TAPBP	6p21.32	0.13636	0.00761	0.020968
PCDHGA2	5q31.3	-0.13635	0.007615	0.020977
CD58	1p13.1	-0.13635	0.007616	0.020977
LRWD1	7q22.1	0.136346	0.007617	0.020977
PLA2G6	22q13.1	0.136293	0.007641	0.02104
AKR1C2	10p15.1	-0.13626	0.007655	0.021076
GATA5	20q13.33	-0.13626	0.007657	0.021079
MRTFA	22q13.1-q13.2	-0.13625	0.007659	0.021082
SLC25A1	22q11.21	0.136245	0.007662	0.021087
LIMCH1	4p13	-0.13623	0.00767	0.021107
CD248	11q13.2	-0.13622	0.007672	0.021107
ZNF607	19q13.12	0.136222	0.007673	0.021107
HIVEP2	6q24.2	-0.13622	0.007675	0.021109
CHI3L1	1q32.1	-0.13622	0.007676	0.021109
TOE1	1p34.1	0.13621	0.007678	0.021114
TMEM176A	7q36.1	-0.13616	0.007701	0.021174
GREB1	2p25.1	-0.13613	0.007714	0.021204
GID4	17p11.2 17p11.2	-0.13613	0.007715	0.021204
ZYG11A	1p32.3	-0.13613	0.007715	0.021204
HSPA9	5q31.2	0.136117	0.00772	0.021214
CCDC102B	18q22.1-q22.2	-0.13611	0.007722	0.021218
APOL4	22q12.3	-0.1361	0.007729	0.021232
TUBB1	20q13.32	0.136087	0.007734	0.021243
SAGE1	Xq26.3	-0.13606	0.007746	0.021273
SKAP2	7p15.2	-0.13606	0.007748	0.021276
TMEM161A	19p13.11	0.136019	0.007764	0.021319
CCDC181	1q24.2	-0.13601	0.007769	0.02133
KCTD7	7q11.21	-0.136	0.007771	0.021332
CYTIP	2q24.1	-0.136	0.007774	0.021333
CABYR	18q11.2	-0.136	0.007774	0.021333
EPB41L2	6q23.1-q23.2	0.135979	0.007783	0.021355
DICER1-AS1	14q32.13	0.135937	0.007802	0.021405
MFS10	4p16.3	0.135923	0.007808	0.021419
SLC25A53	Xq22.2	-0.13591	0.007813	0.021429
PMS1	2q32.2	0.135903	0.007818	0.021439
SLAMF9	1q23.2	-0.1359	0.007821	0.021444
HEATR3	16q12.1	0.13589	0.007823	0.021446

HAVCR1P1	19p12	-0.13589	0.007824	0.021446
WDR41	5q13.3-q14.1	-0.13587	0.007833	0.021469
KRTAP3-1	17q21.2	-0.13585	0.00784	0.021484
C18ORF21	18q12.2	-0.13584	0.007848	0.021503
ZBTB37	1q25.1	0.135817	0.007857	0.021526
MOV10L1	22q13.33	-0.13578	0.007876	0.021576
SLC27A3	1q21.3	0.135757	0.007885	0.021595
LRPAP1	4p16.3	-0.13575	0.007886	0.021595
GNAT1	3p21.31	0.135753	0.007887	0.021595
CLEC17A	19p13.12	-0.13574	0.007891	0.021604
CACFD1	9q34.2	-0.13571	0.007906	0.021639
BLOC1S2	10q24.31	-0.13571	0.007906	0.021639
TCHHL1	1q21.3	-0.13563	0.007945	0.021742
KCNN3	1q21.3	-0.13563	0.007946	0.021742
MPPE1	18p11.21	-0.13561	0.007951	0.021755
NR2C2AP	19p13.11	0.135609	0.007954	0.021757
AIPL1	17p13.2	0.135578	0.007968	0.021791
IDH2	15q26.1	0.135578	0.007968	0.021791
JAG2	14q32.33	0.135537	0.007987	0.021841
IL1RL2	2q12.1	0.135485	0.008011	0.021904
PLEC	8q24.3	0.135475	0.008016	0.021914
HIST1H1T	6p22.2	0.135468	0.008019	0.021917
SEC14L4	22q12.2	-0.13547	0.008019	0.021917
TMEM248	7q11.21	-0.13545	0.008026	0.021931
NCKIPSD	3p21.31	0.135452	0.008027	0.021931
NPB	17q25.3	0.135449	0.008028	0.021932
HIST1H2AC	6p22.2	-0.13544	0.008034	0.021946
STAC	3p22.3-p22.2	-0.13543	0.008037	0.021949
SHB	9p13.1	0.135382	0.00806	0.022008
ADCY1	7p12.3	-0.13538	0.008061	0.022008
DDX56	7p13	0.13531	0.008094	0.022095
PLEKHH3	17q21.2	0.135295	0.008101	0.022112
CNBP	3q21.3	-0.13529	0.008104	0.022117
CYB5R3	22q13.2	-0.13528	0.008108	0.022127
SIGLEC10	19q13.41	-0.13526	0.00812	0.022154
EXOSC7	3p21.31	0.135253	0.008121	0.022154
MGC16275	17q25.1	-0.13524	0.008129	0.022173
FAM98C	19q13.2	0.135227	0.008133	0.022183
PNPT1	2p16.1	0.135222	0.008135	0.022185
RTP1	3q27.3	-0.13521	0.008143	0.022204
FOXI2	10q26.2	-0.1352	0.008148	0.022213
GTPBP8	3q13.2	-0.13516	0.008166	0.022259
CAPG	2p11.2	-0.1351	0.008193	0.022329
TMED8	14q24.3	0.135092	0.008198	0.02234
RAD17	5q13.2	-0.13502	0.008234	0.022436
RNF31	14q12	0.134988	0.008248	0.02247
SSR3	3q25.31	-0.13497	0.008257	0.022492
TMEM39A	3q13.33	-0.13495	0.008268	0.022519
LIPT2	11q13.4	0.134929	0.008276	0.022537
KLHL2	4q32.3	-0.13492	0.008279	0.022542
CAMK1G	1q32.2	-0.13492	0.008282	0.022549
MIF4GD	17q25.1	-0.13489	0.008292	0.022574
RAB13	1q21.3	-0.13485	0.008313	0.022626
CCN3	8q24.12	-0.13483	0.008325	0.022656
PIN1	19p13.2	0.134816	0.00833	0.022667
ZIC1	3q24	-0.13481	0.008333	0.022671
PCDHGA8	5q31.3	-0.1348	0.008338	0.02268
ZZZ3	1p31.1	-0.1348	0.008338	0.02268

PCDH12	5q31.3	-0.13479	0.008345	0.022696
DSG1	18q12.1	-0.13478	0.008347	0.022696
PMF1	1q22	0.13478	0.008348	0.022696
PXDN	2p25.3	-0.13478	0.008349	0.022696
AGRP	16q22.1	-0.13476	0.008359	0.02272
CD200	3q13.2	-0.13476	0.00836	0.02272
GOLGA7B	10q24.2	-0.13474	0.008366	0.022734
PFKFB3	10p15.1	0.134729	0.008373	0.022749
GLMP	1q22	-0.1347	0.008386	0.022781
FBXO24	7q22.1	0.134689	0.008392	0.022795
KLHL26	19p13.11	0.134685	0.008394	0.022797
ALAD	9q32	-0.13467	0.0084	0.02281
MAMLD1	Xq28	-0.13466	0.008408	0.02283
ALKBH8	11q22.3	-0.13465	0.008413	0.022839
PPP1R18	6p21.33	-0.13462	0.008425	0.022869
NDRG4	16q21	-0.1346	0.008435	0.022892
SPATS1	6p21.1	-0.1346	0.008437	0.022895
NRSN2	20p13	-0.13459	0.00844	0.022897
HK2	2p12	0.134592	0.00844	0.022897
RNF128	Xq22.3	-0.13458	0.008448	0.022915
LRRC7	1p31.1	-0.13453	0.00847	0.022974
MS4A2	11q12.1	-0.13453	0.008473	0.022977
IFI30	19p13.11	-0.13451	0.008482	0.023
ITGA10	1q21.1	-0.1345	0.008485	0.023005
FGFBP3	10q23.32	0.134478	0.008496	0.023031
AP5S1	20p13	-0.13447	0.008502	0.023044
DHCR7	11q13.4	0.134456	0.008507	0.023052
UBE2D3	4q24	-0.13445	0.008507	0.023052
PSG7	19q13.31	-0.13443	0.008521	0.023085
VTN	17q11.2	-0.1344	0.008533	0.023114
XKR4	8q12.1	-0.13439	0.008537	0.023123
SEPTIN14	7p11.2	-0.13439	0.008538	0.023123
DNAJC8	1p35.3	-0.13438	0.008543	0.023134
POLR1B	2q14.1	0.134379	0.008545	0.023134
PRSS41	16p13.3	0.134359	0.008555	0.023156
CCDC174	3p25.1	-0.13436	0.008555	0.023156
CCDC40	17q25.3	0.134352	0.008558	0.023162
SEZ6L2	16p11.2	-0.13433	0.008567	0.023183
CALCOCO1	12q13.13	-0.13432	0.008572	0.023193
ABLIM3	5q32	-0.13431	0.008581	0.023211
PPP1R16B	20q11.23	-0.13431	0.008581	0.023211
CCDC124	19p13.11	0.134288	0.00859	0.023232
PCCA	13q32.3	-0.13426	0.008602	0.023262
KCNJ4	22q13.1	0.134259	0.008605	0.023265
CD96	3q13.13-q13.2	-0.13424	0.008614	0.023288
TOX	8q12.1	-0.13422	0.008622	0.023307
RFPL4A	19q13.42	-0.13422	0.008626	0.023313
TCEANC	Xp22.2	-0.13421	0.008627	0.023313
UPRT	Xq13.3	-0.1342	0.008633	0.023327
GGA3	17q25.1	0.134199	0.008635	0.023328
REXO2	11q23.2	-0.13417	0.008649	0.023363
LINC00032	9p21.2	0.134093	0.008688	0.023465
LRRC61	7q36.1	-0.13408	0.008697	0.023486
BDNF	11p14.1	-0.13405	0.008711	0.023522
LSM2	6p21.33	0.134032	0.008719	0.023537
OCSTAMP	20q13.12	-0.13403	0.008719	0.023537
GABPB1-AS1	15q21.2	0.134016	0.008727	0.023554
MPP6	7p15.3	0.133974	0.008748	0.023609

ZNF514	2q11.1	0.133955	0.008758	0.023631
MIA2	14q21.1	-0.13395	0.008759	0.023632
HOXB2	17q21.32	-0.13393	0.008771	0.02366
TWNK	10q24.31	0.133904	0.008784	0.023691
CBWD6	9p11.2	0.133899	0.008786	0.023695
ZNF181	19q13.11	-0.1339	0.008788	0.023696
KCNJ2	17q24.3	-0.13385	0.008812	0.023758
TM4SF1	3q25.1	-0.13384	0.008814	0.023762
DPAGT1	11q23.3	0.133838	0.008817	0.023766
RDH5	12q13.2	-0.13383	0.008819	0.023768
PTBP2	1p21.3	-0.13381	0.008834	0.023805
OBSL1	2q35	-0.1338	0.008835	0.023805
RBBP5	1q32.1	0.133792	0.008841	0.023816
NME1-NME2	17q21.33	0.133762	0.008856	0.023854
FZD2	17q21.31	-0.13374	0.008869	0.023885
HIST1H3C	6p22.2	0.133711	0.008883	0.02392
FKBP10	17q21.2	-0.1337	0.008888	0.023931
TBC1D25	Xp11.23	-0.13366	0.00891	0.023987
PRPSAP2	17p11.2	-0.13364	0.008921	0.024014
ANKRD1	10q23.31	-0.13362	0.008928	0.024027
PSG6	19q13.31	-0.13362	0.008928	0.024027
ZNF705A	12p13.31	-0.1336	0.008937	0.024048
COX14	12q13.12	-0.1336	0.00894	0.024053
SATB1	3p24.3	-0.13359	0.008945	0.02406
ATP9A	20q13.2	-0.13359	0.008945	0.02406
EMC4	15q14	-0.13359	0.008947	0.024061
LRP1B	2q22.1-q22.2	-0.13358	0.008951	0.024063
LIG3	17q12	0.133577	0.008951	0.024063
TNNT2	1q32.1	0.133577	0.008952	0.024063
BAHCC1	17q25.3	0.133572	0.008954	0.024066
RPLP0P2	11q12.2	-0.13357	0.008956	0.024068
TECR	19p13.12	0.133491	0.008996	0.024173
TMEM133	11q22.1	-0.13347	0.009009	0.024204
WDR45	Xp11.23	-0.13345	0.009018	0.024227
FLNB	3p14.3	0.133441	0.009022	0.024233
EID3	12q23.3	-0.13342	0.00903	0.024252
ZNF174	16p13.3	-0.1334	0.009041	0.024278
RXYLT1	12q14.2	-0.13338	0.009055	0.024313
THPO	3q27.1	-0.13335	0.009067	0.024342
PDLIM7	5q35.3	-0.13334	0.009073	0.02435
TBC1D14	4p16.1	0.133344	0.009073	0.02435
IRGQ	19q13.31	0.133338	0.009076	0.024354
KIF5B	10p11.22	0.133325	0.009083	0.02437
MAP1LC3A	20q11.22	-0.13332	0.009087	0.024378
CD3G	11q23.3	-0.13331	0.009088	0.024379
SIRT2	19q13.2	-0.13331	0.009091	0.024382
VPS35L	16p12.3	-0.1333	0.009097	0.024395
LSM10	1p34.3	-0.13327	0.009111	0.024428
TNFRSF4	1p36.33	-0.13324	0.00913	0.024477
LINC00475	9q22.31	-0.13323	0.009135	0.024487
SCAI	9q33.3	0.133219	0.009138	0.024493
PPM1K	4q22.1	-0.1332	0.00915	0.024522
LINC01138	1q21.2	-0.13319	0.009155	0.02453
EFCAB12	3q21.3	0.133186	0.009156	0.02453
ZNF34	8q24.3	-0.13311	0.009196	0.024634
RIMS4	20q13.12	-0.13311	0.009198	0.024638
SEMA5B	3q21.1	-0.13308	0.009211	0.024668
ZNF148	3q21.2	-0.13308	0.009214	0.024672



CGN	1q21.3	0.133054	0.009225	0.0247
ZDBF2	2q33.3	-0.13304	0.009231	0.024703
CCDC198	14q22.3	-0.13304	0.009231	0.024703
ARFGAP3	22q13.2	-0.13304	0.009232	0.024703
GRASP	12q13.13	-0.13304	0.009232	0.024703
SMPX	Xp22.12	-0.13304	0.009233	0.024703
DNAJC24	11p13	-0.13304	0.009234	0.024703
ZNF302	19q13.11	-0.133	0.009252	0.024748
CMPK1	1p33	-0.13299	0.009262	0.024772
MLPH	2q37.3	0.132964	0.009273	0.024798
HNRNPC	14q11.2	0.132955	0.009278	0.024808
FAXC	6q16.2	-0.13295	0.009279	0.024808
RTF2	20q13.31	-0.13295	0.009283	0.024815
ZNF829	19q13.12	-0.13294	0.009288	0.024824
LRRC1	6p12.1	0.132931	0.009291	0.02483
ZDHHC1	16q22.1	-0.13292	0.009295	0.024836
VSTM1	19q13.42	-0.13291	0.009303	0.024854
SMOX	20p13	-0.13291	0.009304	0.024855
COA8	14q32.33	-0.13286	0.009332	0.024925
GLTP	12q24.11	-0.13285	0.009336	0.024931
POLL	10q24.32	0.132846	0.009336	0.024931
PRELID1	5q35.3	0.132839	0.00934	0.024938
HECTD2	10q23.32	-0.13283	0.009343	0.024941
HSPB3	5q11.2	-0.13283	0.009347	0.024942
ACKR2	3p22.1	-0.13283	0.009347	0.024942
P2RY8	Xp22.33 and Yp11.2	-0.13283	0.009348	0.024942
THRAP3	1p34.3	0.132823	0.009349	0.024942
IPP	1p34.1	-0.13282	0.009349	0.024942
ZNF341	20q11.22	0.132811	0.009355	0.024955
MAP3K3	17q23.3	-0.13281	0.009357	0.024955
PTP4A3	8q24.3	-0.1328	0.009359	0.024958
IPCEF1	6q25.2	-0.13279	0.009365	0.02497
SLAMF7	1q23.3	-0.13275	0.009388	0.02503
TOM1L1	17q22	-0.13272	0.009403	0.025065
SNAR-B2	19q13.33	0.132691	0.00942	0.025104
GRIK1	21q21.3	-0.13269	0.00942	0.025104
TMEM105	17q25.3	0.132689	0.009421	0.025104
RGPD8	2q14.1	0.132687	0.009423	0.025104
C2CD4A	15q22.2	0.132653	0.009441	0.02515
NAT2	8p22	-0.13264	0.009447	0.025164
TAS2R50	12p13.2	0.132633	0.009452	0.025172
ENG	9q34.11	-0.13263	0.009454	0.025175
PFDN4	20q13.2	-0.13263	0.009455	0.025175
C21ORF62	21q22.11	-0.1326	0.009469	0.025206
FAM160A1	4q31.3	0.132583	0.009479	0.02523
RPH3A	12q24.13	-0.13257	0.009483	0.025239
PGBD1	6p22.1	-0.13256	0.009491	0.025256
FCRLB	1q23.3	-0.13256	0.009492	0.025256
CHD7	8q12.2	0.132547	0.009498	0.025269
HAAO	2p21	-0.13253	0.009505	0.025284
SNORA62	3p22.1	0.132528	0.009509	0.02529
GLUL	1q25.3	-0.13252	0.009513	0.025297
TMEM131	2q11.2	-0.13251	0.009519	0.025311
LOC100272217	9q34.11	0.132486	0.009532	0.025341
MARK3	14q32.32-q32.33	0.132456	0.009548	0.025382
TRAF5	1q32.3	0.132433	0.009561	0.025411
AGAP1	2q37.2	0.132423	0.009566	0.025423
UBN2	7q34	0.132411	0.009573	0.025437

C16ORF54	16p11.2	-0.13239	0.009587	0.02547
PCDH17	13q21.1	-0.13237	0.009593	0.025484
CYP4A11	1p33	-0.13235	0.009608	0.025521
TLR5	1q41	-0.13232	0.009623	0.025553
KLHL11	17q21.2	0.13232	0.009623	0.025553
COQ7	16p12.3	0.132303	0.009632	0.025575
B4GALT1	9p21.1	-0.13229	0.009638	0.025585
FSTL4	5q31.1	-0.13229	0.009639	0.025586
TIGD1	2q37.1	0.132258	0.009657	0.02563
GCSAML-AS1	1q44	-0.13225	0.009662	0.02564
SPOPL	2q22.1	-0.13224	0.009666	0.025647
AFAP1L1	5q32	-0.13223	0.009672	0.025659
HNRNPDL	4q21.22	0.132229	0.009673	0.025659
ZNF507	19q13.11	0.13222	0.009678	0.025669
LINC01555	1p22.3	-0.13219	0.009694	0.025704
SHLD2	10q23.2	0.132191	0.009694	0.025704
CTSC	11q14.2	-0.13216	0.009711	0.025746
PTPRQ	12q21.31	-0.13215	0.009716	0.025756
BREA2	8q24.3	0.13215	0.009717	0.025756
LILRA5	19q13.42	-0.13215	0.009719	0.025757
NUDT19	19q13.11	0.132127	0.00973	0.025783
TAS2R20	12p13.2	0.132114	0.009737	0.025799
TBC1D17	19q13.33	-0.13208	0.009756	0.025844
ZMYM4	1p34.3	-0.13207	0.009764	0.025861
FADS6	17q25.1	-0.13206	0.009769	0.025872
FAM110D	1p36.11	-0.13206	0.00977	0.025872
OR51I2	11p15.4	0.132022	0.009789	0.025915
PSIP1	9p22.3	0.132019	0.009791	0.025915
FFAR3	19q13.12	-0.13202	0.009792	0.025915
IGFL3	19q13.32	-0.13201	0.009794	0.025915
DOCK2	5q35.1	-0.13201	0.009795	0.025915
IKZF5	10q26.13	-0.13201	0.009796	0.025915
TFPI2	7q21.3	-0.13201	0.009796	0.025915
RPS14	5q33.1	-0.13199	0.009805	0.025935
PPP4R3B	2p16.1	-0.13197	0.009816	0.025963
MIR4697HG	11q25	0.131969	0.009818	0.025963
PHYKPL	5q35.3	0.131968	0.009819	0.025963
SFTPD	10q22.3	-0.13193	0.009842	0.026021
SLCO2B1	11q13.4	-0.13191	0.009849	0.026031
EIF1	17q21.2	-0.13191	0.00985	0.026031
TCF20	22q13.2 22q13.3	0.13191	0.009852	0.026031
WHAMM	15q25.2	0.131907	0.009853	0.026031
PREX2	8q13.2	-0.13191	0.009854	0.026031
PSG5	19q13.31	-0.13191	0.009854	0.026031
EDN2	1p34.2	-0.1319	0.009857	0.026036
C8ORF37	8q22.1	-0.13188	0.009866	0.026057
LLGL2	17q25.1	0.131868	0.009875	0.026077
TDO2	4q32.1	-0.13185	0.009883	0.026095
EIF2AK3	2p11.2	-0.13184	0.009894	0.026119
ADCK1	14q24.3	0.131821	0.009902	0.026137
TRIM55	8q13.1	-0.13182	0.009903	0.026137
B4GALT5	20q13.13	-0.13179	0.009919	0.026175
TXNDC11	16p13.13	-0.13176	0.009934	0.026211
ZNF503	10q22.2	-0.13175	0.009943	0.026232
ENTPD2	9q34.3	0.131719	0.00996	0.026273
ZNF720	16p11.2	-0.13169	0.009976	0.026312
COL4A2	13q34	-0.13166	0.009991	0.026346
SPACA3	17q11.2	-0.13166	0.009992	0.026346

POLM	7p13	0.131661	0.009993	0.026346
SDHD	11q23.1	-0.13165	0.009997	0.026355
TBXA2R	19p13.3	-0.13161	0.010019	0.026409
TSPAN12	7q31.31	-0.13159	0.010036	0.026449
ZNF641	12q13.11	-0.13156	0.010049	0.026481
TLCD4	1p21.3	-0.13155	0.010058	0.0265
ZIC5	13q32.3	0.131527	0.01007	0.026528
CR1	1q32.2	-0.13152	0.010074	0.026536
TAS2R3	7q34	0.131505	0.010082	0.026554
RAB40C	16p13.3	0.131495	0.010088	0.026562
CXXC1	18q21.1	0.131495	0.010088	0.026562
PSPN	19p13.3	0.131475	0.010099	0.026588
LAMP1	13q34	-0.13147	0.010103	0.026596
CWF19L1	10q24.31	0.131458	0.010109	0.026604
ZMYM6	1p34.3	-0.13146	0.010109	0.026604
TRIM72	16p11.2	0.131455	0.010111	0.026605
KDM4D	11q21	-0.13145	0.010114	0.026611
SV2C	5q13.3	-0.13144	0.010121	0.026624
PRKCE	2p21	-0.13142	0.010128	0.026637
DNM1L	12p11.21	0.131424	0.010129	0.026637
ABTB1	3q21.3	-0.13138	0.010156	0.026705
CLEC18B	16q23.1	0.131374	0.010158	0.026707
CEP164	11q23.3	0.131369	0.01016	0.02671
EFTUD2	17q21.31	0.131359	0.010166	0.026723
ADARB2	10p15.3	-0.13135	0.010172	0.026734
HNRNPA3P1	10q11.21	0.131329	0.010184	0.026761
CHD9	16q12.2	-0.13133	0.010186	0.026763
MZT1	13q21.33	0.131295	0.010203	0.026806
AKIRIN2	6q15	-0.13129	0.010207	0.026813
CHAC2	2p16.2	0.13128	0.010212	0.026823
G6PC	17q21.31	-0.13125	0.010232	0.026869
MAFG	17q25.3	0.131238	0.010237	0.026879
RHOA	1q42.13	-0.13123	0.010244	0.026895
PLCL2	3p24.3	-0.13122	0.010249	0.026906
TMCC1	3q22.1	-0.1312	0.010259	0.026926
CYB5RL	1p32.3	0.131196	0.010261	0.026929
KRTCAP2	1q22	0.131174	0.010274	0.02696
ZNF462	9q31.2	0.131171	0.010276	0.026961
NRSN1	6p22.3	-0.13117	0.010278	0.026964
SULT6B1	2p22.2	-0.13115	0.010286	0.026982
SMAD9	13q13.3	-0.13114	0.010296	0.027004
TTF1	9q34.13	0.131119	0.010306	0.027026
UGCG	9q31.3	-0.13111	0.010309	0.02703
SLC30A4	15q21.1 15q21.1	-0.1311	0.010317	0.027047
YIPF3	6p21.1	-0.13108	0.010326	0.027068
GRB2	17q25.1	-0.13103	0.010359	0.02715
RPL5	1p22.1	-0.13102	0.010366	0.027167
TDP1	14q32.11	0.131011	0.010369	0.027171
TSFM	12q14.1	0.131	0.010376	0.027185
SLC22A23	6p25.2	0.130955	0.010403	0.027251
SENP7	3q12.3	-0.13095	0.010404	0.027252
CMTM1	16q21	0.130937	0.010414	0.027272
METTL14	4q26	-0.13092	0.010425	0.0273
PAGE4	Xp11.23	-0.13091	0.010427	0.027301
TGOLN2	2p11.2	-0.13091	0.010431	0.027307
CXCL13	4q21.1	-0.13088	0.010445	0.027341
SYTL3	6q25.3	-0.13088	0.010449	0.027348
PPFIBP1	12p11.23-p11.22	-0.13087	0.010455	0.027359

CTNS	17p13.2	-0.13083	0.010475	0.027409
SLC7A8	14q11.2	-0.13082	0.010482	0.027421
PLBD2	12q24.13	-0.13082	0.010483	0.027421
ACOT11	1p32.3	0.130815	0.010486	0.027426
TSPAN13	7p21.1	0.130808	0.01049	0.027433
KPRP	1q21.3	-0.1308	0.010493	0.027437
TSPAN5	4q23	-0.1308	0.010495	0.027439
ARPC3	12q24.11	-0.13077	0.010513	0.027482
RCOR2	11q13.1	0.130759	0.010519	0.027496
EPPIN	20q13.12	-0.13075	0.010526	0.027508
EPHA7	6q16.1	-0.13074	0.010528	0.02751
FYB2	1p32.2	-0.13071	0.010546	0.027553
L3MBTL4	18p11.31	-0.13071	0.010547	0.027553
PRRG1	Xp21.1	-0.13071	0.010551	0.02756
PCNX1	14q24.2	-0.1307	0.010555	0.027565
DGAT1	8q24.3	0.130698	0.010555	0.027565
IL6ST	5q11.2	-0.1307	0.010557	0.027565
KIAA1107	1p22.1	-0.13069	0.010561	0.027572
KLRF1	12p13.31	-0.13067	0.010569	0.027591
CYP3A5	7q22.1	0.130657	0.01058	0.027615
MYO18A	17q11.2	0.130652	0.010584	0.02762
FGA	4q31.3	-0.13065	0.010587	0.027626
PDCD7	15q22.31	0.130626	0.010599	0.027651
DGUOK	2p13.1	-0.13062	0.0106	0.027651
MT1X	16q13	-0.1306	0.010612	0.027679
KRTAP10-4	21q22.3	0.130587	0.010622	0.027703
BRI3	7q21.3	-0.13058	0.010624	0.027704
PSMB7	9q33.3	0.130566	0.010635	0.027728
REV1	2q11.2	0.130558	0.01064	0.027738
NPM2	8p21.3	-0.13049	0.010682	0.027845
TCTA	3p21.31	-0.13046	0.010697	0.027879
FRY	13q13.1	-0.13044	0.010709	0.027907
SLC25A29	14q32.2	0.130421	0.010723	0.027939
IL1RAPL1	Xp21.3-p21.2	-0.13041	0.01073	0.027955
C9ORF57	9q21.13	0.130384	0.010745	0.027992
DOCK1	10q26.2	-0.13037	0.010752	0.028005
CEP120	5q23.2	-0.13037	0.010755	0.028009
TRDN	6q22.31	-0.13036	0.010762	0.028023
IVL	1q21.3	-0.13034	0.010772	0.028047
BRF1	14q32.33	0.130305	0.010794	0.028097
COX19	7p22.3	0.130304	0.010794	0.028097
ALDH1A1	9q21.13	-0.1303	0.010798	0.028102
MAGEA3	Xq28	-0.13028	0.010808	0.028125
VEZT	12q22	-0.13026	0.010822	0.028158
PDE3B	11p15.2	-0.13025	0.010827	0.028168
SNTB1	8q24.12	-0.13025	0.010829	0.028169
ZSWIM4	19p13.13-p13.12	-0.13024	0.010831	0.028169
SPDEF	6p21.31	0.130242	0.010832	0.028169
ADAM17	2p25.1	-0.1302	0.010858	0.028232
RANBP10	16q22.1	0.130165	0.010879	0.028285
MEN1	11q13.1	0.130156	0.010885	0.028295
SLC17A7	19q13.33	-0.13015	0.010889	0.028299
SNX31	8q22.3	-0.13015	0.01089	0.028299
TRIM8	10q24.32	-0.13015	0.01089	0.028299
SLC22A2	6q25.3	-0.13014	0.010893	0.0283
DESI2	1q44	0.130141	0.010894	0.0283
TMEM38B	9q31.2	-0.13013	0.010902	0.028318
LMX1A	1q23.3	-0.13011	0.010913	0.028343

DZIP1L	3q22.3	-0.13009	0.010923	0.028365
PNMA6A	Xq28	-0.13009	0.010927	0.028372
HEPACAM	11q24.2	-0.13007	0.010935	0.02839
BTNL8	5q35.3	0.130071	0.010937	0.028391
TPP2	13q33.1	0.130052	0.010949	0.028418
PAH	12q23.2	-0.13004	0.010958	0.028438
TAP1	6p21.32	0.130027	0.010964	0.028451
RPL41	12q13.2	-0.13	0.010984	0.028498
SEC14L3	22q12.2	0.129983	0.010992	0.028514
PNP	14q11.2	0.129963	0.011004	0.028543
RNF40	16p11.2	0.12995	0.011012	0.028559
CADM2	3p12.1	-0.12993	0.011023	0.028584
MCEMP1	19p13.2	-0.12992	0.011028	0.028594
RBM23	14q11.2	-0.12987	0.011061	0.028675
ZBTB45	19q13.43	0.129832	0.011086	0.028734
DNASE2B	1p31.1-p22.3	-0.12983	0.011086	0.028734
STAG3L1	7q11.23	0.129816	0.011096	0.028755
TEDDM1	1q25.3	0.129795	0.011109	0.028785
ADH4	4q23	-0.12977	0.011124	0.028819
CTCF	16q22.1	0.129757	0.011132	0.028838
RASAL2	1q25.2	0.129741	0.011143	0.028861
PITX1	5q31.1	0.12969	0.011175	0.02894
LINC01341	1q44	0.129688	0.011176	0.02894
ALDH3B2	11q13.2	0.129677	0.011183	0.028954
EXOC6B	2p13.2	-0.12967	0.011185	0.028956
ADAMTS17	15q26.3	0.129652	0.011199	0.028988
METRNL	16p13.3	0.129647	0.011202	0.028992
RPF1	1p22.3	-0.12964	0.011206	0.029
SPECC1L	22q11.23	-0.12962	0.011218	0.029027
MORN2	2p22.1	-0.1296	0.01123	0.029054
ZNF440	19p13.2	0.129586	0.011241	0.029077
RBMX	Xq26.3	0.129556	0.011259	0.029122
ARHGEF33	2p22.1	-0.12955	0.011262	0.029125
ACBD4	17q21.31	-0.12954	0.011271	0.029141
PCIF1	20q13.12	-0.12954	0.011271	0.029141
CDYL2	16q23.2	-0.12953	0.011274	0.029145
PCDHGA6	5q31.3	-0.12952	0.01128	0.029157
HSPA1A	6p21.33	0.1295	0.011295	0.029192
BRD9	5p15.33	0.129496	0.011297	0.029194
LINC01973	17q25.3	-0.12947	0.011317	0.02924
CTNNDL1	20q11.23	-0.12946	0.011321	0.029248
H2AFY2	10q22.1	-0.12945	0.011327	0.029259
PIIP5K2	5q21.1	-0.12944	0.011331	0.029267
GALNT14	2p23.1	-0.1294	0.011358	0.02933
CEBPG	19q13.11	0.1294	0.011359	0.02933
MYRF	11q12.2	0.129383	0.011369	0.029354
ANXA13	8q24.13	-0.12937	0.011381	0.029379
EXT1	8q24.11	-0.12936	0.011383	0.029382
CLCN1	7q34	0.129342	0.011396	0.02941
IMMP2L	7q31.1	-0.12933	0.011403	0.029425
TUG1	22q12.2	0.129326	0.011406	0.029429
PLAC8L1	5q32	0.129323	0.011408	0.029431
USP20	9q34.11	0.129297	0.011425	0.029469
IPW	15q11.2	-0.12929	0.011431	0.029483
RAB11B	19p13.2	-0.12928	0.011435	0.029488
IDI1	10p15.3	0.129275	0.011439	0.029495
MTA3	2p21	-0.12927	0.011444	0.029501
CCNK	14q32.2	0.129267	0.011444	0.029501

CTNNAL1	9q31.3	0.129263	0.011447	0.029504
UGT2B11	4q13.2	0.129251	0.011454	0.029519
CRYGS	3q27.3	0.129248	0.011456	0.029521
SVOP	12q24.11	-0.12924	0.011459	0.029523
TOLLIP	11p15.5	-0.12924	0.01146	0.029523
CT45A5	Xq26.3	-0.1292	0.011485	0.029583
BSPRY	9q32	0.129198	0.011489	0.029589
MOSPD3	7q22.1	-0.12918	0.011498	0.029609
SPATA25	20q13.12	0.129139	0.011527	0.02968
GALE	1p36.11	0.129135	0.011529	0.029682
HDAC4	2q37.3	0.1291	0.011552	0.029736
ZNF474	5q23.2	-0.12908	0.011567	0.029768
RHBDD2	7q11.23	-0.12908	0.011568	0.029768
KRTAP1-1	17q21.2	-0.12907	0.01157	0.029768
ATF6B	6p21.32	0.129072	0.01157	0.029768
APOBEC3H	22q13.1	-0.12903	0.011598	0.029835
LPO	17q22	-0.12902	0.011606	0.029852
LHB	19q13.33	0.128989	0.011624	0.029896
KCND3	1p13.2	-0.12898	0.01163	0.029908
CPT1C	19q13.33	-0.12895	0.011651	0.029958
LRRTM2	5q31.2	-0.12894	0.011659	0.029974
IBTK	6q14.1	0.128928	0.011664	0.029983
KLRC2	12p13.2	-0.1289	0.011685	0.030033
EMC8	16q24.1	0.128879	0.011696	0.030055
HOMER1	5q14.1	0.128878	0.011697	0.030055
OR56B1	11p15.4	-0.12887	0.011705	0.030073
VHL	3p25.3	0.128837	0.011723	0.030116
FAM110A	20p13	0.128818	0.011736	0.030145
MAST4	5q12.3	-0.12881	0.011741	0.030154
AHCYL2	7q32.1	0.128804	0.011745	0.03016
FAM66C	12p13.31	-0.1288	0.011748	0.030164
RPP38-DT	10p13	0.128782	0.01176	0.030189
OR2A9P	7q35	-0.12877	0.011765	0.030197
USP33	1p31.1	-0.12877	0.011766	0.030197
PLAG1	8q12.1	-0.12877	0.011771	0.030206
PELO	5q11.2	-0.12876	0.011772	0.030206
TMEM237	2q33.1	-0.12875	0.011782	0.030228
PGAP3	17q12	-0.12874	0.01179	0.030245
G3BP2	4q21.1	-0.12871	0.011806	0.030281
JMJD8	16p13.3	0.12868	0.011827	0.030332
TMCO3	13q34	-0.12868	0.01183	0.030335
ALOX15B	17p13.1	-0.12867	0.011836	0.030348
GIPC3	19p13.3	-0.12865	0.011847	0.03037
DEGS2	14q32.2	0.128644	0.011851	0.030378
TKTL1	Xq28	-0.12864	0.011855	0.030384
GCSH	16q23.2	0.128635	0.011857	0.030384
KMO	1q43	-0.12863	0.011861	0.030392
KDELR3	22q13.1	-0.1286	0.011883	0.030444
THEMIS2	1p35.3	-0.12859	0.011887	0.03045
MIP	12q13.3	-0.12858	0.011893	0.030462
SSTR4	20p11.21	-0.12856	0.011906	0.03049
HSPD1	2q33.1	0.128551	0.011913	0.030504
KIF2A	5q12.1	0.12855	0.011914	0.030504
PGAP1	2q33.1	0.128545	0.011917	0.030507
ZHX1	8q24.13	-0.12853	0.011928	0.030532
TMEM220	17p13.1	-0.12852	0.011931	0.030537
WT1-AS	11p13	-0.12851	0.011937	0.030548
NELL1	11p15.1	-0.1285	0.011945	0.030564

SLC25A51P4	11p15.1	0.128413	0.012005	0.030714
ELP5	17p13.1	-0.1284	0.012017	0.030739
FBXO15	18q22.3	-0.12837	0.012033	0.030778
TRIL	7p14.3	-0.12836	0.012042	0.030795
TRIM74	7q11.23	0.128349	0.012048	0.030807
PDCL2	4q12	0.128331	0.01206	0.030834
MSI1	12q24.31	-0.12832	0.012068	0.030848
TAF13	1p13.3	-0.12832	0.012068	0.030848
PRRX2	9q34.11	-0.12826	0.012109	0.030948
ATP6V0D1	16q22.1	-0.12822	0.012132	0.031003
POLR2E	19p13.3	0.128192	0.012154	0.031056
CD244	1q23.3	-0.12818	0.012162	0.031072
SIGIRR	11p15.5	0.128176	0.012165	0.031075
RGS14	5q35.3	0.12817	0.012169	0.031081
ARX	Xp21.3	0.128138	0.012191	0.031134
TGM5	15q15.2	-0.12812	0.012202	0.031157
SRRM4	12q24.23	-0.12811	0.012209	0.031172
CCL5	17q12	-0.12811	0.012212	0.031175
ZNF492	19p12	-0.1281	0.012214	0.031175
PHETA1	12q24.12	0.12809	0.012224	0.031197
SPRY3	Xq28 and Yq12	0.12807	0.012237	0.031228
KMT2E-AS1	7q22.3	0.128064	0.012241	0.031234
DNAH17	17q25.3	0.128061	0.012244	0.031235
CYP27B1	12q14.1	0.128059	0.012245	0.031235
MATR3	5q31.2	-0.12805	0.012249	0.031242
SDC1	2p24.1	-0.12804	0.01226	0.031265
C9ORF170	9q21.33	-0.12803	0.012263	0.031266
SYN3	22q12.3	-0.12803	0.012263	0.031266
ALKAL2	2p25.3	-0.12799	0.012292	0.031336
TNNI1	1q32.1	0.127962	0.012311	0.031377
TBC1D22A	22q13.31	-0.12796	0.012311	0.031377
ITGA5	12q13.13	-0.12795	0.012318	0.03139
SLC9A3R2	16p13.3	-0.12794	0.012324	0.0314
SLC38A9	5q11.2	-0.12794	0.012328	0.031408
ZNF224	19q13.31	0.127904	0.012351	0.031461
CCR5	3p21.31	-0.12789	0.01236	0.031481
DIABLO	12q24.31	-0.12788	0.01237	0.031503
NGRN	15q26.1	-0.12787	0.012375	0.03151
CLIC3	9q34.3	-0.12786	0.012383	0.031528
FAM168A	11q13.4	-0.12782	0.012406	0.031579
CDRT1	17p12	0.127824	0.012406	0.031579
PI15	8q21.13	-0.12782	0.01241	0.031585
DHX33	17p13.2	0.127792	0.012428	0.031627
PIGF	2p21	-0.12778	0.012437	0.031639
DIDO1	20q13.33	0.127779	0.012437	0.031639
GSPT2	Xp11.22	-0.12778	0.012438	0.031639
ABO	9q34.2	0.127776	0.012439	0.031639
SLC6A15	12q21.31	-0.12777	0.012446	0.031651
DESI1	22q13.2	0.127764	0.012447	0.031651
LRMP	12p12.1	-0.12776	0.01245	0.031653
FANCL	2p16.1	0.127758	0.012452	0.031655
KIF26B	1q44	-0.12774	0.012464	0.03168
RNPC3	1p21.1	0.127739	0.012465	0.03168
COL21A1	6p12.1 6p12.3-p11.2	-0.12771	0.012485	0.031726
SSPO	7q36.1	0.127702	0.012491	0.031737
TRAPPC11	4q35.1	-0.12768	0.012506	0.031771
HPRT1	Xq26.2-q26.3	0.127667	0.012515	0.031791
MPV17L2	19p13.11	0.127611	0.012554	0.031886

PABPC1L2B	Xq13.2	-0.12759	0.012568	0.031917
FKBP1B	2p23.3	-0.12759	0.01257	0.031918
SVIP	11p14.3	-0.12758	0.012575	0.031924
KRTAP5-7	11q13.4	0.12758	0.012576	0.031924
MYO7B	2q14.3	0.127578	0.012577	0.031924
PHTF2	7q11.23-q21.11	-0.12752	0.012619	0.032027
RILP	17p13.3	-0.12751	0.012627	0.032043
MRPS18A	6p21.1	0.127501	0.012631	0.03205
BRK1	3p25.3	-0.12748	0.012643	0.032075
TTC41P	12q23.3	0.127477	0.012648	0.032081
C1QTNF6	22q12.3	-0.12748	0.012648	0.032081
GZMH	14q12	-0.12746	0.01266	0.032107
DYNLRB1	20q11.22	-0.12744	0.012676	0.032143
BCLAF1	6q23.3	0.127384	0.012713	0.032233
PDE8A	15q25.3	0.127374	0.01272	0.032247
GTF3C5	9q34.13	0.127353	0.012735	0.032281
ANAPC16	10q22.1	-0.12734	0.012745	0.032301
SLC39A7	6p21.32	0.127321	0.012758	0.03233
SCN2A	2q24.3	-0.1273	0.012769	0.032355
CAMSAP2	1q32.1	-0.12729	0.012781	0.032381
ZNF385D	3p24.3	-0.12728	0.012788	0.032394
AP2S1	19q13.32	0.127258	0.012803	0.032427
CECR7	22q11.1	-0.12724	0.012817	0.032459
TNS2	12q13.13	-0.12719	0.01285	0.03254
KLHL14	18q12.1	-0.12714	0.012886	0.032624
OIP5-AS1	15q15.1	0.127138	0.012888	0.032628
POU3F4	Xq21.1	-0.12711	0.012906	0.032669
RBMXL1	1p22.2	-0.1271	0.012913	0.032681
SLC35E2A	1p36.33	0.127085	0.012926	0.03271
GRPEL1	4p16.1	0.127058	0.012946	0.032754
SPN	16p11.2	-0.12705	0.012948	0.032754
OSCAR	19q13.42	-0.12705	0.012948	0.032754
SH2D3C	9q34.11	-0.12705	0.012953	0.032761
TMEM132E	17q12	-0.12704	0.012955	0.032761
ACSL6	5q31.1	-0.12704	0.012957	0.032761
CTAGE6	7q35	0.127041	0.012958	0.032761
ZNF414	19p13.2	0.127039	0.012959	0.032761
UNC13C	15q21.3	-0.12703	0.012965	0.032771
TP53I11	11p11.2	0.127019	0.012973	0.032788
ATP11A	13q34	0.126977	0.013004	0.032861
POLR1E	9p13.2	0.12692	0.013044	0.03296
RYR1	19q13.2	-0.12691	0.01305	0.032969
LINC01550	14q32.2	-0.12689	0.013063	0.032998
TUBG2	17q21.2	-0.12689	0.013068	0.033008
MAP2K2	19p13.3	0.126875	0.013077	0.033026
NPHP1	2q13	-0.12687	0.01308	0.033029
WDR77	1p13.2	0.126869	0.013082	0.033029
SRSF4	1p35.3	0.126862	0.013087	0.033038
LOXL2	8p21.3	-0.12686	0.013091	0.033044
NDUFA10	2q37.3	0.126842	0.013101	0.033065
OGA	10q24.32	0.126839	0.013104	0.033068
HSPB1	7q11.23	-0.12683	0.013106	0.03307
CEBPE	14q11.2	-0.12682	0.013115	0.033088
PRICKLE3	Xp11.23	0.126821	0.013116	0.033088
TMEM253	14q11.2	0.126783	0.013144	0.033152
S100A11	1q21.3	0.126761	0.01316	0.033185
MAP7D2	Xp22.12	-0.12676	0.01316	0.033185
SDK2	17q25.1	-0.12676	0.013162	0.033187



TSTA3	8q24.3	0.126694	0.013209	0.033298
VDAC2	10q22.2	0.126692	0.01321	0.033298
NR2F2	15q26.2	-0.12669	0.013214	0.033304
PDE6A	5q32	-0.12668	0.013215	0.033304
MYBPHL	1p13.3	-0.12664	0.013245	0.033374
CSNK1D	17q25.3	-0.12663	0.013258	0.0334
AGR2	7p21.1	0.126626	0.013259	0.0334
AGPS	2q31.2	-0.12659	0.013287	0.033467
RAB8A	19p13.11	0.126585	0.013289	0.033467
RAB38	11q14.2	-0.12658	0.013293	0.033473
CTIF	18q21.1	-0.12653	0.013328	0.033557
OPLAH	8q24.3	0.126529	0.01333	0.033558
LOC729609	Xp22.12	0.126515	0.01334	0.033578
FOXD3	1p31.3	-0.12651	0.013341	0.033578
FIG4	6q21	-0.12648	0.013364	0.033633
CDH26	20q13.33	-0.12647	0.013375	0.033654
CEP290	12q21.32	0.126464	0.013378	0.033658
PDX1	13q12.2	0.126444	0.013393	0.033691
CD40LG	Xq26.3	-0.12643	0.013406	0.03372
MORN4	10q24.2	-0.12642	0.013412	0.033732
HOXD12	2q31.1	-0.12641	0.013415	0.033735
STC1	8p21.2	-0.12636	0.013457	0.033836
NUDT3	6p21.31	0.126344	0.013466	0.033854
PHF10	6q27	0.126342	0.013468	0.033854
KDM4A	1p34.2-p34.1	-0.12633	0.013474	0.033867
GRIA1	5q33.2	-0.12632	0.013482	0.033881
LILRB1	19q13.42	-0.12631	0.013495	0.03391
NEK10	3p24.1	-0.12629	0.013507	0.033937
PREX1	20q13.13	-0.12629	0.013509	0.033938
TESK1	9p13.3	0.126284	0.013511	0.033938
ZNF765	19q13.42	0.126281	0.013513	0.03394
TMEM132A	11q12.2	-0.12627	0.013522	0.033956
POLR2C	16q21	-0.12626	0.013532	0.033976
ACSM2A	16p12.3	-0.12625	0.013533	0.033976
SSTR5-AS1	16p13.3	0.126237	0.013546	0.034004
SEMG1	20q13.12	0.126233	0.013549	0.034008
TMEM115	3p21.31	-0.12623	0.013553	0.034014
A1BG-AS1	19q13.43	-0.12618	0.013588	0.034093
LYPD2	8q24.3	-0.12618	0.013588	0.034093
SUSD3	9q22.31	-0.12618	0.013591	0.034095
MYRF-AS1	11q12.2	0.126114	0.013638	0.034209
LTV1	6q24.2	0.126101	0.013648	0.03423
SNORD22	11q12.3	0.126084	0.013661	0.034254
SOCS2	12q22	-0.12608	0.013661	0.034254
COG1	17q25.1	-0.12604	0.013693	0.034331
HIST3H3	1q42.13	0.126011	0.013716	0.034383
FGF17	8p21.3	0.125985	0.013735	0.034425
RWDD1	6q22.1	-0.12598	0.013736	0.034425
CD99L2	Xq28	-0.12596	0.013753	0.034464
FGB	4q31.3	-0.12592	0.013782	0.034532
C10ORF90	10q26.2	-0.12591	0.013792	0.034553
TBC1D8B	Xq22.3	-0.1259	0.013799	0.034566
SNORA5C	7p13	0.125897	0.013802	0.03457
C10ORF95	10q24.32	0.125884	0.013812	0.03459
KCNJ10	1q23.2	-0.12582	0.013864	0.034716
SCARNA16	17q25.2	0.125812	0.013867	0.034718
COPS2	15q21.1	-0.12579	0.013884	0.034758
MOK	14q32.31	0.12577	0.013899	0.034786

CYCS	7p15.3	0.125769	0.013899	0.034786
CBWD2	2q14.1	0.12575	0.013914	0.034819
SNORA41	2q33.3	0.125742	0.01392	0.03483
CDH15	16q24.3	-0.12573	0.013929	0.034847
CCL11	17q12	-0.12573	0.013933	0.034853
HDAC1	1p35.2-p35.1	0.125708	0.013946	0.034883
TREM1	6p21.1	-0.1257	0.013949	0.034886
RET	10q11.21	-0.12563	0.014009	0.03503
FAM174B	15q26.1	-0.12561	0.01402	0.035053
TMEM42	3p21.31	-0.12559	0.01404	0.0351
TAF1	3p14.1	-0.12556	0.014058	0.035139
STEAP4	7q21.12	-0.12555	0.014067	0.035158
RTN4R	22q11.21	0.125542	0.014074	0.035171
SLC15A4	12q24.33	-0.12549	0.01411	0.035257
CTRC	1p36.21	0.125484	0.014118	0.035266
COIL	17q22	-0.12548	0.014119	0.035266
SLC49A3	4p16.3	-0.12548	0.014119	0.035266
PRINS	10p12.1	0.125458	0.014139	0.035311
PAM16	16p13.3	0.125424	0.014165	0.035373
TPTEP1	22q11.1	-0.12538	0.014202	0.035461
COL18A1	21q22.3	-0.12536	0.014215	0.035488
LINC01300	8q24.3	0.125357	0.014217	0.035488
TFB2M	1q44	0.125346	0.014226	0.035505
ITGA1	5q11.2	-0.1253	0.014261	0.035589
MYO6	6q14.1	0.125289	0.01427	0.035608
DPCD	10q24.32	0.125277	0.014279	0.035627
ZNF428	19q13.31	-0.12523	0.014315	0.035711
IGSF1	Xq26.1	-0.12522	0.014328	0.035738
CUZD1	10q26.13	0.125212	0.01433	0.03574
LCOR	10q24.1	0.125206	0.014335	0.035748
PMPCB	7q22.1	-0.1252	0.014343	0.035762
CHD5	1p36.31	0.125166	0.014367	0.035818
SYT17	16p12.3	-0.12516	0.014372	0.035823
TMED2	12q24.31	-0.12516	0.014373	0.035823
TESK2	1p34.1	-0.12514	0.01439	0.035862
GCNT7	20q13.31	0.125125	0.014399	0.03588
SLC7A14	3q26.2	-0.12512	0.014403	0.035885
TRHDE-AS1	12q21.1	-0.12508	0.014437	0.035966
TAGLN3	3q13.2	-0.12505	0.014458	0.036013
CARD6	5p13.1	-0.12502	0.014481	0.036066
SGPP1	14q23.2	-0.12502	0.014483	0.036068
SLC35D2	9q22.32	-0.125	0.014499	0.036103
DGCR11	22q11.21	0.124992	0.014504	0.036109
NCBP3	17p13.2	0.124984	0.01451	0.036122
RFPL3S	22q12.3	0.124977	0.014516	0.03613
SH3PXD2B	5q35.1	-0.12498	0.014517	0.03613
G6PD	Xq28	0.124959	0.01453	0.036155
UTP23	8q24.11	-0.12496	0.014531	0.036155
BATF3	1q32.3	-0.12486	0.014606	0.036338
CXCR6	3p21.31	-0.12486	0.01461	0.036342
SPZ1	5q14.1	0.124829	0.014634	0.036394
CNGA3	2q11.2	-0.12483	0.014634	0.036394
MRPL24	1q23.1	0.124824	0.014638	0.036399
SLC39A5	12q13.3	-0.12482	0.014645	0.03641
MUSTN1	3p21.1	-0.1248	0.014655	0.036431
LOC400940	2p25.2	-0.1248	0.014661	0.036441
APBA2	15q13.1	-0.12477	0.014679	0.036482
STOML2	9p13.3	0.124766	0.014684	0.036486

EEF1G	11q12.3	-0.12477	0.014684	0.036486
OR2D2	11p15.4	0.124744	0.014702	0.036524
TTC16	9q34.11	0.124742	0.014703	0.036524
CRP	1q23.2	-0.12474	0.014705	0.036524
TRAPPC1	17p13.1	-0.12473	0.014715	0.036545
PPP4C	16p11.2	0.124692	0.014744	0.036611
COL12A1	6q13-q14.1	-0.12469	0.014745	0.036611
CCDC153	11q23.3	-0.12467	0.014762	0.036649
LGMMN	14q32.12	-0.12466	0.014768	0.036657
C6ORF223	6p21.1	0.124659	0.01477	0.036659
NHLRC2	10q25.3	0.124653	0.014775	0.036667
RNF167	17p13.2	-0.12465	0.014779	0.036669
ZNF331	19q13.42	-0.12465	0.01478	0.036669
ACOT1	14q24.3	-0.12464	0.014782	0.03667
PRR5L	11p13-p12	0.12464	0.014785	0.036674
PPIL4	6q25.1	-0.12458	0.014833	0.036787
GCSAM	3q13.2	0.124577	0.014836	0.036791
TCEA3	1p36.12	0.124568	0.014844	0.036805
SNORA13	5q22.1	0.124529	0.014875	0.036875
ZNF768	16p11.2	0.124528	0.014875	0.036875
DPF1	19q13.2	0.124526	0.014878	0.036876
EXOC3-AS1	5p15.33	-0.12451	0.01489	0.036896
TTC27	2p22.3	-0.12451	0.01489	0.036896
KATNBL1	15q14	-0.12451	0.014891	0.036896
MCRS1	12q13.12	0.124479	0.014916	0.036952
IRAK4	12q12	-0.12445	0.014936	0.036996
FBXL22	15q22.31	-0.12444	0.014944	0.037013
SMAD1	4q31.21	-0.12442	0.014966	0.037063
SLC17A1	6p22.2	-0.12439	0.014989	0.037115
TRMT10B	9p13.2	0.124369	0.015005	0.03715
RUNX3	1p36.11	-0.12437	0.015007	0.03715
OR6V1	7q34	0.124351	0.01502	0.037177
DCTN5	16p12.2	-0.12432	0.015042	0.037228
GRHL1	2p25.1	0.124316	0.015049	0.03724
GPR27	3p13	-0.12427	0.015087	0.037329
CEP170P1	4q26	-0.12419	0.015149	0.037473
CSF2RB	22q12.3	-0.12419	0.015149	0.037473
TRIM59	3q25.33	0.12419	0.015152	0.037475
COG5	7q22.3	-0.12419	0.015153	0.037475
SLC17A3	6p22.2	-0.12418	0.015164	0.037496
COQ2	4q21.22-q21.23	0.12415	0.015185	0.037543
SFMBT2	10p14	-0.12415	0.015187	0.037545
PAOX	10q26.3	-0.12412	0.015208	0.037591
IL32	16p13.3	-0.12412	0.015213	0.037597
TAF1	Xq13.1	0.124114	0.015214	0.037597
FAM170B	10q11.23	-0.12411	0.015216	0.037597
KIF7	15q26.1	-0.12411	0.015217	0.037597
HOXA3	7p15.2	0.124105	0.015222	0.037603
TXNIP	1q21.1	-0.1241	0.015228	0.037614
GLP1R	6p21.2	-0.12409	0.015232	0.037619
PRCD	17q25.1	-0.12409	0.015234	0.03762
PIP4P1	14q11.2	-0.12408	0.015246	0.037645
KRT10	17q21.2	-0.12406	0.015256	0.037665
C18ORF25	18q21.1	0.124045	0.015272	0.037697
NPHP3-AS1	3q22.1	-0.12404	0.015273	0.037697
LOC388955	2p15	0.124029	0.015285	0.037722
FAM120B	6q27	-0.12399	0.015316	0.037794
SLC39A2	14q11.2	-0.12398	0.015328	0.037812

IL27RA	19p13.12	-0.12398	0.015328	0.037812
PCSK5	9q21.13	-0.12398	0.015329	0.037812
GOLGA5	14q32.12	-0.12395	0.015348	0.037854
CASC10	10p12.31	-0.12395	0.015353	0.037862
SELENOH	11q12.1	-0.12394	0.015363	0.037881
SOX11	2p25.2	-0.12393	0.015368	0.037889
MRPL17	11p15.4	0.123901	0.015391	0.037942
MTG1	10q26.3	0.123874	0.015414	0.037991
TSACC	1q22	0.123873	0.015415	0.037991
CLEC6A	12p13.31	-0.12382	0.015462	0.038103
SUPT20HL2	Xp22.11	-0.12376	0.015509	0.03821
MED19	11q12.1	-0.12376	0.01551	0.03821
DPH2	1p34.1	0.123753	0.015516	0.038221
NPR1	1q21.3	-0.12372	0.015546	0.03829
ING1	13q34	0.123711	0.015551	0.038298
CYCSP52	1q23.1	0.123702	0.015558	0.038311
DIPK2A	3q24	-0.1237	0.015563	0.038319
GPSM1	9q34.3	-0.12368	0.01558	0.038355
DLEU1	13q14.2-q14.3	0.123666	0.015589	0.038373
WNT3A	1q42.13	0.123661	0.015593	0.038378
FAM225A	9q32	-0.12366	0.015595	0.038378
ADSSL1	14q32.33	-0.12366	0.015598	0.03838
LRRC41	1p34.1-p33	-0.12365	0.015602	0.038386
EPB41L5	2q14.2	-0.12358	0.015658	0.038519
PMS2P1	7q22.1	-0.12355	0.015688	0.038587
KANK4	1p31.3	-0.12354	0.015694	0.038597
CSK	15q24.1	0.123512	0.01572	0.038656
ZNF384	12p13.31	0.123506	0.015725	0.038664
TMEM17	2p15	-0.1235	0.015729	0.038669
UGT3A1	5p13.2	-0.12349	0.015735	0.03868
METTL11B	1q24.2	-0.12347	0.015754	0.038722
LOC646999	7p14.1	-0.12345	0.015769	0.038754
PTPN3	9q31.3	0.12345	0.015772	0.038757
ZNF528	19q13.41	-0.12344	0.015778	0.038768
CYTH4	22q13.1	-0.12344	0.015783	0.038773
HPGD	4q34.1	-0.12344	0.015785	0.038773
RNF111	15q22.1-q22.2	-0.12338	0.015836	0.038895
ZNF541	19q13.33	-0.12336	0.015847	0.038918
ZNF383	19q13.12	-0.12334	0.015866	0.038958
RNF24	20p13	-0.12334	0.015869	0.038961
L2HGDH	14q21.3	0.123331	0.015874	0.03897
TRAF3IP3	1q32.2	-0.12326	0.015934	0.039111
ABCA11P	4p16.3	-0.12326	0.015937	0.039113
BAIAP2-DT	17q25.3	-0.12325	0.015942	0.03912
SEMA3A	7q21.11	-0.12323	0.01596	0.039161
ATRX	Xq21.1	-0.12322	0.015966	0.039171
PREPL	2p21	-0.12322	0.015971	0.039178
CCDC117	22q12.1	-0.12321	0.015975	0.039183
KPNA6	1p35.2	0.123179	0.016005	0.039252
UBE3A	15q11.2	-0.12317	0.016013	0.039267
CD79A	19q13.2	-0.12313	0.016044	0.039339
FGG	4q32.1	-0.12312	0.016055	0.039361
TMEM88	17p13.1	-0.12312	0.016059	0.039365
DACH2	Xq21.2	-0.12311	0.016061	0.039366
C5ORF47	5q35.2	-0.12308	0.016088	0.039423
ARG2	14q24.1	-0.12308	0.016089	0.039423
ASCC3	6q16.3	0.123067	0.016102	0.039448
TBX18	6q14.3	-0.12306	0.016104	0.039448

ZNF207	17q11.2	0.123064	0.016105	0.039448
SMPDL3A	6q22.31	-0.12305	0.016114	0.039467
MTFP1	22q12.2	0.123015	0.016147	0.039542
TSR1	17p13.3	0.123008	0.016153	0.039553
RBCK1	20p13	0.122967	0.016189	0.039636
NOC3L	10q23.33	0.122948	0.016206	0.039672
COL6A1	21q22.3	-0.12293	0.016221	0.039705
SOD3	4p15.2	-0.1229	0.01625	0.03977
CD38	4p15.32	-0.12288	0.016262	0.039795
DNAL4	22q13.1	-0.12286	0.016279	0.039832
HAPLN4	19p13.11	-0.12283	0.016312	0.039902
PYY2	17q11.2	0.122827	0.016312	0.039902
C16ORF96	16p13.3	-0.12282	0.01632	0.039917
KCNIP3	2q11.1	-0.12281	0.016323	0.03992
KRT83	12q13.13	-0.12281	0.016325	0.03992
NCF1C	7q11.23	-0.1228	0.01634	0.039951
CATSPERZ	11q13.1	0.122763	0.016368	0.040015
PROX1	1q32.3	-0.12275	0.016376	0.04003
WNT9A	1q42.13	-0.12273	0.0164	0.040082
IFIT1	10q23.31	-0.12271	0.016412	0.040107
UHRF2	9p24.1	0.122709	0.016416	0.040112
FAM131B	7q34	0.122674	0.016446	0.040182
SCARNA9	11q21	0.122662	0.016457	0.040204
RTN2	19q13.32	-0.12265	0.016464	0.040214
CAMKV	3p21.31	-0.12265	0.016466	0.040215
SERTAD3	19q13.2	-0.12264	0.016474	0.040231
ROMO1	20q11.22	-0.12264	0.01648	0.040239
POLK	5q13.3	-0.12263	0.016485	0.040248
EVPLL	17p11.2	0.122601	0.016512	0.040307
C6ORF132	6p21.1	0.122592	0.016519	0.040321
ENDOG	9q34.11	0.122584	0.016526	0.040333
ARID1A	1p36.11	0.122571	0.016538	0.040356
AFDN-DT	6q27	0.122565	0.016544	0.040366
MYH13	17p13.1	0.122561	0.016547	0.040368
LINC00839	10q11.21	-0.12256	0.016551	0.040372
FOXP4	6p21.1	0.122552	0.016555	0.040378
EI24	11q24.2	0.122542	0.016564	0.040395
NUBPL	14q12	-0.12254	0.016567	0.040397
COL6A3	2q37.3	-0.12252	0.016581	0.040417
LYPD1	2q21.2	-0.12252	0.016583	0.040417
CABLES2	20q13.33	0.122519	0.016584	0.040417
DPH5	1p21.2	-0.12252	0.016585	0.040417
SHROOM4	Xp11.22	-0.12252	0.016585	0.040417
SLC33A1	3q25.31	-0.12252	0.016587	0.040418
CTSW	11q13.1	-0.12251	0.016596	0.040434
FBXO28	1q42.11	0.122496	0.016604	0.04045
MAGEA6	Xq28	-0.12248	0.016616	0.040473
TRHR	8q23.1	0.122432	0.016662	0.040581
COL5A1	9q34.3	-0.12243	0.016664	0.040581
PTPRS	19p13.3	-0.1224	0.016691	0.040641
GDA	9q21.13	0.122371	0.016717	0.040699
PLEK2	14q23.3-q24.1	0.122332	0.016751	0.040778
GSAP	7q11.23	-0.12233	0.016755	0.040781
TDRD5	1q25.2	0.122319	0.016763	0.040797
SCARNA6	2q37.1	0.122316	0.016766	0.040798
VWCE	11q12.2	-0.12231	0.016768	0.040798
P3H3	12p13.31	-0.12231	0.016773	0.040807
ZMYND8	20q13.12	-0.1223	0.01678	0.040819

BMS1P20	22q11.22	-0.12229	0.016793	0.040844
KCNG3	2p21	-0.12228	0.016797	0.04085
HOMER2	15q25.2	-0.12228	0.016801	0.040854
ZNF846	19p13.2	-0.12226	0.016813	0.040879
ARHGAP42	11q22.1	-0.12226	0.016818	0.040886
FUCA1	1p36.11	-0.12224	0.016839	0.040931
CDH18	5p14.3	-0.12222	0.016849	0.040942
NR1D2	3p24.2	-0.12222	0.016849	0.040942
CYP8B1	3p22.1	-0.12222	0.01685	0.040942
GPC3	Xq26.2	-0.12218	0.016892	0.041041
SMYD1	2p11.2	-0.12212	0.016939	0.041149
QPRT	16p11.2	-0.12209	0.016973	0.041226
ZRANB3	2q21.3	0.122041	0.017015	0.041324
TRIR	19p13.13	0.122039	0.017017	0.041325
CACNA2D4	12p13.33	-0.12204	0.017019	0.041325
NLRP8	19q13.43	-0.12203	0.017024	0.041332
RPS27L	15q22.2	-0.12203	0.017029	0.041338
NSMAF	8q12.1	-0.122	0.017049	0.041382
TOGARAM1	14q21.2	-0.122	0.017054	0.041389
CD320	19p13.2	0.12198	0.017071	0.041426
CAMK2N2	3q27.1	0.121963	0.017087	0.041458
PHLDA2	11p15.4	0.121955	0.017094	0.04147
LRAT	4q32.1	-0.12194	0.01711	0.041503
CASTOR3	7q22.1	-0.12194	0.017111	0.041503
TSGA10	2q11.2	-0.12191	0.017136	0.041556
ZNF286B	17p11.2	-0.1219	0.017141	0.041565
SPATA22	17p13.2	-0.1219	0.017147	0.041575
SLC30A2	1p36.11	-0.12189	0.017149	0.041575
IL411	19q13.33	-0.12186	0.017176	0.041636
ETNK1	12p12.1	-0.12185	0.017193	0.041671
CMA1	14q12	-0.12184	0.017204	0.041692
CPAMD8	19p13.11	-0.12183	0.017211	0.041703
FDX1	11q22.3	-0.12182	0.017217	0.041713
SLC17A9	20q13.33	0.121809	0.017228	0.041734
KCNQ1OT1	11p15.5	0.121794	0.017241	0.041763
ADI1	2p25.3	-0.12177	0.017267	0.041819
UTP4	16q22.1	0.121733	0.017298	0.041889
NNT	5p12	0.121704	0.017325	0.041949
LYPLA1	8q11.23	-0.12169	0.017335	0.041965
TRAPPC4	11q23.3	-0.12169	0.017335	0.041965
NAPRT	8q24.3	0.121679	0.017348	0.041989
RHOG	11p15.4	-0.12168	0.017349	0.041989
PAPLN	14q24.2	-0.12167	0.017361	0.042006
KRT5	12q13.13	-0.12167	0.017361	0.042006
PGAM1	10q24.1	0.121641	0.017383	0.042056
TMEM196	7p21.1	-0.12164	0.017386	0.042056
VPS18	15q15.1	-0.12163	0.017391	0.042064
GPA33	1q24.1	0.121615	0.017407	0.042098
FIGNL2	12q13.13	-0.12161	0.017409	0.042098
UQCRHL	1p36.21	0.121563	0.017456	0.042206
SCUBE3	6p21.31	-0.12156	0.017462	0.042216
PRMT1	19q13.33	0.121522	0.017494	0.042288
ASCL4	12q23.3	-0.12151	0.017502	0.042303
GNPNAT1	14q22.1	0.121493	0.017521	0.042343
SCIN	7p21.3	0.121489	0.017525	0.042348
CTSS	1q21.3	-0.12147	0.017541	0.04238
GALR3	22q13.1	0.121455	0.017556	0.042413
EFCAB11	14q32.11	0.121437	0.017574	0.04245

HMHB1	5q31.3	-0.12141	0.017602	0.042512
SETD2	3p21.31	0.121396	0.017612	0.042532
MRPS16	10q22.2	0.121384	0.017623	0.042554
ALG10B	12q12	-0.12138	0.017629	0.042562
IMP4	2q21.1	0.121356	0.01765	0.042608
SAMD5	6q24.3	0.121354	0.017652	0.042608
IRF6	1q32.2	0.121338	0.017667	0.042639
AKR7A3	1p36.13	0.121328	0.017677	0.042652
PTENP1	9p13.3	-0.12133	0.017677	0.042652
LCN2	9q34.11	0.12132	0.017683	0.042663
CLEC1B	12p13.31-p13.2	-0.12131	0.017695	0.042685
RAB9B	Xq22.2	-0.1213	0.0177	0.042694
SLC4A1AP	2p23.3	-0.12126	0.017736	0.042774
VSX1	20p11.21	-0.12125	0.017746	0.042792
DYRK4	12p13.32	-0.12125	0.017748	0.042792
PRMT6	1p13.3	-0.12125	0.017754	0.042802
ZBTB7A	19p13.3	0.121216	0.017782	0.042865
ARMC5	16p11.2	0.121202	0.017796	0.042892
SINHCAF	12p11.21	-0.12119	0.01781	0.042917
OCIAD2	4p11	-0.12118	0.017814	0.042917
PILRA	7q22.1	-0.12118	0.017814	0.042917
RHBDD3	22q12.2	0.121182	0.017814	0.042917
ZNF688	16p11.2	-0.12118	0.017818	0.04292
ANKRD20A3	9q21.11	0.121168	0.017827	0.042937
CLK3	15q24.1	0.121156	0.017839	0.042961
SDK1	7p22.2	-0.12115	0.017846	0.042972
C2ORF16	2p23.3	-0.12113	0.017864	0.043012
MLXIP	12q24.31	0.121117	0.017876	0.043034
GRK3	22q12.1	-0.12111	0.017883	0.043045
MSL2	3q22.3	0.121045	0.017944	0.043189
CCDC138	2q13	0.12103	0.017959	0.043217
UBE2MP1	16p11.2	0.121011	0.017977	0.043257
HM13	20q11.21	-0.121	0.017991	0.043285
DNALI1	1p34.3	-0.12097	0.018019	0.043348
EIF3L	22q13.1	-0.12092	0.018067	0.043457
ARHGAP35	19q13.32	0.120905	0.018079	0.04348
VAT1L	16q23.1	-0.1209	0.018081	0.04348
PARD3B	2q33.3	-0.12089	0.018095	0.043509
C2	6p21.33	-0.12087	0.018116	0.043555
ADGRG4	Xq26.3	-0.12085	0.018129	0.04358
CCL22	16q21	-0.12084	0.018138	0.043592
PITRM1	10p15.2	0.120841	0.01814	0.043592
SFTA1P	10p14	-0.12084	0.01814	0.043592
ZBTB22	6p21.32	-0.12083	0.018148	0.0436
HEXIM2	17q21.31	-0.12083	0.018148	0.0436
C6ORF47	6p21.33	0.120822	0.018158	0.04362
PRMT9	4q31.23	-0.12081	0.018173	0.043649
FYCO1	3p21.31	-0.1208	0.018184	0.04367
CNOT6L	4q21.1	-0.12079	0.018192	0.043684
MGRN1	16p13.3	0.120772	0.018207	0.043714
ST18	8q11.23	-0.12077	0.018209	0.043714
MYLK3	16q11.2	-0.12075	0.018227	0.043753
ROBO2	3p12.3	-0.12074	0.018237	0.043771
H2AFV	7p13	0.120724	0.018253	0.043806
SCNM1	1q21.3	0.120719	0.018259	0.043813
OR2H2	6p22.1	0.120715	0.018262	0.043816
ZNF571	19q13.12	-0.1207	0.018281	0.043857
REN	1q32.1	-0.12062	0.018355	0.044029

B3GNT8	19q13.2	-0.12061	0.018365	0.044048
KLF12	13q22.1	-0.1206	0.018371	0.044055
COQ4	9q34.11	0.120595	0.018379	0.044071
LINC00596	14q11.2	0.120592	0.018382	0.044071
SOBP	6q21	-0.12059	0.018384	0.044073
SNORA56	Xq28	0.120531	0.018441	0.044201
ZDHHC14	6q25.3	0.12053	0.018442	0.044201
NTMT1	9q34.11	0.120498	0.018474	0.044272
OXSR1	3p22.2	0.120472	0.018499	0.044327
TMEM160	19q13.32	0.120455	0.018516	0.044361
PPEF2	4q21.1	0.120435	0.018536	0.044404
VKORC1L1	7q11.21	-0.12041	0.018562	0.044458
ZNF749	19q13.43	0.120407	0.018563	0.044458
NAT8L	4p16.3	-0.1204	0.018566	0.044459
EBNA1BP2	1p34.2	0.120353	0.018616	0.044575
KDM4B	19p13.3	0.120319	0.01865	0.04465
AKNA	9q32	0.120311	0.018658	0.04466
RALGPS1	9q33.3	0.120309	0.01866	0.04466
RHEBL1	12q13.12	0.120308	0.018661	0.04466
RPL39	Xq24	-0.1203	0.018665	0.044666
CHP1	15q15.1	0.120292	0.018676	0.044687
FAM83B	6p12.1	0.120255	0.018713	0.044766
AFDN	6q27	0.120254	0.018714	0.044766
DDTL	22q11.23	0.12025	0.018718	0.04477
POLR2H	3q27.1	0.120239	0.018729	0.044791
TOR1AIP1	1q25.2	-0.12018	0.018783	0.044916
C16ORF86	16q22.1	-0.12018	0.018792	0.044931
CSKMT	11q12.3	0.120144	0.018824	0.045002
TFRC	3q29	0.120125	0.018842	0.04504
ALKBH3	11p11.2	-0.12011	0.018853	0.045062
POMGNT1	1p34.1	-0.12009	0.018875	0.045109
KRT17P5	17p11.2	0.12008	0.018887	0.045132
PKD2L2	5q31.2	0.120055	0.018912	0.045187
ADNP2	18q23	0.120047	0.01892	0.0452
NDUFC2	11q14.1	-0.12003	0.018935	0.045231
PNPLA7	9q34.3	0.120021	0.018947	0.045252
RUNDC3A	17q21.31	-0.12002	0.01895	0.045254
RAB6D	2q21.1	-0.12002	0.018952	0.045254
AADAT	4q33	0.12	0.018967	0.045285
CD163	12p13.31	-0.12	0.018972	0.045291
ZNF773	19q13.43	-0.11998	0.018992	0.045333
CLU10S	12q22	-0.11997	0.019001	0.04535
LRRC40	1p31.1	-0.1199	0.019063	0.045494
ABI2	2q33.2	-0.11989	0.019078	0.045521
NOD2	16q12.1	-0.11989	0.019079	0.045521
SNX19	11q24.3-q25	-0.11988	0.019085	0.04553
NTN5	19q13.33	0.119876	0.019091	0.045535
NFAM1	22q13.2	-0.11988	0.019092	0.045535
FGFR2	10q26.13	-0.11986	0.019103	0.045556
HEATR4	14q24.3	0.119858	0.01911	0.045568
TBX6	16p11.2	0.119842	0.019126	0.0456
HADHA	2p23.3	-0.11983	0.01914	0.045626
KIAA1841	2p15	0.119827	0.019142	0.045626
HNRNPUL2	11q12.3	0.119789	0.01918	0.045712
AFG3L2	18p11.21	0.11978	0.019189	0.045727
TOB1	17q21.33	-0.11977	0.019199	0.045742
ADAMTS10	19p13.2	-0.11977	0.019199	0.045742
SLC26A6	3p21.31	0.119763	0.019206	0.045752



PHF7	3p21.1	0.119703	0.019266	0.045891
PRMT7	16q22.1	0.119668	0.019302	0.045971
ALPL	1p36.12	-0.11965	0.019318	0.045997
SERPINB1	6p25.2	0.119653	0.019318	0.045997
C3ORF79	3q25.2	0.119624	0.019347	0.046061
NMD3	3q26.1	-0.11962	0.019351	0.046065
EVX1	7p15.2	0.119568	0.019405	0.046187
MAGEA12	Xq28	-0.11956	0.019412	0.046198
POTEH	22q11.1	-0.11956	0.019417	0.046201
IL23R	1p31.3	-0.11956	0.019418	0.046201
FUBP1	1p31.1	0.119527	0.019447	0.046261
BZW2	7p21.1	0.119526	0.019447	0.046261
CD93	20p11.21	-0.11949	0.019487	0.046351
ESPNL	2q37.3	-0.11948	0.019491	0.046353
LYZL2	10p11.23	0.119466	0.019509	0.04639
GPR179	17q12	-0.11944	0.019536	0.04645
ACTL7A	9q31.3	0.119422	0.019554	0.046488
MED29	19q13.2	-0.11942	0.019557	0.046489
CTTNBP2	7q31.31	-0.11936	0.019615	0.04662
CHRN3	8p11.21	-0.11935	0.019626	0.046642
CCDC185	1q41	-0.11933	0.019654	0.046702
F11R	1q23.3	0.119321	0.019658	0.046707
SCN1A	2q24.3	-0.11931	0.019666	0.046721
CNOT2	12q15	-0.11929	0.01969	0.046773
GJB1	Xq13.1	-0.11927	0.019712	0.046816
ANKAR	2q32.2	-0.11927	0.019713	0.046816
TATDN2	3p25.3	0.119239	0.019744	0.046882
ANKRD40	17q21.33	-0.1192	0.019781	0.046965
FASLG	1q24.3	-0.11917	0.01981	0.04703
RPAP1	15q15.1	0.119159	0.019826	0.047061
BEND4	4p13	-0.11915	0.019834	0.047074
ABLIM1	10q25.3	0.119131	0.019856	0.04712
UTP20	12q23.2	0.119113	0.019875	0.04716
MTMR7	8p22	-0.1191	0.019884	0.047176
MOB3B	9p21.2	0.119102	0.019886	0.047176
SEC24C	10q22.2	0.1191	0.019888	0.047176
CHST9	18q11.2	-0.11908	0.019912	0.047226
TRPC6	11q22.1	-0.11907	0.019921	0.047242
MAD1L1	7p22.3	0.119066	0.019924	0.047243
THSD1	13q14.3	-0.11906	0.019932	0.047256
HMG20B	19p13.3	0.119047	0.019943	0.047274
GLYATL3	6p12.3	-0.11905	0.019944	0.047274
PPP3CA	4q24	-0.11904	0.019947	0.047274
AGPAT2	9q34.3	0.119024	0.019967	0.047318
OR10P1	12q13.2	0.118995	0.019998	0.047386
GAL3ST2	2q37.3	0.118979	0.020015	0.04742
AMOTL2	3q22.2	-0.11897	0.020022	0.047431
IL18BP	11q13.4	-0.11897	0.020029	0.047438
VPS37D	7q11.23	-0.11896	0.02003	0.047438
TEKT1	17p13.1	-0.11895	0.020043	0.047463
NOL9	1p36.31	0.11893	0.020066	0.047513
DGKE	17q22	0.11892	0.020077	0.047532
GPR19	12p13.1	0.118909	0.020089	0.047555
LBP	20q11.23	-0.1189	0.020099	0.047575
PCED1B-AS1	12q13.11	-0.11887	0.020126	0.047633
NEURL3	2q11.2	-0.11882	0.020184	0.047759
PRPF38B	1p13.3	0.118818	0.020184	0.047759
ABHD14A	3p21.2	-0.11881	0.020193	0.047775

ZNF320	19q13.41	0.118796	0.020207	0.047802
OXCT1	5p13.1	0.118793	0.020211	0.047806
ORMDL2	12q13.2	-0.11874	0.020264	0.047925
SLC45A2	5p13.2	-0.11874	0.020267	0.047926
C3ORF22	3q21.3	0.118704	0.020306	0.048012
HIST2H3D	1q21.2	0.118686	0.020325	0.048051
AP1G1	16q22.2	0.118682	0.020328	0.048054
PTGER4	5p13.1	-0.11866	0.02035	0.048094
SLC18B1	6q23.2	0.118662	0.02035	0.048094
SNORA67	17p13.1	0.118653	0.02036	0.048111
FAS	10q23.31	-0.11863	0.020381	0.048155
TTC39B	9p22.3	0.118628	0.020386	0.048158
SLC22A9	11q12.3	-0.11863	0.020387	0.048158
BCAS4	20q13.13	-0.1186	0.020415	0.048219
DEPTOR	8q24.12	-0.1186	0.02042	0.048224
VLDLR-AS1	9p24.2	-0.11859	0.020422	0.048224
WDR83OS	19p13.13	-0.11858	0.020435	0.04825
UBE2E1	3p24.2	-0.11854	0.020477	0.048343
UTF1	10q26.3	-0.11852	0.020506	0.048404
PHACTR1	6p24.1	-0.11847	0.020557	0.04852
METTL5	2q31.1	-0.11847	0.020559	0.04852
KRTAP10-10	21q22.3	0.118462	0.020564	0.048525
GPR161	1q24.2	-0.11845	0.020574	0.048544
EIF3H	8q23.3-q24.11	-0.11844	0.020593	0.048582
ACOT2	14q24.3	-0.11842	0.020612	0.048623
TIGIT	3q13.31	-0.11837	0.020666	0.048743
ATAD1	10q23.31	-0.11836	0.020673	0.048753
ZNRF2	7p14.3	-0.11836	0.020676	0.048755
RASSF9	12q21.31	-0.11834	0.020691	0.048784
ANGPT2	8p23.1	-0.11834	0.020695	0.048789
DAGLA	11q12.2	0.118335	0.020701	0.048796
CHCHD1	10q22.2	0.118274	0.020767	0.048946
MEST	7q32.2	-0.11827	0.020775	0.04896
SLC20A2	8p11.21	-0.11826	0.020784	0.048975
ELMOD1	11q22.3	-0.11826	0.020787	0.048976
NAA16	13q14.11	0.118229	0.020816	0.04904
FBXW5	9q34.3	0.118183	0.020867	0.049153
DEPDC4	12q23.1	0.118176	0.020874	0.049161
CXCL2	4q13.3	0.118175	0.020875	0.049161
TMX4	20p12.3	-0.11814	0.020914	0.049248
SCN5A	3p22.2	-0.11812	0.02094	0.049297
NPAS2	2q11.2	0.118115	0.02094	0.049297
RCHY1	4q21.1	-0.11811	0.020951	0.049316
NAP1L5	4q22.1 4q21-q22	-0.1181	0.020958	0.049326
KRT18P55	17q11.2	0.118094	0.020963	0.049334
THAP2	12q21.1	-0.11809	0.020971	0.049343
RIOK1	6p24.3	0.118085	0.020973	0.049343
WSCD1	17p13.2	-0.11808	0.020974	0.049343
ARHGEF15	17p13.1	-0.11803	0.02103	0.049467
EMBP1	1p11.2	-0.11801	0.021058	0.049528
CMTM6	3p22.3	-0.11799	0.021077	0.049567
HNRNPA1	12q13.13	0.117966	0.021104	0.049624
OMG	17q11.2	0.11796	0.02111	0.049632
SERPINB6	6p25.2	0.117942	0.02113	0.049675
KCNJ12	17p11.2	-0.11794	0.021134	0.049676
IRAK2	3p25.3	-0.11793	0.021144	0.049695
ZNF567	19q13.12	-0.11792	0.021151	0.049706
NPY	7p15.3	-0.11785	0.021234	0.049893

MPO	17q22	-0.11785	0.021236	0.049893
AURKAIP1	1p36.33	0.117836	0.021247	0.049913
PKDREJ	22q13.31	0.117818	0.021266	0.049953
LONP2	16q12.1	0.117765	0.021325	0.050086
STRC	15q15.3	0.117751	0.021341	0.050116
PIGR	1q32.1	0.117735	0.021359	0.05015
RSC1A1	1p36.21	0.117734	0.02136	0.05015
ARRB2	17p13.2	-0.11773	0.021369	0.05016
MST1L	1p36.13	0.117726	0.021369	0.05016
CYP4V2	4q35.1-q35.2	-0.11772	0.021377	0.050165
MRPS6	21q22.11	-0.11772	0.021377	0.050165
RSPO4	20p13	-0.11771	0.021381	0.050165
EPHA10	1p34.3	0.117715	0.021382	0.050165
PPP2CB	8p12	-0.11771	0.021387	0.050172
SMIM21	18q23	-0.11769	0.021409	0.050217
BHMT	5q14.1	-0.11767	0.021434	0.050266
RSU1	10p13	-0.11766	0.021437	0.050266
TADA1	1q24.1	0.117665	0.021437	0.050266
CTNNBIP1	1p36.22	0.117641	0.021464	0.050324
HIST1H4B	6p22.2	0.117615	0.021493	0.050385
AKR1C4	10p15.1	-0.11761	0.021496	0.050386
WDR35	2p24.1	-0.11758	0.021535	0.050472
GSTM2P1	6q21	0.117573	0.02154	0.050478
KLK4	19q13.41	-0.11756	0.021554	0.050505
AVPR2	Xq28	-0.11752	0.021598	0.050601
ZBED2	3q13.13	-0.11751	0.021605	0.050611
PI4K2B	4p15.2	0.117498	0.021624	0.050648
CARD8	19q13.33	-0.1175	0.021625	0.050648
SPIRE2	16q24.3	0.117486	0.021637	0.05067
FMNL1	17q21.31	-0.11746	0.021661	0.05072
RPS6KA6	Xq21.1	-0.11745	0.021677	0.050752
ZNF777	7q36.1	0.117442	0.021687	0.050767
LOC728554	5q35.3	0.11744	0.021689	0.050767
RAB27A	15q21.3	-0.11742	0.021712	0.050816
THAP4	2q37.3	0.117388	0.021748	0.050891
REG4	1p12	0.117385	0.021751	0.050891
AGAP3	7q36.1	0.117384	0.021752	0.050891
NCMAP	1p36.11	-0.11737	0.021765	0.050915
C1ORF56	1q21.3	-0.11737	0.021768	0.050917
TRAPPC2	Xp22.2	0.117362	0.021777	0.050927
EFNA3	1q21.3	0.117359	0.02178	0.050927
RPS20	8q12.1	-0.11736	0.02178	0.050927
ARHGAP6	Xp22.2	-0.11736	0.021784	0.05093
DLGAP1	18p11.31	-0.11735	0.021791	0.05094
ARID5A	2q11.2	-0.11732	0.021819	0.051001
QSER1	11p13	0.11731	0.021836	0.051034
DVL3	3q27.1	0.117306	0.02184	0.051038
MGAT5B	17q25.2	-0.11728	0.021867	0.051094
NADSYN1	11q13.4	0.11723	0.021926	0.051227
C11ORF88	11q23.1	-0.11722	0.021939	0.051251
IER5	1q25.3	0.117215	0.021944	0.051253
NIPAL3	1p36.11	0.117214	0.021945	0.051253
ZBTB38	3q23	-0.11721	0.021953	0.051265
PRDX6	1q25.1	0.117189	0.021974	0.051308
LOC730101	6p12.2	0.117155	0.022012	0.051392
AOC1	7q36.1	-0.11714	0.022034	0.051437
DSC1	18q12.1	-0.11712	0.022048	0.051463
TNFAIP8	5q23.1	-0.1171	0.022079	0.05153

BPIFB4	20q11.21	-0.11709	0.022087	0.051541
COQ8A	1q42.13	0.117088	0.022089	0.051541
CDC20B	5q11.2	-0.11708	0.022094	0.051548
PDE4B	1p31.3	-0.11703	0.022154	0.05168
MSL1	17q21.1	0.117029	0.022156	0.05168
SLC6A4	17q11.2	-0.11702	0.02217	0.051706
CFLAR	2q33.1	-0.11698	0.022213	0.0518
ZSCAN23	6p22.1	-0.11697	0.022222	0.051814
IL36A	2q14.1	-0.11696	0.022231	0.051825
MEIG1	10p13	-0.11696	0.022231	0.051825
MRGPRE	11p15.4	-0.11696	0.022238	0.051835
ZRANB2	1p31.1	0.116933	0.022267	0.051895
LMBR1	7q36.3	-0.11693	0.022273	0.051901
FAM104A	17q25.1	-0.11693	0.022275	0.051901
FOLR3	11q13.4	-0.11692	0.022283	0.051915
ZNF280A	22q11.22	-0.1169	0.022299	0.051946
MSH4	1p31.1	0.116899	0.022305	0.051954
GPR143	Xp22.2	-0.11688	0.022325	0.05199
PPP1R14C	6q25.1	-0.11688	0.022326	0.05199
MS4A8	11q12.2	0.116822	0.022394	0.052144
SLC9A1	1p36.11	0.11681	0.022408	0.05217
TOMM6	6p21.1	0.116795	0.022426	0.052206
PRR29	17q23.3	-0.11679	0.022435	0.052219
DPYSL5	2p23.3	-0.11678	0.02244	0.052219
GRIA2	4q32.1	-0.11678	0.02244	0.052219
NFXL1	4p12	0.116777	0.022447	0.052231
KYAT3	1p22.2	-0.11677	0.022454	0.05224
FUT1	19q13.33	0.116759	0.022468	0.052266
TENT2	5q14.1	-0.11676	0.022471	0.052268
WFDC2	20q13.12	-0.11672	0.022509	0.05235
ANKRD39	2q11.2	0.116706	0.022529	0.052391
INTU	4q28.1	0.116693	0.022545	0.052421
SEMA4C	2q11.2	-0.11668	0.022561	0.052452
ADRA1D	20p13	-0.11665	0.022589	0.052511
TMEM167A	5q14.2	-0.11665	0.022591	0.052511
EHBP1L1	11q13.1	0.116648	0.022597	0.052518
SERPINA6	14q32.13	-0.11664	0.022609	0.052539
KIAA0040	1q25.1	0.116632	0.022616	0.052545
ZNF592	15q25.3	0.116631	0.022616	0.052545
HIPK3	11p13	-0.11662	0.022632	0.052575
CHMP4C	8q21.13	-0.11661	0.022641	0.05259
MEG8	14q32.2-q32.31	0.116592	0.022663	0.052634
FKBP1A	20p13	-0.11658	0.022674	0.052655
MRPS14	1q25.1	0.116569	0.02269	0.052685
PCP2	19p13.2	0.116556	0.022705	0.052713
FTCD	21q22.3	-0.11654	0.022719	0.052739
GTF2E1	3q13.33	-0.11654	0.022721	0.052739
TMPRSS11E	4q13.2	-0.11651	0.022762	0.052827
SCAND1	20q11.23	-0.1165	0.022767	0.052835
CLVS1	8q12.2-q12.3	-0.11648	0.022789	0.052872
FKBP9	7p14.3	-0.11648	0.022789	0.052872
PIPSL	10q23.33	0.116475	0.022799	0.052889
SLC41A1	1q32.1	0.116473	0.022802	0.052889
CCDC166	8q24.3	0.116458	0.022819	0.052924
TMEM129	4p16.3	0.116449	0.02283	0.052944
SIGLEC6	19q13.41	-0.11644	0.022844	0.05297
POLR3H	22q13.2	0.116413	0.022872	0.053028
HCG11	6p22.2	-0.11638	0.022906	0.0531

ZNF415	19q13.42	-0.11637	0.022923	0.053133
SLC25A5	Xq24	0.116364	0.02293	0.053144
GZMA	5q11.2	-0.11636	0.022936	0.053152
TRIM44	11p13	-0.11635	0.022944	0.053164
OR51E1	11p15.4	-0.11635	0.022951	0.053175
RAI1	17p11.2	0.116343	0.022955	0.053178
CACNA1H	16p13.3	-0.11631	0.02299	0.053253
HPCAL1	2p25.1	-0.1163	0.023003	0.053277
LAMTOR2	1q22	0.11629	0.023018	0.053305
GTF2H2B	5q13.2	0.116265	0.023048	0.053368
CHRNA4	15q25.1	-0.11626	0.023053	0.053374
PRAM1	19p13.2	-0.11625	0.023061	0.053384
DANCR	4q12	0.116252	0.023063	0.053384
RCOR3	1q32.2-q32.3	0.116245	0.023071	0.053397
CEND1	11p15.5	-0.11624	0.023082	0.053415
NCF1	7q11.23	-0.11622	0.023103	0.053458
EXOC6	10q23.33	0.116199	0.023126	0.053505
KRTAP5-10	11q13.4	0.116188	0.023139	0.053529
TTY10	Yq11.223	-0.11618	0.02315	0.053549
PLD6	17p11.2	0.116156	0.023178	0.053607
LINC00899	22q13.31	-0.11615	0.023184	0.053616
PPWD1	5q12.3	0.116139	0.023198	0.053635
UBR7	14q32.12	0.116139	0.023198	0.053635
CAGE1	6p24.3	0.116121	0.023219	0.053677
SRSF5	14q24.1	0.116116	0.023225	0.053685
SNORD94	2p11.2	0.116106	0.023238	0.053702
ASAP1	8q24.21-q24.22	-0.11611	0.023238	0.053702
SAAL1	11p15.1	0.116095	0.02325	0.053724
CD109	6q13	-0.11607	0.023277	0.053779
PLEKHM3	2q33.3	-0.11607	0.023279	0.053779
TRANK1	3p22.2	-0.11605	0.023301	0.053824
NNAT	20q11.23	0.116034	0.023323	0.053869
ZNF526	19q13.2	0.116019	0.023341	0.053894
TMEM79	1q22	0.116019	0.023341	0.053894
CYP39A1	6p12.3	-0.11602	0.023342	0.053894
FMR1-AS1	Xq27.3	0.116016	0.023345	0.053894
RAPGEF4	2q31.1	-0.11601	0.02335	0.0539
C17ORF49	17p13.1	-0.116	0.023358	0.053912
OAF	11q23.3	-0.11596	0.023414	0.054035
NRG4	15q24.2	0.115947	0.023427	0.054057
SFXN3	10q24.31	-0.11595	0.023429	0.054057
ZNF230	19q13.31	-0.11593	0.023453	0.054107
ZNF143	11p15.4	-0.11592	0.023462	0.054121
NME1	17q21.33	0.115906	0.023477	0.054149
BRAP	12q24.12	-0.1159	0.02348	0.05415
RGL2	6p21.32	0.115897	0.023488	0.054161
ZNF18	17p12	-0.11588	0.023505	0.054194
FOXD4L6	9p11.2	0.115878	0.023511	0.054201
OR5B21	11q12.1	0.115845	0.023551	0.054287
MPV17L	16p13.11	-0.11584	0.023557	0.054296
GAD1	2q31.1	0.115832	0.023566	0.054311
TUBBP5	9q34.3	0.115816	0.023585	0.054348
BAIAP2	17q25.3	-0.11581	0.023588	0.054348
JAG1	20p12.2	-0.11581	0.023591	0.054349
LINC02694	15q14	-0.11581	0.023597	0.054357
RBM46	4q32.1	-0.1158	0.023605	0.054368
P2RY6	11q13.4	-0.11579	0.023618	0.054391
ST20	15q25.1	0.115788	0.02362	0.054391

SHLD1	20p12.3	-0.11577	0.023642	0.05443
PHF1	6p21.32	-0.11577	0.023642	0.05443
PSORS1C1	6p21.33	0.115767	0.023645	0.05443
SIM2	21q22.13	0.115764	0.02365	0.054434
ZFYVE9	1p32.3	-0.11576	0.023653	0.054435
MAPK3	16p11.2	0.115756	0.023659	0.054443
KIAA1217	10p12.2-p12.1	-0.11575	0.023663	0.054446
GDF2	10q11.22	-0.11574	0.023678	0.054469
SDHAP3	5p15.33	0.11574	0.023678	0.054469
TOPAZ1	3p21.31	0.115728	0.023692	0.054494
TECPR2	14q32.31	-0.11564	0.023798	0.054732
ELOVL7	5q12.1	0.115634	0.023807	0.054746
EGFLAM	5p13.2-p13.1	-0.11562	0.023824	0.054778
DMBT1	10q26.13	0.115616	0.023829	0.054784
PRKAG2	7q36.1	-0.11561	0.023843	0.054809
SVIL	10p11.23	-0.1156	0.023853	0.054827
MEGF11	15q22.31	-0.11558	0.02387	0.05486
RICTOR	5p13.1	-0.11553	0.023933	0.054998
FLCN	17p11.2	-0.11549	0.023983	0.055107
ATCAY	19p13.3	-0.11548	0.023997	0.055127
FKBP2	11q13.1	-0.11548	0.023997	0.055127
SBNO1	12q24.31	0.115441	0.024044	0.055228
CKMT2	5q14.1	-0.11543	0.02406	0.055259
EIF5A	17p13.1	0.115425	0.024063	0.055259
PDILT	16p12.3	-0.11542	0.024071	0.055271
C5AR1	19q13.32	-0.11542	0.024075	0.055272
HELB	12q14.3 12q	0.115414	0.024077	0.055272
CA13	8q21.2	0.115401	0.024094	0.055304
KCNMB4	12q15	-0.11535	0.024155	0.055433
LRRC8B	1p22.2	0.11535	0.024156	0.055433
UNC5C	4q22.3	-0.11534	0.024169	0.055457
ATP2A2	12q24.11	0.115332	0.024178	0.055472
POLD4	11q13.2	-0.11532	0.02419	0.055492
ABHD17A	19p13.3	0.11531	0.024205	0.055522
C20ORF197	20q13.33	-0.11531	0.024208	0.055522
SNX14	6q14.3	-0.11526	0.024269	0.055656
NKRF	Xq24	0.115255	0.024273	0.055658
ZNF79	9q33.3	-0.11522	0.024314	0.055745
CBLN2	18q22.3	-0.11522	0.024316	0.055745
HR	8p21.3	0.115174	0.024374	0.055871
DR1	1p22.1	-0.11516	0.024393	0.055907
KRT17	17q21.2	-0.11513	0.024423	0.055969
INGX	Xq13.1	0.115133	0.024426	0.055969
SIN3B	19p13.11	0.115128	0.024431	0.055976
ZNF252P	8q24.3	-0.11512	0.024441	0.055992
FLT3	13q12.2	-0.11511	0.024459	0.056027
SRP54	14q13.2	-0.1151	0.024466	0.056037
MAGEA11	Xq28	-0.11509	0.024484	0.05607
FCGR2A	1q23.3	-0.11508	0.024497	0.056095
DSCAM	21q22.2	-0.11507	0.02451	0.056117
H2AFJ	12p12.3	-0.11506	0.024517	0.056128
FAM193A	4p16.3	0.115052	0.024527	0.056143
EPS15	1p32.3	-0.11505	0.024533	0.056151
OR2T10	1q44	-0.11503	0.024558	0.056203
SLC43A1	11q12.1	0.11501	0.024579	0.056244
SCGB3A1	5q35.3	-0.115	0.024592	0.056266
OR2T3	1q44	-0.11498	0.024612	0.056306
CASKIN1	16p13.3	0.114979	0.024619	0.056315

COL19A1	6q13	-0.11497	0.024629	0.056332
KCNH3	12q13.12	-0.11493	0.024675	0.056431
ADAM33	20p13	-0.11493	0.024682	0.05644
HCG26	6p21.33	0.114917	0.024696	0.056466
TPD52L2	20q13.33	-0.11491	0.024706	0.056482
IL2	4q27	-0.11491	0.024708	0.056482
PIWIL4	11q21	0.114902	0.024715	0.05649
VCP	9p13.3	0.11488	0.024744	0.056549
SIRT1	10q21.3	-0.11488	0.024749	0.056554
RNLS	10q23.31	-0.11484	0.024792	0.056646
GSTZ1	14q24.3	-0.11483	0.0248	0.056646
FAT2	5q33.1	0.114832	0.024804	0.056646
LOC100134368	16p13.3	0.114832	0.024804	0.056646
KRT80	12q13.13	-0.11483	0.024805	0.056646
TRIM78P	11p15	0.11483	0.024806	0.056646
SNORA5A	7p13	0.114828	0.024808	0.056646
TMIE	3p21.31	-0.11482	0.024816	0.056655
HYPK	15q15.3	0.114807	0.024835	0.056693
LRRC57	15q15.2	-0.1148	0.024838	0.056694
HOGA1	10q24.2	-0.1148	0.024849	0.056713
SLIRP	14q24.3	0.114772	0.02488	0.056777
AFF2	Xq28	-0.11476	0.0249	0.056815
COG2	1q42.2	0.114747	0.024912	0.056836
VANGL1	1p13.1	0.114735	0.024926	0.056863
RIF1	2q23.3	0.114683	0.024993	0.057007
OTULINL	5p15.2	-0.11468	0.024998	0.057014
CYP26B1	2p13.2	-0.11462	0.025072	0.057175
S100Z	5q13.3	-0.11461	0.025092	0.057215
YIPF2	19p13.2	-0.1146	0.0251	0.057226
CCDC7	10p11.22	0.114588	0.025114	0.057252
DNAH6	2p11.2	0.114582	0.025122	0.057264
RPGRIP1L	16q12.2	0.114574	0.025132	0.057281
SNORA53	12q23.1	0.114565	0.025144	0.0573
LOC100268168	5q35.1	0.11455	0.025162	0.057336
MRPL20-AS1	1p36.33	0.114533	0.025184	0.05738
CD1B	1q23.1	-0.11453	0.025189	0.057383
FAU	11q13.1	-0.1145	0.025221	0.05745
CD160	1q21.1	0.114496	0.025232	0.057468
SHKBP1	19q13.2	0.114409	0.025344	0.057717
STAMBPL1	10q23.31	0.114403	0.025352	0.057728
ARIH2OS	3p21.31	-0.11439	0.025367	0.057755
GTF3C1	16p12.1	0.114385	0.025375	0.057762
VDR	12q13.11	0.114385	0.025375	0.057762
CIB2	15q25.1	-0.11438	0.025383	0.057772
PCDH20	13q21.2	-0.11433	0.025444	0.057905
RMDN3	15q15.1	0.11432	0.025459	0.057929
HSF5	17q22	-0.11432	0.02546	0.057929
EFCAB14	1p33	-0.11431	0.02547	0.057946
GGT6	17p13.2	-0.1143	0.025487	0.057978
SPTY2D1	11p15.1	-0.11429	0.025499	0.057997
CCDC169	13q13.3	-0.11425	0.025551	0.058109
SFMBT1	3p21.1	0.114247	0.025554	0.058109
SEL1L2	20p12.1	-0.11418	0.025635	0.058288
C1QTNF1	17q25.3	-0.11415	0.025676	0.058374
DUSP14	17q12	-0.11414	0.025696	0.058412
MYBPC2	19q13.33	-0.11412	0.025714	0.058447
ADGRE5	19p13.12	0.114115	0.025725	0.058466
GNPAT	1q42.2	0.114066	0.025789	0.058603

ANKRD33	12q13.13	0.114064	0.025791	0.058603
ACKR4	3q22.1	-0.11406	0.0258	0.058617
DHX58	17q21.2	-0.11405	0.025811	0.05863
TLX2	2p13.1	0.114048	0.025812	0.05863
SVOPL	7q34	-0.11402	0.025851	0.058712
MPL	1p34.2	-0.114	0.025878	0.058766
RBM22	5q33.1	-0.11399	0.025884	0.058772
NDUFB5	3q26.33	-0.11399	0.025891	0.058782
FRMPD2	10q11.22	-0.11398	0.025898	0.058793
LRRC37A16P	17q24.2	-0.11397	0.025918	0.05883
INSYN2B	5q35.1	-0.11397	0.025921	0.05883
ACTR1A	10q24.32	-0.11395	0.025948	0.058884
LCE2A	1q21.3	0.113943	0.025951	0.058885
PVR	19q13.31	0.113897	0.026011	0.059015
FBXO43	8q22.2	0.113846	0.026078	0.059159
RHOC	1p13.2	-0.11384	0.026091	0.059184
ASCC2	22q12.2	0.113832	0.026097	0.05919
MC2R	18p11.21	-0.11383	0.026101	0.059193
TMUB1	7q36.1	0.113818	0.026115	0.059217
RPS29	14q21.3	-0.11378	0.026171	0.059338
PIGX	3q29	0.11376	0.026192	0.059377
IAH1	2p25.1	-0.11376	0.026197	0.059377
TAS1R3	1p36.33	-0.11376	0.026197	0.059377
UGT2B10	4q13.2	-0.11374	0.026222	0.059425
PLCD4	2q35	0.113721	0.026244	0.059468
SAMD10	20q13.33	0.113719	0.026246	0.059468
RCN3	19q13.33	-0.1137	0.026273	0.059522
ICOS	2q33.2	-0.1137	0.026277	0.059525
PDCD2L	19q13.11	0.113683	0.026294	0.059552
FZD10	12q24.33	-0.11368	0.026295	0.059552
ZNHIT3	17q12	-0.11367	0.026305	0.059567
LIMK2	22q12.2	0.113664	0.02632	0.059594
TPI1	12p13.31	0.113657	0.026328	0.059606
RSPRY1	16q13	-0.11365	0.026332	0.059609
GPR149	3q25.2	-0.11365	0.02634	0.059614
FOXP3	Xp11.23	-0.11365	0.026341	0.059614
SCN10A	3p22.2	-0.11358	0.026425	0.059798
ZNF426	19p13.2	-0.11358	0.026431	0.059804
CYP4F12	19p13.12	0.113552	0.026468	0.059883
PDAP1	7q22.1	0.113523	0.026508	0.059966
KCNA3	1p13.3	-0.11351	0.026524	0.059994
PTCH2	1p34.1	-0.11351	0.026527	0.059994
ZNF503-AS2	10q22.2	-0.11351	0.026531	0.059998
CD82	11p11.2	-0.11349	0.026558	0.060051
PRDX2	19p13.13	0.113468	0.026581	0.060097
GNG3	11q12.3	0.11343	0.026633	0.060207
FAM157B	9q34.3	0.113412	0.026657	0.060256
CHAMP1	13q34	0.113401	0.026671	0.060281
KCNC4	1p13.3	0.113367	0.026717	0.06037
PKD1L2	16q23.2	-0.11337	0.026717	0.06037
UQCRB	8q22.1	-0.11336	0.026729	0.060389
SUPT3H	6p21.1	-0.11334	0.026748	0.060426
XPO7	8p21.3	0.11334	0.026754	0.060434
IVNS1ABP	1q25.3	0.113336	0.026759	0.060437
TBX15	1p12	-0.11333	0.026762	0.060437
MOB3A	19p13.3	-0.11332	0.026778	0.060466
HADH	4q25	0.113294	0.026815	0.060545
HMGB3P1	20q11.22	0.113284	0.02683	0.06057



ADAL	15q15.3	-0.11323	0.026901	0.06072
KRTAP10-8	21q22.3	0.11323	0.026902	0.06072
CNTNAP1	17q21.2	-0.1132	0.026944	0.060807
CRYM	16p12.2	-0.11319	0.026952	0.06082
ZIC2	13q32.3	0.113176	0.026976	0.060867
NGLY1	3p24.2	-0.11317	0.026982	0.060873
SEC14L1P1	11p11.2	0.113167	0.026988	0.060879
ADAM19	5q33.3	-0.11314	0.027026	0.060959
CALM2	2p21	-0.11311	0.027064	0.061037
AP2A1	19q13.33	0.113086	0.027099	0.061108
TMEM147	19q13.12	0.113083	0.027102	0.061109
PUS3	11q24.2	-0.11307	0.027116	0.061133
SLC30A3	2p23.3	-0.11307	0.027123	0.061142
MMP24	20q11.22	-0.11304	0.027164	0.061228
PRPSAP1	17q25.1	-0.11303	0.027171	0.061238
RPL23AP53	8p23.3	-0.11301	0.0272	0.061295
SSX2	Xp11.22	0.112997	0.027221	0.061336
MFSD11	17q25.1-q25.2	-0.11299	0.027232	0.061355
NEDD4	15q21.3	-0.11298	0.027244	0.061374
ZNF536	19q12	-0.11294	0.027305	0.061504
GDAP1	8q21.11	-0.11293	0.027318	0.061527
CAPS	19p13.3	-0.11292	0.02733	0.061547
ANGEL2	1q32.3	0.112912	0.027336	0.061554
LRG1	19p13.3	0.112882	0.027378	0.061641
DNAJC5	20q13.33	0.112868	0.027397	0.061677
CCDC125	5q13.2	0.112853	0.027418	0.061718
UEVLD	11p15.1	-0.11284	0.027435	0.061748
SNORA40	11q21	0.112831	0.027448	0.061772
TPGS1	19p13.3	0.112821	0.027462	0.061796
CTU2	16q24.3	0.112815	0.02747	0.061807
CD24	6q21	-0.1128	0.027489	0.061843
SNTG2	2p25.3	-0.11274	0.027569	0.062015
RNF34	12q24.31	0.112735	0.027582	0.062037
SPNS3	17p13.2	-0.11273	0.027593	0.062056
MIRLET7BHG	22q13.31	0.11272	0.027602	0.062069
PRDM11	11p11.2	-0.1127	0.027634	0.062133
BRF2	8p11.23	-0.11266	0.02769	0.062253
TTLL9	20q11.21	-0.11265	0.0277	0.062266
UNC93A	6q27	0.112648	0.027702	0.062266
C12ORF54	12q13.11	-0.1126	0.027767	0.062405
COL1A1	17q21.33	-0.11258	0.027792	0.062453
LOC100272216	-	0.112564	0.027819	0.062507
FAM204A	10q26.11	-0.11256	0.027823	0.062509
WASL	7q31.32	-0.11256	0.027826	0.062509
PALD1	10q22.1	0.112552	0.027835	0.062523
S1PR5	19p13.2	-0.11255	0.027844	0.062536
SNORA29	6q25.3	0.112521	0.02788	0.062609
CAPRN2	12p11.21	0.112498	0.027911	0.062672
CLGN	4q31.1	-0.11248	0.027939	0.062729
DPH6	15q14	-0.11247	0.027945	0.062735
NRG3	10q23.1	-0.11247	0.02795	0.062739
LCN15	9q34.3	-0.11247	0.027957	0.062748
PTPN6	12p13.31	-0.11246	0.02797	0.06277
MALL	2q13	0.112431	0.028005	0.062841
GTF2F1	19p13.3	0.112406	0.02804	0.062913
PRSS12	4q26	0.112392	0.02806	0.062951
TRPM3	9q21.12-q21.13	-0.11239	0.028063	0.062951
NANOG	12p13.31	0.112368	0.028094	0.063012

KIF12	9q32	0.112335	0.028141	0.06311
NUTM2A	10q23.2	-0.11232	0.028162	0.063151
TSSK1B	5q22.2	-0.11231	0.02817	0.063157
CCDC116	22q11.21	0.11231	0.028176	0.063157
CDKN2AIPNL	5q31.1	-0.11231	0.028176	0.063157
SLC4A11	20p13	0.112309	0.028178	0.063157
WTAP	6q25.3	-0.11226	0.028243	0.063296
HIPK4	19q13.2	-0.11226	0.028247	0.063299
RPL23P8	7p21.1	-0.11222	0.028299	0.063408
TCAF2	7q35	-0.11222	0.028309	0.063425
RNASE9	14q11.2	0.112196	0.028337	0.063479
WDR75	2q32.2	0.112191	0.028344	0.063487
TNNT1	19q13.42	0.112157	0.028392	0.063589
SNORA55	1p34.3	0.112139	0.028417	0.063638
PCSK4	19p13.3	0.11213	0.02843	0.063659
CLEC4E	12p13.31	-0.11213	0.028433	0.063659
KLK2	19q13.33	-0.11212	0.028443	0.063675
PCDHB8	5q31.3	-0.11211	0.028453	0.06369
RPL38	17q25.1	-0.11211	0.028461	0.063701
NBAS	2p24.3	-0.11206	0.028526	0.063839
HARS	5q31.3	0.112029	0.028575	0.06394
HOXA10	7p15.2	0.11202	0.028588	0.063962
PCDHGB8P	5q31.3	0.112015	0.028595	0.063971
RPS6KB2	11q13.2	0.111969	0.028661	0.064112
KPTN	19q13.32	0.111958	0.028677	0.06414
DOP1A	6q14.1	0.111934	0.02871	0.064208
LHX8	1p31.1	-0.11191	0.028752	0.064284
MKRN3	15q11.2	-0.1119	0.028757	0.064284
KCNC2	12q21.1	-0.1119	0.028759	0.064284
GYPE	4q31.21	-0.1119	0.028759	0.064284
ZNF85	19p12	-0.1119	0.028761	0.064284
SLC35B3	6p24.3	-0.1119	0.028764	0.064284
GIT2	12q24.11	-0.11187	0.028806	0.06437
RAB11FIP5	2p13.2	-0.11187	0.028809	0.06437
CYP4F22	19p13.12	-0.11186	0.028815	0.064377
UBE2R2	9p13.3	-0.11183	0.028853	0.064456
SLC9C2	1q25.1	0.111831	0.028858	0.064459
TOR1AIP2	1q25.2	0.11182	0.028874	0.064488
MSTN	2q32.2	-0.11178	0.028926	0.064596
ZNF713	7p11.2	-0.11178	0.028931	0.0646
ZSCAN29	15q15.3	0.111773	0.028943	0.064619
RBBP7	Xp22.2	0.111757	0.028965	0.064653
SNORA27	13q12.2	0.111756	0.028966	0.064653
MRC1	10p12.33	-0.11176	0.028967	0.064653
PLIN3	19p13.3	-0.11175	0.028975	0.064662
THAP12	11q13.5	-0.11173	0.029001	0.064711
BEND3P3	10q22.3	0.111731	0.029003	0.064711
ING3	7q31.31	-0.11171	0.02903	0.064763
CHST12	7p22.3	-0.11168	0.02907	0.064843
C8ORF33	8q24.3	-0.11168	0.029072	0.064843
ZBED6CL	7q36.1	-0.11168	0.02908	0.064853
RPPH1	14q11.2	-0.11167	0.029094	0.064877
JMJD4	1q42.13	0.111653	0.029116	0.06491
BEX5	Xq22.1	-0.11165	0.029117	0.06491
RBIS	8q21.2	-0.11165	0.029118	0.06491
FCRL6	1q23.2	-0.11165	0.029127	0.064923
ZNF800	7q31.33	-0.11164	0.029132	0.064925
NT5DC2	3p21.1	0.111631	0.029148	0.064956

DPYSL4	10q26.3	-0.11162	0.029159	0.064971
IRAK3	12q14.3	-0.11161	0.029179	0.06501
ZC3HC1	7q32.2	-0.1116	0.029191	0.065026
PPAT	4q12	0.111598	0.029195	0.065026
LPCAT1	5p15.33	0.111598	0.029196	0.065026
BTRC	10q24.32	-0.11159	0.029208	0.065045
C5ORF51	5p13.1	-0.11158	0.029219	0.065063
CNGA4	11p15.4	0.111551	0.029264	0.065151
PPFIA1	11q13.3	0.11155	0.029266	0.065151
KCNC3	19q13.33	0.111546	0.029272	0.065159
LIMS1	2q12.3	-0.11154	0.029279	0.065168
ARPP21	3p22.3	-0.11153	0.029296	0.065192
ZNF662	3p22.1	-0.11153	0.0293	0.065192
HCN2	19p13.3	-0.11153	0.0293	0.065192
GGNBP1	6p21.31	0.111515	0.029317	0.065223
PGAM2	7p13	0.111493	0.02935	0.065284
MPC2	1q24.2	0.111492	0.029351	0.065284
ZNF33A	10p11.1	0.111469	0.029384	0.065348
LCORL	4p15.31	0.111467	0.029387	0.065348
SOD2	6q25.3	-0.11145	0.02941	0.065393
PLB1	2p23.2	-0.11144	0.02942	0.065408
PP2D1	3p24.3	0.111425	0.029448	0.065464
RIMBP3C	22q11.21	-0.11142	0.029462	0.065486
MYL12A	18p11.31	-0.11138	0.029511	0.065588
FNDC9	5q33.3	-0.11138	0.029518	0.065596
LOC100133920	2q11.1	-0.11137	0.029533	0.065621
RC3H1	1q25.1	0.111366	0.029535	0.065621
UTP3	4q13.3	0.111363	0.02954	0.065623
HPSE2	10q24.2	-0.11135	0.029558	0.065657
SLC1A5	19q13.32	0.111345	0.029567	0.065668
CCT8	21q21.3	0.111337	0.029577	0.065684
PHF8	Xp11.22	0.111334	0.029582	0.065687
GGCX	2p11.2	-0.11132	0.029606	0.065734
ZNF329	19q13.43	-0.11129	0.029648	0.065818
IGBP1P1	14q13.2	-0.11129	0.029651	0.065818
HOXA5	7p15.2	0.111268	0.029679	0.065875
DKK1	10q21.1	-0.11126	0.029685	0.06588
ZNF311	6p22.1	0.111246	0.029711	0.065929
MTUS2	13q12.3	-0.11124	0.029714	0.065929
ARHGAP44	17p12	-0.11123	0.029737	0.06597
LRIG3	12q14.1	0.111228	0.029739	0.06597
DMC1	22q13.1	0.111223	0.029746	0.065972
PWRN1	15q11.2	-0.11122	0.029748	0.065972
PCDHGB2	5q31.3	-0.11122	0.02975	0.065972
ABHD5	3p21.33	-0.1112	0.029783	0.066039
ORM1	9q32	-0.11117	0.029826	0.066127
CYTL1	4p16.2	-0.11115	0.029854	0.066177
C2CD4B	15q22.2	0.111147	0.029858	0.066177
CDK5R2	2q35	-0.11115	0.029859	0.066177
C20ORF202	20p13	-0.11113	0.029881	0.06622
TNC	9q33.1	-0.11111	0.029912	0.066282
MAGEC1	Xq27.2	-0.11108	0.029956	0.066371
PDIA2	16p13.3	0.111045	0.03001	0.066483
CYBA	16q24.2	0.11104	0.030017	0.066492
C9ORF85	9q21.13	-0.111	0.03008	0.066623
UBE2L6	11q12.1	-0.11098	0.030109	0.06668
RIPOR1	16q22.1	-0.11097	0.030123	0.066703
AGTRAP	1p36.22	0.110965	0.030129	0.066703

UPK1A	19q13.12	0.110965	0.03013	0.066703
TRAF4	17q11.2	0.110963	0.030132	0.066703
NR4A3	9q31.1	-0.11095	0.030154	0.066742
GCSAML	1q44	-0.11094	0.030168	0.066766
CPNE6	14q11.2	-0.11092	0.030195	0.066819
UBR2	6p21.1	0.110901	0.030225	0.066879
TUBB2B	6p25.2	-0.1109	0.030231	0.066883
NID2	14q22.1	-0.11089	0.030237	0.06689
MICOS10	1p36.13	0.110879	0.030259	0.066931
UBAC2	13q32.3	-0.11087	0.030266	0.066941
RALGPS2	1q25.2	0.11087	0.030272	0.066941
MFAP1	15q15.3	-0.11087	0.030274	0.066941
SNORA2A	12q13.11	0.110855	0.030294	0.066979
MED13	17q23.2	-0.11085	0.030304	0.066995
GUCA1A	6p21.1	-0.11084	0.030314	0.067001
TYRO3	15q15.1	0.110842	0.030314	0.067001
TPRG1	3q28	-0.11084	0.030322	0.067011
TRIM39	6p22.1	0.110824	0.030341	0.067046
RBMS2	12q13.3	-0.11082	0.03035	0.067058
MYPOP	19q13.32	0.110814	0.030356	0.067065
ZNF319	16q21	-0.11081	0.03036	0.067067
RTN3	11q13.1	-0.1108	0.030374	0.067088
ZHX3	20q12	0.110796	0.030383	0.067101
XCR1	3p21.31	-0.11079	0.030396	0.067123
TAC4	17q21.33	0.110775	0.030415	0.067158
AGAP2-AS1	12q14.1	-0.11076	0.030435	0.067196
FOXP2	7q31.1	-0.11075	0.030456	0.067234
DAPK2	15q22.31	-0.11072	0.030491	0.067303
ADGRE1	19p13.3-p13.2	-0.1107	0.030533	0.067389
PRR25	16p13.3	0.110686	0.03055	0.067417
TMEM270	7q11.23	0.110682	0.030554	0.067417
TNFAIP1	17q11.2	-0.11068	0.030556	0.067417
RIT1	1q22	-0.11068	0.030561	0.067421
ABCC4	13q32.1	-0.11066	0.030586	0.067469
LAMC1	1q25.3	-0.11066	0.030592	0.067475
C10ORF88	10q26.13	-0.11065	0.03061	0.067501
PRR15	7p14.3	-0.11065	0.030611	0.067501
PLEKHJ1	19p13.3	0.110633	0.030629	0.067533
NOL3	16q22.1	0.110626	0.030641	0.067552
CPEB2	4p15.32	-0.11062	0.030655	0.067575
HPDL	1p34.1	0.110611	0.030662	0.067584
PRKX	Xp22.33	0.110595	0.030686	0.06763
SOAT2	12q13.13	-0.11057	0.030719	0.067696
RTL1	14q32.2	-0.11053	0.030779	0.067819
AKIRIN1	1p34.3	-0.11053	0.030788	0.067833
PLCB4	20p12.3-p12.2	-0.11053	0.030793	0.067836
ZFP28	19q13.43	-0.11051	0.030821	0.067889
C17ORF58	17q24.2	-0.11049	0.03085	0.067945
VTI1B	14q24.1	-0.11046	0.03089	0.068026
DNAJC12	10q21.3	-0.11043	0.030943	0.068135
RPL30	8q22.2	-0.11042	0.030956	0.068156
TFPT	19q13.42	-0.11037	0.031036	0.068325
ALDH9A1	1q24.1	0.110361	0.031043	0.068334
LRP2	2q31.1	-0.11034	0.031072	0.068389
ECE2	3q27.1	0.110324	0.031101	0.068445
GBP1	1p22.2	-0.11032	0.031104	0.068445
SPSB2	12p13.31	0.110305	0.03113	0.068495
IGF2-AS	11p15.5	-0.1103	0.031134	0.068497

PTK2	8q24.3	-0.1103	0.03114	0.068502
UIMC1	5q35.2	0.110291	0.031152	0.068521
PHF21B	22q13.31	-0.11028	0.031162	0.068535
SRPRA	11q24.2	-0.11027	0.031181	0.068569
ZNF334	20q13.12	-0.11026	0.031192	0.068581
RAPGEFL1	17q21.1	0.110264	0.031193	0.068581
MT1M	16q13	-0.11026	0.0312	0.068585
TREML1	6p21.1	-0.11026	0.031202	0.068585
TOMM7	7p15.3	-0.11025	0.031207	0.068589
STAG3L4	7q11.21	-0.11025	0.031214	0.068594
FAM138B	2q14.1	-0.11025	0.031216	0.068594
SDF2L1	22q11.21	0.110229	0.031247	0.068654
HSPBAP1	3q21.1	-0.1102	0.031289	0.068739
DNAJA3	16p13.3	0.110192	0.031304	0.068765
SLCO2A1	3q22.1-q22.2	-0.11018	0.031321	0.068792
HERC2	15q13.1	0.110179	0.031323	0.068792
VPS28	8q24.3	-0.1101	0.031453	0.069069
KLHL23	2q31.1	-0.11008	0.031472	0.069103
ABCG5	2p21	0.110077	0.031483	0.069119
EFCAB2	1q44	-0.11005	0.031531	0.069217
RNF222	17p13.1	0.110028	0.031559	0.069271
PRO0628	20q12	0.110003	0.031597	0.069348
CIB4	2p23.3	-0.11	0.031603	0.069353
AMD1	6q21	0.109962	0.03166	0.069471
ANKRD44	2q33.1	-0.10996	0.031664	0.069471
CASS4	20q13.31	-0.10995	0.031679	0.06949
FBXO34	14q22.3	-0.10995	0.031679	0.06949
DRP2	Xq22.1	-0.10993	0.031709	0.069547
GCGR	17q25.3	0.109928	0.031714	0.069551
ENY2	8q23.1	-0.10983	0.031864	0.069872
HAPLN3	15q26.1	-0.10983	0.031868	0.069874
SLC39A13	11p11.2	-0.10982	0.031884	0.069899
ZCCHC2	18q21.33	0.109811	0.031897	0.069921
GJD3	17q21.2	-0.10981	0.031905	0.069932
ZIC4	3q24	-0.1098	0.031915	0.069938
LGR4	11p14.1	0.109798	0.031917	0.069938
FUT3	19p13.3	0.109797	0.031919	0.069938
SNORA71B	20q11.23	0.109777	0.031951	0.070002
IL16	15q25.1	-0.10977	0.031961	0.070015
ZPBP2	17q21.1	0.109763	0.031973	0.070034
MT2A	16q13	-0.10974	0.032008	0.070103
LINC00426	13q12.3	-0.10974	0.032015	0.070111
PITPNM1	11q13.2	0.109734	0.032019	0.070111
EPM2AIP1	3p22.2	-0.10973	0.032031	0.070131
VAMP3	1p36.23	-0.10972	0.032034	0.070131
SCNN1B	16p12.2	-0.10972	0.032041	0.070132
CD70	19p13.3	-0.10972	0.032042	0.070132
ZNF593	1p36.11	0.109706	0.032063	0.070169
CFAP298	21q22.11	0.109693	0.032083	0.070205
FAM104B	Xp11.21	-0.10967	0.032112	0.070261
ADAMTS2	5q35.3	-0.10967	0.032123	0.070278
MPP1	Xq28	-0.10965	0.032145	0.070319
LINC00705	10p15.1	0.109646	0.032157	0.070337
RGS6	14q24.2	-0.10964	0.032164	0.070345
PRR4	12p13.2	0.109631	0.03218	0.070373
CFAP43	10q25.1	0.109619	0.0322	0.070402
GRAP2	22q13.1	-0.10962	0.032205	0.070402
ERF	19q13.2	0.109615	0.032205	0.070402

PIBF1	13q21.33-q22.1	-0.10961	0.032208	0.070402
CUEDC2	10q24.32	-0.10961	0.032213	0.070407
ZNF512B	20q13.33	-0.10959	0.032253	0.070486
C6	5p13.1	-0.10955	0.032313	0.070609
RAB12	18p11.22	-0.10954	0.032328	0.070635
ZER1	9q34.11	-0.10952	0.032361	0.070696
ZNF358	19p13.2	-0.10952	0.032363	0.070696
OR2J3	6p22.1	0.1095	0.032389	0.070744
CHMP2A	19q13.43	-0.10946	0.032444	0.070834
ULK4	3p22.1	0.109464	0.032445	0.070834
BCL2L15	1p13.2	0.109464	0.032446	0.070834
ERICH3	1p31.1	-0.10946	0.032446	0.070834
GLYCTK	3p21.2	0.109462	0.03245	0.070834
LAMTOR4	7q22.1	-0.10946	0.032451	0.070834
ZNF71	19q13.43	-0.10944	0.032491	0.070904
TBL2	7q11.23	-0.10944	0.032491	0.070904
CAMK2B	7p13	-0.10941	0.032532	0.070988
HSPA1B	6p21.33	0.109391	0.032562	0.071046
RBFOX3	17q25.3	0.109378	0.032583	0.071083
RNF186	1p36.13	-0.10937	0.032598	0.071108
PLAAT4	11q12.3	-0.10937	0.032603	0.071111
ANXA8	10q11.22	-0.10935	0.032623	0.071146
DGAT2L6	Xq13.1	0.109351	0.032626	0.071146
CCL1	17q12	-0.10934	0.032648	0.071187
RTP4	3q27.3	-0.10932	0.032681	0.071249
WFDC3	20q13.12	-0.1093	0.032716	0.071318
FRK	6q22.1	0.109287	0.032729	0.071328
FCRL2	1q23.1	-0.10929	0.03273	0.071328
TRIM31	6p22.1	0.109286	0.032731	0.071328
ERI1	8p23.1	0.109276	0.032746	0.071352
TCF7L2	10q25.2-q25.3	0.109269	0.032757	0.071369
CNOT9	2q35	0.109265	0.032764	0.071378
LOC100130872	4p16.3	-0.10925	0.032786	0.071416
LAS1L	Xq12	0.109247	0.032793	0.071425
ODF3L1	15q24.2	-0.10924	0.03281	0.071453
NRDC	1p32.3	0.109234	0.032814	0.071453
EBF2	8p21.2	-0.1092	0.032865	0.071557
DTNBP1	6p22.3	0.109198	0.032871	0.071564
ZNF675	19p12	-0.10919	0.032889	0.071594
GREB1L	18q11.1-q11.2	-0.10918	0.032897	0.071603
HPYR1	8q24.22	0.109173	0.032912	0.071626
PLLP	16q13	0.109172	0.032914	0.071626
SYT14	1q32.2	-0.10916	0.032925	0.071641
NLGN3	Xq13.1	-0.10916	0.032928	0.071641
GPD2	2q24.1	0.109135	0.032974	0.071732
ZNF566	19q13.12	-0.10913	0.032978	0.071733
DGAT2	11q13.5	-0.10912	0.032992	0.071755
ZNF398	7q36.1	0.109119	0.033	0.071765
USP7	16p13.2	0.109107	0.033019	0.071799
TAF3	1p13.2	-0.1091	0.033022	0.071799
ZNF175	19q13.41	-0.10909	0.033044	0.071838
GNB1	1p36.33	-0.10907	0.033081	0.071911
SGCZ	8p22	-0.10904	0.033119	0.071986
FHL2	2q12.2	-0.10904	0.033128	0.071997
SPTSSA	14q13.1	-0.10903	0.033135	0.071999
LINC01512	6p21.1	-0.10903	0.033136	0.071999
APLN	Xq26.1	0.108972	0.033237	0.072211
TLE1	9q21.32	0.10893	0.033305	0.072349

VSTM5	11q21	0.108929	0.033308	0.072349
NR1H2	19q13.33	-0.10891	0.033345	0.072423
SRARP	1p36.13	-0.1089	0.033361	0.072448
SERTAD4	1q32.2	-0.10888	0.033393	0.072508
ARHGAP1	11p11.2	-0.10887	0.033396	0.072508
CHMP1A	16q24.3	0.108871	0.033403	0.072515
IMPA2	18p11.21	0.108868	0.033407	0.072517
TYW3	1p31.1	-0.10886	0.033419	0.072535
ZBTB1	14q23.3	-0.10878	0.033545	0.072801
WIPI2	7p22.1	-0.10878	0.033559	0.072823
JCHAIN	4q13.3	-0.10877	0.033565	0.072828
HRC	19q13.33	-0.10877	0.033569	0.07283
ACSL5	10q25.2	-0.10877	0.033575	0.072833
KCNQ3	8q24.22	-0.10876	0.033585	0.072841
DCAF4L1	4p13	0.108759	0.033585	0.072841
RSPH10B2	7p22.1	0.108705	0.033674	0.073025
GAS5	1q25.1	0.108671	0.033729	0.073138
FSHR	2p16.3	-0.10865	0.033759	0.073194
CCL26	7q11.23	-0.10864	0.033782	0.073236
FLJ37201	10q23.31	0.108636	0.033788	0.073241
CDC42BPA	1q42.13	0.10863	0.033798	0.073253
SMYD4	17p13.3	0.108628	0.033801	0.073253
WNT16	7q31.31	-0.10862	0.033816	0.073278
TLR6	4p14	-0.10859	0.033865	0.073376
HULC	6p24.3	-0.10858	0.033883	0.073407
KIAA0319	6p22.3	0.108573	0.033891	0.073417
PTK6	20q13.33	0.108561	0.033911	0.073451
KDF1	1p36.11	0.10854	0.033946	0.073519
MUC6	11p15.5	0.108502	0.034009	0.073647
SAP130	2q14.3	0.108482	0.034042	0.073711
NSMCE1	16p12.1	-0.10847	0.034054	0.073728
MIA3	1q41	0.108473	0.034057	0.073728
NUTM2D	10q23.2	-0.10845	0.034087	0.073785
LPAR6	13q14.2	-0.10844	0.034107	0.07382
CALCOCO2	17q21.32	-0.10844	0.034116	0.073832
TMEM186	16p13.2	0.108393	0.03419	0.073983
RABAC1	19q13.2	-0.10839	0.034202	0.074001
MMP19	12q13.2	-0.10838	0.034218	0.074028
B3GNT9	16q22.1	-0.10837	0.034221	0.074028
OR1G1	17p13.3	0.108346	0.034268	0.074121
HSPA4L	4q28.1	0.108305	0.034336	0.074261
ZNF565	19q13.12	0.108302	0.034343	0.074266
DISP1	1q41	-0.10827	0.034396	0.074373
KIAA0753	17p13.1	0.10825	0.034429	0.074436
ORAI2	7q22.1	-0.10822	0.034487	0.074554
RHOA	3p21.31	-0.1082	0.034517	0.07461
CEACAM6	19q13.2	-0.1082	0.034521	0.074612
GALNT9	12q24.33	0.108191	0.034527	0.074617
RIMKLB	12p13.31	-0.10817	0.034556	0.074667
CIPC	14q24.3	-0.10817	0.034558	0.074667
ZRANB1	10q26.13	-0.10817	0.034562	0.074667
DCHS1	11p15.4	-0.10815	0.034605	0.074753
NSUN7	4p14	0.108126	0.034638	0.074815
RNF208	9q34.3	0.108123	0.034642	0.074818
ST6GALNAC6	9q34.11	-0.1081	0.034684	0.074899
STARD3	17q12	-0.10809	0.034691	0.074907
THOC6	16p13.3	0.108089	0.0347	0.074918
PCBD2	5q31.1	0.10808	0.034715	0.074942

MGAT4B	5q35.3	0.108068	0.034735	0.074969
NEDD4L	18q21.31	-0.10807	0.034737	0.074969
CLCA2	1p22.3	-0.10807	0.034739	0.074969
SOX21	13q32.1	-0.10805	0.034763	0.075012
KDR	4q12	-0.10805	0.034771	0.075022
RPL10	Xq28	-0.10802	0.034811	0.0751
GSTA1	6p12.2	-0.10801	0.034837	0.075149
NPSR1	7p14.3	0.108004	0.034843	0.075154
SLC19A2	1q24.2	0.107985	0.034876	0.075217
HES7	17p13.1	0.107974	0.034894	0.075248
PGBD3	10q11.23	-0.10797	0.034908	0.075269
RIOK2	5q15	-0.10796	0.034923	0.075295
TNFRSF17	16p13.13	-0.10795	0.034929	0.075298
STEAP1B	7p15.3	-0.10795	0.034941	0.075317
RAB28	4p15.33	-0.10794	0.034958	0.075345
NCOA1	2p23.3	-0.10792	0.034979	0.075381
TFAP2C	20q13.31	-0.10789	0.035031	0.075477
CCDC39	3q26.33	0.107892	0.035032	0.075477
EOMES	3p24.1	-0.10789	0.035034	0.075477
NRN1L	16q22.1	-0.10787	0.035062	0.075529
SYNJ2BP	14q24.2	-0.10787	0.035071	0.075539
ZNF137P	19q13.41	0.107868	0.035074	0.075539
FAT1	4q35.2	0.107854	0.035097	0.07558
MBTPS2	Xp22.12	-0.10785	0.035101	0.07558
TPM3P9	19q13.42	0.107836	0.035128	0.075631
ADRB1	10q25.3	-0.10781	0.035166	0.075703
NTRK1	1q23.1	-0.10781	0.035175	0.075716
PPIB	15q22.31	-0.1078	0.035185	0.075728
TARSL2	15q26.3	-0.1078	0.035196	0.075743
CXCL10	4q21.1	-0.10775	0.035276	0.075907
PEX11G	19p13.2	-0.10772	0.03532	0.075994
TP53AIP1	11q24.3	0.107703	0.035355	0.076061
TAMM41	3p25.2	0.10768	0.035396	0.076133
LINC01011	6p25.2	0.10768	0.035396	0.076133
ZC4H2	Xq11.2	-0.10766	0.035422	0.076182
RLN1	9p24.1	-0.10765	0.035445	0.076223
NDUFAF1	15q15.1	-0.10764	0.035458	0.076242
UNC45A	15q26.1	0.107606	0.035522	0.076366
TPGS2	18q12.2	0.107605	0.035523	0.076366
CASQ1	1q23.2	-0.1076	0.035536	0.076385
IGIP	5q31.3	-0.10759	0.035545	0.076396
CCP110	16p12.3	0.107576	0.035574	0.076448
KLHL31	6p12.1	0.107574	0.035577	0.076448
BARX1	9q22.32	-0.10757	0.035586	0.07646
TIMM8A	Xq22.1	0.107562	0.035597	0.076463
	5-Mar 10q23.32-q23.33	-0.10756	0.035598	0.076463
IFT57	3q13.12-q13.13	-0.10756	0.035599	0.076463
ZNF775	7q36.1	-0.10755	0.035611	0.07648
CDKL1	14q21.3	0.107546	0.035626	0.076505
DPY19L2P4	7q21.13	-0.10753	0.035651	0.076549
HLA-DOB	6p21.32	-0.10752	0.035664	0.076568
NRIP3	11p15.4	-0.10752	0.035667	0.076568
MLST8	16p13.3	0.107517	0.035676	0.076579
MISP3	19p13.12	0.107499	0.035707	0.076637
LYSMD1	1q21.3	0.107483	0.035735	0.076689
IMPAD1	8q12.1	-0.10746	0.035772	0.076755
ASAP2	2p25.1 2p24	0.10746	0.035773	0.076755
KCNG1	20q13.13	-0.10744	0.035801	0.076805



SLC39A4	8q24.3	-0.10744	0.035813	0.076823
MFSD12	19p13.3	0.107408	0.035863	0.076924
TSPYL1	6q22.1	-0.10739	0.035893	0.076979
SLC44A1	9q31.1-q31.2	-0.10739	0.035902	0.07699
ZNF707	8q24.3	0.107381	0.035911	0.076994
ZNF580	19q13.42	0.107381	0.035912	0.076994
PIAS4	19p13.3	0.107373	0.035924	0.077013
IQCF1	3p21.2	0.107353	0.035959	0.077079
ANXA1	9q21.13	-0.10733	0.035992	0.077141
ZNF219	14q11.2	0.10733	0.035999	0.077141
PLPPR2	19p13.2	-0.10733	0.035999	0.077141
RAB10	2p23.3	-0.10732	0.036019	0.077168
PCBP3	21q22.3	-0.10732	0.036021	0.077168
TTY6B	Yq11.223	0.107316	0.036023	0.077168
MEGF9	9q33.2	-0.10731	0.036035	0.077184
GSTT1	22q11.23	-0.10731	0.036039	0.077185
TMIGD2	19p13.3	-0.10729	0.036066	0.077227
TMEM14EP	3q25.2	0.107292	0.036066	0.077227
PCAT4	4q21.21	-0.10725	0.03614	0.077376
RIN3	14q32.12	-0.10724	0.036157	0.077403
SIGLEC14	19q13.41	-0.10724	0.036163	0.077408
PAK1IP1	6p24.2	0.107234	0.036166	0.077408
FAM92B	16q24.1	-0.10723	0.036182	0.077434
CSE1L	20q13.13	0.107202	0.036222	0.077511
SYT12	11q13.2	-0.10718	0.036255	0.077573
WRAP53	17p13.1	0.107161	0.036295	0.077649
MYBPC3	11p11.2	0.107157	0.036301	0.077649
NUDT17	1q21.1	0.107157	0.036302	0.077649
NEBL	10p12.31	-0.10715	0.036311	0.077659
SPIB	19q13.33	-0.10709	0.036418	0.07788
GALNT1	18q12.2	-0.10706	0.036477	0.077997
METTL21C	13q33.1	-0.10704	0.036499	0.078029
ZNF19	16q22.2	-0.10704	0.0365	0.078029
ZNF630	Xp11.23	-0.10704	0.036513	0.078041
KLHL6	3q27.1	-0.10703	0.036517	0.078041
CHD6	20q12	-0.10703	0.036517	0.078041
FAM118B	11q24.2	-0.10702	0.036542	0.078086
FAAH	1p33	0.107012	0.036557	0.078111
CEP19	3q29	-0.10701	0.036568	0.078125
HSPA2	14q23.3	-0.10698	0.03661	0.078207
TRIAP1	12q24.31	-0.10695	0.036672	0.078323
CFAP221	2q14.2	-0.10695	0.036674	0.078323
GALNT5	2q24.1	0.106944	0.036676	0.078323
SH3TC1	4p16.1	-0.1069	0.036754	0.078481
MYO9B	19p13.11	0.106891	0.03677	0.078508
CDH8	16q21	-0.10689	0.036776	0.078511
SMIM3	5q33.1	-0.10688	0.036784	0.078519
CA10	17q21.33-q22	-0.10687	0.036814	0.078576
HS6ST3	13q32.1	-0.10684	0.036855	0.078656
OR4N2	14q11.2	-0.10684	0.03686	0.078657
FABP5	8q21.13	0.106832	0.036875	0.078675
OTOAP1	16p12.2	-0.10683	0.036876	0.078675
RHCG	15q26.1	-0.1068	0.036926	0.078772
FNDC8	17q12	0.106783	0.036962	0.078841
NAMPT	7q22.3	-0.10677	0.036985	0.078874
DBT	1p21.2	-0.10677	0.036986	0.078874
CEACAM19	19q13.31	0.106768	0.036989	0.078874
CARD19	9q22.31	0.106764	0.036996	0.07888

ZNF322P1	9q22.33	-0.10676	0.037004	0.078888
TFAMP1	7p22.3	0.106757	0.037009	0.078891
COQ9	16q21	0.106754	0.037014	0.078892
ASS1	9q34.11	0.10675	0.037021	0.078899
ACVR1B	12q13.13	-0.10674	0.037031	0.078912
RHOD	11q13.2	-0.10674	0.037036	0.078915
C1ORF100	1q44	0.106699	0.037112	0.079068
BARHL1	9q34.13	0.106693	0.037122	0.079081
SBDS	7q11.21	-0.10669	0.037135	0.079092
TH	11p15.5	-0.10669	0.037135	0.079092
SLC34A1	5q35.3	0.106672	0.037159	0.079135
CLEC4C	12p13.31	-0.10667	0.037166	0.079142
FBXW11	5q35.1	-0.10666	0.037173	0.079147
FAM167B	1p35.2	-0.10666	0.037179	0.079151
STRBP	9q33.3	0.106658	0.037184	0.079155
HYDIN	16q22.2	-0.10663	0.037226	0.079236
TEX30	13q33.1	0.106604	0.037282	0.079346
CEACAM20	19q13.31	0.1066	0.037288	0.079351
FBXO44	1p36.22	-0.1066	0.037296	0.079359
PRPH	12q13.12	-0.10658	0.037324	0.079411
CASC1	12p12.1	-0.10657	0.037336	0.079428
VMO1	17p13.2	-0.10656	0.037354	0.079456
SERP1	3q25.1	-0.10653	0.037407	0.07956
STT3B	3p23	-0.10651	0.037454	0.079652
C6ORF226	6p21.1	-0.10648	0.037504	0.07975
CENPV	17p11.2	0.106472	0.037518	0.079772
RND3	2q23.3	-0.10647	0.037525	0.079778
PSEN1	14q24.2	-0.10646	0.03754	0.079802
PPP2R5A	1q32.3	0.106453	0.037553	0.079821
PART1	5q12.1	-0.10642	0.037614	0.079941
ZNF710	15q26.1	0.106409	0.037632	0.079972
ZNF502	3p21.31	-0.10641	0.037639	0.079979
SEH1L	18p11.21	0.106402	0.037645	0.079982
MAP4K2	11q13.1	-0.1064	0.03765	0.079984
GALM	2p22.1	0.106397	0.037654	0.079985
ZNF248	10p11.21	0.10638	0.037684	0.080041
SYCE3	22q13.33	-0.10638	0.037691	0.080045
SLC30A1	1q32.3	-0.10637	0.037707	0.080073
RASSF10	11p15.3	-0.10635	0.037743	0.08014
SEC22A	3q21.1	-0.10631	0.037814	0.080282
CRIP3	6p21.1	0.106293	0.037843	0.080335
AP3B2	15q25.2	-0.10627	0.037876	0.080388
GARNL3	9q33.3	0.106275	0.037876	0.080388
CDK2AP2	11q13.2	0.106271	0.037883	0.080395
MEX3C	18q21.2	-0.10623	0.037952	0.080532
LINC00638	14q32.33	-0.10622	0.037983	0.080589
CDRT4	17p12	-0.10621	0.03799	0.080597
ZC3H12D	6q25.1	0.106191	0.038029	0.08067
STK10	5q35.1	-0.10617	0.038065	0.080731
TEX19	17q25.3	0.106169	0.038069	0.080731
TIGD3	11q13.1	0.106168	0.03807	0.080731
PCDHA13	5q31.3	-0.10614	0.038122	0.080833
DBNDD1	16q24.3	0.106134	0.038132	0.080845
RPL19P12	7q22.1	-0.10613	0.038138	0.080849
SLC2A11	22q11.23	-0.10613	0.038149	0.080864
TECPR1	7q21.3	0.106068	0.038253	0.081075
SIDT2	11q23.3	-0.10606	0.038259	0.081075
HSP90AB1	6p21.1	0.106064	0.03826	0.081075

CNTD1	17q21.2-q21.31	0.10604	0.038304	0.081152
DUSP8	11p15.5	0.10604	0.038305	0.081152
TPSD1	16p13.3	-0.10602	0.038336	0.08121
R3HCC1	8p21.3	-0.10596	0.038447	0.081435
DDA1	19p13.11	0.105958	0.038456	0.08144
M1AP	2p13.1	-0.10596	0.038457	0.08144
GPR150	5q15	0.105915	0.038534	0.081595
SULT1C3	2q12.3	0.105904	0.038554	0.081629
TMCC2	1q32.1	-0.10588	0.038594	0.081705
CELP	9q34.13	-0.10587	0.038611	0.081731
CALCA	11p15.2	-0.10585	0.03865	0.081805
CYP4F35P	18p11.21	0.105847	0.03866	0.081806
ELF3	1q32.1	0.105846	0.038661	0.081806
DCAF12L1	Xq25	-0.10585	0.038662	0.081806
NEK11	3q22.1	-0.10584	0.03868	0.081835
LPL	8p21.3	-0.10582	0.038701	0.08187
NPEPL1	20q13.32	0.105813	0.038722	0.081902
SNORA9	7p13	0.105811	0.038727	0.081902
AMER2	13q12.13	-0.10581	0.038728	0.081902
RPS3	11q13.4	-0.1058	0.038749	0.081937
MRPL10	17q21.32	-0.10579	0.038772	0.081969
PRPF40B	12q13.12	0.105786	0.038772	0.081969
LINC00938	12q12	-0.10577	0.038801	0.082021
FOXD4L3	9q21.11	0.105755	0.03883	0.082073
DNAJC6	1p31.3	-0.10575	0.03884	0.082086
C8ORF82	8q24.3	-0.10574	0.03886	0.082118
SLC52A1	17p13.2	-0.10574	0.038866	0.082118
HOXC8	12q13.13	-0.10573	0.038867	0.082118
CCDC38	12q23.1	0.105724	0.038887	0.082151
CWC22	2q31.3	-0.10571	0.038908	0.082187
LENG9	19q13.42	0.105683	0.038964	0.082296
SLC26A11	17q25.3	-0.10568	0.038968	0.082296
PIGU	20q11.22	-0.10567	0.038997	0.082348
SYN2	3p25.2	-0.10561	0.039105	0.082569
RNF141	11p15.4 11p15	-0.1056	0.03911	0.082569
KIAA0513	16q24.1	-0.1056	0.039115	0.082572
LRIG2	1p13.2	0.105593	0.039132	0.082599
TAF11	6p21.31	0.105578	0.03916	0.08265
TCIM	8p11.21	-0.10557	0.039171	0.082654
VASH1	14q24.3	-0.10557	0.039174	0.082654
SNAI3-AS1	16q24.2	0.10557	0.039174	0.082654
C18ORF54	18q21.2	0.105565	0.039183	0.082663
MAN2C1	15q24.2	0.105559	0.039194	0.082678
ZNF703	8p11.23	0.105545	0.039222	0.082727
FCHO1	19p13.11	0.105537	0.039235	0.082747
RRS1	8q13.1	0.105499	0.039307	0.08289
SDHA	5p15.33	0.105495	0.039314	0.082896
CCDC36	3p21.31	-0.10545	0.039392	0.083052
TGFBR3	1p22.1	-0.10544	0.039419	0.083094
SART1	11q13.1	0.105438	0.039421	0.083094
TEAD1	11p15.3	-0.10544	0.039427	0.083098
PSMD3	17q21.1	0.105416	0.039462	0.083165
SERPINA1	14q32.13	-0.10538	0.039528	0.083289
CDC42EP5	19q13.42	0.105381	0.03953	0.083289
MAF1	8q24.3	-0.10537	0.039546	0.083314
GNL3	3p21.1	0.105355	0.039577	0.083371
ARHGEF10	8p23.3	0.105343	0.039601	0.083412
RILPL2	12q24.31	-0.10533	0.039618	0.083434

C2ORF70	2p23.3	0.105333	0.039619	0.083434
COL11A2	6p21.32	0.10532	0.039643	0.083476
SLC37A4	11q23.3	0.105305	0.039673	0.083528
MEPCE	7q22.1	0.105303	0.039676	0.083528
CHCHD10	22q11.23	0.105295	0.039692	0.083551
FAM155B	Xq13.1	-0.10529	0.039701	0.08356
PTGER4P2-CDK2AP2P2	9q13	-0.10529	0.039704	0.08356
CEP170	1q43	-0.10527	0.039747	0.083641
SEC63	6q21	-0.10525	0.039767	0.083675
NPPA	1p36.22	0.105233	0.039809	0.083755
TLL11	9q33.2	0.105215	0.039843	0.083817
MRM1	17q12	0.105206	0.03986	0.083845
HMGA2	12q14.3	0.105198	0.039875	0.083866
PRR5	22q13.31	0.105187	0.039896	0.083901
RPL34	4q25	-0.10518	0.039904	0.083909
MAGEA10	Xq28	-0.10518	0.039909	0.083911
ZNF616	19q13.41	-0.10518	0.039916	0.083918
FGFBP2	4p15.32	-0.10516	0.039949	0.083978
TEX26	13q12.3	-0.10515	0.039971	0.084016
POMT1	9q34.13	0.105137	0.03999	0.084047
TRPC4	13q13.3	-0.10513	0.040011	0.084081
EFHC2	Xp11.3	-0.10511	0.040042	0.084139
FLG	1q21.3	-0.1051	0.040069	0.084186
DPH3P1	20q13.33	0.105079	0.040101	0.084244
TNFRSF13C	22q13.2	0.105076	0.040107	0.084249
ADGRL3	4q13.1	-0.10506	0.040136	0.084301
PRR18	6q27	0.105045	0.040167	0.084356
PHC1	12p13.31	-0.10501	0.040229	0.084478
ARHGAP4	Xq28	0.104998	0.040256	0.084526
FGR	1p35.3	-0.10492	0.04041	0.08483
OVOL2	20p11.23	0.104917	0.040411	0.08483
SERPINA9	14q32.13	-0.10492	0.040414	0.08483
ZNF549	19q13.43	-0.10491	0.040426	0.084846
TM7SF3	12p11.23	-0.10491	0.040434	0.084853
WDR86	7q36.1	-0.1049	0.040437	0.084853
MYL12B	18p11.31	-0.10489	0.040462	0.084897
DAP	5p15.2	-0.10489	0.040469	0.084903
ETNPPL	4q25	-0.10487	0.040504	0.084967
SH3GL2	9p22.2	-0.10486	0.040522	0.084995
BCL6	3q27.3	-0.10486	0.04053	0.085003
PCNX4	14q23.1	-0.10485	0.040546	0.085027
SLC26A8	6p21.31	0.104832	0.040574	0.085077
FAN1	15q13.3	0.104827	0.040584	0.08509
ATP5F1E	20q13.32	-0.10481	0.040622	0.08516
CASC2	10q26.11	0.104804	0.040628	0.085163
OSGIN2	8q21.3	-0.1048	0.040633	0.085164
VRTN	14q24.3	0.1048	0.040636	0.085164
OR9Q1	11q12.1	0.104796	0.040644	0.08517
CYP7A1	8q12.1	-0.10478	0.040678	0.085233
MRGBP	20q13.33	0.104769	0.040696	0.085262
MTTP	4q23	-0.10475	0.040728	0.085316
GCM1	6p12.1	-0.10475	0.04073	0.085316
PER1	17p13.1	-0.10473	0.040767	0.085383
TMED4	7p13	-0.10471	0.040819	0.085484
ZACN	17q25.1	0.10468	0.040867	0.085576
TAF8	6p21.1	0.104644	0.040938	0.085715
TPRG1L	1p36.32	-0.10464	0.04095	0.085732
OSBPL1A	18q11.2	-0.10463	0.04096	0.085742

CEBPA-DT	19q13.11	0.104627	0.04097	0.085756
HMGCLL1	6p12.1	-0.10462	0.040977	0.08576
PON2	7q21.3	-0.10461	0.041002	0.085805
ACAA1	3p22.2	0.104608	0.041007	0.085806
ZNF740	12q13.13	0.104582	0.041058	0.085904
AVPR1A	12q14.2	-0.10456	0.041105	0.085993
C3ORF52	3q13.2	0.104553	0.041114	0.086002
SPATA9	5q15	-0.10455	0.041124	0.086012
DHDH	19q13.33	0.104547	0.041127	0.086012
AMIGO1	1p13.3	-0.10454	0.041146	0.086043
RAB3GAP2	1q41	0.104494	0.041229	0.086208
GJB3	1p34.3	0.104451	0.041314	0.086377
INTS14	15q22.31	-0.10444	0.041336	0.086412
SLC5A12	11p14.2	-0.10443	0.041364	0.086462
MCCC1	3q27.1	-0.10442	0.041371	0.086467
COLGALT2	1q25.3	-0.10442	0.041384	0.086486
LAMA1	18p11.31	-0.10437	0.041463	0.086642
FSD1L	9q31.2	-0.10437	0.041476	0.08666
PRAP1	10q26.3	-0.10433	0.041559	0.086826
IPMK	10q21.1	0.104323	0.041564	0.086826
AMY2A	1p21.1	0.104317	0.041576	0.086843
STAP1	4q13.2	-0.1043	0.04161	0.086904
CCN6	6q21	-0.10427	0.041671	0.087023
PCDHB13	5q31.3	-0.10426	0.041687	0.087047
UHMK1	1q23.3	0.104253	0.041702	0.087069
CRYZ	1p31.1	-0.10424	0.041728	0.087115
TBC1D8	2q11.2	0.104235	0.041738	0.087126
HTR2C	Xq23	-0.10423	0.041747	0.087135
TENM3-AS1	4q34.3	-0.10423	0.041752	0.087137
ARHGAP5-AS1	14q12	-0.10422	0.041776	0.087177
KRTAP10-2	21q22.3	0.104186	0.041834	0.08729
KCNA2	1p13.3	-0.10415	0.041899	0.087416
KIRREL3	11q24.2	-0.10415	0.041903	0.087416
SEC14L5	16p13.3	-0.10414	0.041933	0.087469
AZIN1	8q22.3	-0.10411	0.041977	0.087552
SNHG28	1q23.2	0.104063	0.042078	0.087749
COL9A2	1p34.2	0.104062	0.04208	0.087749
WBP4	13q14.11	-0.10406	0.042089	0.087759
FRG1BP	20q11.1	-0.10404	0.042125	0.087823
PDRG1	20q11.21	-0.10403	0.042138	0.087841
ACTL6A	3q26.33	0.104004	0.042195	0.087943
SLC12A9	7q22.1	0.104004	0.042195	0.087943
TEX11	Xq13.1	-0.10398	0.042236	0.088019
CACNB1	17q12	0.103978	0.042246	0.088028
TBC1D10C	11q13.2	-0.10398	0.042252	0.088028
SLAMF6	1q23.2-q23.3	-0.10397	0.042254	0.088028
NDST1	5q33.1	-0.10397	0.042267	0.088047
CLEC18A	16q22.1	0.103936	0.04233	0.088165
NQO1	16q22.1	0.103935	0.042333	0.088165
TMEM181	6q25.3	0.103927	0.042348	0.088188
BMP8A	1p34.3	-0.10392	0.042362	0.088208
ZNF177	19p13.2	-0.10391	0.042392	0.088262
E2F5	8q21.2	-0.10388	0.042443	0.088352
HRH2	5q35.2	-0.10388	0.042445	0.088352
ZZEF1	17p13.2	0.10387	0.042462	0.08838
CNDP1	18q22.3	0.103865	0.042472	0.08839
LINC00592	12q13.13	-0.10385	0.042505	0.088447
STAB2	12q23.3	-0.10385	0.04251	0.088447

FKBP1AP1	19q13.43	-0.10385	0.042512	0.088447
DVL2	17p13.1	-0.10382	0.042568	0.088554
TMEM155	4q27	-0.10379	0.042619	0.088652
ATF1	12q13.12	-0.10378	0.042643	0.088692
PSMD11	17q11.2	0.103747	0.042709	0.088819
LSM12	17q21.31	0.103722	0.042759	0.088914
TIFAB	5q31.1	-0.10372	0.042772	0.088933
BAP1	3p21.1	0.103698	0.042808	0.088993
VAPA	18p11.22	-0.1037	0.04281	0.088993
CAMK2N1	1p36.12	-0.10369	0.042817	0.088994
SDHC	1q23.3	0.103692	0.042821	0.088994
CPLANE2	1p36.13	0.10369	0.042824	0.088994
TBX19	1q24.2	0.10368	0.042843	0.089025
MYO1B	2q32.3	-0.10368	0.042851	0.089031
CPNE1	20q11.22	-0.10367	0.042866	0.089054
ATP5F1B	12q13.3	0.10366	0.042885	0.089084
ARPP19	15q21.2	-0.10366	0.042892	0.089087
COL7A1	3p21.31	0.103655	0.042895	0.089087
ASIC1	12q13.12	0.103642	0.042921	0.089125
LINC00643	14q23.2	-0.10364	0.042923	0.089125
SWAP70	11p15.4	-0.10362	0.042964	0.089202
IQCF5	3p21.2	0.103595	0.043016	0.089301
OVGP1	1p13.2	-0.10359	0.043028	0.089315
S100A8	1q21.3	-0.10359	0.043032	0.089316
EDN3	20q13.32	-0.10358	0.043047	0.089336
RGP1	9p13.3	0.103573	0.04306	0.089355
SLC22A18	11p15.4	0.10357	0.043066	0.089357
PIK3R5	17p13.1	-0.10357	0.043076	0.08937
SFTPB	2p11.2	-0.10355	0.043101	0.089412
BEAN1	16q21	-0.10354	0.043121	0.089439
MESD	15q25.1	-0.10354	0.043123	0.089439
TTC19	17p12	-0.10353	0.043149	0.089483
RASSF5	1q32.1	-0.10353	0.043154	0.089483
C12ORF4	12p13.32	-0.10352	0.043162	0.089483
NDUFS8	11q13.2	0.103523	0.043162	0.089483
SRMS	20q13.33	0.103509	0.04319	0.089532
OTP	5q14.1	0.103498	0.043213	0.08957
SNORA11	Xp11.21	0.103474	0.043261	0.08966
RBM18	9q33.2	-0.10346	0.04328	0.089687
STK3	8q22.2	-0.10346	0.043283	0.089687
DDX24	14q32.12	-0.10345	0.043313	0.08974
PDCD5	19q13.11	0.103443	0.043324	0.089754
IGSF9B	11q25	0.103437	0.043336	0.089769
HLA-E	6p22.1	-0.10337	0.043473	0.090043
HTR1B	6q14.1	-0.10337	0.043477	0.090043
EFCAB6	22q13.2-q13.31	-0.10336	0.0435	0.090081
HOXC4	12q13.13	-0.10334	0.043529	0.090133
CIDEA	18p11.21 18	-0.1033	0.043617	0.090296
SELPLG	12q24.11	-0.1033	0.043617	0.090296
SLC25A14	Xq26.1	0.103287	0.043641	0.090331
ZBTB40	1p36.12	0.103287	0.043643	0.090331
NT5C2	10q24.32-q24.33	0.10328	0.043657	0.090351
GNL3L	Xp11.22	0.103266	0.043685	0.090398
DEFB1	8p23.1	-0.10325	0.043725	0.090472
RASSF3	12q14.2	0.103215	0.04379	0.090588
PIANP	12p13.31	-0.10321	0.04379	0.090588
ARHGEF10L	1p36.13	0.103211	0.043799	0.090596
FXN	9q21.11	0.103197	0.043827	0.090646

NUGGC	8p21.1	-0.10319	0.04384	0.090662
RBM39	20q11.22	0.103176	0.043871	0.090718
PROKR1	2p13.3	-0.10317	0.043885	0.090739
EXOC1	4q12	-0.10316	0.043894	0.090743
PKD1L1	7p12.3	-0.10316	0.043897	0.090743
MYB	6q23.3	0.103123	0.043979	0.090904
IER5L	9q34.11	0.103121	0.043984	0.090904
RNF151	16p13.3	0.103108	0.044009	0.090948
CCL23	17q12	-0.1031	0.044027	0.090975
PHACTR2-AS1	6q24.2	0.103078	0.044072	0.091058
IFITM2	11p15.5	-0.10307	0.044095	0.091091
AADACP1	3q25.1	-0.10306	0.0441	0.091091
TRAPPC2B	19q13.43	-0.10306	0.044101	0.091091
BRIX1	5p13.2	0.103061	0.044107	0.091093
P3H2	3q28	-0.10306	0.044112	0.091093
AMY2B	1p21.1	0.103052	0.044126	0.091114
ADAM18	8p11.22	-0.10305	0.044132	0.091116
ELOVL3	10q24.32	-0.10304	0.044148	0.091141
RPS26	12q13.2	0.102969	0.044298	0.091441
AMZ1	7p22.3	-0.10297	0.044304	0.091444
MORC1	3q13.13	-0.10295	0.044332	0.091491
CBLN1	16q12.1	-0.10292	0.044396	0.091614
SIGLEC11	19q13.33	-0.10286	0.044532	0.091885
CRYL1	13q12.11	-0.10282	0.044609	0.092035
ZMPSTE24	1p34.2	-0.10281	0.044634	0.092077
LRRC26	9q34.3	0.102798	0.044654	0.092109
TUBB7P	4q35.2	0.102792	0.044666	0.092125
IP6K3	6p21.31	-0.10278	0.044695	0.092175
PRDM1	6q21	-0.10277	0.044709	0.092194
VRK3	19q13.33	0.102757	0.044738	0.092244
STK26	Xq26.2	0.102736	0.044783	0.092327
ADIRF	10q23.2	0.102733	0.044788	0.092329
GPATCH1	19q13.11	0.102727	0.044801	0.092346
HMGB1	13q12.3	0.102718	0.044821	0.092377
NKG7	19q13.41	-0.1027	0.04485	0.092428
PROM1	4p15.32	-0.1027	0.044868	0.092455
NTN3	16p13.3	0.102682	0.044895	0.092492
TPBG	6q14.1	-0.10268	0.044895	0.092492
GOLIM4	3q26.2	-0.10268	0.044904	0.092501
CYP19A1	15q21.2	-0.10263	0.044999	0.092677
CNGB1	16q21	-0.10263	0.045001	0.092677
APEH	3p21.31	0.102631	0.045004	0.092677
ITIH1	3p21.1	-0.10262	0.045023	0.092708
ESRRA	11q13.1	0.102592	0.045084	0.092824
OTULIN	5p15.2	0.102583	0.045103	0.092854
MASP2	1p36.22	0.10255	0.045174	0.09299
TYW5	2q33.1	-0.10252	0.045244	0.093125
UBE2N	12q22	0.102507	0.045264	0.093156
SLC25A2	5q31.3	0.102499	0.045281	0.093165
IGLL3P	22q11.23	0.102499	0.045281	0.093165
ANKRD20A8P	2q11.1	0.102498	0.045282	0.093165
PIK3R6	17p13.1	-0.10248	0.04533	0.093253
CCDC141	2q31.2	-0.10242	0.045452	0.093494
PXDNL	8q11.22-q11.23	-0.10241	0.04546	0.0935
WDR6	3p21.31	0.102411	0.045468	0.0935
LINC00626	1q24.2	-0.10241	0.045469	0.0935
XYLT1	16p12.3	-0.1024	0.045484	0.093514
SPHK1	17q25.1	-0.1024	0.045485	0.093514

ZFAS1	20q13.13	-0.10239	0.045504	0.093544
MUC2	11p15.5	0.102379	0.045535	0.093598
MIR1-1HG-AS1	20q13.33	-0.10237	0.045562	0.093644
PITHD1	1p36.11	0.102362	0.045572	0.093655
DCUN1D3	16p12.3	-0.10235	0.045591	0.093684
STK33	11p15.4	-0.10235	0.045596	0.093685
KDM7A-DT	7q34	-0.10234	0.045616	0.093718
AASS	7q31.32	-0.10231	0.045674	0.093827
PDE9A	21q22.3	-0.10231	0.045683	0.093835
SOCS3	17q25.3	-0.10231	0.045691	0.093843
TCEA1	8q11.23	-0.10229	0.045731	0.093915
USHBP1	19p13.11	-0.10228	0.04574	0.093922
CDH12	5p14.3	0.102273	0.045761	0.093941
CACNA1B	9q34.3	-0.10227	0.045762	0.093941
SLC26A3	7q22.3-q31.1	-0.10227	0.045762	0.093941
WFDC10A	20q13.12	-0.10227	0.045775	0.093955
MEGF10	5q23.2	-0.10226	0.045779	0.093955
GOLGA6B	15q24.1	0.102255	0.045798	0.093984
TTC31	2p13.1	0.102248	0.045813	0.094006
LAMTOR5	1p13.3	-0.10224	0.045824	0.094019
DTX2	7q11.23	0.102218	0.045877	0.094117
SORT1	1p13.3 1p21.3-p13.1	-0.10221	0.045903	0.094158
SBF2	11p15.4	-0.1022	0.045906	0.094158
AKR1E2	10p15.1	0.102189	0.04594	0.094218
SLC7A10	19q13.11	-0.10218	0.045952	0.094233
SLC45A3	1q32.1	0.102149	0.046025	0.094372
OR5H6	3q11.2	0.102141	0.046042	0.094399
F7	13q34	-0.10212	0.046084	0.094475
KIAA1614	1q25.3	-0.10211	0.046113	0.094525
DNAL1	14q24.3	-0.1021	0.046127	0.094543
POU2F2	19q13.2	-0.10209	0.046158	0.094597
PDE8B	5q13.3	-0.10208	0.046168	0.094609
DNMT3A	2p23.3	-0.10207	0.046188	0.09464
ZFP14	19q13.12	-0.10207	0.046194	0.094642
GUK1	1q42.13	0.102041	0.046258	0.094763
PGLYRP1	19q13.32	0.102033	0.046273	0.094785
RLN2	9p24.1	-0.10203	0.046287	0.094803
H6PD	1p36.22	-0.10202	0.046304	0.094829
SIKE1	1p13.2	-0.10201	0.046324	0.094851
SIAE	11q24.2	0.10201	0.046324	0.094851
MAP7D3	Xq26.3	-0.10201	0.046329	0.094851
KCNN4	19q13.31	0.101996	0.046355	0.094893
RSAD2	2p25.2	-0.10199	0.046375	0.094925
SERPINB10	18q22.1	-0.10198	0.046383	0.094932
CCT6P1	7q11.21	0.101977	0.046394	0.094946
GRINA	8q24.3	-0.10196	0.04644	0.095029
OR9G4	11q12.1	0.101934	0.046487	0.095115
TMED3	15q25.1	-0.1019	0.046551	0.095237
STX2	12q24.33	0.101901	0.046558	0.095243
CLNS1A	11q14.1	-0.10188	0.046605	0.095328
SOSTDC1	7p21.2	-0.10187	0.046625	0.095346
DPPA4	3q13.13	-0.10187	0.046625	0.095346
ZNF252P-AS1	8q24.3	0.101869	0.046628	0.095346
GLRX3	10q26.3	0.101851	0.046667	0.095417
UNC5A	5q35.2	-0.10183	0.046713	0.0955
TRAF3	14q32.32	0.101823	0.046728	0.095521
APH1A	1q21.2	0.101797	0.046785	0.095627
PLPPR5	1p21.3	-0.10179	0.046802	0.095651



FLT4	5q35.3	-0.10179	0.046806	0.095651
DLGAP2	8p23.3	-0.10177	0.046844	0.09572
ANKS4B	16p12.2	0.101765	0.046853	0.095728
NKX2-6	8p21.2	-0.10176	0.046863	0.095739
ANXA2P3	10q21.3	-0.10175	0.046876	0.095756
ZNF506	19p13.11	-0.10173	0.046923	0.095841
SLC30A6	2p22.3	-0.10173	0.046933	0.095852
PP7080	5p15.33	0.101716	0.046959	0.095896
RPAP2	1p22.1	-0.10171	0.046964	0.095896
CCKAR	4p15.2	-0.10171	0.046979	0.095917
PKM	15q23	0.101695	0.047005	0.095959
STARD13	13q13.1-q13.2	-0.10169	0.047026	0.095986
SRSF6	20q13.11	0.101685	0.047027	0.095986
ZFHX3	16q22.2-q22.3	-0.10164	0.047125	0.096176
ZNF266	19p13.2	0.101638	0.047131	0.096178
ANKUB1	3q25.1	-0.1016	0.047217	0.096345
VPS39	15q15.1	-0.10158	0.047254	0.09641
LHX6	9q33.2	-0.10155	0.047315	0.096524
NFYA	6p21.1	0.101521	0.047385	0.096658
KMT2E	7q22.3	-0.10151	0.0474	0.096678
KLHL36	16q24.1	0.101503	0.047426	0.09672
GPRC5D	12p13.1	0.101498	0.047436	0.096731
TEX2	17q23.3	-0.10147	0.047505	0.096863
SLC4A3	2q35	-0.10146	0.047525	0.096886
EPST11	13q14.11	-0.10146	0.047526	0.096886
AGPAT4	6q26	-0.10145	0.047537	0.096897
ECM1	1q21.2	-0.10143	0.047593	0.096998
SPAG16	2q34	-0.10143	0.047596	0.096998
DNASE2	19p13.13	-0.10141	0.047623	0.097044
FMC1	7q34	-0.1014	0.047655	0.097099
RPL10A	6p21.31	-0.10137	0.047713	0.097208
H2AFB1	Xq28	0.101368	0.047722	0.097217
SQLE	8q24.13	0.101349	0.047765	0.097287
TULP2	19q13.33	-0.10135	0.047767	0.097287
DEAF1	11p15.5	-0.10134	0.047778	0.0973
BLOC1S5	6p24.3	-0.10133	0.047816	0.097365
LYRM1	16p12.3	-0.10132	0.04782	0.097365
EPC1	10p11.22	-0.10129	0.047892	0.097503
SLC44A4	6p21.33	0.101287	0.047901	0.097511
TAF4	20q13.33	0.101269	0.047941	0.097582
CYMP	1p13.3	0.101266	0.047949	0.097588
GSTM3	1p13.3	-0.10124	0.047996	0.097675
NDNF	4q27	-0.10124	0.048005	0.097676
LSMEM1	7q31.1	0.10124	0.048006	0.097676
LAMA2	6q22.33	-0.10123	0.048025	0.097703
ABCG8	2p21	0.10121	0.048073	0.097791
ABHD11-AS1	7q11.23	-0.1012	0.048095	0.097827
SNAPC3	9p22.3	0.101187	0.048124	0.097875
CMTR1	6p21.2	0.101172	0.048157	0.097933
ZNF761	19q13.42	0.10116	0.048184	0.097977
TOMM70	3q12.2	0.101152	0.048202	0.098003
LINC00910	17q21.31	-0.10115	0.048208	0.098007
HOXA7	7p15.2	0.101133	0.048245	0.09807
MAVS	20p13	0.101129	0.048252	0.09807
KCTD14	11q14.1	-0.10113	0.048254	0.09807
LNP1	3q12.2	-0.10111	0.048296	0.098146
PPP4R1L	20q13.32	0.101089	0.048341	0.098226
N4BP1	16q12.1	-0.10108	0.048365	0.098265

JMY	5q14.1	-0.10106	0.048416	0.098359
PLEKHA5	12p12.3	-0.10104	0.048444	0.098406
NKAIN3-IT1	8q12.3	-0.10103	0.048475	0.09846
LILRB2	19q13.42	-0.10097	0.048611	0.098726
TEAD2	19q13.33	-0.10096	0.048622	0.098737
RPS6	9p22.1	-0.10095	0.048648	0.098781
SLC30A7	1p21.2	-0.10093	0.048704	0.098885
WDR61	15q25.1	-0.10092	0.048728	0.098923
GAR1	4q25	0.100914	0.048733	0.098924
SLC8A2	19q13.32	-0.1009	0.048766	0.098981
ADAM6	14q32.33	-0.10089	0.048778	0.098994
DCBLD2	3q12.1 3	-0.10089	0.048786	0.099001
CD247	1q24.2	-0.10088	0.048821	0.099058
GRM7	3p26.1	-0.10087	0.048824	0.099058
MED11	17p13.2	-0.10085	0.048869	0.099138
DYSF	2p13.2	-0.10085	0.048873	0.099138
LOC100129534	1p36.32	0.100842	0.048897	0.099175
KIF27	9q21.32	0.100816	0.048955	0.099283
IFNLR1	1p36.11	-0.10081	0.048973	0.099304
TMPRSS9	19p13.3	0.100806	0.048975	0.099304
TRIB3	20p13	0.100804	0.04898	0.099304
FOXA1	14q21.1	0.100796	0.049	0.099332
DRICH1	22q11.23	0.100794	0.049004	0.099332
ABHD18	4q28.2	0.100767	0.049064	0.099437
MYEF2	15q21.1	-0.10077	0.049065	0.099437
ACTRT3	3q26.2	-0.10076	0.049079	0.099453
PRSS30P	16p13.3	-0.10075	0.049102	0.09949
IL12RB1	19p13.11	-0.10074	0.049136	0.099546
ST6GAL1	3q27.3	-0.10073	0.049139	0.099546
MMP17	12q24.33	-0.10072	0.049164	0.099587
KRT18	12q13.13	0.100718	0.049175	0.099595
PRAMEF8	1p36.21	-0.10072	0.049181	0.099595
TCP11L2	12q23.3	-0.10071	0.049183	0.099595
TXNL4B	16q22.2	-0.10071	0.049192	0.099603
DLAT	11q23.1	0.100703	0.049209	0.099626
GUCA1B	6p21.1	0.100697	0.049223	0.099645
CASP10	2q33.1	0.100676	0.04927	0.099729
TCAP	17q12	0.100651	0.049327	0.099835
REEP3	10q21.3	-0.10062	0.049397	0.099966
SURF1	9q34.2	-0.10061	0.049409	0.099982
BPNT1	1q41	0.100564	0.049524	0.100204
KIAA0930	22q13.31	-0.10056	0.049542	0.10023
C19ORF38	19p13.2	-0.10055	0.049551	0.100238
SHOX2	3q25.32	-0.10054	0.049572	0.10027
BAG5	14q32.33	0.100534	0.049593	0.100304
SPTBN5	15q15.1	0.100528	0.049607	0.10032
PCSK6	15q26.3	0.100521	0.049624	0.100345
PDE4DIP	1q21.2	0.100514	0.049639	0.100359
ZNF525	19q13.42	0.100513	0.049641	0.100359
RFPL2	22q12.3	-0.10049	0.049682	0.100433
TMEM255B	13q34	-0.10047	0.049746	0.100552
GABPB1-IT1	15q21.2	-0.10045	0.049787	0.100623
ZNF45	19q13.31	-0.10044	0.04981	0.100661
LHX1	17q12	0.100433	0.049824	0.100676
CHST5	16q23.1	0.10043	0.04983	0.100676
ART1	11p15.4	-0.10043	0.049835	0.100676
HPF1	4q33	-0.10043	0.049838	0.100676
SPATC1L	21q22.3	-0.10041	0.049874	0.100721

CPT1A	11q13.3	0.100411	0.049874	0.100721
PCDHGA11	5q31.3	-0.10041	0.049877	0.100721
POLE4	2p12	-0.10041	0.04988	0.100721
PMCHL2	5q13.2	0.100398	0.049903	0.100758
GYPB	4q31.21	0.10039	0.049923	0.100787
NFATC3	16q22.1	0.10038	0.049946	0.100816
DDX23	12q13.12	0.100379	0.049947	0.100816
RAC3	17q25.3	0.100372	0.049964	0.10084
PADI2	1p36.13	-0.10036	0.049986	0.100873
CPLANE1	5p13.2	-0.10036	0.049991	0.100874
TMEM54	1p35.1	0.100356	0.049999	0.10088
LINC01588	14q21.3	0.100345	0.050025	0.100923
ACSL4	Xq23	-0.10033	0.050062	0.100986
RAB11FIP1	8p11.23	0.100307	0.050112	0.101077
FTSJ1	Xp11.23	0.100301	0.050127	0.101096
ATXN7L1	7q22.3	-0.10028	0.050167	0.101164
IL3	5q31.1	0.100282	0.05017	0.101164
MDM2	12q15	-0.10026	0.050227	0.101268
FBXO25	8p23.3	-0.10025	0.050253	0.10131
SNORA3A	11p15.4	0.100237	0.050274	0.101342
GBP5	1p22.2	-0.10023	0.05029	0.101365
PNPLA1	6p21.31	0.100215	0.050324	0.101422
ZNF107	7q11.21	0.100209	0.050338	0.101435
IRF2BP1	19q13.32	0.100207	0.050342	0.101435
LIME1	20q13.33	-0.10021	0.050345	0.101435
GPR37	7q31.33	-0.1002	0.050363	0.101461
VHLL	1q22	0.100192	0.050378	0.101481
SPRY1	4q28.1	-0.10018	0.050413	0.101524
SFR1	10q25.1	0.100176	0.050414	0.101524
NPBWR1	8q11.23	-0.10018	0.050415	0.101524
TMEM18	2p25.3	-0.10017	0.050423	0.101531
INPP5A	10q26.3	-0.10013	0.050516	0.101708
ATP6AP1	Xq28	-0.10012	0.050543	0.101752
LEMD3	12q14.3	-0.10011	0.050559	0.101772
C12ORF45	12q23.3	0.100112	0.050563	0.101772
KAT8	16p11.2	0.100107	0.050575	0.101785
MED21	12p11.23	-0.1001	0.050596	0.101818
LIPG	18q21.1	0.100062	0.050678	0.101971
ADAMTSL4	1q21.2	-0.10005	0.050708	0.102021
GOLGA2	9q34.11	0.10004	0.05073	0.102056
MFF	2q36.3	-0.10001	0.050804	0.102194
EXOC7	17q25.1	-0.1	0.050825	0.102226
SLFN5	17q12	-0.09999	0.05084	0.102247
TRIM49D2	11q14.3	-0.09999	0.050855	0.102265
MT3	16q13	-0.09998	0.050859	0.102265
PLAAT5	11q12.3	-0.09997	0.050898	0.102333
CRYGN	7q36.1	-0.09996	0.050922	0.10237
EID2B	19q13.2	-0.09995	0.050948	0.102405
PMM1	22q13.2	-0.09995	0.050949	0.102405
FIP1L1	4q12	0.099934	0.050976	0.102447
TYSND1	10q22.1	0.099923	0.051002	0.102489
CTAGE15	7q35	0.099908	0.051036	0.102549
GRIK5	19q13.2	-0.09989	0.05107	0.102606
DENND1B	1q31.3	0.099883	0.051096	0.102649
GNA12	7p22.3-p22.2	-0.09988	0.051107	0.102658
LIN28A	1p36.11	0.099876	0.051111	0.102658
FOXL2NB	3q22.3	0.099868	0.051131	0.102688
TFDP3	Xq26.2	0.099864	0.05114	0.102693

OR7C1	19p13.12	-0.09986	0.051144	0.102693
IFNE	9p21.3	0.099858	0.051155	0.102704
TULP4	6q25.3	0.099847	0.051118	0.102745
CIB3	19p13.11	-0.09984	0.051198	0.102771
CPA1	7q32.2	-0.09983	0.051211	0.102785
TTY13	Yq11.223	0.099826	0.05123	0.102813
KRT81	12q13.13	-0.09981	0.051266	0.102877
SLC14A2	18q12.3	-0.0998	0.051289	0.102912
KBTBD13	15q22.31	-0.09978	0.051326	0.102975
IL27	16p12.1-p11.2	-0.09977	0.051349	0.103012
RPL27A	11p15.4	-0.09977	0.051369	0.103042
FCN2	9q34.3	-0.09976	0.051387	0.103068
MEAK7	16q24.1	-0.09974	0.051442	0.103167
DEGS1	1q42.11	-0.09971	0.051506	0.103286
ERVFRD-1	6p24.2	-0.0997	0.051521	0.103306
FOSL1	11q13.1	0.099663	0.051611	0.103475
ADAM7	8p21.2	-0.09965	0.051636	0.103516
SLA2	20q11.23	-0.09957	0.051822	0.103878
NUDT21	16q13	0.099565	0.051843	0.103898
ZNF3	7q22.1	-0.09957	0.051843	0.103898
NFIL3	9q22.31	-0.09955	0.051888	0.103976
LRRC58	3q13.33	0.099544	0.051892	0.103976
TF	3q22.1	-0.09953	0.05192	0.104017
SYT3	19q13.33	-0.09953	0.051923	0.104017
ATP5MC1	17q21.32	0.099482	0.052038	0.104238
NPHP3	3q22.1	0.099467	0.052076	0.104303
EIF4E2	2q37.1	-0.09945	0.052122	0.104373
POLDIP2	17q11.2	0.099447	0.052122	0.104373
BNIP2	15q22.2	-0.09944	0.052135	0.104391
CIDECP1	3p25.3	-0.0994	0.052233	0.104571
GXYLT1	12q12	0.099399	0.052236	0.104571
PHF2	9q22.31	0.099383	0.052276	0.10464
PCP4L1	1q23.3	-0.09938	0.05229	0.104658
B3GALT5-AS1	21q22.2	-0.09935	0.052359	0.104785
ATXN7L3	17q21.31	0.09934	0.052378	0.104813
AGFG1	2q36.3	-0.09934	0.052385	0.104817
CLASP1	2q14.2-q14.3	-0.09931	0.052439	0.104916
SEMA5A	5p15.31	-0.0993	0.052463	0.104952
STPG4	2p21	0.0993	0.052472	0.10496
KLF13	15q13.3	0.099297	0.05248	0.104964
DDAH1	1p22.3	0.099294	0.052487	0.104968
RIPOR2	6p22.3	-0.09927	0.052537	0.105058
ZMIZ1	10q22.3	-0.09924	0.052606	0.105186
PAPPA	9q33.1	-0.09923	0.052636	0.105234
EPHA4	2q36.1	-0.09921	0.052684	0.10532
NUP37	12q23.2	0.099206	0.052697	0.105329
PTTG2	4p14	0.099205	0.052699	0.105329
C1ORF87	1p32.1	-0.09919	0.052728	0.105377
PLAC9P1	2q21.1	-0.09919	0.052738	0.105386
DSCR9	21q22.13	0.099158	0.052812	0.105499
APOL1	22q12.3	-0.09916	0.052813	0.105499
C16ORF87	16q11.2	-0.09916	0.052813	0.105499
C9	5p13.1	-0.09916	0.052816	0.105499
SAMD14	17q21.33	-0.09915	0.052825	0.105507
CAPSL	5p13.2	-0.09914	0.052861	0.105569
AQP9	15q21.3	-0.09913	0.052884	0.105604
C2ORF66	2q33.1	0.099107	0.052934	0.105688
SCARNA17	18q21.1	0.099107	0.052936	0.105688

N4BP3	5q35.3	0.099075	0.053012	0.105829
SLC39A6	18q12.2	-0.09906	0.053058	0.105909
UCP3	11q13.4	0.099053	0.053065	0.105912
ZNF649	19q13.41	-0.09903	0.053117	0.106006
ZFP3	17p13.2	0.099016	0.053154	0.106069
CSMD3	8q23.3	-0.09901	0.053167	0.106085
LINC00111	21q22.3	0.098991	0.053216	0.106169
MESP1	15q26.1	0.098989	0.05322	0.106169
PNLIPRP3	10q25.3	-0.09897	0.053275	0.106269
DUSP6	12q21.33	0.098961	0.053288	0.106284
FBXO10	9p13.2	-0.09896	0.053294	0.106285
OR4F29	1p36.33	0.098948	0.053318	0.106323
SETDB2	13q14.2	-0.09894	0.053345	0.106366
KRT72	12q13.13	0.098931	0.053361	0.10638
LCE1E	1q21.3	-0.09893	0.053362	0.10638
FXYD3	19q13.12	-0.09889	0.053453	0.106549
CALR3	19p13.11	-0.09888	0.053474	0.106581
SNORA71C	20q11.23	0.098851	0.053554	0.106729
DLK1	14q32.2	-0.09885	0.053564	0.106739
SIRPG	20p13	-0.09881	0.053661	0.106923
DCAF17	2q31.1	-0.0988	0.053678	0.106942
NAP1L4	11p15.4	0.098798	0.053684	0.106942
ISOC2	19q13.42	0.098794	0.053692	0.106942
SNORD15A	11q13.4	-0.09879	0.053693	0.106942
LAX1	1q32.1	-0.09878	0.053735	0.107017
SMAD6	15q22.31	0.098765	0.053763	0.107052
CRNN	1q21.3	-0.09876	0.053764	0.107052
ECI2	6p25.2	-0.09876	0.053774	0.107061
TFF1	21q22.3	0.098757	0.053783	0.107068
TTC21A	3p22.2	0.098742	0.053819	0.10713
TM9SF1	14q12	-0.09873	0.053842	0.107165
RAC2	22q13.1	-0.09873	0.053848	0.107166
IFT140	16p13.3	0.098713	0.053891	0.107242
ST7	7q31.2	-0.09871	0.053904	0.107256
STX16	20q13.32	0.098696	0.053932	0.107301
EMC6	17p13.2	0.098682	0.053966	0.107358
USF3	3q13.2	0.09864	0.054069	0.107553
PTPRH	19q13.42	0.098631	0.054091	0.107587
HTR5A	7q36.2	-0.09862	0.054114	0.107621
THAP9	4q21.22	-0.09859	0.054192	0.107765
LGSN	6q12	-0.09858	0.054219	0.107797
XIRP1	3p22.2	-0.09858	0.054219	0.107797
ING2	4q35.1	0.09857	0.05424	0.107828
POLR2I	19q13.12	0.098559	0.054267	0.107871
CEACAM4	19q13.2	-0.09855	0.054295	0.10791
MRPS23	17q22	-0.09855	0.054297	0.10791
KLF5	13q22.1	0.098529	0.05434	0.107982
IKBKG	Xq28	0.098528	0.054344	0.107982
CXCL9	4q21.1	-0.09852	0.054373	0.108029
CNTN6	3p26.3	-0.09851	0.054386	0.108044
KMT5B	11q13.2	-0.09849	0.054438	0.108134
HIST1H3D	6p22.2	0.098488	0.054442	0.108134
CCDC151	19p13.2	-0.09847	0.05448	0.108198
SLC36A1	5q33.1	-0.09847	0.054496	0.10822
S100A2	1q21.3	-0.09846	0.054504	0.108224
NAB2	12q13.3	-0.09842	0.054602	0.108409
OR7A5	19p13.12	-0.09841	0.054637	0.108467
DCTN1	2p13.1	-0.09841	0.054643	0.108469

MPG	16p13.3	-0.09836	0.054749	0.108668
SLC6A3	5p15.33	-0.09834	0.054805	0.108769
SRBD1	2p21	-0.09833	0.05484	0.108826
SHISA5	3p21.31	-0.09832	0.054845	0.108826
PIGM	1q23.2	0.098321	0.054855	0.108835
TMEM229B	14q24.1	-0.09828	0.054964	0.10904
ZNF200	16p13.3	0.098264	0.054996	0.109091
PTPN20	10q11.22	0.098262	0.055001	0.109091
DRAXIN	1p36.22	-0.09825	0.055019	0.109117
CACNG1	17q24.2	-0.09824	0.055061	0.10919
SNED1	2q37.3	-0.09823	0.055079	0.109214
SEC14L1	17q25.2-q25.3	-0.09822	0.0551	0.109246
NOL4	18q12.1	-0.09821	0.05512	0.109275
STIMATE	3p21.1	-0.0982	0.05516	0.109342
SHANK2	11q13.3-q13.4	-0.09819	0.055171	0.109354
OR13G1	1q44	0.098191	0.055177	0.109355
MIXL1	1q42.12	-0.09817	0.055229	0.109447
GJA8	1q21.2	0.098164	0.055245	0.109469
C1QTNF4	11p11.2	-0.09816	0.055251	0.109469
SNRPGP15	19p13.12	0.098153	0.055272	0.109499
ZBTB12	6p21.33	0.098127	0.055338	0.109619
PHOX2A	11q13.4	-0.09811	0.055368	0.109668
QPCT	2p22.2	-0.09811	0.055373	0.109668
PEX13	2p15	-0.09811	0.055385	0.109681
UNC45B	17q12	-0.0981	0.055405	0.109702
PARG	10q11.23	0.098099	0.055407	0.109702
UBALD2	17q25.1	0.098085	0.055443	0.109756
C17ORF99	17q25.3	0.098084	0.055445	0.109756
ANKRD17	4q13.3	0.098054	0.05552	0.109893
SLC51A	3q29	-0.09804	0.055561	0.109963
DDI2	1p36.21	0.098021	0.055602	0.110033
STARD4	5q22.1	0.098016	0.055614	0.110047
PEAK3	19p13.3	-0.09801	0.055624	0.110056
OR10G7	11q24.2	-0.098	0.055657	0.110109
MUS81	11q13.1	0.097993	0.055674	0.110133
WNK1	12p13.33	-0.09799	0.05569	0.110152
AFTPH	2p14	-0.09798	0.055714	0.11019
SENP1	12q13.11	0.097972	0.055727	0.110204
NAA35	9q21.33	0.097969	0.055734	0.110207
UCP1	4q31.1	-0.09794	0.055794	0.110316
ZNF831	20q13.32	-0.09794	0.055813	0.110343
MRPS11	15q25.3	0.097919	0.055859	0.110421
RPS9	19q13.42	-0.09791	0.055883	0.110459
FUNDC1	Xp11.3	-0.0979	0.05591	0.1105
PTGER2	14q22.1	-0.09789	0.05592	0.1105
TBCE	1q42.3	0.097894	0.055923	0.1105
TNKS2	10q23.32	-0.09789	0.055926	0.1105
EIF2S3	Xp22.11	0.09788	0.055957	0.11055
TMEM234	1p35.2	0.097873	0.055975	0.110571
ELMSAN1	14q24.3	0.097872	0.055978	0.110571
FAM27C	9q13	0.097848	0.056037	0.110676
CNPY2	12q13.3	-0.09782	0.056115	0.110814
SNAR-C4	19q13.33	0.097816	0.056118	0.110814
LGALS9B	17p11.2	-0.09779	0.056184	0.110932
SGPP2	2q36.1	0.097788	0.056189	0.110932
INSIG1	7q36.3	0.097782	0.056203	0.11094
PANK3	5q34	0.097782	0.056204	0.11094
OXNAD1	3p25.1-p24.3	0.09777	0.056234	0.110988

SLC25A35	17p13.1	0.097759	0.056262	0.111033
UBASH3A	21q22.3	-0.09775	0.056273	0.111043
DDX28	16q22.1	0.097742	0.056306	0.111083
ZBTB46	20q13.33	-0.09774	0.056309	0.111083
PRPS2	Xp22.2	0.09774	0.05631	0.111083
P2RY4	Xq13.1	0.097712	0.056382	0.111214
PLAU	10q22.2	-0.09769	0.056438	0.111314
POTEC	18p11.21	0.09766	0.056515	0.111454
LASP1	17q12	0.097632	0.056586	0.111584
JAK3	19p13.11	-0.09763	0.056598	0.111597
GNAI3	1p13.3	-0.09762	0.056607	0.111604
ADORA1	1q32.1	-0.0976	0.056665	0.111703
CDKN1A	6p21.2	-0.0976	0.056671	0.111703
WRB	21q22.2	-0.0976	0.056674	0.111703
DCTPP1	16p11.2	0.097583	0.056711	0.111764
NAALAD2	11q14.3	-0.09758	0.056726	0.111783
SNTN	3p14.2	-0.09756	0.05677	0.111857
CYP51A1	7q21.2	0.097557	0.056775	0.111857
MYO1D	17q11.2	-0.09755	0.056804	0.111905
ZNF263	16p13.3	0.097538	0.056824	0.111925
STBD1	4q21.1	-0.09754	0.056827	0.111925
CCL8	17q12	-0.09754	0.056831	0.111925
RNF152	18q21.33	-0.09752	0.05687	0.11198
LIPN	10q23.31	-0.09752	0.05687	0.11198
POU6F2	7p14.1	-0.09748	0.056984	0.112193
OXCT2	1p34.2	0.097458	0.057029	0.112271
STRAP	12p12.3	-0.09745	0.057056	0.112313
GK	Xp21.2	0.097432	0.057094	0.112376
CLSTN3	12p13.31	-0.09742	0.057126	0.112428
HOOK1	1p32.1	0.097415	0.057139	0.112441
TAS2R9	12p13.2	0.097403	0.05717	0.112492
SELENOW	19q13.33	-0.09739	0.057191	0.112522
GUCA2A	1p34.2	-0.09739	0.057202	0.112533
ATP5ME	4p16.3	0.097366	0.057265	0.112645
ZNF484	9q22.31	-0.09736	0.057275	0.112654
PDE6D	2q37.1	-0.09736	0.057288	0.112668
SYCP2L	6p24.2	-0.09733	0.057352	0.112784
BANP	16q24.2	0.097327	0.057366	0.112801
NEIL2	8p23.1	-0.0973	0.057428	0.112912
JAKMIP1	4p16.1	-0.09728	0.057481	0.113004
GPAA1	8q24.3	0.097262	0.057533	0.113095
IL17RC	3p25.3 3p25.3-p24.1	-0.09725	0.057568	0.113152
COPE	19p13.11	0.097239	0.057592	0.113189
IL2RB	22q12.3	-0.09723	0.057614	0.113221
CLUL1	18p11.32	-0.09722	0.057643	0.113267
SPATA3	2q37.1	0.097197	0.057701	0.113369
ELAVL2	9p21.3	-0.09718	0.057746	0.113448
HEXD	17q25.3	0.097167	0.057777	0.113498
ZDHHC8P1	22q11.23	0.097138	0.057852	0.113633
TMEM249	8q24.3	0.097132	0.057867	0.113652
VPS33B	15q26.1	0.097109	0.057928	0.113761
VPS13D	1p36.22-p36.21	0.097105	0.057939	0.113771
SCML2	Xp22.13	0.097086	0.057987	0.113844
CD7	17q25.3	-0.09709	0.057988	0.113844
SLC6A12	12p13.33	-0.09707	0.058036	0.113921
RRP15	1q41	0.097066	0.058039	0.113921
ATP6V1B1	2p13.3	-0.09706	0.058066	0.113964
RSRC1	3q25.32	0.09704	0.058107	0.114033

CBLB	3q13.11	-0.09702	0.05817	0.114137
ATP2B3	Xq28	-0.09702	0.058171	0.114137
GUSBP5	4q31.21	-0.09701	0.058182	0.114147
KCNK4	11q13.1	-0.097	0.058207	0.114177
HBM	16p13.3	0.097001	0.058209	0.114177
MPC1	6q27	0.096989	0.058241	0.114228
SSB	2q31.1	-0.09697	0.058281	0.114296
FAM74A3	9q21.11	-0.09695	0.058354	0.114429
SSR4P1	21q22.3	-0.09694	0.05836	0.114429
MCOLN3	1p22.3	0.096937	0.058376	0.114449
PCDHA9	5q31.3	-0.09693	0.058392	0.114447
MCMDC2	8q13.1	-0.09692	0.058425	0.114522
MYOM3	1p36.11	-0.09692	0.058432	0.114525
ASB7	15q26.3	-0.09689	0.058504	0.114645
TOMM20	1q42.3	0.096888	0.058505	0.114645
ZNF141	4p16.3	0.096883	0.058515	0.114655
RBP2	3q23	-0.09687	0.058559	0.11473
RALGAPB	20q11.23	-0.09683	0.058664	0.114923
SFTPC	8p21.3	-0.09682	0.058679	0.114942
SERPINB5	18q21.33	0.096781	0.058784	0.115136
PSMB11	14q11.2	0.096763	0.058831	0.115216
TRIM68	11p15.4	-0.09674	0.05888	0.115302
EIF2B4	2p23.3	-0.09673	0.058907	0.115344
CHD1	5q15-q21.1	0.096713	0.058962	0.11544
MAPK9	5q35.3	0.096708	0.058976	0.115456
PRMT5	14q11.2	0.096694	0.059013	0.115516
CNTNAP5	2q14.3	-0.09668	0.059042	0.115563
BSG	19p13.3	0.096661	0.0591	0.115656
TNFRSF13B	17p11.2	-0.09666	0.059101	0.115656
FBXL15	10q24.32	0.096658	0.059108	0.115657
WNT4	1p36.12	-0.09665	0.059119	0.115667
GEMIN7	19q13.32	0.096622	0.059203	0.115821
SENP8	15q23	-0.0966	0.059252	0.115904
SYT8	11p15.5	0.096601	0.059257	0.115904
UBAP1L	15q22.31	0.09655	0.059393	0.116158
ALX3	1p13.3	0.096506	0.059509	0.116374
GABRD	1p36.33	-0.09649	0.05955	0.116443
NFKBIZ	3q12.3	0.096484	0.059567	0.116464
AEN	15q26.1	0.096477	0.059586	0.116491
TOMM40L	1q23.3	0.096467	0.059614	0.116533
GRXCR2	5q32	0.096438	0.059691	0.116673
CACNG7	19q13.42	-0.0964	0.059781	0.116837
PPP1R35	7q22.1	0.096398	0.059796	0.11685
RAPGEF2	4q32.1	-0.0964	0.059799	0.11685
IFITM4P	6p22.1	0.096376	0.059854	0.116946
ITGAD	16p11.2	-0.09636	0.059887	0.116999
TREML3P	6p21.1	-0.09635	0.059922	0.11705
MYO15B	17q25.1	0.09635	0.059925	0.11705
ABHD1	2p23.3	-0.09634	0.059938	0.117064
POU4F2	4q31.22	-0.09634	0.059944	0.117065
AMPD1	1p13.2	-0.09634	0.059956	0.117076
TERF1	8q21.11	-0.09633	0.059974	0.117101
ZBTB33	Xq24	-0.09629	0.060082	0.117299
TSG1	6q16.1	-0.09629	0.060092	0.117308
PIM3	22q13.33	0.09626	0.060165	0.117439
TMEM254-AS1	10q22.3	-0.09625	0.060204	0.117503
PKLR	1q22	-0.09624	0.060209	0.117503
LOC284441	19p12	-0.09624	0.060216	0.117504



YIPF7	4p12	-0.09623	0.060239	0.117529
MOB2	11p15.5	-0.09623	0.060241	0.117529
GSTTP2	22q11.23	0.096206	0.06031	0.117653
ZDHHC9	Xq26.1	-0.0962	0.060325	0.117672
NOTCH2	1p12	-0.09617	0.060411	0.117817
GPATCH3	1p36.11	-0.09617	0.060417	0.117817
FBXO38	5q32	-0.09617	0.060417	0.117817
SERPINB7	18q21.33	-0.09614	0.060476	0.11792
BPHL	6p25.2	-0.09613	0.060511	0.117976
SPDYE3	7q22.1	-0.09612	0.060534	0.117999
C10ORF99	10q23.1	-0.09612	0.060538	0.117999
SCAPER	15q24.3	-0.09612	0.060541	0.117999
PSTK	10q26.13	-0.09612	0.060546	0.117999
ATP5MC2	12q13.13	-0.09611	0.060562	0.118018
MMAB	12q24.11	0.096105	0.060581	0.118021
IGDCC4	15q22.31	-0.0961	0.060583	0.118021
CD163L1	12p13.31	-0.0961	0.060589	0.118021
SLC25A32	8q22.3	-0.0961	0.060591	0.118021
SCMH1	1p34.2	0.0961	0.060593	0.118021
BOP1	8q24.3	0.096091	0.060618	0.118059
RPS6KA1	1p36.11	0.096088	0.060626	0.118063
DEFB132	20p13	-0.09608	0.060637	0.118073
CLUAP1	16p13.3	-0.09608	0.060649	0.118084
OR52K2	11p15.4	-0.09607	0.060669	0.118111
HDAC6	Xp11.23	0.096044	0.060744	0.118246
UBC	12q24.31	-0.09602	0.060822	0.118387
ZNF23	16q22.2	0.096006	0.060846	0.118423
ECE1	1p36.12	-0.09599	0.060881	0.118478
ZNF562	19p13.2	0.09599	0.06089	0.118486
ZDHHC2	8p22	-0.09597	0.060957	0.118603
RASAL2-AS1	1q25.2	-0.09595	0.060995	0.118666
PLIN1	15q26.1	-0.09594	0.061036	0.118735
CCDC146	7q11.23	0.095842	0.061292	0.119221
NOP56	20p13	0.095837	0.061305	0.119235
UBA3	3p14.1	-0.09582	0.061359	0.119326
APOM	6p21.33	-0.09581	0.061368	0.119326
LALBA	12q13.11	0.095813	0.06137	0.119326
EPHX3	19p13.12	-0.0958	0.061406	0.119383
OSTCP1	6q25.3	-0.0958	0.061411	0.119383
CTXN1	19p13.2	0.095788	0.061438	0.119424
ANAPC15	11q13.4	0.095784	0.061448	0.119431
ZFP36	19q13.2	0.095777	0.061469	0.119461
STUB1	16p13.3	0.095772	0.061482	0.119473
CARD16	11q22.3	-0.09574	0.061567	0.119627
LINS1	15q26.3	0.095737	0.061579	0.119639
PPIA	7p13	0.095733	0.061589	0.119648
PTAR1	9q21.12	0.095716	0.061634	0.119712
TPPP3	16q22.1	-0.09572	0.061634	0.119712
DOCK11	Xq24	-0.09571	0.061644	0.119718
MCUR1	6p23	0.09571	0.061652	0.119723
ITGB3	17q21.32	-0.09571	0.06166	0.119726
TAF7L	Xq22.1	0.095701	0.061676	0.119747
DCAF5	14q24.1	-0.09568	0.061738	0.119855
LOC91450	15q24.3	0.095669	0.061764	0.119895
CPNE4	3q22.1	-0.09566	0.061776	0.119906
STT3A	11q24.2	0.095655	0.061802	0.119944
GPR12	13q12.13	-0.09558	0.061997	0.120311
CMSS1	3q12.1	0.095567	0.062042	0.120388

HNRNPA1P33	10q11.22	0.095561	0.062058	0.120407
URGCP	7p13	0.09555	0.062089	0.120455
P4HA1	10q22.1	-0.09554	0.062124	0.120511
ADGRG6	6q24.2	0.095528	0.062151	0.120551
PDLIM5	4q22.3	-0.09551	0.062199	0.120625
H19	11p15.5	-0.09551	0.062201	0.120625
SLC66A1L	3q25.32	-0.0955	0.062216	0.120643
CFAP97	4q35.1	-0.09549	0.062256	0.120707
SERTAD2	2p14	-0.09549	0.062261	0.120707
IL2RA	10p15.1	-0.09547	0.062306	0.120781
FAM71E2	19q13.42	0.095464	0.062324	0.120806
TAF12	1p35.3	-0.09544	0.062397	0.120934
C6ORF89	6p21.2	-0.09544	0.062403	0.120934
COX17	3q13.33	0.095419	0.062451	0.121017
DBNDD2	20q13.12	-0.09537	0.062573	0.121241
SPHKAP	2q36.3	-0.09535	0.062641	0.121362
HOXB7	17q21.32	0.095332	0.062691	0.121446
XBP1	22q12.1 22q12	-0.09533	0.062708	0.121459
NISCH	3p21.1	0.095325	0.062709	0.121459
MINDY4	7p14.3	0.095305	0.062765	0.121554
ZFAND2B	2q35	0.0953	0.062778	0.121568
LDAH	2p24.1	-0.09529	0.062795	0.12159
NHLH1	1q23.2	0.095257	0.062898	0.121757
FLVCR2	14q24.3	-0.09526	0.062899	0.121757
SLC25A46	5q22.1	-0.09525	0.062905	0.121757
SIX3	2p21	-0.09525	0.062909	0.121757
LINC00698	3p14.2	0.095252	0.062912	0.121757
GHRH	20q11.23	-0.09524	0.062944	0.121807
IL2RG	Xq13.1	-0.09523	0.062961	0.121829
CDX1	5q32	0.095209	0.063033	0.121955
CCDC136	7q32.1	-0.0952	0.063061	0.121997
SUN2	22q13.1	-0.0952	0.063067	0.121998
TSKS	19q13.33	-0.09519	0.063082	0.122015
CCT5	5p15.2	0.095161	0.063166	0.122163
IL18R1	2q12.1	-0.09516	0.063171	0.122163
	8-Mar 10q11.21-q11.22	-0.09515	0.0632	0.122209
ZKSCAN4	6p22.1	-0.09514	0.063231	0.122256
NFYB	12q23.3	-0.09512	0.063266	0.122311
CHRNB1	17p13.1	-0.09509	0.063349	0.122461
ZNF467	7q36.1	-0.09509	0.063356	0.122462
TMSB4XP8	4q22.1	-0.09508	0.063397	0.12253
ATG10	5q14.1-q14.2	-0.09507	0.063409	0.122541
NOTO	2p13.2	0.095066	0.063429	0.122558
ZNF581	19q13.42	-0.09507	0.06343	0.122558
ZNF485	10q11.21	0.095062	0.063442	0.12257
MTX3	5q14.1	0.095057	0.063455	0.122583
KIAA2013	1p36.22	0.095047	0.063482	0.122623
RPL24	3q12.3	-0.09504	0.063498	0.122633
KATNAL2	18q21.1	0.095041	0.0635	0.122633
ZFP92	Xq28	-0.09503	0.063526	0.122673
DDX49	19p13.11	0.095008	0.063591	0.122787
PGAM4	Xq21.1	0.094994	0.063631	0.122852
RNF169	11q13.4	0.094986	0.063653	0.122871
VGF	7q22.1	0.094986	0.063653	0.122871
PYCR3	8q24.3	0.094976	0.063682	0.122915
IGFBP2	2q35	-0.09496	0.063727	0.122983
DNAJC16	1p36.21	0.094959	0.06373	0.122983
KRT24	17q21.2	-0.09491	0.063856	0.123214

OSBPL5	11p15.4	0.094869	0.063983	0.123448
IBSP	4q22.1	-0.09486	0.064	0.123468
CACNA1C	12p13.33	-0.09485	0.064027	0.123509
RPL13AP20	12p13.1	-0.09481	0.064153	0.123741
LTA4H	12q23.1	-0.0948	0.064181	0.123782
BCL3	19q13.32	0.09479	0.064205	0.123816
SLC25A16	10q21.3	0.09477	0.064262	0.123915
NORAD	20q11.23	-0.09477	0.06427	0.123918
FKBP11	12q13.12	-0.09474	0.06436	0.12408
ZNF268	12q24.33	-0.09473	0.064371	0.12409
DMXL1	5q23.1	-0.09473	0.064383	0.124096
ZC3H7B	22q13.2	0.094726	0.064387	0.124096
WDR24	16p13.3	0.094715	0.064417	0.124141
FXVD4	10q11.21	0.09469	0.064488	0.124266
SULT1E1	4q13.3	-0.09468	0.064511	0.124289
PTMS	12p13.31	-0.09468	0.064512	0.124289
POLR3G	5q14.3	0.094675	0.064532	0.124315
MAPK14	6p21.31	-0.09467	0.064544	0.124327
ZNHIT6	1p22.3	-0.09466	0.064575	0.124375
HAL	12q23.1	0.094626	0.064669	0.124543
AGR3	7p21.1	0.094623	0.064677	0.124548
MYL10	7q22.1	-0.09462	0.064693	0.124566
ALAS2	Xp11.21	0.094608	0.064722	0.124609
UXT	Xp11.23	-0.0946	0.064734	0.124616
LSM5	7p14.3	0.094601	0.064741	0.124616
PCDH1	5q31.3	0.0946	0.064744	0.124616
SF3B1	2q33.1	0.094594	0.064761	0.124636
PAX7	1p36.13	-0.09456	0.064855	0.124806
TTLL7	1p31.1	-0.09449	0.065066	0.1252
TPTE2P1	13q12.13	-0.09448	0.065093	0.12524
RGS16	1q25.3	-0.09446	0.065142	0.125321
ERMP1	9p24.1	0.094456	0.065153	0.12533
MAG	19q13.12	-0.09443	0.065225	0.125458
C1ORF105	1q24.3	-0.09443	0.065238	0.125468
PLTP	20q13.12	-0.09442	0.065243	0.125468
TLE6	19p13.3	0.094414	0.065275	0.125517
LINC00319	21q22.3	0.094388	0.065348	0.125645
NUAK2	1q32.1	0.094371	0.065398	0.125731
PXMP4	20q11.22	-0.09435	0.065454	0.125825
CDC23	5q31.2	0.094338	0.065492	0.125886
PCED1B	12q13.11	-0.09433	0.06551	0.125899
DUOX1	15q21.1	0.09433	0.065514	0.125899
MS4A1	11q12.2	-0.09433	0.065517	0.125899
OR1F2P	16p13.3	-0.09432	0.065533	0.125914
MUCL1	12q13.2	-0.09432	0.065538	0.125914
DNASE1L3	3p14.3	-0.0943	0.065611	0.126042
ITGAL	16p11.2	-0.09428	0.065646	0.126098
FAM78A	9q34.13	-0.09426	0.065714	0.126217
CACNG4	17q24.2	-0.09423	0.065798	0.126363
FLYWCH2	16p13.3	-0.09423	0.065803	0.126363
PRRT3	3p25.3	-0.09422	0.065834	0.126409
PCA3	9q21.2	0.094215	0.065844	0.126413
FXR1	3q26.33	-0.09421	0.065848	0.126413
CCM2	7p13	0.094209	0.065863	0.12643
LINC01184	5q23.3	-0.0942	0.065888	0.126459
TASP1	20p12.1	-0.0942	0.065891	0.126459
AMPD3	11p15.4	-0.09419	0.065904	0.126471
ZNF625	19p13.2	-0.09419	0.065916	0.126482

ODF2L	1p22.3	-0.09418	0.065946	0.126528
ACE2	Xp22.2	-0.09417	0.065983	0.126587
MRPL18	6q25.3	0.094137	0.066071	0.126744
PEX19	1q23.2	-0.09413	0.066083	0.126749
GPR132	14q32.33	-0.09413	0.066087	0.126749
BCR	22q11.23	0.094122	0.066113	0.126777
PARN	16p13.12	-0.09412	0.066116	0.126777
SNORD116-20	15q11.2	-0.09412	0.06612	0.126777
OR2H1	6p22.1	0.094107	0.066156	0.126835
PSMC3	11p11.2	0.094103	0.066168	0.126846
LGALS12	11q12.3	-0.09409	0.066206	0.126905
SNHG17	20q11.23	0.094055	0.066308	0.12708
RABEP1	17p13.2	-0.09405	0.066312	0.12708
AARS	16q22.1	0.094052	0.066316	0.12708
PPBPP2	4q13.3	0.094048	0.066329	0.127092
SSNA1	9q34.3	0.094044	0.066339	0.127099
HIPK1	1p13.2	0.094039	0.066353	0.127114
DDX3X	Xp11.4	-0.09403	0.066382	0.127158
NKAIN2	6q22.31	-0.09403	0.066394	0.127169
RAF1	3p25.2	0.094015	0.066424	0.127214
HIST1H2AJ	6p22.1	0.094006	0.066451	0.127254
SLC10A3	Xq28	-0.09399	0.066487	0.12731
PRDM2	1p36.21	-0.09396	0.066573	0.127463
C4BPB	1q32.1	0.093956	0.066595	0.127492
FGFR4	5q35.2	0.093943	0.066633	0.127542
FBXL14	12p13.33	0.093943	0.066634	0.127542
TXNDC5	6p24.3	-0.09394	0.066651	0.127563
GNG4	1q42.3	-0.09393	0.066669	0.127585
BRINP3	1q31.1	-0.09393	0.066683	0.127601
CLUU1	12q22	-0.09392	0.066713	0.127645
COL9A1	6q13	-0.0939	0.06676	0.127719
C10ORF82	10q25.3	-0.0939	0.066768	0.127719
DNAJB13	11q13.4	0.093896	0.066771	0.127719
COA7	1p32.3	0.093893	0.06678	0.127724
MIER3	5q11.2	-0.09386	0.066879	0.127902
FAM192A	16q13	0.09383	0.066963	0.128051
RIMBP2	12q24.33	-0.0938	0.067063	0.128218
ISCA2	14q24.3	-0.0938	0.067064	0.128218
PPARG	3p25.2	-0.09377	0.06713	0.128333
ARHGAP30	1q23.3	-0.09375	0.067195	0.128444
PRRG3	Xq28	-0.09374	0.067228	0.128489
UBR1	15q15.2	-0.09374	0.067231	0.128489
WDR91	7q33	-0.09373	0.067246	0.128504
PSG11	19q13.31	-0.09373	0.067252	0.128504
AVPI1	10q24.2	0.093721	0.067282	0.128549
MBP	18q23	-0.09371	0.067308	0.128587
CDV3	3q22.1	0.093669	0.067434	0.128816
EED	11q14.2	0.093658	0.067468	0.128869
KLK3	19q13.33	-0.09365	0.067484	0.128886
SALL3	18q23	-0.09364	0.067507	0.128919
FAM182A	20p11.1	-0.0936	0.067637	0.129154
SNORD116-4	15q11.2	-0.0936	0.067652	0.129158
NAT14	19q13.42	-0.0936	0.067652	0.129158
PPM1E	17q22	-0.09359	0.067674	0.129188
PTPRCAP	11q13.2	-0.09358	0.067696	0.129217
GUCY1A2	11q22.3	-0.09357	0.067714	0.129239
ETV7	6p21.31	0.09357	0.067727	0.129245
METTL27	7q11.23	-0.09357	0.06773	0.129245

AMMECR1L	2q14.3	-0.09356	0.067759	0.129289
TPTE2P6	13q12.12	-0.09355	0.067784	0.129324
KRT35	17q21.2	-0.09354	0.067826	0.129384
MAGEA2	Xq28	-0.09354	0.067829	0.129384
KRTAP10-12	21q22.3	0.093533	0.067836	0.129384
PIGL	17p11.2	0.093531	0.067841	0.129384
TMEM102	17p13.1	-0.09351	0.067893	0.129471
RAPGEF3	12q13.11	0.093507	0.067911	0.129492
NPC1L1	7p13	-0.0935	0.067928	0.129513
CXORF66	Xq27.1	-0.0935	0.067943	0.129518
FLJ23867	1q25.2	0.093496	0.067944	0.129518
UGT3A2	5p13.2	-0.09349	0.067964	0.129543
GALNT6	12q13.13	-0.09349	0.067972	0.129547
TMEM260	14q22.3	-0.09348	0.067999	0.129586
IFIH1	2q24.2	-0.09344	0.068119	0.129802
MZT2B	2q21.1	0.093427	0.068148	0.129845
LINC01622	6p25.3	-0.0934	0.068223	0.129976
CARD9	9q34.3	-0.09335	0.068367	0.130232
WDR63	1p22.3	-0.09335	0.06837	0.130232
SPTBN2	11q13.2	0.093333	0.068428	0.130328
ATG4A	Xq22.3	-0.09333	0.068439	0.130336
ACAP2	3q29	-0.09332	0.06846	0.130364
NIPA1	15q11.2	0.093317	0.068476	0.130382
HSPA6	1q23.3	0.09331	0.068497	0.13041
NSA2	5q13.3	-0.09331	0.068506	0.130416
TLE4	9q21.31	-0.0933	0.068522	0.130426
ROPN1B	3q21.2	0.093301	0.068525	0.130426
SPATA31C1	9q22.1	-0.09326	0.068643	0.130639
RPS13	11p15.1	-0.09325	0.068685	0.130706
PDCL	9q33.2	-0.09324	0.068707	0.130735
MYLPF	16p11.2	-0.09321	0.068783	0.130869
UCN2	3p21.31	0.093211	0.068793	0.130874
COL4A1	13q34	-0.09321	0.068803	0.130876
TCF12	15q21.3	-0.09321	0.068807	0.130876
EEF1B2	2q33.3	-0.0932	0.068816	0.130881
NEB	2q23.3	-0.0932	0.068837	0.130909
ACOT12	5q14.1	0.093185	0.068868	0.130955
RAP2A	13q32.1	-0.09317	0.068917	0.131036
KRT86	12q13.13	-0.09316	0.068942	0.131071
ZNF185	Xq28	-0.09315	0.068979	0.131121
DUT	15q21.1	0.093148	0.068981	0.131121
KLB	4p14	-0.09314	0.06899	0.131126
CLTRN	Xp22.2	-0.09311	0.069083	0.131283
UBE2I	16p13.3	0.093112	0.069087	0.131283
DTHD1	4p14	-0.09311	0.069093	0.131284
ZNF782	9q22.33	0.093067	0.069223	0.131519
TLK2	17q23.2	-0.09306	0.069231	0.13152
FZD6	8q22.3	-0.09306	0.069242	0.131529
TM7SF2	11q13.1	-0.09305	0.069262	0.131555
GSTO1	10q25.1	-0.09304	0.069317	0.131646
SLC4A9	5q31.3	0.093032	0.069329	0.131656
OAT	10q26.13	-0.09299	0.069448	0.13187
NKAP	Xq24	-0.09299	0.069459	0.131879
RPS8	1p34.1	-0.09298	0.069476	0.131898
MYO3B	2q31.1	-0.09296	0.069543	0.132013
ZEB1-AS1	10p11.22	-0.09293	0.06963	0.132166
LOXL3	2p13.1	-0.09292	0.06966	0.132211
IDO1	8p11.21	-0.09291	0.069693	0.132261

ANKRD12	18p11.22	-0.0929	0.069722	0.132303
CCL16	17q12	-0.09285	0.069872	0.132574
SLC22A5	5q31.1	-0.09285	0.069892	0.1326
NCBP2	3q29	-0.09284	0.069902	0.132603
KRTAP13-4	21q22.11	-0.09284	0.069907	0.132603
MMAA	4q31.21	-0.09283	0.069936	0.132645
TPM4	19p13.12-p13.11	-0.09282	0.069955	0.13267
DEFA5	8p23.1	-0.09281	0.069998	0.132739
GLIS1	1p32.3	-0.09279	0.070053	0.13283
OR1J1	9q33.2	0.092789	0.070063	0.132837
ZNF431	19p12	0.092732	0.070236	0.133152
RYR2	1q43	-0.09272	0.070259	0.133184
CIAO2B	16q22.1	0.092715	0.070286	0.133221
SMPDL3B	1p35.3	-0.0927	0.070333	0.133299
CYP4F2	19p13.12	-0.0927	0.070344	0.133306
MTF1	1p34.3	0.092671	0.070421	0.133439
UTP6	17q11.2	0.092663	0.070446	0.133474
CDKN2AIP	4q35.1	-0.09264	0.070502	0.133567
DEF8	16q24.3	0.092635	0.070529	0.133607
ACBD7	10p13	0.092609	0.070608	0.133744
C16ORF91	16p13.3	0.092595	0.070652	0.133813
RADIL	7p22.1	-0.09255	0.070791	0.134065
IL31	12q24.31	-0.09252	0.070893	0.134245
PDCD1	2q37.3	-0.09249	0.070978	0.134383
NEUROD2	17q12	0.092488	0.070979	0.134383
SNORA72	8q22.2	0.09248	0.071005	0.134419
DDX19A	16q22.1	0.092464	0.071052	0.134495
SFXN4	10q26.11	0.092454	0.071083	0.13454
LIPI	21q11.2	0.092451	0.071094	0.134549
FARS2	6p25.1	0.092444	0.071113	0.134572
GLB1L2	11q25	0.092442	0.071112	0.134573
NLGN2	17p13.1	-0.09244	0.071135	0.134579
OSER1	20q13.12	-0.09243	0.071143	0.134579
TMEM64	8q21.3	-0.09243	0.071143	0.134579
POLR3C	1q21.1	0.092428	0.071163	0.134604
SRP9	1q42.12	0.092415	0.071203	0.13466
EPB41L4B	9q31.3	-0.09241	0.071213	0.13466
TAC3	12q13.3	0.09241	0.071219	0.13466
PIK3CD	1p36.22	-0.09241	0.071223	0.13466
GPR158	10p12.1	-0.09241	0.071226	0.13466
RAB32	6q24.3	-0.0924	0.071246	0.134685
HSP90AB4P	15q21.3	0.092374	0.071328	0.134827
SERPINC1	1q25.1	0.092366	0.071353	0.13485
EID2	19q13.2	-0.09236	0.071368	0.13485
RPP38	10p13	0.092361	0.071368	0.13485
GRK4	4p16.3	-0.09236	0.071374	0.13485
HNRNPK	9q21.32	0.092359	0.071374	0.13485
FAM241A	4q25	-0.09235	0.071416	0.134906
RSU1P2	10q11.21	0.092346	0.071417	0.134906
ZNF684	1p34.2	-0.09232	0.071482	0.135016
CNOT7	8p22	-0.0923	0.071567	0.135163
UCP2	11q13.4	-0.09229	0.071592	0.135198
ATM	11q22.3	-0.09228	0.071614	0.135226
KLHL20	1q25.1	-0.09226	0.07167	0.13532
E2F6	2p25.1	-0.09226	0.071684	0.135333
YJU2	19p13.3	0.09225	0.071712	0.135373
MROH2B	5p13.1	-0.09223	0.071783	0.135494
ITSN2	2p23.3	-0.09221	0.071832	0.135575

USP14	18p11.32	0.092191	0.071895	0.13568
ZNF738	19p12	0.092186	0.071909	0.135694
NLRP4	19q13.43	-0.09214	0.072038	0.135924
OR6C4	12q13.2	-0.09214	0.07205	0.135927
LOC728613	5p15.33	-0.09214	0.072053	0.135927
MIEF1	22q13.1	0.092137	0.072061	0.13593
FAM50A	Xq28	0.092097	0.072187	0.136155
TMEM92	17q21.33	0.092085	0.072225	0.136203
RBP3	10q11.22	0.092083	0.072229	0.136203
ANGPTL3	1p31.3	0.092082	0.072233	0.136203
CD300E	17q25.1	-0.09207	0.072263	0.136247
MIMT1	19q13.43	-0.09206	0.072286	0.136273
ACSL3	2q36.1	0.092063	0.07229	0.136273
NECTIN2	19q13.32	0.092055	0.072316	0.136308
C6ORF203	6q21	0.092045	0.072347	0.136354
RANGRF	17p13.1	-0.09203	0.072388	0.136407
AMDHD2	16p13.3	-0.09203	0.072389	0.136407
CASR	3q13.33-q21.1	-0.09203	0.0724	0.136414
BORCS8	19p13.11	0.091984	0.072538	0.136662
FNIP1	5q31.1	-0.09197	0.072571	0.136712
C16ORF71	16p13.3	-0.09197	0.072582	0.136719
AP3S1	5q22.3-q23.1	-0.09197	0.072595	0.136731
MMGT1	Xq26.3	-0.09195	0.072646	0.136814
NT5C	17q25.1	0.09194	0.072676	0.136857
FAM199X	Xq22.2	0.091936	0.072689	0.13687
EIF3CL	16p12.1	0.091926	0.072719	0.136914
GFRA3	5q31.2	-0.09191	0.07276	0.136969
COX18	4q13.3	-0.09191	0.072762	0.136969
MCCC2	5q13.2	0.091908	0.072777	0.136983
LCN12	9q34.3	0.091901	0.072797	0.137009
PAK1	11q13.5-q14.1	-0.0919	0.07281	0.13702
MYLK2	20q11.21	0.091894	0.072819	0.137023
SPANXB1	Xq27.1	-0.09188	0.072856	0.137081
FAM184A	6q22.31	-0.09187	0.072896	0.137136
OAS1	12q24.13	-0.09187	0.072899	0.137136
GPANK1	6p21.33	-0.09186	0.072931	0.137183
NUBP2	16p13.3	0.091834	0.073006	0.137311
FAHD2CP	2q11.2	-0.09183	0.073018	0.137321
TM4SF5	17p13.2	-0.09183	0.073034	0.137339
RPL31	2q11.2	-0.09182	0.073057	0.137369
PPCDC	15q24.2	0.091796	0.073127	0.137487
LINC01547	21q22.3	-0.09179	0.073146	0.137511
IL6R	1q21.3	-0.09178	0.073169	0.137529
PI4K2A	10q24.2	-0.09178	0.073175	0.137529
VRK2	2p16.1	-0.09178	0.073177	0.137529
TRIML2	4q35.2	-0.09176	0.073254	0.137659
MARCKSL1	1p35.1	-0.09175	0.073259	0.137659
RHEB	7q36.1	-0.09174	0.073295	0.137713
CBY1	22q13.1	-0.09173	0.073326	0.137753
C6ORF163	6q15	0.091731	0.073331	0.137753
ZPBP	7p12.2	-0.09173	0.073348	0.137753
TUT4	1p32.3	-0.09173	0.073348	0.137753
ZNF679	7q11.21	-0.09172	0.073351	0.137753
ATP9B	18q23	-0.09172	0.073359	0.137755
AUH	9q22.31	-0.0917	0.073419	0.137856
HSPA1L	6p21.33	-0.0917	0.073431	0.137864
RARRES1	3q25.32	-0.09167	0.073509	0.137999
DUSP18	22q12.2	-0.09166	0.073567	0.138095

HDDC2	6q22.31	-0.09165	0.073591	0.138126
KNG1	3q27.3	-0.09161	0.073707	0.138331
KLHL29	2p24.1	-0.0916	0.073744	0.138387
DCANP1	5q31.1	-0.09158	0.073812	0.138503
LTBP4	19q13.2	0.091563	0.07386	0.138572
RPEL1	10q24.33	0.091562	0.073863	0.138572
BTBD8	1p22.1	-0.09153	0.073955	0.138732
RILPL1	12q24.31	-0.09152	0.073993	0.138789
DUSP9	Xq28	0.091507	0.07404	0.138865
TBX10	11q13.2	-0.09149	0.074085	0.138929
MYO3A	10p12.1	-0.09149	0.074088	0.138929
ENDOV	17q25.3	-0.09144	0.074245	0.13921
CD8A	2p11.2	-0.09142	0.074314	0.139327
CCDC42	17p13.1	-0.09141	0.074362	0.139403
HOXA11	7p15.2	0.0914	0.074379	0.139421
STAG3	7q22.1	-0.09139	0.074403	0.139455
VN1R1	19q13.43	0.091379	0.074445	0.139519
ZNF433	19p13.2	-0.09137	0.074467	0.139548
PIP5K1A	1q21.3	0.091362	0.0745	0.139596
ZNF350	19q13.41	-0.09134	0.074555	0.139679
ATP1A1-AS1	1p13.1	-0.09134	0.074558	0.139679
PRR3	6p21.33	0.091324	0.074622	0.139787
UBN1	16p13.3	0.09131	0.074665	0.139853
CSNK1A1	5q32	-0.0913	0.074697	0.139901
LINC00696	3p21.2	0.091272	0.074786	0.140055
OR10J3	1q23.2	-0.09122	0.074969	0.140383
LHFPL2	5q14.1	-0.0912	0.075028	0.140481
SNORA52	11p15.5	0.091177	0.075092	0.140587
PPP1R14B	11q13.1	0.091099	0.075341	0.141041
AGRN	1p36.33	0.091085	0.075387	0.141113
SH2D4A	8p21.3	0.091068	0.075441	0.141201
MAP10	1q42.2	-0.09106	0.075483	0.141267
GRM5	11q14.2-q14.3	-0.09103	0.075559	0.141396
OR2A4	6q23.2	0.091026	0.075577	0.141416
NDEL1	17p13.1	-0.09098	0.075724	0.141677
CNN2	19p13.3	0.090978	0.07573	0.141677
LOC100271832	2p22.3	0.090974	0.075744	0.141689
B3GLCT	13q12.3	-0.09096	0.075795	0.141772
C1ORF174	1p36.32	0.090941	0.075852	0.141865
FAM182B	20p11.1	-0.09092	0.075924	0.141984
NR6A1	9q33.3	0.090915	0.075937	0.141984
APOH	17q24.2	-0.09091	0.07594	0.141984
B4GALT4	3q13.32	-0.09091	0.075944	0.141984
HMG20A	15q24.3	-0.09089	0.076002	0.142079
ZMYM1	1p34.3	0.090888	0.076024	0.142108
CPLX4	18q21.32	-0.09087	0.076073	0.142184
TBC1D3C	17q12	0.090862	0.076108	0.142238
ZNF418	19q13.43	-0.09085	0.076145	0.142293
LRRC20	10q22.1	0.090835	0.076196	0.142374
CYP2C9	10q23.33	0.090831	0.076209	0.142386
ATP13A3	3q29	0.090828	0.076217	0.142387
LENEP	1q21.3	0.090797	0.076319	0.142565
KATNA1	6q25.1	0.090787	0.076351	0.142612
MNAT1	14q23.1	-0.09078	0.076381	0.142654
LRRN4	20p12.3	-0.09077	0.076391	0.14266
DGCR6L	22q11.21	-0.09075	0.076476	0.142804
NBPF10	1q21.1	0.090725	0.076553	0.142936
PEG10	7q21.3	-0.09072	0.076571	0.142956



UQCRH	1p33	0.090695	0.07665	0.143089
TRIM56	7q22.1	0.090664	0.076751	0.143265
KLHL33	14q11.2	0.090658	0.076771	0.143289
KRBOX4	Xp11.3	-0.09063	0.07685	0.143424
IQUB	7q31.32	-0.09063	0.076868	0.143443
RETNLB	3q13.13	-0.09061	0.076916	0.143515
FAR2P1	2q21.1	-0.09061	0.07692	0.143515
PUS7L	12q12	0.090594	0.07698	0.143613
CLCN6	1p36.22	0.090579	0.07703	0.143683
MIS18BP1	14q21.2	0.090578	0.077032	0.143683
CHMP4A	14q12	-0.09057	0.077045	0.143694
CHRM1	11q12.3	0.090565	0.077077	0.14374
CES5A	16q12.2	-0.09056	0.077107	0.143783
LOC148709	1q32.1	0.090552	0.07712	0.143793
NCOR1P1	20p11.1	-0.09053	0.077191	0.143906
NTSR2	2p25.1	0.090528	0.077199	0.143906
TMEM63C	14q24.3	-0.09053	0.077203	0.143906
ARMC12	6p21.31	0.090521	0.077219	0.143906
PHTF1	1p13.2	-0.09052	0.077219	0.143906
PSD4	2q14.1	0.09052	0.077224	0.143906
P2RX1	17p13.2	-0.0905	0.077277	0.143993
PLAGL2	20q11.21	-0.0905	0.077304	0.144021
MYT1L	2p25.3	-0.09049	0.077309	0.144021
SLC6A1	3p25.3	-0.09049	0.077314	0.144021
CASP8	2q33.1	-0.09048	0.077362	0.144085
PELP1	17p13.2	0.090478	0.077363	0.144085
SH3BGRL2	6q14.1	-0.09047	0.07738	0.144092
NPRL2	3p21.31	0.090472	0.077381	0.144092
MSI2	17q22	0.090455	0.077437	0.144182
SYP	Xp11.23	-0.09044	0.077496	0.14428
CAPN1	11q13.1	0.090434	0.077506	0.144285
TMEM51	1p36.21	-0.09041	0.077573	0.144395
LINC00205	21q22.3	0.090386	0.077666	0.144555
SH2D6	2p11.2	0.090378	0.077692	0.144591
MAEA	4p16.3	0.09036	0.077751	0.144687
EYS	6q12	-0.09035	0.077796	0.144758
MAPT-AS1	17q21.31	0.090323	0.077871	0.144884
CMTM8	3p22.3	-0.09029	0.077977	0.145067
UNCX	7p22.3	0.09028	0.078013	0.145121
KRT25	17q21.2	-0.09026	0.078072	0.145216
OR5E1P	11p15.4	0.090233	0.07817	0.145385
CCK	3p22.1	0.090212	0.078238	0.145499
SLC6A17	1p13.3	-0.09021	0.078257	0.14552
BMPR1A	10q23.2	-0.0902	0.078283	0.145554
C1ORF198	1q42.2	0.090189	0.078318	0.145595
ASPHD2	22q12.1	0.090188	0.078319	0.145595
PXK	3p14.3	-0.09018	0.078341	0.145622
DMAC1	9p24.1	-0.09018	0.078348	0.145622
SOWAHA	5q31.1	-0.09015	0.078461	0.145819
DAB1	1p32.2	-0.09013	0.078508	0.145892
ACBD3	1q42.12	0.090124	0.078531	0.145922
CEP83-DT	12q22	0.090119	0.078548	0.145939
PSMC4	19q13.2	0.090112	0.078574	0.145974
MUC20	3q29	-0.0901	0.078619	0.146044
EDARADD	1q42.3-q43	-0.09008	0.078682	0.146148
FAM162B	6q22.1	-0.09006	0.078748	0.146256
SLC35G6	17p13.1	0.090057	0.078756	0.146259
VPS37A	8p22	-0.09004	0.078829	0.146379

ANKRD30BL	2q21.2	0.09003	0.078846	0.146398
MIAT	22q12.1	0.090027	0.078857	0.146405
EN2	7q36.3	0.090011	0.07891	0.146489
TPO	2p25.3	-0.09001	0.078928	0.146509
FBLL1	5q34	-0.08999	0.078978	0.146589
FAM157A	3q29	0.089953	0.079103	0.146807
TMEM70	8q21.11	-0.08994	0.079131	0.146846
TEAD3	6p21.31	0.089928	0.079188	0.146937
VPS72	1q21.3	0.089913	0.079235	0.147012
RCAN1	21q22.12	-0.08989	0.07931	0.147138
TTBK2	15q15.2	-0.08988	0.079339	0.147177
TSC22D2	3q25.1	-0.08988	0.079349	0.147183
TEKT2	1p34.3	-0.08985	0.079453	0.147361
TSPO2	6p21.1	0.089842	0.079474	0.147386
SNPH	20p13	-0.08983	0.079532	0.147471
IER2	19p13.13	0.089824	0.079535	0.147471
FAM151A	-	0.089796	0.07963	0.147634
ALG5	13q13.3	-0.08978	0.079668	0.147691
TMEM170A	16q23.1	0.089777	0.079695	0.147728
FAM98B	15q14	0.089763	0.07974	0.147797
PAQR3	4q21.21	-0.08976	0.079766	0.147831
OR51T1	11p15.4	-0.08975	0.07978	0.147844
OSBPL11	3q21.2	-0.08973	0.079841	0.147944
AXIN2	17q24.1	-0.08971	0.079915	0.148068
STAT4	2q32.2-q32.3	-0.0897	0.07994	0.14809
PGM3	6q14.1	0.089703	0.079942	0.14809
SYT10	12p11.1	-0.08969	0.080004	0.148191
TAAR6	6q23.2	-0.08968	0.080018	0.148203
ROR1	1p31.3	-0.08967	0.080041	0.148232
CLMN	14q32.13	0.089668	0.08006	0.148253
TMEM14B	6p24.2	-0.08966	0.080077	0.148272
EEA1	12q22	-0.08963	0.080189	0.148464
PPM1B	2p21	-0.08956	0.08044	0.148915
SNORD10	17p13.1	0.089536	0.080507	0.149026
TTC26	7q34	0.089522	0.080556	0.149103
POC5	5q13.3	0.089495	0.080647	0.149257
EIF2AK2	2p22.2	0.089489	0.080667	0.149281
ZFAND3	6p21.2	-0.08949	0.080674	0.149281
CIB1	15q26.1	0.089471	0.080729	0.149367
LRRIQ4	3q26.2	0.089441	0.08083	0.149541
RASGRP1	15q14	-0.08942	0.080905	0.149665
LINC02347	12q24.32	0.089389	0.081009	0.149845
IFNB1	9p21.3	0.089384	0.081027	0.149864
MAPT	17q21.31	-0.08938	0.081036	0.149866
SERPINB9	6p25.2	0.089378	0.081046	0.149872
ZDHHC16	10q24.1	0.089376	0.081054	0.149872
TNNT3	11p15.5	-0.08934	0.081179	0.15009
CNTFR-AS1	9p13.3	0.089327	0.081221	0.150153
MROH9	1q24.3	-0.0893	0.081319	0.150321
ZSCAN22	19q13.43	0.089279	0.081386	0.15043
SMAD2	18q21.1	-0.08925	0.081476	0.150583
SQSTM1	5q35.3	-0.08923	0.081547	0.150693
GAL3ST1	22q12.2	0.089231	0.08155	0.150693
DST	6p12.1	-0.08922	0.081578	0.150729
CRABP2	1q23.1	-0.08922	0.081603	0.150762
ZNF83	19q13.41	0.089196	0.081668	0.150869
PEX7	6q23.3	-0.08919	0.081687	0.15089
PLD2	17p13.2	-0.08919	0.081698	0.150892

CXORF58	Xp22.11	-0.08919	0.081703	0.150892
CISD2	4q24	-0.08915	0.081826	0.151105
NPR2	9p13.3	-0.08915	0.081841	0.151118
PTPRN2	7q36.3	-0.08913	0.081891	0.151197
PPM1L	3q25.33-q26.1	-0.08912	0.081916	0.15123
AP2B1	17q12	0.08912	0.081931	0.151243
THNSL2	2p11.2	-0.08911	0.081968	0.151284
WIPF3	7p14.3	-0.08911	0.081968	0.151284
SPG7	16q24.3	0.089084	0.082056	0.151422
CYP11B1	8q24.3	0.089083	0.082058	0.151422
NUP42	7p15.3	0.089078	0.082077	0.151431
TMEM67	8q22.1	-0.08908	0.082079	0.151431
CLBA1	14q32.33	0.089004	0.08233	0.151873
RHBDL2	1p34.3	0.089004	0.082333	0.151873
EMC1	1p36.13	0.088997	0.082356	0.151894
TAS2R1	5p15.31	-0.089	0.08236	0.151894
MRM3	17p13.3	0.08899	0.082379	0.151916
NUMBL	19q13.2	-0.08898	0.082414	0.151967
FAM25A	10q23.2	0.088962	0.082476	0.152067
PRSS53	16p11.2	0.088956	0.082497	0.152091
UNC79	14q32.12	-0.08894	0.082548	0.152159
OR2L3	1q44	-0.08894	0.082549	0.152159
SCARNA15	15q25.2	0.088915	0.082638	0.152309
OR911	11q12.1	0.088907	0.082668	0.15234
PRKCG	19q13.42	0.088906	0.08267	0.15234
EEPD1	7p14.2	-0.08889	0.082715	0.152409
STK17B	2q32.3	-0.08888	0.082746	0.152451
RASA2	3q23	0.088882	0.082755	0.152454
OCM2	7q21.3	0.088878	0.082767	0.152463
FKBP9P1	7p11.2	-0.08886	0.082827	0.152559
ZNF16	8q24.3	-0.08884	0.08291	0.152694
ACOX3	4p16.1	-0.08884	0.082915	0.152694
GPR153	1p36.31	-0.08883	0.082933	0.152712
FAAH2	Xp11.21	-0.08881	0.083004	0.15283
PLOD3	7q22.1	0.088796	0.083055	0.152908
PANK4	1p36.32	0.088791	0.08307	0.152922
VWA2	10q25.3	-0.08879	0.083086	0.152934
GATB	4q31.3	-0.08879	0.083091	0.152934
CEP76	18p11.21	0.088778	0.083115	0.152964
C3P1	19p13.2	0.088755	0.083197	0.153099
STAM	10p12.33	0.088751	0.083211	0.153112
TPMT	6p22.3	0.088747	0.083225	0.153123
TMC5	16p12.3	0.088719	0.083321	0.153276
VPS37C	11q12.2	0.088718	0.083323	0.153276
AGK	7q34	0.088695	0.083406	0.153414
GLDC	9p24.1	-0.08868	0.083455	0.15349
TRAK1	3p22.1	0.088663	0.083518	0.153592
LILRB3	19q13.42	-0.08864	0.083601	0.15373
PREP	6q21	0.088635	0.083615	0.153734
HPD	12q24.31	-0.08863	0.083619	0.153734
C1ORF194	1p13.3	0.088632	0.083626	0.153734
BAMBI	10p12.1	-0.08861	0.083704	0.153864
GTF2H3	12q24.31	0.088595	0.083755	0.153943
CXCR3	Xq13.1	-0.08858	0.083825	0.15405
INTS6	13q14.3	0.088572	0.083836	0.15405
NLRP3	1q44	-0.08857	0.083836	0.15405
PHKA1	Xq13.1	0.088552	0.083905	0.154162
TMEM247	2p21	-0.08854	0.083959	0.154247

TCN1	11q12.1	0.088525	0.084001	0.15431
FUNDC2P2	2p11.2	-0.08852	0.084028	0.154346
SNHG11	20q11.23	-0.08851	0.084061	0.154377
OTOP1	4p16.3	0.088507	0.084064	0.154377
HMGXB4	22q12.3	0.088504	0.084075	0.154377
PRAMEF10	1p36.21	-0.0885	0.084076	0.154377
ROCK1	18q11.1	-0.08849	0.084136	0.154473
VPS37B	12q24.31	0.08848	0.084161	0.154505
NBPF3	1p36.12	-0.08846	0.084213	0.154586
NXF1	11q12.3	0.088449	0.084269	0.154664
AATK	17q25.3	0.088448	0.084271	0.154664
WDR82	3p21.2	-0.08844	0.084287	0.154679
NSDHL	Xq28	0.088404	0.084429	0.154918
TAF1B	2p25.1	-0.0884	0.084432	0.154918
ZNF184	6p22.1	0.088391	0.084471	0.154975
IMPACT	18q11.2	-0.08839	0.08449	0.154991
AP1AR	4q25	-0.08838	0.084495	0.154991
DUSP23	1q23.2	0.08836	0.084584	0.155139
RPS15A	16p12.3	-0.08835	0.084612	0.155176
COX6B2	19q13.42	0.088336	0.084669	0.155266
SSBP2	5q14.1	-0.08831	0.08475	0.1554
CCZ1	7p22.1	-0.0883	0.084802	0.155482
TRUB1	10q25.3	-0.08828	0.084849	0.155555
BPIFA1	20q11.21	-0.08828	0.084873	0.155584
AQP12B	2q37.3	0.088272	0.084892	0.155604
EXD1	15q15.1	-0.08826	0.084922	0.155645
MUC5B	11p15.5	0.088242	0.084999	0.155772
GPR89B	1q21.2	0.088232	0.085034	0.155822
TBP	6q27	0.088229	0.085047	0.155832
KRTAP4-9	17q21.2	0.088221	0.085073	0.155865
CRB3	19p13.3	0.088176	0.085236	0.156149
LOC284009	17p13.3	0.088167	0.085267	0.156191
IGFBP1	7p12.3	-0.08815	0.085318	0.156271
ARHGEF37	5q32	-0.08814	0.085349	0.156307
SRCIN1	17q12	0.088143	0.085353	0.156307
RELCH	18q21.33	0.08814	0.085363	0.156311
CYP4B1	1p33	-0.08814	0.085375	0.156317
ADAM30	1p12	0.088113	0.085459	0.156458
PLEKHA2	8p11.22	-0.08811	0.085485	0.156491
UGT1A10	2q37.1	-0.08809	0.085548	0.156588
BRMS1	11q13.2	0.088084	0.085561	0.156588
LAGE3	Xq28	0.088084	0.085562	0.156588
OR9K2	12q13.2	0.08808	0.085576	0.1566
RPL29	3p21.2	-0.08807	0.085606	0.156641
OLFM3	1p21.1	-0.08806	0.085633	0.156675
ADHFE1	8q13.1	-0.08804	0.085719	0.156796
OR2Z1	19p13.2	-0.08804	0.085722	0.156796
OR2AK2	1q44	0.088039	0.085722	0.156796
NLE1	17q12	0.088026	0.085768	0.156865
NBPF4	1p13.3	0.088016	0.085806	0.156921
FAM83F	22q13.1	0.088013	0.085817	0.156926
ACTL7B	9q31.3	0.088004	0.085849	0.15697
LOC392196	8p23.1	-0.088	0.085857	0.156971
LRRC47	1p36.32	0.087981	0.085932	0.157093
BLVRA	7p13	-0.08797	0.085967	0.157144
B4GALT2	1p34.1	0.087944	0.086064	0.157305
RMND1	6q25.1	-0.08794	0.086083	0.157326
HYAL3	3p21.31	0.087922	0.086141	0.157419

GLYAT	11q12.1	-0.08792	0.086152	0.157424
GFRAL	6p12.1	-0.0879	0.086212	0.157513
PCGF6	10q24.33	0.087901	0.086216	0.157513
LYPLAL1	1q41	-0.0879	0.086237	0.157537
TMLHE	Xq28	-0.08788	0.086283	0.157588
COX5B	2q11.2	0.087882	0.086286	0.157588
EPX	17q22	0.087881	0.086289	0.157588
SERGEF	11p15.1	-0.08787	0.086317	0.157624
C5ORF64	5q12.1	-0.08786	0.086365	0.157698
MZB1	5q31.2	-0.08785	0.08641	0.157767
CDKL3	5q31.1	-0.0878	0.086582	0.158059
ACBD5	10p12.1	0.087798	0.086586	0.158059
ZGPAT	20q13.33	0.087787	0.086627	0.158119
FAM151B	5q14.1	-0.08778	0.086665	0.158174
CRACR2A	12p13.32	0.08777	0.086689	0.158202
NEU3	11q13.4	0.087756	0.086739	0.15828
NBPF15	1q21.1	0.08775	0.086758	0.158301
CHP2	16p12.2	-0.08775	0.086773	0.158313
RASA4CP	7p13	0.087738	0.086804	0.158351
SNORD89	2q11.2	0.087736	0.086811	0.158351
DCT	13q32.1	-0.08773	0.086817	0.158351
SDHAF1	19q13.12	0.087708	0.08691	0.158505
ZNF250	8q24.3	-0.08767	0.08706	0.158765
OR51B2	11p15.4	0.087644	0.087144	0.158903
CHGA	14q32.12	-0.0876	0.087314	0.159198
RGS8	1q25.3	-0.08758	0.087359	0.159264
LRRC75A	17p11.2	-0.08758	0.087366	0.159264
KRTAP21-2	21q22.11	0.087574	0.087395	0.159302
LPAR2	19p13.11	0.08756	0.087447	0.15937
CYP1A2	15q24.1	-0.08756	0.087448	0.15937
ATP6V0E2	7q36.1	0.087553	0.087474	0.159402
RETSAT	2p11.2	-0.08754	0.087517	0.159466
RPL13AP3	14q22.3	-0.08752	0.087575	0.159558
GDPGP1	15q26.1	0.087517	0.087602	0.159593
C17ORF102	17q12	-0.08751	0.087615	0.159603
LRRC37BP1	17q11.2	-0.08751	0.087624	0.159605
EMID1	22q12.2	-0.0875	0.087652	0.15964
GRSF1	4q13.3	0.087484	0.087723	0.159755
BRD1	22q13.33	0.08748	0.087738	0.159769
DDX6	11q23.3	-0.08747	0.087763	0.159786
C1ORF229	1q44	0.087473	0.087764	0.159786
BCAR1	16q23.1	0.087449	0.087851	0.159929
COMMD5	8q24.3	-0.08745	0.087859	0.159929
ZNF154	19q13.43	-0.08744	0.087868	0.159929
AHNAK2	14q32.33	-0.08744	0.087874	0.159929
LRRC37A	17q21.31	0.08744	0.087884	0.159932
MAP2K6	17q24.3	-0.08744	0.087901	0.159949
RABGGTA	14q12	0.087422	0.087948	0.16002
TCF7	5q31.1	-0.0874	0.088021	0.160138
MIF	22q11.23	0.08739	0.088067	0.160206
ELFN1	7p22.3	-0.08739	0.088077	0.16021
ANKIB1	7q21.2	-0.08738	0.088108	0.160253
FMNL3	12q13.12	-0.08737	0.088148	0.16031
RNASE12	14q11.2	0.087364	0.08816	0.160318
LIPK	10q23.31	-0.08736	0.088175	0.16033
ISYNA1	19p13.11	-0.08735	0.088221	0.160399
ISL2	15q24.3	-0.08732	0.088336	0.160594
ATAD2B	2p24.1-p23.3	0.087308	0.088367	0.160636

RMC1	18q11.2	0.0873	0.088394	0.160671
SHC2	19p13.3	-0.0873	0.088404	0.160673
PRTFDC1	10p12.1	0.087289	0.088437	0.160719
ANKRD45	1q25.1	-0.08728	0.088466	0.160757
KCNN2	5q22.3	-0.08727	0.088507	0.160817
MTDH	8q22.1	-0.08726	0.08856	0.160895
LANCL2	7p11.2	-0.08725	0.088568	0.160895
VWDE	7p21.3	-0.08725	0.088574	0.160895
PHAX	5q23.2	-0.08724	0.088613	0.160951
HS3ST3B1	17p12	-0.08724	0.088622	0.160953
OR14I1	1q44	-0.08722	0.088677	0.161039
NUDT18	8p21.3	-0.0872	0.088755	0.161165
TYMP	22q13.33	-0.0872	0.088773	0.161175
SLAIN2	4p11	-0.08719	0.088783	0.161175
PHF2P1	13q12.11	0.087194	0.088784	0.161175
WDR33	2q14.3	0.087185	0.088816	0.161216
AKR1C1	10p15.1	-0.08718	0.088823	0.161216
CHRNA4	20q13.33	-0.08716	0.088908	0.161355
VPS45	1q21.2	0.087146	0.088961	0.161437
COA3	17q21.2	-0.08714	0.088994	0.161472
ENC1	5q13.3	0.087136	0.088996	0.161472
CHAC1	15q15.1	0.087124	0.089043	0.161542
ICA1L	2q33.2	-0.08711	0.089089	0.161611
IL17RB	3p21.1	0.087088	0.089175	0.161752
TMEM184A	7p22.3	0.087064	0.089262	0.161895
SPO11	20q13.31	-0.08706	0.089277	0.161908
TBC1D13	9q34.11	0.087051	0.089312	0.161957
ATP5MF	7q22.1	0.087045	0.089333	0.16198
NIPSNAP3A	9q31.1	-0.08702	0.089424	0.162123
DRG2	17p11.2	-0.08702	0.08943	0.162123
OPN3	1q43	-0.08702	0.089436	0.162123
COQ10A	12q13.3	-0.08701	0.089444	0.162123
FAM90A7P	8p23.1	0.087005	0.08948	0.162173
CEP104	1p36.32	0.087001	0.089497	0.162189
HCCAT5	16q22.3	-0.08695	0.089669	0.162487
SON	21q22.11	0.086939	0.089724	0.162571
DDX52	17q12	-0.08693	0.089752	0.162608
WASHC2A	10q11.23	0.086927	0.089768	0.162616
RBBP8	18q11.2	0.086926	0.089773	0.162616
GRAPL	17p11.2	-0.08691	0.089827	0.1627
SMDT1	22q13.2	-0.08691	0.089844	0.162716
TUBA8	22q11.21	0.086902	0.089862	0.162734
SEMA4A	1q22	-0.08689	0.089905	0.162796
KHDRBS2	6q11.1	-0.08687	0.089988	0.162931
CCDC30	1p34.2	0.086854	0.09004	0.163011
OR7A10	19p13.12	-0.08685	0.090073	0.163048
TNFRSF10D	8p21.3	-0.08684	0.090076	0.163048
ELOA2	18q21.1	0.086791	0.090273	0.16339
ATP6V1G3	1q31.3	0.08677	0.090351	0.163506
SLC9A3	5p15.33	0.08677	0.090354	0.163506
AKIP1	11p15.4	-0.08677	0.090368	0.163516
NET1	10p15.1	-0.08676	0.090403	0.163565
PRSS21	16p13.3	-0.08673	0.090518	0.163757
DMBT1P1	10q26.13	0.086719	0.090542	0.163787
DDX42	17q23.3	0.086666	0.09074	0.164129
ARPC4	3p25.3	-0.08666	0.090757	0.164147
PAXIP1-AS2	7q36.2	-0.08665	0.090787	0.164186
ACVRL1	12q13.13	-0.08665	0.09081	0.164212

HCCS	Xp22.2	-0.08664	0.090855	0.164269
WDR12	2q33.2	0.086633	0.090864	0.164269
TAS2R13	12p13.2	0.086633	0.090866	0.164269
DDX5	17q23.3	-0.08662	0.090894	0.164305
AGBL4	1p33	0.086615	0.09093	0.164356
POLR2J2	7q22.1	-0.08661	0.090952	0.16438
VPS51	11q13.1	-0.08658	0.091051	0.164543
DLGAP4	20q11.23	-0.08658	0.091059	0.164543
NFAT5	16q22.1	-0.08658	0.091076	0.16456
USF2	19q13.12	0.086566	0.091115	0.164616
CPEB3	10q23.32	-0.08656	0.091131	0.164629
SNORA78	16p13.3	0.086542	0.091206	0.16475
PPDPFL	8q11.21	-0.08653	0.091235	0.164785
C9ORF131	9p13.3	0.086532	0.091242	0.164785
LINC00520	14q22.3	0.086518	0.091297	0.164869
HRNR	1q21.3	-0.08651	0.091333	0.164921
SHH	7q36.3	-0.0865	0.091368	0.164956
C14ORF39	14q23.1	-0.0865	0.09137	0.164956
ZNF227	19q13.31	-0.08649	0.091396	0.164981
MYO7A	11q13.5	-0.08649	0.0914	0.164981
C12ORF75	12q23.3	0.086482	0.091431	0.165023
LOC286359	9q22.33	0.086453	0.091539	0.165203
LY6G6F	6p21.33	-0.08643	0.09164	0.165369
CYC1	8q24.3	0.0864	0.091739	0.165534
LOC441455	9q22.33	-0.08639	0.091763	0.165561
LINC00599	8p23.1	0.08639	0.091779	0.165561
MYO1F	19p13.2	-0.08639	0.09178	0.165561
CWC25	17q12	0.086387	0.091787	0.165561
NBN	8q21.3	-0.08637	0.091854	0.165659
RPS6KA2	6q27	-0.08637	0.091858	0.165659
ATOX1	5q33.1	-0.08635	0.091933	0.165779
NICN1	3p21.31	-0.08634	0.091967	0.165826
KIAA1671	22q11.23	0.086336	0.09198	0.165834
SEC22C	3p22.1	-0.08632	0.09203	0.165905
NSD3	8p11.23	0.086321	0.092036	0.165905
TMPRSS12	12q13.12	-0.08629	0.09217	0.166131
ANPEP	15q26.1	-0.08628	0.092202	0.166174
PANK2	20p13	-0.08627	0.09223	0.16621
FAM92A	8q22.1	-0.08627	0.092244	0.16622
PITX3	10q24.32	-0.08626	0.092274	0.16626
MSGN1	2p24.2	-0.08625	0.092294	0.166281
OGFRL1	6q13	-0.08625	0.092307	0.166288
APTX	9p21.1	0.086223	0.09241	0.166452
ABCB11	2q31.1	0.086222	0.092414	0.166452
LSM3	3p25.1	0.08621	0.092458	0.166502
TCTEX1D2	3q29	0.08621	0.092459	0.166502
UBQLN1	9q21.32 9q21.2-q21.3	0.086199	0.092499	0.166561
PRSS42P	3p21.31	-0.08619	0.092524	0.16659
LDHAL6B	15q22.2	0.086181	0.092567	0.166633
SPANXN4	Xq27.3	-0.08618	0.092569	0.166633
BTF3	5q13.2	-0.08618	0.092573	0.166633
SLC43A3	11q12.1	-0.08616	0.092665	0.166783
MED27	9q34.13	0.086149	0.09269	0.166814
MAT1A	10q22.3	-0.08613	0.092746	0.1669
KCTD6	3p14.3	0.08611	0.092837	0.167048
GIPC1	19p13.12	0.086098	0.092885	0.16712
TEX101	19q13.31	0.086079	0.092958	0.167236
PPARA	22q13.31	0.086064	0.093013	0.167295

STN1	10q24.33	-0.08606	0.093016	0.167295
SCARNA11	12p13.31	0.086062	0.093021	0.167295
MTNR1B	11q14.3	-0.08606	0.093024	0.167295
VIRMA	8q22.1	-0.08604	0.093086	0.167391
SIGLECL1	19q13.41	-0.08601	0.093209	0.167597
PUM2	2p24.1	-0.086	0.093262	0.167651
FICD	12q23.3	-0.086	0.093263	0.167651
NSMCE4A	10q26.13	0.085996	0.093272	0.167651
GBX1	7q36.1	0.085994	0.093281	0.167651
RETN	19p13.2	-0.08599	0.093281	0.167651
ATMIN	16q23.2	-0.08598	0.093318	0.167703
INSL6	9p24.1	0.085982	0.093328	0.167706
ADAMDEC1	8p21.2	-0.08598	0.093339	0.167711
AHRR	5p15.33	0.085945	0.093468	0.167927
G6PC3	17q21.31	0.085938	0.093496	0.167962
LEPROTL1	8p12	-0.08593	0.093508	0.167969
MCHR1	22q13.2	-0.08593	0.093537	0.167991
GPR119	Xq26.1	-0.08592	0.093545	0.167991
SIDT1	3q13.2	0.085925	0.093545	0.167991
C19ORF73	19q13.33	0.08592	0.093563	0.168007
AKAP5	14q23.3	-0.08592	0.093579	0.168009
KLHDC9	1q23.3	0.085914	0.093589	0.168009
SLC25A4	4q35.1	-0.08591	0.093589	0.168009
MESTIT1	7q32.2	0.085907	0.093613	0.168031
TMEM268	9q32	0.085906	0.093618	0.168031
SLC25A15	13q14.11	0.085899	0.093644	0.168062
TEX44	2q37.1	0.085896	0.093655	0.168066
SERPINA11	14q32.13	-0.08589	0.093665	0.16807
TRMT2B	Xq22.1	0.085859	0.093798	0.168294
LRRC18	10q11.23	-0.08584	0.093881	0.168428
GDF3	12p13.31	-0.08582	0.09393	0.1685
LOC344967	4p14	0.085822	0.093942	0.168506
TIAM1	21q22.11	-0.08582	0.093963	0.168528
C4BPA	1q32.2	0.085807	0.093999	0.168579
OR2AG1	11p15.4	0.085793	0.094051	0.168656
TMEM266	15q24.2	-0.08579	0.094076	0.168686
TUBB3	16q24.3	-0.08577	0.094137	0.16878
S1PR4	19p13.3	-0.08576	0.094196	0.168858
CDC5L	6p21.1	0.085755	0.094197	0.168858
GOLGA8EP	15q11.2	0.085739	0.09426	0.168952
PDE11A	2q31.2	-0.08574	0.094266	0.168952
PLEKHG1	6q25.1	-0.08573	0.094298	0.168991
SLC2A4RG	20q13.33	0.085727	0.094305	0.168991
OR51A2	11p15.4	0.085716	0.094348	0.169053
GPR158-AS1	10p12.1	-0.08571	0.094382	0.169099
EMILIN2	18p11.32-p11.31	-0.0857	0.094408	0.16913
RNF215	22q12.2	-0.08568	0.094505	0.169289
FBXW7	4q31.3	0.085668	0.094532	0.169322
PROCR	20q11.22	-0.08566	0.094577	0.169387
VSIG8	1q23.2	0.085633	0.094671	0.16954
SPANXN3	Xq27.3	-0.08562	0.0947	0.169578
EPB41L1	20q11.23	-0.08561	0.094776	0.169699
CELA3B	1p36.12	-0.08557	0.094902	0.16991
ZFP41	8q24.3	0.085553	0.094979	0.170032
CXCR5	11q23.3	-0.08555	0.094992	0.170039
UFM1	13q13.3	-0.08554	0.095019	0.170073
SPANXC	Xq27.2	-0.08552	0.095108	0.170217
DPY19L2P2	7q22.1	0.085498	0.095191	0.170339



DHRS1	14q12	0.085498	0.095193	0.170339
PDPK1	16p13.3	0.08549	0.095225	0.17038
IFIT3	10q23.31	-0.08547	0.095287	0.170476
RPL3	22q13.1	-0.08545	0.095377	0.170622
FAM91A1	8q24.13	-0.08544	0.095425	0.170689
ENGASE	17q25.3	0.085436	0.095434	0.170689
RTP3	3p21.31	-0.08543	0.095443	0.170689
CCDC58	3q21.1	0.085432	0.095448	0.170689
SEC24D	4q26	-0.08543	0.095463	0.170699
FRAT1	10q24.1	0.085421	0.095492	0.170733
RASD1	17p11.2	-0.08542	0.095499	0.170733
XRN2	20p11.22	-0.08541	0.095546	0.170803
LIMS3-LOC440895	2q13	-0.0854	0.095577	0.170842
MOSMO	16p12.2	-0.08539	0.095614	0.170894
CFL1P1	10q23.31	-0.08539	0.095628	0.170904
ABHD16A	6p21.33	0.085355	0.09575	0.171105
LOC90784	2p11.2	0.085351	0.095766	0.171119
PRRT4	7q32.1	0.085338	0.095817	0.171195
BBIP1	10q25.2	-0.0853	0.095982	0.171462
SCGB1D1	11q12.3	-0.08529	0.095986	0.171462
SLC28A2	15q21.1	0.085293	0.095992	0.171462
VWA7	6p21.33	0.085285	0.096024	0.171465
IFNGR1	6q23.3	-0.08528	0.096029	0.171465
DLL3	19q13.2	-0.08528	0.096033	0.171465
SLC10A6	4q21.3	-0.08528	0.096035	0.171465
PLAC1	Xq26.3	-0.08528	0.096042	0.171465
ISG15	1p36.33	-0.08528	0.096045	0.171465
VPS13B	8q22.2	-0.08527	0.0961	0.171549
PTPRJ	11p11.2	-0.08526	0.096122	0.171572
OR10X1	1q23.1	-0.08525	0.096153	0.171612
ASCL2	11p15.5	-0.08524	0.096197	0.171669
PRX	19q13.2	-0.08524	0.096206	0.171669
MGC57346	17q21.31	0.085237	0.096211	0.171669
OSTN	3q28	-0.08523	0.096224	0.171678
SCARNA9L	Xp22.12	0.085229	0.096241	0.171692
JRKL	11q21	0.085224	0.096261	0.171712
EIF4G3	1p36.12	0.085208	0.096322	0.171807
HOXA4	7p15.2	0.085206	0.096332	0.171809
C1QL3	10p13	0.085202	0.096348	0.171823
UBE2Q2P1	15q25.2	0.085196	0.096372	0.17185
CLPB	11q13.4	0.085182	0.096426	0.171931
ARHGAP27P2	17q24.2	-0.08517	0.096481	0.172013
IFITM3	11p15.5	-0.08516	0.096516	0.172055
PMAIP1	18q21.32	-0.08516	0.096527	0.172055
UGT1A9	2q37.1	-0.08516	0.09653	0.172055
ZNF664	12q24.31	0.085141	0.096588	0.172142
IKZF2	2q34	-0.08513	0.096648	0.172234
CAAP1	9p21.2	-0.08511	0.096705	0.172321
CELSR1	22q13.31	0.085104	0.096731	0.172352
VCX3B	Xp22.31	-0.08507	0.096859	0.172564
GRPEL2	5q32	0.084993	0.097172	0.173106
CBR3	21q22.12	0.084964	0.097283	0.173289
GCDH	19p13.13	0.084959	0.097305	0.173313
DZANK1	20p11.23	-0.08495	0.097339	0.173358
HIST1H4C	6p22.2	0.084948	0.097348	0.173359
ZFP36L2	2p21	-0.08494	0.097385	0.17341
STIP1	11q13.1	0.084911	0.097494	0.173576
FUT11	10q22.2	-0.08491	0.0975	0.173576

FAM171A2	17q21.31	-0.08491	0.097505	0.173576
GEMIN8P4	1p22.2	0.084884	0.0976	0.173716
LGALS9	17q11.2	-0.08488	0.097601	0.173716
SPINK7	5q32	-0.08488	0.097624	0.173741
CTXN2	15q21.1	-0.08486	0.097697	0.173856
CXCR2P1	2q35	-0.08484	0.097765	0.173961
ZNF668	16p11.2	0.084836	0.097793	0.173996
FAM181A	14q32.12	-0.08482	0.097854	0.174089
TFAP2E	1p34.3	0.084812	0.097888	0.17412
DNAJC25	9q31.3	0.084811	0.097889	0.17412
GSC2	22q11.21	-0.08479	0.097986	0.174278
HMGN4	6p22.2	-0.08476	0.098095	0.174456
BCL7B	7q11.23	-0.08475	0.098124	0.174492
ADGRV1	5q14.3	-0.08472	0.098236	0.174655
CHIT1	1q32.1	-0.08472	0.09824	0.174655
MAP4K5	14q22.1	-0.08472	0.098242	0.174655
OC90	8q24.22	-0.0847	0.09834	0.174814
SMYD3	1q44	0.084689	0.098376	0.174863
NINL	20p11.21	-0.08468	0.098418	0.174921
UGT1A8	2q37.1	-0.08467	0.098434	0.174935
PRKD3	2p22.2	-0.08467	0.098449	0.174946
MAK	6p24.2	0.084654	0.098515	0.175048
MTERF1	7q21.2	-0.08465	0.098537	0.175071
LRCH1	13q14.13-q14.2	0.084636	0.098589	0.175149
KMT2A	11q23.3	0.084619	0.098655	0.175249
IGF2BP2-AS1	3q27.2	-0.0846	0.098724	0.175353
WDFY3	4q21.23	-0.0846	0.098731	0.175353
CNKS3	6q25.2	0.084554	0.098917	0.175669
PARP16	15q22.31	-0.08454	0.098964	0.175736
ZNF658	9q21.11	-0.08452	0.099039	0.175852
INTS8	8q22.1	0.084521	0.099047	0.175852
SIX4	14q23.1	-0.08451	0.099094	0.17591
MRPL46	15q25.3	0.084509	0.099097	0.17591
CALML4	15q23	0.084507	0.099106	0.17591
DLX6-AS1	7q21.3	-0.0845	0.099141	0.175957
DDX17	22q13.1	0.084486	0.099187	0.176022
RPL39L	3q27.3	-0.08447	0.099271	0.176156
ALPI	2q37.1	0.084458	0.0993	0.176193
INHA	2q35	0.084445	0.099354	0.176272
	1-Mar 4q32.2-q32.3	-0.08444	0.099389	0.176319
IMMT	2p11.2 2	0.08442	0.099452	0.176401
GJA3	13q12.11	0.08442	0.099453	0.176401
TOX2	20q13.12	-0.08441	0.099486	0.176444
TMED10P1	8q24.3	-0.08439	0.099573	0.176582
C4ORF47	4q35.1	-0.08438	0.099613	0.176639
KBTD6	13q14.11	-0.08437	0.099653	0.176692
SPRR2G	1q21.3	-0.08435	0.099741	0.176833
ARHGDI3	16p13.3	0.084341	0.099773	0.176874
COQ5	12q24.31	-0.08433	0.099833	0.176966
OR51A7	11p15.4	0.084322	0.099847	0.176974
TAF4B	18q11.2	0.084308	0.099906	0.177057
GALNT18	11p15.4	-0.08431	0.099915	0.177057
PAQR5	15q23	-0.0843	0.09992	0.177057
MYF6	12q21.31	-0.0843	0.099946	0.177088
RHOXF1	Xq24	0.084283	0.100008	0.177181
MFN2	1p36.22	0.084264	0.100084	0.177301
PIK3CD-AS1	1p36.22	-0.08426	0.100098	0.177309
GPM6B	Xp22.2	-0.08426	0.100117	0.177327

BCDIN3D-AS1	12q13.12	0.084239	0.100183	0.177425
IGF2BP1	17q21.32	-0.08424	0.10019	0.177425
PLEKHA8	7p14.3	0.084226	0.100235	0.177489
FOXN1	17q11.2	-0.08421	0.100318	0.17762
B4GALNT2	17q21.32	-0.08419	0.10038	0.177703
MRPL11	11q13.2	0.08419	0.100382	0.177703
CISH	3p21.2	-0.08418	0.100409	0.177735
DLX6	7q21.3	-0.08417	0.100459	0.177808
CHCHD7	8q12.1	-0.08415	0.100532	0.177922
HBBP1	11p15.4	-0.08415	0.100553	0.177943
ACVR2B-AS1	3p22.2	-0.08414	0.100568	0.177944
AIRE	21q22.3	-0.08414	0.100572	0.177944
FAM24B	10q26.13	0.084135	0.100607	0.177987
LOC100128288	17p13.1	-0.08413	0.100614	0.177987
OR11A1	6p22.1	0.084113	0.100694	0.178113
SNRNP200	2q11.2	0.084097	0.100758	0.178211
IHH	2q35	-0.08408	0.100831	0.178325
MTMR8	Xq11.2	-0.08404	0.100972	0.178558
THRA	17q21.1	-0.08403	0.101032	0.178648
ATP2B1-AS1	12q21.33	-0.08403	0.101052	0.178668
SHLD2P3	10q11.22	0.084019	0.101076	0.178694
GPR26	10q26.13	-0.08401	0.101105	0.178729
ZNF584	19q13.43	0.083984	0.101221	0.178911
PHF11	13q14.2	-0.08398	0.101225	0.178911
NLRP1	17p13.2	-0.08396	0.101321	0.179064
MFS3	8q24.3	0.08394	0.101398	0.179185
MRPL12	17q25.3	0.083935	0.10142	0.179208
ZNF487	10q11.21	-0.08393	0.101442	0.17922
AP4M1	7q22.1	-0.08393	0.101445	0.17922
NLRP7	19q13.42	-0.08393	0.101455	0.179223
PIP4K2B	17q12	-0.08392	0.101482	0.179253
KCTD4	13q14.12-q14.13	-0.0839	0.101558	0.179372
TPT1-AS1	13q14.13	-0.08387	0.101681	0.179573
LOC646813	11p11.12	0.083858	0.101735	0.179654
RNF2	1q25.3	-0.08385	0.101765	0.17969
GALNT4	12q21.33	-0.08385	0.101782	0.179701
DPM3	1q22	0.083845	0.101789	0.179701
PRDM7	16q24.3	0.083839	0.101813	0.179727
RPL36AL	14q21.3	-0.08383	0.101861	0.179796
RRN3P2	16p11.2	-0.08381	0.101912	0.179868
SELENOV	19q13.2	-0.08381	0.101921	0.179868
FASTKD2	2q33.3	-0.08381	0.101936	0.179868
HEPACAM2	7q21.2	-0.08381	0.101938	0.179868
PPIAL4G	1q21.2	0.08377	0.102095	0.18013
RSPH9	6p21.1	-0.08376	0.102128	0.180168
ATG101	12q13.13	-0.08376	0.102135	0.180168
RASGEF1B	4q21.21	-0.08375	0.102162	0.180201
LINC01548	21q22.11	-0.08375	0.102179	0.180215
DMPK	19q13.32	0.083728	0.102267	0.180355
FIRRE	Xq26.2	0.083714	0.102326	0.180443
RABIF	1q32.1	0.083708	0.102352	0.180472
ALOX5	10q11.21	-0.08369	0.102442	0.180615
AGFG2	7q22.1	0.08368	0.102465	0.180633
MRPS33	7q34	-0.08368	0.102473	0.180633
ZNF608	5q23.2	-0.08368	0.102479	0.180633
MYH16	7q22.1	-0.08365	0.102597	0.180824
CCL3	17q12	-0.08364	0.102641	0.180875
TCP10	6q27	-0.08364	0.102644	0.180875

SPATA13	13q12.12	0.083627	0.102686	0.180933
HOXD4	2q31.1	0.083622	0.102704	0.18095
SLC7A7	14q11.2	-0.08361	0.102739	0.180988
CALB2	16q22.2	-0.08361	0.102744	0.180988
CFAP47	Xp21.1	-0.0836	0.102776	0.181029
ERAP2	5q15	-0.08358	0.102865	0.181146
ASAH2B	10q11.23	0.083583	0.102866	0.181146
KCNK5	6p21.2	-0.08358	0.10287	0.181146
ZNF333	19p13.12	-0.08358	0.102883	0.181147
C7ORF25	7p14.1	-0.08358	0.102889	0.181147
HABP2	10q25.3	0.083559	0.102967	0.181253
RBFOX2	22q12.3	-0.08356	0.102967	0.181253
MYO15A	17p11.2	-0.08355	0.102995	0.181287
LINC-PINT	7q32.3	0.083547	0.103013	0.181302
KCNQ1	11p15.5-p15.4	0.083514	0.103149	0.181527
PTAFR	1p35.3	-0.08351	0.103178	0.181561
UFC1	1q23.3	-0.0835	0.103201	0.181578
AADA4L4	1p36.21	-0.0835	0.103206	0.181578
RBM47	4p14	0.083472	0.103323	0.181769
CHDH	3p21.1	0.083453	0.103403	0.181893
ADGRF3	2p23.3	-0.08344	0.103451	0.181961
TXNRD3NB	3q21.3	-0.08343	0.103494	0.182021
INSL3	19p13.11	0.083413	0.103569	0.182136
SLC22A18AS	11p15.4	0.083405	0.103603	0.182181
SDR16C6P	8q12.1	0.083393	0.103652	0.182235
SCARNA18	5q14.2	-0.08339	0.103652	0.182235
WDR36	5q22.1	0.083378	0.103716	0.182331
LRRC37A3	17q24.1	-0.08337	0.10376	0.182392
IFIT2	10q23.31	-0.08334	0.10389	0.182604
BRMS1L	14q13.2	-0.08333	0.103924	0.182648
MRAP2	6q14.2	0.083326	0.103933	0.182648
MPND	19p13.3	-0.0833	0.104055	0.182846
ZDHHC8	22q11.21	0.083284	0.104108	0.182925
GJB7	6q14.3-q15	0.083272	0.104155	0.182991
SEC14L2	22q12.2	-0.08325	0.10424	0.183123
CALHM1	10q24.33	-0.08324	0.104311	0.183232
PDZK1	1q21.1	-0.08323	0.104347	0.183281
MSMP	9p13.3	0.083214	0.104398	0.183354
NFATC2	20q13.2	-0.0832	0.104457	0.183441
SCARNA1	1p35.3	-0.08317	0.10457	0.183623
RPL19	17q12	-0.08315	0.10466	0.183765
MFSD6	2q32.2	-0.08314	0.104691	0.183803
FNBP1L	1p22.1	-0.08312	0.104779	0.183942
LACC1	13q14.11	-0.08311	0.104838	0.184029
SAP30BP	17q25.1	-0.0831	0.104859	0.184051
WDR81	17p13.3	-0.08304	0.10512	0.184477
ZBBX	3q26.1	-0.08304	0.105124	0.184477
LOC100128164	3q26.2	-0.08304	0.10513	0.184477
DNAJC15	13q14.11	-0.08304	0.105141	0.184481
GVINP1	11p15.4	-0.08302	0.105194	0.184558
ZNF813	19q13.42	-0.08298	0.105379	0.184865
RAD51C	17q22	0.082956	0.105483	0.185032
LINC00606	3p25.3	-0.08293	0.105598	0.185168
GPR139	16p12.3	0.082929	0.105598	0.185168
PPBPP1	4q13.3	-0.08293	0.105598	0.185168
DEFB123	20q11.21	-0.08293	0.105598	0.185168
CTSV	9q22.33	-0.08292	0.10563	0.185209
DNMBP	10q24.2	0.082917	0.105646	0.18522

PMS2P2	7q11.23	0.082896	0.105733	0.185346
RUFY3	4q13.3	0.082896	0.105736	0.185346
FGF3	11q13.3	-0.08289	0.105753	0.185358
TMPRSS11BNL	4q13.2	-0.08288	0.105797	0.18542
MIB1	18q11.2	-0.08287	0.10585	0.185497
TBC1D10A	22q12.2	-0.08286	0.105881	0.185536
LINC02731	11q25	-0.08286	0.105901	0.185554
LMNTD1	12p12.1	-0.08285	0.105921	0.185573
IL17B	5q32	-0.08283	0.106002	0.185698
POLN	4p16.3	-0.08282	0.106044	0.185747
FBXO9	6p12.1	0.082822	0.106049	0.185747
RSRC2	12q24.31	0.082813	0.106086	0.185786
CLDN16	3q28	-0.08281	0.106089	0.185786
SNORA65	9q33.3	0.082802	0.106133	0.185847
F8A1	Xq28	0.082787	0.106198	0.185944
RPS15	19p13.3	0.082775	0.106246	0.186012
DMRT3	9p24.3	-0.08277	0.106272	0.18603
HBQ1	16p13.3	0.082768	0.106275	0.18603
KIF13A	6p22.3	0.08275	0.106353	0.186151
PARP8	5q11.1	-0.08274	0.106391	0.1862
RHBDD1	2q36.3	-0.08273	0.106428	0.186249
CD80	3q13.33	-0.08273	0.106453	0.186259
STAU1	20q13.13	-0.08273	0.106457	0.186259
ARHGFEF40	14q11.2	-0.08272	0.106463	0.186259
C9ORF50	9q34.11	0.08272	0.10648	0.186259
ARHGDI4	17q25.3	0.08272	0.10648	0.186259
LBHD1	11q12.3	0.082703	0.106553	0.186371
FAM221A	7p15.3	0.082651	0.106774	0.18674
ASCL1	12q23.2	-0.08264	0.106799	0.186769
RD3	1q32.3	-0.08262	0.106898	0.186883
OR52N5	11p15.4	-0.08262	0.106901	0.186883
FAF1	1p32.3	0.082621	0.106903	0.186883
HLF	17q22	-0.08262	0.106905	0.186883
HIF1A	14q23.2	-0.08262	0.106911	0.186883
DHX29	5q11.2	0.082602	0.106984	0.186983
ANP32D	12q13.11	-0.0826	0.10699	0.186983
TBKBP1	17q21.32	-0.0826	0.106997	0.186983
MANSC1	12p13.2	-0.08255	0.107221	0.187358
DPM1	20q13.13	-0.08254	0.107258	0.187407
CALM1	14q32.11	-0.08252	0.10734	0.187534
MACROD1	11q13.1	0.082515	0.107354	0.187542
CAMTA2	17p13.2	0.082488	0.107469	0.187726
AVEN	15q14	-0.08246	0.107589	0.187919
LOC100134868	20p11.1	-0.08244	0.107672	0.188048
USP28	11q23.2	0.082427	0.10773	0.188133
PIGW	17q12	0.08242	0.10776	0.18817
LINC00284	13q14.11	-0.08241	0.10781	0.188241
GPR173	Xp11.22	-0.0824	0.107865	0.18832
GLYR1	16p13.3	0.082392	0.107879	0.188328
OR2L13	1q44	-0.08238	0.107926	0.188394
DKC1	Xq28	0.082373	0.107964	0.188442
GLI4	8q24.3	0.082369	0.107979	0.188446
CACHD1	1p31.3	-0.08237	0.107985	0.188446
EGR3	8p21.3	-0.08236	0.108	0.188457
AP1S1	7q22.1	0.08236	0.108019	0.188473
EFNB1	Xq13.1	0.082356	0.108033	0.188481
PRB4	12p13.2	-0.08235	0.108067	0.188525
SAMD4A	14q22.2	-0.08234	0.108083	0.188535

ARRB1	11q13.4	-0.08234	0.108098	0.188545
PTRHD1	2p23.3	-0.08233	0.108161	0.18864
HSPB11	1p32.3	-0.08231	0.108218	0.188722
TRAPPC8	18q12.1	-0.08231	0.108238	0.188739
SDHAF4	6q13	-0.08231	0.108247	0.188739
SP7	12q13.13	-0.0823	0.108257	0.18874
TBC1D2B	15q24.3-q25.1	-0.08227	0.1084	0.188974
CLEC4M	19p13.2	-0.08227	0.108421	0.188994
SSR4	Xq28	-0.08226	0.108433	0.188997
NOP53	19q13.33	-0.08226	0.108442	0.188997
NPM3	10q24.32	0.082236	0.10855	0.189167
ZNF774	15q26.1	0.082234	0.108558	0.189167
EIF4H	7q11.23	0.082228	0.108588	0.189202
GPC2	7q22.1	0.082213	0.108652	0.189297
MFNG	22q13.1	-0.08219	0.108741	0.189436
C22ORF39	22q11.21	-0.08219	0.108771	0.189471
RBX1	22q13.2	-0.08218	0.108809	0.189521
PRSS3P2	7q34	-0.08217	0.108848	0.189574
AAGAB	15q23	0.082161	0.108874	0.189602
NEDD1	12q23.1	0.082156	0.108895	0.189622
TMEM175	4p16.3	0.082144	0.108948	0.189698
YWHAZ	8q22.3	-0.08212	0.109036	0.189834
DCAF12	9p13.3	0.08212	0.109054	0.189848
HIST1H2BI	6p22.2	0.08211	0.109095	0.189904
RASL11A	13q12.2	0.082081	0.109222	0.190109
MUC16	19p13.2	-0.08207	0.109249	0.190139
OR13D1	9q31.1	0.082068	0.109275	0.190168
MROH5	8q24.3	0.082063	0.109297	0.190189
PIGC	1q24.3	-0.08204	0.109415	0.190379
OR5AU1	14q11.2	0.082006	0.109545	0.190588
OR5M3	11q12.1	0.081999	0.109575	0.19062
UBE2J2	1p36.33	0.081996	0.109588	0.19062
GABRA1	5q34	-0.08199	0.109601	0.19062
TOB2	22q13.2	-0.08199	0.109601	0.19062
CCL4	17q12	-0.08198	0.10964	0.19067
BLVRB	19q13.2	0.081976	0.109675	0.190715
PRUNE1	1q21.3	0.081972	0.109695	0.190733
OR5P2	11p15.4	0.081962	0.109738	0.190791
MIDN	19p13.3	0.081959	0.10975	0.190796
C1ORF43	1q21.3	0.081941	0.109827	0.190913
METTL18	1q24.2	0.081898	0.110017	0.191219
IFIT5	10q23.31	-0.08189	0.110037	0.191219
ZNRF1	16q23.1	-0.08189	0.110042	0.191219
C7ORF26	7p22.1	-0.08189	0.110042	0.191219
NXF3	Xq22.1	0.081884	0.110078	0.191265
FRMPD2B	10q11.22	0.081848	0.110235	0.191522
MBNL3	Xq26.2	0.081829	0.110317	0.191648
CDHR4	3p21.31	0.081812	0.110392	0.191763
RPN2	20q11.23	-0.08181	0.110404	0.191766
DLL1	6q27	0.081801	0.110439	0.19181
LOC100131496	20q13.12	0.081773	0.110561	0.192005
MUC17	7q22.1	0.081765	0.110595	0.192048
SEL1L3	4p15.2	-0.08175	0.110647	0.192121
PCARE	2p23.2	-0.08175	0.110683	0.192162
YME1L1	10p12.1	0.081744	0.110689	0.192162
ACTR6	12q23.1	-0.08172	0.110788	0.192317
HIP1	7q11.23	-0.08171	0.110837	0.192385
EMC10	19q13.33	-0.0817	0.11087	0.192421

CPD	17q11.2	-0.0817	0.110877	0.192421
CBWD3	9q21.11	0.081694	0.110906	0.192454
LIG4	13q33.3	-0.08169	0.110916	0.192454
JPX	Xq13.2	0.081681	0.110963	0.19252
ASPRV1	2p13.3	-0.08167	0.110997	0.192562
LINC00473	6q27	-0.08167	0.111019	0.192584
CXCR2	2q35	-0.08166	0.111047	0.192615
NPFFR2	4q13.3	-0.08165	0.111093	0.192679
GSX2	4q12	-0.08164	0.111151	0.192763
IP6K1	3p21.31	-0.08161	0.111264	0.192941
NID1	1q42.3	-0.08161	0.111286	0.192964
TMEM185B	2q14.2	-0.08159	0.111364	0.193081
THUMPD2	2p22.1 2p22-p21	0.081586	0.111383	0.193098
FAM135B	8q24.23	-0.08158	0.111394	0.193101
CSAG1	Xq28	-0.08158	0.111409	0.19311
AURKC	19q13.43	-0.08156	0.111492	0.193237
CNR2	1p36.11	-0.08155	0.111525	0.193278
FBN3	19p13.2	-0.08155	0.111536	0.193279
TNIP1	5q33.1	-0.08155	0.111548	0.193283
ADPGK	15q24.1	0.081539	0.111588	0.193321
GLRA1	5q33.1	0.081537	0.111597	0.193321
TSPY3	Yp11.2	-0.08153	0.111607	0.193321
NOL7	6p23	0.081535	0.111608	0.193321
ZNF223	19q13.31	-0.08151	0.111721	0.1935
ETV3L	1q23.1	0.081477	0.111861	0.193725
CDK4	12q14.1	0.081427	0.112084	0.194089
FAM66D	8p23.1	0.081425	0.11209	0.194089
DDX53	Xp22.11	-0.08141	0.112152	0.194149
GRM6	5q35.3	-0.08141	0.112154	0.194149
PIN4	Xq13.1	-0.08141	0.112154	0.194149
RPE	2q34	0.081401	0.112197	0.194206
RSPH6A	19q13.32	0.081398	0.112211	0.194214
HENMT1	1p13.3	-0.08139	0.11224	0.194218
NAXE	1q22	0.081391	0.112242	0.194218
FAM76A	1p35.3	-0.08139	0.112242	0.194218
FAHD1	16p13.3	-0.08138	0.11227	0.194249
TAS2R8	12p13.2	0.081362	0.112372	0.194409
NR4A2	2q24.1	0.081352	0.112416	0.194463
GOLGA6C	15q24.2	0.08135	0.112423	0.194463
VPREB3	22q11.23 22q11	-0.08135	0.11244	0.194476
POLR3B	12q23.3	0.081331	0.112509	0.194579
OBSCN	1q42.13	0.081318	0.112567	0.194661
MED12L	3q25.1	-0.08127	0.112772	0.194999
MBLAC2	5q14.3	-0.08121	0.113053	0.195468
AK4	1p31.3	-0.08119	0.113156	0.19563
CXCL1	4q13.3	0.081174	0.113205	0.195698
ERP44	9q31.1	-0.08112	0.113426	0.196062
GFRA2	8p21.3	-0.08111	0.113492	0.196161
SPX	12p12.1	-0.08109	0.113568	0.196274
DCUN1D5	11q22.3	0.081079	0.113632	0.196367
PRR23C	3q23	-0.08106	0.113727	0.196516
MTFMT	15q22.31	0.081051	0.113756	0.196548
IFI16	1q23.1	-0.08105	0.113779	0.196571
GPR157	1p36.22	0.081036	0.11382	0.196625
UCN3	10p15.1	-0.08103	0.113862	0.19668
PPM1D	17q23.2	-0.08102	0.113877	0.19669
CHST13	3q21.3	-0.081	0.113979	0.196848
SHTN1	10q25.3	0.080993	0.114014	0.196893

ANXA9	1q21.3	-0.08098	0.114061	0.196957
CYP2B7P	19q13.2	-0.08098	0.114081	0.196975
RNF5P1	8p11.22	-0.08097	0.114104	0.196996
HMGCS2	1p12	-0.08094	0.114249	0.197216
USP4	3p21.31	-0.08094	0.114251	0.197216
LDHB	12p12.1	0.080928	0.114308	0.197297
LRRC37A2	17q21.31	0.080906	0.114407	0.197452
TRIM3	11p15.4	0.080872	0.114557	0.197684
C20ORF85	20q13.32	-0.08087	0.114562	0.197684
DOC2A	16p11.2	0.080823	0.11478	0.198045
TRAF3IP2	6q21	0.080783	0.114959	0.198337
NETO2	16q12.1	0.080777	0.114987	0.198367
WNT5A	3p14.3	-0.08076	0.115081	0.198512
SLC9A3R1	17q25.1	0.080737	0.115164	0.198639
OR3A1	17p13.3	-0.08073	0.115212	0.198704
FGL1	8p22	-0.08069	0.115363	0.19894
OR6A2	11p15.4	0.080692	0.115369	0.19894
TINAG	6p12.1	-0.08068	0.115417	0.199006
GPR4	19q13.32	-0.08062	0.115717	0.199506
KIF25	6q27	-0.08061	0.115731	0.199513
RXRβ	6p21.32	0.080597	0.115799	0.199567
ATXN3	14q32.12	-0.0806	0.1158	0.199567
CLN3	16p12.1	0.080597	0.115802	0.199567
OXGR1	13q32.1	-0.0806	0.115802	0.199567
SHPRH	6q24.3	0.08055	0.116015	0.199916
ACADVL	17p13.1	0.080545	0.116035	0.199934
GK3P	4q32.3	0.080543	0.116046	0.199936
INSRR	1q23.1	-0.0805	0.116251	0.200271
NDRG3	20q11.23	-0.08049	0.116268	0.200277
SH3BGRL3	1p36.11	0.080493	0.116274	0.200277
ZNF430	19p12	-0.08048	0.116329	0.200354
TNNC1	3p21.1	-0.08047	0.116387	0.200438
LAMB2P1	3p21.31	0.080453	0.116455	0.200522
KRTAP5-AS1	11p15.5	0.080453	0.116456	0.200522
MAN1A2	1p12	-0.08044	0.116534	0.200638
MICU2	13q12.11	-0.08041	0.116637	0.200786
COX15	10q24.2	0.080412	0.11664	0.200786
RCVRN	17p13.1	-0.08041	0.116656	0.200787
MAGEA5	Xq28	0.080408	0.116661	0.200787
LRPPRC	2p21	0.080398	0.116706	0.200847
HCG18	6p22.1	0.080378	0.116796	0.200986
CETP	16q13	-0.08037	0.116825	0.201019
PFN4	2p23.3	-0.08036	0.116856	0.201054
EFNA5	5q21.3	-0.08035	0.11693	0.201164
PAX3	2q36.1	-0.08031	0.117092	0.201427
LSR	19q13.12	0.080291	0.117194	0.201583
PEG3-AS1	19q13.43	-0.08027	0.117289	0.201731
MCTP2	15q26.2	0.080244	0.117409	0.201919
PRH2	12p13.2	0.08024	0.117426	0.201931
ARL6IP6	2q23.3	-0.08023	0.11749	0.202023
KLHDC7B	22q13.33	-0.08021	0.117586	0.202171
PNPLA5	22q13.31	-0.0802	0.117618	0.202204
LYRM4	6p25.1	-0.0802	0.117625	0.202204
MKRN1	7q34	-0.08017	0.117762	0.202423
FAM86FP	12p13.31	0.080163	0.117783	0.202425
DCPS	11q24.2	0.080162	0.117784	0.202425
AKR1B10	7q33	0.080159	0.117801	0.202437
DNAJC22	12q13.12	0.080156	0.117812	0.202438



TAAR5	6q23.2	-0.08014	0.117882	0.202524
OR2M2	1q44	-0.08014	0.117882	0.202524
PLIN2	9p22.1	-0.08014	0.117905	0.202546
HHLA2	3q13.13	0.080113	0.118012	0.202712
VNN2	6q23.2	-0.08007	0.118227	0.203064
PICSAAR	21q22.3	-0.08006	0.11824	0.203069
ANGEL1	14q24.3	-0.08006	0.118274	0.2031
SOX18	20q13.33	-0.08005	0.118285	0.2031
MACC1	7p21.1	-0.08005	0.118289	0.2031
MAFA	8q24.3	0.080047	0.118315	0.203128
USP54	10q22.2	0.080044	0.118328	0.203134
SNORA12	10q24.31	0.080039	0.11835	0.203142
ENTPD8	9q34.3	0.080039	0.118353	0.203142
SLC10A1	14q24.1	-0.08003	0.118405	0.203214
PHOSPHO1	17q21.32	-0.08001	0.118497	0.203355
PHF6	Xq26.2	0.080002	0.118524	0.203383
CYP21A2	6p21.33	-0.07997	0.118657	0.203594
MRPS27	5q13.2	0.079968	0.118678	0.203612
IWS1	2q14.3	0.079962	0.118708	0.203646
WNK4	17q21.2	0.079957	0.118733	0.203671
CLIC1	6p21.33	0.07994	0.11881	0.203786
APOC1P1	19q13.32	-0.07993	0.118841	0.203822
KRT78	12q13.13	0.079922	0.118892	0.203887
GPR52	1q25.1	0.07992	0.118901	0.203887
SLC35C2	20q13.12	-0.07992	0.118909	0.203887
RPL7	8q21.11	-0.07991	0.118955	0.203948
PSG4	19q13.31	-0.07989	0.119041	0.204065
PDHA2	4q22.3	0.079889	0.119044	0.204065
LRIG1	3p14.1	-0.07988	0.119097	0.204138
ZFP30	19q13.12	-0.07986	0.119168	0.204242
ERMN	2q24.1	-0.07984	0.119296	0.204444
FASTKD1	2q31.1	0.079824	0.119345	0.204512
HCG4B	6p22.1	0.079807	0.119425	0.204631
FOXL1	16q24.1	-0.0798	0.119445	0.204648
TCTE1	6p21.1	0.079793	0.11949	0.204708
CHRM5	15q14	0.079788	0.119517	0.204735
ICAM5	19p13.2	0.079785	0.119528	0.204737
HSPA5	9q33.3	-0.07978	0.11955	0.20474
UNC5D	8p12	-0.07978	0.11955	0.20474
ADCY10P1	6p21.1	0.079778	0.119561	0.204741
HECTD2-AS1	10q23.32	-0.07975	0.119693	0.20495
TAF9B	Xq21.1	-0.07974	0.119719	0.204976
TAX1BP1	7p15.2	-0.07974	0.119743	0.205
ERAL1	17q11.2	0.079736	0.119757	0.205007
CYP2C8	10q23.33	0.079724	0.119813	0.205078
CPLX1	4p16.3	0.079723	0.119819	0.205078
ZNF683	1p36.11	-0.07971	0.119885	0.205173
PSMB8	6p21.32	0.07967	0.120064	0.205462
ENDOU	12q13.11	-0.07967	0.120082	0.205476
DTWD2	5q23.1	-0.07963	0.12025	0.205745
RBMY2EP	Yq11.223	-0.07963	0.120266	0.20575
DMP1	4q22.1	-0.07963	0.120273	0.20575
PPHLN1	12q12	-0.07961	0.120353	0.205869
POLR2G	11q12.3	-0.07958	0.120497	0.206098
TBCC	6p21.1	0.079571	0.120527	0.206131
KPNA4	3q25.33	-0.07957	0.12055	0.206152
ASPHD1	16p11.2	-0.07956	0.120569	0.206167
DHTKD1	10p14	0.079556	0.120597	0.206198

FUT8-AS1	14q23.3	-0.07955	0.120614	0.20621
C10ORF53	10q11.23	-0.07955	0.120632	0.206223
MPZL2	11q23.3	-0.07953	0.120703	0.206326
FRMD3	9q21.32	0.079527	0.120731	0.206356
MFSD8	4q28.2	-0.07952	0.120749	0.20637
FRRS1L	9q31.3	-0.0795	0.120856	0.206536
CRYAA	21q22.3	-0.07948	0.120973	0.206707
MYCL	1p34.2	-0.07947	0.120978	0.206707
OPA1	3q29	0.079446	0.121113	0.206921
OR2F1	7q35	0.079443	0.121126	0.206925
LINC00471	2q37.1	0.079431	0.121182	0.207003
ZNF300	5q33.1	-0.07943	0.121206	0.207026
HESX1	3p14.3	-0.07942	0.121226	0.207044
RPRD1B	20q11.23	-0.07941	0.121273	0.207106
DENND4C	9p22.1	-0.07936	0.121518	0.207507
HDHD5	22q11.1	0.079354	0.121547	0.207539
TENT5B	1p36.11	-0.07932	0.121689	0.207763
LINC02035	3q21.1	-0.07932	0.121706	0.207763
MOCS3	20q13.13	-0.07932	0.12171	0.207763
TMEM71	8q24.22	-0.07932	0.12172	0.207763
SLC1A6	19p13.12	-0.07931	0.121733	0.207768
CRYBA2	2q35	0.079295	0.121822	0.207903
NDUFB1	14q32.12	-0.07929	0.12184	0.207914
MS4A13	11q12.2	-0.07928	0.121876	0.207958
PLEKHA1	10q26.13	-0.07926	0.121991	0.208137
EDDM3B	14q11.2	0.079252	0.122029	0.208184
DCAF10	9p13.2	0.079248	0.122047	0.208197
BAG4	8p11.23	-0.07924	0.122078	0.208232
GATAD1	7q21.2	-0.07922	0.122179	0.208387
TNPO3	7q32.1	0.079208	0.122232	0.20846
CASP3	4q35.1	-0.0792	0.122278	0.20852
IZUMO1R	11q21	-0.0792	0.122289	0.208521
MAMSTR	19q13.33	-0.07919	0.122318	0.208554
SLCO1A2	12p12.1	-0.07917	0.122403	0.20868
ADCY8	8q24.22	-0.07916	0.122449	0.208741
FER	5q21.3	-0.07913	0.12261	0.208998
NOSTRIN	2q24.3	0.079124	0.122632	0.209017
C5ORF52	5q33.3	0.079122	0.122643	0.209018
ARHGEF26	3q25.2	0.079119	0.122656	0.209022
PAX2	10q24.31	0.079096	0.122763	0.209187
MED12	Xq13.1	0.079093	0.122779	0.209197
CCDC144CP	17p11.2	0.079082	0.122833	0.20927
EIF3C	16p11.2	0.079055	0.12296	0.209469
LRRC2	3p21.31	-0.07905	0.122983	0.20949
FLACC1	2q33.1	0.079046	0.123005	0.20951
KRTAP12-4	21q22.3	0.079041	0.123029	0.209533
TOP1P2	22q11.23	0.079034	0.123061	0.209571
CER1	9p22.3	0.079029	0.123085	0.209593
PYM1	12q13.2	0.07902	0.123126	0.209645
SFTPA1	10q22.3	-0.079	0.12322	0.209787
NOTCH1	9q34.3	0.078993	0.123253	0.209826
NCF1B	7q11.23	-0.07898	0.12333	0.209938
PLCH2	1p36.32	0.078971	0.123359	0.20997
CATSPERD	19p13.3	0.078968	0.123373	0.209976
B3GALT6	1p36.33	0.078955	0.123435	0.210048
MAN1B1-DT	9q34.3	-0.07895	0.123446	0.210048
RIPPLY2	6q14.2	-0.07895	0.123447	0.210048
TRAPPC13	5q12.3	-0.07893	0.123566	0.210233

BSN	3p21.31	-0.07892	0.123619	0.210306
CDKN2A	9p21.3	-0.07891	0.123643	0.210329
TAF1L	9p21.1	0.078896	0.123718	0.210436
THEM6	8q24.3	0.078894	0.123727	0.210436
RPS16	19q13.2	0.078892	0.123739	0.210438
TDRD1	10q25.3	-0.07888	0.123793	0.210512
ZNF24	18q12.2	-0.07887	0.123824	0.210548
BLOC1S4	4p16.1	-0.07887	0.123856	0.210583
HIST1H4K	6p22.1	0.078848	0.123946	0.210718
TATDN1	8q24.13	-0.07884	0.123984	0.210754
MCAT	22q13.2	0.078837	0.123998	0.210754
PRSS48	4q31.3	0.078837	0.123998	0.210754
LPA	6q25.3-q26	-0.07883	0.124038	0.210803
RUNDC1	17q21.31	0.078824	0.124063	0.210828
HECW2	2q32.3	-0.0788	0.124177	0.211004
FAM153A	5q35.3	0.078797	0.124191	0.21101
NMNAT3	3q23	-0.07879	0.124208	0.211021
TIGD5	8q24.3	0.078772	0.124309	0.211175
HBA2	16p13.3	0.07873	0.124515	0.211506
EHD4	15q15.1	-0.07872	0.124543	0.211536
TMEM106C	12q13.11	0.078712	0.124601	0.211616
ATP5PD	17q25.1	-0.0787	0.124665	0.211707
SMARCC2	12q13.2	0.078622	0.125032	0.212313
ZNF81	Xp11.23	0.078607	0.125105	0.212418
CCDC163	1p34.1	0.0786	0.125138	0.212457
CRNKL1	20p11.23	-0.0786	0.125156	0.212469
CASP9	1p36.21	-0.07859	0.125185	0.2125
RECQL5	17q25.1	0.078587	0.125201	0.21251
CDK15	2q33.1	-0.07858	0.125243	0.212563
ATP23	12q14.1	0.078571	0.125275	0.212599
FAM160B2	8p21.3	0.078566	0.125302	0.212627
AP5Z1	7p22.1	0.078556	0.125349	0.212688
NBL1	1p36.13	-0.07855	0.125372	0.212709
NFIB	9p23-p22.3	0.078545	0.125403	0.212745
MRPS7	17q25.1	-0.07853	0.125486	0.212867
LLCFC1	7q34	0.078511	0.125568	0.212988
NXT1	20p11.21	-0.07849	0.12568	0.213151
NCOA7	6q22.31-q22.32	-0.07849	0.125686	0.213151
LY86-AS1	6p25.1	-0.07846	0.125811	0.213345
GPR61	1p13.3	0.078448	0.125871	0.21343
BEST3	12q15	-0.07844	0.125909	0.213476
RP9	7p14.3	-0.07843	0.125976	0.213562
DNAJB8	3q21.3	0.078425	0.125981	0.213562
IDNK	9q21.32	-0.07841	0.126073	0.2137
TXNRD1	12q23.3	0.078404	0.126084	0.2137
ACAD11	3q22.1	0.0784	0.126105	0.213709
TREX2	Xq28	0.078399	0.126111	0.213709
SPRR2B	1q21.3	-0.07837	0.126229	0.213892
OR2S2	9p13.3	0.078371	0.126247	0.213892
RPS27A	2p16.1	-0.07837	0.126251	0.213892
PON1	7q21.3	0.078365	0.126275	0.213915
CRLS1	20p12.3	-0.07835	0.126334	0.213998
OR10G8	11q24.2	-0.07834	0.126395	0.214083
MRPL13	8q24.12	-0.07833	0.126424	0.214114
ZNF689	16p11.2	-0.07833	0.126444	0.214129
RAPGEF5	7p15.3	0.078322	0.126483	0.21416
MLH1	3p22.2	-0.07832	0.126484	0.21416
FOXD2-AS1	1p33	0.078293	0.126622	0.214376

ZNF735	7q11.21	-0.07828	0.1267	0.214491
HOTAIR	12q13.13	0.078262	0.126775	0.214584
CR1L	1q32.2	-0.07826	0.126777	0.214584
CREB5	7p15.1	-0.07825	0.126813	0.214628
SPTLC2	14q24.3	0.078243	0.126869	0.214704
CDK9	9q34.11	0.078238	0.126892	0.214725
NECAB2	16q23.3	-0.07821	0.127027	0.214936
LINC00593	15q23	0.078203	0.127062	0.214963
TMEM50B	21q22.11	-0.0782	0.127065	0.214963
MORC3	21q22.12	-0.07818	0.127162	0.215108
TSNAX	1q42.2	-0.07818	0.127176	0.215115
UBXN2A	2p23.3	-0.07817	0.127226	0.21518
GRIN3B	19p13.3	0.078165	0.127247	0.215198
ETV2	19q13.12	0.078154	0.1273	0.215269
LARS2	3p21.31	0.078136	0.127387	0.215398
C2ORF88	2q32.2	-0.07812	0.127443	0.215476
MAPRE1	20q11.21	-0.07812	0.127474	0.215509
SLC27A5	19q13.43	0.078113	0.127503	0.215541
EGFL6	Xp22.2	-0.0781	0.127551	0.21559
CDC42EP4	17q25.1	-0.0781	0.127554	0.21559
CFAP300	11q22.1	-0.07809	0.12762	0.215682
POM121L10P	22q11.23	0.078062	0.127753	0.215889
SCAND2P	15q25.2	0.078002	0.128043	0.216332
TTC22	1p32.3	0.078002	0.128045	0.216332
PRELID3B	20q13.32	-0.078	0.128047	0.216332
ZNF556	19p13.3	-0.07798	0.128161	0.216506
TXLNA	1p35.2	0.077965	0.128225	0.216596
SNHG29	17p11.2	-0.07795	0.128304	0.216711
GTF3C6	6q21	-0.07794	0.128338	0.216737
CCDC88B	11q13.1	0.077942	0.128341	0.216737
BID	22q11.21	-0.07793	0.1284	0.216819
BSPH1	19q13.33	-0.07792	0.128461	0.216903
MPIG6B	6p21.33	0.077914	0.128475	0.216904
ANTXRL	10q11.22	0.077913	0.128483	0.216904
HSF2BP	21q22.3	-0.07789	0.128601	0.217085
LMO4	1p22.3	-0.07788	0.128645	0.217141
DEFB124	20q11.21	-0.07786	0.12872	0.217248
DLST	14q24.3	0.077861	0.128737	0.21726
INSYN2A	10q26.2	-0.07784	0.128836	0.217408
TKTL2	4q32.2	0.077835	0.128865	0.21743
ANXA3	4q21.21	-0.07783	0.128871	0.21743
ORC5	7q22.1-q22.2	-0.07781	0.129013	0.217652
SESTD1	2q31.2	-0.0778	0.129034	0.217669
CCNT1	12q13.11-q13.12	0.077793	0.129074	0.217717
NOL10	2p25.1	0.07779	0.129086	0.21772
SFN	1p36.11	0.077778	0.129145	0.217795
ADCY7	16q12.1	0.077777	0.129152	0.217795
ZNF419	19q13.43	-0.07775	0.129275	0.217983
PAX5	9p13.2	0.077748	0.129296	0.218
PNPLA3	22q13.31	0.077741	0.129329	0.218038
GABRA6	5q34	-0.07773	0.129369	0.218087
MED6	14q24.2	-0.07772	0.129438	0.218182
MRPS28	8q21.13	-0.07772	0.129447	0.218182
PDPR	16q22.1	0.0777	0.12953	0.218284
DYNC1LI2	16q22.1	-0.0777	0.129535	0.218284
ENAM	4q13.3	-0.0777	0.129543	0.218284
RPL37	5p13.1	-0.0777	0.129551	0.218284
SLC26A4-AS1	7q22.3	-0.07767	0.129697	0.218511

HARS2	5q31.3	0.077656	0.12975	0.218581
CXADR	21q21.1	-0.07762	0.129909	0.218831
SMARCA5	4q31.21	-0.0776	0.130049	0.219041
MSS51	10q22.2	-0.07759	0.130055	0.219041
CTSE	1q32.1	0.077581	0.13012	0.219131
PTGR2	14q24.3	-0.07755	0.130292	0.219403
KNCN	1p33	-0.07752	0.130403	0.219571
COP1	1q25.1-q25.2	0.077521	0.130422	0.219585
PTPRB	12q15	-0.07751	0.130456	0.219601
ADRM1	20q13.33	0.077514	0.130457	0.219601
COL9A3	20q13.33	-0.07751	0.130465	0.219601
SOWAHD	Xq24	0.077501	0.130522	0.219679
NRIP2	12p13.33	-0.0775	0.130542	0.219694
SCRN1	7p14.3	-0.07749	0.130586	0.21975
MMP28	17q12	-0.07748	0.130624	0.219796
PSMD12	17q24.2	0.07746	0.130725	0.219948
OR8G5	11q24.2	-0.07744	0.130821	0.22009
CCT6B	17q12	-0.07743	0.130866	0.220147
SPATA21	1p36.13	-0.07738	0.131107	0.220533
CDH3	16q22.1	0.077381	0.131117	0.220533
SAR1A	10q22.1	-0.07737	0.131155	0.220563
METAP1D	2q31.1	0.077373	0.131157	0.220563
ZNF232	17p13.2	0.077355	0.131249	0.220698
MYOD1	11p15.1	-0.07735	0.131288	0.220745
CLTC	17q23.1	-0.07733	0.131352	0.220835
BRCC3	Xq28	0.077324	0.131403	0.220902
GSDMB	17q21.1	0.077311	0.131468	0.220993
DPPA2P3	3q29	0.077267	0.13169	0.221348
KIAA1586	6p12.1	-0.07726	0.13174	0.221413
SSBP3	1p32.3	-0.07725	0.13177	0.221445
GKN1	2p13.3	-0.07725	0.131798	0.221473
HCG9	6p22.1	0.077227	0.131891	0.22161
SAYS1D	6p21.2	-0.07722	0.131928	0.221655
ITGB3BP	1p31.3	0.077215	0.131949	0.22167
MLLT10	10p12.31	0.077212	0.131967	0.221683
OR2T33	1q44	0.0772	0.132027	0.221765
HPR	16q22.2	-0.07719	0.132086	0.221846
WNK3	Xp11.22	-0.07717	0.132154	0.221941
SLC27A1	19p13.11	-0.07715	0.132269	0.222115
MYRIP	3p22.1	-0.07714	0.13231	0.222151
HTR3C	3q27.1	-0.07714	0.132312	0.222151
RFT1	3p21.1	0.077127	0.132393	0.222267
FBXO21	12q24.22	-0.07712	0.132404	0.222267
PHLPP1	18q21.33	0.077111	0.132472	0.222364
RFPL3	22q12.3	0.077103	0.132513	0.222396
DNAJB11	3q27.3	0.077103	0.132514	0.222396
ICAM4	19p13.2	-0.07706	0.132732	0.222743
HECTD3	1p34.1	0.077053	0.132765	0.222781
ACTN3	11q13.2	-0.07704	0.132808	0.222834
ANKRD26	10p12.1	0.077036	0.132849	0.222867
CBLL1	7q22.3	-0.07704	0.13285	0.222867
NDUFAF4	6q16.1	0.077029	0.132885	0.222895
RPS10	6p21.31	0.077028	0.132889	0.222895
WDR83	19p13.13	0.077025	0.132905	0.222904
MRPL16	11q12.1	0.076993	0.133068	0.223159
GUCY2D	17p13.1	-0.07699	0.133104	0.223199
SNORA46	16q21	0.076984	0.133115	0.2232
PMS2	7p22.1	0.076979	0.133138	0.22322

MACF1	1p34.3	-0.07693	0.133386	0.223617
ATF5	19q13.33	-0.07692	0.133418	0.223651
HSP90AB2P	4p15.33	0.076917	0.133451	0.223687
NUDT16	3q22.1	0.076912	0.133477	0.223713
MTHFS	15q25.1	-0.07688	0.133636	0.223955
TANC1	2q24.2	0.076879	0.133644	0.223955
ASH2L	8p11.23	-0.07686	0.133717	0.224059
IDI2	10p15.3	0.076847	0.133809	0.224194
NUDT16L1	16p13.3	-0.07684	0.133821	0.224195
CNGB3	8q21.3	-0.07683	0.133903	0.224314
FLJ12825	12q13.13	0.076811	0.133992	0.224427
EDDM3A	14q11.2	-0.07681	0.133993	0.224427
TMEM8A	16p13.3	0.076788	0.134105	0.224596
TMED6	16q22.1	-0.07677	0.134175	0.224695
ZNF551	19q13.43	0.076763	0.134236	0.224778
ATP4A	19q13.12	-0.07675	0.134305	0.224875
ZNF674	Xp11.3	-0.07675	0.134324	0.224888
NPY2R	4q32.1	-0.07674	0.134356	0.224918
PROKR2	20p12.3	0.076737	0.134368	0.224918
SLC25A52	18q12.1	0.076735	0.134376	0.224918
ZBTB9	6p21.32	0.076713	0.134491	0.225091
TDH	8p23.1	0.076708	0.134512	0.225108
CSNK1E	22q13.1	0.076698	0.134564	0.225173
MYT1	20q13.33	-0.0767	0.134573	0.225173
ZBED9	6p22.1	-0.07667	0.134711	0.225386
SLCO5A1	8q13.3	-0.07665	0.134801	0.225516
PIGN	18q21.33	-0.07662	0.134973	0.225785
ERCC5	13q33.1	0.07661	0.135016	0.225838
PAX6	11p13	0.0766	0.135067	0.225903
SCN8A	12q13.13	-0.0766	0.135077	0.225903
CLDND2	19q13.41	0.076594	0.135097	0.225918
LOC100128573	19p13.2	0.076575	0.135194	0.226061
GABRP	5q35.1	-0.07657	0.135229	0.2261
HACD3	15q22.31	0.076548	0.135329	0.226234
LRP5	11q13.2	0.076548	0.135332	0.226234
IL18	11q23.1	-0.07654	0.135391	0.226315
IFNW1	9p21.3	-0.07652	0.13546	0.226412
RAPH1	2q33.2	0.076513	0.135511	0.226474
SSH1	12q24.11	-0.07651	0.13552	0.226474
FKSG29	13q32.3	0.076504	0.135557	0.226504
IL25	14q11.2	-0.0765	0.135564	0.226504
GMFB	14q22.2	-0.0765	0.135572	0.226504
C14ORF180	14q32.33	-0.07647	0.135729	0.226747
PRXL2A	10q23.1	-0.07645	0.135834	0.226903
SLAIN1	13q22.3	-0.07645	0.135846	0.226904
PGM2	4p14	0.076442	0.135873	0.226932
SAMD12	8q24.11-q24.12	0.076432	0.135928	0.226981
VDAC1	5q31.1	0.076431	0.135929	0.226981
CCNQ	Xq28	0.076425	0.135964	0.226981
OR1S2	11q12.1	0.076424	0.135965	0.226981
OR7G3	19p13.2	0.076424	0.135965	0.226981
ARSA	22q13.33	-0.07642	0.135971	0.226981
RUBCNL	13q14.13	-0.07642	0.136004	0.227017
HSPG2	1p36.12	-0.0764	0.136069	0.227107
WNK2	9q22.31	0.0764	0.136088	0.227119
ZBTB6	9q33.2	-0.07639	0.136161	0.227222
KRT7	12q13.13	-0.07636	0.136282	0.227382
WASF2	1p36.11	0.07636	0.136294	0.227382

MGST3	1q24.1	0.07636	0.136295	0.227382
IER3	6p21.33	0.076358	0.136305	0.227382
CUX2	12q24.11-q24.12	-0.07636	0.136313	0.227382
LRRTM3	10q21.3	-0.07633	0.136451	0.227582
PSME3	17q21.31	0.076329	0.136456	0.227582
FAM183BP	7p14.1	0.076307	0.136567	0.227748
TDRD6	6p12.3	0.076285	0.13668	0.227907
CELF4	18q12.2	-0.07628	0.136685	0.227907
SULT2A1	19q13.33	-0.07626	0.136814	0.228103
CAST	5q15	-0.07625	0.136868	0.228174
MMUT	6p12.3	-0.07625	0.136888	0.228188
CABS1	4q13.3	0.076232	0.136955	0.228266
PLAC4	21q22.2	0.07623	0.136967	0.228266
IPO13	1p34.1	0.07623	0.136969	0.228266
TCFL5	20q13.33	0.076215	0.137042	0.22837
NECAP1	12p13.31	-0.0762	0.137099	0.228445
ZCCHC4	4p15.2	-0.0762	0.137136	0.228487
RPA2	1p35.3	-0.07619	0.137169	0.228524
STEAP1	7q21.13	-0.07618	0.137213	0.228577
INTS13	12p11.23	0.076149	0.137388	0.22885
CFAP52	17p13.1	0.076136	0.137454	0.228942
NFS1	20q11.22	-0.07613	0.137497	0.228979
TTY6	Yq11.223	-0.07613	0.1375	0.228979
TRUB2	9q34.11	0.076123	0.137522	0.228998
TMEM171	5q13.2	0.07612	0.137536	0.229002
EXOC3	5p15.33	-0.07612	0.137557	0.229018
MGLL	3q21.3	-0.0761	0.137615	0.229095
SFTA3	14q13.3	-0.07609	0.137713	0.22924
IL21	4q27	-0.07608	0.137731	0.229245
ACACB	12q24.11	-0.07608	0.137739	0.229245
MEG3	14q32.2	0.076077	0.13776	0.229261
COL4A3BP	5q13.3	-0.07607	0.137798	0.229305
TMEM203	9q34.3	0.076059	0.137852	0.229375
RP2	Xp11.3	-0.07606	0.13787	0.229386
B4GALNT3	12p13.33	0.076053	0.137885	0.229393
ANXA11	10q22.3	0.076036	0.13797	0.229515
RPGRIP1	14q11.2	-0.07601	0.138088	0.229692
SPACA9	9q34.13	-0.07599	0.138203	0.22986
LRRFIP1	2q37.3	0.07599	0.138212	0.22986
AOC2	17q21.31	0.075983	0.138246	0.229897
CTDSP1	2q35	-0.07597	0.138304	0.229975
OR4D11	11q12.1	0.07596	0.138368	0.230061
KANK3	19p13.2	-0.07595	0.138437	0.230158
ZBTB39	12q13.3	0.075935	0.138497	0.230238
ZNF26	12q24.33	0.07592	0.138575	0.230349
RAB3C	5q11.2	-0.0759	0.138656	0.230464
LZTS3	20p13	-0.07589	0.138706	0.230528
CRYGD	2q33.3	0.075874	0.138813	0.230685
LTK	15q15.1	0.075872	0.138824	0.230685
TEX43	5q23.2	-0.07585	0.138939	0.230841
CPB1	3q24	-0.07585	0.13894	0.230841
SP140	2q37.1	-0.07584	0.139005	0.230929
COLCA2	11q23.1	0.075833	0.139029	0.230941
CDC123	10p14-p13	0.075832	0.139035	0.230941
RFLNA	12q24.31	0.075829	0.139048	0.230944
TNFRSF10A	8p21.3	0.075817	0.139115	0.231035
ZNF35	3p21.31	-0.07578	0.139323	0.231345
SIL1	5q31.2	-0.07578	0.139324	0.231345

USP6NL	10p14	0.075772	0.139349	0.231367
ST6GALNAC4	9q34.11	0.07576	0.139411	0.23145
DHRS4-AS1	14q11.2	-0.07573	0.139552	0.231665
GSE1	16q24.1	0.075723	0.139607	0.231738
ZMYND11	10p15.3	-0.07572	0.139621	0.231741
THEM5	1q21.3	0.075705	0.139697	0.231848
MAPRE3	2p23.3	-0.0757	0.139715	0.231858
RNF113A	Xq24	-0.07569	0.139767	0.231925
S100A1	1q21.3	0.075671	0.139879	0.232092
BAGE2	21p11.2	0.075667	0.139901	0.232098
LOC100270746	6p22.2	0.075666	0.139906	0.232098
DGCR2	22q11.21	-0.07566	0.139944	0.232127
KPNA7	7q22.1	-0.07566	0.139957	0.232127
PABPC4	1p34.3	0.075656	0.139958	0.232127
XKR3	22q11.1	-0.07563	0.140114	0.232367
GALNT7	4q34.1	-0.07562	0.140158	0.232416
ZNF445	3p21.31	0.075616	0.140167	0.232416
MGC15885	15q22.2	0.075612	0.140188	0.232432
ACADSB	10q26.13	-0.0756	0.140267	0.232543
TOR1B	9q34.11	0.075577	0.140374	0.232702
TARP	7p14.1	-0.07556	0.140444	0.232798
SMG6	17p13.3	-0.07556	0.140459	0.232804
DHRS2	14q11.2	-0.07555	0.140501	0.232855
ATP1A4	1q23.2	-0.07555	0.140533	0.232871
STAG2	Xq25	-0.07555	0.140534	0.232871
FGF16	Xq21.1	-0.07554	0.140568	0.232904
ATP11B	3q26.33	0.075538	0.140577	0.232904
SRSF9	12q24.31	0.075529	0.140626	0.232965
ITGA6	2q31.1	-0.07552	0.140689	0.233038
RBP4	10q23.33	-0.07551	0.140704	0.233038
SNTB2	16q22.1	0.075513	0.140708	0.233038
DOLK	9q34.11	0.075512	0.140717	0.233038
CYP2B6	19q13.2	-0.0755	0.140752	0.233077
SCARNA14	15q22.31	-0.0755	0.140803	0.233142
PPIAL4C	1q21.2	0.075489	0.140834	0.233175
SLC13A5	17p13.1	-0.07548	0.140859	0.233196
CCDC112	5q22.3	0.075469	0.140939	0.233311
ZNF138	7q11.21	0.075463	0.140975	0.23335
NMNAT2	1q25.3	-0.07545	0.14102	0.233405
PDE4D	5q11.2-q12.1	-0.07545	0.141057	0.233447
SMCO2	12p11.23	0.075394	0.141339	0.233894
HOXB4	17q21.32	0.075384	0.14139	0.23396
ALDH3B1	11q13.2	0.075381	0.141406	0.233967
CLTB	5q35.2	0.075372	0.141455	0.234029
POTEF	2q21.1	-0.07536	0.141524	0.234123
SYTL1	1p36.11	0.075333	0.141659	0.234324
PLEKHD1	14q24.1	0.075332	0.141668	0.234324
CDIPTOSP	16p11.2	-0.07531	0.141783	0.234472
NRTN	19p13.3	0.075308	0.141792	0.234472
FSTL3	19p13.3	-0.07531	0.141793	0.234472
GGPS1	1q42.3	-0.0753	0.141842	0.234533
ZFP91-CNTF	11q12.1	0.07529	0.141887	0.234588
SLC9A8	20q13.13	0.075245	0.142126	0.234964
WDR25	14q32.2	-0.07523	0.142191	0.235053
MLIP	6p12.1	-0.0752	0.142343	0.235284
RALA	7p14.1	-0.07519	0.142446	0.235435
SPACA6	19q13.41	0.075181	0.142468	0.235452
PPP1R2C	Xp11.3	-0.07518	0.142486	0.235462



VTCN1	1p13.1-p12	-0.07516	0.142592	0.235618
ZNRF4	19p13.3	-0.07514	0.142669	0.235726
CGB1	19q13.33	-0.07514	0.142688	0.235737
MSANTD3	9q31.1	-0.07513	0.14272	0.235772
SYVN1	11q13.1	0.07513	0.14274	0.235784
ASIC2	17q11.2-q12	-0.07508	0.143031	0.236245
ADAM32	8p11.22	-0.07504	0.143219	0.236537
AQP12A	2q37.3	0.075032	0.143266	0.236594
SPTBN4	19q13.2	-0.07503	0.143285	0.236606
URAD	13q12.2	0.075006	0.143405	0.236785
NCOA2	8q13.3	-0.07499	0.143466	0.236866
TIPARP-AS1	3q25.31	-0.07499	0.143489	0.236885
CCDC13	3p22.1	-0.07496	0.143635	0.237107
NTHL1	16p13.3	0.074949	0.143707	0.237205
CCL18	17q12	-0.07494	0.143745	0.237248
TIMM10	11q12.1	0.074935	0.143785	0.237296
RPS6KC1	1q32.3	-0.07493	0.143835	0.237343
PNCK	Xq28	-0.07492	0.143837	0.237343
KIN	10p14	-0.0749	0.143976	0.237551
FLOT1	6p21.33	-0.07488	0.144067	0.237683
BRWD1	21q22.2	0.074861	0.144179	0.237848
ZKSCAN2	16p12.1	-0.07485	0.144217	0.237877
RAB14	9q33.2	-0.07485	0.144221	0.237877
IL36B	2q14.1	-0.07485	0.144246	0.2379
DIPK1C	18q22.3	-0.07484	0.144289	0.237951
KLHL21	1p36.31	0.074835	0.144321	0.237985
EGF	4q25	0.074823	0.144382	0.238065
TMEM132D	12q24.33	-0.07481	0.144429	0.238122
XRN1	3q23	-0.07473	0.144872	0.238822
PGRMC1	Xq24	-0.07473	0.144877	0.238822
SAP18	13q12.11	-0.07472	0.144926	0.238883
NOB1	16q22.1	-0.07471	0.14497	0.238936
TTC23	15q26.3	-0.0747	0.145041	0.239016
ENHO	9p13.3	-0.0747	0.145042	0.239016
CDH17	8q22.1	-0.07469	0.145084	0.239064
CXORF51A	Xq27.3	-0.07469	0.145122	0.239109
CSNK1A1L	13q13.3	-0.07468	0.14514	0.239118
C2ORF68	2p11.2	-0.07466	0.145259	0.239295
REM2	14q11.2	0.074641	0.145366	0.239451
MT1DP	16q13	-0.07463	0.145405	0.239495
HIBADH	7p15.2	-0.07462	0.145465	0.239575
VCY	Yq11.221	0.074612	0.145522	0.239648
ARR3	Xq13.1	0.074605	0.145562	0.239695
AKAP13	15q25.3	-0.0746	0.145592	0.239724
MISP	19p13.3	0.074597	0.145604	0.239724
PSME1	14q12	-0.07457	0.145775	0.239987
VCPIP1	8q13.1	-0.07455	0.14585	0.24009
SNX12	Xq13.1	-0.07455	0.145873	0.240109
CEP70	3q22.3	0.07447	0.146295	0.240782
SLC23A1	5q31.2	-0.07447	0.146307	0.240782
ATG12	5q22.3	-0.07446	0.146342	0.240821
XYLB	3p22.2	0.074435	0.146481	0.24103
ACRBP	12p13.31	-0.07443	0.146495	0.241033
ZNRF3	22q12.1	-0.07442	0.14656	0.241119
C7ORF50	7p22.3	0.074411	0.146613	0.241188
LARP7	4q25	-0.07439	0.146722	0.241348
UBE2D2	5q31.2	-0.07438	0.146775	0.241415
AASDH	4q12	-0.07435	0.146931	0.241652

GLYATL1	11q12.1	-0.07435	0.146944	0.241653
ADTRP	6p24.1	0.07432	0.14711	0.241905
SOX12	20p13	0.074316	0.14713	0.241918
TTL	2q14.1	0.074309	0.147171	0.241966
NSL1	1q32.3	-0.0743	0.147211	0.242009
KCNA6	12p13.32	-0.0743	0.147221	0.242009
ARHGAP26	5q31.3	0.074297	0.147237	0.242015
MED24	17q21.1	0.074292	0.147262	0.242037
SOCS6	18q22.2	-0.07428	0.147313	0.2421
ZNF512	2p23.3	-0.07424	0.147551	0.242472
SUMO4	6q25.1	0.07423	0.147603	0.242537
FAM71F2	7q32.1	0.074221	0.147651	0.242596
PLGLB2	2p11.2	0.074215	0.147681	0.242626
CANX	5q35.3	-0.07418	0.147884	0.242939
AATF	17q12	0.07415	0.148041	0.243177
C11ORF94	11p11.2	0.074128	0.148161	0.243355
CIC	19q13.2	0.074118	0.148217	0.243426
CYP2C18	10q23.33	0.074099	0.14832	0.243575
NPLOC4	17q25.3	0.074095	0.148343	0.243594
ZNF117	7q11.21	0.07405	0.148588	0.243976
IFNK	9p21.2	0.074045	0.148619	0.244006
GDI1	Xq28	0.074042	0.148634	0.244012
GDAP2	1p12	-0.07404	0.148662	0.244037
TRIM37	17q22	0.07403	0.148696	0.24407
VAV2	9q34.2	0.074028	0.14871	0.24407
CT47A1	Xq24	0.074026	0.148719	0.24407
CCR10	17q21.2	-0.07402	0.14874	0.244085
DPP10	2q14.1	-0.07401	0.148799	0.244161
GNPDA1	5q31.3	-0.07396	0.149074	0.244593
PEX1	7q21.2	0.073948	0.149148	0.244694
OR52I1	11p15.4	-0.07394	0.149196	0.244754
ANKRD18DP	3q29	0.073933	0.149231	0.244791
TSPAN8	12q21.1	-0.07393	0.149253	0.244807
PLP2	Xp11.23	0.073914	0.149338	0.244926
PCDHAC2	5q31.3	-0.07391	0.149371	0.244954
GPR174	Xq21.1	-0.07391	0.14938	0.244954
DPH1	17p13.3	0.073889	0.149477	0.245094
ZNF594	17p13.2	0.073875	0.149551	0.24518
PRB2	12p13.2	-0.07387	0.149554	0.24518
ZNF439	19p13.2	-0.07386	0.149614	0.245258
PLET1	11q23.1	0.073859	0.149643	0.245285
ITGA2	5q11.2	0.073841	0.149742	0.245428
XAGE1B	Xp11.22	-0.07384	0.149756	0.245431
ARL4A	7p21.3	-0.07383	0.149799	0.245482
LMX1B	9q33.3	-0.07383	0.149826	0.245505
GMCL2	5q35.3	-0.07381	0.149889	0.245588
TRIM9	14q22.1	-0.07379	0.15001	0.245766
CA1	8q21.2	-0.07378	0.150098	0.245891
PYROXD1	12p12.1	-0.07377	0.150134	0.245927
SCYL2	12q23.1	-0.07377	0.150145	0.245927
GPS2	17p13.1	-0.07373	0.150353	0.246247
PHPT1	9q34.3	-0.07372	0.150408	0.246317
DRAP1	11q13.1	-0.07371	0.150476	0.246409
NEUROD6	7p14.3	-0.0737	0.150513	0.24645
ECHS1	10q26.3	0.073662	0.150733	0.246789
RNPEPL1	2q37.3	0.073655	0.150771	0.246829
TBX5	12q24.21	-0.07365	0.150782	0.246829
SNAR-G2	19q13.33	0.073639	0.15086	0.246937

TRPM7	15q21.2	-0.07363	0.150902	0.246985
ARNTL2	12p11.23	0.073617	0.150983	0.247097
MLX	17q21.2	0.073615	0.150995	0.247097
FRG2B	10q26.3	-0.0736	0.151051	0.247159
EML6	2p16.1	0.073604	0.151057	0.247159
ZNF780B	19q13.2	0.073588	0.151146	0.247266
NCF2	1q25.3	-0.07359	0.151147	0.247266
GOLT1A	1q32.1	0.073578	0.151201	0.247329
CLIC5	6p21.1	0.073576	0.151211	0.247329
KRTAP2-4	17q21.2	0.073533	0.151455	0.247708
PLOD1	1p36.22	-0.07352	0.151531	0.247813
MRPL39	21q21.3	0.073496	0.151658	0.247993
CTPS2	Xp22.2	-0.07349	0.151666	0.247993
AHSG	3q27.3	-0.07349	0.1517	0.248027
CBWD5	9q21.11	0.073457	0.151879	0.2483
ARAP2	4p14	-0.07345	0.151909	0.248325
IFT88	13q12.11	0.073449	0.151919	0.248325
CASC8	8q24.21	0.073442	0.151963	0.248377
PEF1	1p35.2	-0.07344	0.151992	0.248379
NEDD8	14q12	-0.07344	0.151997	0.248379
RRN3P1	16p12.2	0.073435	0.152002	0.248379
ZNF12	7p22.1	-0.07342	0.152069	0.248469
ETFB	19q13.41	0.073403	0.152181	0.248632
NOX3	6q25.3	-0.07338	0.152295	0.248798
ABHD16B	20q13.33	0.073374	0.15234	0.248852
SNRPB2	20p12.1	-0.07336	0.152392	0.248916
PGS1	17q25.3	0.073359	0.152422	0.248945
ZSCAN1	19q13.43	-0.07335	0.152478	0.249016
RLF	1p34.2	0.073336	0.152555	0.249121
RASGRP2	11q13.1	-0.0733	0.152756	0.249428
SPRTN	1q42.2	0.073276	0.152892	0.249631
TENT5C	1p12	-0.07326	0.15296	0.249721
PRKCSH	19p13.2	0.073258	0.152993	0.249754
RPS2	16p13.3	0.073229	0.153156	0.250001
MKS1	17q22	-0.07321	0.153252	0.250137
LOC340357	8p23.1-p22	-0.0732	0.153293	0.250183
SLC39A3	19p13.3	0.073188	0.153386	0.250315
DIO1	1p32.3	-0.07318	0.153424	0.250356
ZNF490	19p13.2-p13.13	-0.07317	0.153471	0.250413
EIPR1	2p25.3	0.073169	0.153494	0.25043
MYO5B	18q21.1	0.073156	0.153568	0.250531
IDH3B	20p13	0.073128	0.153725	0.250766
FRMD5	15q15.3	0.073119	0.153777	0.250813
MYCBP	1p34.3	0.073118	0.15378	0.250813
NSF	17q21.31	0.073116	0.153792	0.250813
CLHC1	2p16.1	0.073082	0.153985	0.251108
SPATA6	1p33	-0.07308	0.154014	0.251135
DEFA6	8p23.1	-0.07306	0.154089	0.251236
ARHGAP5	14q12	-0.07304	0.154203	0.251402
GRIN2C	17q25.1	-0.07303	0.154258	0.251471
SCAMP5	15q24.2	-0.073	0.154427	0.251726
APEX2	Xp11.21	0.073001	0.154442	0.25173
DIO3OS	14q32.31	-0.073	0.154473	0.251754
SNORA25	11q21	0.072994	0.154482	0.251754
ZNF397	18q12.2	0.072987	0.154521	0.251797
OR56B4	11p15.4	-0.07298	0.154587	0.251884
LIPH	3q27.2	0.072959	0.154678	0.252013
ZNF451	6p12.1	0.072951	0.154725	0.252068

WDR49	3q26.1	-0.07294	0.154805	0.252178
CACNA1G	17q21.33	-0.07293	0.154824	0.252189
GPR18	13q32.3	-0.07291	0.15496	0.25239
FAM205A	9p13.3	0.072853	0.155282	0.252894
SUPT20HL1	Xp22.11	-0.07285	0.155308	0.252916
FCMR	1q32.1	-0.07284	0.155341	0.252948
ANKMY2	7p21.1	-0.07284	0.155364	0.252965
ODAPH	4q21.1	-0.07283	0.155431	0.253055
SPCS1	3p21.1	-0.07281	0.155511	0.253151
PRR34-AS1	22q13.31	-0.07281	0.155516	0.253151
ZNF417	19q13.43	0.072797	0.155603	0.253253
ANP32A	15q23	0.072796	0.155604	0.253253
DNAJC3	13q32.1	-0.07278	0.155702	0.253392
KLK8	19q13.41	-0.07277	0.155742	0.253437
COL27A1	9q32	0.072764	0.155787	0.253489
GOPC	6q22.1	-0.07276	0.155802	0.253492
NLRP14	11p15.4	0.072742	0.155914	0.253654
POR	7q11.23	-0.07274	0.15593	0.253661
MYL4	17q21.32	-0.07273	0.156	0.253753
MAGEA1	Xq28	-0.07271	0.156104	0.253869
IDO2	8p11.21	-0.07271	0.156106	0.253869
HSFY1P1	22q11.1	0.072708	0.156109	0.253869
SCAMP4	19p13.3	0.072705	0.156124	0.253873
ZNF654	3p11.1	-0.0727	0.156163	0.253904
SPRED2	2p14	0.072697	0.156169	0.253904
RGS7	1q43 1q23.1	-0.07267	0.156314	0.254117
ARMC10	7q22.1	-0.07267	0.156325	0.254117
ALOX12P2	17p13.1	0.072652	0.156429	0.254265
VEPH1	3q25.31-q25.32	-0.07265	0.156459	0.254293
C1ORF189	1q21.3	-0.07263	0.156531	0.25439
SNORA47	5q13.3	0.072624	0.156589	0.254463
OXER1	2p21	-0.07261	0.156649	0.25454
NUDT14	14q32.33	-0.07261	0.156683	0.254575
EPO	7q22.1	0.07257	0.156894	0.254892
PRPF8	17p13.3	0.072569	0.156904	0.254892
SMAD3	15q22.33	-0.07257	0.156919	0.254896
OAZ3	1q21.3	0.072563	0.156935	0.254902
PLEKHF1	19q12	-0.07254	0.157068	0.255097
SLC37A3	7q34	-0.07254	0.157089	0.25511
CCDC68	18q21.2	0.072516	0.157209	0.255284
SNIP1	1p34.3	-0.07251	0.157222	0.255285
MRE11	11q21	0.072508	0.157251	0.255311
PTCHD3P1	10p11.23	-0.07249	0.157352	0.255455
RBM11	21q11.2	-0.07249	0.157372	0.255466
LINC00950	9p13.3	0.072482	0.157404	0.255495
TNFRSF10C	8p21.3	-0.07248	0.157415	0.255495
AP3S2	15q26.1	-0.07248	0.157432	0.255502
TM9SF4	20q11.21	-0.07247	0.157457	0.255522
ANKRD34C	15q25.1	-0.07246	0.157528	0.255616
NBPF6	1p13.3	0.072456	0.157549	0.25563
GPR108	19p13.3	-0.07244	0.15762	0.25572
STAG3L2	7q11.23	0.072442	0.15763	0.25572
OR6C3	12q13.2	-0.07241	0.157798	0.255971
TMEM174	5q13.2	0.07241	0.157814	0.255977
RHOBTB2	8p21.3	-0.0724	0.157874	0.256051
TSHR	14q31.1	-0.0724	0.157885	0.256051
ANKRD28	3p25.1	0.072377	0.158003	0.256221
ZNF790	19q13.12	-0.07237	0.158068	0.256305

PCBD1	10q22.1	0.072362	0.158094	0.256326
RLIM	Xq13.2	0.07236	0.158106	0.256326
FIBP	11q13.1	-0.07234	0.158218	0.256486
GPRIN2	10q11.22	-0.07232	0.158307	0.25661
SLCO4C1	5q21.1	-0.07231	0.158398	0.256715
SRRM2-AS1	16p13.3	0.072307	0.158407	0.256715
SNX24	5q23.2	-0.07231	0.15841	0.256715
ZMYND15	17p13.2	0.072293	0.158492	0.256827
GSTT2	22q11.23	-0.07227	0.15861	0.256998
SERF2	15q15.3	-0.07227	0.158629	0.257007
P2RX6	22q11.21	-0.07226	0.158676	0.25705
PABPC1L2A	Xq13.2	-0.07226	0.158681	0.25705
OR52H1	11p15.4	0.07225	0.15874	0.257124
NT5C1A	1p34.2	-0.07223	0.158858	0.257294
GABBR2	9q22.33	-0.07219	0.15911	0.257682
RNASE7	14q11.2	-0.07217	0.159172	0.257743
RPL37A	2q35	-0.07217	0.159173	0.257743
REXO1L6P	8q21.2	-0.07215	0.159335	0.257983
MROH7	1p32.3	0.072142	0.159366	0.258013
STX1A	7q11.23	0.072139	0.15938	0.258016
BIRC3	11q22.2	-0.07213	0.159408	0.258039
NLRP11	19q13.42-q13.43	-0.07212	0.159499	0.258166
CR2	1q32.2	-0.07209	0.159638	0.25837
COX5A	15q24.2	0.072092	0.159655	0.258377
RARS	5q34	0.072087	0.159683	0.258401
SBK1	16p12.1	-0.07208	0.159703	0.258412
EIF6	20q11.22	-0.07207	0.159799	0.258547
CLPTM1	19q13.32	0.072033	0.159997	0.258827
FAM241B	10q22.1	0.072033	0.159998	0.258827
CREB3L1	11p11.2	0.07203	0.160013	0.258883
MAN2B2	4p16.1	-0.07201	0.160152	0.259034
LYSMD2	15q21.2	-0.072	0.160201	0.259092
PRAMEF1	1p36.21	0.071988	0.160257	0.259162
DDB1	11q12.2	0.071947	0.160499	0.259533
GRAMD4	22q13.31	0.071933	0.160576	0.259625
MAP4K1	19q13.2	-0.07193	0.160583	0.259625
LSM14B	20q13.33	0.07193	0.160595	0.259625
NXPH1	7p21.3	-0.07192	0.160661	0.259712
LINC00469	17q25.1	-0.07191	0.160724	0.259765
FBN2	5q23.3	-0.07191	0.160737	0.259765
CAMK1	3p25.3	-0.07191	0.160742	0.259765
LFNG	7p22.3	-0.0719	0.160747	0.259765
MZT2A	2q21.1	0.071887	0.160848	0.259906
HLA-F	6p22.1	0.071885	0.16086	0.259906
NDUFAF2	5q12.1	0.071874	0.160924	0.259989
HFE	6p22.2	-0.07186	0.161026	0.260132
MEX3A	1q22	-0.07185	0.161052	0.260154
POU5F1B	8q24.21	0.071815	0.16127	0.260485
UROC1	3q21.3	0.071811	0.161294	0.260502
ISY1	3q21.3	-0.07179	0.161421	0.260687
SULT1A1	16p11.2	-0.07177	0.161517	0.260821
FEZF2	3p14.2	0.071732	0.161753	0.261175
ST8SIA6	10p12.33	-0.07173	0.161762	0.261175
MEF2D	1q22	-0.07173	0.161787	0.261193
HEMK1	3p21.31	0.071699	0.161945	0.261425
KRT27	17q21.2	-0.0717	0.161957	0.261425
SPON1	11p15.2	-0.07167	0.162125	0.261677
CNBD2	20q11.23	-0.07166	0.162153	0.261686

CATSPER4	1p36.11	0.07166	0.162174	0.261686
RGMB	5q15	-0.07166	0.162178	0.261686
TECTB	10q25.2	0.071659	0.162184	0.261686
RGS12	4p16.3	0.07165	0.162236	0.26175
CT62	15q23	0.071625	0.162383	0.261967
SNORA74A	5q31.2	0.071621	0.162408	0.261985
RAB43	3q21.3	0.071611	0.162463	0.262048
HK3	5q35.2	-0.07161	0.162475	0.262048
PDE6H	12p12.3	-0.07161	0.162486	0.262048
PF4V1	4q13.3	0.071577	0.162662	0.26231
ZSCAN18	19q13.43	-0.07157	0.162706	0.262361
RPL28	19q13.42	0.071561	0.162756	0.262419
OR2V2	5q35.3	0.071555	0.162791	0.262435
ACTG1P4	1p21.1	0.071555	0.162792	0.262435
FGD1	Xp11.22	-0.07155	0.162815	0.262452
PTER	10p13	0.071533	0.162923	0.262605
PAFAH2	1p36.11	-0.07152	0.162998	0.262693
GOLGA2P3Y	Yq11.23	0.071518	0.16301	0.262693
C14ORF93	14q11.2	-0.07152	0.163017	0.262693
RNF216	7p22.1	-0.07151	0.163044	0.26271
SPATA24	5q31.2	0.071511	0.163054	0.26271
TRIML1	4q35.2	-0.07149	0.163148	0.26284
GUF1	4p12	0.071479	0.163239	0.262966
LYPD6	2q23.2	0.071476	0.16326	0.262978
COL4A4	2q36.3	-0.07146	0.163356	0.263112
BSDC1	1p35.1	-0.07144	0.163447	0.263236
CCNY	10p11.21	-0.07144	0.163459	0.263236
PIK3CA	3q26.32	-0.0714	0.163737	0.263662
COLEC10	8q24.12	-0.07138	0.163824	0.263781
KRT38	17q21.2	-0.07137	0.163899	0.26388
FKBP14	7p14.3	-0.07136	0.163973	0.263978
DNAJC7	17q21.2	0.07133	0.164121	0.264156
CEP162	6q14.2-q14.3	0.07133	0.164122	0.264156
IRGC	19q13.31	0.07133	0.164123	0.264156
OR8B8	11q24.2	0.071314	0.164219	0.264288
MPP4	2q33.1	-0.0713	0.164285	0.264374
OR2T12	1q44	0.071284	0.164395	0.264531
OR5C1	9q33.2	0.071247	0.164618	0.264867
YBX1	1p34.2	0.071244	0.164634	0.264872
TREML2	6p21.1	-0.07122	0.164754	0.265044
DAGLB	7p22.1	0.071208	0.164847	0.265171
GS1-124K5.11	7q11.21	0.071204	0.164871	0.265189
NAV2	11p15.1	0.0712	0.164897	0.265209
INKA2	1p13.2	-0.07117	0.165054	0.265441
SCAF11	12q12	0.071161	0.165127	0.265537
COX7B	Xq21.1	0.071157	0.16515	0.265553
PRDM16-DT	1p36.32	-0.07115	0.165177	0.265574
LINC00909	18q22.3	-0.07113	0.165296	0.265745
KRTAP9-9	17q21.2	0.071128	0.165326	0.265772
ILDR2	1q24.1	-0.07111	0.165453	0.265955
LINC01558	6q27	-0.07109	0.165539	0.266065
STRA8	7q33	-0.07109	0.165549	0.266065
SYCP2	20q13.33	0.07108	0.16561	0.266143
C11ORF45	11q24.3	-0.07106	0.165703	0.266272
KCTD20	6p21.31	-0.07105	0.165764	0.266326
DOCK8-AS1	9p24.3	-0.07105	0.165764	0.266326
TMOD2	15q21.2	-0.07105	0.165784	0.266338
AQP7	9p13.3	-0.07104	0.165836	0.266399

UBE3C	7q36.3	0.07103	0.165907	0.266491
CFAP61	20p11.23	-0.07102	0.165996	0.266613
SCP2D1	20p11.23	0.070985	0.166176	0.266881
ADH6	4q23	-0.07098	0.166226	0.26694
METTL7B	12q13.2	-0.07095	0.166384	0.267173
LCE1C	1q21.3	0.07092	0.166569	0.267448
ANKRD24	19p13.3	0.070911	0.166623	0.267513
PROSER1	13q13.3	0.070897	0.166706	0.267624
PLEKHG3	14q23.3	0.070884	0.166783	0.267722
C4ORF51	4q31.21	0.070882	0.166793	0.267722
C12ORF43	12q24.31	-0.07088	0.166818	0.26774
HPN	19q13.11	-0.07086	0.166914	0.267873
ARV1	1q42.2	0.070855	0.16696	0.267925
FGD6	12q22	-0.07083	0.167106	0.268138
FXR2	17p13.1	-0.07083	0.167137	0.268166
AHR	7p21.1	-0.07082	0.16716	0.268166
NBPF22P	5q14.3	0.070816	0.167189	0.268166
RTL10	22q11.21	0.070816	0.16719	0.268166
TFB1M	6q25.3	0.070816	0.16719	0.268166
CCDC47	17q23.3	-0.07078	0.167431	0.268531
FAM102A	9q34.11	-0.07077	0.167489	0.268603
OTOF	2p23.3	-0.07073	0.167726	0.268961
ATP5MD	10q24.33	0.070725	0.167739	0.268961
RNF43	17q22	-0.07072	0.167768	0.268985
TMPRSS6	22q12.3	-0.07072	0.167785	0.268991
DLGAP1-AS1	18p11.31	-0.0707	0.167865	0.269098
CDR2	16p12.2	0.070682	0.167999	0.269277
ZNF596	8p23.3	-0.07068	0.168004	0.269277
CACNA2D2	3p21.31	-0.07067	0.16807	0.269343
CC2D2B	10q24.1	-0.07067	0.168072	0.269343
GBP7	1p22.2	-0.07067	0.1681	0.269364
PHKG1	7p11.2	0.070663	0.168112	0.269364
OGFOD3	17q25.3	-0.07064	0.168268	0.269592
ALDH2	12q24.12	-0.07063	0.168342	0.269689
STK19	6p21.33	0.070622	0.168359	0.269695
KDM5A	12p13.33	-0.07061	0.168421	0.269766
OR4D5	11q24.1	-0.07061	0.168432	0.269766
CRTC3	15q26.1	-0.07061	0.168444	0.269766
OR2T11	1q44	-0.0706	0.168488	0.269816
GPR39	2q21.2	-0.0706	0.168509	0.269828
KCNMB3	3q26.32	0.07059	0.168552	0.269874
TMCO5A	15q14	-0.07058	0.168616	0.269955
BNIP1	5q35.1	0.07057	0.168677	0.270031
OR2A2	7q35	0.070558	0.168747	0.270107
C19ORF24	19p13.3	0.070557	0.168751	0.270107
MTERF2	12q23.3	0.07055	0.168795	0.270156
PDHB	3p14.3	-0.07053	0.168929	0.270349
ZNF830	17q12	-0.07052	0.168984	0.270415
FGF23	12p13.32	-0.07051	0.169037	0.270478
LOC100129935	19q13.2	-0.07051	0.169052	0.270481
FAM153B	5q35.2	-0.0705	0.169069	0.270487
TMEM74B	20p13	0.07048	0.169223	0.270711
STX17	9q31.1	0.070477	0.169241	0.270717
CSRNP1	3p22.2	-0.07046	0.169343	0.27086
SPINK14	5q32	0.07045	0.169401	0.270931
BCDIN3D	12q13.12	-0.07043	0.169534	0.271122
CDC14C	7p12.3	-0.07042	0.169604	0.271213
CPPED1	16p13.12	-0.07041	0.169633	0.271237

ZNF510	9q22.33	-0.07041	0.16967	0.271274
ACOT4	14q24.3	-0.0704	0.169703	0.271306
OR10Z1	1q23.1	-0.07038	0.169798	0.271392
DEFB118	20q11.21	0.070385	0.169798	0.271392
IFNA14	9p21.3	0.070385	0.169798	0.271392
BASP1-AS1	5p15.1	-0.07038	0.169832	0.271424
HAUS4	14q11.2	0.070375	0.169855	0.27144
NFX1	9p13.3	0.070373	0.169873	0.271446
CCDC63	12q24.11	-0.07037	0.169886	0.271446
PPP1R1B	17q12	0.070362	0.16994	0.27151
SKOR1	15q23	0.070355	0.16998	0.271553
CEP41	7q32.2	-0.07035	0.169998	0.271561
SORD	15q21.1	0.070343	0.170053	0.271608
LIPM	10q23.31	-0.07034	0.170055	0.271608
FGF19	11q13.3	-0.07034	0.170087	0.27162
SLC35D1	1p31.3	-0.07034	0.17009	0.27162
PARM1	4q13.3	-0.07033	0.170103	0.27162
SCARNA2	1p13.3	-0.07033	0.170119	0.271623
DNLZ	9q34.3	0.070329	0.170137	0.271628
RBFOX1	16p13.3	-0.07033	0.170161	0.271628
FAM3B	21q22.3	-0.07032	0.170162	0.271628
USP38	4q31.21	-0.07031	0.170264	0.271769
PPARD	6p21.31	0.070305	0.170282	0.271775
DUXA	19q13.43	-0.0703	0.170327	0.271816
OR11L1	1q44	0.070295	0.170346	0.271816
EVX2	2q31.1	-0.07029	0.170348	0.271816
PARD3	10p11.22-p11.21	0.07029	0.170375	0.271837
ABHD3	18q11.2	0.070276	0.17046	0.271951
RAB5B	12q13.2	-0.07027	0.170494	0.271984
CYP46A1	14q32.2	-0.07022	0.170816	0.272475
SEC11A	15q25.2-q25.3	-0.07021	0.170877	0.272551
LONRF1	8p23.1	-0.07018	0.171052	0.272808
LINC00965	8p23.1	-0.07017	0.171108	0.272876
DCAF16	4p15.31	0.070141	0.171287	0.273139
OR14A16	1q44	-0.07014	0.171319	0.273169
MRGPRX2	11p15.1	-0.07009	0.17159	0.273579
AK3	9p24.1	-0.07007	0.171725	0.273773
OR2G6	1q44	0.070064	0.171757	0.273802
OR4C6	11q11	-0.07006	0.171775	0.273809
UPF3A	13q34	0.070056	0.171806	0.273827
CEP63	3q22.2	-0.07005	0.171813	0.273827
OSBP	11q12.1	0.070038	0.171919	0.273973
GSTO2	10q25.1	0.070034	0.171939	0.273982
ZNF680	7q11.21	-0.07003	0.171952	0.273982
MAD2L1BP	6p21.1	0.070023	0.17201	0.274053
MYO18B	22q12.1	-0.06999	0.172217	0.274361
MT1IP	16q13	0.069984	0.172251	0.274373
DMWD	19q13.32	0.069983	0.172252	0.274373
TMEM94	17q25.1	0.06997	0.172332	0.274478
	10-Mar 17q23.2	-0.06997	0.172359	0.274499
SUCLA2	13q14.2	-0.06996	0.172414	0.274565
COX6B1	19q13.12	0.069947	0.172475	0.274625
OBP2A	9q34.3	-0.06995	0.172479	0.274625
EWSAT1	15q23	-0.06994	0.172508	0.274648
HCP5	6p21.33	0.06994	0.172521	0.274648
TINCR	19p13.3	-0.06993	0.172566	0.274698
CCDC62	12q24.31	-0.06993	0.172588	0.274711
OR4C12	11p11.12	0.069923	0.172621	0.274742



COPG1	3q21.3	0.069913	0.172687	0.274809
LAMP3	3q27.1	-0.06991	0.172691	0.274809
CHCHD5	2q14.1	-0.0699	0.172757	0.274884
FAM124A	13q14.3	-0.0699	0.172765	0.274884
MED14	Xp11.4	0.069884	0.172866	0.275022
ZDHHC7	16q24.1	0.069864	0.172989	0.275181
RPUSD3	3p25.3	0.069863	0.172993	0.275181
TMEM177	2q14.2	0.069857	0.17303	0.275192
CPTP	1p36.33	0.069856	0.173038	0.275192
TNFSF13	17p13.1	-0.06986	0.173041	0.275192
FKBP5	6p21.31	0.069838	0.173144	0.275334
CPNE2	16q13	-0.06983	0.173201	0.275374
IL4	5q31.1	0.069828	0.173207	0.275374
ZNF785	16p11.2	0.069828	0.173211	0.275374
ZBTB8B	1p35.1	-0.06981	0.173331	0.275544
KLK14	19q13.41	0.069792	0.173431	0.27568
CFHR4	1q31.3	-0.06979	0.173464	0.275683
DBX1	11p15.1	-0.06979	0.173471	0.275683
MAPK8	10q11.22	-0.06979	0.173474	0.275683
TFAM	10q21.1	0.069771	0.173558	0.275795
RHNO1	12p13.33	0.069768	0.173578	0.275805
SLC17A4	6p22.2	0.069741	0.173749	0.276055
MYEOV	11q13.3	0.069737	0.173771	0.276067
CNTN5	11q22.1	-0.06972	0.173871	0.276204
CEP57L1	6q21	0.069692	0.174048	0.276465
HOXC10	12q13.13	-0.06969	0.174072	0.276481
FRMD1	6q27	-0.06968	0.174112	0.276522
MIR205HG	1q32.2	-0.06968	0.174139	0.276535
AMBRA1	11p11.2	-0.06968	0.174148	0.276535
NKX2-5	5q35.1	-0.06965	0.174293	0.276744
CCL4L1	17q12	-0.06964	0.174353	0.276817
LINC01366	5q35.1	-0.06963	0.174421	0.276902
LRRC3	21q22.3	-0.06962	0.174492	0.276994
RAPSN	11p11.2	-0.0696	0.174624	0.277181
APOL2	22q12.3	-0.06956	0.17486	0.277533
LINC02085	3q12.3	-0.06955	0.174908	0.27758
F9	Xq27.1	-0.06955	0.174917	0.27758
FUT2	19q13.33	0.069548	0.174944	0.277601
UMOD	16p12.3	0.069544	0.174968	0.277617
ACTL6B	7q22.1	-0.06952	0.175118	0.277832
SPANXN2	Xq27.3	-0.06949	0.175317	0.278127
SLC47A2	17p11.2	0.069484	0.175343	0.278146
TBX21	17q21.32	-0.06947	0.175405	0.278223
IAPP	12p12.1	-0.06945	0.175552	0.278433
COX16	14q24.2	-0.06945	0.175574	0.278446
TXNRD2	22q11.21	0.069438	0.175629	0.278496
MYO1G	7p13	-0.06944	0.175633	0.278496
DCK	4q13.3	-0.0694	0.175864	0.278824
ABCC11	16q12.1	0.0694	0.175868	0.278824
AQP10	1q21.3	0.069386	0.175954	0.278929
GPAM	10q25.2	-0.06938	0.175962	0.278929
SEPSECS	4p15.2	-0.06938	0.176001	0.278969
FOXP1	3p13	0.069373	0.176032	0.278996
GON7	14q32.12	-0.06936	0.176122	0.279082
SKIDA1	10p12.31	-0.06936	0.176123	0.279082
TRPV5	7q34	0.069355	0.176143	0.279082
KLHL25	15q25.3	0.069353	0.176156	0.279082
DYDC1	10q23.1	0.069353	0.176156	0.279082

CRLF2	Xp22.33 and Yp11.2	-0.06934	0.176213	0.27915
ADSS	1q44	0.06933	0.176301	0.279268
ARGFX	3q13.33	0.069323	0.176348	0.27932
DUS4L	7q22.3	-0.06931	0.17644	0.279443
ARMC7	17q25.1	-0.06929	0.176533	0.279568
ETF1	5q31.2	0.069286	0.176574	0.279612
PMS2P4	7q11.21	-0.06926	0.176716	0.279814
NPAS1	19q13.32	-0.06925	0.176772	0.27988
CLTCL1	22q11.21	-0.06922	0.176974	0.280178
ZNF180	19q13.31	0.069198	0.177128	0.2804
PLK2	5q11.2	-0.06918	0.177263	0.280591
LRRC8A	9q34.11	0.069169	0.17731	0.280644
RPL23A	17q11.2	-0.06917	0.177325	0.280645
ODF3	11p15.5	0.069164	0.177339	0.280646
PPP6R2	22q13.33	0.069119	0.177627	0.281051
SSTR1	14q21.1	0.069117	0.177636	0.281051
ALOXE3	17p13.1	0.069113	0.17766	0.281051
SLC38A5	Xp11.23	0.069113	0.177666	0.281051
ESYT2	7q36.3	-0.06911	0.17767	0.281051
ZNF75D	Xq26.3	0.06911	0.177679	0.281051
MAPK7	17p11.2	-0.0691	0.177756	0.281151
ZNF750	17q25.3	-0.06909	0.17782	0.281229
TMEM198	2q35	-0.06905	0.178038	0.281525
ELP3	8p21.1	-0.06905	0.178064	0.281525
HCN4	15q24.1	-0.06905	0.178065	0.281525
NEUROD1	2q31.3	-0.06905	0.178069	0.281525
KRTAP4-1	17q21.2	-0.06905	0.178082	0.281525
SPINK13	5q32	-0.06904	0.178092	0.281525
ANKFN1	17q22	-0.06904	0.178136	0.281573
MYH7	14q11.2	0.069034	0.178162	0.281591
CYP2C19	10q23.33	0.069024	0.178224	0.281668
CAPN14	2p23.1	-0.06902	0.178261	0.281704
TMBIM6	12q13.12	-0.06901	0.178292	0.281731
HIST1H2BK	6p22.1	0.069003	0.178354	0.281807
LCE2D	1q21.3	0.068991	0.178431	0.281905
INSL5	1p31.3	-0.06899	0.178459	0.281928
CHD4	12p13.31	0.068948	0.1787	0.282286
TMEM134	11q13.2	-0.06893	0.178788	0.282389
H2AFY	5q31.1	0.068934	0.178793	0.282389
ACP7	19q13.2	-0.06893	0.178832	0.282411
RAB4A	1q42.13	0.068927	0.178836	0.282411
PSMC6	14q22.1	-0.06892	0.178853	0.282417
OR52N4	11p15.4	-0.06892	0.178907	0.282479
SOWAHC	2q13	0.068894	0.179041	0.282669
CLDN4	7q11.23	-0.06884	0.179386	0.283191
MRPL23	11p15.5	0.068809	0.179581	0.283448
RNF115	1q21.1	0.068808	0.179586	0.283448
HTR1F	3p11.2-p11.1	-0.06881	0.179591	0.283448
RPL32	3p25.2	-0.0688	0.17966	0.283512
KCNE1	21q22.12	-0.06879	0.179683	0.283512
TCL1B	14q32.13	-0.06879	0.179687	0.283512
C17ORF78	17q12	-0.06879	0.179688	0.283512
LEFTY1	1q42.12	-0.06878	0.179745	0.283578
FBXL13	7q22.1	-0.06877	0.179856	0.283728
TBR1	2q24.2	0.068764	0.179867	0.283728
LURAP1L	9p23	-0.06876	0.179893	0.283746
PRR19	19q13.2	0.06875	0.179956	0.283823
CCDC134	22q13.2	0.06874	0.180018	0.283898

SRY	Yp11.2	-0.06873	0.180066	0.283913
LINC00887	3q29	0.068732	0.180069	0.283913
PRADC1	2p13.2	0.068732	0.18007	0.283913
ARL5C	17q12	-0.06873	0.180111	0.283955
AK7	14q32.2	0.068705	0.180242	0.28414
PRPS1L1	7p21.1	-0.06868	0.180406	0.284376
ZNF382	19q13.12	-0.06866	0.180537	0.28456
NELFE	6p21.33	0.068656	0.180552	0.28456
SH2B3	12q24.12	-0.06865	0.180619	0.284644
PACRG-AS1	6q26	-0.06864	0.180662	0.284689
TBC1D21	15q24.1	0.068621	0.180777	0.28483
CT83	Xq23	-0.06862	0.18078	0.28483
PSMB9	6p21.32	0.068617	0.180804	0.284846
DUSP5	10q25.2	-0.0686	0.180886	0.284953
ERBB3	12q13.2	0.068584	0.181012	0.285129
MEP1B	18q12.1	0.068572	0.181092	0.285232
SNORA24	4q26	0.068562	0.181155	0.28531
NHP2	5q35.3	0.068555	0.181195	0.28535
DOC2B	17p13.3	-0.06854	0.181279	0.285458
SYN1	Xp11.3-p11.23	-0.06854	0.181292	0.285458
FAM90A1	12p13.31	-0.06853	0.181365	0.28549
ZNF746	7q36.1	0.068511	0.181477	0.28569
CCDC34	11p14.1	0.06851	0.181482	0.28569
MICA	6p21.33	0.068495	0.181581	0.285823
FCRL5	1q23.1	-0.06849	0.181635	0.285885
MRPL52	14q11.2	0.068482	0.181665	0.28591
KANSL1	17q21.31	-0.06848	0.181689	0.285925
DPY19L2P1	7p14.2	-0.06845	0.181875	0.286196
SP8	7p21.1	0.068446	0.181891	0.286199
KDELRL1	19q13.33	0.068411	0.182117	0.286531
SLC12A3	16q13	-0.06841	0.182131	0.286531
CDK5RAP1	20q11.21	0.068404	0.182163	0.286559
UGT2B7	4q13.2	-0.0684	0.182187	0.286561
ZNF98	19p12	-0.0684	0.182193	0.286561
PAK5	20p12.2	-0.06839	0.182243	0.286617
LOC100128076	9q22.31	0.068378	0.182328	0.286728
FANCF	11p14.3	-0.06834	0.182592	0.28712
FAM41AY1	Yq11.222	0.06833	0.182639	0.287172
TRMT5	14q23.1	-0.06832	0.182733	0.287297
SPP2	2q37.1	-0.06829	0.182887	0.287516
NPAP1	15q11.2	-0.06829	0.182908	0.287527
NOVA2	19q13.32	-0.06828	0.182979	0.287596
PMEL	12q13.2	-0.06828	0.18298	0.287596
TNF	6p21.33	-0.06827	0.183024	0.287643
KANK1	9p24.3	-0.06827	0.183049	0.287659
MEPE	4q22.1	-0.06826	0.183063	0.287659
TTPA	8q12.3	-0.06824	0.183195	0.287843
ZNF793	19q13.12	-0.06823	0.183271	0.28794
MTMR10	15q13.3	-0.06822	0.183317	0.287989
MRGPRD	11q13.3	-0.06822	0.183357	0.288029
SUGT1P4-STRA6LP-CCDC180	9q22.33	-0.06821	0.183414	0.288096
HIST1H4F	6p22.2	0.068205	0.18344	0.288115
CFAP54	12q23.1	-0.06819	0.183548	0.288262
SLC30A5	5q13.1-q13.2	-0.06816	0.183723	0.288514
ZFP69B	1p34.2	-0.06815	0.183771	0.288542
MBD4	3q21.3	0.068153	0.183776	0.288542
APIP	11p13	-0.06815	0.183784	0.288542
IFT81	12q24.11	0.068143	0.183842	0.288611

C7ORF57	7p12.3	-0.06813	0.183925	0.288719
MICAL3	22q11.21	0.068124	0.183964	0.288735
PSMD5	9q33.2	0.068124	0.183964	0.288735
TCP11	6p21.31	-0.06811	0.184072	0.28888
SARS	1p13.3	-0.06809	0.184187	0.289039
RNF113B	13q32.2	0.068079	0.184255	0.289123
MX2	21q22.3	-0.06807	0.184293	0.289159
FOXN4	12q24.11	0.068053	0.18442	0.289315
HPS6	10q24.32	0.068053	0.184421	0.289315
PLEKHH2	2p21	-0.06804	0.184501	0.289419
CSPG5	3p21.31	0.068024	0.184611	0.289568
LRRC52	1q24.1	0.06801	0.1847	0.289685
KMT2C	7q36.1	0.068004	0.184737	0.28972
SLC5A6	2p23.3	-0.06799	0.184826	0.289837
ZIM2	19q13.43	-0.06799	0.184846	0.289846
PVT1	8q24.21	0.06797	0.18496	0.289983
TNIK	3q26.2-q26.31	0.067969	0.184962	0.289983
CAMK2G	10q22.2	0.067965	0.184989	0.290002
HOXC9	12q13.13	-0.06796	0.185029	0.290042
MATN1	1p35.2	-0.06795	0.185086	0.290109
ELANE	19p13.3	-0.06795	0.185111	0.290125
MTERF4	2q37.3	-0.06794	0.185163	0.290175
S100P	4p16.1	0.067937	0.185172	0.290175
BMP2K	4q21.21	-0.06793	0.185191	0.290183
SLC5A9	1p33	-0.06793	0.185229	0.290219
USE1	19p13.11	-0.06792	0.185271	0.290262
IER3IP1	18q21.1	-0.06789	0.185458	0.290533
RIPPLY1	Xq22.3	0.067885	0.18551	0.290581
LINC00303	1q32.1	-0.06788	0.185518	0.290581
CCDC191	3q13.31	0.067853	0.185715	0.290857
RAG2	11p12	0.067852	0.185723	0.290857
ST3GAL1	8q24.22	-0.06782	0.185934	0.29115
HIST4H4	12p12.3	0.067819	0.185939	0.29115
GPR182	12q13.3	-0.06782	0.185961	0.291162
CES3	16q22.1	0.067791	0.186123	0.291377
DNAH14	1q42.12	0.06779	0.186128	0.291377
CXCL6	4q13.3	-0.06779	0.186156	0.291398
SLC4A10	2q24.2	-0.06776	0.186311	0.291617
SLC26A4	7q22.3	-0.06774	0.186437	0.291792
CSAG2	Xq28	-0.06773	0.186549	0.291944
TAS2R10	12p13.2	0.067715	0.186616	0.292026
GABRR2	6q15	0.067712	0.186634	0.292033
RPE65	1p31.3	-0.06771	0.186656	0.292044
GOLM1	9q21.33	0.067705	0.186678	0.292055
SPTLC1	9q22.31	-0.0677	0.186727	0.29211
LCN8	9q34.3	0.067678	0.186856	0.292281
BTC	4q13.3	-0.06767	0.186878	0.292281
PARL	3q27.1	-0.06767	0.18688	0.292281
CPA5	7q32.2	-0.06767	0.186899	0.292288
PEX26	22q11.21	0.067667	0.18693	0.292312
STXBP5	6q24.3	-0.06766	0.186948	0.292318
CCL20	2q36.3	-0.06766	0.186991	0.292363
GADD45GIP1	19p13.13	0.067646	0.187069	0.292438
FCGBP	19q13.2	0.067646	0.187069	0.292438
ERBIN	5q12.3	-0.06764	0.187118	0.292492
SNHG32	6p21.33	-0.06762	0.187214	0.292619
SLC25A20	3p21.31	-0.06761	0.187302	0.292735
OBP2B	9q34.2	-0.0676	0.187354	0.292792

LINC00301	11q12.2	0.067597	0.187385	0.292795
POTEA	8p11.1	-0.0676	0.187385	0.292795
YTHDC2	5q22.2	0.067593	0.187414	0.292817
PPDPF	20q13.33	0.06757	0.187566	0.293032
FAM226B	Xq13.1	-0.06757	0.187587	0.293042
IVD	15q15.1	0.06756	0.18763	0.293088
HHLA1	8q24.22	0.067549	0.187703	0.293178
PRRG4	11p13	0.067545	0.187726	0.293192
TPTE	21p11.2	0.067533	0.187807	0.293294
NEUROG2	4q25	-0.06753	0.18783	0.293308
MCF2	Xq27.1	-0.06751	0.187929	0.293439
ZBTB26	9q33.2	0.067511	0.187951	0.293451
IL31RA	5q11.2	-0.06751	0.187982	0.293476
SRD5A1	5p15.31	0.067496	0.188048	0.293557
ATP7A	Xq21.1	-0.06747	0.188236	0.293827
XXYL1	3q29	0.067426	0.188504	0.294223
ZP1	11q12.2	-0.06741	0.188614	0.294372
HRK	12q24.22	0.067396	0.188706	0.29448
CD6	11q12.2	-0.06739	0.188717	0.29448
TRIM6-TRIM34	11p15.4	0.067392	0.188728	0.29448
BMP5	6p12.1	-0.06738	0.188789	0.294549
MED13L	12q24.21	-0.06738	0.188802	0.294549
RTBDN	19p13.13	0.067372	0.188861	0.294612
GNA15	19p13.3	-0.06737	0.188871	0.294612
IFT22	7q22.1	-0.06737	0.188902	0.294637
NR2C2	3p25.1	0.067335	0.189106	0.294933
YWHAG	7q11.23	-0.06732	0.189187	0.295036
DBP	19q13.33	0.067301	0.189329	0.295234
TBPL2	14q22.3	-0.06729	0.189371	0.295276
GJA10	6q15	0.067285	0.189438	0.295358
ZNF704	8q21.13	-0.06727	0.18951	0.295448
SNW1	14q24.3	-0.06726	0.189576	0.295527
FAM167A	8p23.1	-0.06726	0.189616	0.295566
TSPAN19	12q21.31	-0.06726	0.189633	0.29557
MS4A3	11q12.1	-0.06725	0.189688	0.295632
RFC1	4p14	0.067239	0.189741	0.295684
OR11H12	14q11.2	-0.06724	0.18975	0.295684
EBPL	13q14.2	0.067222	0.189853	0.295821
PCDHGC5	5q31.3	-0.0672	0.189973	0.295973
SAA3P	11p15.1	-0.0672	0.18999	0.295973
MIPEP	13q12.12	0.0672	0.189995	0.295973
TNFRSF12A	16p13.3	-0.06719	0.190041	0.296021
CTNNA1	5q31.2	-0.06718	0.190129	0.296135
WWC3	Xp22.2	-0.06718	0.190147	0.296141
ZNF717	3p12.3	0.06715	0.19033	0.296402
TCTN1	12q24.11	-0.06714	0.190365	0.296434
SGSM2	17p13.3	0.067142	0.190379	0.296434
NWD1	19p13.11	-0.06713	0.190449	0.296519
DYRK2	12q15	-0.06709	0.190754	0.296971
NMRAL1	16p13.3	0.06707	0.19086	0.297112
PIAS3	1q21.1	0.067045	0.191024	0.297345
TMEM165	4q12	-0.06704	0.191084	0.297415
SPATA31A1	9p12	-0.06702	0.191171	0.297495
PLA2G3	22q12.2	0.067022	0.191174	0.297495
RAP1GAP2	17p13.3	0.067021	0.19118	0.297495
ZNF718	4p16.3	0.066984	0.191426	0.297854
WDR1	4p16.1	-0.06697	0.191517	0.297974
RGPD3	2q12.2	0.066959	0.191592	0.298066

SLC49A4	3q21.1	-0.06695	0.191633	0.298108
STARD10	11q13.4	-0.06694	0.191688	0.298169
WVOX	16q23.1-q23.2	-0.06693	0.191779	0.298288
CSNK2A2	16q21	-0.06692	0.191835	0.298331
SNF8	17q21.32	-0.06692	0.191836	0.298331
LGALS8	1q43	0.066905	0.191955	0.298493
KRT31	17q21.2	-0.0669	0.191999	0.298538
STAR	8p11.23	-0.06688	0.192095	0.298664
AACSP1	5q35.3	0.066879	0.192128	0.298693
SBSN	19q13.12	-0.06687	0.192201	0.29876
RPS4X	Xq13.1	-0.06687	0.192202	0.29876
SLC35E2B	1p36.33	0.066819	0.192528	0.299244
SPATA8	15q26.2	-0.06681	0.192603	0.299337
LRIF1	1p13.3	-0.0668	0.192647	0.299383
AMN	14q32.32	0.066789	0.192725	0.299472
SLC46A1	17q11.2	-0.06679	0.192735	0.299472
GUCY1B2	13q14.3	0.066779	0.192793	0.29954
NDUFA4	7p21.3	-0.06677	0.192884	0.299658
NOMO2	16p12.3	0.066756	0.192945	0.299729
RANBP6	9p24.1	0.066738	0.193064	0.299891
C6ORF52	6p24.2	0.066716	0.193216	0.300104
TMEM30CP	3q12.1	0.066675	0.193489	0.300504
KLF3	4p14	-0.06667	0.193514	0.300519
CCNJ	10q24.1	0.066667	0.193545	0.300525
DAO	12q24.11	-0.06667	0.193555	0.300525
ANKRD13C	1p31.1	-0.06666	0.193563	0.300525
NDUFB4	3q13.33	-0.06665	0.193627	0.300583
OR2G3	1q44	-0.06665	0.19363	0.300583
CABLES1	18q11.2	0.06664	0.193723	0.300704
ZC3H12C	11q22.3	-0.06663	0.19378	0.30077
PRKACG	9q21.11	0.066622	0.193845	0.300848
NFE2L3P2	17q21.32	0.066614	0.193897	0.300905
CABP2	11q13.2	-0.06661	0.193934	0.30094
ESS2	22q11.21 22q11.2	0.066598	0.194006	0.301027
DDAH2	6p21.33	-0.06658	0.194159	0.301241
CGB2	19q13.33	-0.06652	0.194526	0.301787
IDH3G	Xq28	0.066518	0.194541	0.301787
IL1RL1	2q12.1	-0.06652	0.194558	0.301791
LRRC39	1p21.2	0.066509	0.194602	0.301836
SEC24B	4q25	-0.06649	0.194729	0.302005
PWAR5	15q11.2	-0.06649	0.194742	0.302005
ROGDI	16p13.3	0.06648	0.194797	0.302067
F5	1q24.2	-0.06648	0.19482	0.30208
ZNF638	2p13.3-p13.2	0.066467	0.194888	0.302162
TUBA3C	13q12.11	0.066464	0.194903	0.302162
ALS2	2q33.1	0.066442	0.195052	0.30236
AWAT2	Xq13.1	-0.06644	0.195072	0.30236
PLCXD2	3q13.2	-0.06644	0.195077	0.30236
RBL2	16q12.2	-0.06643	0.195156	0.302461
KLHL12	1q32.1	0.066418	0.195216	0.302529
COL18A1-AS1	21q22.3	0.066416	0.195232	0.302531
TMEM69	1p34.1	-0.06641	0.195284	0.302588
ACTR3BP2	2p11.1	-0.0664	0.195354	0.302674
EHD1	11q13.1	-0.06639	0.195425	0.30276
ABHD17C	15q25.1	0.06638	0.195473	0.302811
PPP1R36	14q23.3	-0.06635	0.195685	0.303116
ATP13A4	3q29	-0.06634	0.195727	0.303157
NDUFS1	2q33.3	0.066329	0.195819	0.303276

CHSY1	15q26.3	-0.06631	0.195957	0.303466
PIWIL3	22q11.23	-0.0663	0.195982	0.303481
CHD2	15q26.1	0.066299	0.196019	0.303516
TMA16	4q32.2	-0.06629	0.196059	0.303554
MON1B	16q23.1	0.066275	0.19618	0.303717
GRM1	6q24.3	-0.06627	0.196196	0.303719
CASP6	4q25	-0.06623	0.196467	0.304095
IPO8	12p11.21	-0.06623	0.196475	0.304095
ZNF763	19p13.2	-0.06623	0.196484	0.304095
ZNF124	1q44	0.06621	0.196621	0.304283
HIST1H2BN	6p22.1	0.066203	0.196667	0.304331
RSL1D1	16p13.13	-0.06619	0.196752	0.30444
ATP11AUN	13q34	0.066187	0.196774	0.30445
CCDC51	3p21.31	0.066165	0.196925	0.304637
VWC2	7p12.2	-0.06616	0.196926	0.304637
TNFRSF21	6p12.3	0.066163	0.196941	0.304637
OR4N3P	15q11.2	0.066159	0.196969	0.304656
CT45A1	Xq26.3	-0.06613	0.197166	0.304938
ZNF711	Xq21.1	0.066126	0.197191	0.304953
VASP	19q13.32	0.066112	0.197286	0.305076
TFE3	Xp11.23	-0.0661	0.197341	0.305138
CXCL5	4q13.3	0.066083	0.197483	0.305334
OR10A2	11p15.4	0.066081	0.197499	0.305336
SAMM50	22q13.31	-0.06607	0.197593	0.305457
GPX2	14q23.3	-0.06606	0.197648	0.305519
C20ORF173	20q11.22	0.066053	0.197683	0.305549
CXCR1	2q35	-0.06601	0.197963	0.305958
FABP1	2p11.2	-0.06601	0.197996	0.305985
ELP4	11p13	0.066004	0.198022	0.306002
OR4F6	15q26.3	0.065978	0.198197	0.306249
ABCC6P2	16p13.11	-0.06596	0.198314	0.306406
DNAH3	16p12.3	0.065954	0.198362	0.306457
UTP14A	Xq26.1	0.065929	0.198528	0.30669
FBXO42	1p36.13	0.065918	0.198609	0.306746
POMGNT2	3p22.1	-0.06592	0.198615	0.306746
ATF7	12q13.13	-0.06592	0.198622	0.306746
SNORA51	20p13	0.065914	0.198635	0.306746
FOXO3	6q21	-0.06591	0.198641	0.306746
RAB40A	Xq22.2	-0.06591	0.198684	0.306788
RAB3D	19p13.2	0.065899	0.198737	0.306847
MRPL42P5	15q15.1	-0.06589	0.198803	0.306919
CLCN4	Xp22.2	0.065887	0.198818	0.306919
CST11	20p11.21	0.065885	0.19883	0.306919
NR2E1	6q21	-0.06588	0.198852	0.30693
GBA3	4p15.2	-0.06586	0.198993	0.307124
CAMK2A	5q32	0.065856	0.199029	0.307146
LRRC19	9p21.2	-0.06585	0.199039	0.307146
CELF6	15q23	0.06585	0.199068	0.307156
ZNF444	19q13.43	0.065849	0.199075	0.307156
ESPN	1p36.31	-0.06584	0.199168	0.307258
IRF1	5q31.1	-0.06584	0.199172	0.307258
ELAC1	18q21.2	-0.06583	0.199239	0.307338
RNF112	17p11.2	-0.06582	0.199273	0.307367
FIZ1	19q13.42	0.065776	0.199576	0.30781
ACADS	12q24.31	-0.06576	0.199718	0.308005
BLZF1	1q24.2	0.065751	0.199747	0.308025
SCARNA20	17q23.2	-0.06575	0.19978	0.308054
ZNF518A	10q24.1	0.065699	0.200108	0.308534

IL17REL	22q13.33	0.065688	0.200184	0.308629
PRSS1	7q34	-0.06568	0.200234	0.308683
RNF149	2q11.2	-0.06568	0.200269	0.30871
GLT6D1	9q34.3	-0.06567	0.200283	0.30871
ECHDC3	10p14	-0.06567	0.200318	0.30874
CDY2B	Yq11.222	-0.06566	0.200383	0.30878
DDB2	11p11.2	-0.06566	0.200385	0.30878
IRF4	6p25.3	-0.06566	0.20039	0.30878
LVRN	5q23.1	-0.06565	0.200427	0.308813
MXD1	2p13.3	0.065648	0.200455	0.308824
ATXN10	22q13.31	-0.06565	0.200465	0.308824
ZFY	Yp11.2	-0.06562	0.200666	0.30911
PAX4	7q32.1	0.065613	0.200695	0.309122
LCK	1p35.2	-0.06561	0.200705	0.309122
RNASE8	14q11.2	0.065608	0.200728	0.309133
IL20RA	6q23.3	-0.0656	0.200772	0.309178
ZNF706	8q22.3	-0.0656	0.200806	0.309206
LINC00598	13q14.11	0.065593	0.200834	0.309226
RNF39	6p22.1	0.065584	0.200892	0.309292
TRMT44	4p16.1	0.06558	0.200921	0.30931
TOP2B	3p24.2	-0.06558	0.200935	0.30931
NCAN	19p13.11	-0.06557	0.200996	0.30938
CTAGE11P	13q22.2	-0.06554	0.201221	0.309702
KLC3	19q13.32	0.065532	0.201253	0.309729
RPS21	20q13.33	-0.06552	0.201371	0.309885
ICE2	15q22.2	-0.06548	0.201599	0.310201
RAB24	5q35.3	0.06548	0.201614	0.310201
SNORA28	14q32.32	0.065479	0.201622	0.310201
THAP11	16q22.1	-0.06547	0.2017	0.310297
TEPP	16q21	-0.06546	0.201727	0.310315
PPP1R27	17q25.3	0.06545	0.20182	0.310434
SNAR-E	19q13.32	0.065437	0.201908	0.310522
ALDH18A1	10q24.1	0.065437	0.201908	0.310522
CASP7	10q25.3	0.065432	0.201944	0.310545
CES4A	16q22.1	0.06543	0.201954	0.310545
IL17F	6p12.2	-0.06543	0.20197	0.310546
CLINT1	5q33.3	0.065418	0.202044	0.310635
CARS2	13q34	0.065413	0.202075	0.310651
GNAS	20q13.32	-0.06541	0.202085	0.310651
AIDA	1q41	0.065355	0.202475	0.311227
VSIG10	12q24.23	0.065343	0.202562	0.311336
USP19	3p21.31	0.065323	0.202699	0.311523
OR2T8	1q44	0.06532	0.202719	0.311529
ZNF486	19p12	-0.06531	0.202777	0.311594
GLRA3	4q34.1	-0.06529	0.202922	0.311793
P2RX3	11q12.1	-0.06529	0.202945	0.311805
PRAMEF16	1p36.21	-0.06527	0.203035	0.311911
PSME2	14q12	0.065273	0.203045	0.311911
PALM3	19p13.12	-0.06525	0.20323	0.312172
ANXA2P1	4q31.3	-0.06524	0.203295	0.312247
RNF133	7q31.32	0.065232	0.203327	0.312272
USP5	12p13.31	0.065226	0.203368	0.312311
ZNF155	19q13.31	-0.0652	0.203541	0.312537
FAM216A	12q24.11	0.065201	0.203546	0.312537
AFAP1L2	10q25.3	0.065195	0.203585	0.312572
IGFL4	19q13.32	-0.06519	0.203629	0.312615
CCAR2	8p21.3	0.065184	0.203666	0.312648
UFD1	22q11.21	0.065156	0.203857	0.312919



SLC16A8	22q13.1	0.065153	0.203879	0.312928
CENPX	17q25.3	0.065138	0.203983	0.313054
KCNH4	17q21.2	0.065137	0.203992	0.313054
INVS	9q31.1	0.065127	0.204056	0.313128
EFNA2	19p13.3	0.065109	0.204185	0.313302
SNORA71A	20q11.23	0.065102	0.20423	0.313347
SNAR-A2	19q13.33	-0.06509	0.204315	0.313453
UNG	12q24.11	0.065086	0.204344	0.313474
GYG2	Xp22.33	-0.06507	0.204448	0.313578
TBC1D28	17p11.2	-0.06507	0.204459	0.313578
SPOCD1	1p35.2	-0.06507	0.20447	0.313578
ANXA4	2p13.3	-0.06507	0.204475	0.313578
POM121C	7q11.23	0.065053	0.204572	0.313704
HYAL6P	7q31.32	-0.06504	0.204663	0.313818
FITM2	20q13.12	-0.06501	0.204856	0.314091
CXXC5	5q31.2	-0.06501	0.204877	0.314099
UXT-AS1	Xp11.23	0.064997	0.204967	0.314213
WDR72	15q21.3	-0.06496	0.205194	0.314537
CYP4A22	1p33	0.064951	0.205285	0.314652
SNORA63	3q27.3	0.064948	0.205311	0.314667
HACD1	10p12.33	0.064945	0.205331	0.314675
ANO1	11q13.3	-0.06494	0.205369	0.314709
KLRK1	12p13.2	-0.06494	0.205389	0.314716
FLOT2	17q11.2	-0.06491	0.20556	0.314954
EIF2B3	1p34.1	0.064905	0.205612	0.315008
GRIN2B	12p13.1	0.064899	0.205648	0.315039
FAM221B	9p13.3	0.064896	0.205672	0.315052
HS3ST1	4p15.33	-0.06489	0.205738	0.315124
STH	17q21.31	0.064885	0.205751	0.315124
OR2T34	1q44	-0.06487	0.205849	0.315251
S100G	Xp22.2	0.064857	0.205945	0.315373
SLIT1	10q24.1	-0.06484	0.206069	0.315539
SLC39A1	1q21.3	0.064818	0.206219	0.315726
CDK13	7p14.1	0.064817	0.206222	0.315726
TAS2R38	7q34	0.064804	0.206318	0.315849
PSG1	19q13.2	-0.0648	0.206353	0.315878
MTMR3	22q12.2	-0.06478	0.206509	0.316093
LOC553137	6q21	-0.06477	0.20658	0.316177
HSPA4	5q31.1	0.064761	0.206621	0.316216
SYBU	8q23.2	-0.06473	0.206821	0.316498
CKLF	16q21	0.064707	0.206997	0.316742
CAND1	12q14.3-q15	0.064695	0.207084	0.316852
C7ORF13	7q36.3	-0.06467	0.207256	0.31709
KIF3A	5q31.1	-0.06467	0.207275	0.317096
KCNJ6	21q22.13	-0.06466	0.207333	0.31716
PHF12	17q11.2	0.064644	0.207444	0.317305
EIF3K	19q13.2	0.064633	0.207518	0.317394
C10ORF67	10p12.2	-0.06463	0.20757	0.31745
SLITRK2	Xq27.3	-0.06462	0.207608	0.317484
ALG8	11q14.1	-0.0646	0.20775	0.317677
MED8	1p34.2	-0.06459	0.207788	0.31771
ACP1	2p25.3	-0.06458	0.207878	0.317823
S100PBP	1p35.1	0.064568	0.207975	0.317933
DAPL1	2q24.1	-0.06457	0.207983	0.317933
LINC02433	4q32.1	-0.06456	0.208004	0.317933
GATA1	Xp11.23	-0.06456	0.208013	0.317933
DPF3	14q24.2	-0.06455	0.208093	0.318032
CLCNKA	1p36.13	-0.06454	0.208174	0.318094

POLR2J3	7q22.1	0.06454	0.208175	0.318094
UQCRC1	3p21.31	0.064539	0.208182	0.318094
RPS5	19q13.43	-0.06453	0.208271	0.318206
EML4	2p21	0.064517	0.208334	0.318277
MTREX	5q11.2	0.0645	0.208457	0.318441
ACY3	11q13.2	0.06449	0.208527	0.318524
DPP4	2q24.2	0.064472	0.208655	0.318694
NPM1	5q35.1	0.06447	0.20867	0.318694
KHNYN	14q12	0.064443	0.208863	0.318965
FAHD2A	2q11.1	-0.0644	0.209185	0.319432
PTX4	16p13.3	0.064394	0.209205	0.319438
IFT172	2p23.3	-0.06438	0.209293	0.319549
ICOSLG	21q22.3	-0.06437	0.209364	0.319632
C16ORF74	16q24.1	-0.06436	0.209417	0.319689
FAM149A	4q35.1	0.064344	0.209565	0.319891
TAL1	1p33	-0.06432	0.209761	0.320165
C9ORF40	9q21.13	0.064303	0.20985	0.320276
SPRYD4	12q13.3	-0.06429	0.209957	0.320415
APOA4	11q23.3	-0.06428	0.210038	0.320508
CHCHD3	7q32.3-q33	0.064275	0.21005	0.320508
CCDC172	10q25.3	0.064263	0.210139	0.32062
OR52B4	11p15.4	0.064247	0.210247	0.320761
RIMBP3	22q11.21	-0.06423	0.210351	0.32088
CCDC25	8p21.1	-0.06423	0.210358	0.32088
SNORA64	16p13.3	-0.06423	0.210387	0.320887
PROSER2	10p14	-0.06423	0.210394	0.320887
SH3D21	1p34.3	0.064218	0.210454	0.320954
DMAC2L	14q21.3	-0.06421	0.210542	0.321063
P2RX2	12q24.33	0.064192	0.210639	0.321187
OR1L8	9q33.2	-0.06418	0.210711	0.321271
GNG8	19q13.32	-0.06418	0.210747	0.321302
OR52W1	11p15.4	0.064167	0.210818	0.321386
TMEM178A	2p22.1	0.064152	0.210926	0.321514
NLRP2	19q13.42	-0.06415	0.210934	0.321514
CCL3L1	17q21.1	-0.06414	0.210988	0.321572
SPINDOC	11q13.1	0.064133	0.211063	0.321662
CHUK	10q24.31	0.06412	0.211157	0.32178
SPDYC	11q13.1	-0.06412	0.211191	0.321808
ILF3-DT	19p13.2	-0.06411	0.211223	0.321832
NEU4	2q37.3	0.064067	0.211533	0.322281
B3GNTL1	17q25.3	0.064062	0.211572	0.32229
SAMD9	7q21.2	-0.06406	0.211572	0.32229
MYD88	3p22.2	-0.06404	0.211704	0.322467
LRTOMT	11q13.4	0.064025	0.211835	0.32263
FTMT	5q23.1	0.064024	0.211843	0.32263
PAPOLB	7p22.1	-0.064	0.21202	0.322875
ODF1	8q22.3	-0.06398	0.212137	0.323028
CCSER1	4q22.1	-0.06398	0.212168	0.32305
ZSWIM8	10q22.2	0.063969	0.212234	0.323127
PATZ1	22q12.2	-0.06394	0.212451	0.323433
MRPS18C	4q21.23	-0.06393	0.212481	0.323453
ZNF233	19q13.31	-0.06392	0.212569	0.323543
OTUD7A	15q13.3	-0.06392	0.212573	0.323543
RCE1	11q13.2	-0.06392	0.212603	0.323543
PTCD2	5q13.2	0.063917	0.212604	0.323543
PATE4	11q24.2	0.063915	0.212622	0.323546
CDH20	18q21.33	-0.0639	0.212723	0.323673
CAP1	1p34.2	-0.0639	0.212738	0.323673

CFHR5	1q31.3	-0.06389	0.212805	0.32375
CDKL4	2p22.1	-0.06387	0.212911	0.323875
CDR2L	17q25.1	0.063874	0.212919	0.323875
AHSP	16p11.2	-0.06384	0.213153	0.324192
CCR6	6q27	0.06384	0.21316	0.324192
DDX47	12p13.1	-0.06383	0.213199	0.324222
CLDN17	21q21.3	-0.06383	0.213213	0.324222
TBC1D3G	17q12	0.063816	0.213332	0.324379
SEPTIN11	4q21.1	-0.06379	0.213487	0.32459
BNIP3	10q26.3	-0.06379	0.21355	0.324662
POLR2D	2q14.3	0.063771	0.213659	0.324792
TAPT1	4p15.32	-0.06377	0.213668	0.324792
SILC1	2p25.2	-0.06377	0.213696	0.32481
HAPLN1	5q14.3	-0.06375	0.2138	0.324944
GOLGA6D	15q24.2	-0.06374	0.21386	0.325009
TEKT3	17p12	-0.06373	0.213984	0.325173
GRM8	7q31.33	-0.06369	0.214204	0.325483
MAGOH	1p32.3	0.063686	0.214267	0.325553
PRSS22	16p13.3	-0.06368	0.214329	0.325621
MAP4	3p21.31	-0.06367	0.214355	0.325621
ARHGFEF38	4q24	0.063673	0.21436	0.325621
ARHGFEF9	Xq11.1	0.063667	0.214403	0.325662
STRIP1	1p13.3	-0.06366	0.214444	0.325699
TBC1D4	13q22.2	0.063655	0.214492	0.325747
HIST1H2BE	6p22.2	0.06365	0.214527	0.325777
RPL23	17q12	-0.06364	0.214586	0.325841
ZBTB44	11q24.3	-0.06363	0.214658	0.325925
DOP1B	21q22.12	0.063619	0.214754	0.326047
TTC24	1q22	0.063607	0.214838	0.326149
SEPTIN7P9	10p11.1	0.063586	0.214993	0.32636
HINT2	9p13.3	0.063578	0.215047	0.326417
KRT33B	17q21.2	-0.06357	0.215139	0.326521
DNAJC10	2q32.1	-0.06356	0.215148	0.326521
WEE2	7q34	-0.06355	0.215236	0.32663
TSPAN32	11p15.5	-0.06354	0.215291	0.326689
LINC00323	21q22.2	0.06354	0.215325	0.326715
ZSCAN25	7q22.1	-0.0635	0.215637	0.327164
COA1	7p13	0.063491	0.215678	0.327201
LINC00515	21q21.3	0.06346	0.215906	0.327522
GPR78	4p16.1	0.06345	0.215974	0.3276
KIAA1324L	7q21.12	-0.06344	0.216018	0.327642
SH2D1B	1q23.3	-0.06342	0.216166	0.327842
TRMT61B	2p23.2	-0.06342	0.216201	0.32787
KIR3DX1	19q13.42	0.0634	0.216334	0.328048
DTX3L	3q21.1	0.063364	0.216598	0.328422
POF1B	Xq21.1	0.06335	0.216698	0.328549
RASIP1	19q13.33	-0.06332	0.216917	0.328857
RGS21	1q31.2	-0.0633	0.217038	0.329016
TBC1D20	20p13	-0.06327	0.217251	0.329295
SLC25A47	14q32.2	-0.06327	0.217256	0.329295
AGO1	1p34.3	-0.06327	0.217273	0.329296
APOC4	19q13.32	-0.06326	0.217363	0.329408
TSEN15	1q25.3	0.063232	0.217557	0.329677
MKNK2	19p13.3	0.063221	0.217638	0.329775
PRPF6	20q13.33	-0.06321	0.217724	0.329881
EIF5AL1	10q22.3	0.063207	0.217743	0.329885
FPR2	19q13.41	-0.0632	0.217769	0.329899
ALOX12B	17p13.1	-0.0632	0.217807	0.329926

MALSU1	7p15.3	0.063196	0.21782	0.329926
DNAJC27	2p23.3	-0.06319	0.217876	0.329986
SRGAP1	12q14.2	-0.06318	0.21794	0.330057
JPH3	16q24.2	-0.06317	0.218019	0.330152
ZNF518B	4p16.1	-0.06316	0.218108	0.330262
RAB3A	19p13.11	0.063154	0.218129	0.330269
MTMR1	Xq28	0.063128	0.218319	0.330511
PHF20	20q11.22-q11.23	-0.06313	0.218336	0.330511
EZH1P	Xp11.22	-0.06313	0.218338	0.330511
TRIOBP	22q13.1	0.063118	0.218393	0.330568
DAG1	3p21.31	0.063102	0.218506	0.330715
HERC2P4	16p11.2	-0.0631	0.218527	0.330722
PPP1R3F	Xp11.23	0.063092	0.218581	0.330779
LGALS9C	17p11.2	-0.06309	0.218614	0.330804
ASB12	Xq11.2	-0.06308	0.218688	0.330869
MOGAT1	2q36.1	0.063077	0.21869	0.330869
RNF214	11q23.3	-0.06306	0.218844	0.331077
PPM1H	12q14.1-q14.2	-0.06305	0.218865	0.331083
SF3B2	11q13.1	0.063051	0.218885	0.331089
SORCS3	10q25.1	-0.06305	0.218903	0.33109
C1ORF141	1p31.3	0.06304	0.218963	0.331157
FAM25BP	10q11.22	-0.06302	0.219088	0.3313
KIRREL2	19q13.12	-0.06302	0.219107	0.3313
GDAP1L1	20q13.12	0.06302	0.219107	0.3313
CLDN23	8p23.1	-0.06301	0.219158	0.331329
IRF5	7q32.1	-0.06301	0.21916	0.331329
GPR20	8q24.3	-0.063	0.21922	0.331395
	11-Mar 5p15.1	-0.063	0.219266	0.331439
ATF3	1q32.3	-0.06299	0.219362	0.331559
TRAPPC9	8q24.3	0.062969	0.219483	0.331718
OR4M1	14q11.2	-0.06295	0.219612	0.331888
CXADRP3	18p11.21	-0.06292	0.219866	0.332242
IK	5q31.3	-0.06291	0.21988	0.332242
LRRC6	8q24.22	0.062907	0.219942	0.33231
GAST	17q21.2	-0.0629	0.219958	0.33231
RAMP1	2q37.3	-0.0629	0.219976	0.332313
QRSL1	6q21	0.062895	0.220026	0.332362
BCLAF3	Xp22.12	-0.06289	0.220081	0.33242
PCDHGA10	5q31.3	-0.06287	0.220206	0.332584
SYT14P1	4q13.2	-0.06286	0.220313	0.332721
GJC3	7q22.1	-0.06285	0.220379	0.332796
FOXE1	9q22.33	-0.06279	0.220823	0.333441
RNASE11	14q11.2	0.06278	0.220875	0.333493
GCG	2q24.2	0.062772	0.220932	0.333555
SOX8	16p13.3	0.06276	0.221017	0.333659
NUCB2	11p15.1	-0.06275	0.221067	0.333708
GZF1	20p11.21	-0.06268	0.221621	0.33452
SH2B2	7q22.1	0.06265	0.221829	0.334809
MIR155HG	-	0.062646	0.22186	0.334824
LOC440173	9q21.33	-0.06264	0.221883	0.334824
CNOT11	2q11.2	0.062642	0.22189	0.334824
PPP1R14D	15q15.1	-0.06263	0.221958	0.334902
LKAAEAR1	20q13.33	-0.0626	0.22219	0.335227
PPIAP80	7p15.1	-0.06259	0.222297	0.335362
SEMA6B	19p13.3	-0.06256	0.222518	0.33567
LAP3	4p15.32	-0.06254	0.222648	0.335818
LOC93429	19q13.32	-0.06254	0.222649	0.335818
USP42	7p22.1	0.062532	0.222707	0.335881

FMO5	1q21.1	-0.06249	0.223001	0.336257
GIPC2	1p31.1	-0.06249	0.223001	0.336257
UBE3B	12q24.11	0.062488	0.223033	0.336257
SNORA11D	Xp11.22	0.062487	0.223041	0.336257
TMEM202	15q23-q24.1	-0.06249	0.223041	0.336257
RLBP1	15q26.1	-0.06248	0.223081	0.336292
FAM83A-AS1	8q24.13	0.062478	0.223109	0.336309
SNORD115-13	15q11.2	-0.06247	0.223147	0.336318
BAHD1	15q15.1	0.062472	0.223148	0.336318
KIR3DP1	19q13.42	-0.06247	0.223187	0.336351
COL5A3	19p13.2	0.062453	0.223289	0.336479
RNGTT	6q15	0.062442	0.223375	0.336584
IRX3	16q12.2	-0.06243	0.223436	0.33665
SNORA71D	20q11.23	0.06242	0.223535	0.336774
KCNAB2	1p36.31	-0.06241	0.223626	0.336886
SPATA1	1p22.3	-0.06239	0.223775	0.337055
ERN1	17q23.3	-0.06239	0.223777	0.337055
MUCL3	6p21.33	0.062386	0.223789	0.337055
LYST	1q42.3	0.06238	0.223833	0.337096
PRF1	10q22.1	-0.06238	0.22385	0.337097
ANKRD34B	5q14.1	-0.06237	0.22392	0.337176
ZNF160	19q13.41-q13.42	0.062349	0.224068	0.337374
CSAG3	Xq28	-0.06234	0.224143	0.337444
HSD17B10	Xp11.22	0.062338	0.224149	0.337444
TRIM77	11q14.3	0.062336	0.224165	0.337444
LMF2	22q13.33	0.06233	0.224208	0.337483
IL36RN	2q14.1	-0.06232	0.224259	0.337529
CPS1	2q34	-0.06232	0.224272	0.337529
CASK	Xp11.4	-0.06232	0.224294	0.337537
SLC39A9	14q24.1	-0.06231	0.224344	0.337587
DUSP10	1q41	-0.06229	0.224509	0.33781
P4HTM	3p21.31 3p21.3	0.062281	0.224572	0.337879
SUB1	5p13.3	-0.06227	0.224643	0.337941
STMN3	20q13.33	-0.06227	0.224647	0.337941
OSTF1	9q21.13	-0.06225	0.224826	0.338184
TINAGL1	1p35.2	-0.06224	0.224895	0.338263
ZNF546	19q13.2	-0.06223	0.224925	0.338283
MRPS35	12p11.22	0.062227	0.224977	0.338335
CYP11B1-AS1	2p22.2	-0.06221	0.225069	0.338448
AQR	15q14	0.062205	0.225136	0.338514
BCRP3	22q11.23	0.062202	0.225159	0.338514
OR6C2	12q13.2	0.062202	0.225163	0.338514
MINDY2	15q21.3-q22.1	-0.06217	0.225364	0.33877
SOCS4	14q22.3	0.062174	0.225368	0.33877
DOK7	4p16.3	0.062158	0.225491	0.33893
NIPSNAP1	22q12.2	-0.06215	0.225554	0.339
SIGLEC15	18q12.3	-0.06214	0.22562	0.339074
OTUD5	Xp11.23	-0.06214	0.225659	0.339107
KYNU	2q22.2	-0.06212	0.225777	0.339258
MAGEB4	Xp21.2	-0.06211	0.225837	0.339323
ST6GALNAC1	17q25.1	0.062103	0.225901	0.339393
TNFSF15	9q32	-0.0621	0.225931	0.339396
GRAMD2A	15q23	-0.0621	0.225944	0.339396
FMO6P	1q24.3	-0.0621	0.225954	0.339396
YAE1	7p14.1	-0.06209	0.226004	0.339446
ART3	4q21.1 4p15.1-p14	0.062058	0.226241	0.339778
FRG2	4q35.2	0.062036	0.226402	0.339994
MIA2	14q13.2	-0.06203	0.226466	0.340064

TAS2R46	12p13.2	0.062025	0.226487	0.340069
ARHGAP9	12q13.3	-0.06202	0.226507	0.340075
COX7A2	6q14.1	0.061998	0.226687	0.340318
KLC1	14q32.33	-0.062	0.226703	0.340318
IGDCC3	15q22.31	-0.06198	0.22684	0.340498
SRL	16p13.3	-0.06197	0.226913	0.340582
GTF2E2	8p12	0.061965	0.226934	0.340588
HELT	4q35.1	0.061962	0.226957	0.340596
P3H4	17q21.2	-0.06195	0.227026	0.340657
ZNF771	16p11.2	0.061952	0.227031	0.340657
DNM3	1q24.3	-0.06194	0.227091	0.340721
CATIP	2q35	-0.06194	0.227122	0.340742
EIF2B2	14q24.3	-0.06192	0.227301	0.34097
REPIN1	7q36.1	0.061916	0.227308	0.34097
FAM237A	2q33.3	-0.06191	0.227348	0.341005
METTL4	18p11.32	0.061905	0.22739	0.341016
CREB3L4	1q21.3	0.061904	0.227397	0.341016
NCOR1	17p12-p11.2	0.061903	0.227407	0.341016
CCNG1	5q34	-0.06188	0.227577	0.341246
C4ORF19	4p14	0.061871	0.227643	0.34132
PCBP1	2p13.3	-0.06187	0.227667	0.341331
ELL3	15q15.3	0.061859	0.227734	0.341405
GPRC6A	6q22.1	-0.06186	0.22776	0.341418
BDKRB1	14q32.2	-0.06183	0.227936	0.341656
FCRL1	1q23.1	-0.06183	0.227981	0.341698
MAFG-DT	17q25.3	0.061813	0.228079	0.34182
ZNF579	19q13.42	0.061797	0.228198	0.341972
OR52B6	11p15.4	0.061771	0.228396	0.342223
KCNH8	3p24.3	0.061771	0.228399	0.342223
HPCA	1p35.1	-0.06177	0.22842	0.342229
MRPL20	1p36.33	0.061755	0.22852	0.342352
TDP2	6p22.3	-0.06173	0.228707	0.342606
TMCO2	1p34.2	0.061717	0.228807	0.3427
FAM27B	9q21.11	0.061716	0.228811	0.3427
SALL4	20q13.2	-0.06172	0.22882	0.3427
ARHGEF5	7q35	0.061706	0.228889	0.342777
PLGRKT	9p24.1	-0.06169	0.229001	0.342908
RPS23	5q14.2	-0.06169	0.229011	0.342908
HAPLN2	1q23.1	0.061686	0.229042	0.342929
PAGE2	Xp11.21	0.061673	0.229136	0.343044
PIGT	20q13.12	-0.06167	0.229161	0.343056
ACE	17q23.3	0.061642	0.229369	0.343342
ALDH3A2	17p11.2	-0.06161	0.229643	0.343726
SMCO1	3q29	0.061593	0.229747	0.343856
DDX1	2p24.3	-0.06159	0.229764	0.343856
FOSB	19q13.32	-0.06157	0.229933	0.344084
CUL2	10p11.21	0.061565	0.229958	0.344095
ULK4P3	15q13.2	-0.06154	0.230157	0.344367
IKBKB	8p11.21	0.061534	0.23019	0.34439
ALG1L	3q21.2	-0.06153	0.230245	0.344448
IFI44L	1p31.1	-0.0615	0.230423	0.344688
KHDRBS3	8q24.23	-0.0615	0.230443	0.344692
TAAR8	6q23.2	0.061492	0.230513	0.34477
COX6A1	12q24.31 12q24.2	0.061481	0.23059	0.344861
PSKH1	16q22.1	-0.06146	0.230719	0.345028
RNF145	5q33.3	0.061459	0.230759	0.345061
SNORD15B	11q13.4	0.061449	0.230838	0.345154
DYNLL1	12q24.31	-0.06145	0.230865	0.345169

BLK	8p23.1	-0.06144	0.230937	0.345251
BOLL	2q33.1	0.06143	0.230984	0.345294
CASKIN2	17q25.1	-0.06143	0.231014	0.345308
RPS11	19q13.33	-0.06142	0.231027	0.345308
TBC1D2	9q22.33	0.061413	0.231112	0.34541
C2CD5	12p12.1	0.061406	0.231165	0.345462
KIAA1147	7q34	-0.0614	0.231227	0.345529
POLR3D	8p21.3	-0.06139	0.231316	0.345636
GABRG3	15q12	-0.06138	0.231336	0.34564
CENPBD1P1	19q13.43	0.061368	0.23145	0.345785
C15ORF32	15q26.1	-0.06136	0.231539	0.345861
OFD1	Xp22.2	0.061356	0.231545	0.345861
TEKT5	16p13.13	-0.06135	0.231553	0.345861
CHKB-DT	22q13.33	-0.06135	0.231575	0.345869
GSTM2	1p13.3	-0.06135	0.231622	0.345907
SMCO4	11q21	-0.06134	0.231635	0.345907
RP9P	7p14.3	-0.06134	0.231701	0.345967
LSM11	5q33.3	0.061334	0.231713	0.345967
BIRC6	2p22.3	0.061332	0.231727	0.345967
TSPYL6	2p16.2	0.061325	0.231781	0.346022
MYO1E	15q22.2	-0.06132	0.231809	0.346035
ASMT	Xp22.33 and Yp11.2	-0.06132	0.231825	0.346035
RPP30	10q23.31	0.061312	0.231877	0.346087
SMG1P5	16p11.2	0.061302	0.231957	0.346181
SNORA57	11q12.3	0.061296	0.232003	0.346215
PCED1A	20p13	0.061294	0.232015	0.346215
RPL35	9q33.3	0.061286	0.232075	0.346279
IPO11	5q12.1	0.061284	0.232092	0.346279
SLC25A3	12q23.1	0.061272	0.232182	0.346388
CARD10	22q13.1	0.061269	0.232205	0.346397
SNORA36A	Xq28	0.061245	0.23239	0.346605
ZFYVE19	15q15.1	0.061245	0.232391	0.346605
FAM177B	1q41	0.061244	0.232397	0.346605
FDFT1	8p23.1	0.061236	0.232462	0.34666
NDRG1	8q24.22	-0.06123	0.232468	0.34666
TP53TG3B	16p11.2	-0.06122	0.232563	0.346776
PDCD6	5p15.33	0.061216	0.232613	0.346824
PRORS1P	2p16.1	0.061194	0.232784	0.347052
PFN1	17p13.2	0.061185	0.23285	0.34712
C2CD2	21q22.3	0.061183	0.232863	0.34712
SPATA2	20q13.13	0.061176	0.232919	0.347178
IL12A	3q25.33	-0.06116	0.233038	0.347306
SEPTIN12	16p13.3	-0.06116	0.23304	0.347306
DNITIP2	1p22.1	-0.06115	0.233101	0.34737
EIF3F	11p15.4	-0.06114	0.2332	0.347492
KLHDC8A	1q32.1	-0.06112	0.233377	0.34773
OR5V1	6p22.1	-0.06109	0.233554	0.347968
DNAI1	9p13.3	-0.06108	0.233623	0.348045
ADA	20q13.12	-0.06106	0.233825	0.34832
C19ORF53	19p13.13	-0.06104	0.233936	0.348459
SERHL2	22q13.2	0.061032	0.234022	0.348562
FGFBP1	4p15.32	0.061025	0.23408	0.348621
GALNTL5	7q36.1	-0.06102	0.234132	0.348674
ALG6	1p31.3	0.061001	0.234258	0.348835
RNF166	16q24.2-q24.3	0.06099	0.234342	0.348929
STAT1	2q32.2	-0.06099	0.234356	0.348929
CCNB3	Xp11.22	0.060945	0.234689	0.349387
ALDH1L2	12q23.3	-0.06094	0.234698	0.349387

ZNF544	19q13.43	0.060939	0.234735	0.349415
SUOX	12q13.2	-0.06093	0.234824	0.349519
OR51B5	11p15.4	-0.06093	0.234839	0.349519
NHS	Xp22.2-p22.13	0.060903	0.235017	0.349738
FNDC7	1p13.3	0.060902	0.235021	0.349738
CDA	1p36.12	-0.0609	0.235055	0.349761
EFCC1	3q21.3	-0.06088	0.235201	0.349953
SIPA1L1	14q24.2	0.060871	0.235259	0.350002
CPB2	13q14.13	-0.06087	0.235268	0.350002
YWHAB	20q13.12	-0.06087	0.235305	0.35003
YLPM1	14q24.3	0.060842	0.235486	0.350273
GCAT	22q13.1	0.060836	0.235534	0.350319
TSPAN17	5q35.2	-0.06082	0.235629	0.350433
NR5A2	1q32.1	-0.06082	0.235669	0.350467
COQ8B	19q13.2	0.06078	0.235963	0.350859
IL17RA	22q11.1	0.060779	0.235968	0.350859
KLC4	6p21.1	-0.06076	0.236127	0.351071
GTPBP10	7q21.13	0.060732	0.236332	0.351349
LMBR1L	12q13.12	-0.06073	0.236362	0.351367
MAP3K1	5q11.2	0.060721	0.236419	0.351425
UQCRQ	5q31.1	0.060667	0.236835	0.352018
ADPRHL1	13q34	-0.06066	0.236868	0.352018
SIAH2	3q25.1	-0.06066	0.23687	0.352018
TADA2B	4p16.1	-0.06066	0.236917	0.352061
VILL	3p22.2	0.060644	0.237012	0.352176
HERC6	4q22.1	-0.06064	0.237083	0.352257
ORAI1	12q24.31	0.060602	0.237344	0.352596
WDR44	Xq24	-0.0606	0.237347	0.352596
SLC66A1	1p36.13	0.060592	0.237419	0.352677
ALOX15	17p13.2	-0.06059	0.237461	0.352713
DDX20	1p13.2	0.060581	0.237507	0.352756
FAM178B	2q11.2	-0.06057	0.237581	0.352839
IFNA5	9p21.3	0.060564	0.237638	0.352897
EPB41L4A-AS1	5q22.1	-0.06056	0.237674	0.352926
PPP2R5B	11q13.1	-0.06055	0.237721	0.352969
PTPRK	6q22.33	-0.06053	0.237925	0.353232
CDC34	19p13.3	-0.06053	0.237934	0.353232
PLXNB2	22q13.33	0.060522	0.237965	0.353253
SERINC5	5q14.1	0.060515	0.238019	0.353306
EIF2AK1	7p22.1	0.060496	0.238166	0.353498
NKIRAS2	17q21.2	-0.06048	0.23825	0.353596
PLEKHS1	10q25.3	0.060479	0.238293	0.353633
PHACTR4	1p35.3	0.060477	0.23831	0.353633
CFAP57	1p34.2	0.060472	0.23835	0.353648
DYNLT1	6q25.3	0.060471	0.238355	0.353648
KRTAP5-2	11p15.5	0.060464	0.238413	0.353707
ZNHIT1	7q22.1	-0.06046	0.238431	0.353707
SPATA19	11q25	0.060453	0.238498	0.353782
LNPK	2q31.1	-0.06043	0.23865	0.353954
CPSF3	2p25.1	0.060433	0.23865	0.353954
GOLGA8F	15q13.1	-0.06042	0.238723	0.354036
RO60	1q31.2	-0.06041	0.238796	0.354118
APOBEC3B	22q13.1	0.060394	0.238955	0.354328
FRRS1	1p21.2	-0.06038	0.239028	0.35441
SHPK	17p13.2	0.060374	0.239113	0.354509
LMTK2	7q21.3	0.060363	0.239198	0.35461
MYADML2	17q25.3	-0.06035	0.239285	0.354713
LINC00632	Xq27.1	-0.06034	0.239343	0.354753



ARL13A	Xq22.1	0.060344	0.239348	0.354753
CD274	9p24.1	-0.06033	0.239451	0.35488
OPTC	1q32.1	0.060328	0.239471	0.354882
C1QBP	17p13.2	0.060324	0.239506	0.354908
ESM1	5q11.2	-0.06031	0.239593	0.355007
CHCHD2	7p11.2	0.060311	0.239608	0.355007
PTGR1	9q31.3	-0.06031	0.239642	0.355031
SIK2	11q23.1	-0.06028	0.239822	0.355217
CCS	11q13.2	-0.06028	0.239823	0.355217
LOC148696	1q32.2	0.060281	0.239838	0.355217
CCR3	3p21.31	-0.06028	0.239838	0.355217
MMP26	11p15.4	-0.06026	0.239975	0.355393
COL13A1	10q22.1	0.060259	0.240008	0.355401
CACNG6	19q13.42	-0.06026	0.240016	0.355401
PRSS50	3p21.31	-0.06025	0.240076	0.355464
OR1Q1	9q33.2	0.060244	0.240127	0.355513
HEPH	Xq12	-0.06023	0.240219	0.355607
LRRC37B	17q11.2	0.06023	0.240239	0.355607
MTM1	Xq28	-0.06023	0.240244	0.355607
GCC2	2q12.3	-0.06022	0.240345	0.35571
ATP1B4	Xq24	-0.06021	0.240361	0.35571
TMEM184B	22q13.1	-0.06021	0.24038	0.35571
LINC00608	2q35	0.060209	0.240399	0.35571
LINC00410	13q31.3	0.060209	0.240402	0.35571
HNRNP2	Xq22.1	-0.0602	0.240458	0.355766
DAZ1	Yq11.223	-0.06019	0.240556	0.355885
ELOVL1	1p34.2	-0.06018	0.240665	0.35602
SLC25A45	11q13.1	0.06017	0.240707	0.356042
DCTN1-AS1	2p13.1	0.060169	0.240715	0.356042
ACY1	3p21.2	0.060151	0.240856	0.356223
ZNF560	19p13.2	-0.06015	0.240879	0.356231
CMTR2	16q22.2	-0.06012	0.241107	0.356542
RWDD4	4q35.1	-0.0601	0.241235	0.356706
PDCD6IP	3p22.3	-0.06009	0.241325	0.356804
MBL1P	10q22.3	-0.06009	0.241338	0.356804
DCAF13	8q22.3	-0.06009	0.241355	0.356804
NR1I3	1q23.3	0.060068	0.241509	0.357005
DQX1	2p13.1	0.060044	0.241695	0.357253
TGDS	13q32.1	-0.06001	0.241977	0.357627
EFCAB5	17q11.2	-0.06001	0.241983	0.357627
LYPD3	19q13.31	-0.05999	0.242084	0.357749
MRI1	19p13.13	0.059979	0.242206	0.357899
LCNL1	9q34.3	0.059977	0.242221	0.357899
PKDCC	2p21	-0.05997	0.242279	0.357958
NOMO1	16p13.11	0.059962	0.242341	0.358024
EGFL7	9q34.3	-0.05995	0.242396	0.358078
BIRC8	19q13.42	-0.05994	0.24251	0.3582
BBX	3q13.12	-0.05994	0.242514	0.3582
C20ORF203	20q11.21	-0.05994	0.242552	0.358223
ACP4	19q13.33	0.059933	0.242566	0.358223
ANKRD30B	18p11.21	0.059927	0.242619	0.358275
CACNG3	16p12.1	-0.05992	0.242699	0.358356
SLC36A2	5q33.1	-0.05992	0.242709	0.358356
UBTF	17q21.31	-0.05991	0.242764	0.35841
PPY	17q21.31	-0.0599	0.2428	0.358436
UBXN10	1p36.12	0.059889	0.242914	0.358561
GPR107	9q34.11	0.059888	0.24292	0.358561
ADD3	10q25.1-q25.2	-0.05987	0.243083	0.358762

KIAA1257	3q21.3	-0.05987	0.243096	0.358762
CLEC4F	2p13.3	-0.05986	0.24311	0.358762
GLTPD2	17p13.2	-0.05986	0.243128	0.358763
MS4A14	11q12.2	-0.05985	0.24322	0.358872
MAN1B1	9q34.3	-0.05984	0.243269	0.358918
PDZD3	11q23.3	0.059833	0.243358	0.359022
UBR3	2q31.1	-0.05982	0.243485	0.359179
GTSF1L	20q13.12	-0.05981	0.2435	0.359179
CTNNA3	10q21.3	-0.05981	0.24353	0.359197
ZSCAN20	1p35.1	0.059804	0.243584	0.35925
LIAS	4p14	-0.05979	0.243696	0.359339
ATPAF2	17p11.2	-0.05979	0.243698	0.359339
OLIG3	6q23.3	-0.05979	0.243698	0.359339
HINFP	11q23.3	-0.05978	0.243762	0.359407
CEACAM5	19q13.2	-0.05978	0.243803	0.359441
TMC6	17q25.3	0.059767	0.243876	0.359522
DYNC1H1	14q32.31	0.059762	0.243917	0.359538
DGKG	3q27.2-q27.3	-0.05976	0.243923	0.359538
C22ORF31	22q12.1	-0.05976	0.243953	0.359556
ZNF212	7q36.1	-0.05975	0.243985	0.359577
RBM34	1q42.3	0.059722	0.244234	0.359917
ABL2	1q25.2	0.059715	0.24429	0.359973
PRAMEF9	1p36.21	-0.05971	0.244322	0.359993
OR10T2	1q23.1	-0.0597	0.244413	0.360102
ZBTB25	14q23.3	0.059689	0.244493	0.360192
ALDH1A2	15q21.3	-0.05968	0.244552	0.360254
MAGEC2	Xq27.2	-0.05968	0.244578	0.360266
ARHGEF18	19p13.2	0.059674	0.244614	0.360291
UBOX5	20p13	-0.05967	0.244651	0.36032
WDR74	11q12.3	0.059653	0.244779	0.360455
EXTL3	8p21.1	-0.05965	0.244779	0.360455
RFX4	12q23.3	0.059648	0.244818	0.360486
SPAG9	17q21.33	-0.05964	0.244905	0.360588
PWP1	12q23.3	-0.05963	0.244948	0.360624
BSX	11q24.1	-0.05961	0.245084	0.360798
TMEM82	1p36.21	-0.05959	0.24525	0.361015
SF3B5	6q24.2	0.059592	0.245267	0.361015
ITPRIPL2	16p12.3	-0.05957	0.245466	0.361279
GNB2	7q22.1	0.059564	0.245483	0.361279
TTC14	3q26.33	0.059545	0.245633	0.361467
CARF	2q33.2	-0.05954	0.245647	0.361467
PNRC2	1p36.11	-0.05954	0.245713	0.361539
AJAP1	1p36.32	-0.05952	0.245874	0.361749
MMP20	11q22.2	-0.05951	0.245941	0.36182
DYM	18q21.1	-0.0595	0.245968	0.361834
POLR3F	20p11.23	-0.0595	0.246016	0.361878
ARID3A	19p13.3	-0.05949	0.246042	0.361889
SLC25A40	7q21.12	0.059485	0.246116	0.361961
CHRNA7	15q13.3	0.059483	0.246127	0.361961
GALK1	17q25.1	-0.05948	0.246193	0.362031
KRT13	17q21.2	-0.05947	0.246213	0.362035
IL11RA	9p13.3	0.059433	0.246527	0.362469
RNASE13	14q11.2	0.059427	0.246576	0.362515
LMO1	11p15.4	-0.0594	0.24679	0.362803
MRPL22	5q33.2	0.059396	0.246823	0.362824
TMEM126B	11q14.1	-0.05939	0.246854	0.362844
CHIAP2	1p13.2	0.059383	0.246922	0.362917
OR2L8	1q44	-0.05936	0.247092	0.363141

TAPT1-AS1	4p15.32	-0.05935	0.247151	0.363201
ESRRB	14q24.3	-0.05933	0.247351	0.363445
PCLO	7q21.11	-0.05933	0.247364	0.363445
KLK7	19q13.41	-0.05933	0.247372	0.363445
LRRC31	3q26.2	-0.05932	0.247407	0.36347
ADAMTS7	15q25.1	-0.05932	0.247444	0.363473
SOX3	Xq27.1	-0.05932	0.247445	0.363473
PRRC1	5q23.2	-0.05931	0.247547	0.363595
CLEC3A	16q23.1	-0.0593	0.247598	0.363644
SMTNL1	11q12.1	0.059296	0.247624	0.363655
ZPLD1	3q12.3	-0.05929	0.247673	0.363701
PC	11q13.2	0.059237	0.248095	0.364289
OR6C65	12q13.2	0.059235	0.24811	0.364289
OLFM4	13q14.3	-0.05923	0.248164	0.364342
RPL35A	3q29	-0.05922	0.248242	0.364429
DHRS4L2	14q11.2	-0.05921	0.248333	0.364536
TERC	3q26.2	0.05919	0.248466	0.364705
ARHGEF7	13q34	0.059167	0.248649	0.364934
KCNS3	2p24.2	-0.05917	0.248659	0.364934
CNOT4	7q33	-0.05916	0.248716	0.364991
ADAM2	8p11.22	-0.05914	0.248879	0.365203
UQCRFS1	19q12	0.059128	0.248963	0.3653
GPR6	6q21	0.059122	0.249012	0.365345
ZNF708	19p12	-0.05912	0.249066	0.365398
CCDC171	9p22.3	-0.05911	0.249099	0.365408
SMURF1	7q22.1	-0.05911	0.249109	0.365408
TRIM46	1q22	-0.05911	0.249141	0.365428
ZNF202	11q24.1	0.059102	0.24917	0.36544
KCNJ3	2q24.1	-0.0591	0.249186	0.36544
PYGL	14q22.1	0.059074	0.249398	0.365724
MAGEB3	Xp21.2	0.05907	0.249434	0.36575
EXOC1L	4q12	0.059058	0.249528	0.365861
LYPLA2	1p36.11	0.059055	0.249547	0.365861
C3ORF36	3q22.1	-0.05905	0.249592	0.365902
ITPRID1	7p14.3	0.059045	0.249633	0.365935
SEPTIN1	16p11.2	-0.05903	0.249719	0.366035
FRS3	6p21.1	0.059026	0.24978	0.366097
SLC22A6	11q12.3	-0.059	0.249965	0.366341
ADCY3	2p23.3	0.059001	0.249988	0.366347
SNX29	16p13.13-p13.12	-0.05899	0.250097	0.36648
GRAMD1B	11q24.1	0.058971	0.250228	0.366646
JSRP1	19p13.3	-0.05896	0.250324	0.366759
R3HDML	20q13.12	0.058942	0.250458	0.36693
JUN	1p32.1	-0.05893	0.25054	0.367023
SNRPD2	19q13.32	0.05892	0.250639	0.367125
ATP6V0C	16p13.3	0.058917	0.250658	0.367125
BANK1	4q24	-0.05892	0.250665	0.367125
LCE3E	1q21.3	-0.05891	0.250733	0.367198
GPR45	2q12.1	0.058901	0.250789	0.36725
RSBN1L	7q11.23	-0.0589	0.250806	0.36725
MRPL3	3q22.1	0.058888	0.250892	0.367351
POM121L8P	22q11.21	-0.05888	0.250937	0.367373
ANKRD30BP2	21q11.2	-0.05888	0.250944	0.367373
ZNF524	19q13.42	0.058856	0.251151	0.367649
MTAP	9p21.3	0.058852	0.251186	0.367656
IPO5	13q32.2	0.058851	0.251193	0.367656
ATP6V1E2	2p21 2p16-p12	-0.05881	0.251488	0.368061
MPP5	14q23.3	-0.05878	0.251775	0.368454

ANKHD1-EIF4EBP3	5q31.3	0.058774	0.251812	0.368481
NEURL2	20q13.12	-0.05877	0.251874	0.368546
MTSS2	16q22.1	0.058756	0.251963	0.368649
TRMT1L	1q25.3	-0.05874	0.252055	0.368757
SLC7A13	8q21.3	0.058739	0.252094	0.368787
TALDO1	11p15.5	0.058714	0.252301	0.369062
SIGLEC16	19q13.33	0.058707	0.252355	0.369114
PTGDR	14q22.1	-0.05869	0.252458	0.369226
PCGEM1	2q32.3	-0.05869	0.252468	0.369226
TSSC2	11p15.4	-0.05867	0.25265	0.369465
LINC01257	12q24.33	-0.05867	0.252678	0.369478
PTPN4	2q14.2	-0.05864	0.252871	0.369734
AKAP7	6q23.2	-0.05863	0.253007	0.369902
EIF5A2	3q26.2	-0.05862	0.253023	0.369902
GCLC	6p12.1	-0.05862	0.253051	0.369916
CSTL1	20p11.21	0.058614	0.253109	0.369931
LIN7A	12q21.31	-0.05861	0.253135	0.369931
VCX3A	Xp22.31	0.058611	0.253138	0.369931
MAPK12	22q13.33	0.058609	0.253152	0.369931
PIK3AP1	10q24.1	0.058607	0.253164	0.369931
MT1H	16q13	-0.05861	0.253172	0.369931
FTSJ3	17q23.3	0.058603	0.253196	0.369939
SESN2	1p35.3	-0.0586	0.25326	0.370006
RASGEF1A	10q11.21	-0.05859	0.253323	0.370071
ARPIN	15q26.1	-0.05858	0.253376	0.370121
XPA	9q22.33	-0.05855	0.253629	0.370464
CRISP1	6p12.3	0.058539	0.253718	0.370566
UNC5CL	6p21.1	0.058529	0.253797	0.370655
TPPP	5p15.33	0.058525	0.253835	0.370684
PXT1	6p21.31	0.058518	0.253886	0.370731
GHITM	10q23.1	0.058515	0.253911	0.37074
ROCK2	2p25.1	-0.05849	0.254105	0.370997
ZSCAN30	18q12.2	-0.05848	0.254222	0.371141
CDK20	9q22.1	0.058464	0.254331	0.371272
ACOT9	Xp22.11	-0.05845	0.25442	0.371376
ALOX12	17p13.1	0.05845	0.254445	0.371385
VENTXP1	Xp21.3	0.058439	0.254532	0.371485
TGIF2	20q11.23	-0.05843	0.254638	0.371612
PNLIP	10q25.3	0.058422	0.254672	0.371629
UBD	6p22.1	-0.05842	0.254687	0.371629
NGDN	14q11.2	-0.05841	0.254801	0.371768
STAT2	12q13.3	-0.05839	0.254929	0.371928
SLC7A2	8p22	-0.05839	0.254959	0.371945
RAD21	8q24.11	0.058381	0.255008	0.371989
CNFN	19q13.2	0.058368	0.255113	0.372116
STPG1	1p36.11	0.058358	0.255194	0.372206
NBPF14	1q21.2	0.058338	0.255357	0.372418
KCNJ1	11q24.3	-0.05831	0.25561	0.372738
IFNA7	9p21.3	0.058306	0.25562	0.372738
CEP95	17q23.3	0.058304	0.255633	0.372738
LOC728989	1q21.1	0.058302	0.255651	0.372738
ARSF	Xp22.33	-0.05829	0.255724	0.372817
ASRGL1	11q12.3	0.058286	0.255779	0.37287
FCAR	19q13.42	-0.05825	0.256053	0.373242
MRPL32	7p14.1	0.05824	0.256159	0.37337
TEX36	10q26.13	-0.05822	0.256317	0.373573
KLHL22	22q11.21	-0.05822	0.256346	0.373587
RAET1L	6q25.1	-0.05819	0.256569	0.373885

KLK1	19q13.33	0.058186	0.256594	0.373895
ZNF862	7q36.1	0.058175	0.256688	0.374004
COPS6	7q22.1	-0.05817	0.256711	0.37401
RNF213	17q25.3	0.05817	0.256731	0.374012
GGTLC2	22q11.22	-0.05817	0.256765	0.374035
ADGRE3	19p13.12	-0.05815	0.256929	0.374246
NCR2	6p21.1	-0.05812	0.25717	0.374571
OR10H1	19p13.12	0.058109	0.257233	0.374623
RAE1	20q13.31	-0.05811	0.257243	0.374623
OR56A5	11p15.4	0.058089	0.257394	0.374816
POM121L2	6p22.1	-0.05806	0.257655	0.375156
POP5	12q24.31	0.058056	0.257666	0.375156
MED1	17q12	0.058047	0.257742	0.375239
ZFAND1	8q21.13	-0.05804	0.25777	0.375253
OR52K1	11p15.4	-0.05803	0.257875	0.375379
GP6	19q13.42	0.058011	0.258036	0.375585
TENT5A	6q14.1	-0.058	0.258085	0.37563
ERCC4	16p13.12	-0.058	0.258145	0.37569
NCOA3	20q13.12	-0.05797	0.25835	0.375962
PRDM16	1p36.32	-0.05796	0.258437	0.376061
TTC7A	2p21	0.05795	0.258536	0.376178
TMEM236	10p12.33	-0.05794	0.258609	0.376241
HAR1B	20q13.33	0.05794	0.258617	0.376241
RDH12	14q24.1	-0.05793	0.258717	0.376359
VCPKMT	14q21.3	0.057914	0.258832	0.376499
TEX15	8p12	-0.0579	0.258927	0.376609
LARP1B	4q28.2	0.057897	0.258974	0.376651
SARM1	17q11.2	-0.05789	0.25904	0.376697
POM121L1P	22q11.22	0.057888	0.259044	0.376697
AKR1D1	7q33	-0.05788	0.259124	0.376768
MTRF1L	6q25.2	-0.05788	0.25913	0.376768
SMAD5-AS1	5q31.1	-0.05787	0.259222	0.376874
SLC16A9	10q21.2	-0.05786	0.259285	0.376938
SYCP3	12q23.2	0.057834	0.259489	0.377208
CT47A6	Xq24	-0.05779	0.259816	0.377656
PRSS54	16q21	0.05777	0.260021	0.377926
CIAO2A	15q22.31	-0.05776	0.260074	0.377975
ELP6	3p21.31	-0.05776	0.260108	0.377997
RALGAPA2	20p11.23	0.057743	0.260243	0.378166
GNRHR2	1q21.1	0.057736	0.260298	0.378219
MTO1	6q13	0.057686	0.260713	0.378795
CAPN11	6p21.1	-0.05767	0.260856	0.378975
SCAMP2	15q24.1	0.057645	0.261057	0.37922
HUS1B	6p25.3	0.057644	0.261065	0.37922
CTXN3	5q23.2	-0.05764	0.261082	0.37922
RPL22L1	3q26.2	-0.05763	0.261164	0.379312
HCG22	6p21.33	-0.05763	0.261203	0.379332
IL5	5q31.1	0.057625	0.261216	0.379332
LIMA1	12q13.12	0.057609	0.261355	0.379507
DNTT	10q24.1	-0.05759	0.261526	0.379714
MED23	6q23.2	-0.05759	0.261536	0.379714
UBL4A	Xq28	0.057562	0.261745	0.37999
FASTKD3	5p15.31	0.057521	0.262081	0.38045
TMEM257	Xq27.3	-0.05743	0.262807	0.381476
NDUFV3	21q22.3	0.057429	0.262851	0.381513
SNORA14B	1q42.3	0.057426	0.262875	0.38152
SH2D4B	10q23.1	0.057421	0.26291	0.381544
HAT1	2q31.1	0.057417	0.262946	0.381548

FBRS	16p11.2	0.057417	0.262951	0.381548
SLC2A6	9q34.2	-0.0574	0.263086	0.381698
PYROXD2	10q24.2	-0.0574	0.263093	0.381698
ABCC2	10q24.2	-0.05739	0.263154	0.381759
MRPL58	17q25.1	0.057388	0.263186	0.381778
OR10K2	1q23.1	-0.05738	0.263286	0.381895
FFAR2	19q13.12	0.057373	0.263317	0.381912
TRPM2	21q22.3	-0.05737	0.263364	0.381953
SLX4IP	20p12.2	0.057359	0.263432	0.382005
TSSK6	19p13.11	0.057358	0.263438	0.382005
RGSL1	1q25.3	0.057351	0.263494	0.382059
TTY7	Yp11.2	-0.05734	0.263608	0.382196
SLCO1B3	12p12.2	-0.05734	0.263627	0.382197
KRTAP1-5	17q21.2	-0.05733	0.263704	0.38228
GPR62	3p21.2	0.057298	0.263938	0.382585
FAM122C	Xq26.3	-0.0573	0.263953	0.382585
C2CD4C	19p13.3	-0.05729	0.263982	0.3826
NOSIP	19q13.33	-0.05728	0.264052	0.382673
FEV	2q35	-0.05726	0.264271	0.38296
ZNRD2	11q13.1	0.057256	0.264288	0.38296
LOC728024	8p11.23	-0.05723	0.264543	0.383302
ROPN1L	5p15.2	-0.05722	0.264612	0.383374
SMIM32	5q31.1	0.057201	0.264755	0.383554
PRR23B	3q23	-0.05718	0.264885	0.383715
BCL9	1q21.2	0.057178	0.26494	0.383766
ZNF99	19p12	-0.05717	0.264989	0.38381
HECA	6q24.1	-0.05716	0.265052	0.383874
C1ORF185	1p32.3	0.057151	0.265167	0.384006
COL6A4P2	3q22.1	0.057149	0.265182	0.384006
EPHB4	7q22.1	0.057147	0.265204	0.38401
ANKRD37	4q35.1	0.057122	0.265415	0.384287
SNORD116-28	15q11.2	-0.05712	0.265463	0.384329
ACSM3	16p12.3	-0.05711	0.265493	0.384344
STK40	1p34.3	0.057099	0.265603	0.384476
SPEM2	17p13.1	0.057087	0.265704	0.384595
THSD1P1	13q14.3	0.057081	0.26576	0.384628
IQCB1	3q13.33 3q21.1	0.05708	0.265765	0.384628
RRBP1	20p12.1	0.057077	0.26579	0.384635
CCDC197	14q32.12	0.057074	0.265811	0.384635
CYP26C1	10q23.33	-0.05707	0.265828	0.384635
KCTD17	22q12.3	-0.05706	0.265966	0.384807
RGS3	9q32	-0.05704	0.266083	0.384949
OR5B12	11q12.1	0.057006	0.266387	0.385361
APEX1	14q11.2	-0.05699	0.266517	0.385521
PBDC1	Xq13.3	-0.05695	0.266879	0.386017
CLDN25	11q23.2	0.056942	0.266927	0.386059
PSMF1	20p13	-0.05694	0.266962	0.386069
TMEM161B	5q14.3	0.056936	0.266973	0.386069
DMAC2	19q13.2	-0.05693	0.267062	0.386157
HSD3B1	1p12	-0.05692	0.267073	0.386157
ATG9B	7q36.1	0.056917	0.267136	0.386207
NDUFA6	22q13.2	-0.05692	0.267145	0.386207
ANKRD10	13q34	0.056911	0.267182	0.386231
CT45A6	Xq26.3	-0.05691	0.267205	0.386237
MRGPRX3	11p15.1	-0.05688	0.267431	0.386536
ZNF211	19q13.43	-0.05687	0.267506	0.386617
TRAPPC6A	19q13.32	-0.05687	0.267546	0.386646
NR1H4	12q23.1	-0.05687	0.267567	0.386649

IL33	9p24.1	0.056848	0.267718	0.38684
FAM106C	17p11.2	0.056843	0.26776	0.386872
DMRTA2	1p32.3	0.056819	0.267957	0.387129
SIRPD	20p13	-0.05678	0.268248	0.38752
LRRC10	12q15	0.056774	0.268336	0.38762
TMOD3	15q21.2	0.056769	0.268385	0.387663
CDK12	17q12	0.056762	0.268438	0.387711
CRK	17p13.3	-0.05676	0.268458	0.387712
MS4A15	11q12.2	0.056744	0.26859	0.387874
KDM4E	11q21	-0.05674	0.268624	0.387897
CEP97	3q12.3	0.056736	0.268658	0.387917
SOAT1	1q25.2	-0.05671	0.268858	0.388178
ZNF214	11p15.4	-0.05671	0.268878	0.388179
ZNF733P	7q11.21	-0.0567	0.268955	0.388263
SULT1C2	2q12.3	0.056699	0.268976	0.388265
NAPB	20p11.21	0.056689	0.269058	0.388355
MICOS13	19p13.3	0.056669	0.269228	0.388572
INE2	Xp22.2	0.056662	0.269284	0.388625
ZSCAN5A	19q13.43	0.05665	0.26939	0.38875
CD209	19p13.2	-0.05664	0.269487	0.388861
GSTP1	11q13.2	0.056629	0.269563	0.388918
COL4A5	Xq22.3	-0.05663	0.269565	0.388918
C2ORF81	2p13.1	-0.05662	0.269652	0.389017
MAIP1	2q33.1	-0.05661	0.269735	0.389107
SERPINB11	18q21.33	-0.0566	0.269771	0.389132
VWA5B2	3q27.1	0.056599	0.269823	0.389178
SNRPB	20p13	0.056589	0.269906	0.389253
IMPDH2	3p21.31	0.056588	0.269913	0.389253
PAN3	13q12.2	0.056585	0.269939	0.389262
LYG2	2q11.2	0.056577	0.270009	0.389335
COPG2	7q32.2	-0.05657	0.270041	0.389353
C15ORF62	15q15.1	0.056551	0.270226	0.389591
GCKR	2p23.3	-0.05655	0.270275	0.389632
NDUFA8	9q33.2	0.056543	0.270293	0.389632
C19ORF44	19p13.11	0.056538	0.270339	0.38967
PTMA	2q37.1	0.056523	0.270463	0.389821
TACR2	10q22.1	-0.0565	0.270686	0.390114
ARFGAP1	20q13.33	0.056461	0.270993	0.390529
LINC00112	21q22.3	0.056445	0.271125	0.390691
CFAP70	10q22.2	-0.05644	0.271193	0.39076
KRTAP4-4	17q21.2	0.056435	0.271212	0.39076
CIART	1q21.2	0.056418	0.27136	0.390944
ZSCAN12	6p22.1	-0.0564	0.271508	0.391029
GRAMD1A	19q13.11	0.0564	0.271514	0.391029
SMAGP	12q13.13	-0.0564	0.271519	0.391029
STRN	2p22.2	0.056397	0.271532	0.391029
DYNLL2	17q22	-0.0564	0.271534	0.391029
CCDC110	4q35.1	-0.0564	0.271535	0.391029
SERPINI2	3q26.1	-0.05637	0.27177	0.391339
NXPE4	11q23.2	-0.05637	0.271792	0.391341
SNX8	7p22.3	0.056365	0.27181	0.391341
TRIB1	8q24.13	-0.05636	0.271889	0.391426
SH3KBP1	Xp22.12	-0.05635	0.271955	0.391493
SLC25A41	19p13.3	0.056345	0.271982	0.391503
ATP6V0E2-AS1	7q36.1	0.056333	0.272078	0.391614
ATL3	11q13.1	-0.05632	0.27219	0.391747
PDS5B	13q13.1	0.056314	0.272247	0.3918
HMBOX1	8p21.1-p12	0.056291	0.272435	0.392043

VPS29	12q24.11	0.056284	0.272497	0.392103
TNPO1	5q13.2	-0.05628	0.27257	0.392181
STEAP2	7q21.13	-0.05627	0.272646	0.392256
KRT4	12q13.13	-0.05626	0.272681	0.392256
MBD3L5	19p13.2	0.056263	0.272681	0.392256
MUC7	4q13.3	-0.05625	0.272747	0.392323
RFPL1	22q12.2	0.056232	0.272943	0.392575
PSG3	19q13.2	-0.05623	0.272962	0.392575
MLF2	12p13.31	0.056225	0.273001	0.392602
RAX2	19p13.3	0.056217	0.273075	0.392681
BRWD3	Xq21.1	0.05621	0.273131	0.392734
ADCY9	16p13.3	0.056194	0.273271	0.392907
LINC00588	8q12.1	0.056181	0.273379	0.393022
IQCJ	3q25.32	-0.05618	0.27339	0.393022
RAB35	12q24.23	0.056173	0.273444	0.393067
ANAPC10	4q31.21	-0.05617	0.273468	0.393067
FAM209A	20q13.31	0.056169	0.273481	0.393067
NAE1	16q22.1	0.056158	0.273575	0.393146
REP15	12p11.22	-0.05616	0.273575	0.393146
PAX9	14q13.3	0.056151	0.273638	0.393195
ALDH4A1	1p36.13	0.056149	0.273648	0.393195
NUTF2	16q22.1	0.056133	0.273792	0.393374
UTS2	1p36.23	0.056129	0.273821	0.39338
TAT	16q22.2	-0.05613	0.273845	0.39338
CLEC4D	12p13.31	-0.05613	0.273856	0.39338
LINC00271	6q23.3	-0.05612	0.273927	0.393455
CFAP53	18q21.1	-0.0561	0.274046	0.393598
IRGM	5q33.1	-0.05609	0.274125	0.393683
BAD	11q13.1	-0.05608	0.274202	0.393764
HEBP2	6q24.1	-0.05601	0.274842	0.394652
SLCO6A1	5q21.1	-0.05601	0.274859	0.394652
TDRKH	1q21.3	0.056004	0.274898	0.394679
XKR6	8p23.1	0.055996	0.274966	0.394748
SLC6A14	Xq23	0.055971	0.275182	0.395031
DBR1	3q22.3	-0.05596	0.275239	0.395084
AKR1B15	7q33	0.055925	0.275576	0.39554
LOC90246	3q21.3	0.055918	0.275634	0.395595
CRLF3	17q11.2	-0.0559	0.275749	0.39573
TSPAN3	15q24.3	0.055889	0.275887	0.395901
PARP14	3q21.1	0.055875	0.276001	0.396035
PHKB	16q12.1	-0.05586	0.276127	0.396183
XRCC6	22q13.2	-0.05586	0.276143	0.396183
ADAM29	4q34.1	-0.05583	0.276356	0.396459
PAXIP1-AS1	7q36.2	0.05583	0.276391	0.396459
ASAH2	10q11.23	0.055829	0.276397	0.396459
RNF220	1p34.1	0.055827	0.276418	0.396459
ABT1	6p22.2	0.055825	0.276434	0.396459
PLA2G4F	15q15.1	0.055805	0.276605	0.396675
C6ORF62	6p22.3	0.055802	0.276631	0.396684
JAGN1	3p25.3	-0.05579	0.276709	0.396767
OVCH2	11p15.4	0.055784	0.276789	0.396853
EPB41	1p35.3	0.055766	0.276943	0.397046
IL7	8q21.13	-0.05575	0.277054	0.397168
YKT6	7p13	0.055752	0.277067	0.397168
FAM153CP	5q35.3	-0.05575	0.277096	0.39718
UBA52	19p13.11	0.055744	0.277131	0.397201
EXOSC6	16q22.1	0.055734	0.27722	0.397301
RB1	13q14.2	0.055731	0.277246	0.39731



FAM86C2P	11q13.2	-0.05573	0.277285	0.397315
ALKBH7	19p13.3	-0.05572	0.277309	0.397315
MRPS24	7p13	0.055724	0.277309	0.397315
KRT1	12q13.13	-0.05571	0.277392	0.397405
LEXM	1p32.3	0.055707	0.277454	0.397465
GRIK1-AS1	21q21.3	-0.0557	0.277528	0.397544
FAM71C	12q23.1	-0.05568	0.27767	0.397695
ARF5	7q32.1	-0.05568	0.277673	0.397695
DUSP13	10q22.2	-0.05567	0.277777	0.397815
UBL5	19p13.2	-0.05566	0.277897	0.397958
PTCHD3	10p12.1	-0.05562	0.278239	0.39842
FRMD7	Xq26.2	-0.0556	0.278415	0.398643
H3F3A	1q42.12	-0.05559	0.278478	0.398705
TLX3	5q35.1	0.055554	0.278774	0.399099
LINC00336	6p21.31	0.055549	0.278821	0.399138
SCGB2A1	11q12.3	-0.05554	0.278934	0.399271
TACC2	10q26.13	0.055522	0.279053	0.399413
ORC2	2q33.1	0.055517	0.279101	0.399454
FAM86DP	3p12.3	0.055512	0.279139	0.399479
CRYBB2	22q11.23	0.055504	0.279206	0.399512
CACNG8	19q13.42	0.055501	0.279235	0.399512
RAB21	12q21.1	-0.0555	0.279239	0.399512
ARL16	17q25.3	-0.0555	0.279243	0.399512
SLC6A5	11p15.1	-0.0555	0.279261	0.399512
PTPRU	1p35.3	-0.05548	0.279434	0.39973
ENKUR	10p12.1	-0.05547	0.279464	0.399744
MYH3	17p13.1	0.055471	0.279493	0.399758
ADGRG1	16q21	-0.05546	0.279585	0.399835
PHGDH	1p12	0.055461	0.279587	0.399835
TLDC2	20q11.23	-0.05546	0.279607	0.399836
XRCC4	5q14.2	-0.05545	0.279716	0.399962
PEX5	12p13.31	-0.05542	0.279961	0.400266
UQCC1	20q11.22	-0.05542	0.279968	0.400266
PANX2	22q13.33	-0.0554	0.280109	0.400439
TRIT1	1p34.2	-0.05536	0.280434	0.400874
CELA1	12q13.13	0.055354	0.280516	0.40096
NIFK	2q14.3	-0.05535	0.280534	0.40096
ARNT	1q21.3	-0.05533	0.280721	0.401199
AQP4-AS1	18q11.2	-0.05527	0.281241	0.401906
IFNL1	19q13.2	0.055269	0.281256	0.401906
PDE7A	8q13.1	0.055249	0.281429	0.402124
MAP3K11	11q13.1	0.055229	0.281603	0.402345
ZNF295-AS1	21q22.3	0.055225	0.281641	0.40237
RNASE10	14q11.2	-0.05516	0.282196	0.403113
FAM219A	9p13.3	0.055161	0.282201	0.403113
TNFRSF18	1p36.33	-0.05515	0.282256	0.403157
PSMC2	7q22.1	-0.05515	0.282272	0.403157
APOBR	16p12.1	0.055141	0.282368	0.403265
WDR19	4p14	-0.05513	0.282432	0.403307
ZNF597	16p13.3	-0.05513	0.282438	0.403307
HSFY2	Yq11.222	0.055126	0.282502	0.403369
LINC00523	14q32.2	-0.05512	0.282546	0.403376
SNORA48	17p13.1	0.055119	0.282561	0.403376
LOC728743	7q36.1	-0.05512	0.282581	0.403376
ALDH7A1	5q23.2	-0.05512	0.282587	0.403376
NPHS2	1q25.2	0.055088	0.282833	0.403698
MSL3P1	2q37.1	-0.05508	0.282914	0.403786
ASTL	2q11.2	-0.05506	0.283038	0.403934

LPP	3q27.3-q28	-0.05506	0.28308	0.403961
NAP1L1	12q21.2	-0.05505	0.283127	0.403961
OR1A1	17p13.3	0.055053	0.283138	0.403961
ITGA7	12q13.2	-0.05505	0.283154	0.403961
ALKBH5	17p11.2 17p11.2	-0.05505	0.283158	0.403961
INO80D	2q33.3	0.055002	0.283588	0.404545
SH3GL1	19p13.3	0.054964	0.283922	0.40497
ABCD1	Xq28	-0.05496	0.283926	0.40497
MSMB	10q11.22	0.054941	0.284127	0.405228
PLEKHB2	2q21.1	-0.05492	0.284306	0.405412
HCRTR2	6p12.1	-0.05492	0.284308	0.405412
RRN3	16p13.11	-0.05492	0.284317	0.405412
RUFY1	5q35.3	0.054915	0.284351	0.405432
VPS26A	10q22.1	-0.05491	0.284413	0.405492
H1FX-AS1	3q21.3	0.054894	0.284538	0.405633
PLG	6q26	-0.05489	0.284553	0.405633
CRX	19q13.33	0.054886	0.284607	0.405682
GRID2	4q22.1-q22.2	-0.05487	0.284755	0.405864
TSPAN14	10q23.1	0.054856	0.284871	0.406
SLC9A2	2q12.1	0.05482	0.285184	0.406417
PTGFRN	1p13.1	0.054798	0.285383	0.406663
RPRD1A	18q12.2	-0.0548	0.285397	0.406663
KDM4C	9p24.1	0.054787	0.285481	0.406754
AMER1	Xq11.2	0.054738	0.285914	0.407341
CFDP1	16q23.1	-0.05473	0.285961	0.40738
ENTPD5	14q24.3	-0.05472	0.28605	0.407474
XAGE2	Xp11.22	-0.05472	0.286068	0.407474
OR10G4	11q24.2	-0.05471	0.286161	0.407577
SRD5A3	4q12	-0.05471	0.286189	0.407588
KDM8	16p12.1	0.05469	0.286329	0.407758
OR13J1	9p13.3	0.054688	0.286354	0.407766
TSPEAR	21q22.3	-0.05468	0.286462	0.407891
EFL1	15q25.2	0.054657	0.286624	0.408092
SOX2-OT	3q26.33	-0.05465	0.286716	0.408167
MT1G	16q13	-0.05464	0.286736	0.408167
ADGRE2	19p13.12	-0.05464	0.286738	0.408167
ACSM4	12p13.31	0.054638	0.286796	0.40822
FMR1	Xq27.3	0.054631	0.286856	0.408277
LINC01881	2q37.3	0.054609	0.287045	0.408517
COL6A4P1	3p25.1	0.054603	0.287098	0.408563
TM9SF3	10q24.1	0.054592	0.287202	0.408683
OR5AC2	3q11.2	0.054589	0.287226	0.408687
FRG2C	3p12.3	0.054578	0.287326	0.408801
ZDHHC18	1p36.11	-0.05457	0.287376	0.408842
CDC42SE1	1q21.3	0.054554	0.287534	0.409038
GLT1D1	12q24.33	-0.05454	0.287701	0.409246
KRAS	12p12.1	-0.05453	0.287739	0.409273
LCE5A	1q21.3	0.054489	0.288112	0.409773
GEMIN6	2p22.1	-0.05448	0.288199	0.409837
CCDC160	Xq26.2	-0.05448	0.288215	0.409837
ZNF234	19q13.31	0.054477	0.288218	0.409837
TPPP2	14q11.2	-0.05447	0.288305	0.409931
STX3	11q12.1	0.054447	0.288483	0.410156
FAM92A1P2	4q35.1	-0.05444	0.288504	0.410157
GABRG1	4p12	-0.05442	0.288747	0.410472
PIR	Xp22.2	0.054406	0.288844	0.410582
FAM162A	3q21.1	0.054404	0.288865	0.410582
XK	Xp21.1	0.054395	0.28894	0.410638

PRKAR1B	7p22.3	-0.05439	0.288946	0.410638
MAPT-IT1	17q21.31	-0.05439	0.288969	0.410642
MRPL47	3q26.33	0.05438	0.289074	0.410762
HIST1H2AE	6p22.2	-0.05437	0.289131	0.410814
SCGB1B2P	19q13.11	-0.05437	0.289174	0.410846
TMEM235	17q25.3	0.054365	0.289206	0.410863
RASGEF1C	5q35.3	-0.05436	0.289287	0.410949
ZBTB20	3q13.31	-0.05432	0.289576	0.411329
XKR9	8q13.3	-0.05431	0.289688	0.41146
DISC2	1q42.2	-0.05431	0.289735	0.411497
LGALS7	19q13.2	-0.05426	0.290143	0.412047
STAC3	12q13.3	0.054242	0.290307	0.41223
CLDN19	1p34.2	-0.05424	0.290312	0.41223
F11	4q35.2	-0.05422	0.290491	0.412453
HIST2H2AA3	1q21.2	0.054207	0.290619	0.412607
COL20A1	20q13.33	0.054194	0.290735	0.412742
B3GNT7	2q37.1 2q37.1	0.054183	0.290832	0.412851
SMAP1	6q13	-0.05416	0.291049	0.413122
ATP6V1C2	-	-0.05416	0.291065	0.413122
SECISBP2	9q22.2	0.054153	0.291095	0.413136
RALY	20q11.22	-0.05413	0.291264	0.413347
AQP11	11q14.1	-0.05413	0.291288	0.41335
RAB11A	15q22.31	-0.05413	0.291332	0.413357
SNAR-F	19q13.33	0.054124	0.291354	0.413357
HIST1H4G	6p22.2	0.054124	0.291354	0.413357
XIRP2	2q24.3	-0.05411	0.291443	0.413454
PNO1	2p14	-0.0541	0.291553	0.413554
CKM	19q13.32	-0.0541	0.291555	0.413554
RPAP3	12q13.11	0.054097	0.291599	0.413587
PPME1	11q13.4	0.054089	0.291669	0.413657
RSPH3	6q25.3	-0.05407	0.291855	0.413891
HILPDA	7q32.1	-0.05405	0.292003	0.414072
CBARP	19p13.3	0.054028	0.292215	0.414343
PEX3	6q24.2	-0.05401	0.292348	0.414479
CYP2F1	19q13.2	0.054013	0.292352	0.414479
TDRD12	19q13.11	-0.05401	0.292406	0.414526
ERICH6B	13q14.13	-0.05399	0.292553	0.414706
PWRN2	15q11.2	0.053988	0.292574	0.414706
MOB1A	2p13.1	-0.05397	0.292757	0.414914
SLFN12L	17q12	-0.05397	0.292773	0.414914
KIAA1143	3p21.31	-0.05396	0.292797	0.414914
TPD52L3	9p24.1	0.053962	0.292804	0.414914
KCP	7q32.1	0.053948	0.292928	0.415061
ZYX	7q34	-0.05394	0.293011	0.415149
SCARNA4	1q22	-0.05393	0.293094	0.415237
PIM2	Xp11.23	-0.05393	0.293136	0.415268
METTL15	11p14.1	-0.05392	0.293179	0.415298
F2	11p11.2	0.053912	0.293254	0.415376
LLPH	12q14.3	0.053902	0.293347	0.415478
PPP3R2	9q31.1	0.053897	0.293385	0.415503
DMTN	8p21.3	-0.05389	0.29341	0.415509
NAGLU	17q21.2	-0.05389	0.293441	0.415523
NPDC1	9q34.3	0.053873	0.293602	0.415708
METTL16	17p13.3	-0.05387	0.293613	0.415708
ABCA12	2q35	0.053864	0.293688	0.415769
LINC00313	21q22.3	0.053862	0.293698	0.415769
NEUROG1	5q31.1	-0.05385	0.293803	0.415889
RIC8A	11p15.5	-0.05384	0.293924	0.416

RCBTB1	13q14.2	-0.05384	0.293942	0.416
GBX2	2q37.2	-0.05383	0.293954	0.416
SLC16A3	17q25.3	0.053833	0.293965	0.416
GTF2H2	5q13.2	-0.05381	0.294135	0.416212
KHDC1L	6q13	-0.0538	0.294233	0.416321
TNIP2	4p16.3	0.053794	0.294317	0.41641
MICAL2	11p15.3	-0.05379	0.294342	0.416416
NLRP13	19q13.43	0.053787	0.29438	0.41642
CLIP1	12q24.31	-0.05379	0.294387	0.41642
NEK5	13q14.3	0.053777	0.294461	0.416497
PRSS27	16p13.3	0.053761	0.294608	0.416675
CSTB	21q22.3	0.053751	0.294698	0.416773
SLC25A30	13q14.13	-0.05374	0.2948	0.416887
RAPGEF1	9q34.13	0.053729	0.294894	0.416967
CLCA3P	1p22.3	0.053729	0.294898	0.416967
PTP4A1	6q12	-0.05372	0.294964	0.41703
RPF2	6q21	0.053697	0.295187	0.417316
LRATD1	2p24.3	0.053687	0.295276	0.417389
MCF2L2	3q27.1	-0.05369	0.29528	0.417389
IFI44	1p31.1	-0.05367	0.295413	0.417506
SNORA79	14q31.1	0.053671	0.295421	0.417506
ATP5MPL	14q32.33	0.05367	0.295425	0.417506
TGFBRAP1	2q12.1-q12.2	0.053667	0.295452	0.417515
QSOX1	1q25.2	0.053664	0.295481	0.417524
SLC18A2	10q25.3	-0.05366	0.295503	0.417524
OR3A4P	17p13.3	0.05366	0.295521	0.417524
ZNF256	19q13.43	-0.05365	0.295565	0.417555
LINC00486	2p22.3	0.053653	0.295585	0.417555
PGLYRP2	19p13.12	-0.05365	0.29565	0.417618
LINC00653	20p11.23	0.053629	0.295796	0.417794
TPSG1	16p13.3	-0.05362	0.295865	0.417863
SLC36A3	5q33.1	-0.05361	0.295931	0.417905
SNORA68	19p13.11	-0.05361	0.295937	0.417905
EEF2KMT	16p13.3	0.053609	0.295976	0.417931
LAPTM4B	8q22.1	-0.05359	0.296149	0.418146
CFB	6p21.33	-0.05358	0.296281	0.418303
NXPH4	12q13.3	0.053553	0.296487	0.418564
PPM1J	1p13.2	0.053522	0.296767	0.41893
ZNF131	5p12	-0.05351	0.296841	0.419005
OR10AD1	12q13.11	0.053493	0.297022	0.419231
IL1R2	2q11.2	0.053465	0.297283	0.419539
FBXO39	17p13.1	-0.05346	0.297308	0.419539
BFSP1	20p12.1	-0.05346	0.297313	0.419539
ITGB7	12q13.13	-0.05346	0.297324	0.419539
TACC1	8p11.22	-0.05345	0.297402	0.419619
KRT15	17q21.2	-0.05344	0.297509	0.419741
PUS7	7q22.3	0.05343	0.297597	0.419818
TMC3	15q25.1	-0.05343	0.297606	0.419818
IGSF8	1q23.2	0.053418	0.297708	0.419933
MAGEB2	Xp21.2	-0.0534	0.297863	0.420121
SGF29	16p11.2	0.053391	0.29795	0.420215
FCRL3	1q23.1	-0.05338	0.298086	0.420377
PSMA6	14q13.2	-0.05337	0.298182	0.420483
MAPKAPK5-AS1	12q24.12	-0.05336	0.29821	0.420492
SPATA18	4q12	-0.05336	0.298247	0.420514
SNORA15	7p11.2	0.053356	0.298272	0.42052
HSD17B12	11p11.2	-0.05335	0.298327	0.420568
PPP1R9A	7q21.3	0.053336	0.298446	0.420706

HTR1E	6q14.3	-0.05333	0.298541	0.420807
ADIPOR2	12p13.33	0.053324	0.298559	0.420807
SLC35D3	6q23.3	-0.0533	0.298818	0.421141
FAM217A	6p25.2	0.053283	0.298926	0.421228
ENOX2	Xq26.1	-0.05328	0.29893	0.421228
ZNF275	Xq28	0.053282	0.298942	0.421228
SERPIND1	22q11.21	-0.05328	0.298999	0.421278
BRD7	16q12.1	0.053257	0.299167	0.421486
NIBAN3	19p13.11	-0.05325	0.299197	0.421499
PEAR1	1q23.1	0.053251	0.299222	0.421504
MSRB2	10p12.2	-0.05324	0.299341	0.421642
TMEM138	11q12.2	0.053231	0.299406	0.421703
NPAT	11q22.3	-0.05322	0.299478	0.421776
ANKRD34A	1q21.1	-0.05322	0.299522	0.421803
TRABD2A	2p11.2	0.053212	0.299576	0.421803
CDKN2B-AS1	9p21.3	-0.05321	0.299584	0.421803
CEACAM18	19q13.41	-0.05321	0.299588	0.421803
PAGE5	Xp11.21	-0.05321	0.299603	0.421803
IQCF3	3p21.2	0.053191	0.299769	0.422008
ADCY10	1q24.2	0.053174	0.299917	0.422185
MGAT5	2q21.2-q21.3	-0.05317	0.299974	0.422236
NOP10	15q14	-0.05314	0.300231	0.422568
CC2D1B	1p32.3	0.053136	0.30027	0.422593
TMEM231	16q23.1	0.053124	0.300378	0.422715
CXORF40B	Xq28	-0.05311	0.300509	0.422871
CASP5	11q22.3	0.053075	0.300827	0.423288
MYMK	9q34.2	-0.05307	0.30088	0.423317
INPP5F	10q26.11	0.053068	0.30089	0.423317
SH2D2A	1q23.1	0.053061	0.300953	0.423376
ABCC12	16q12.1	0.053055	0.301007	0.423423
FOXH1	8q24.3	0.053033	0.301206	0.423673
RPLP1	15q23	-0.05303	0.30123	0.423676
OR6S1	14q11.2	0.053016	0.301357	0.423825
ANP32C	4q32.3	0.053013	0.301384	0.423833
CFAP65	2q35	0.053006	0.301456	0.423905
SPNS1	16p11.2	0.053002	0.301493	0.423928
B3GNT5	3q27.1	-0.05295	0.301928	0.424509
PEX5L	3q26.33	0.052944	0.302016	0.424581
ALX4	11p11.2	-0.05294	0.302022	0.424581
GBAP1	1q22	0.052934	0.302113	0.42468
WNT7B	22q13.31	0.052927	0.302179	0.424715
DYNAP	18q21.2	-0.05293	0.30218	0.424715
IRF8	16q24.1	0.052916	0.302276	0.42482
C17ORF50	17q12	-0.05291	0.302352	0.424896
SIPA1L2	1q42.2	0.052867	0.302728	0.425395
MAK16	8p12	0.05285	0.302883	0.425535
ITIH4	3p21.1	0.052849	0.302891	0.425535
CTDSPL	3p22.2	0.052849	0.302891	0.425535
NCCRP1	19q13.2	-0.05284	0.302985	0.425633
ADAM21	14q24.2	-0.05284	0.303004	0.425633
TP53BP1	15q15.3	-0.05283	0.303091	0.425714
TTC29	4q31.22	0.052826	0.303103	0.425714
SLC29A1	6p21.1	0.052816	0.303187	0.425802
ASB17	1p31.1	0.052811	0.303235	0.425836
APOL6	22q12.3	-0.05281	0.303254	0.425836
RIDA	8q22.2	-0.05279	0.30343	0.426053
KIF6	6p21.2	-0.05277	0.303568	0.426207
STS	Xp22.31	0.052773	0.303588	0.426207

CAPN5	11q13.5	0.052771	0.303604	0.426207
ADAM10	15q21.3	-0.05275	0.303835	0.426502
KRTAP3-3	17q21.2	-0.05273	0.303961	0.426627
PNPLA6	19p13.2	0.05273	0.303975	0.426627
TRNP1	1p36.11	-0.05273	0.303988	0.426627
DEFB131A	4p16.1	0.052703	0.304229	0.426936
WDR11	10q26.12	-0.05266	0.304608	0.427438
RPL17	18q21.1	-0.05263	0.304905	0.427825
PPID	4q32.1	-0.05263	0.304941	0.427845
IL1A	2q14.1	0.052608	0.305101	0.428038
RHPN1-AS1	8q24.3	-0.0526	0.305211	0.428163
CARMN	5q32	-0.05259	0.30526	0.428202
ZNF286A	17p12	-0.05258	0.305351	0.4283
CHRNA9	4p14	-0.05257	0.305454	0.428414
RASAL3	19p13.12	-0.05255	0.305613	0.428605
FLYWCH1	16p13.3	0.05255	0.305633	0.428605
NXF2	Xq22.1	-0.05255	0.305662	0.428616
GAGE2C	Xp11.23	-0.05254	0.305683	0.428616
GPT	8q24.3	0.052523	0.305883	0.428847
CCL27	9p13.3	0.052522	0.305891	0.428847
FAM3A	Xq28	-0.05251	0.306012	0.428987
SPEM1	17p13.1	0.052504	0.306057	0.429019
YES1	18p11.32	0.052502	0.306078	0.429019
NOA1	4q12	0.052497	0.306123	0.429053
PLSCR1	3q24	-0.05249	0.306189	0.429114
USP17L9P	4p16.1	0.052486	0.306225	0.429134
ADGRE4P	19p13.2	0.052482	0.306265	0.429161
GLRX5	14q32.13	0.05247	0.306374	0.429283
NUPR2	7p11.2	0.052461	0.306454	0.429366
PDHX	11p13	0.052441	0.306646	0.429605
EDAR	2q13	0.052433	0.306716	0.429672
ZBTB34	9q33.3	0.052423	0.306807	0.429727
CACUL1	10q26.11	0.052422	0.306818	0.429727
ACAN	15q26.1	0.052422	0.306819	0.429727
PIK3C2G	12p12.3	-0.05242	0.306842	0.429729
SPTSSB	3q26.1	-0.0524	0.307038	0.429974
ZCCHC14	16q24.2	0.052384	0.307167	0.430124
VWC2L	2q34-q35	-0.05238	0.307213	0.430158
RAB3B	1p32.3	-0.05238	0.307248	0.430178
RPL12	9q33.3	-0.05236	0.307372	0.430303
PRDM13	6q16.2	0.052361	0.307381	0.430303
ZNF615	19q13.41	-0.05234	0.30754	0.430495
ZNF614	19q13.41	-0.05234	0.307605	0.430557
BEST4	1p34.1	-0.05233	0.307682	0.430634
PNLIPRP2	10q25.3	0.052317	0.307787	0.430752
RTN4RL2	11q12.1	-0.05229	0.308081	0.431132
SYNPO2L	10q22.2	-0.05227	0.308206	0.431278
YRDC	1p34.3	0.052269	0.308231	0.431281
BTNL3	5q35.3	0.052267	0.308251	0.431281
COBLL1	2q24.3	-0.05226	0.308313	0.431337
PSMA5	1p13.3	0.052256	0.308349	0.431338
PHF20L1	8q24.22	-0.05226	0.308357	0.431338
SULT1B1	4q13.3	-0.05224	0.308493	0.431473
KHDRBS1	1p35.2	0.052241	0.308497	0.431473
ANKRD20A9P	13q11	0.052234	0.308557	0.431527
CARNMT1	9q21.13	0.052204	0.308832	0.431882
CCDC65	12q13.12	0.052193	0.30894	0.43199
BTN3A1	6p22.2	-0.05219	0.308952	0.43199

MYPN	10q21.3	-0.05218	0.309064	0.432116
UGT1A5	2q37.1	-0.05217	0.309105	0.432143
AFAP1-AS1	4p16.1	0.05217	0.309149	0.432166
BCL11B	14q32.2	0.052168	0.30917	0.432166
HTR1D	1p36.12	0.052166	0.309186	0.432166
SPPL2C	17q21.31	0.052152	0.309319	0.432321
SLC10A2	13q33.1	0.052146	0.309375	0.432369
C19ORF25	19p13.3	0.052129	0.309528	0.432553
FGFRL1	4p16.3	0.05212	0.309616	0.432646
RBPJL	20q13.12	-0.05211	0.309706	0.432741
SH3PXD2A	10q24.33	-0.05208	0.309995	0.433114
CCZ1P-OR7E38P	7q21.3	-0.05208	0.310019	0.433118
SLFN13	17q12	-0.05206	0.310151	0.433272
DYRK3	1q32.1	-0.05204	0.310391	0.433578
KTN1	14q22.3	-0.05203	0.310447	0.433626
TGM7	15q15.2-q15.3	-0.05201	0.310612	0.433812
PRKD2	19q13.32	0.05201	0.31064	0.433812
GLCCI1	7p21.3	-0.05201	0.310646	0.433812
ADRA2C	4p16.3	-0.05201	0.310668	0.433813
GATA3-AS1	10p14	0.051991	0.31082	0.433995
CLEC19A	16p12.3	-0.05197	0.310985	0.434182
ALMS1P1	2p13.1	-0.05197	0.310997	0.434182
GNE	9p13.3	0.051964	0.311067	0.434249
ADAMTS8	11q24.3	-0.05195	0.311169	0.434362
CEACAM7	19q13.2	-0.05194	0.311248	0.434441
WNT1	12q13.12	-0.05192	0.311464	0.434699
F13B	1q31.3	0.05192	0.311476	0.434699
GOLGB1	3q13.33	0.051911	0.311559	0.434772
KRTAP12-2	21q22.3	0.05191	0.311572	0.434772
RNF44	5q35.2	0.051899	0.311674	0.434884
SNRNP35	12q24.31	0.051859	0.312044	0.43537
ZNF394	7q22.1	-0.05185	0.312094	0.43541
DCTN6	8p12	-0.05182	0.31238	0.435778
TXNDC8	9q31.3	-0.0518	0.312587	0.436021
KRT12	17q21.2	-0.0518	0.312598	0.436021
ZG16B	16p13.3	-0.0518	0.312645	0.436047
MAS1L	6p22.1	-0.05179	0.31266	0.436047
DIP2B	12q13.12	0.051761	0.312964	0.436441
NDUFA4L2	12q13.3	-0.05176	0.312994	0.436452
ENDOD1	11q21	-0.05175	0.31303	0.436473
HSD3B7	16p11.2	0.05175	0.313071	0.436487
KCNF1	2p25.1	-0.05175	0.313098	0.436487
GH1	17q23.3	-0.05175	0.313106	0.436487
OTOS	2q37.3	0.05173	0.313254	0.436634
UPK3A	22q13.31	0.05173	0.313255	0.436634
GATD3A	21q22.3	-0.05172	0.313375	0.436771
TMCC3	12q22	-0.05169	0.313603	0.437058
ERC1	12p13.33	-0.05169	0.313627	0.437062
ICE1	5p15.32	0.051688	0.313649	0.437062
ZNF837	19q13.43	-0.05167	0.313827	0.437279
RIT2	18q12.3	0.051659	0.313922	0.437381
SLC17A2	6p22.2	-0.05165	0.31402	0.437488
ADSL	22q13.1	-0.05164	0.314102	0.437571
LINC00240	6p22.2	0.051624	0.314245	0.43774
RBM26	13q31.1	0.051615	0.314338	0.437811
UNC13D	17q25.1	0.051614	0.31434	0.437811
RTN4IP1	6q21	0.051609	0.314393	0.437845
CAVIN4	9q31.1	0.051607	0.314408	0.437845

TBK1	12q14.2	-0.05159	0.314522	0.437973
PDS5A	4p14	0.051585	0.314617	0.438075
ZFP90	16q22.1	-0.05157	0.314797	0.438295
PRR32	Xq25	-0.05156	0.314843	0.438328
PPFIBP2	11p15.4	-0.05155	0.314949	0.438446
SKINT1L	1p33	0.051536	0.315074	0.43859
PTPRF	1p34.2	-0.05151	0.315301	0.438851
HES3	1p36.31	-0.05151	0.315307	0.438851
TGIF2LX	Xq21.31	0.051509	0.315328	0.438851
C8ORF44	8q13.1	0.051501	0.315404	0.438927
IRX4	5p15.33	0.051498	0.315432	0.438935
RABL3	3q13.33	-0.05147	0.315718	0.439303
TTC37	5q15	0.051432	0.316055	0.439741
HS3ST6	16p13.3	-0.05142	0.316167	0.439806
CARD17	11q22.3	-0.05142	0.316175	0.439806
KCTD15	19q13.11	-0.05142	0.316185	0.439806
LIN28B	6q16.3-q21	-0.05142	0.316189	0.439806
LGALS17A	19q13.2	-0.05141	0.316221	0.43982
NACA4P	8q22.3	-0.0514	0.316394	0.440029
BIK	22q13.2	0.051358	0.316751	0.440496
TMEM40	3p25.2	-0.05134	0.316903	0.440677
SPINK8	3p21.31	0.051337	0.316953	0.440686
MEP1A	6p12.3	-0.05134	0.316954	0.440686
CAPZB	1p36.13	-0.05133	0.316985	0.440698
PIPOX	17q11.2	-0.05133	0.317044	0.440749
ABCA3	16p13.3	0.051305	0.317253	0.44101
C1ORF127	1p36.22	-0.0513	0.317299	0.441043
OGFR	20q13.33	0.051286	0.317432	0.44117
PTPN14	1q32.3-q41	0.051286	0.317434	0.44117
IDH1	2q34	-0.0512	0.318244	0.442265
STXBP6	14q12	-0.05118	0.318395	0.442444
OTX2	14q22.3	-0.05118	0.318434	0.442467
MAP3K14	17q21.31	-0.05114	0.318813	0.442957
ONECUT2	18q21.31	0.051138	0.318832	0.442957
ADGRG3	16q21	-0.05114	0.318853	0.442957
LCT	2q21.3	-0.05113	0.318914	0.443011
EIF4E1B	5q35.2	-0.0511	0.319159	0.44332
LINC00934	12q24.23	-0.0511	0.3192	0.443346
CT47A2	Xq24	-0.0511	0.319231	0.443359
TAS2R30	12p13.2	0.05108	0.31938	0.443536
RPGR	Xp11.4	0.051065	0.319522	0.443701
ANKLE1	19p13.11	0.051059	0.319577	0.443748
FCN3	1p36.11	-0.05104	0.319738	0.44394
HECTD1	14q12	0.051028	0.319877	0.444103
FARP1	13q32.2	-0.05102	0.319963	0.444191
RTL6	22q13.31	-0.05102	0.319992	0.444192
APOBEC4	1q25.3	0.051012	0.320025	0.444192
ZNF479	7p11.2	-0.05101	0.320031	0.444192
RCC1L	7q11.23	0.050999	0.320149	0.444326
FAM222B	17q11.2	-0.05099	0.320233	0.444404
MAPK13	6p21.31	0.050987	0.320264	0.444404
SSBP4	19p13.11	0.050986	0.320272	0.444404
ID2B	3p14.2	-0.05098	0.320352	0.444484
EFCAB13	17q21.32	0.050973	0.320398	0.444517
ADRA1A	8p21.2	-0.05097	0.320447	0.444554
KLHL40	3p22.1	-0.05096	0.320545	0.44466
CYB561D2	3p21.31	0.05095	0.320618	0.44473
NOL4L	20q11.21	-0.05095	0.320659	0.444756



MRPS17	7p11.2	0.050922	0.32088	0.445009
LOC441601	11p11.12	-0.05092	0.320885	0.445009
RPS17	15q25.2	0.050903	0.321064	0.445226
CSTF1	20q13.2-q13.31	-0.05088	0.321247	0.445448
YIPF6	Xq12-q13.1	-0.05088	0.321296	0.445485
PKP1	1q32.1	-0.05086	0.321429	0.445639
ANGPT4	20p13	-0.05086	0.321462	0.445646
SPSB3	16p13.3	0.05086	0.321478	0.445646
RBAK	7p22.1	0.050837	0.321696	0.445916
RNF125	18q12.1	0.050821	0.321844	0.44609
KLHL35	11q13.4	0.050817	0.321885	0.446116
CSRP3	11p15.1	0.050806	0.321986	0.446225
FARP2	2q37.3	0.050773	0.322306	0.446638
MSRA	8p23.1	-0.05076	0.322382	0.446712
OR2B2	6p22.1	0.050747	0.322551	0.446916
PSMA8	18q11.2	0.050738	0.322638	0.446956
PARP10	8q24.3	0.050737	0.322645	0.446956
FOXA3	19q13.32	0.050737	0.322647	0.446956
ZNF644	1p22.2	-0.05071	0.322887	0.447258
FAM83A	8q24.13	0.050706	0.322942	0.447288
RANBP2	2q13	0.050704	0.322961	0.447288
IL6	7p15.3	-0.0507	0.322976	0.447288
RASA1	5q14.3	-0.05069	0.323064	0.44738
MT1E	16q13	-0.05069	0.323097	0.447394
CFAP46	10q26.3	-0.05069	0.323126	0.447404
RBM27	5q32	0.050681	0.323186	0.447455
CAMK1D	10p13	-0.05067	0.323301	0.447584
ARFIP2	11p15.4	0.05066	0.323381	0.447641
SIGLEC12	19q13.41	-0.05066	0.323387	0.447641
TARM1	19q13.42	-0.05065	0.323433	0.447674
TMPRSS2	21q22.3	0.050648	0.323496	0.447731
MANF	3p21.2	-0.05064	0.323542	0.447733
NDST4	4q26	0.050643	0.323543	0.447733
LINC00635	3q13.12	0.050598	0.323973	0.448297
C8A	1p32.2	-0.05059	0.324038	0.448356
RPS18	6p21.32	-0.05059	0.324092	0.4484
BOD1	5q35.2	-0.05058	0.32415	0.448449
KCNS2	8q22.2	-0.05055	0.324418	0.448789
SCARNA3	1q25.1	0.050549	0.324449	0.448801
YBX3P1	16p11.2	-0.05055	0.324475	0.448807
OR2L1P	1q44	0.05053	0.324631	0.44899
ZNF101	19p13.11	-0.05052	0.32468	0.449027
LRR37A6P	10p12.1	0.050514	0.324781	0.449104
HAUS1	18q21.1	0.050514	0.324785	0.449104
LPAR3	1p22.3	-0.05051	0.324803	0.449104
GAL	11q13.2	0.050504	0.324873	0.44917
TMEM107	17p13.1	0.050495	0.324965	0.449244
RAVER2	1p31.3	0.050494	0.324971	0.449244
ZFP57	6p22.1	-0.05049	0.325026	0.449288
C16ORF78	16q12.1	-0.05048	0.325107	0.44937
ADAM21P1	14q24.2	0.050454	0.325357	0.449676
CDC42EP2	11q13.1	0.050452	0.325374	0.449676
CCL25	19p13.2	0.050449	0.325408	0.449693
FRYL	4p11	-0.05043	0.325556	0.449866
AP3B1	5q14.1	0.050426	0.325624	0.449929
PGK2	6p12.3	0.050411	0.325765	0.45007
RAB19	7q34	0.050411	0.325771	0.45007
TERF2	16q22.1	0.050407	0.325808	0.45009

ZNF500	16p13.3	0.050404	0.325833	0.450094
PTRH2	17q23.1	-0.0504	0.325866	0.450108
UTP11	1p34.3	0.050364	0.32622	0.450566
SRD5A2	2p23.1	-0.05034	0.326416	0.450806
MRPS15	1p34.3	0.050325	0.326601	0.45103
SERBP1	1p31.3	0.050321	0.326632	0.451042
LOC100130264	20p11.23	-0.0503	0.326808	0.451253
ELOVL5	6p12.1	-0.05027	0.327163	0.451713
PPP4R3A	14q32.12	0.050248	0.327337	0.451922
CCT2	12q15	0.050224	0.327572	0.452187
SOX1	13q34	0.050224	0.327574	0.452187
CYP2J2	1p32.1	0.050221	0.327599	0.45219
C22ORF46	22q13.2	-0.05022	0.327655	0.452226
HEATR6	17q23.1	-0.05021	0.32767	0.452226
LINC01091	4q28.1	-0.05021	0.327729	0.452273
MDS2	1p36.11	-0.05021	0.327749	0.452273
CHRNA2	8p21.2	-0.0502	0.327815	0.452333
OR4K15	14q11.2	-0.05018	0.328026	0.452588
HYAL4	7q31.32	-0.05017	0.328045	0.452588
ACMSD	2q21.3	0.05017	0.328089	0.452617
MRNIP	5q35.3	-0.05016	0.328193	0.452729
ARAP3	5q31.3	0.050145	0.328334	0.452893
TIA1	2p13.3	-0.05014	0.328359	0.452896
CDH16	16q22.1	0.050132	0.328461	0.453005
ACHE	7q22.1	-0.05012	0.328557	0.453106
LHCGR	2p16.3	-0.05011	0.328624	0.453168
ZNF575	19q13.31	0.05011	0.328675	0.453207
NARF	17q25.3	-0.0501	0.328734	0.453256
ZNF205-AS1	16p13.3	-0.0501	0.328771	0.453277
KANSL3	2q11.2	0.050093	0.328838	0.453295
LINC00310	21q22.11	-0.05009	0.328857	0.453295
CLEC12B	12p13.2	-0.05009	0.328874	0.453295
MRPL38	17q25.1	0.050089	0.328875	0.453295
TDGF1	3p21.31	-0.05008	0.329006	0.453445
PNPO	17q21.32	0.050069	0.329069	0.4535
SGPL1	10q22.1	-0.05006	0.329135	0.453558
CBFA2T3	16q24.3	-0.05006	0.329156	0.453558
SDHAF3	7q21.3	-0.05005	0.329292	0.453713
BAAT	9q31.1	-0.05004	0.32939	0.453818
KIF1C	17p13.2	-0.05003	0.329471	0.453898
IFNA2	9p21.3	0.050024	0.329505	0.453914
MRPS30	5p12	0.050017	0.329573	0.453945
MGAT3	22q13.1	0.050017	0.329573	0.453945
CASC3	17q21.1	-0.05001	0.329631	0.453994
FAM189A2	9q21.12	-0.05001	0.329671	0.454018
MRPL19	2p12	0.050001	0.329727	0.454063
B3GNT3	19p13.11	-0.05	0.329777	0.454101
APOL5	22q12.3	-0.04997	0.330023	0.454409
SNAP29	22q11.21	-0.04994	0.330353	0.454831
SLC18A1	8p21.3	-0.04993	0.330433	0.4549
GRID2IP	7p22.1	-0.04993	0.330448	0.4549
NPAS4	11q13.2	-0.0499	0.33071	0.455229
LOC100240734	12q13.13	-0.0499	0.330743	0.455243
AKR1C8P	10p15.1	0.04988	0.330897	0.455424
NCOA5	20q13.12	-0.04987	0.331005	0.455541
ATP11C	Xq27.1	0.049854	0.331153	0.455714
TAOK3	12q24.23	-0.04985	0.33118	0.45572
ALDOC	17q11.2	-0.0498	0.331659	0.456348

CA6	1p36.23	-0.04979	0.331742	0.456429
ZIM3	19q13.43	-0.04979	0.331764	0.456429
C7ORF65	7p12.3	-0.04978	0.331871	0.456545
CCDC105	19p13.12	-0.04977	0.331955	0.456663
MYOG	1q32.1	-0.04976	0.332018	0.456684
FCGR3B	1q23.3	-0.04975	0.332208	0.456914
HSP90B1	12q23.3	-0.04974	0.332252	0.456943
BHLHE40	3p26.1	-0.04971	0.332533	0.457298
SLC25A17	22q13.2	-0.04971	0.332589	0.457344
TRIM63	1p36.11	-0.04969	0.332782	0.457579
ARL14	3q25.33	0.049678	0.332864	0.457659
SAMD15	14q24.3	0.049672	0.332923	0.457686
KRTAP10-6	21q22.3	0.049671	0.332929	0.457686
MCOLN1	19p13.2	-0.04967	0.332962	0.457701
TRIM71	3p22.3	-0.04966	0.333047	0.457786
MT4	16q13	-0.04965	0.333167	0.457919
FASTKD5	20p13	0.049642	0.333214	0.457952
BSND	1p32.3	-0.04964	0.333261	0.457985
SACS	13q12.12	0.049609	0.333531	0.458325
RITA1	12q24.13	0.049604	0.333588	0.458372
HSPE1	2q33.1	0.049594	0.33368	0.458467
TOPORS	9p21.1	-0.04958	0.333777	0.458569
ZNF606	19q13.43	-0.04958	0.333817	0.458592
PLK3	1p34.1	-0.04957	0.333964	0.458763
FAM13A	4q22.1	-0.04955	0.334153	0.458991
TMEM139	7q34	-0.04952	0.33437	0.459257
BOLA1	1q21.2	0.04952	0.334406	0.459275
IQCH	15q23	0.049512	0.334479	0.459314
JOSD1	22q13.1	0.049511	0.334492	0.459314
REPS2	Xp22.2	-0.04951	0.334524	0.459314
CUL4A	13q34	0.049508	0.334526	0.459314
GTSE1-DT	22q13.31	0.049505	0.33455	0.459315
ICAM3	19p13.2	-0.04943	0.335248	0.460242
BOD1L1	4p15.33	-0.04941	0.335511	0.460572
PER2	2q37.3	0.049397	0.335604	0.460668
KLLN	10q23.31	-0.04939	0.335649	0.460697
ASNS	7q21.3	0.04938	0.33577	0.460832
C1ORF210	1p34.2	-0.04938	0.335809	0.460854
GNMT	6p21.1	0.049365	0.335918	0.460972
ONECUT1	15q21.3	-0.04936	0.335972	0.461015
ADGRA3	4p15.2	-0.04934	0.336151	0.461228
HINT1	5q23.3	-0.04931	0.336434	0.461585
RBM44	2q37.3	0.049294	0.336621	0.461785
KPNA3	13q14.2	-0.04929	0.336626	0.461785
TAS2R31	12p13.2	0.049262	0.336937	0.462181
B3GALT5	21q22.2	0.049233	0.337214	0.462528
ENTPD4	8p21.3	-0.04921	0.337412	0.462769
PIK3C2A	11p15.1	-0.04919	0.33763	0.463037
GPR148	2q21.1	0.049168	0.337856	0.463309
SERPINB3	18q21.33	0.049166	0.337876	0.463309
WNT8A	5q31.2	-0.04916	0.337971	0.463409
ZC3H7A	16p13.13	-0.04915	0.338065	0.463505
TCP10L	21q22.11	-0.04911	0.33845	0.464001
GPX6	6p22.1	0.049102	0.338505	0.464045
SPATA6L	9p24.2-p24.1	0.049096	0.33856	0.46409
OPN1LW	Xq28	-0.04904	0.339123	0.464826
MTCL1	18p11.22	0.049037	0.339144	0.464826
CRABP1	15q25.1	-0.04903	0.33925	0.464914

DISC1	1q42.2	-0.04903	0.339261	0.464914
AAK1	2p13.3	-0.04902	0.339279	0.464914
SRXN1	20p13	0.04902	0.339314	0.464914
NOMO3	16p13.11	0.049019	0.339324	0.464914
CYP4F8	19p13.12	0.049013	0.339383	0.464963
FRAS1	4q21.21	-0.049	0.339467	0.464999
PRSS36	16p11.2	-0.049	0.339467	0.464999
MTUS1	8p22	0.049002	0.33949	0.464999
LINC01102	2q12.1	0.049001	0.339503	0.464999
ZNF702P	19q13.41	-0.049	0.339526	0.465
GSR	8p12	0.048992	0.339586	0.465049
ZNF282	7q36.1	0.048983	0.339683	0.465151
DNPEP	2q35	-0.04896	0.339928	0.465454
SNORA20	6q25.3	0.04895	0.340007	0.465531
KRTAP10-3	21q22.3	-0.04893	0.34018	0.465711
SORBS3	8p21.3	-0.04893	0.340187	0.465711
AKR1A1	1p34.1	-0.04893	0.340209	0.465711
PITX2	4q25	-0.04892	0.340253	0.465741
ARMH1	1p34.1	0.048903	0.340472	0.466008
CACNG5	17q24.2	0.048897	0.340527	0.466052
SLC36A4	11q21	-0.04889	0.340585	0.466078
CLPSL1	6p21.31	-0.04889	0.34063	0.466078
AHCYL1	1p13.3	0.048887	0.34063	0.466078
SLCO1C1	12p12.2	-0.04889	0.340639	0.466078
MEF2B	19p13.11	0.048862	0.340879	0.466374
UBXN8	8p12	0.048853	0.340969	0.466465
ATXN3L	Xp22.2	-0.04884	0.341073	0.466576
KRT14	17q21.2	-0.04878	0.341667	0.467357
SRP68	17q25.1	-0.04877	0.34174	0.46741
ZNF106	15q15.1	0.048773	0.341753	0.46741
RASGRP4	19q13.2	-0.04872	0.342267	0.468082
GLIS3-AS1	9p24.2	-0.04871	0.342332	0.468134
SNORA77	1q32.1	0.048713	0.342353	0.468134
HPSE	4q21.23	0.048689	0.342588	0.468424
LDHA	11p15.1	0.048685	0.34263	0.468431
PCDHA1	5q31.3	-0.04868	0.34264	0.468431
ARID5B	10q21.2	-0.04868	0.34272	0.468509
GPR151	5q32	-0.04867	0.342792	0.468575
IGF2BP3	7p15.3	0.048642	0.343059	0.468908
FAM138E	15q26.3	0.048625	0.343228	0.469082
HIST1H4H	6p22.2	-0.04862	0.343233	0.469082
NMUR2	5q33.1	0.048581	0.343658	0.46963
SCAF8	6q25.2	0.048562	0.34385	0.469861
RHAG	6p12.3	-0.04856	0.34388	0.46987
LRRC34	3q26.2	-0.04856	0.34392	0.469888
MED4	13q14.2	-0.04855	0.34394	0.469888
ZNF836	19q13.41	-0.04854	0.344021	0.469967
EIF2S1	14q23.3	0.048533	0.344135	0.47009
CCT8L2	22q11.1	0.048527	0.344195	0.47014
ZNF112	19q13.31	0.048518	0.344293	0.470242
ACTBL2	5q11.2	-0.04852	0.344318	0.470243
CETN2	Xq28	-0.04851	0.344343	0.470245
CEP85L	6q22.31	-0.04846	0.344904	0.470962
HAR1A	20q13.33	0.048455	0.344914	0.470962
SMR3B	4q13.3	0.048399	0.345477	0.471697
BICD1	12p11.21	-0.04837	0.345738	0.472022
UGT1A6	2q37.1	-0.04837	0.345789	0.472059
COL6A6	3q22.1	-0.04836	0.345873	0.472131

TUT1	11q12.3	0.048358	0.345888	0.472131
CA5A	16q24.2	-0.04835	0.345994	0.472243
AP2M1	3q27.1	-0.04834	0.346043	0.472278
RBBP4	1p35.1	-0.04834	0.346075	0.472229
LELP1	1q21.3	-0.04833	0.346208	0.472438
SMUG1	12q13.13	-0.04832	0.346271	0.472492
NUDCD1	8q23.1	-0.04831	0.346351	0.472569
MCPH1	8p23.1	-0.04829	0.346533	0.472739
SH3BP4	2q37.2	-0.04829	0.34654	0.472739
ATN1	12p13.31	0.048292	0.346546	0.472739
LOC6444669	18p11.21	-0.04828	0.346691	0.472904
IL5RA	3p26.2	-0.04826	0.346898	0.473155
MOV10	1p13.2	0.048246	0.347001	0.473244
BTN1A1	6p22.2	0.048245	0.347011	0.473244
HSBP1	16q23.3	-0.04824	0.347093	0.473324
SLC35G5	8p23.1	0.048234	0.347128	0.473339
CMAS	12p12.1	0.048213	0.34733	0.473583
LRRC46	17q21.32	0.048202	0.347441	0.473672
RAX	18q21.32	-0.0482	0.347443	0.473672
MGC12916	17p12	-0.04818	0.347696	0.473985
AMBN	4q13.3	-0.04816	0.347914	0.474249
GTF3A	13q12.2	-0.04814	0.348115	0.474492
ABCC13	21q11.2	0.048121	0.348255	0.474649
ZSCAN4	19q13.43	-0.04811	0.348354	0.474752
OR5K2	3q11.2	-0.0481	0.348486	0.474899
C10ORF71	10q11.23	0.048075	0.348715	0.47518
STARD7	2q11.2	0.048059	0.348874	0.475363
JARID2	6p22.3	-0.04806	0.348917	0.47539
FBXW12	3p21.31	0.048047	0.348998	0.475464
ZC3H15	2q32.1	-0.04805	0.349018	0.475464
REST	4q12	-0.04804	0.349057	0.475484
LOC341056	11q24.1	0.048036	0.349111	0.475526
ZNHIT2	11q13.1	0.048021	0.349257	0.475692
GNRHR	4q13.2	0.048018	0.349292	0.475692
IFT43	14q24.3	-0.04802	0.349305	0.475692
VWF	12p13.31	-0.04798	0.349635	0.476109
GAS2L1	22q12.2	0.047964	0.34983	0.476342
C7ORF66	7q31.1	0.047961	0.349862	0.476354
LGALS3	14q22.3	0.047935	0.350122	0.476667
ACOT6	14q24.3	-0.04793	0.35014	0.476667
ZNF844	19p13.2	-0.04793	0.350189	0.476702
HK1	10q22.1	0.047903	0.350447	0.477021
CDSN	6p21.33	-0.04786	0.35089	0.47759
VSIG2	11q24.2	0.047842	0.351063	0.477768
ZNF554	19p13.3	0.047841	0.351067	0.477768
LRRC4B	19q13.33	-0.04784	0.351091	0.477768
GOLGA8G	15q13.1	-0.04783	0.35118	0.477853
KIF3B	20q11.21	-0.04783	0.351202	0.477853
RGS20	8q11.23	-0.04782	0.351285	0.477934
N6AMT1	21q21.3	0.047817	0.351315	0.477942
ACOT8	20q13.12	-0.0478	0.351443	0.478084
LINC02418	12q24.33	-0.0478	0.351532	0.478144
LOC100192426	18p11.23	0.047795	0.351535	0.478144
ITPRID2	2q31.3	-0.04779	0.351578	0.478169
MYH2	17p13.1	-0.04778	0.35164	0.478222
GSTT4	22q11.23	0.047772	0.351772	0.47836
LTBR	12p13.31	-0.04777	0.351801	0.47836
SMN1	5q13.2	-0.04777	0.351813	0.47836

GTF2I	7q11.23	-0.04776	0.351882	0.478421
OPALIN	10q24.1	-0.04773	0.352145	0.478746
C1ORF115	1q41	-0.04773	0.352203	0.478793
CHORDC1	11q14.3	0.047723	0.35226	0.478805
KRTAP4-12	17q21.2	-0.04772	0.35226	0.478805
NSG1	4p16.3	-0.04769	0.35256	0.479179
LRIT1	10q23.1	0.047691	0.352588	0.479179
OR2B11	1q44	0.047689	0.352607	0.479179
KDELR2	7p22.1	0.04768	0.352699	0.479272
SYNE3	14q32.13	0.047651	0.352994	0.47964
LMBRD2	5p13.2	-0.04764	0.353107	0.47976
ATP7B	13q14.3	0.047611	0.353399	0.480124
RARG	12q13.13	-0.04759	0.353558	0.480308
TESMIN	11q13.3	0.047589	0.353621	0.480361
S100A7	1q21.3	-0.04758	0.353685	0.480411
CCNB1IP1	14q11.2	-0.04758	0.353706	0.480411
POTED	21q11.2	0.047577	0.353734	0.480417
GPR32	19q13.33	0.047574	0.353766	0.480428
CBX1	17q21.32	-0.04757	0.353813	0.480459
NEURL1B	5q35.1	0.047554	0.353968	0.480637
PADI4	1p36.13	-0.04755	0.354035	0.480695
TBX4	17q23.2	-0.04754	0.354126	0.480761
TMEM91	19q13.2	-0.04754	0.354131	0.480761
SNORA14A	7q11.23	-0.04753	0.354262	0.480906
CDPF1	22q13.31	-0.04751	0.354371	0.481022
OCA2	15q12-q13.1	-0.04751	0.35444	0.481057
ZNF543	19q13.43	0.047507	0.354445	0.481057
GTF2IRD1	7q11.23	0.047474	0.35478	0.481478
SNRPG	2p13.3	0.04747	0.354823	0.481505
CDADC1	13q14.2	-0.04746	0.354917	0.481599
ENAH	1q42.12	-0.04745	0.355072	0.481777
PPP2R5C	14q32.31	-0.04743	0.355249	0.481985
ALKBH4	7q22.1	-0.0474	0.355547	0.482356
SLC50A1	1q22	0.047369	0.355853	0.482739
ZFAND2A	7p22.3	-0.04736	0.355982	0.482881
KRTAP4-11	17q21.2	0.04733	0.356242	0.483183
DMRT1	9p24.3	-0.04733	0.356253	0.483183
TEX9	15q21.3	-0.0473	0.356597	0.483616
SPRY2	13q31.1	-0.04728	0.356773	0.483823
DYRK1A	21q22.13	0.047268	0.35688	0.483913
ZNRF2P1	7p14.3	0.047267	0.356888	0.483913
UNC119B	12q24.31	-0.04724	0.35717	0.484263
MYF5	12q21.31	-0.04722	0.357323	0.484438
ASB4	7q21.3	-0.04721	0.357454	0.484563
RPS4Y2	Yq11.223	0.04721	0.357464	0.484563
MARVELD3	16q22.2	0.047198	0.357587	0.484665
RP1L1	8p23.1	0.047198	0.357588	0.484665
HAO2	1p12	-0.04719	0.357711	0.484769
PAQR9	3q23	-0.04719	0.357713	0.484769
RNF114	20q13.13	-0.04715	0.358112	0.485259
CTC1	17p13.1	0.047146	0.358123	0.485259
SYNGR3	16p13.3	-0.04714	0.35817	0.48529
KIF16B	20p12.1	-0.04713	0.358277	0.485402
OPN1MW	Xq28	-0.04712	0.358337	0.485451
TRMT12	8q24.13	-0.04711	0.358439	0.485528
WT1	11p13	-0.04711	0.358443	0.485528
INO80C	18q12.2	0.04711	0.358488	0.485556
ATP5MG	11q23.3	-0.0471	0.35854	0.485595

INPP4A	2q11.2	-0.0471	0.358591	0.48563
RMST	12q23.1 12q21	-0.04709	0.35866	0.485671
OR6T1	11q24.1	-0.04709	0.358669	0.485671
STIM2	4p15.2	0.047078	0.358813	0.48583
DTX4	11q12.1	0.047076	0.358835	0.48583
HNRNPCL2	1p36.21	-0.04706	0.35903	0.486039
MLN	6p21.31	-0.04705	0.359119	0.486039
CADPS2	7q31.32	-0.04705	0.359123	0.486039
HIST1H2BB	6p22.2	0.047048	0.359127	0.486039
RNU11	1p35.3	0.047046	0.359139	0.486039
RBSN	3p25.1	0.047045	0.359154	0.486039
ABCA13	7p12.3	-0.04704	0.35916	0.486039
SGMS2	4q25	-0.04703	0.359289	0.486181
MTMR14	3p25.3	-0.04701	0.359542	0.48649
FBP2	9q22.32	0.047001	0.3596	0.486537
DCAF4L2	8q21.3	0.046995	0.359666	0.486593
PYCR1	17q25.3	0.046974	0.359875	0.4868
WDR89	14q23.2	-0.04697	0.359897	0.4868
USP29	19q13.43	-0.04697	0.359913	0.4868
CTLA4	2q33.2	-0.04697	0.359916	0.4868
HMX2	10q26.13	0.046958	0.360046	0.486942
OR10K1	1q23.1	-0.04692	0.360457	0.487465
PRLHR	10q26.11	-0.04691	0.360565	0.487545
BAX	19q13.33	0.046907	0.360565	0.487545
TIMM22	17p13.3	-0.0469	0.360622	0.487586
RLN3	19p13.12	-0.0469	0.360644	0.487586
UMODL1	21q22.3	-0.04688	0.360805	0.487771
PCGF2	17q12	-0.04688	0.360867	0.487811
CDKL2	4q21.1	-0.04688	0.360884	0.487811
PVALEF	17q25.3	0.046841	0.361245	0.488267
LCE6A	1q21.3	-0.04683	0.36136	0.488389
HNF1A	12q24.31	0.046818	0.361481	0.488521
PGC	6p21.1	0.046804	0.361619	0.488674
DSG2	18q12.1	-0.0468	0.361678	0.488721
SNORA37	18q21.2	-0.04678	0.361899	0.488986
FERMT1	20p12.3	-0.04676	0.362052	0.48916
RER1	1p36.32	0.046749	0.362185	0.489306
OR5P3	11p15.4	0.046736	0.362322	0.489458
PREB	2p23.3	-0.04671	0.362556	0.489742
WDCP	2p23.3	-0.04669	0.362754	0.489952
TAS2R16	7q31.32 7q31	-0.04669	0.362785	0.489952
OR4K17	14q11.2	-0.04669	0.362785	0.489952
HLA-J	6p22.1	0.046685	0.362847	0.490002
MTNR1A	4q35.2	0.046675	0.362949	0.490107
PTPN2	18p11.21	-0.04666	0.363064	0.490229
EIF2B1	12q24.31	0.046656	0.363144	0.490276
SNORA2C	12q13.11	0.046656	0.363147	0.490276
TIPRL	1q24.2	0.046652	0.36319	0.490276
FAM24A	10q26.13	0.046651	0.363196	0.490276
VSTM2A	7p11.2	-0.04664	0.363282	0.490359
ZBTB2	6q25.1	0.046616	0.363552	0.490677
BGLAP	1q22	-0.04661	0.363567	0.490677
IL13RA2	Xq23	0.04661	0.363623	0.490719
CFAP69	7q21.13	0.046601	0.363716	0.490812
HBB	11p15.4	-0.0466	0.363743	0.490816
NME3	16p13.3	-0.04657	0.364073	0.491228
ADAT1	16q23.1	0.046557	0.364162	0.491314
MLF1	3q25.32	-0.04655	0.364193	0.491323

VSIG1	Xq22.3	-0.04654	0.364356	0.4915
MAP4K4	2q11.2	-0.04654	0.364373	0.4915
SNAPC2	19p13.2	-0.04653	0.364466	0.491592
OR6C68	12q13.2	0.046516	0.364584	0.491695
KRTAP12-1	21q22.3	0.046516	0.364591	0.491695
BTBD18	11q12.1	0.046511	0.364638	0.491725
CAPRIN1	11p13	-0.04651	0.364666	0.49173
CHD8	14q11.2	0.046501	0.364742	0.491754
SLC46A2	9q32	0.046498	0.364768	0.491754
NPEPPS	17q21.32	-0.04649	0.364806	0.491754
CCL13	17q12	-0.04649	0.364824	0.491754
ZNF408	11p11.2	0.046492	0.364837	0.491754
SLITRK6	13q31.1	-0.04649	0.364847	0.491754
SNAPIN	1q21.3	-0.04649	0.364856	0.491754
TMEM170B	6p24.2	-0.04648	0.364924	0.491812
IQCD	12q24.13	0.046481	0.364951	0.491815
ZC3H6	2q14.1	-0.04647	0.365046	0.491911
LEMD1	1q32.1	0.046469	0.365072	0.491913
SCARF1	17p13.3	-0.04645	0.365275	0.492153
HAUS2	15q15.2	0.046441	0.365364	0.49224
PRSS45P	3p21.31	-0.04643	0.365475	0.492357
PLD1	3q26.31	-0.04642	0.365536	0.492405
OTUD6B	8q21.3	0.04642	0.365578	0.492429
OASL	12q24.31	0.046412	0.365662	0.492509
TDG	12q23.3	0.046408	0.365705	0.492533
MGME1	20p11.23	0.046399	0.365792	0.492617
C20ORF27	20p13	0.046391	0.365883	0.492707
SERPINE3	13q14.3	0.046386	0.365933	0.492741
RNF217	6q22.31	-0.04638	0.366008	0.492809
COL4A3	2q36.3	-0.04636	0.36619	0.493021
ACPP	3q22.1	0.046337	0.366439	0.493323
IFNA8	9p21.3	-0.04633	0.366528	0.49341
LOC285847	6p21.31	0.046322	0.366591	0.493462
THNSL1	10p12.1	-0.04631	0.36667	0.493501
FAM71A	1q32.3	0.046314	0.366673	0.493501
CEACAM1	19q13.2	-0.04631	0.366694	0.493501
ERICH1	8p23.3	0.046293	0.366897	0.493741
FBXO30	6q24.3	-0.04629	0.366948	0.493776
LCLAT1	2p23.1	0.046274	0.367087	0.493929
OR6F1	1q44	0.046271	0.367126	0.493949
ARF6	14q21.3	0.046254	0.367296	0.494145
BTBD2	19p13.3	0.046243	0.367408	0.494232
IFNA10	9p21.3	0.046243	0.367411	0.494232
CTRB1	16q23.1	-0.04623	0.367505	0.494326
TIAM2	6q25.2-q25.3	0.046231	0.36754	0.49434
SMCR8	17p11.2	-0.04622	0.367656	0.494408
KRTAP12-3	21q22.3	0.046219	0.367661	0.494408
NEK9	14q24.3	-0.04622	0.367665	0.494408
NXPE2	11q23.2-q23.3	-0.04621	0.367775	0.494523
ZSCAN32	16p13.3	-0.04618	0.368038	0.494844
LOC100132831	Xp11.4	-0.04617	0.36815	0.494961
TOMM20L	14q23.1	-0.04616	0.368305	0.495136
IGFN1	1q32.1	-0.04615	0.368416	0.495252
UFSP1	7q22.1	-0.04614	0.36844	0.495252
SETX	9q34.13	0.04612	0.368691	0.495555
CECR2	22q11.1-q11.21	-0.0461	0.368871	0.495751
PHF14	7p21.3	-0.0461	0.368886	0.495751
ATP2B1	12q21.33	0.046084	0.369067	0.49594



C15ORF41	15q14	-0.04608	0.369076	0.49594
HMOX2	16p13.3	0.046078	0.369125	0.495953
C10ORF62	10q24.2	-0.04608	0.369136	0.495953
PHC2	1p35.1	-0.04607	0.369235	0.496047
LRFN1	19q13.2	-0.04607	0.369255	0.496047
FOS	14q24.3	0.046057	0.36934	0.496128
OR4X2	11p11.2	0.046049	0.36943	0.496216
NT5DC1	6q22.1	-0.04604	0.369493	0.496266
PDXP	22q13.1	0.046038	0.369541	0.496298
ARFGEF2	20q13.13	-0.04602	0.369685	0.496425
BPIFC	22q12.3	-0.04602	0.369703	0.496425
SLC25A11	17p13.2	-0.04602	0.36971	0.496425
C12ORF65	12q24.31	0.04601	0.369831	0.496554
OCLNP1	5q13.2	-0.046	0.369948	0.496678
FAM53C	5q31.2	-0.04599	0.370013	0.496732
HYLS1	11q24.2	0.04599	0.370044	0.496741
VSIG10L	19q13.41	-0.04596	0.370323	0.497082
GKAP1	9q21.32	-0.04595	0.370451	0.49722
LRRC8E	19p13.2	0.04591	0.370877	0.497758
KRT26	17q21.2	-0.04589	0.371058	0.497942
HIVEP1	6p24.1	0.045892	0.371063	0.497942
ASAP1-IT1	8q24.21	-0.04587	0.371245	0.498152
PCDH8	13q14.3	-0.04585	0.371461	0.498408
METTL8	2q31.1	-0.04585	0.371526	0.498463
TMEM106A	17q21.31	-0.04582	0.371812	0.498812
TRPM1	15q13.3	-0.04579	0.372165	0.499253
CCNH	5q14.3	-0.04578	0.372212	0.499283
TMEM189-UBE2V1	20q13.13	0.045778	0.37225	0.4993
UNC119	17q11.2	-0.04573	0.372725	0.499898
AVL9	7p14.3	-0.04573	0.372746	0.499898
ARPC5	1q25.3	0.045699	0.373084	0.500318
RHBG	1q22	0.045685	0.373228	0.500478
TRADD	16q22.1	0.045673	0.373356	0.500617
CCDC120	Xp11.23	0.045668	0.373411	0.50064
PAFAH1B2	11q23.3	-0.04567	0.373424	0.50064
SKIL	3q26.2	-0.04565	0.37355	0.500776
RBMX2	Xq26.1	-0.04565	0.373576	0.500777
SNAR-G1	19q13.33	0.045593	0.374193	0.50157
PRAC1	17q21.32	-0.04559	0.374229	0.501585
ALPK3	15q25.3	-0.04558	0.374304	0.501652
PBX3	9q33.3	-0.04558	0.37434	0.501667
WDR87	19q13.13	0.045566	0.374479	0.501819
DDR1	6p21.33	0.04556	0.374537	0.501864
SACM1L	3p21.31	-0.04556	0.374569	0.501872
CARS	11p15.4	0.045552	0.374618	0.501905
LINC02209	8p12	0.045549	0.374654	0.501919
BEST1	11q12.3	-0.04554	0.37476	0.50201
SOWAHB	4q21.1	-0.04554	0.374788	0.50201
FGF11	17p13.1	-0.04553	0.374801	0.50201
SMARCA2	9p24.3	-0.04553	0.374822	0.50201
CYLC2	9q31.1	-0.04551	0.375059	0.502288
CIAPIN1	16q21	0.045508	0.375079	0.502288
C1ORF53	1q31.3	-0.04549	0.375245	0.502475
TOMM34	20q13.12	0.045479	0.375392	0.502634
ZNF93	19p12	0.045476	0.375423	0.502634
ZFP69	1p34.2	0.045474	0.375438	0.502634
SGMS1	10q11.23	-0.04547	0.375527	0.50272
MMP27	11q22.2	-0.04545	0.375656	0.502813

KAT6B	10q22.2	0.045453	0.375665	0.502813
UBL4B	1p13.3	-0.04545	0.375672	0.502813
LINC01226	1p35.2	0.045438	0.375822	0.502979
SPATA31E1	9q22.1	-0.04543	0.375908	0.503061
SMC1B	22q13.31	0.045424	0.375963	0.503101
RIOK3	18q11.2	-0.04542	0.376012	0.503133
MOGS	2p13.1	0.0454	0.376216	0.503369
CIAO1	2q11.2	-0.0454	0.376238	0.503369
FOXB1	15q22.2	-0.04538	0.376381	0.503526
C8ORF76	8q24.13	-0.04537	0.376531	0.503659
PRDM5	4q27	-0.04537	0.376533	0.503659
BNIP5	6p21.31	0.045368	0.376556	0.503659
DUOX2	15q21.1	0.04534	0.37685	0.504019
LDB1	10q24.32	-0.04533	0.376918	0.504077
TIPARP	3q25.31	-0.04532	0.377066	0.50424
DOK4	16q21	0.045313	0.377134	0.504297
FAM78B	1q24.1	-0.04531	0.377165	0.504305
RBM12	20q11.22	-0.0453	0.377259	0.504397
EIF2AK4	15q15.1	-0.04529	0.377372	0.504515
EZH1	17q21.2	0.045281	0.377477	0.504621
ZNF347	19q13.42	-0.04528	0.377528	0.504655
PLA2G2C	1p36.12	0.045256	0.377734	0.504856
LRRD1	7q21.2	0.045255	0.377745	0.504856
BACE2	21q22.2-q22.3	0.045253	0.377767	0.504856
C1ORF116	1q32.1	0.045252	0.377779	0.504856
KRTAP11-1	21q22.11	-0.04524	0.37794	0.505019
LINC00494	20q13.13	-0.04524	0.377951	0.505019
MRPS21	1q21.2	0.045223	0.378081	0.505131
SYNJ1	21q22.11	0.045222	0.378092	0.505131
RTKN	2p13.1	0.045221	0.37811	0.505131
PADI6	1p36.13	0.045206	0.378261	0.505299
TMEM104	17q25.1	-0.04519	0.378388	0.505431
SIGLEC1	20p13	-0.04519	0.37841	0.505431
IFFO2	1p36.13	0.045187	0.37847	0.505476
FAM3D	3p14.2	-0.04517	0.378656	0.505664
GNAQ	9q21.2	0.045169	0.378661	0.505664
PTH	11p15.3	-0.04516	0.378761	0.505763
ABCF2	7q36.1	0.045144	0.378922	0.505945
ARG1	6q23.2	-0.04514	0.379012	0.506032
NUBP1	16p13.13	0.045105	0.37933	0.506422
ZNF572	8q24.13	-0.04509	0.379524	0.506594
MTCH1	6p21.2	0.045087	0.379526	0.506594
DCP1A	3p21.1	0.045083	0.37956	0.506594
KDM3A	2p11.2	-0.04508	0.37956	0.506594
ACTR1B	2q11.2	-0.04508	0.379603	0.506605
CHST4	16q22.2	-0.04508	0.379619	0.506605
LAMA3	18q11.2	-0.04507	0.379708	0.50669
FAM185A	7q22.1	0.045058	0.379827	0.506811
SWI5	9q34.11	-0.04505	0.379867	0.506811
KSR1	17q11.2	0.045054	0.379874	0.506811
ZNF548	19q13.43	-0.04502	0.380241	0.507267
DSCR8	21q22.13	-0.04501	0.380305	0.507318
PLA2G4E	15q15.1	-0.04501	0.380338	0.507329
ERC2-IT1	3p14.3	0.045004	0.380402	0.507381
TMPRSS5	11q23.2	-0.045	0.380474	0.507442
NANOS2	19q13.32	0.044991	0.380536	0.507492
TMEM207	3q28	0.044967	0.38079	0.507796
LOC652276	16p13.3	-0.04496	0.380887	0.507891

LOC644936	5q14.1	-0.04495	0.380981	0.507982
SS18	18q11.2	0.044946	0.381017	0.507997
GDPD4	11q13.5	-0.04493	0.381188	0.508192
LRRK1	15q26.3	0.044908	0.381419	0.508466
TRIB2	2p24.3	-0.0449	0.381499	0.508538
DISP3	1p36.22	-0.04489	0.381652	0.508708
ERCC6L2	9q22.32	-0.04487	0.381842	0.50891
GUSBP3	5q13.2	0.044867	0.381854	0.50891
LINC00200	10p15.3	0.044855	0.381986	0.509052
ABLIM2	4p16.1	-0.04484	0.382173	0.509268
CEMIP2	9q21.13	0.044831	0.382233	0.509282
FAM135A	6q13	0.044831	0.382235	0.509282
MAATS1	3q13.33	-0.04483	0.382287	0.509317
PACSIN2	22q13.2	0.044781	0.382764	0.509919
ZBTB41	1q31.3	-0.04477	0.382862	0.509994
FLVCR1-DT	1q32.3	-0.04477	0.382897	0.509994
LHX5	12q24.13	-0.04477	0.3829	0.509994
SLN	11q22.3	-0.04477	0.382922	0.509994
TEX264	3p21.2	-0.04476	0.383043	0.510122
PYGB	20p11.21	0.044746	0.383142	0.510219
DCAKD	17q21.31	-0.04471	0.38357	0.510756
HOXC6	12q13.13	-0.04469	0.383691	0.510882
ZMYM3	Xq13.1	0.04469	0.383733	0.510904
ZAP70	2q11.2	-0.04468	0.383811	0.510974
LOC407835	7q32.1	0.044656	0.384096	0.511319
ZCCHC3	20p13	-0.04464	0.384247	0.511487
FAM86C1	11q13.4	-0.04464	0.384286	0.511505
HOXA1	7p15.2	-0.04461	0.384634	0.511933
SLC35F2	11q22.3	0.044594	0.384757	0.512063
SLC26A10	12q13.3	-0.04458	0.38487	0.51218
ALDH3A1	17p11.2	0.04457	0.385014	0.512337
EN1	2q14.2	-0.04457	0.385061	0.512365
OR4F5	1p36.33	-0.04455	0.3852	0.512517
OR2W1	6p22.1	0.04453	0.385449	0.512813
CTSL3P	9q21.33	-0.04453	0.385486	0.512828
PLCG1	20q12	0.044521	0.385545	0.512874
SLC35E4	22q12.2	0.044517	0.385586	0.512895
ERMARD	6q27	0.044509	0.385669	0.512971
TBX3	12q24.21	0.044498	0.385784	0.51309
AREL1	14q24.3	0.044485	0.385922	0.513239
PLCB2	15q15.1	0.04448	0.385973	0.513272
NLRC3	16p13.3	-0.04448	0.386005	0.513281
TTPAL	20q13.12	-0.04447	0.386051	0.513308
SPRR1A	1q21.3	-0.04446	0.386221	0.5135
IL36G	2q14.1	0.044452	0.38628	0.513532
UGT2B4	4q13.3	-0.04445	0.386296	0.513532
FAM43A	3q29	-0.04444	0.386394	0.513628
ZNF17	19q13.43	-0.04442	0.386567	0.513808
CAMK2D	4q26	-0.04442	0.386581	0.513808
EPN2	17p11.2	-0.0444	0.386781	0.51404
LCN1	9q34.3	-0.0444	0.386873	0.514128
PCK1	20q13.31	-0.04439	0.386899	0.514128
TERB2	15q21.1	0.044389	0.386954	0.514167
OR5B17	11q12.1	0.044368	0.387177	0.514429
ZNF586	19q13.43	0.044364	0.387222	0.514454
PNLIPRP1	10q25.3	0.044359	0.387268	0.514482
SAMHD1	20q11.23	-0.04434	0.387425	0.514628
PSMD8	19q13.2	0.044344	0.387429	0.514628

VENTXP7	3p24.3	-0.04433	0.387584	0.514775
SLC15A1	13q32.2-q32.3	-0.04433	0.387594	0.514775
WDR53	3q29	0.044326	0.38763	0.514775
EIF1AD	11q13.1	-0.04432	0.387642	0.514775
OR1E1	17p13.3	-0.04432	0.387725	0.51485
ITGB4	17q25.1	0.044309	0.387808	0.514925
LOC400710	19q13.33	0.044301	0.387894	0.515007
CCL15	17q12	-0.0443	0.387923	0.51501
ARL17B	17q21.31	0.044293	0.387976	0.515046
ZNF284	19q13.31	0.044286	0.388057	0.515074
PSMC5	17q23.3	0.044285	0.388068	0.515074
PPP2CA	5q31.1	-0.04428	0.388112	0.515074
ASB11	Xp22.2	0.044279	0.388129	0.515074
DICER1	14q32.13	0.044278	0.388145	0.515074
CASP14	19p13.12	-0.04428	0.388151	0.515074
GGT1	22q11.23	-0.04426	0.388339	0.515289
NFIX	19p13.13	0.044257	0.388371	0.515298
TTY15	Yq11.221	-0.04425	0.388476	0.515403
GCNT1	9q21.13	0.044243	0.388512	0.515416
CUTC	10q24.2	-0.04423	0.388616	0.51552
GRM3	7q21.11-q21.12	-0.04423	0.388687	0.515565
LY6G6C	6p21.33	0.044226	0.388701	0.515565
DNAJC19	3q26.33	-0.04421	0.388832	0.515704
CYSTM1	5q31.3	0.044184	0.389145	0.516086
MYADML	2p22.3	-0.04417	0.389249	0.516189
DENR	12q24.31	-0.04417	0.389291	0.516192
GOLGA8CP	15q11.2	-0.04417	0.389303	0.516192
TWISTNB	7p21.1	-0.04416	0.389372	0.51625
NKX2-1	14q13.3	-0.04415	0.389545	0.516444
CNPY3	6p21.1	0.044131	0.389717	0.516638
ZNF770	15q14	0.044126	0.389779	0.51664
DLEU7	13q14.3	-0.04413	0.389784	0.51664
CD2BP2	16p11.2	-0.04412	0.389795	0.51664
B4GAT1	11q13.2	-0.04412	0.389846	0.516674
GNGT1	7q21.3	-0.04411	0.389923	0.516741
HDLBP	2q37.3	0.044102	0.390029	0.51682
CCDC74A	2q21.1	0.044102	0.390034	0.51682
ARHGAP17	16p12.1	-0.04409	0.390117	0.516896
KRTAP2-2	17q21.2	-0.04405	0.390588	0.517485
LINC00051	8q24.3	0.044042	0.390679	0.517572
KAT14	20p11.23	-0.04401	0.391021	0.517991
FDXR	17q25.1	-0.044	0.391091	0.51803
VCX	Xp22.31	0.044003	0.391103	0.51803
SPERT	13q14.13	-0.04398	0.391305	0.518264
ATP2C1	3q22.1	0.043979	0.391355	0.518296
MARVELD2	5q13.2	0.043926	0.391924	0.519015
PPP2R5E	14q23.2	-0.04389	0.392324	0.51951
FAM168B	2q21.1	-0.04389	0.392367	0.519533
EIF2S2	20q11.22	-0.04387	0.392484	0.519654
KHK	2p23.3	0.043854	0.392701	0.519887
SLCO4A1-AS1	20q13.33	-0.04385	0.392712	0.519887
TTY14	Yq11.222	-0.04385	0.392793	0.51996
SSUH2	3p25.3	-0.04383	0.392947	0.520129
SHC1	1q21.3	0.043815	0.393126	0.520332
LDHC	11p15.1	0.043782	0.393479	0.520709
KRTAP9-4	17q21.2	0.043781	0.393499	0.520709
ST14	11q24.3	-0.04378	0.393508	0.520709
TPI1P3	6q22.1	0.043779	0.393515	0.520709

TMEM243	7q21.12	-0.04377	0.393622	0.520751
SSX5	Xp11.23	-0.04377	0.393625	0.520751
PGK1	Xq21.1	0.043769	0.393629	0.520751
VSX2	14q24.3	-0.04377	0.393651	0.520751
NWD2	4p14	0.043748	0.393857	0.520989
OLIG2	21q22.11	-0.04374	0.393888	0.520996
R3HCC1L	10q24.2	-0.04373	0.394086	0.521223
TMEM45B	11q24.3	-0.04372	0.39413	0.521247
CLDN14	21q22.13	0.043715	0.394208	0.521316
NDUFA9	12p13.32	0.043709	0.394272	0.521366
LCA5L	21q22.2	-0.0437	0.394384	0.52148
DCAF8L1	Xp21.3	0.043695	0.394422	0.521494
PLEKHG2	19q13.2	0.043693	0.394447	0.521494
SRP19	5q22.2	-0.04366	0.394832	0.521968
SPRR4	1q21.3	-0.04365	0.394906	0.522023
PTPN1	20q13.13	-0.04365	0.394925	0.522023
DGCR5	22q11.21	-0.04365	0.394954	0.522027
VWA8	13q14.11	0.043614	0.395305	0.522455
CYP3A43	7q22.1	-0.0436	0.395449	0.52261
KISS1R	19p13.3	0.043598	0.395474	0.52261
DEFA4	8p23.1	-0.04358	0.395696	0.522869
APRT	16q24.3	0.043568	0.395808	0.522982
TMEM258	11q12.2	-0.04356	0.395925	0.523102
LCAT	16q22.1	0.043552	0.395973	0.523131
BICD2	9q22.31	0.043541	0.396091	0.523253
DCTN4	5q33.1	-0.04354	0.396151	0.523298
FMN1	15q13.3	0.043529	0.396222	0.523356
KRTAP7-1	21q22.11	0.043519	0.39633	0.523465
BABAM1	19p13.11	0.04351	0.396437	0.523572
HSBP1L1	18q23	0.043502	0.396522	0.52365
MRPS26	20p13	0.043461	0.39697	0.524207
OR6C75	12q13.2	-0.04345	0.397041	0.524218
ZNF189	9q31.1	-0.04345	0.397054	0.524218
SCARNA10	12p13.31	-0.04345	0.397057	0.524218
LINC02249	15q13.2	0.04345	0.397088	0.524225
C8ORF74	8p23.1	0.043444	0.397154	0.524273
KANSL1L	2q34	-0.04344	0.397188	0.524273
HBE1	11p15.4	-0.04344	0.397204	0.524273
ELOC	8q21.11	-0.04341	0.397506	0.52462
LINC00452	13q34	-0.04341	0.397519	0.52462
TFG	3q12.2	0.043395	0.397682	0.524779
MAPKAPK3	3p21.2	-0.04339	0.397692	0.524779
EDC3	15q24.1	0.04338	0.397846	0.524935
GAGE8	Xp11	0.043379	0.397863	0.524935
TRMT10A	4q23	0.043367	0.397992	0.525071
TMEM254	10q22.3	-0.04334	0.398282	0.52542
NAIP	5q13.2	-0.04334	0.398327	0.52542
PCDHGA1	5q31.3	-0.04334	0.398335	0.52542
NAGS	17q21.31	0.043333	0.398362	0.525421
BST2	19p13.11	-0.04331	0.398599	0.525656
RPUSD4	11q24.2	-0.04331	0.398601	0.525656
PGLS	19p13.11	-0.0433	0.398681	0.525656
ESRP1	8q22.1	-0.0433	0.398681	0.525656
RNU12-2P	Xp11.3	0.043303	0.398683	0.525656
IL9	5q31.1	0.0433	0.398722	0.525656
ICK	6p12.1	0.043298	0.398735	0.525656
C11ORF86	11q13.2	0.043297	0.39875	0.525656
CATSPERE	1q44	-0.04329	0.398832	0.52573

PAGE2B	Xp11.21	0.043286	0.398871	0.525738
C11ORF53	11q23.1	0.043284	0.398891	0.525738
TMEM72	10q11.21	-0.04326	0.399134	0.526016
FAM47C	Xp21.1	-0.04326	0.399154	0.526016
PDE1C	7p14.3	-0.04325	0.399267	0.52613
RPS6KB1	17q23.1	-0.04324	0.399329	0.526177
PHKA2	Xp22.13	0.043239	0.399381	0.526211
SLC16A1	1p13.2	0.043219	0.399602	0.526467
SCARNA22	4p16.3	0.043215	0.399641	0.526483
SLC17A5	6q13	0.043206	0.399747	0.526581
RPS28	19p13.2	-0.0432	0.399778	0.526581
CLRN1-AS1	3q25.1	0.043201	0.399794	0.526581
LYZ	12q15	0.043197	0.399846	0.526616
DLG1	3q29	0.043178	0.400048	0.526847
RNF138P1	5q11.2	0.043154	0.400317	0.527166
BTBD3	20p12.2	-0.04314	0.400491	0.527339
SCGB2A2	11q12.3	0.043137	0.400501	0.527339
AMBP	9q32	0.043131	0.40056	0.527383
DNAAF1	16q24.1	0.043122	0.400657	0.527475
SCARNA23	Xp22.11	0.043101	0.400895	0.527754
HERC3	4q22.1	-0.0431	0.400929	0.527764
OR4F21	8p23.3	0.043095	0.400958	0.527768
CRISP3	6p12.3	-0.04308	0.401082	0.527897
SHF	15q21.1	-0.04308	0.40115	0.527951
LINC00488	3q13.13	-0.04305	0.401482	0.528325
NTF4	19q13.33	0.043047	0.401487	0.528325
UBA5	3q22.1	0.042999	0.402005	0.528973
PDK3	Xp22.11	0.042991	0.402099	0.52906
PARVB	22q13.31	0.042983	0.402178	0.52913
MRFAP1	4p16.1	-0.04297	0.402274	0.529216
OR52M1	11p15.4	0.042973	0.402296	0.529216
PACSIN1	6p21.31	-0.04296	0.402465	0.529403
DEFB119	20q11.21	-0.04294	0.402634	0.529561
EXOC3L1	16q22.1	0.042941	0.402638	0.529561
SUGT1	13q14.3	-0.04293	0.402739	0.529655
BORCS5	12p13.2	-0.04293	0.402778	0.529655
H2BFXP	Xq22.2	-0.04293	0.402814	0.529655
ESCO1	18q11.2	-0.04293	0.402815	0.529655
POMK	8p11.21	0.042904	0.403051	0.529931
PPTC7	12q24.11	0.042897	0.403127	0.529995
STAG1	3q22.3	0.042886	0.40325	0.530122
EEF2K	16p12.2	0.042882	0.403294	0.530146
TBXAS1	7q34	0.042858	0.403559	0.530428
FSIP1	15q14	-0.04286	0.403562	0.530428
NR2E3	15q23	0.042818	0.403999	0.530967
HCRT	17q21.2	0.042812	0.404063	0.531018
CYP4F30P	2q21.1	0.042776	0.404453	0.531495
CTDSPL2	15q15.3-q21.1	-0.04275	0.404711	0.531799
SOX30	5q33.3	0.042741	0.404842	0.531936
CCDC54	3q13.12	-0.04272	0.405066	0.532196
POFUT2	21q22.3	0.042713	0.405152	0.532274
GID8	20q13.33	-0.04271	0.405218	0.532326
HTRA2	2p13.1	-0.0427	0.405247	0.532328
DTNB	2p23.3	-0.0427	0.405332	0.532405
RPL34-AS1	4q25	-0.04268	0.405496	0.532586
ABCD3	1p21.3	-0.04268	0.405553	0.532625
FADS1	11q12.2	-0.04264	0.405984	0.533157
FAM86B2	8p23.1	0.042624	0.406124	0.533305

FCHSD1	5q31.3	-0.0426	0.406399	0.533632
EEF1AKMT2	10q26.13	0.042594	0.406461	0.533679
HMGNS	Xq21.1	0.04259	0.406506	0.533703
ZAR1	4p11	0.042538	0.407074	0.534412
FIBCD1	9q34.12	0.042535	0.407109	0.534424
ADARB1	21q22.3	-0.04252	0.407312	0.534636
C16ORF90	16p13.3	-0.04251	0.407339	0.534636
SLC11A1	2q35	-0.04251	0.407385	0.534636
CCNQP1	1q32.1	0.04251	0.407386	0.534636
DUSP28	2q37.3	0.042508	0.407404	0.534636
ETV6	12p13.2	-0.04249	0.407571	0.53482
HORMAD2	22q12.2	-0.04249	0.407633	0.534839
FOXQ1	6p25.3	-0.04249	0.407656	0.534839
NFE2L3	7p15.2	-0.04248	0.407666	0.534839
TM4SF4	3q25.1	-0.04248	0.407713	0.534864
CCDC74B	2q21.1	0.042477	0.407749	0.534864
DUSP4	8p12	0.042475	0.407778	0.534864
PPA1	10q22.1	0.042471	0.407813	0.534864
LINC00518	6p24.3	-0.04247	0.407818	0.534864
ARID3B	15q24.1	0.042466	0.407878	0.534881
RABGGTB	1p31.1	0.042465	0.407885	0.534881
BOK	2q37.3	-0.04246	0.407954	0.534937
GGNBP2	17q12	-0.04246	0.407989	0.53494
FBXW4	10q24.32	0.042453	0.408013	0.53494
KRT6B	12q13.13	0.042451	0.408036	0.53494
TGS1	8q12.1	-0.04243	0.408277	0.535221
OR7E156P	13q21.31	-0.04242	0.408346	0.535276
OR56A3	11p15.4	-0.04241	0.408477	0.535413
MRPS36	5q13.2	-0.0424	0.408568	0.535497
CT55	Xq26.3	0.04238	0.408821	0.535793
BUD31	7q22.1	-0.04238	0.408856	0.535804
DNM1	9q34.11	0.042355	0.409104	0.536094
BIRC7	20q13.33	-0.04235	0.409202	0.536187
MRGPRX4	11p15.1	-0.04234	0.409251	0.536217
AVP	20p13	-0.04233	0.409368	0.536335
SNORC	2q37.1	0.042314	0.409552	0.53654
SPINT4	20q13.12	-0.0423	0.409717	0.536722
CHST6	16q23.1	0.042251	0.410252	0.537388
FAM49B	8q24.21	-0.04225	0.410287	0.537398
TRAPPC12	2p25.3	-0.04223	0.410516	0.537645
OR4M2	15q11.2	-0.04223	0.410529	0.537645
ADAMTS4	1q23.3	-0.04222	0.4106	0.537702
PRDX4	Xp22.11	-0.0422	0.410858	0.538005
LINC00052	15q25.3	-0.04217	0.411103	0.538291
TRIM29	11q23.3	-0.04216	0.411281	0.538488
ZNF784	19q13.42	0.042125	0.411654	0.538942
RAD51D	17q12	0.042121	0.411694	0.53896
CLCF1	11q13.2	-0.04211	0.411809	0.539075
PJVK	2q31.2	-0.0421	0.41191	0.539171
RGS9BP	19q13.11	-0.0421	0.411952	0.539191
ATL2	2p22.2-p22.1	-0.04209	0.412017	0.539242
LOC153684	5p12	0.042087	0.412074	0.53928
KLHL34	Xp22.12	-0.04208	0.412196	0.539405
FAM74A4	9q12	-0.04205	0.41254	0.539819
OR1F1	16p13.3	-0.04203	0.412714	0.540012
ACCSL	11p11.2	0.042017	0.412857	0.540164
GJD4	10p11.21	-0.042	0.413002	0.540319
MAJIN	11q13.1	-0.042	0.413086	0.540393

PLPPR3	19p13.3	-0.04199	0.413199	0.540506
OR9Q2	11q12.1	0.041982	0.413243	0.540527
TXNDC17	17p13.1	0.041975	0.413321	0.540594
GOLGA2P6	10p11.23	0.041972	0.413353	0.540601
SLC22A25	11q12.3	0.041967	0.413412	0.540643
TRIM62	1p35.1	-0.04196	0.41344	0.540645
ME2	18q21.2	0.041945	0.413659	0.540895
UBE2A	Xq24	-0.04193	0.413774	0.540993
USP9Y	Yq11.221	-0.04193	0.413788	0.540993
KCNH5	14q23.2	-0.0419	0.414168	0.541453
FAM214B	9p13.3	-0.0419	0.414194	0.541453
SLC5A4	22q12.3	-0.04188	0.414434	0.541732
ILVBL	19p13.12	0.041868	0.414511	0.541797
BRS3	Xq26.3	0.041855	0.414652	0.541946
C4ORF33	4q28.2	-0.04184	0.41483	0.542131
PPP4R2	3p13	-0.04184	0.414851	0.542131
SERPINB2	18q21.33-q22.1	-0.04184	0.414875	0.542131
PABPC1P2	2q22.3	-0.0418	0.415306	0.542659
ARHGEF4	2q21.1	0.04178	0.415491	0.542866
CDHR3	7q22.3	0.041775	0.415554	0.542883
CENPC	4q13.2	-0.04177	0.415559	0.542883
SLC41A3	3q21.2-q21.3	-0.04177	0.415648	0.542964
PRKY	Yp11.2	0.041753	0.415796	0.5431
XPR1	1q25.3	0.041752	0.415807	0.5431
LILRA6	19q13.42	-0.04173	0.416057	0.543392
CAPN3	15q15.1	0.041726	0.4161	0.543413
S100A6	1q21.3	0.041706	0.416322	0.543667
PKD2L1	10q24.31	-0.0417	0.416355	0.543674
CCDC97	19q13.2	-0.0417	0.41641	0.543711
ZNRD1	6p22.1	0.041692	0.416483	0.543771
FLG2	1q21.3	-0.04168	0.416614	0.54388
ALDH5A1	6p22.3	-0.04168	0.41662	0.54388
GPR180	13q32.1	-0.04167	0.416709	0.543935
VGLL1	Xq26.3	-0.04167	0.416717	0.543935
HRH4	18q11.2	-0.04167	0.416759	0.543954
FAM133CP	10q21.1	-0.04166	0.416873	0.544063
PRB3	12p13.2	-0.04165	0.416897	0.544063
PHB2	12p13.31	0.041646	0.416999	0.544161
FOXO3B	17p11.2	-0.04163	0.417153	0.544326
MSL3	Xp22.2	-0.04162	0.417261	0.544433
KBTBD2	7p14.3	0.041619	0.417295	0.544441
C17ORF75	17q11.2	-0.04162	0.417336	0.544459
SEC1P	19q13.33	0.041606	0.417442	0.544562
MACO1	1p36.11 1p36.11	-0.04158	0.417705	0.54487
BTN3A2	6p22.2	-0.04155	0.418055	0.54529
ITGA3	17q21.33	0.041538	0.418207	0.545398
C8ORF86	8p11.22	-0.04154	0.418211	0.545398
MAPKBP1	15q15.1	-0.04154	0.418219	0.545398
OLA1	2q31.1	-0.04152	0.418454	0.545667
PEMT	17p11.2	-0.04151	0.41848	0.545667
AATBC	21q22.3	-0.0415	0.418683	0.545896
ATG2A	11q13.1	0.04149	0.41874	0.545909
FAM131C	1p36.13	0.04149	0.418748	0.545909
ACSS2	20q11.22	0.041483	0.418826	0.545975
DGLUCY	14q32.11	-0.04146	0.419036	0.546214
PARP6	15q23	0.041451	0.419181	0.546315
HCN1	5p12	0.041451	0.419183	0.546315
BCOR	Xp11.4	0.04145	0.419195	0.546315



CLPX	15q22.31	0.041443	0.419275	0.546361
CCT6A	7p11.2	0.041442	0.419285	0.546361
IFI6	1p35.3	-0.04144	0.419316	0.546366
KRTAP3-2	17q21.2	-0.04144	0.419351	0.546375
ISOC1	5q23.3	0.041412	0.419619	0.546689
SLC1A4	2p14	0.041405	0.419694	0.546751
TNR	1q25.1	-0.0414	0.419773	0.546819
TMED9	5q35.3	-0.04138	0.419926	0.546972
RDH10	8q21.11	-0.04138	0.419945	0.546972
WNT10B	12q13.12	0.041375	0.420032	0.547043
SEMA6D	15q21.1	-0.04137	0.420054	0.547043
GPR152	11q13.2	0.041363	0.420174	0.547163
HBG2	11p15.4	0.04136	0.420206	0.54717
NGEF	2q37.1	-0.04134	0.420427	0.547422
LSMEM2	3p21.31	0.041334	0.420495	0.547475
LUZP4	Xq23	-0.04132	0.420621	0.547602
GPR137	11q13.1	0.041318	0.420679	0.547643
LRFN2	6p21.2-p21.1	-0.0413	0.420831	0.547805
IL11	19q13.42	0.041297	0.420907	0.547868
CYP2S1	19q13.2	-0.04128	0.421098	0.548055
XKR5	8p23.1	-0.04128	0.421124	0.548055
DDX18	2q14.1	-0.04128	0.421132	0.548055
SLC35F4	14q22.3-q23.1	-0.04127	0.42117	0.548068
GPR50	Xq28	-0.04127	0.421215	0.548092
CXCL8	4q13.3	-0.04127	0.421268	0.548124
SEPHS1P1	7q11.21	-0.04125	0.42139	0.548248
NMI	2q23.3	-0.04124	0.421547	0.548416
PPIAL4E	1q21.1	0.041235	0.421607	0.548459
TRMT13	1p21.2	-0.04121	0.421899	0.548802
KLF7	2q33.3	-0.0412	0.421998	0.548896
LINC01312	6q23.2	-0.04119	0.422068	0.548952
HSFX2	Xq28	-0.04117	0.422303	0.549221
ODF3B	22q13.33	-0.04117	0.422355	0.549237
AP5M1	14q22.3	-0.04117	0.42237	0.549237
PINX1	8p23.1	0.041149	0.422583	0.54945
PTPN12	7q11.23	-0.04115	0.422588	0.54945
DENND4A	15q22.31	-0.04114	0.422676	0.549528
TAF3	10p14	0.041124	0.42286	0.549732
OR4F15	15q26.3	-0.04112	0.422954	0.549782
KRTAP4-3	17q21.2	0.041116	0.422954	0.549782
PPIE	1p34.2	-0.04111	0.423072	0.5499
UBR5	8q22.3	0.041096	0.423174	0.549997
TTC17	11p12-p11.2	-0.04109	0.423276	0.550094
SLC22A1	6q25.3	0.041084	0.423312	0.550105
TRIM53AP	11q14.3	0.041078	0.423384	0.550163
TPTE2	13q12.11	-0.04107	0.423516	0.55029
SAMD7	3q26.2	0.041064	0.423537	0.55029
ATP5MC3	2q31.1	0.041061	0.42357	0.550298
SYT13	11p11.2	0.041048	0.423723	0.550461
HHATL	3p22.1	-0.04104	0.423791	0.550513
TMEM30B	14q23.1	-0.04102	0.423998	0.550747
CD5L	1q23.1	-0.04101	0.42411	0.550856
TUT7	9q21.33	0.041009	0.424166	0.550894
PGAP2	11p15.4	-0.04099	0.424405	0.551168
USP18	22q11.21	0.040977	0.424522	0.551284
SSTR3	22q13.1	-0.04096	0.424731	0.551519
DMRTC2	19q13.2	0.040955	0.42477	0.551534
BTBD16	10q26.13	0.040942	0.424914	0.551686

PTPN13	4q21.3	0.0409	0.425389	0.552267
KIAA2026	9p24.1	0.040891	0.425497	0.552371
WHRN	9q32	-0.04089	0.425543	0.552395
NANOS1	10q26.11	0.040875	0.425675	0.55253
RPS12	6q23.2	-0.04087	0.42577	0.552615
OR10G9	11q24.2	-0.04086	0.425796	0.552615
PRTN3	19p13.3	0.040855	0.425905	0.552721
ACOXL	2q13	0.040835	0.426132	0.552981
ABHD6	3p14.3	-0.04083	0.42618	0.553007
OR2D3	11p15.4	0.040824	0.42625	0.553049
ADGB	6q24.3	0.040823	0.426267	0.553049
GLDN	15q21.2	-0.04082	0.426339	0.553096
AFM	4q13.3	-0.04081	0.426359	0.553096
ZBTB49	4p16.3	-0.04081	0.426466	0.553198
BCAS1	20q13.2	-0.04079	0.426641	0.55339
RBM4B	11q13.2	-0.04078	0.426805	0.553531
LOC145845	15q14	-0.04078	0.426805	0.553531
ATP2A3	17p13.2	-0.04077	0.426908	0.553628
STON2	14q31.1	0.040759	0.426988	0.55364
PCDHGB3	5q31.3	-0.04076	0.427012	0.55364
PLPBP	8p11.23	-0.04076	0.427018	0.55364
DECR2	16p13.3	0.040756	0.427027	0.55364
AADA2L2	3q25.1	-0.04075	0.427121	0.553726
LYRM7	5q23.3-q31.1	-0.04074	0.427201	0.553776
SEZ6	17q11.2	-0.04074	0.427215	0.553776
DCAF11	14q12	-0.04074	0.427262	0.553801
AAMP	2q35	0.040715	0.427489	0.554003
SLC1A1	9p24.2	0.040713	0.427511	0.554003
AANAT	17q25.1	0.040713	0.427521	0.554003
CBFB	16q22.1	0.040712	0.427529	0.554003
FGD4	12p11.21	0.040706	0.427599	0.554039
PROM2	2q11.1	0.040705	0.427612	0.554039
IRX2	5p15.33	0.040694	0.427734	0.554142
LGALS3BP	17q25.3	-0.04069	0.427746	0.554142
KRTAP4-5	17q21.2	-0.04068	0.427837	0.554224
SIK1	21q22.3	-0.04066	0.428104	0.554533
CPA6	8q13.2	-0.04066	0.428137	0.55454
KC6	-	-0.04066	0.428165	0.554541
RPP40	6p25.1	0.040646	0.428275	0.554632
SMCHD1	18p11.32	0.040644	0.428304	0.554632
SLC20A1	2q14.1	0.040642	0.428319	0.554632
ACSM2B	16p12.3	-0.04063	0.428419	0.554727
CCL28	5p12	0.040623	0.428539	0.55478
LINC01003	7q36.1	-0.04062	0.428539	0.55478
FAM215A	17q21.31	-0.04062	0.428549	0.55478
RFNG	17q25.3	-0.04062	0.428596	0.55478
OLIG1	21q22.11	-0.04062	0.428599	0.55478
PROK1	1p13.3	-0.04061	0.428662	0.554826
RFXAP	13q13.3	0.040608	0.428713	0.554856
DDT	22q11.23	0.040598	0.428821	0.554959
SND1	7q32.1	-0.0406	0.428855	0.554968
MUC12	7q22.1	-0.04059	0.428939	0.55504
SLC9A4	2q12.1	0.040585	0.428977	0.555053
C3ORF67	3p14.2	-0.04058	0.429081	0.555152
NDUFS4	5q11.2	-0.04057	0.42912	0.555167
ORC3	6q15	0.040552	0.429343	0.555399
DNAJB3	2q37.1	0.04055	0.429367	0.555399
THADA	2p21	-0.04055	0.429382	0.555399

AVIL	12q14.1	-0.04054	0.429437	0.555434
USP53	4q26	-0.04052	0.429723	0.555768
ZNF619	3p22.1	0.040509	0.429838	0.555851
GIGYF2	2q37.1	-0.04051	0.429843	0.555851
MB	22q12.3	-0.04051	0.42988	0.555862
MDH2	7q11.23	0.040497	0.429968	0.555941
TGIF2LY	Yp11.2	-0.04049	0.430021	0.555974
BLNK	10q24.1	-0.04047	0.430253	0.556238
NR1D1	17q21.1	0.040453	0.430472	0.556484
THUMPD3	3p25.3	-0.04044	0.43057	0.556575
ZNF441	19p13.2	-0.04042	0.430813	0.556826
NHLH2	1p13.1	-0.04042	0.430819	0.556826
CEBPD	8q11.21	-0.04042	0.430887	0.556877
EPHX4	1p22.1	-0.04041	0.431002	0.55699
NME4	16p13.3	-0.0404	0.4311	0.557041
ZSCAN9	6p22.1	0.040397	0.43111	0.557041
NONO	Xq13.1	0.040396	0.431125	0.557041
KRT74	12q13.13	-0.04039	0.431164	0.557053
ZC2HC1B	6q24.2	0.040389	0.431205	0.557053
FAM205BP	9p13.3	0.040388	0.431218	0.557053
CLPS	6p21.31	0.040379	0.431323	0.557154
CHMP7	8p21.3	-0.04037	0.431444	0.557274
PRELID2	5q32	0.040355	0.431592	0.557412
ARID2	12q12	-0.04035	0.431607	0.557412
CBLN3	14q12	-0.04035	0.431649	0.55743
WFDC10B	20q13.12	-0.04035	0.4317	0.55746
NDUFS3	11p11.2	0.040326	0.431922	0.557711
HAVCR1	5q33.3	-0.04032	0.431952	0.557714
ZMYM5	13q12.11	-0.04031	0.432052	0.557766
UNK	17q25.1	-0.04031	0.432075	0.557766
KRT76	12q13.13	0.040312	0.432085	0.557766
SYS1-DBNDD2	20q13.12	-0.04031	0.432103	0.557766
CRIP1	14q32.33	0.040308	0.432136	0.557771
PRPF38A	1p32.3	0.040299	0.432229	0.557856
ATP6V1F	7q32.1	-0.04029	0.432352	0.557979
BSCL2	11q12.3	0.040283	0.432419	0.558006
TDRD7	9q22.33	-0.04028	0.432429	0.558006
ASNA1	19p13.13	0.040271	0.432554	0.558107
ID1	20q11.21	-0.04027	0.432584	0.558107
TSPO	22q13.2	0.040268	0.432591	0.558107
HSPH1	13q12.3	0.040257	0.432717	0.558195
DFFA	1p36.22	0.040256	0.432729	0.558195
MYLK4	6p25.2	0.040255	0.432742	0.558195
NKX1-2	10q26.13	0.040249	0.432804	0.558233
PSMG2	18p11.21	-0.04025	0.432827	0.558233
CBX3	7p15.2	0.040239	0.432924	0.558321
NDUFAF8	17q25.3	-0.04023	0.433066	0.558469
LINC00710	10p14	0.040221	0.433121	0.558503
CRYGC	2q33.3	0.040212	0.433234	0.558614
MKKS	20p12.2	-0.04019	0.433434	0.558834
APOF	12q13.3	0.040178	0.433613	0.55903
OR4D1	17q22	0.040175	0.433648	0.559038
NAA80	3p21.31	0.040148	0.433965	0.559411
RPUSD2	15q15.1	0.040143	0.434021	0.559447
OR6M1	11q24.1	-0.04014	0.434099	0.559513
UBP1	3p22.3	0.04012	0.43428	0.559709
FNIP2	4q32.1	-0.04012	0.434334	0.559743
HBG1	11p15.4	0.0401	0.434507	0.559906

HIVEP3	1p34.2	-0.0401	0.434517	0.559906
PRAG1	8p23.1	-0.04008	0.434697	0.560102
ZNFX1	20q13.13	-0.04008	0.434771	0.560162
LHFPL3	7q22.2-q22.3	-0.04007	0.434845	0.560201
ATE1	10q26.13	0.04007	0.434857	0.560201
DOK3	5q35.3	-0.04007	0.434892	0.56021
LIN52	14q24.3	-0.04006	0.434924	0.560215
AGBL1	15q25.3	0.040047	0.435123	0.560435
ADAM20	14q24.2	0.040039	0.43521	0.560511
FABP7	6q22.31	-0.04001	0.435566	0.560934
COPS5	8q13.1	-0.04	0.435688	0.561054
DPYSL2	8p21.2	-0.03999	0.435749	0.561098
C11ORF80	11q13.2	0.039988	0.435799	0.561125
NES	1q23.1	-0.03997	0.435994	0.561341
TXN2	22q12.3	0.039955	0.436181	0.561507
LINC00917	16q24.1	-0.03995	0.4362	0.561507
OR6C70	12q13.2	-0.03995	0.436207	0.561507
EXOC2	6p25.3	0.039946	0.436284	0.561569
TMA7	3p21.31	0.039935	0.436412	0.561699
MSRB1	16p13.3	-0.03992	0.436566	0.561837
SMPD3	16q22.1	0.03992	0.436576	0.561837
PLEKHG4B	5p15.33	-0.03991	0.436654	0.561856
RPL3L	16p13.3	0.039912	0.436671	0.561856
NENF	1q32.3	0.039912	0.436675	0.561856
HIST1H2BC	6p22.2	0.039906	0.436744	0.561909
ZNF48	16p11.2	0.039901	0.436803	0.561949
C2CD6	2q33.1	0.039891	0.436914	0.562055
RAET1K	6q25.1	0.039886	0.436965	0.562061
PLAAT3	11q12.3-q13.1	-0.03989	0.436974	0.562061
COPS3	17p11.2	-0.03987	0.437101	0.562151
OR5B3	11q12.1	-0.03987	0.437104	0.562151
GOLGA6A	15q24.1	-0.03987	0.437171	0.562151
ARFGEF1	8q13.2	-0.03987	0.437202	0.562151
PRSS8	16p11.2	0.039865	0.437212	0.562151
CPXCR1	Xq21.31	-0.03986	0.437213	0.562151
CAMKK2	12q24.31	0.039858	0.437288	0.562211
ARSJ	4q26	0.039848	0.437408	0.562329
SWSAP1	19p13.2	-0.03984	0.437462	0.562363
DCP2	5q22.2	0.039829	0.437628	0.562541
CA3	8q21.2	0.039801	0.437946	0.562912
ZBTB48	1p36.31	0.039792	0.438049	0.56297
MAP3K8	10p11.23	-0.03979	0.438052	0.56297
C15ORF54	15q14	-0.03979	0.438106	0.56297
HCRTR1	1p35.2	-0.03979	0.43812	0.56297
TRIO	5p15.2	-0.03978	0.438134	0.56297
TRIM24	7q33-q34	0.039783	0.438159	0.56297
RMRP	9p13.3	-0.03977	0.438336	0.563156
DHRS4	14q11.2	-0.03977	0.43836	0.563156
SNHG6	8q13.1 8q13	-0.03975	0.438578	0.5634
OR4C45	11p11.12	0.039722	0.438858	0.563723
RDH11	14q24.1	-0.03971	0.438956	0.563813
AMY1A	1p21.1	0.039702	0.439087	0.563945
S100A9	1q21.3	-0.03969	0.439184	0.564007
MEA1	6p21.1	0.039693	0.439192	0.564007
INSC	11p15.2	0.039677	0.439377	0.564195
TEX55	3q13.32	-0.03967	0.439423	0.564195
NARS2	11q14.1	-0.03967	0.439447	0.564195
C10ORF105	10q22.1	-0.03967	0.43945	0.564195

NEURL1	10q24.33	-0.03966	0.439529	0.56426
WDR64	1q43	-0.03964	0.439764	0.564494
NAPEPLD	7q22.1	-0.03964	0.439768	0.564494
ELSPBP1	19q13.33	-0.03963	0.439894	0.564619
STATH	4q13.3	-0.03962	0.439987	0.564702
TUSC1	9p21.2	-0.03962	0.440051	0.564749
PEAK1	15q24.3	-0.03961	0.440101	0.564777
TMEM213	7q34	-0.03961	0.440168	0.564827
GNG13	16p13.3	0.039589	0.440398	0.565086
BCL2L10	15q21.2	-0.03959	0.440431	0.565091
ZNF791	19p13.13	-0.03958	0.440489	0.56513
PTPN22	1p13.2	-0.03956	0.44076	0.565442
SPINT1	15q15.1	-0.03955	0.440793	0.565447
GPR37L1	1q32.1	-0.03953	0.441131	0.565845
ZNF470	19q13.43	-0.03952	0.441236	0.565943
GUSBP4	6p11.2	0.039506	0.441358	0.566063
DNASE1L1	Xq28	-0.0395	0.441445	0.566139
KLHDC3	6p21.1	0.039479	0.441672	0.566358
MRPL23-AS1	11p15.5	-0.03948	0.441672	0.566358
UGT1A3	2q37.1	-0.03946	0.441892	0.566603
RGR	10q23.1	-0.03946	0.441929	0.566614
CXCL16	17p13.2	0.039436	0.44216	0.566875
OR1D4	17p13.3	0.039426	0.442285	0.566998
CELA2B	1p36.21	0.039417	0.442387	0.567092
LCE1B	1q21.3	-0.03941	0.442513	0.567183
CCDC148	2q24.1	0.039406	0.442514	0.567183
PSCA	8q24.3	-0.0394	0.442587	0.567239
GCHFR	15q15.1	0.039388	0.442717	0.56735
OR2C3	1q44	-0.03939	0.44273	0.56735
FAM86JP	3q21.2	-0.03935	0.443111	0.567802
MAPKAPK5	12q24.12-q24.13	0.039349	0.443171	0.567831
ATXN8OS	13q21.33	-0.03935	0.443192	0.567831
ZNF75A	16p13.3	-0.03935	0.443218	0.567831
PTBP3	9q32	-0.03933	0.443338	0.567948
JADE3	Xp11.3	0.039331	0.443378	0.567963
TOGARAM2	2p23.2	0.039325	0.44345	0.567993
AARSD1	17q21.31	0.039324	0.443458	0.567993
LGR5	12q21.1	-0.0393	0.443745	0.568324
HTR3E	3q27.1	-0.03929	0.443892	0.568476
CCSER2	10q23.1	-0.03928	0.443938	0.568498
NADK2	5p13.2	0.039271	0.444073	0.568635
SLC12A8	3q21.2	0.039268	0.44411	0.568646
KRTAP10-1	21q22.3	0.039258	0.444228	0.568761
ZNF195	11p15.4	-0.03925	0.444365	0.5689
CARMIL2	16q22.1	-0.03924	0.444453	0.568976
SOCS1	16p13.13	0.039231	0.444548	0.569047
NAA20	20p11.23	-0.03923	0.444565	0.569047
C4ORF17	4q23	-0.0392	0.444869	0.569371
C10RF122	1p34.3	-0.0392	0.444875	0.569371
SHOC1	9q31.3	0.039181	0.445129	0.56966
PATJ	1p31.3	0.039157	0.445409	0.569981
KCNJ9	1q23.2	-0.03915	0.445457	0.570006
C10ORF113	10p12.31	0.039134	0.445667	0.570239
ANP32AP1	15q14	0.039112	0.445927	0.570535
EIF4B	12q13.13	-0.03909	0.44615	0.570784
MRPL1	4q21.1	-0.03908	0.44628	0.570887
BTBD6	14q32.33	0.039081	0.446288	0.570887
GNAT3	7q21.11	-0.03907	0.446367	0.570952

HINT3	6q22.32	-0.03907	0.446473	0.571051
TMEM116	12q24.12-q24.13	0.039049	0.446664	0.571259
GAGE2E	Xp11.23	0.039025	0.446937	0.571571
PRSS37	7q34	0.039009	0.447127	0.571778
APBA1	9q21.12	-0.03901	0.447168	0.571794
TSEN34	19q13.42	-0.039	0.447269	0.571875
ERP29	12q24.13	-0.039	0.447289	0.571875
SLC26A9	1q32.1	0.038979	0.447472	0.572072
MTMR12	5p13.3	-0.03895	0.447761	0.572376
SNAP47	1q42.13	0.038952	0.447788	0.572376
TTYH3	7p22.3	0.038951	0.447801	0.572376
MRS2P2	12q21.1	0.038949	0.447824	0.572376
SPIDR	8q11.21	-0.03892	0.448183	0.572775
MUC13	3q21.2	-0.03892	0.448193	0.572775
BORCS6	17p13.1	-0.03891	0.448301	0.572876
ZNF701	19q13.41	-0.0389	0.44834	0.57289
BTNL2	6p21.32	-0.0389	0.448426	0.572964
FREM1	9p22.3	0.038882	0.44861	0.573162
URM1	9q34.11	0.038876	0.448673	0.573197
PTOV1	19q13.33	0.038874	0.448705	0.573197
DOK1	2p13.1	-0.03887	0.448723	0.573197
ZNF280C	Xq26.1	0.038849	0.448992	0.573504
LNX1	4q12	-0.03884	0.449138	0.573633
SLC35C1	11p11.2	0.038836	0.449151	0.573633
ARRDC5	19p13.3	0.038821	0.449326	0.57382
SEMA3B	3p21.31	0.038815	0.449392	0.573868
PSMG1	21q22.2	0.038803	0.449528	0.574005
OR52E8	11p15.4	-0.03879	0.449649	0.574086
KRTAP19-1	21q22.11	-0.03879	0.449649	0.574086
ARID4B	1q42.3	-0.03878	0.449752	0.574181
DAZ4	Yq11.23	-0.03878	0.449821	0.574227
MBD1	18q21.1	0.038776	0.449845	0.574227
TRIM42	3q23	-0.03876	0.450021	0.574371
TMEM14A	6p12.2	-0.03876	0.450039	0.574371
FUCA2	6q24.2	0.038759	0.450044	0.574371
CCDC144A	17p11.2	0.038751	0.450141	0.574458
DPEP3	16q22.1	-0.03872	0.450464	0.574834
USP40	2q37.1	-0.0387	0.450737	0.575146
OCRL	Xq26.1	0.038693	0.450818	0.575212
AGPAT4-IT1	6q26	0.038683	0.45093	0.575294
OR5J2	11q12.1	-0.03868	0.450939	0.575294
WFDC12	20q13.12	0.03868	0.450969	0.575295
FABP5P3	7q36.1	-0.03866	0.451166	0.57551
LETM2	8p11.23	0.038655	0.45126	0.575593
SNORD115-26	15q11.2	-0.03865	0.451295	0.575601
SUCO	1q24.3	0.038623	0.451635	0.575998
LOC645752	15q24.3	-0.03861	0.451803	0.57615
EGLN3	14q13.1	-0.03861	0.451812	0.57615
SLC17A8	12q23.1	-0.0386	0.451901	0.576169
MAP2K1	15q22.31	0.038599	0.451925	0.576169
TSNARE1	8q24.3	0.038598	0.451928	0.576169
PGLYRP3	1q21.3	0.038596	0.451959	0.576169
NDUFAF3	3p21.31	-0.03859	0.451971	0.576169
GJB6	13q12.11	-0.03858	0.452116	0.576317
KNOP1	16p12.3	0.038566	0.452311	0.57653
CSH2	17q23.3	-0.03856	0.452411	0.57662
KLHL15	Xp22.11	-0.03855	0.452458	0.576643
PRAMEF12	1p36.21	0.038549	0.452504	0.576665

ZNF605	12q24.33	0.038535	0.452673	0.576844
CFAP161	15q25.1	0.038523	0.452807	0.576971
MFHAS1	8p23.1	0.03852	0.452847	0.576971
OR13A1	10q11.21	0.038519	0.452859	0.576971
KDM1A	1p36.12	0.038509	0.452981	0.57709
UQCR10	22q12.2	0.0385	0.453082	0.577182
DCXR	17q25.3	-0.03847	0.453434	0.577593
TMEM208	16q22.1	-0.03846	0.453601	0.577769
PRSS57	19p13.3	0.038444	0.453737	0.577906
BMP4	14q22.2	-0.03844	0.4538	0.57795
RESF1	12p11.21	-0.03842	0.45399	0.578155
IGLL1	22q11.23	-0.0384	0.454205	0.578392
SLC41A2	12q23.3	0.038398	0.454276	0.578446
CRELD2	22q13.33	0.038393	0.45434	0.578489
SERPINB12	18q21.33	-0.03837	0.454567	0.578742
ANXA10	4q32.3	0.038358	0.454756	0.578921
C9ORF16	9q34.11	0.038357	0.454765	0.578921
TMEM191A	22q11.21	0.038339	0.454973	0.579148
DNAH11	7p15.3	0.038332	0.45506	0.579223
ZNF629	16p11.2	0.038309	0.455325	0.579523
CLCN3	4q33	0.038301	0.455419	0.579606
ARPC1B	7q22.1	0.038293	0.455518	0.579667
RIPOR3	20q13.13	0.038292	0.455525	0.579667
CBL	11q23.3	0.03829	0.455557	0.579671
SYNGR2	17q25.3	-0.03827	0.455792	0.579933
OR1C1	1q44	0.038256	0.455951	0.580099
WBP11P1	18q12.1	-0.03825	0.45602	0.580149
GPAT2	2q11.2	-0.03825	0.456053	0.580155
CALML5	10p15.1	0.03823	0.456258	0.580379
KRTAP19-5	21q22.11	0.038222	0.456353	0.580463
RIPK2	8q21.3	-0.03821	0.456484	0.580593
CWC27	5q12.3	-0.03817	0.456964	0.581166
SUPT20H	13q13.3	0.038159	0.457097	0.581261
SGSM1	22q11.23	-0.03816	0.457097	0.581261
CCT4	2p15	-0.03815	0.457231	0.581395
ATIC	2q35	-0.03814	0.457328	0.581481
LOC650293	4p16.1	-0.03813	0.457466	0.581619
GYPA	4q31.21	0.038125	0.457501	0.581627
TICAM1	19p13.3	0.038121	0.457546	0.581634
TMEM44	3q29	-0.03812	0.457564	0.581634
KCNIP4	4p15.31-p15.2	-0.03811	0.457659	0.581718
DMKN	19q13.12	-0.0381	0.45774	0.581783
HSD17B8	6p21.32	-0.03807	0.458126	0.582237
DUOXA2	15q21.1	0.038066	0.458194	0.582287
ITIH2	10p14	-0.03806	0.458302	0.582387
HAO1	20p12.3	-0.03805	0.458363	0.582395
SLC5A10	17p11.2	-0.03805	0.458367	0.582395
HHLA3	1p31.1	-0.03803	0.458617	0.582676
SLC25A34	1p36.21	-0.03803	0.458671	0.582707
ABITRAM	9q31.3	0.037989	0.459106	0.583223
EIF1AY	Yq11.223	-0.03795	0.459543	0.583741
PRORP	14q13.2	-0.03795	0.459616	0.583797
VAX1	10q25.3	0.037927	0.459838	0.584042
KCNC1	11p15.1	0.037917	0.459955	0.584108
GNAZ	22q11.22-q11.23	0.037916	0.459965	0.584108
MEGF6	1p36.32	0.037915	0.459978	0.584108
ADAMTS9	3p14.1	-0.03791	0.460046	0.584159
C8B	1p32.2	-0.03791	0.460077	0.584161

RHCE	1p36.11	0.037891	0.46026	0.584329
TULP3	12p13.33	0.037891	0.460268	0.584329
ST8SIA5	18q21.1	-0.03788	0.460359	0.584407
VDAC3	8p11.21	-0.03788	0.460437	0.584424
CDYL	6p25.1	-0.03788	0.460444	0.584424
FER1L4	20q11.22	-0.03787	0.460462	0.584424
CHFR	12q24.33	0.037872	0.460493	0.584424
TRIM48	11q11	0.03787	0.460518	0.584424
KCNJ11	11p15.1	-0.03784	0.460881	0.584847
NOTCH4	6p21.32	-0.03783	0.460944	0.584891
ADORA2B	17p12	-0.03783	0.460988	0.584909
CNPY1	7q36.3	-0.03783	0.461045	0.584944
LAMA5	20q13.33	0.037796	0.461391	0.585347
KCNA7	19q13.33	0.037785	0.461522	0.585475
MFSD4A	1q32.1	-0.03775	0.461894	0.585911
TMF1	3p14.1	-0.03775	0.461933	0.585922
AGXT2	5p13.2	0.037747	0.461973	0.585936
MLH3	14q24.3	0.037743	0.462017	0.585955
C14ORF178	14q24.3	-0.0377	0.462559	0.586605
MVP	16p11.2	0.037691	0.462633	0.586662
FAM66E	8p23.1	-0.03767	0.46284	0.586823
API5	11p12	-0.03767	0.46284	0.586823
STC2	5q35.2	0.037673	0.462848	0.586823
ADNP	20q13.13	-0.03764	0.463214	0.58725
FBXO22-AS1	15q24.2	0.037637	0.463281	0.587297
GLRA4	Xq22.2	-0.03763	0.463327	0.587318
ADAD2	16q24.1	-0.03762	0.46348	0.587476
LY6K	8q24.3	-0.03762	0.463512	0.587478
GRIP2	3p25.1	-0.0376	0.463696	0.587675
PEX11A	15q26.1	-0.0376	0.463744	0.587699
C11ORF49	11p11.2	-0.0376	0.463775	0.5877
SDCBP2	20p13	-0.03757	0.464054	0.588017
FABP6	5q33.3	-0.03757	0.464099	0.588037
LDHD	16q23.1	-0.03756	0.464238	0.588141
ACTN4	19q13.2	0.037553	0.464274	0.588141
PSMD7	16q23.1	-0.03755	0.464285	0.588141
SHFL	19p13.2	0.03755	0.464315	0.588141
RPS4Y1	Yp11.2	-0.03755	0.464358	0.588141
SSU72	1p36.33	0.037546	0.464361	0.588141
CNNM3	2q11.2	0.037544	0.464387	0.588141
CFP	Xp11.23	-0.03753	0.464608	0.588383
RBMY1A1	Yq11.223	0.037511	0.464784	0.58857
LBX2-AS1	2p13.1	-0.0375	0.464964	0.588684
LINC00159	21q22.11	0.037494	0.464984	0.588684
IQGAP1	15q26.1	0.037494	0.464987	0.588684
LYPD5	19q13.31	-0.03749	0.464992	0.588684
LNPEP	5q15	-0.03748	0.465115	0.588803
LRRC10B	11q12.2	-0.03748	0.465147	0.588806
BMP8B	1p34.2	0.037474	0.465226	0.588868
HSD52	1p32.1	-0.03746	0.465432	0.589092
ZNF182	Xp11.23	-0.03744	0.465567	0.589218
FGFR3	4p16.3	0.037443	0.46559	0.589218
RPP14	3p14.3	-0.03744	0.465634	0.589236
CPNE5	6p21.2	0.037429	0.465754	0.58933
BIN1	2q14.3	-0.03743	0.465767	0.58933
NT5C1B	2p24.2	0.037416	0.46591	0.589474
GOS2	1q32.2	-0.03739	0.466245	0.58986
CD19	16p11.2	-0.03736	0.466572	0.590202



SFTPA2	10q22.3	-0.03736	0.466574	0.590202
SLC6A19	5p15.33	0.037344	0.466768	0.590411
ZNF345	19q13.12	-0.03733	0.466954	0.590608
TTC32	2p24.1	-0.03732	0.467088	0.59074
TRIM32	9q33.1	0.037314	0.467129	0.590755
KDM2A	11q13.2	0.037285	0.467476	0.591135
PRG3	11q12.1	0.037279	0.46755	0.591135
OR52N1	11p15.4	0.037278	0.467564	0.591135
KRT85	12q13.13	-0.03728	0.467575	0.591135
QRFP	9q34.12	0.037276	0.467577	0.591135
COG8	16q22.1	0.037262	0.467751	0.591287
TMEM214	2p23.3	0.037261	0.467757	0.591287
DBNL	7p13	0.037255	0.467836	0.591323
CXORF56	Xq24	-0.03725	0.467844	0.591323
GRK1	13q34	0.037234	0.468085	0.591562
NKX6-3	8p11.21	-0.03723	0.468092	0.591562
RNU4ATAC	2q14.2	-0.03723	0.468134	0.591577
UBE2DNL	Xq21.1	0.037222	0.468223	0.591653
STKLD1	9q34.2	0.037214	0.468319	0.591702
OR10H2	19p13.12	0.037214	0.468321	0.591702
ZSWIM1	20q13.12	-0.03721	0.468387	0.591748
POLR2F	22q13.1	0.037179	0.468745	0.592163
ZNF100	19p12	0.037156	0.469022	0.592476
TANGO2	22q11.21	0.037147	0.469122	0.592538
SCGB1C1	11p15.5	-0.03715	0.469144	0.592538
SETD7	4q31.1	0.037144	0.46916	0.592538
ECH1	19q13.2	0.037133	0.469299	0.592676
HUS1	7p12.3	-0.03713	0.469372	0.592728
THUMPD1	16p12.3	-0.03712	0.4694	0.592728
DRD5	4p16.1	-0.03712	0.469466	0.592774
DLX2	2q31.1	0.037116	0.469503	0.592782
KRT20	17q21.2	-0.03711	0.469532	0.592782
WDR3	1p12	0.037106	0.469617	0.592852
MPZ	1q23.3	-0.03709	0.46986	0.593123
RGPD1	2p11.2	0.037056	0.47022	0.59354
LEKR1	3q25.31	0.037052	0.470259	0.593551
IQCG	3q29	0.037041	0.470396	0.593686
LINC00242	6q27	-0.03702	0.470623	0.593936
PEX14	1p36.22	-0.03701	0.470742	0.594048
PI3	20q13.12	0.036995	0.470948	0.594272
CANT1	17q25.3	0.036985	0.471065	0.594381
LHFPL3-AS2	7q22.2-q22.3	-0.03698	0.471132	0.594429
SULT2B1	19q13.33	0.036971	0.471233	0.594459
SNORA32	11q21	-0.03697	0.471245	0.594459
AMELX	Xp22.2	-0.03697	0.471261	0.594459
PRM2	16p13.13	-0.03697	0.471275	0.594459
UBA7	3p21.31	-0.03696	0.471406	0.594586
DENND6A	3p14.3	-0.03695	0.471527	0.594666
ZNF681	19p12	-0.03695	0.47153	0.594666
RPL21	13q12.2	-0.03694	0.471558	0.594666
ARMS2	10q26.13	-0.03693	0.471727	0.594814
GOLGA8IP	15q11.2	-0.03693	0.471735	0.594814
CSTF2T	10q21.1	0.036911	0.471956	0.595056
LIN7C	11p14.1	0.036888	0.472233	0.595299
TEKT4P2	21p11.2	-0.03689	0.472233	0.595299
NPPB	1p36.22	-0.03689	0.472238	0.595299
IFNL2	19q13.2	-0.03688	0.472373	0.595432
RPL13A	19q13.33	-0.03687	0.472425	0.595459

TRIM50	7q11.23	-0.03687	0.472476	0.595486
OR1D2	17p13.3	-0.03686	0.472573	0.595571
BEND7	10p13	-0.03685	0.472733	0.595735
EFNA4	1q21.3	-0.03682	0.473012	0.596049
LOC606724	16p11.2	0.036815	0.473109	0.596134
UBQLN3	11p15.4	0.036794	0.47336	0.596379
CYTH1	17q25.3	-0.03679	0.473375	0.596379
LRP4	11p11.2	0.036792	0.473393	0.596379
RSPH14	22q11.22-q11.23	-0.03676	0.473758	0.596801
ANKRD31	5q13.3	-0.03675	0.473893	0.596934
CMBL	5p15.2	0.036742	0.473991	0.59701
KRT6C	12q13.13	0.03674	0.474013	0.59701
LINC00167	11q24.3	0.036718	0.474276	0.597267
YARS2	12p11.21	0.036718	0.474277	0.597267
SUMO1P1	20q13.2	-0.03669	0.474661	0.597684
B3GAT1	11q25	0.036686	0.474668	0.597684
NUP210L	1q21.3	0.03668	0.474736	0.597733
LINC01559	12p13.1	-0.03667	0.474813	0.597768
NDUFB6	9p21.1	0.036673	0.474824	0.597768
RPL13	16q24.3 17p11.2	-0.03667	0.474863	0.59778
PPBP	4q13.3	-0.03666	0.474922	0.597817
C5ORF58	5q35.1	0.03665	0.475099	0.598001
TMC8	17q25.3	0.036643	0.475177	0.598062
TTY18	Yp11.2	0.036638	0.475247	0.598062
SERPINA13P	14q32.13	0.036637	0.475249	0.598062
H2BFWT	Xq22.2	-0.03664	0.475267	0.598062
ZNF274	19q13.43	0.036611	0.475564	0.598399
TMEM272	13q14.3	-0.0366	0.475693	0.598524
CLNK	4p16.1	-0.0366	0.475745	0.598551
PSG2	19q13.31	-0.03659	0.4758	0.598583
SLC25A6	Xp22.33 and Yp11.2	-0.03657	0.476039	0.598846
ZSWIM5	1p34.1	-0.03656	0.476198	0.599008
CALB1	8q21.3	0.036525	0.476604	0.599482
GUCD1	22q11.23	0.03651	0.476788	0.599675
ZNF595	4p16.3	-0.03648	0.47711	0.600043
COL6A5	3q22.1	-0.03648	0.477178	0.60009
SCGB1A1	11q12.3	-0.03647	0.477262	0.600159
RBAKDN	7p22.1	0.036456	0.477442	0.600347
IFNA13	9p21.3	-0.03643	0.477697	0.60063
RTRAF	14q22.1	-0.03642	0.477894	0.60084
OR10A6	11p15.4	0.036415	0.477934	0.600852
RASGRF2	5q14.1	-0.03641	0.477982	0.600862
GJC2	1q42.13	-0.03641	0.478003	0.600862
BHLHA15	7q21.3	-0.03641	0.478031	0.600862
GRK7	3q23	-0.03639	0.478283	0.60114
GAGE2B	Xp11.23	-0.03638	0.478317	0.601146
MOGAT3	7q22.1	0.036373	0.478438	0.60126
FBXL12	19p13.2	-0.03636	0.478594	0.601418
NDUFAF6	8q22.1	-0.03636	0.478639	0.601419
AGBL3	7q33	-0.03636	0.478655	0.601419
NXF5	Xq22.1	-0.03634	0.478894	0.601682
FLJ25758	19p13.2	-0.03632	0.479109	0.601915
EIF4A3	17q25.3	0.036314	0.479162	0.601944
GOSR1	17q11.2	0.036308	0.479225	0.601985
MT1A	16q13	-0.0363	0.479282	0.602019
TSBP1	6p21.32	-0.03628	0.47952	0.602278
HBS1L	6q23.3	0.036282	0.479548	0.602278
TSC22D4	7q22.1	0.036251	0.479922	0.602708

OR2A5	7q35	0.036238	0.480081	0.602808
PIP5K1C	19p13.3	0.036238	0.480083	0.602808
SDHB	1p36.13	0.036237	0.480091	0.602808
WBP11	12p12.3	0.036229	0.480183	0.602857
FAM83G	17p11.2	0.036229	0.48019	0.602857
PHF5A	22q13.2	0.036192	0.480637	0.60338
NMB	15q25.2	0.036189	0.480668	0.603381
SMYD5	2p13.2	-0.03617	0.480906	0.603642
SPRED1	15q14	-0.03615	0.481128	0.603883
SCCPDH	1q44	0.03613	0.481384	0.604166
UGT1A4	2q37.1	-0.03612	0.481491	0.604262
NRL	14q11.2-q12	0.036093	0.481843	0.604605
MAST1	19p13.13	0.036092	0.481847	0.604605
GAGE12J	Xp11.23	-0.03609	0.481855	0.604605
LINC00341	14q32.13	-0.03608	0.481986	0.604732
TNKS1BP1	11q12.1	-0.03608	0.482054	0.604779
UGT1A7	2q37.1	-0.03607	0.482148	0.604797
PATE3	11q24.2	-0.03607	0.48215	0.604797
PRSS3	9p13.3	0.036067	0.482158	0.604797
METTL1	12q14.1	0.036063	0.482203	0.604815
ZSCAN10	16p13.3	0.036061	0.482233	0.604815
LAMB3	1q32.2	0.036035	0.482548	0.605172
ZNF251	8q24.3	-0.03599	0.483122	0.605824
MANCR	10p15.1	-0.03599	0.483129	0.605824
IL15RA	10p15.1	0.035982	0.483187	0.605825
BRD7P3	6q22.31	0.035981	0.483202	0.605825
CERS3	15q26.3	-0.03598	0.48322	0.605825
TIMM8B	11q23.1	-0.03597	0.483337	0.605933
SLC44A2	19p13.2	0.035965	0.483392	0.605964
TRA2A	7p15.3	0.035947	0.483609	0.606199
USP26	Xq26.2	-0.03594	0.483676	0.606244
ETS2	21q22.2	-0.03592	0.483955	0.606526
OR7C2	19p13.12	-0.03592	0.483961	0.606526
HEPHL1	11q21	-0.03592	0.484	0.606537
HUNK	21q22.11	-0.0359	0.48416	0.606697
CBS	21q22.3	-0.0359	0.484188	0.606697
ATP6AP1L	5q14.2	-0.03589	0.484327	0.606809
RAD1	5p13.2	0.035888	0.484338	0.606809
ESX1	Xq22.2	-0.03588	0.484441	0.6069
C6ORF201	6p25.2	0.035874	0.484502	0.606938
SLC4A8	12q13.13	-0.03587	0.484571	0.606987
ZW10	11q23.2	0.03586	0.484671	0.607074
P2RY2	11q13.4	0.035852	0.484765	0.607118
FAM224B	Yq11.222	-0.03585	0.484773	0.607118
HYKK	15q25.1	-0.03585	0.484797	0.607118
NOXRED1	14q24.3	0.035838	0.484946	0.607209
AK9	6q21	-0.03584	0.484965	0.607209
USP39	2p11.2	0.035836	0.484968	0.607209
ITPKC	19q13.2	-0.03583	0.484991	0.607209
BBC3	19q13.32	-0.03582	0.485151	0.607372
GLIPR1L1	12q21.2	-0.03581	0.485288	0.607505
SLC7A9	19q13.11	-0.03581	0.48533	0.607519
RAB20	13q34	-0.0358	0.485422	0.607596
FKRP	19q13.32	-0.03579	0.485564	0.607736
NIPA2	15q11.2	0.035767	0.48581	0.608007
AGPAT3	21q22.3	0.035747	0.486055	0.608275
PLAC8	4q21.22	0.035734	0.48621	0.608431
ZNF69	19p13.2	0.03572	0.486378	0.608603

CAPN2	1q41	0.035668	0.487017	0.609365
FBXO22	15q24.2	-0.03565	0.48718	0.609531
ZNF573	19q13.12	0.035646	0.487288	0.609577
PAPOLA	14q32.2	-0.03564	0.487304	0.609577
SSX7	Xp11.22	-0.03564	0.487332	0.609577
SCTR	2q14.2	-0.03564	0.487351	0.609577
STX4	16p11.2	0.035639	0.48737	0.609577
PLGLA	2q12.2	-0.03563	0.487523	0.609703
C5AR2	19q13.32	-0.03563	0.487531	0.609703
CALR	19p13.13	-0.03562	0.487583	0.609705
WFDC8	20q13.12	-0.03562	0.487594	0.609705
MRPL15	8q11.23	-0.03561	0.487746	0.609858
LSM6	4q31.22	0.035595	0.487904	0.610017
OR9G9	11q11	0.035575	0.488157	0.610245
HTR6	1p36.13	-0.03557	0.488158	0.610245
UQCRC2	16p12.2	-0.03557	0.488178	0.610245
LINC02203	15q11.2	-0.03556	0.488282	0.610337
TUBA4B	2q35	0.035553	0.48842	0.610468
TMEM212	3q26.31	0.035551	0.488447	0.610468
OR13C4	9q31.1	-0.03554	0.488572	0.610549
HIST1H4L	6p22.1	0.035541	0.488573	0.610549
UPK2	11q23.3	-0.03553	0.488649	0.610605
B3GALT1	2q24.3	-0.03553	0.488762	0.610674
GH2	17q23.3	0.035522	0.488807	0.610674
KRIT1	7q21.2	-0.03552	0.488855	0.610674
SAXO2	15q25.2	0.035516	0.488872	0.610674
SDR16C5	8q12.1	0.035516	0.488876	0.610674
TCF25	16q24.3	-0.03551	0.48891	0.610674
IGFALS	16p13.3	0.035513	0.488918	0.610674
METAP2	12q22	-0.0355	0.489108	0.610874
RERE	1p36.23	-0.03549	0.489224	0.610959
PRDM8	4q21.21	-0.03549	0.489237	0.610959
PRMT3	11p15.1	-0.03547	0.489438	0.611172
DOCK7	1p31.3	-0.03546	0.489538	0.611259
PSMA1	11p15.2	-0.03546	0.489607	0.611306
MALT1	18q21.32	-0.03545	0.489694	0.611377
MKLN1	7q32.3	-0.03543	0.489881	0.611566
CCDC83	11q14.1-q14.2	0.035432	0.489907	0.611566
SH2D7	15q25.1	-0.03542	0.490068	0.611722
ITGAX	16p11.2	-0.03542	0.490092	0.611722
MADCAM1	19p13.3	-0.0354	0.490242	0.611871
MFN1	3q26.33	-0.03539	0.490467	0.612113
LINC00326	6q23.2	0.035365	0.490727	0.6124
TFF2	21q22.3	0.035349	0.490924	0.612605
PDE4A	19p13.2	-0.03535	0.490953	0.612605
KLK11	19q13.41	-0.03531	0.491415	0.613144
LINC01551	14q12	0.035304	0.491473	0.613177
OTOR	20p12.1	-0.0353	0.491529	0.613194
SPHK2	19q13.33	0.035298	0.491548	0.613194
KRT16	17q21.2	-0.03529	0.491594	0.613201
TFEB	6p21.1	-0.03529	0.491614	0.613201
MYH6	14q11.2	-0.03528	0.491798	0.613393
FGF7P6	9q13	-0.03527	0.491913	0.613498
RSPH4A	6q22.1	-0.03526	0.492054	0.613613
CCDC190	1q23.3	0.035256	0.492067	0.613613
MKRN2	3p25.2	-0.03524	0.492225	0.613753
FLNC	7q32.1	-0.03524	0.492241	0.613753
LYPD6B	2q23.2	-0.03523	0.492325	0.61382

SLC2A7	1p36.23	-0.03523	0.492414	0.613893
TFCP2	12q13.12-q13.13	0.035214	0.492577	0.614022
NMNAT1	1p36.22	0.035214	0.492579	0.614022
PDLIM1	10q23.33	-0.0352	0.492712	0.614149
BRDT	1p22.1	0.035194	0.492832	0.614261
LCE1D	1q21.3	-0.03519	0.492894	0.6143
GAGE2A	Xp11.23	0.035178	0.493021	0.61442
DCAF13P3	15q21.2	-0.03517	0.493095	0.614474
PTDSS2	11p15.5	-0.03514	0.493445	0.614863
CRYBA1	17q11.2	-0.03514	0.493468	0.614863
AFG1L	6q21	0.035137	0.493525	0.614895
ZNF404	19q13.31	0.035127	0.493646	0.615008
FAM117B	2q33.2	0.035105	0.493925	0.615317
PDIA5	3q21.1	-0.0351	0.494012	0.615387
VN1R4	19q13.42	-0.03508	0.494277	0.615525
OR5T3	11q12.1	-0.03508	0.494277	0.615525
SPINT3	20q13.12	-0.03508	0.494277	0.615525
OR4A5	11q11	-0.03508	0.494277	0.615525
KRTAP13-3	21q22.11	-0.03508	0.494277	0.615525
TLCD1	17q11.2	-0.03507	0.494399	0.61564
TTC12	11q23.2	-0.03504	0.49476	0.616051
TTC21B	2q24.3	-0.03503	0.494845	0.616118
OR51Q1	11p15.4	0.035004	0.495165	0.616478
CMC4	Xq28	0.034988	0.495365	0.616672
MGAM	7q34	0.034987	0.495382	0.616672
SLC26A5	7q22.1	0.034983	0.49543	0.616693
DRG1	22q12.2	-0.03498	0.495506	0.616749
SRFBP1	5q23.1	-0.03497	0.495596	0.616823
XAGE5	Xp11.22	-0.03497	0.495634	0.616833
GPN2	1p36.11	0.034954	0.495785	0.616981
OR5AN1	11q12.1	0.034947	0.495875	0.617056
OR2J2	6p22.1	-0.03494	0.495964	0.617127
OR7E24	19p13.2	0.034934	0.496029	0.61717
SMCP	1q21.3	-0.03493	0.496064	0.617175
HBZ	16p13.3	0.034929	0.496096	0.617177
USP37	2q35	0.034904	0.496401	0.617518
ZNF766	19q13.41	-0.03489	0.496523	0.617632
RAB22A	20q13.32	-0.03488	0.496653	0.617755
ANAPC5	12q24.31	0.034878	0.496725	0.617798
ZNF330	4q31.21	-0.03488	0.496749	0.617798
MCUB	4q25	0.034844	0.49714	0.618245
FTHL17	Xp21.2	0.034839	0.497202	0.618284
ELL	19p13.11	0.03483	0.497316	0.618362
MAPK11	22q13.33	-0.03483	0.497326	0.618362
CXORF65	Xq13.1	0.034815	0.497501	0.618541
MGST2	4q31.1	-0.03481	0.497616	0.618645
C3ORF70	3q27.2	0.034783	0.49789	0.618948
MUC21	6p21.33	-0.03474	0.498467	0.619609
TBC1D3P2	17q23.2	0.034735	0.498484	0.619609
ASB10	7q36.1	-0.03471	0.498857	0.620033
IFNA1	9p21.3	-0.03469	0.499002	0.620176
PDIA3P1	1q21.1	-0.03469	0.499044	0.620189
LEUTX	19q13.2	0.034674	0.499241	0.620396
CRCP	7q11.21	-0.03467	0.499294	0.620423
CLCA4	1p22.3	0.034659	0.499433	0.620557
ADCY4	14q12	0.034641	0.499658	0.620798
RPL8	8q24.3	-0.03459	0.500265	0.621497
HMX1	4p16.1	-0.03459	0.500282	0.621497

MOCS2	5q11.2	-0.03455	0.500839	0.62215
TMSB10	2p11.2	-0.03453	0.500991	0.622252
EIF3J	15q21.1	0.034531	0.501012	0.622252
EIF3D	22q12.3	-0.03453	0.501031	0.622252
OR13C8	9q31.1	0.034529	0.501046	0.622252
IRF7	11p15.5	0.034525	0.50109	0.622269
QRICH1	3p21.31	0.034511	0.501269	0.622452
EXO5	1p34.2	0.034507	0.501314	0.62247
WDR38	9q33.3	-0.0345	0.501418	0.622556
DDX25	11q24.2	-0.0345	0.501446	0.622556
SHC3	9q22.1	-0.03449	0.501516	0.622605
ACTL9	19p13.2	0.034488	0.501548	0.622606
NFYC	1p34.2	0.034471	0.501758	0.622794
TOP1MT	8q24.3	-0.03447	0.501779	0.622794
PTGS2	1q31.1	0.034468	0.501793	0.622794
OR5AK2	11q12.1	0.034456	0.501941	0.62294
TMEM222	1p36.11	-0.03444	0.502164	0.623178
TRH	3q22.1	-0.03443	0.502259	0.62322
RAB40B	17q25.3	-0.03443	0.50226	0.62322
RAB4B	19q13.2	-0.03442	0.502381	0.623309
OR9A2	7q34	0.03442	0.502394	0.623309
ANKRD19P	9q22.31	0.034403	0.5026	0.623525
DNAJC13	3q22.1	0.034393	0.502731	0.623649
DAPP1	4q23	-0.03438	0.502924	0.623785
PLA2G2A	1p36.13	0.034376	0.50294	0.623785
ALPK1	4q25	0.034372	0.502985	0.623785
CHRNA2	1q21.3	-0.03437	0.502988	0.623785
BRSK2	11p15.5	-0.03437	0.502996	0.623785
HIF1AN	10q24.31	0.034369	0.503028	0.623786
OR3A3	17p13.2	0.034349	0.503279	0.624058
MKNK1	1p33	0.034343	0.503349	0.624076
PMS2CL	7p22.1	0.034341	0.503371	0.624076
CRTC1	19p13.11	0.03434	0.503387	0.624076
ATOX1	10q21.3 10q21.3-q22.1	0.034337	0.503429	0.624089
LINC02396	12q13.12	0.034329	0.503527	0.624173
RHOBTB3	5q15	-0.03431	0.503743	0.624402
TEX29	13q34	-0.0343	0.503847	0.624492
PISD	22q12.2	0.034298	0.503914	0.624508
CFAP299	4q21.21	-0.0343	0.503922	0.624508
MTIF3	13q12.2	-0.03429	0.503955	0.62451
ZNF879	5q35.3	-0.03429	0.504054	0.624543
UBE2V2	8q11.21	-0.03429	0.504067	0.624543
ITGAE	17p13.2	-0.03428	0.504075	0.624543
SLITRK1	13q31.1	0.034257	0.504421	0.624933
PABPN1L	16q24.3	0.03424	0.504628	0.62515
ATP12A	13q12.12 13q12.1-q12.3	-0.03424	0.504658	0.62515
KXD1	19p13.11	0.034213	0.504965	0.625491
ADGRF2	6p12.3	-0.0342	0.505101	0.625621
SSBP1	7q34	0.034183	0.505341	0.625878
C3ORF33	3q25.31	-0.03418	0.505429	0.625937
KRT32	17q21.2	-0.03417	0.505451	0.625937
ARC	8q24.3	-0.03417	0.505544	0.625994
CACNA1S	1q32.1	-0.03417	0.505559	0.625994
SNAR-I	3q28	-0.03415	0.505791	0.626243
LYN	8q12.1	0.034132	0.505974	0.626416
A4GNT	3q22.3	0.034131	0.505993	0.626416
RNF138	18q12.1	0.034123	0.506087	0.626493
ZBP1	20q13.31	-0.03411	0.506234	0.626637

VIT	2p22.2	-0.0341	0.506426	0.626828
GLUD1	10q23.2	0.034094	0.506452	0.626828
FGF20	8p22	-0.03408	0.506618	0.626996
GCC1	7q32.1	-0.03408	0.506664	0.627014
NAGPA	16p13.3	-0.03405	0.506946	0.627324
GC	4q13.3	-0.03405	0.507039	0.627396
LINC00930	15q26.1	0.034045	0.507067	0.627396
TRAF1	9q33.2	0.034039	0.507137	0.627444
TRIM69	15q21.1	-0.03403	0.507231	0.627474
CPVL	7p14.3	-0.03403	0.507234	0.627474
KBTBD7	13q14.11	-0.03403	0.507255	0.627474
XAF1	17p13.1	0.034027	0.507296	0.627485
REV3L	6q21	0.034018	0.5074	0.627554
TMPRSS3	21q22.3	0.034017	0.507414	0.627554
HTATSF1	Xq26.3	0.034011	0.507494	0.627615
RUFY4	2q35	0.034003	0.507585	0.627688
LHX9	1q31.3	-0.034	0.507639	0.627716
NPFFR1	10q22.1	0.033993	0.507711	0.627766
HOXC11	12q13.13	0.033984	0.507827	0.627871
SPINK4	9p13.3	0.033978	0.507902	0.627904
OR1K1	9q33.2	0.033977	0.507917	0.627904
TUBA3FP	22q11.21	-0.03396	0.508141	0.628131
LINC00461	5q14.3	-0.03396	0.508163	0.628131
KLRG2	7q34	-0.03393	0.50846	0.628441
WFDC11	20q13.12	0.033932	0.508476	0.628441
AHNAK	11q12.3	-0.03391	0.508813	0.628818
TMEM109	11q12.2	-0.03389	0.509017	0.629032
SPEF1	20p13	0.033885	0.509069	0.629057
GCFC2	2p12	-0.03387	0.509287	0.629287
NUDCD3	7p13	-0.03386	0.509395	0.629381
ZNF697	1p12	-0.03384	0.509661	0.629672
WFS1	4p16.1	-0.03383	0.509809	0.629757
RPL26L1	5q35.1	-0.03383	0.509812	0.629757
POTEM	14q11.2	-0.03382	0.509824	0.629757
TSR2	Xp11.22	-0.03381	0.510031	0.629973
ABHD12B	14q22.1	0.033798	0.510156	0.630089
LGALS2	22q13.1	0.033788	0.510281	0.630205
BHLHE23	20q13.33	-0.03378	0.510386	0.630295
ZNF92	7q11.21	-0.03377	0.510451	0.630337
HAP1	17q21.2	-0.03375	0.510749	0.630632
PFKFB1	Xp11.21	-0.03375	0.510753	0.630632
TMEM125	1p34.2	-0.03374	0.510831	0.63069
SLC39A8	4q24	0.033741	0.510867	0.630694
UBE2K	4p14	-0.03372	0.511074	0.630877
VPS4A	16q22.1	0.033723	0.511093	0.630877
KSR2	12q24.22-q24.23	-0.03372	0.511123	0.630877
ARVCF	22q11.21	0.033719	0.511144	0.630877
IFITM1	11p15.5	-0.03372	0.51119	0.630877
NAB1	2q32.2	0.033714	0.511204	0.630877
IL12RB2	1p31.3	-0.03371	0.511267	0.630917
YBEY	21q22.3	-0.0337	0.511333	0.630953
LOC389705	9p22.3	-0.0337	0.511375	0.630953
OR13C5	9q31.1	-0.0337	0.511391	0.630953
KPNA1	3q21.1	-0.03369	0.511552	0.631113
SLC25A48	5q31.1	0.033679	0.511646	0.63119
MICALL1	22q13.1	0.033674	0.511711	0.63123
TXLNKY	Yq11.222-q11.223	-0.03367	0.511754	0.63123
PEX16	11p11.2	-0.03367	0.511773	0.63123

DRC3	17p11.2	-0.03365	0.51203	0.631508
USPL1	13q12.3	-0.03364	0.512076	0.631526
KCTD9	8p21.2	0.033622	0.512354	0.63183
OR6B2	2q37.3	0.033609	0.51252	0.631979
MSX2	5q35.2	-0.03361	0.512538	0.631979
SPRR3	1q21.3	0.033596	0.512687	0.632124
TTY1B	Yp11.2	0.033566	0.513058	0.632542
UGT1A1	2q37.1	0.033556	0.513188	0.632664
PCDH11Y	Yp11.2	-0.03355	0.513271	0.632703
OR2AG2	11p15.4	-0.03355	0.513283	0.632703
ZFYVE26	14q24.1	0.033535	0.513455	0.632837
CYB5R4	6q14.2	-0.03353	0.513463	0.632837
ASB9	Xp22.2	0.033532	0.513487	0.632837
CDK19	6q21	-0.0335	0.513917	0.633298
SMN2	5q13.2	0.033495	0.513961	0.633298
IFI27	14q32.12	0.033494	0.513969	0.633298
CABP7	22q12.2	0.033492	0.513988	0.633298
TREML4	6p21.1	0.033465	0.514334	0.633686
UBE2L3	22q11.21	0.033461	0.514386	0.633711
NCOA6	20q11.22	0.033445	0.514589	0.633922
ZNF517	8q24.3	-0.03344	0.514667	0.63398
ROBO4	11q24.2	-0.03343	0.514789	0.634057
ANO2	12p13.31	0.033428	0.514793	0.634057
SSX1	Xp11.23	0.03342	0.514894	0.634118
ZNF253	19p13.11	-0.03342	0.514935	0.634118
SMARCB1	22q11.23 22q11	-0.03342	0.514938	0.634118
MESP2	15q26.1	0.033414	0.514971	0.63412
HPS1	10q24.2	0.033404	0.515101	0.63424
DNMBP-AS1	10q24.2	0.033397	0.515187	0.634306
ABCC5	3q27.1	0.033395	0.515217	0.634306
INTS4P1	7q11.21	0.033388	0.515298	0.634361
HIST3H2A	1q42.13	0.033386	0.515326	0.634361
SLC5A11	16p12.1	-0.03337	0.515569	0.634622
PAWR	12q21.2	0.033363	0.515616	0.63464
TTLL2	6q27	0.033358	0.515673	0.634672
FOXA2	20p11.21	0.033351	0.51577	0.634727
RPL14	3p22.1	-0.03335	0.515795	0.634727
NPHS1	19q13.12	0.033347	0.515812	0.634727
LILRA3	19q13.4	-0.03332	0.516136	0.635086
KLRC4	12p13.2	0.033318	0.516185	0.635107
XDH	2p23.1	-0.03331	0.516253	0.635114
VMA21	Xq28	0.033312	0.516264	0.635114
C12ORF49	12q24.22	-0.03331	0.516285	0.635114
LRGUK	7q33	-0.0333	0.516423	0.635244
LOC100133050	5q21.1	0.033292	0.516514	0.635256
CWH43	4p11	-0.03329	0.51653	0.635256
HOXD3	2q31.1	0.03329	0.51654	0.635256
CHRAC1	8q24.3	-0.03329	0.516559	0.635256
ZADH2	18q22.3	0.033276	0.516717	0.63541
SERHL	22q13.2	0.03326	0.516912	0.635611
PRAMEF4	1p36.21	-0.03325	0.517077	0.63577
SGK2	20q13.12	0.033245	0.517105	0.63577
ZPR1	11q23.3	-0.03322	0.517439	0.636101
ZNF337	20p11.21	0.033217	0.517455	0.636101
AEBP2	12p12.3	-0.03322	0.517469	0.636101
ESD	13q14.2	-0.03321	0.517521	0.636125
MYO9A	15q23	0.033206	0.517597	0.636179
SLC25A18	22q11.21	-0.0332	0.517731	0.636305



CFAP58	10q25.1	0.033187	0.517832	0.636376
CTDNEP1	17p13.1	-0.03319	0.517852	0.636376
TAS2R41	7q35	0.033163	0.518132	0.636681
FAM169A	5q13.3	-0.03314	0.518385	0.636953
USP22	17p11.2	-0.03313	0.518553	0.637121
ASL	7q11.21	0.033126	0.518608	0.637148
ZNF609	15q22.31	0.033118	0.518703	0.637196
HYPM	Xp11.4	-0.03312	0.51871	0.637196
USP15	12q14.1	-0.03311	0.518852	0.637332
CFTR	7q31.2	-0.03309	0.519073	0.637563
ABCA17P	16p13.3	0.033086	0.519112	0.637573
RACK1	5q35.3	-0.03308	0.519195	0.637635
DIMT1	5q12.1	0.033074	0.51926	0.637676
CDK8	13q12.13	-0.03307	0.519369	0.637771
SPATA32	17q21.31	0.033062	0.51942	0.637794
CCDC85B	11q13.1	0.033048	0.519592	0.637967
LINC01591	8q24.22	-0.03304	0.519708	0.638069
LINGO1	15q24.3	0.033023	0.519908	0.638276
TMEM131L	4q31.3	-0.03302	0.519956	0.638296
ST7-AS1	7q31.2	0.033014	0.520017	0.638332
CIITA	16p13.13	-0.03301	0.52008	0.638347
SHD	19p13.3	0.033008	0.520093	0.638347
ATP5PO	21q22.11	0.033002	0.520167	0.638398
NR4A1	12q13.13	0.032996	0.520251	0.638408
ZNF547	19q13.43	-0.033	0.520254	0.638408
BCO2	11q23.1	0.032994	0.52027	0.638408
PIH1D3	Xq22.3	-0.03296	0.520664	0.638851
MTMR4	17q22	0.032953	0.520793	0.638971
SATB2-AS1	2q33.1	0.032916	0.521265	0.63951
ZBTB8OS	1p35.1	-0.03289	0.521538	0.639806
MRAP	21q22.11	-0.03288	0.521751	0.640029
PLEKHM2	1p36.21	-0.03287	0.521821	0.640075
TMEM53	1p34.1	-0.03287	0.521862	0.640086
PRY2	Yq11.223	0.032865	0.521909	0.640105
ZNF449	Xq26.3	-0.03283	0.522348	0.640591
UCK1	9q34.13	0.032829	0.52237	0.640591
PWAR1	15q11.2	-0.03281	0.522649	0.640869
FOXB2	9q21.2	0.032806	0.52266	0.640869
CABP1	12q24.31	0.032795	0.522799	0.641
OPN1SW	7q32.1	-0.03279	0.522855	0.64103
RPL18	19q13.33	0.032788	0.522888	0.641031
SDAD1	4q21.1	-0.03278	0.522984	0.641109
LINC00574	6q27	0.03277	0.523106	0.641219
DDX4	5q11.2	-0.03275	0.523311	0.641402
POU4F3	5q32	0.032754	0.523319	0.641402
GFER	16p13.3	-0.03274	0.523476	0.641551
TRIM67	1q42.2	0.032739	0.523504	0.641551
ACO2	22q13.2	0.032736	0.523549	0.641567
SNAI3	16q24.2	-0.03273	0.52362	0.641588
B4GALT7	5q35.3	0.032729	0.523631	0.641588
ATF7IP	12p13.1	-0.03271	0.523829	0.64176
SI	3q26.1	0.032713	0.523835	0.64176
MAGI1	3p14.1	-0.0327	0.523997	0.641919
CSNK1A1P1	15q14	-0.0327	0.524033	0.641924
CCDC87	11q13.2	0.032683	0.52422	0.64207
AMHR2	12q13.13	-0.03268	0.524237	0.64207
SCUBE1	22q13.2	-0.03268	0.524258	0.64207
NEDD9	6p24.2	-0.03268	0.524306	0.64207

ADO	10q21.3	-0.03267	0.524323	0.64207
LNX2	13q12.2	-0.03267	0.524345	0.64207
RRN3P3	16p12.2	0.032663	0.524473	0.642188
COTL1	16q24.1	-0.03265	0.524684	0.642305
PARP4	13q12.12	0.032646	0.524687	0.642305
SERPINB13	18q21.33	-0.03265	0.524689	0.642305
LRP6	12p13.2	-0.03265	0.524697	0.642305
USP34	2p15	-0.03263	0.52493	0.642551
SNHG5	6q14.3	-0.03262	0.525042	0.642649
USP46	4q12	-0.03261	0.525097	0.642677
ARL5B	10p12.31	0.032605	0.525212	0.642757
TBCB	19q13.12	-0.0326	0.52525	0.642757
MECR	1p35.3	0.0326	0.525275	0.642757
MMP10	11q22.2	0.032598	0.525291	0.642757
TLE5	19p13.3	-0.03258	0.525521	0.642999
LRRC8D	1p22.2	-0.03257	0.525601	0.643057
DSC2	18q12.1	-0.03255	0.525926	0.643417
PGGT1B	5q22.3	0.032543	0.525999	0.643458
NOX5	15q23	-0.03254	0.526025	0.643458
TMCO1	1q24.1	-0.03253	0.526209	0.643644
YIF1A	11q13.2	-0.03252	0.526291	0.643666
RNASEH2B	13q14.3	-0.03252	0.526291	0.643666
ATP8B3	19p13.3	-0.03251	0.526419	0.643784
SZRD1	1p36.13	0.032502	0.526521	0.643868
VPREB1	22q11.22	-0.03248	0.526828	0.644205
CCRL2	3p21.31	-0.03248	0.526861	0.644205
DDX11L2	2q14.1	0.03247	0.526925	0.644245
GALK2	15q21.1-q21.2	0.032464	0.527001	0.644298
IGFLR1	19q13.12	-0.03246	0.527047	0.644315
RND1	12q13.12	-0.03245	0.527176	0.644433
HSD17B1	17q21.2	0.032442	0.527277	0.644499
HDHD2	18q21.1	-0.03244	0.527294	0.644499
WBP2NL	22q13.2	-0.03239	0.527918	0.645222
CNST	1q44	-0.03237	0.528202	0.64553
LIPJ	10q23.31	0.032366	0.528249	0.645548
JADE2	5q31.1	-0.03235	0.528466	0.645773
ATPAF1	1p33	0.032333	0.528677	0.645992
FAM110C	2p25.3	0.032328	0.528739	0.646028
ZNF146	19q13.12	-0.03231	0.528921	0.646145
KLK10	19q13.41	0.032312	0.528943	0.646145
NIP7	16q22.1	-0.03231	0.528954	0.646145
C11ORF16	11p15.4	-0.03231	0.528963	0.646145
PANK1	10q23.31	-0.03229	0.529177	0.646366
DEFB135	8p23.1	-0.03229	0.529235	0.646399
TSTD2	9q22.33	-0.03229	0.52927	0.646402
KIAA0754	1p34.3	0.032272	0.529449	0.646541
SMIM24	19p13.3	0.032272	0.529449	0.646541
KREMEN1	22q12.1	-0.03226	0.529551	0.646616
AKAP1	17q22	0.032262	0.529575	0.646616
RXFP4	1q22	0.032259	0.529614	0.646624
UNQ6494	9q22.2	-0.03225	0.529729	0.646725
ANK1	8p11.21	-0.03224	0.529911	0.646903
KLK15	19q13.33	-0.03223	0.529939	0.646903
MICU1	10q22.1	-0.03223	0.530032	0.646976
ZXDB	Xp11.21	-0.03222	0.530111	0.647034
HACD2	3q21.1	-0.0322	0.530375	0.647317
NEUROG3	10q22.1	0.032196	0.530421	0.647318
APOA1	11q23.3	-0.03219	0.53044	0.647318

PRR26	10p15.3	0.032174	0.530697	0.647591
WDR45B	17q25.3	-0.03215	0.530978	0.647895
LINC01590	6q15	-0.03214	0.531171	0.648091
TFDP2	3q23	-0.03211	0.531517	0.648474
RAB11FIP3	16p13.3	0.032093	0.531738	0.648703
C12ORF56	12q14.2	-0.03206	0.532102	0.649108
ZNF446	19q13.43	-0.03206	0.532165	0.649145
UTP18	17q21.33	-0.03205	0.532267	0.64923
DENND1C	19p13.3	0.032049	0.5323	0.64923
ZNF550	19q13.43	-0.03204	0.532377	0.649285
ALDH1L1	3q21.3	0.032029	0.53255	0.649421
HLTF	3q24	0.032029	0.532553	0.649421
NUDT6	4q28.1	0.03202	0.532666	0.649519
RBM38	20q13.31	-0.03201	0.532815	0.649659
PAEP	9q34.3	-0.032	0.532868	0.649659
SBK2	19q13.42	-0.032	0.532886	0.649659
FZD9	7q11.23	-0.032	0.53291	0.649659
ASGR1	17p13.1	-0.03199	0.53303	0.649765
RTP5	2q37.3	0.031977	0.533227	0.649928
TMPRSS11F	4q13.2	-0.03198	0.533228	0.649928
APBA3	19p13.3	-0.03197	0.533336	0.649997
HLA-C	6p21.33	-0.03197	0.53335	0.649997
HSDL2	9q32	0.031963	0.533405	0.650015
GBA	1q22	-0.03196	0.53343	0.650015
CHRFAM7A	15q13.2	0.031957	0.533479	0.650036
PDYN	20p13	-0.03195	0.533548	0.650081
ZNF133	20p11.23	-0.03195	0.533612	0.650092
FXVD7	19q13.12	-0.03195	0.533623	0.650092
XIAP	Xq25	-0.03193	0.533772	0.650234
VAPB	20q13.32	-0.03193	0.533833	0.650269
CSN1S1	4q13.3	-0.03192	0.533962	0.650377
TEX13B	Xq22.3	0.031917	0.533987	0.650377
SPA17	11q24.2	0.031893	0.534296	0.650715
LINC00470	18p11.32	-0.03188	0.534482	0.650902
TNRC6C	17q25.3	-0.03187	0.534617	0.651026
UBQLNL	11p15.4	-0.03183	0.535143	0.651626
LLGL1	17p11.2	-0.03182	0.535208	0.651666
ACVR1C	2q24.1	-0.03181	0.535401	0.651862
PSMG3-AS1	7p22.3	-0.0318	0.535445	0.651876
HTR3D	3q27.1	-0.0318	0.53549	0.651891
IL37	2q14.1	0.031752	0.536102	0.652596
TACSTD2	1p32.1	-0.03174	0.53624	0.652725
CCL3L3	17q12	-0.0317	0.536801	0.653368
ZNF705D	8p23.1	0.031695	0.536846	0.653383
USP35	11q14.1	0.031688	0.536936	0.653453
BDKRB2	14q32.2	-0.03167	0.537146	0.653669
NKX6-2	10q26.3	-0.03166	0.537318	0.653838
HSP90B3P	1p22.1	-0.03165	0.537466	0.653979
SGSH	17q25.3	-0.03164	0.537612	0.654058
ALG13	Xq23	-0.03163	0.537623	0.654058
H2BFM	Xq22.2	-0.03163	0.537629	0.654058
LINC00928	15q26.1	-0.03163	0.537664	0.65406
CRSP8P	5q14.1	0.031612	0.537908	0.654317
RIBC1	Xp11.22	0.031601	0.538049	0.654427
MRTFB	16p13.12	-0.0316	0.538066	0.654427
RAD21L1	20p13	0.031597	0.538096	0.654427
HMSD	18q22.1	-0.03159	0.53816	0.654465
AKR7A2	1p36.13	0.031563	0.538537	0.654884

HMG3	6q14.1	-0.03155	0.538648	0.654979
RASAL1	12q24.13	0.031534	0.538917	0.655266
ASPH	8q12.3	0.031531	0.53895	0.655266
HORMAD1	1q21.3	0.031527	0.539004	0.655292
HLA-A	6p22.1	-0.03151	0.539169	0.655453
MORF4L2	Xq22.2	0.031509	0.539238	0.655498
SNX13	7p21.1	-0.03149	0.539424	0.655684
INSL4	9p24.1	0.031489	0.539488	0.655722
POGLUT3	11q22.3	-0.03148	0.53964	0.655867
C1QTNF9	13q12.12	-0.03147	0.539797	0.656018
GSTK1	7q34	-0.03146	0.539854	0.656047
MPP7	10p12.1	-0.03145	0.540023	0.656213
LY6E	8q24.3	0.031433	0.540209	0.656399
SLCO1B1	12p12.1	0.031426	0.540305	0.656476
XKRX	Xq22.1	-0.03142	0.540354	0.656495
TNFRSF10B	8p21.3	0.031415	0.540451	0.656573
EMSY	11q13.5	0.031403	0.540606	0.656722
ABCC6	16p13.11	0.031387	0.540809	0.656929
EIF2A	3q25.1	-0.03138	0.54087	0.656963
SLC5A2	16p11.2	0.031369	0.541038	0.657116
GALP	19q13.43	0.031367	0.541062	0.657116
MGC27382	1p31.1	-0.03133	0.54158	0.657706
SNORA69	Xq24	-0.03132	0.541624	0.657719
SSX8P	Xp11.22	0.031311	0.541787	0.657877
NDUFAF7	2p22.2	0.031307	0.541834	0.657895
ARL13B	3q11.1-q11.2	-0.03129	0.542021	0.658081
GPR17	2q14.3	0.03129	0.542058	0.658086
C1QL4	12q13.12	0.031285	0.542124	0.658127
TTC23L	5p13.2	-0.03128	0.542184	0.65816
BCORP1	Yq11.222	0.031227	0.542879	0.658964
SLC2A1	1p34.2	-0.03122	0.542914	0.658966
FAR2	12p11.22	0.03122	0.542964	0.658986
MRPL28	16p13.3	0.031192	0.543323	0.659345
ADAD1	4q27	-0.03119	0.543335	0.659345
ZNF460	19q13.43	0.03119	0.543358	0.659345
PPP1R9B	17q21.33	0.031175	0.54354	0.659526
PHF13	1p36.31	0.031161	0.543732	0.659654
LHPP	10q26.13	-0.03116	0.543735	0.659654
IL17A	6p12.2	0.03116	0.543744	0.659654
AZU1	19p13.3	0.031149	0.543886	0.659786
OR1A2	17p13.3	0.031126	0.544185	0.660108
HTR3B	11q23.2	-0.03109	0.544587	0.660557
CD55	1q32.2	-0.03108	0.544727	0.660686
CSMD1	8p23.2	-0.03107	0.544848	0.660792
GDF15	19p13.11	-0.03107	0.544966	0.660867
HLA-G	6p22.1	-0.03106	0.544975	0.660867
OR56A1	11p15.4	0.031047	0.545199	0.661049
ZNF776	19q13.43	-0.03105	0.545212	0.661049
PLSCR5	3q24	-0.03105	0.545224	0.661049
CHAT	10q11.23	-0.031	0.545779	0.661682
TNIP3	4q27	-0.031	0.545824	0.661696
CXORF40A	Xq28	-0.03099	0.545881	0.661725
LOC284798	20p11.21	-0.03098	0.546047	0.661886
ADAMTS14	10q22.1	0.030975	0.546135	0.661953
CLDN15	7q22.1	-0.03097	0.546247	0.662048
CCDC196	14q23.3	0.030944	0.546536	0.662359
MON2	12q14.1	0.030938	0.546621	0.662394
C5ORF38	5p15.33	0.030935	0.546652	0.662394

MBD2	18q21.2	0.030932	0.546688	0.662394
ALCAM	3q13.11	-0.03093	0.546724	0.662394
OR10V1	11q12.1	-0.03093	0.54673	0.662394
CFAP410	21q22.3	0.030911	0.546959	0.662631
IFNA17	9p21.3	-0.03089	0.547173	0.662792
SNAR-C3	19q13.33	0.030895	0.547173	0.662792
TBATA	10q22.1	0.030891	0.54722	0.662792
TP53	17p13.1	0.030891	0.54723	0.662792
PPP1R3D	20q13.33	-0.03089	0.547258	0.662792
SCO1	17p13.1	0.030874	0.547448	0.662982
MAN2A1	5q21.3	-0.03086	0.54761	0.663138
C1ORF61	1q22	-0.03085	0.547807	0.663295
LOC154761	7q35	-0.03084	0.547833	0.663295
PMCH	12q23.2	-0.03084	0.547839	0.663295
STXBP1	9q34.11	0.030837	0.547926	0.663325
C9ORF43	9q32	-0.03084	0.54793	0.663325
PPP4R3C	Xp21.3	0.030833	0.547974	0.663338
NME2P1	12q24.23	-0.03082	0.548161	0.663524
SLC45A4	8q24.3	0.030812	0.548247	0.663589
TRPC2	11p15.4	0.030783	0.548629	0.663973
KCNRG	13q14.2	0.030783	0.54863	0.663973
INTS5	11q12.3	0.030771	0.548781	0.664115
GNB1L	22q11.21	0.030761	0.54891	0.664218
GLOD4	17p13.3	-0.03076	0.548933	0.664218
TSPAN1	1p34.1	0.030755	0.548986	0.664242
CAPZA1	1p13.2	-0.03075	0.549117	0.664361
LRRFIP2	3p22.2	0.030739	0.549201	0.664423
CCDC70	13q14.3	-0.03073	0.549326	0.664534
MPI	15q24.1	-0.03073	0.549361	0.664535
GDF1	19p13.11	0.030717	0.549484	0.664644
EGFEM1P	3q26.2	-0.03071	0.549574	0.664713
LMF1	16p13.3	-0.03069	0.549849	0.665005
PSMD6	3p14.1	0.030687	0.549881	0.665005
DKKL1	19q13.33	-0.03068	0.549976	0.665079
SEPTIN3	22q13.2	-0.03066	0.550198	0.665307
TOM1L2	17p11.2	0.030657	0.550265	0.665348
BTBD19	1p34.1	-0.03063	0.550587	0.665697
TPK1	7q35	-0.03061	0.550915	0.666054
PSMA7	20q13.33	-0.0306	0.551005	0.666095
GEMIN8	Xp22.2	-0.0306	0.551016	0.666095
FBXO40	3q13.33	-0.03059	0.551108	0.666137
AGPAT5	8p23.1	0.030592	0.551117	0.666137
LAMC2	1q25.3	-0.03057	0.551411	0.666452
YY2	Xp22.12	0.030566	0.551454	0.666454
SNORA16B	1q32.3	-0.03056	0.551479	0.666454
CFAP20	16q21	0.030544	0.551742	0.666732
LDLRAD1	1p32.3	-0.03053	0.551885	0.666833
KRT79	12q13.13	-0.03053	0.551892	0.666833
OPRPN	4q13.3	-0.03051	0.552159	0.667115
LYZL1	10p12.1-p11.23	0.030505	0.552245	0.667178
SLC16A6	17q24.2	0.030498	0.552343	0.66724
MCHR2	6q16.2	0.030495	0.552381	0.66724
MPHOSPH8	13q12.11	0.030493	0.552396	0.66724
PYDC1	16p11.2	-0.03049	0.552478	0.667295
FOXJ3	1p34.2	-0.03048	0.552508	0.667295
ADCK2	7q34	-0.03048	0.552595	0.66736
SIK3	11q23.3	-0.03047	0.552668	0.667408
LCE3D	1q21.3	-0.03043	0.553213	0.667945

RBMY3AP	Yp11.2	0.03043	0.553218	0.667945
BET1L	11p15.5	-0.03043	0.553227	0.667945
ASIP	20q11.22	-0.03043	0.553247	0.667945
DDX59	1q32.1	-0.03042	0.553345	0.668024
SLC39A10	2q32.3	-0.03042	0.553407	0.66804
ZNF585B	19q13.12	-0.03041	0.553443	0.66804
HIST2H2BF	1q21.2	0.030412	0.553459	0.66804
CCDC149	4p15.2	-0.0304	0.553615	0.668188
CLRN1	3q25.1	-0.0304	0.553674	0.668219
KIAA0087	7p15.2	-0.03038	0.553828	0.668365
MTF2	1p22.1	-0.03037	0.553952	0.668454
PYCARD	16p11.2	0.030373	0.553969	0.668454
KRT84	12q13.13	0.030369	0.554017	0.668472
JAKMIP3	10q26.3	0.030365	0.554076	0.668476
TRERF1	6p21.1	-0.03036	0.554087	0.668476
HES5	1p36.32	0.03035	0.554268	0.668654
MID1	Xp22.2	0.030343	0.55436	0.668724
CAPNS2	16q12.2	0.030334	0.554479	0.668823
ESYT1	12q13.2	0.030332	0.554509	0.668823
PNKD	2q35	0.030316	0.554708	0.669024
OR11H4	14q11.2	-0.0303	0.554975	0.669305
SAMD9L	7q21.2	-0.03029	0.555015	0.669313
C10ORF131	10q24.1	-0.03029	0.555084	0.669356
MAGIX	Xp11.23	0.030277	0.555215	0.669473
TMEM200A	6q23.1	-0.03027	0.555369	0.66962
SNORA61	1p35.3	0.030258	0.555464	0.669659
TYR	11q14.3	0.030258	0.55547	0.669659
REXO1L1P	8q21.2	-0.03026	0.555502	0.669659
NDUFAF5	20p12.1	-0.03024	0.555679	0.669798
OARD1	6p21.1	0.030241	0.555686	0.669798
OR5A1	11q12.1	0.030239	0.555718	0.669798
TMEM141	9q34.3	0.030229	0.555848	0.669914
PF4	4q13.3	0.030226	0.55589	0.669925
HNRNPA0	5q31.2	0.030219	0.555975	0.669986
CHID1	11p15.5	-0.03019	0.556324	0.67036
CD47	3q13.12	-0.03019	0.556352	0.67036
POU2AF1	11q23.1	-0.03018	0.556459	0.670409
PLPP6	9p24.1	-0.03018	0.556467	0.670409
HSD17B13	4q22.1	0.03018	0.556493	0.670409
RANBP9	6p23	-0.03018	0.556552	0.67044
FETUB	3q27.3	0.030165	0.556692	0.670569
MYH4	17p13.1	0.03016	0.556755	0.670604
ZNF281	1q32.1	-0.03012	0.557242	0.67115
ST7-OT3	7q31.2	-0.03011	0.557362	0.671255
HILS1	17q21.33	-0.03006	0.558116	0.672123
HEMGN	9q22.33	0.030053	0.558154	0.672127
COPS9	2q37.3	-0.03005	0.558195	0.672137
PATL2	15q21.1	0.030025	0.558517	0.672483
OR2G2	1q44	-0.03001	0.558722	0.672685
PSEN2	1q42.13	0.030007	0.558751	0.672685
THG1L	5q33.3	0.029983	0.55907	0.673028
PSMB1	6q27	0.02997	0.559245	0.673198
HTN1	4q13.3	-0.02996	0.559323	0.673252
PLAUR	19q13.31	-0.02995	0.559536	0.673468
RXFP3	5p13.2	-0.02994	0.559613	0.67352
SLC30A10	1q41	-0.02992	0.559862	0.673773
OR4E2	14q11.2	0.02992	0.559893	0.673773
TMEM151A	11q13.2	0.029918	0.559925	0.673773

EVA1C	21q22.11	-0.02989	0.560231	0.674065
CSF2	5q31.1	0.029894	0.560234	0.674065
MBD3L2	19p13.2	0.029883	0.560389	0.67421
SLC52A2	8q24.3	0.029877	0.560466	0.674262
TMEM154	4q31.3	-0.02987	0.560511	0.674276
PKN1	19p13.12	0.029857	0.560717	0.674484
C22ORF42	22q12.3	0.029854	0.560762	0.674498
ADK	10q22.2 10q11-q24	0.029842	0.560919	0.674646
GRHL2	8q22.3	0.029806	0.561399	0.675182
TEX261	2p13.3	-0.0298	0.561486	0.675247
EML5	14q31.3	-0.02979	0.561554	0.675268
VPS35	16q11.2	-0.02979	0.561571	0.675268
CLCC1	1p13.3	-0.02979	0.561648	0.675319
RGS10	10q26.11	-0.02978	0.561701	0.675343
CDC27	17q21.32	-0.02978	0.561772	0.675388
ADPRHL2	1p34.3	0.029771	0.56186	0.67545
PTGER1	19p13.12	-0.02977	0.561891	0.67545
RPL21P44	4q12	-0.02976	0.562041	0.675589
GML	8q24.3	-0.02975	0.562172	0.675707
BORCS8-MEF2B	19p13.11	-0.02974	0.562308	0.67583
DMAP1	1p34.1	0.02972	0.562525	0.676049
PIGZ	3q29	0.029699	0.562805	0.676292
MTFR1	8q13.1	-0.0297	0.562822	0.676292
SLC11A2	12q13.12	-0.0297	0.562828	0.676292
SLC25A3P1	1p32.3	0.029691	0.562909	0.676348
PTF1A	10p12.2	-0.02969	0.562974	0.676387
CABP4	11q13.2	0.029682	0.563027	0.676409
STRADB	2q33.1	0.029679	0.56306	0.676409
CDCP2	1p32.3	0.029676	0.563104	0.676421
GPS1	17q25.3	-0.02965	0.563468	0.676818
PACSIN3	11p11.2	0.029638	0.563604	0.676931
TSGA13	7q32.2	0.029636	0.56363	0.676931
HIBCH	2q32.2	-0.02962	0.563831	0.677131
RABGAP1L	1q25.1	-0.02962	0.563868	0.677135
BATF2	11q13.1	-0.02961	0.56401	0.677265
FOXJ2	12p13.31	0.0296	0.564109	0.677343
RABL2A	2q14.1	0.029583	0.564324	0.677521
BPIFB2	20q11.21	-0.02958	0.564349	0.677521
ABCC1	16p13.11	-0.02958	0.564358	0.677521
NCEH1	3q26.31	-0.02958	0.564412	0.67754
CRCT1	1q21.3	-0.02957	0.564442	0.67754
SLC44A5	1p31.1	-0.02953	0.565046	0.678224
CGB8	19q13.33	-0.02952	0.565119	0.678264
CD2AP	6p12.3	0.029521	0.565147	0.678264
MYO10	5p15.1	0.029515	0.565218	0.678309
ZNF576	19q13.31	-0.02947	0.565771	0.678912
SPNS2	17p13.2	-0.02947	0.565789	0.678912
H3F3AP5	Xp11.22	-0.02943	0.566366	0.679564
L1TD1	1p31.3	-0.02942	0.566433	0.679604
ECT2L	6q24.1	-0.02942	0.566517	0.679609
NIN	14q22.1	-0.02942	0.566538	0.679609
SLC22A8	11q12.3	0.029412	0.566588	0.679609
OR2AT4	11q13.4	-0.02941	0.566619	0.679609
MAPK6	15q21.2	-0.02941	0.566641	0.679609
IRF2BP2	1q42.3	0.029403	0.566703	0.679609
CD300LD	17q25.1	-0.0294	0.566704	0.679609
ISG20	15q26.1	-0.0294	0.566715	0.679609
UGT2B28	4q13.2	-0.0294	0.566742	0.679609

MTG2	20q13.33	0.029384	0.566948	0.679814
TIMM9	14q23.1	-0.02938	0.56703	0.679872
CCDC27	1p36.32	-0.02937	0.567078	0.679889
REG3G	2p12	-0.02935	0.567399	0.680233
LRRC24	8q24.3	0.029341	0.567521	0.680337
RNASEL	1q25.3	-0.02934	0.567553	0.680337
POLR2A	17p13.1	0.029325	0.567732	0.680511
RNF216P1	7p22.1	-0.0293	0.568025	0.680821
RNH1	11p15.5	-0.0293	0.568096	0.680866
KRTAP9-2	17q21.2	0.029292	0.568167	0.68091
HPS4	22q12.1	-0.02928	0.568338	0.681074
MCCD1	6p21.33	0.029275	0.568391	0.681096
KLF6	10p15.2	-0.02927	0.568483	0.681163
TOP1	20q12	0.029266	0.568515	0.681163
CD27-AS1	12p13.31	-0.02925	0.568685	0.681327
GSKIP	14q32.2	-0.02925	0.568768	0.681385
CDH1	16q22.1	-0.02924	0.568836	0.681426
SPHAR	1q42.13	-0.02923	0.569007	0.681549
FOCAD	9p21.3	-0.02923	0.569007	0.681549
SDR42E1	16q23.3	-0.02922	0.569127	0.681581
RASA4	7q22.1	-0.02922	0.569184	0.681581
NCOR2	12q24.31	0.029215	0.569184	0.681581
BMP10	2p13.3	-0.02921	0.569195	0.681581
SCRT1	8q24.3	0.029212	0.569227	0.681581
SNHG8	4q26	-0.02921	0.569238	0.681581
FOXG1	14q12	0.029208	0.569281	0.681592
CORO1A	16p11.2	-0.0292	0.569437	0.681729
CYP2E1	10q26.3	0.029194	0.569464	0.681729
ACOX2	3p14.3	-0.02919	0.56952	0.681742
SPATA16	3q26.31	0.029186	0.569564	0.681742
FAM186B	12q13.12	-0.02919	0.569576	0.681742
ABCC8	11p15.1	-0.02918	0.569684	0.68183
DEFA1B	8p23.1	-0.02917	0.569782	0.681907
LEAP2	5q31.1	0.02916	0.569914	0.682024
GAB4	22q11.1	-0.02915	0.570021	0.682111
ITGB1BP1	2p25.1	-0.02915	0.570064	0.682121
PELI1	2p14	-0.02913	0.5703	0.682364
EIF3I	1p35.2	0.029124	0.570394	0.682435
OAZ1	19p13.3	0.029121	0.570431	0.682439
PGLYRP4	1q21.3	0.029115	0.570502	0.682483
GJB4	1p34.3	-0.0291	0.570762	0.682753
SLC38A10	17q25.3	0.029084	0.570919	0.6829
NAT8	2p13.1	0.029072	0.571082	0.683054
GAGE1	Xp11.23	-0.02907	0.571118	0.683056
BPIFA4P	20q11.21	-0.02904	0.571547	0.683528
TTC3	21q22.13	-0.02903	0.571638	0.683596
ARSG	17q24.2	-0.02903	0.571672	0.683596
ABCE1	4q31.21	0.029016	0.571815	0.683726
ST3GAL4	11q24.2	-0.02901	0.57196	0.683859
NDUFB10	16p13.3	0.028999	0.572043	0.683918
EEF1AKMT1	13q12.11	-0.02899	0.572109	0.683955
PRPF18	10p13	0.02899	0.57216	0.683976
LINC00937	12p13.31	0.028978	0.572318	0.684124
HIGD2A	5q35.2	-0.02897	0.572483	0.68428
DPY19L3	19q13.11	0.028962	0.572542	0.684297
RDH16	12q13.3	0.02896	0.572565	0.684297
HBEGF	5q31.3	-0.02893	0.572897	0.684652
MIR7-3HG	19p13.3	-0.02893	0.572969	0.684698



EEF1D	8q24.3	-0.02892	0.573094	0.684806
PAX8	2q14.1	-0.02891	0.573281	0.684956
MAFF	22q13.1	-0.0289	0.573302	0.684956
CIDEB	14q12	-0.0289	0.573322	0.684956
ZNF197	3p21.31	-0.02889	0.573437	0.685052
DIAPH2	Xq21.33	0.028889	0.573499	0.685063
PPP2R1B	11q23.1	-0.02889	0.573514	0.685063
LINC00575	4q21.22	-0.02887	0.573691	0.685234
LOC642929	9q21.11	0.028869	0.573775	0.685293
GPSM2	1p13.3	-0.02886	0.573908	0.685411
ZNF516	18q23	-0.02885	0.573957	0.685428
INTS4	11q14.1	-0.02885	0.574074	0.685527
PROX2	14q24.3	0.028843	0.574117	0.685538
GLMN	1p22.1	-0.02884	0.574214	0.685613
AGAP2	12q14.1	0.02883	0.574288	0.685651
DLD	7q31.1	-0.02883	0.574314	0.685651
CEACAM3	19q13.2	0.028818	0.574451	0.685773
OR51F2	11p15.4	0.028799	0.574702	0.686032
EXOSC5	19q13.2	0.028795	0.574752	0.686037
TMEM9	1q32.1	-0.02879	0.574806	0.686037
SENP6	6q14.1	0.028791	0.574809	0.686037
MCL1	1q21.2	0.028776	0.575009	0.686235
ELAC2	17p12	0.028762	0.575192	0.686413
CLCA1	1p22.3	-0.02875	0.575332	0.686539
OR2F2	7q35	-0.02871	0.57588	0.687132
MEFV	16p13.3	0.028709	0.575898	0.687132
ZNF226	19q13.31	0.028695	0.57608	0.687308
CYP2R1	11p15.2	-0.02869	0.576124	0.68732
RHPN2	19q13.11	-0.02867	0.57638	0.687585
ACO1	9p21.1	0.02867	0.576415	0.687585
GRB14	2q24.3	-0.02866	0.576522	0.687633
EFHD2	1p36.21	0.028662	0.576524	0.687633
C3ORF62	3p21.31	0.028657	0.576584	0.687663
PRR30	2p23.3	0.028655	0.576621	0.687667
ACADL	2q34	-0.02865	0.576665	0.687678
KALRN	3q21.1-q21.2	0.028638	0.576836	0.687841
FAM170A	5q23.1	-0.02863	0.576971	0.687961
LINGO3	19p13.3	-0.02861	0.577164	0.688151
HIST1H1C	6p22.2	-0.02861	0.577209	0.688163
SLC2A4	17p13.1	0.028599	0.577366	0.68828
SLC6A18	5p15.33	-0.02859	0.577431	0.68828
MRPL30	2q11.2	-0.02859	0.577518	0.68828
LINC00029	20q13.33	-0.02859	0.577519	0.68828
TNFRSF6B	20q13.33	0.028587	0.577524	0.68828
THEG	19p13.3	0.028579	0.577625	0.68828
NF1P2	15q11.2	-0.02857	0.577719	0.68828
LOC100287704	7q11.21	-0.02857	0.577719	0.68828
OR52E6	11p15.4	-0.02857	0.577719	0.68828
OR51B6	11p15.4	-0.02857	0.577719	0.68828
POM121L12	7p12.1	-0.02857	0.577719	0.68828
TNP1	2q35	-0.02857	0.577719	0.68828
NUDT22	11q13.1	0.028569	0.577765	0.688293
CRISP2	6p12.3	-0.02855	0.578012	0.688546
SYTL5	Xp11.4	0.028542	0.578116	0.68863
FCRL4	1q23.1	-0.02853	0.578303	0.688812
MYH9	22q12.3	-0.02851	0.578525	0.689035
MIA	19q13.2	0.028502	0.578653	0.689141
NUMB	14q24.2-q24.3	-0.0285	0.578683	0.689141

FUOM	10q26.3	0.028494	0.578766	0.689199
NDUFB2-AS1	7q34	0.028474	0.57903	0.689441
NAF1	4q32.2	0.028473	0.579039	0.689441
MRPL48	11q13.4	-0.02847	0.57911	0.689458
PANX3	11q24.2	0.028467	0.579122	0.689458
PCDHB1	5q31.3	-0.02845	0.579328	0.689663
POU1F1	3p11.2	-0.02845	0.579412	0.689695
AGMAT	1p36.21	0.028444	0.579423	0.689695
SNORA49	12q24.33	-0.02844	0.57954	0.689793
DLX4	17q21.33	-0.02843	0.57965	0.689882
PON3	7q21.3	0.028425	0.579684	0.689882
TXNDC16	14q22.1	0.028412	0.579857	0.690047
PNMA2	8p21.2	-0.0284	0.580038	0.690221
C12ORF29	12q21.32	-0.02839	0.580093	0.690245
CLPTM1L	5p15.33	0.028379	0.580297	0.690447
FOXL2	3q22.3	-0.02837	0.580472	0.690615
SLC10A7	4q31.22	-0.02836	0.580518	0.690628
ADM2	22q13.33	0.02835	0.580676	0.690775
THAP3	1p36.31	0.028332	0.580926	0.691031
LOC285593	5q35.2	0.028315	0.581152	0.691259
LCE2C	1q21.3	0.028296	0.581409	0.691523
ASTE1	3q22.1	-0.02829	0.581472	0.691558
C12ORF73	12q23.3	0.028272	0.581728	0.691821
NUMA1	11q13.4	0.028257	0.581921	0.69201
COG3	13q14.13	0.028246	0.582074	0.69215
EAF1	3p25.1	0.028224	0.582359	0.692448
SLC4A1	17q21.31	0.028218	0.58245	0.692515
TMEM41B	11p15.4	0.028214	0.582494	0.692526
PRKACA	19p13.12	-0.02821	0.582551	0.692554
OR4N4	15q11.2	0.028205	0.582624	0.692587
MFSD6L	17p13.1	-0.0282	0.582656	0.692587
STARD7-AS1	2q11.2	0.028198	0.582707	0.692587
OR56A4	11p15.4	-0.0282	0.582718	0.692587
MITD1	2q11.2	-0.02819	0.582764	0.692601
DEFB126	20p13	0.028191	0.582805	0.692608
HES2	1p36.31	-0.02817	0.58311	0.69293
RHOF	12q24.31	0.028151	0.583346	0.693142
ZNF264	19q13.43	-0.02815	0.583358	0.693142
OR2T1	1q44	-0.02811	0.583923	0.693773
CTAG2	Xq28	-0.02805	0.584641	0.694525
HDDC3	15q26.1	0.028053	0.584655	0.694525
FHAD1	1p36.21	0.028052	0.58466	0.694525
HNRNPH3	10q21.3	0.02803	0.58496	0.69484
TRIM35	8p21.2	-0.02799	0.58543	0.695319
CDC26	9q32	-0.02799	0.585433	0.695319
GDI2	10p15.1	0.027982	0.585609	0.695487
CCDC73	11p13	-0.02797	0.58578	0.695648
NPVF	7p15.3	0.027963	0.585862	0.695705
LHFPL5	6p21.31	-0.02795	0.586045	0.695881
TNKS	8p23.1	-0.02794	0.586126	0.695936
FOXI1	5q35.1	-0.02792	0.586397	0.696216
CA8	8q12.1	0.027912	0.586536	0.69634
SCYL1	11q13.1	-0.02789	0.586825	0.696641
FAM180B	11p11.2	0.027887	0.586883	0.696669
OR2T35	1q44	0.02788	0.586977	0.696739
NTPCR	1q42.2	0.027841	0.587498	0.697317
OR2T4	1q44	-0.02783	0.587648	0.697416
NKAIN3	8q12.3	-0.02783	0.587651	0.697416

SUMO3	21q22.3	-0.02782	0.587764	0.697508
CORO1C	12q24.11	-0.02781	0.587946	0.697654
ACSBG1	15q25.1	-0.02781	0.587956	0.697654
ANXA2P2	9p13.3	-0.02779	0.588183	0.697851
YEATS4	12q15	-0.02779	0.588192	0.697851
DHRS7C	17p13.1	-0.02778	0.588378	0.698013
LGALS7B	19q13.2	0.027774	0.588398	0.698013
WDR26	1q42.11-q42.12	0.027769	0.588461	0.698046
TXNL4A	18q23	0.027754	0.588657	0.698237
TRMT6	20p12.3	-0.02775	0.588692	0.698237
CLRN3	10q26.2	0.02774	0.588857	0.698392
CMIP	16q23.2-q23.3	0.027732	0.588955	0.698442
GABPB1	15q21.2	-0.02773	0.588984	0.698442
TDGF1P3	Xq23	-0.02773	0.589016	0.698442
CCDC177	14q24.1	-0.02773	0.589039	0.698442
SLC6A11	3p25.3	-0.0277	0.589424	0.698857
GLRX	5q15	-0.02769	0.589511	0.698884
ERCC3	2q14.3	-0.02769	0.589517	0.698884
BCL10	1p22.3	0.027683	0.589618	0.698925
MECOM	3q26.2	0.027683	0.589621	0.698925
ST3GAL2	16q22.1	-0.02767	0.589832	0.699096
KBTBD8	3p14.1	-0.02767	0.589835	0.699096
ERI3	1p34.1	-0.02765	0.590003	0.699254
OR51L1	11p15.4	0.027643	0.590158	0.699396
ABHD10	3q13.2	-0.02764	0.590226	0.699435
C16ORF58	16p11.2	0.027631	0.590313	0.699438
MAGEB6	Xp21.3	-0.02763	0.590335	0.699438
FEM1C	5q22.3	-0.02763	0.590388	0.699438
FAM41C	1p36.33	0.027625	0.590403	0.699438
ARMT1	6q25.1	-0.02762	0.590403	0.699438
TMEM88B	1p36.33	0.027604	0.590679	0.699719
MCF2L	13q34	-0.0276	0.59071	0.699719
MINDY1	1q21.3	-0.0276	0.590758	0.699734
ZNF157	Xp11.3	-0.02759	0.590908	0.699871
MED9	17p11.2	-0.02758	0.590962	0.699873
GFM2	5q13.3	-0.02758	0.590979	0.699873
PIP5K1P1	6p24.3	-0.02753	0.591742	0.700734
A2ML1	12p13.31	-0.02751	0.591986	0.700982
DNM1P46	15q26.3	-0.02749	0.592153	0.701138
ZNF639	3q26.33	-0.02748	0.592325	0.7013
USP17L6P	4p16.1	0.027479	0.592367	0.701309
C16ORF82	16p12.1	-0.02748	0.592411	0.701319
DHX57	2p22.1	-0.02746	0.59265	0.701541
RBMXL2	11p15.4	0.027456	0.592669	0.701541
CLDN9	16p13.3	-0.02742	0.593097	0.702006
ROS1	6q22.1	0.027416	0.593214	0.702104
C5ORF56	5q31.1	0.027411	0.593277	0.702136
AGO3	1p34.3	0.027406	0.593343	0.702149
SYNE2	14q23.2	0.027405	0.593358	0.702149
FAM102B	1p13.3	0.027395	0.593491	0.702224
CYB561D1	1p13.3	0.027394	0.593506	0.702224
GPCPD1	20p12.3	-0.02739	0.593526	0.702224
SLC2A8	9q33.3	0.027384	0.593648	0.702327
HYAL1	3p21.31	0.027372	0.593811	0.702478
ZNF90	19p12	0.027362	0.593941	0.702591
TGM3	20p13	-0.02736	0.593998	0.702601
EGR4	2p13.2	-0.02736	0.59402	0.702601
C11ORF21	11p15.5	-0.02734	0.594284	0.702871

LINC00923	15q26.2	0.027333	0.594337	0.702893
NPNT	4q24	0.027305	0.594717	0.703263
TIGD2	4q22.1	0.027304	0.59472	0.703263
PCBP2	12q13.13	0.027294	0.594865	0.703386
RIPK1	6p25.2	0.027291	0.594894	0.703386
RBM3	Xp11.23	-0.02729	0.594941	0.703399
APCS	1q23.2	-0.02727	0.595223	0.703692
CHKA	11q13.2	0.027256	0.595377	0.703776
HYOU1	11q23.3	0.027255	0.595386	0.703776
PSENN	19q13.12	-0.02725	0.5954	0.703776
NKX2-8	14q13.3	-0.02725	0.595448	0.703791
NPC1	18q11.2	-0.02724	0.595624	0.703958
SNORA38B	17q24.2	0.027234	0.595668	0.703968
NPL	1q25.3	-0.02723	0.595773	0.70405
CCDC186	10q25.3	-0.02722	0.595898	0.704156
SSR2	1q22	-0.02721	0.595994	0.704228
C17ORF82	17q23.2	-0.02721	0.596043	0.704245
PSMD14	2q24.2	0.027179	0.596415	0.704643
ADGRF4	6p12.3	-0.02717	0.596485	0.704643
PTCH1	9q22.32	-0.02717	0.596485	0.704643
ZIC3	Xq26.3	-0.02716	0.596646	0.704785
FAM181A-AS1	14q32.12	-0.02716	0.596676	0.704785
NUFIP1	13q14.12	-0.02715	0.596817	0.704847
HIST1H2BD	6p22.2	-0.02715	0.596829	0.704847
CT45A2	Xq26.3	-0.02715	0.596853	0.704847
DSPP	4q22.1	0.027145	0.596869	0.704847
HSD17B3	9q22.32	-0.02714	0.596966	0.704873
STEAP3	2q14.2	0.027136	0.596992	0.704873
ANKRD30A	10p11.21	0.027132	0.597044	0.704873
LOC145474	14q24.2	-0.02713	0.597047	0.704873
GET4	7p22.3	-0.02713	0.597067	0.704873
SH3RF1	4q32.3-q33	0.027122	0.597178	0.704962
NLRP10	11p15.4	-0.02711	0.597406	0.705189
MGMT	10q26.3	-0.0271	0.597452	0.705202
SLC22A10	11q12.3	-0.0271	0.597545	0.705271
IRS1	2q36.3	-0.02709	0.597662	0.705367
ACSM6	10q23.33	0.027056	0.598083	0.705823
GGTLC1	20p11.21	-0.02704	0.598257	0.705986
FUT5	19p13.3	0.027038	0.598322	0.706022
LINC02145	5p15.31	-0.02702	0.598577	0.70628
VPS26B	11q25	0.027013	0.598658	0.706335
RPLP0	12q24.23	-0.027	0.598824	0.706409
LINC00160	21q22.12	0.027	0.598839	0.706409
GPR55	2q37.1	-0.027	0.598853	0.706409
LZTS2	10q24.31	-0.027	0.598862	0.706409
CDKAL1	6p22.3	-0.02699	0.599002	0.706532
RAD51B	14q24.1	-0.02698	0.599081	0.706584
ITLN2	1q23.3	0.026979	0.599126	0.706595
PAQR8	6p12.2	0.026959	0.599396	0.706872
PITPNB	22q12.1	0.026949	0.599521	0.706978
RNF135	17q11.2	-0.02694	0.59962	0.707053
GPR25	1q32.1	0.026928	0.599817	0.707203
SPAM1	7q31.32	0.026927	0.599818	0.707203
PPP1R15A	19q13.33	0.026885	0.600391	0.707823
TP53TG5	20q13.12	-0.02688	0.600414	0.707823
DUSP15	20q11.21	0.026873	0.600557	0.70795
HOXC12	12q13.13	0.026854	0.600814	0.708211
WDFY2	13q14.3	0.026845	0.600942	0.70832

MYBPH	1q32.1	-0.02683	0.601148	0.708521
MYH15	3q13.13	0.026813	0.601366	0.708736
CCDC144NL	17p11.2	-0.02681	0.601458	0.708803
LENG1	19q13.42	-0.02679	0.601646	0.708983
STXBP5L	3q13.33	-0.02679	0.601731	0.709041
KARS	16q23.1	0.02678	0.601819	0.709075
EFR3B	2p23.3	-0.02678	0.60183	0.709075
SERPINA12	14q32.13	-0.02677	0.601971	0.709199
C12ORF76	12q24.11	-0.02676	0.602041	0.709239
ACSM1	16p12.3	-0.02675	0.602238	0.709395
LINC01142	1q24.2	-0.02675	0.602244	0.709395
XRCC6P5	Xq22.1	0.026728	0.60253	0.709678
BRPF3	6p21.31	0.026726	0.602555	0.709678
C11ORF40	11p15.4	0.026714	0.602718	0.709828
KLK6	19q13.41	-0.02671	0.602774	0.709853
DEXI	16p13.13	0.026707	0.602809	0.709853
OGDH	7p13	0.026695	0.602973	0.710004
IL2ORB	3q22.3	0.026677	0.603217	0.710241
FAM234A	16p13.3	-0.02667	0.603245	0.710241
TCP10L2	6q27	-0.02667	0.603328	0.710297
ATG2B	14q32.2	-0.02666	0.603409	0.71035
KRT6A	12q13.13	-0.02665	0.603586	0.710516
UBE3D	6q14.1	0.026647	0.603626	0.710521
LARS	5q32	-0.02663	0.603886	0.710772
SPINT2	19q13.2	0.026626	0.603909	0.710772
ANGPTL5	11q22.1	-0.02661	0.604177	0.711045
MOGAT2	11q13.5	-0.02657	0.604701	0.711601
TOMM22	22q13.1	-0.02657	0.60472	0.711601
MBLAC1	7q22.1	-0.02656	0.604763	0.711609
GJD2	15q14	-0.02655	0.604879	0.711703
BCORL1	Xq26.1	0.026544	0.605031	0.711819
ID2	2p25.1	-0.02654	0.605048	0.711819
ARL8A	1q32.1	-0.02653	0.605244	0.712008
SCGB1D2	11q12.3	0.026521	0.605341	0.71208
SERINC2	1p35.2	-0.02651	0.605555	0.712252
BCL9L	11q23.3	-0.0265	0.605558	0.712252
PIN1P1	1p31.1	0.026496	0.605675	0.712347
PRSS38	1q42.13	0.026477	0.605935	0.712595
FOLH1	11p11.12	-0.02648	0.605956	0.712595
METTL22	16p13.2	0.026466	0.606088	0.712637
KIFC3	16q21	-0.02646	0.606112	0.712637
GEMIN2	14q21.1	0.026463	0.606126	0.712637
CENPB	20p13	0.026459	0.606176	0.712637
EPHA8	1p36.12	-0.02646	0.606181	0.712637
ADAM5	8p11.22	-0.02646	0.606206	0.712637
MED30	8q24.11	-0.02645	0.606317	0.712726
IL1RN	2q14.1	0.026435	0.60651	0.712911
CPO	2q33.3	0.026431	0.606562	0.71293
LMTK3	19q13.33	0.026421	0.606701	0.713052
ULK1	12q24.33	-0.0264	0.606933	0.713282
SRC	20q11.23	0.026393	0.607085	0.71342
RBM15B	3p21.2	0.026383	0.607211	0.713526
ST5	11p15.4	-0.02638	0.607255	0.713536
PASD1	Xq28	0.026376	0.607311	0.713559
NPY6R	5q31.2	0.026372	0.607371	0.713561
DDX3Y	Yq11.221	-0.02637	0.607384	0.713561
ZNF558	19p13.2	-0.02636	0.607499	0.713654
RAB1B	11q13.2	0.026356	0.607587	0.713716

ZNF792	19q13.11	0.026353	0.607625	0.713719
COBL	7p12.1	-0.02635	0.607672	0.713732
ALDH6A1	14q24.3	-0.02634	0.607789	0.713828
OR6K3	1q23.1	-0.02633	0.607937	0.71396
NDUFB9	8q24.13	-0.02632	0.608068	0.714058
GPRIN3	4q22.1	0.026318	0.608106	0.714058
CMTM2	16q21	0.026316	0.608128	0.714058
TAAR2	6q23.2	0.026289	0.608502	0.714455
DUSP16	12p13.2	-0.02627	0.608726	0.714677
CD44	11p13	0.026269	0.608767	0.714683
KLHL42	12p11.22	-0.02625	0.609034	0.714955
SSX4	Xp11.23	0.026246	0.60909	0.714978
OSBPL2	20q13.33	0.026234	0.609243	0.715081
IL9R	Xq28 and Yq12	0.026234	0.609249	0.715081
FAM71B	5q33.3	-0.0262	0.609679	0.715544
NT5C3A	7p14.3	0.0262	0.609716	0.715545
LRRC71	1q23.1	0.026191	0.609834	0.715642
NECTIN3	3q13.13	-0.02618	0.610051	0.715822
C1ORF68	1q21.3	-0.02617	0.610118	0.715822
NSRP1	17q11.2	-0.02617	0.610172	0.715822
ZBTB7C	18q21.1	0.026166	0.610177	0.715822
KRTAP4-7	17q21.2	-0.02617	0.610186	0.715822
ANGPTL6	19p13.2	-0.02616	0.610202	0.715822
PRDM14	8q13.3	0.026158	0.61028	0.715871
CCT7	2p13.2	0.026147	0.61043	0.715978
C12ORF10	12q13.13	-0.02615	0.610451	0.715978
KRTAP5-6	11p15.5	0.026144	0.610478	0.715978
ATF6	1q23.3	-0.02614	0.610545	0.716015
KRT77	12q13.13	-0.02613	0.610731	0.716191
VEGFD	Xp22.2	-0.02611	0.610923	0.716374
TSGA10IP	11q13.1	-0.02609	0.611163	0.716613
FIGLA	2p13.3	-0.02608	0.61139	0.716838
ZNF669	1q44	0.026073	0.611454	0.716871
OPHN1	Xq12	-0.02605	0.611725	0.717146
TRIM38	6p22.2	0.026031	0.612022	0.717453
NANP	20p11.21	-0.02602	0.61219	0.717607
MIR31HG	9p21.3	-0.02602	0.612239	0.717623
SMIM12	1p34.3	-0.026	0.612499	0.717885
MRPS10	6p21.1	0.025991	0.612564	0.717885
ERCC6	10q11.23	-0.02599	0.61257	0.717885
RPL18A	19p13.11	-0.02598	0.612676	0.717967
IFITM5	11p15.5	0.025971	0.61284	0.718083
ZNF557	19p13.2	0.025971	0.612846	0.718083
COL17A1	10q25.1	0.025963	0.612955	0.718169
LPAR5	12p13.31	0.025953	0.613085	0.718279
EEF2	19p13.3	0.025944	0.613212	0.718385
SLC35G3	17q12	0.025896	0.613875	0.71912
IPO7	11p15.4	0.025888	0.613975	0.719195
C4ORF50	4p16.1	-0.02588	0.614061	0.719209
OR1J2	9q33.2	-0.02588	0.61408	0.719209
TUBBP6	7p11.2	0.02588	0.614094	0.719209
LINC00113	21q21.3	-0.02587	0.614178	0.719251
VWA3A	16p12.2	0.025871	0.614209	0.719251
SLC5A8	12q23.1-q23.2	-0.02587	0.614238	0.719251
KCNV1	8q23.2	-0.02585	0.614442	0.719448
NUP88	17p13.2	0.025844	0.614579	0.719554
PHGR1	15q15.1	0.025841	0.614624	0.719554
CEBPA	19q13.11	-0.02584	0.61465	0.719554

GUCA2B	1p34.2	-0.02584	0.614677	0.719554
RPH3AL	17p13.3	-0.02583	0.614721	0.719564
PWAR4	15q11.2	-0.02583	0.614761	0.719568
FAM71E1	19q13.33	-0.02582	0.614851	0.719632
DAW1	2q36.3	-0.02581	0.6151	0.719881
ARMC8	3q22.3	-0.02579	0.615255	0.71999
HEATR5B	2p22.2	-0.02579	0.615388	0.71999
KIF2B	17q22	-0.02578	0.615396	0.71999
SPANXN1	Xq27.3	0.025785	0.615396	0.71999
OR6Q1	11q12.1	-0.02578	0.615396	0.71999
ZCCHC9	5q14.1	-0.02578	0.615426	0.71999
SLC24A5	15q21.1	-0.02578	0.615445	0.71999
FRG2DP	16p11.1	0.025742	0.615986	0.720581
CFC1B	2q21.1	0.025721	0.616268	0.720869
PRR35	16p13.3	-0.02571	0.616383	0.720952
MMP25	16p13.3	0.02571	0.616415	0.720952
UGT2A1	4q13.3	-0.02571	0.616447	0.720952
IGF2R	6q25.3	-0.0257	0.616551	0.721032
TMC2	20p13	-0.02567	0.616923	0.72142
MRPL44	2q36.1	-0.02567	0.616956	0.72142
FOXJ1	17q25.1	-0.02566	0.617074	0.721492
SP6	17q21.32	0.025661	0.617088	0.721492
MYBPC1	12q23.2	0.025658	0.617129	0.721497
MGC2889	3q29	0.025646	0.617297	0.721652
LCE1A	1q21.3	0.025588	0.618095	0.722516
EXOC3L2	19q13.32	-0.02559	0.618114	0.722516
OR13H1	Xq26.2	0.025584	0.618145	0.722516
KRT33A	17q21.2	-0.02556	0.618414	0.722788
DNAJB12	10q22.1	0.025551	0.618605	0.72293
LRATD2	8q24.21	0.02555	0.618608	0.72293
RBFA	18q23	0.025535	0.618815	0.72313
HNF4A	20q13.12	-0.02553	0.618945	0.723215
TMPRSS11D	4q13.2	-0.02552	0.61896	0.723215
KRT19	17q21.2	0.025503	0.619259	0.723517
CDKN2A-DT	9p21.3	-0.0255	0.61929	0.723517
RPS26P11	Xq13.1	0.025471	0.619696	0.723949
MREG	2q35	-0.02544	0.620093	0.724371
SPEF2	5p13.2	0.025431	0.62025	0.724512
TRIM2	4q31.3	-0.02542	0.620366	0.724604
SARNP	12q13.2	-0.02538	0.620958	0.725254
PRKCA	17q24.2	0.025345	0.621429	0.72576
POU3F3	2q12.1	0.025343	0.621464	0.72576
ZNF480	19q13.41	0.025335	0.621577	0.72585
KIR3DL3	19q13.42	0.025326	0.6217	0.725951
KIAA1549L	11p13	0.025314	0.621865	0.726101
KRT28	17q21.2	-0.02529	0.622254	0.726513
PARS2	1p32.3	-0.02523	0.622968	0.727243
ZNF442	19p13.2	-0.02523	0.623005	0.727243
ZNF552	19q13.43	-0.02523	0.623023	0.727243
SLC35A1	6q15	-0.02523	0.623024	0.727243
ODF3L2	19p13.3	0.025225	0.623089	0.727276
SLC8B1	12q24.13	-0.02522	0.623131	0.727283
MBL2	10q21.1	-0.02521	0.623297	0.727406
CLCN7	16p13.3	0.025209	0.623309	0.727406
DNAJC14	12q13.2	-0.0252	0.623493	0.727578
FUT8	14q23.3	-0.02514	0.624235	0.728377
RBMXL3	Xq23	-0.02514	0.624308	0.728377
UTY	Yq11.221	-0.02514	0.62432	0.728377

CCDC59	12q21.31	-0.02513	0.624339	0.728377
UBIAD1	1p36.22	-0.02513	0.624393	0.728377
DNAJA1	9p21.1	-0.02513	0.624396	0.728377
PDZD7	10q24.31	-0.02512	0.624468	0.728419
FGF21	19q13.33	0.025119	0.624542	0.728463
ATAD3C	1p36.33	-0.02511	0.624667	0.728566
UBE4B	1p36.22	0.025107	0.624714	0.728578
AKAP11	13q14.11	0.025059	0.625379	0.729311
EIF1AX	Xp22.12	-0.02503	0.625834	0.729798
USP3	15q22.31	0.025023	0.625869	0.729798
LSM14A	19q13.11	-0.02499	0.626384	0.730356
MAPKAP1	9q33.3	-0.02495	0.626818	0.730819
SIM1	6q16.3	0.024951	0.626865	0.730832
PRDX3	10q26.11	-0.02494	0.627032	0.730984
HELZ	17q24.2	-0.02493	0.627109	0.73103
ABRAXAS2	10q26.13	-0.02493	0.627163	0.73103
IL1F10	2q14.1	-0.02493	0.627181	0.73103
FUT10	8p12	-0.02492	0.627246	0.731063
FAM71F1	7q32.1	0.024909	0.627452	0.731261
WDR20	14q32.31	0.024903	0.627535	0.731303
SP5	2q31.1	0.024901	0.627562	0.731303
AKR1C6P	10p15.1	0.024891	0.627699	0.731388
CCND2	12p13.32	0.02489	0.627708	0.731388
GP2	16p12.3	0.024884	0.627789	0.731417
ACAD8	11q25	-0.02488	0.627806	0.731417
SATL1	Xq21.1	-0.02488	0.627862	0.731441
RFX7	15q21.3	-0.02487	0.627931	0.731443
CNBD1	8q21.3	0.024872	0.627958	0.731443
RCAN3	1p36.11	0.024871	0.627974	0.731443
KRTAP27-1	21q22.11	0.024855	0.62819	0.731652
MLYCD	16q23.3	-0.02484	0.628434	0.731894
MRPS31	13q14.11	-0.02483	0.628502	0.731927
EIF4A1	17p13.1	-0.02483	0.628535	0.731927
LL22NC03-63E9.3	22q11.22	-0.02481	0.628761	0.732147
FOXC1	6p25.3	0.024806	0.628878	0.732202
SST	3q27.3	-0.0248	0.628923	0.732202
LOR	1q21.3	-0.0248	0.628927	0.732202
AMOT	Xq23	0.024798	0.628979	0.732202
PRKCZ	1p36.33	0.024797	0.628991	0.732202
LINC01278	Xq11.1	-0.02479	0.629094	0.732279
TPD52L1	6q22.31	-0.02478	0.629292	0.732442
RABGAP1	9q33.2-q33.3	-0.02477	0.629307	0.732442
WSB1	17q11.1	0.024765	0.629435	0.732548
THOC7	3p14.1	0.024759	0.629527	0.732582
HPVC1	7p11.2	-0.02476	0.629537	0.732582
CREB3L3	19p13.3	0.024755	0.629573	0.732582
ZNF391	6p22.1	-0.02474	0.629804	0.732808
PADI1	1p36.13	0.024727	0.629962	0.732949
KLF4	9q31.2	0.024724	0.630001	0.732952
TMEM41A	3q27.2	-0.02472	0.630049	0.732965
MOG	6p22.1	-0.02471	0.630235	0.733139
FUT6	19p13.3	0.024702	0.630308	0.733181
MYCBPAP	17q21.33	-0.02469	0.630496	0.733296
CRHR2	7p14.3	-0.02469	0.630507	0.733296
SBSPON	8q21.11	0.024687	0.630517	0.733296
ERLIN1	10q24.31	0.024684	0.630565	0.733309
PTPN7	1q32.1	-0.02467	0.630708	0.733418
ERO1A	14q22.1	-0.02467	0.630732	0.733418



VIPR1	3p22.1	0.024662	0.630869	0.733535
ULBP3	6q25.1	-0.02466	0.630925	0.733558
IFI27L1	14q32.12	0.024649	0.631042	0.733651
AADACL3	1p36.21	-0.02463	0.631267	0.73387
ZNF534	19q13.41	-0.02462	0.631462	0.734055
C15ORF56	15q15.1	-0.02461	0.631537	0.734099
FAM138D	12p13.33	0.024607	0.631627	0.734125
ZSCAN16	6p22.1	0.024607	0.631633	0.734125
CSHL1	17q23.3	0.024604	0.631676	0.734133
ASPG	14q32.33	-0.02458	0.631942	0.734336
TMEM189	20q13.13	0.024582	0.631973	0.734336
MPZL1	1q24.2	0.02458	0.632003	0.734336
SYT5	19q13.42 11p	0.024578	0.632028	0.734336
DGCR6	22q11.21 22q11	-0.02458	0.632044	0.734336
SCNN1A	12p13.31	0.024575	0.632071	0.734336
UQCR11	19p13.3	0.024566	0.6322	0.734443
KDM6A	Xp11.3	-0.02456	0.632244	0.734452
TMEM179	14q32.33	-0.02455	0.632399	0.734589
KLF1	19p13.13	0.024532	0.632675	0.734867
BCKDK	16p11.2	0.024527	0.63274	0.7349
LMOD3	3p14.1	0.024516	0.632889	0.73503
GFM1	3q25.32	0.0245	0.633113	0.735249
SSH2	17q11.2	0.024495	0.633185	0.735289
GPKOW	Xp11.23	0.024487	0.63329	0.735368
C1ORF146	1p22.1	-0.02448	0.63333	0.735373
PCNAP1	4q23	-0.02447	0.633494	0.735521
SLC48A1	12q13.11	0.024447	0.633848	0.735889
TIMM21	18q22.3	0.024441	0.633932	0.735943
OR5K1	3q11.2	-0.02443	0.634024	0.736008
OR1J4	9q33.2	0.024428	0.634114	0.736069
LUZP1	1p36.12	0.024403	0.634458	0.736401
PRH1	12p13.2	0.024402	0.634473	0.736401
FDX2	19p13.2	-0.02439	0.634659	0.736573
INAFM1	19q13.32	-0.02438	0.634718	0.7366
ULBP2	6q25.1	0.024376	0.634829	0.736686
ALDOB	9q31.1	-0.02436	0.635104	0.736951
MAGI3	1p13.2	0.024355	0.635131	0.736951
TDRD3	13q21.2	-0.02435	0.635227	0.737019
HIST2H2BA	1p11.2	0.02433	0.635474	0.737264
LINGO4	1q21.3	0.024324	0.63556	0.73732
SELENBP1	1q21.3	0.024305	0.635816	0.737575
LINC01634	22q11.21	-0.02427	0.636286	0.738078
SEC61B	9q22.33	0.024246	0.636639	0.738444
FGF4	11q13.3	0.024218	0.637026	0.738849
CYHR1	8q24.3	-0.02419	0.637382	0.739177
SNX5	20p11.23	-0.02419	0.637382	0.739177
LOC401127	4p14	-0.02418	0.637505	0.739271
C2ORF69	2q33.1	-0.02418	0.637577	0.739271
RAC1	7p22.1	0.024178	0.637586	0.739271
RPL29P2	17p13.1	-0.02418	0.63761	0.739271
GPR63	6q16.1	0.024171	0.637683	0.739312
LMO7	13q22.2	0.024158	0.637861	0.739476
ZNF469	16q24.2	-0.02415	0.637978	0.739563
B4GALNT4	11p15.5	0.024148	0.63801	0.739563
OR4C15	11q11	0.02413	0.638256	0.739795
DHRS11	17q12	0.024128	0.638284	0.739795
MCOLN2	1p22.3	0.024125	0.638323	0.739797
USB1	16q21	0.024122	0.638365	0.739803

IZUMO2	19q13.33	0.024116	0.638452	0.739861
KRT3	12q13.13	-0.02411	0.6385	0.739874
TUSC7	3q13.31	0.024095	0.638745	0.740114
H1FNT	12q13.11	0.02408	0.638946	0.740305
KIR3DL2	19q13.42	-0.02407	0.639022	0.740306
PTP4A2	1p35.2	0.024075	0.639028	0.740306
SF3A1	22q12.2	-0.02407	0.639058	0.740306
LIMK1	7q11.23	0.024062	0.639199	0.740426
WDR93	15q26.1	-0.02406	0.639254	0.740448
TRAM2	6p12.2	-0.02404	0.639456	0.740615
LHX3	9q34.3	0.024043	0.639472	0.740615
CREB3L2	7q33	0.024038	0.63954	0.740651
C5ORF22	5p13.3	-0.02403	0.639648	0.740733
BCL11A	2p16.1	-0.02402	0.63975	0.740808
SPATC1	8q24.3	0.024012	0.639894	0.740909
SPRR2A	1q21.3	0.024011	0.639911	0.740909
PARP12	7q34	-0.024	0.640036	0.74101
G2E3	14q12	0.023991	0.640186	0.741057
LRFN3	19q13.12	0.023988	0.640234	0.741057
SLC30A8	8q24.11	-0.02399	0.640244	0.741057
LINC02591	1q21.1	-0.02399	0.640246	0.741057
LOC440896	9p11.2	0.023986	0.640261	0.741057
LRIT2	10q23.1	-0.02396	0.64058	0.741383
MSX1	4p16.2	0.02395	0.640768	0.741558
OTC	Xp11.4	-0.02394	0.640883	0.741648
OR11H1	22q11.1	0.023926	0.641096	0.741852
COCH	14q12	-0.0239	0.641456	0.742225
CFAP100	3q21.3	-0.0239	0.641498	0.742231
HSD3B2	1p12	-0.02389	0.641574	0.742277
ARPC1A	7q22.1	0.023887	0.641645	0.742315
LCMT2	15q15.3	0.023882	0.641714	0.742337
TMC4	19q13.42	-0.02388	0.641738	0.742337
ZSCAN5B	19q13.43	-0.02388	0.641783	0.742347
EIF3M	11p13	-0.02387	0.641903	0.742443
ZNF44	19p13.2	-0.02385	0.642195	0.742737
RPTN	1q21.3	-0.02384	0.642235	0.742741
LRCH3	3q29	-0.02383	0.642378	0.742863
USP17L2	8p23.1	-0.02383	0.642508	0.742906
PUM1	1p35.2	0.023823	0.642536	0.742906
CYP2A6	19q13.2	-0.02382	0.642587	0.742906
CCDC183	9q34.3	0.023819	0.642597	0.742906
SOGA1	20q11.23	0.023818	0.6426	0.742906
SHOX	Xp22.33 and Yp11.2	-0.02381	0.642658	0.742929
ACTL10	20q11.22	-0.0238	0.642823	0.743077
C4ORF45	4q32.1	0.023797	0.642901	0.743125
TSIX	Xq13.2	-0.02379	0.64294	0.743126
TAB1	22q13.1	0.023785	0.643072	0.743204
CHTF8	16q22.1	-0.02378	0.643081	0.743204
ATP1B3	3q23	-0.02378	0.643157	0.743248
ABCA10	17q24.3	0.023761	0.643398	0.743485
RPL13P5	12p13.31	-0.02373	0.643881	0.743985
ENOPH1	4q21.22	0.023725	0.643905	0.743985
CSN3	4q13.3	0.023694	0.644335	0.744438
DEFB4A	8p23.1	-0.02367	0.644645	0.744754
TRMT10C	3q12.3	0.023652	0.644926	0.745035
ULK4P2	15q13.2	-0.02364	0.645026	0.745069
DEPDC7	11p13	-0.02364	0.645037	0.745069
SLC25A31	4q28.1	-0.02364	0.645067	0.745069

SPATA31A6	9p11.2	-0.02363	0.64518	0.745157
ZP4	1q43	-0.02362	0.645335	0.745293
OR2L2	1q44	-0.02361	0.645445	0.745378
SNORA84	9q22.31	0.023594	0.645733	0.745667
CRYGB	2q33.3	-0.02359	0.645836	0.7457
PRR13	12q13.13	0.023585	0.645868	0.7457
RAB5IF	20q11.23	-0.02358	0.645874	0.7457
ANKRD13A	12q24.11	0.023569	0.646088	0.745904
IRS2	13q34	-0.02356	0.646172	0.745959
NAA38	17p13.1	-0.02355	0.646365	0.746138
RNF32	7q36.3	0.023542	0.646465	0.746185
TTC9C	11q12.3	0.023541	0.64648	0.746185
RGL4	22q11.23	0.023534	0.646577	0.746254
RPL6	12q24.13	-0.02351	0.64698	0.74665
UPP1	7p12.3	-0.0235	0.646995	0.74665
SPINK2	4q12	-0.02348	0.647355	0.746999
PRKAR2A	3p21.31	0.023477	0.647372	0.746999
P4HB	17q25.3	-0.02344	0.647884	0.747548
ANGPTL4	19p13.2	0.023431	0.64802	0.747661
ZP2	16p12.3-p12.2	0.023426	0.648088	0.747682
ABCG4	11q23.3	-0.02342	0.648113	0.747682
SLC25A5-AS1	Xq24	-0.02341	0.648352	0.747915
ACTRT1	Xq25	-0.0234	0.648464	0.747994
GPC4	Xq26.2	-0.0234	0.648497	0.747994
NMBR	6q24.1	0.023394	0.648533	0.747994
ZC3H12B	Xq11.2-q12	-0.02339	0.648602	0.748031
GGT3P	22q11.21	-0.02337	0.648862	0.748287
OR7E91P	2p13.3	-0.02335	0.649121	0.748543
GIP	17q21.32	-0.02334	0.649277	0.748679
C12ORF66	12q14.2	-0.02333	0.649448	0.748833
EPB41L4A	5q22.1-q22.2	-0.02332	0.649505	0.748856
SLC35A2	Xp11.23	0.023315	0.649647	0.748977
CARNS1	11q13.2	0.023311	0.649704	0.749
ZNF732	4p16.3	0.023307	0.649762	0.749023
IMP3	15q24.2	-0.02329	0.649997	0.749251
IFT27	22q12.3	0.023286	0.650054	0.749259
BANF1	11q13.1	-0.02328	0.650079	0.749259
GPR156	3q13.33	-0.02327	0.650223	0.749382
GKN2	2p13.3	0.023261	0.650402	0.749545
MAP2K3	17p11.2	0.023243	0.65065	0.749749
OR9A4	7q34	0.023243	0.650654	0.749749
NEK3	13q14.3	0.023227	0.650882	0.749969
C5ORF30	5q21.1	0.023221	0.650964	0.75002
ATP1A3	19q13.2	0.023218	0.651006	0.750026
ARL6IP4	12q24.31	-0.0232	0.651193	0.750199
TPRX1	19q13.33	-0.02319	0.651354	0.75034
TMEM187	Xq28	-0.02315	0.651901	0.750927
CCDC140	2q36.1	0.023146	0.65202	0.751021
GAGE2D	Xp11.23	-0.02314	0.65209	0.751058
SCO2	22q13.33	0.023133	0.652197	0.751139
CDC14B	9q22.32-q22.33	0.023117	0.652421	0.751353
SCARNA21	17p13.1	0.023103	0.652622	0.751542
HERC1	15q22.31	0.023097	0.652705	0.751594
PTGES	9q34.11	0.023091	0.652793	0.751639
DOCK3	3p21.2	0.023089	0.652819	0.751639
REEP6	19p13.3	0.023084	0.652884	0.751662
TJP1	15q13.1	0.023082	0.652914	0.751662
FAM86EP	4p16.3	0.023055	0.653292	0.752054

MRPL27	17q21.33	0.023045	0.653434	0.752175
OR8A1	11q24.2	-0.02304	0.653574	0.752292
TRIM33	1p13.2	0.023026	0.653704	0.752398
SPRR1B	1q21.3	0.023012	0.653904	0.752585
INHBE	12q13.3	0.023007	0.65397	0.752618
ATP5PB	1p13.2	-0.023	0.6541	0.752693
OR5T1	11q12.1	-0.023	0.654111	0.752693
UGGT2	13q32.1	-0.02298	0.654337	0.75291
PPP2R2A	8p21.2	-0.02296	0.654567	0.753119
SYCE1	10q26.3	-0.02296	0.654617	0.753119
NDUFA12	12q22	-0.02296	0.654643	0.753119
ACAT1	11q22.3	0.022955	0.654697	0.753119
PRG1	19q13.31	-0.02295	0.654707	0.753119
C9ORF72	9p21.2	-0.02295	0.65478	0.753161
DAZ3	Yq11.23	0.022914	0.655284	0.753617
SLC51B	15q22.31	0.022913	0.655286	0.753617
KLHDC10	7q32.2	0.022912	0.655303	0.753617
CSF3R	1p34.3	-0.02291	0.655327	0.753617
NFKB2	10q24.32	0.022908	0.655367	0.753619
SNORA11E	Xp11.22	-0.0229	0.655436	0.753655
DAZ2	Yq11.223	0.022897	0.655523	0.753712
SPRED3	19q13.2	0.022881	0.655738	0.753916
C17ORF47	17q22	-0.02287	0.655941	0.754107
TTI1	20q11.23	0.022862	0.656006	0.754133
FN3K	17q25.3	0.02286	0.656039	0.754133
TYW1B	7q11.22-q11.23	-0.02284	0.656339	0.754434
HSF2	6q22.31	-0.02283	0.656491	0.754565
SMIM15	5q12.1	-0.02282	0.656609	0.754658
ZNF623	8q24.3	0.022815	0.656676	0.754691
TAS1R2	1p36.13	-0.02281	0.656736	0.754717
AIF1L	9q34.12-q34.13	-0.0228	0.656843	0.754796
TRIM58	1q44	0.022793	0.656986	0.754917
FSCN3	7q32.1	0.02279	0.657023	0.754917
TIFA	4q25	-0.02278	0.657177	0.755024
PLAAT1	3q29	-0.02278	0.657191	0.755024
ITIH6	Xp11.22	-0.02277	0.657259	0.755058
CALHM3	10q24.33	-0.02277	0.657317	0.755081
IFT80	3q25.33	0.022766	0.657365	0.755093
EHF	11p13	-0.02276	0.65751	0.755217
NTSR1	20q13.33	0.022748	0.657616	0.755294
DKFZP434L192	7p11.2	0.022731	0.657854	0.755525
VPS26C	21q22.13	-0.02273	0.657893	0.755526
AP3M1	10q22.2	0.022722	0.657987	0.755591
PSPH	7p11.2	0.022717	0.658053	0.755624
PPIAL4D	1q21.1	0.022713	0.658109	0.755644
FAM47E	4q21.1	0.022702	0.658266	0.755776
MRPL36	5p15.33	0.0227	0.658299	0.755776
HIST1H2BG	6p22.2	0.022683	0.65853	0.755998
H1FOO	3q22.1	0.022677	0.658614	0.756013
GK2	4q21.21	-0.02268	0.658619	0.756013
OGG1	3p25.3	-0.02267	0.65873	0.756098
ARHGAP45	19p13.3	0.022655	0.658931	0.756284
ZNF764	16p11.2	0.022636	0.659192	0.756541
SRP72	4q12	-0.02263	0.659234	0.756546
FLJ36000	17p11.2	0.022626	0.659341	0.756625
ARMC2	6q21	-0.02262	0.65949	0.756699
SYCN	19q13.2	0.022614	0.659509	0.756699
GNG5	1p22.3	-0.02261	0.659553	0.756699

NDUFA2	5q31.3	-0.02261	0.659556	0.756699
RAPGEF6	5q31.1	0.022583	0.659945	0.757053
STK24	13q32.2	-0.02258	0.659967	0.757053
CT45A4	Xq26.3	0.022581	0.659979	0.757053
SNORA74B	5q35.1	0.022574	0.660071	0.757116
TIMM17B	Xp11.23	0.022564	0.660219	0.757233
ENTPD7	10q24.2	-0.02256	0.660277	0.757233
SPAG11A	8p23.1	-0.02256	0.660287	0.757233
SCEL	13q22.3	-0.02256	0.660329	0.757239
KCNK6	19q13.2	0.022548	0.660435	0.757316
MIR1-1HG	20q13.33	0.022542	0.660523	0.757352
RIC1	9p24.1	-0.02254	0.660602	0.757352
GPATCH11	2p22.2	-0.02254	0.660619	0.757352
BPIFB6	20q11.21	0.022532	0.660658	0.757352
VN1R5	1q44	-0.02253	0.660658	0.757352
MET	7q31.2	-0.02253	0.660693	0.757352
LINC00028	20q11.21	-0.02252	0.660772	0.75736
TMTC2	12q21.31	0.022524	0.660775	0.75736
OXLD1	17q25.3	0.022521	0.660818	0.757365
AP2A2	11p15.5	-0.02251	0.660945	0.757468
BTG4	11q23.1	-0.02251	0.661017	0.757507
KIAA1109	4q27	-0.0225	0.661179	0.75765
OR52N2	11p15.4	0.02248	0.661392	0.757805
YTHDF2	1p35.3	0.022478	0.661426	0.757805
SCARNA8	9p22.1	0.022478	0.661429	0.757805
ZNF354A	5q35.3	0.022473	0.661494	0.757837
GHRHR	7p14.3	-0.02246	0.661655	0.757978
SLCO1B7	12p12.2	0.022453	0.661781	0.758056
PRAMEF11	1p36.21	-0.02245	0.661799	0.758056
PTPRD	9p24.1-p23	-0.02243	0.662052	0.75826
CPSF4L	17q25.1	-0.02243	0.662053	0.75826
PRSS58	7q34	-0.02237	0.66297	0.759267
JUNB	19p13.13	-0.02237	0.663008	0.759267
TACO1	17q23.3	0.022353	0.663188	0.759429
EQTN	9p21.2	0.022348	0.66326	0.759452
C6ORF58	6q22.33	-0.02234	0.663315	0.759452
HACE1	6q16.3	-0.02234	0.663322	0.759452
KDM6B	17p13.1	0.022341	0.663367	0.759461
MAU2	19p13.11	0.022328	0.663541	0.759617
LOC153910	6q24.2	-0.02232	0.663605	0.759647
OR8D1	11q24.2	0.02232	0.663662	0.759669
ZNF33B	10q11.21	0.022309	0.663818	0.759775
ZC2HC1C	14q24.3	-0.02231	0.663839	0.759775
NANOGNB	12p13.31	0.022305	0.663869	0.759775
DHRS9	2q31.1	0.02228	0.66422	0.760133
USP32	17q23.1-q23.2	-0.02225	0.664598	0.760522
TASOR	3p14.3	0.022229	0.664942	0.760873
YWHAH	22q12.3	0.022201	0.665341	0.761286
DPY19L2	12q14.2	-0.0222	0.665412	0.761323
C3ORF20	3p25.1	-0.02218	0.665608	0.761464
PPP1R8	1p35.3	-0.02218	0.665625	0.761464
OR4C3	11p11.2	0.02218	0.665649	0.761464
ERAS	Xp11.23	0.022159	0.665934	0.761705
CIDEC	3p25.3	-0.02216	0.665936	0.761705
MRPL35	2p11.2	-0.02216	0.665994	0.761728
SNORA44	1p35.3	-0.02214	0.666144	0.761856
C3ORF84	3p21.31	0.022133	0.666307	0.762
OR2A1	7q35	-0.02213	0.66635	0.762004

SLC25A51P1	6q12	0.022125	0.666426	0.762048
SNORD97	11p15.4	-0.02212	0.666526	0.762088
C15ORF39	15q24.2	0.022117	0.666537	0.762088
SQOR	15q21.1	-0.02211	0.666641	0.762158
WFDC13	20q13.12	0.022107	0.666674	0.762158
ELK1	Xp11.23	0.0221	0.666778	0.762227
GPR31	6q27	-0.0221	0.666811	0.762227
PCYT1A	3q29	0.022084	0.667007	0.762385
LOC285074	2p11.2	-0.02208	0.667043	0.762385
LINC01777	1p36.32	-0.02208	0.667063	0.762385
TTY16	Yp11.2	-0.02207	0.667231	0.762534
ECI1	16p13.3	0.022062	0.667309	0.762579
NSFL1C	20p13	-0.02205	0.667507	0.762756
CCDC144B	17p11.2	-0.02205	0.66754	0.762756
PCAT18	18q11.2	-0.02204	0.667603	0.762784
LOXHD1	18q21.1	-0.02203	0.66771	0.762863
COPRS	17q11.2	-0.02202	0.667855	0.762986
KRT8P41	11p15.4	0.022016	0.667968	0.763071
DUSP21	Xp11.3	-0.02201	0.668104	0.763182
STAB1	3p21.1	-0.022	0.668228	0.76328
VBP1	Xq28	0.021995	0.668267	0.763282
SLURP1	8q24.3	0.021988	0.668368	0.763333
OR10C1	6p22.1	-0.02198	0.66842	0.763333
DPP8	15q22.31	-0.02198	0.668426	0.763333
PP12613	4q27	-0.02198	0.668539	0.763379
SPRR2D	1q21.3	-0.02198	0.668543	0.763379
TFAP2B	6p12.3	0.02197	0.668623	0.763386
ATP5MGL	22q13.2	-0.02197	0.668625	0.763386
PRPS1	Xq22.3	0.021966	0.668683	0.763408
FAM47B	Xp21.1	0.021947	0.668948	0.763668
BCL2L11	2q13	-0.02193	0.669202	0.763888
DNAH7	2q32.3	0.021928	0.669217	0.763888
ZFAT	8q24.22	-0.02191	0.669425	0.764052
FAM222A	12q24.11	0.021912	0.669437	0.764052
IQC�	19p13.11	-0.02188	0.669871	0.764504
C4ORF48	4p16.3	0.021869	0.670052	0.764658
PLA2G4D	15q15.1	-0.02187	0.670083	0.764658
OR8D4	11q24.1	-0.02185	0.670276	0.764835
KRTAP10-7	21q22.3	0.021847	0.670371	0.7649
FAM86B1	8p23.1	0.021819	0.670764	0.765305
GAREM1	18q12.1	0.021816	0.670804	0.765305
KAT6A	8p11.21	-0.02181	0.670841	0.765305
SERPINB4	18q21.33	0.021804	0.670973	0.765381
CTDP1	18q23	0.021801	0.671012	0.765381
ZNF875	19q13.12	0.0218	0.671027	0.765381
WDR5B	3q21.1	-0.0218	0.671061	0.765381
FAM210A	18p11.21	0.021792	0.67114	0.765429
KRT8	12q13.13	0.021786	0.671232	0.76549
DHX35	20q11.23-q12	-0.02178	0.671333	0.765561
SH3YL1	2p25.3	-0.02177	0.671449	0.76565
OR2T5	1q44	-0.02175	0.671733	0.765915
SMIM8	6q15	-0.02175	0.671758	0.765915
FHIT	3p14.2	-0.02173	0.672015	0.766165
GBP3	1p22.2	0.021727	0.672067	0.76618
MYT1L-AS1	2p25.3	-0.02171	0.672256	0.766294
ZXDA	Xp11.21	-0.02171	0.672279	0.766294
USP12	13q12.13	-0.02171	0.672282	0.766294
RAB17	2q37.3	-0.0217	0.672386	0.766369

CTNND1	11q12.1	-0.02169	0.672649	0.766625
CHRND	2q37.1	-0.02167	0.67294	0.766914
CGREF1	2p23.3	0.021663	0.672983	0.766918
NDUFB8	10q24.31	0.021658	0.67305	0.766952
GSDMA	17q21.1	-0.02165	0.673215	0.766993
KRT75	12q13.13	0.021646	0.673218	0.766993
FGF6	12p13.32	-0.02164	0.673239	0.766993
FAM189A1	15q13.1	-0.02164	0.673272	0.766993
ZBED3-AS1	5q13.3	0.021642	0.673281	0.766993
AOX2P	2q33.1	0.021639	0.67332	0.766993
USP32P2	17p11.2	-0.02164	0.673376	0.766993
C17ORF64	17q23.2	0.021634	0.673393	0.766993
NYAP1	7q22.1	0.02162	0.673587	0.767152
ABCD4	14q24.3	-0.02162	0.673609	0.767152
BCAP31	Xq28	-0.02161	0.673687	0.767197
NEMP2	2q32.2	-0.02161	0.67378	0.767233
LY6E-DT	8q24.3	0.021606	0.673795	0.767233
ATP4B	13q34	0.021594	0.673968	0.767386
TRNAU1AP	1p35.3	-0.02159	0.674018	0.767399
GPX5	6p22.1	-0.02158	0.674124	0.767466
SLC5A1	22q12.3	-0.02158	0.674153	0.767466
DPPA3	12p13.31	-0.02158	0.674195	0.76747
FLJ34503	6q21	0.02157	0.6743	0.767546
DNAJC21	5p13.2	-0.02154	0.674793	0.768064
CCDC12	3p21.31	-0.0215	0.675247	0.768519
UBE2U	1p31.3	0.021502	0.67527	0.768519
ASPDH	19q13.33	0.021494	0.675389	0.768611
ADIG	20q11.23	0.021488	0.675465	0.768653
SERAC1	6q25.3	0.021484	0.675526	0.768662
KRT73	12q13.13	0.021483	0.675549	0.768662
CPT2	1p32.3	-0.02148	0.675627	0.768671
ZMYM2	13q12.11	0.021477	0.675633	0.768671
NPBWR2	20q13.33	-0.02147	0.675677	0.768677
CSNK2A3	11p15.4	-0.02147	0.675768	0.768737
COX8C	14q32.12	0.02146	0.675863	0.768787
DDC	7p12.2-p12.1	0.021456	0.675925	0.768787
STK4	20q13.12	0.021453	0.675977	0.768787
ABHD14B	3p21.2	0.021451	0.675992	0.768787
SNORA38	6p21.33	-0.02145	0.676004	0.768787
FLII	17p11.2	-0.02144	0.6761	0.768808
ZNF7	8q24.3	0.021444	0.6761	0.768808
DNAJC1	10p12.31	0.021428	0.676323	0.769014
RC3H2	9q33.2	-0.02143	0.676357	0.769014
BATF	14q24.3	-0.02142	0.676449	0.769075
METAP1	4q23	-0.02141	0.676624	0.76923
OR7D2	19p13.2	-0.0214	0.676735	0.769273
OR6X1	11q24.1	-0.0214	0.676739	0.769273
OMA1	1p32.2-p32.1	-0.02139	0.676864	0.769326
DKK4	8p11.21	-0.02139	0.676866	0.769326
OR1N2	9q33.2	0.021388	0.676901	0.769326
IL24	1q32.1	0.021379	0.677031	0.769383
FGF22	19p13.3	-0.02138	0.677061	0.769383
POLR2J	7q22.1	-0.02138	0.677066	0.769383
TREML5P	6p21.1	-0.02136	0.677269	0.76957
PATE1	11q24.2	-0.02135	0.677464	0.769748
OCM	7p22.1	-0.02133	0.67773	0.770006
LINC00239	14q32.31	-0.02132	0.677815	0.770026
SEN2	3q27.2	-0.02132	0.677824	0.770026

RNF5	6p21.32	-0.02132	0.677892	0.770059
UTP14C	13q14.3	-0.02131	0.678005	0.770144
GNLY	2p11.2	-0.0213	0.678199	0.77032
ATP6V1A	3q13.31	-0.02127	0.678604	0.770712
CHCHD6	3q21.3	0.021266	0.678635	0.770712
GRIN3A	9q31.1	-0.02126	0.678697	0.770712
CARD18	11q22.3	-0.02126	0.678697	0.770712
PDCL3P4	3q12.3	0.021257	0.678761	0.77074
CBR1	21q22.12	-0.02125	0.678816	0.770759
ZKSCAN3	6p22.1	0.021239	0.679028	0.770956
KRTAP5-5	11p15.5	-0.02121	0.679451	0.771353
LINC00620	3p25.1	-0.02121	0.679455	0.771353
LINC00999	10p11.1	0.021203	0.679531	0.771396
WDR66	12q24.31	-0.0212	0.679575	0.771403
CPSF2	14q32.12	0.021191	0.679711	0.771512
ZNF665	19q13.42	-0.02118	0.679831	0.771605
APOBEC1	12p13.31	-0.02117	0.679997	0.77174
APPL1	3p14.3	0.021168	0.680033	0.77174
ACSL1	4q35.1	-0.02116	0.680086	0.77174
KDM5D	Yq11.223	0.021163	0.680104	0.77174
ACTB	7p22.1	0.021155	0.680221	0.771829
PRKCD	3p21.1	-0.02115	0.680273	0.771829
GPAT4	8p11.21	-0.02115	0.680298	0.771829
RPAIN	17p13.2	-0.02115	0.680353	0.771848
OR8H1	11q12.1	0.021139	0.680454	0.771919
IFNA21	9p21.3	0.021131	0.680557	0.771992
IL17D	13q12.11	0.021116	0.680781	0.772153
GMIP	19p13.11	0.021111	0.680845	0.772153
ATF4	22q13.1	-0.02111	0.680861	0.772153
TARS	5p13.3	0.021109	0.680873	0.772153
GMNC	3q28	-0.02111	0.680892	0.772153
CCDC9B	15q15.1	0.021097	0.681054	0.772294
PAK2	3q29	-0.02108	0.681245	0.772466
FOXI3	2p11.2	-0.02107	0.68145	0.772654
ADH7	4q23	0.021062	0.681545	0.772718
MVB12A	19p13.11	-0.02104	0.681845	0.773015
SPATA2L	16q24.3	-0.02104	0.681919	0.773055
NUP54	4q21.1	0.021033	0.681962	0.77306
LIM2	19q13.41	-0.02102	0.682172	0.773254
EGLN1	1q42.2	0.021006	0.68235	0.773374
PYDC2	3q28	-0.02101	0.682355	0.773374
MAGEC3	Xq27.2	0.02099	0.682585	0.77356
SENP3	17p13.1	0.020989	0.682596	0.77356
PSG9	19q13.31	-0.02097	0.682815	0.773764
PRR15L	17q21.32	-0.02096	0.683015	0.773947
ARFGAP2	11p11.2	-0.02094	0.683292	0.774217
FOXD1	5q13.2	0.020929	0.683451	0.77435
DDIT3	12q13.3	0.020927	0.683486	0.77435
FAAP20	1p36.33	0.020911	0.683714	0.774564
PIP4K2C	12q13.3	-0.02089	0.68401	0.774855
OR6N1	1q23.1	-0.02088	0.684126	0.774943
MFSD4A-AS1	1q32.1	-0.02087	0.684364	0.775129
LPIN2	18p11.31	-0.02087	0.684367	0.775129
FFAR1	19q13.12	0.020848	0.684617	0.775368
PRSS55	8p23.1	-0.02084	0.684677	0.775369
POTEE	2q21.1	-0.02084	0.684702	0.775369
RNF19B	1p35.1	-0.02084	0.684734	0.775369
GPALPP1	13q14.12	-0.02083	0.684934	0.775511



ZNF618	9q32	0.020825	0.684938	0.775511
ZNF30	19q13.11	-0.02082	0.685049	0.775593
SLC9A6	Xq26.3	0.02081	0.685159	0.775675
JMJD6	17q25.1	-0.02079	0.685459	0.77597
FBXO31	16q24.2	-0.02078	0.685656	0.776149
C9ORF78	9q34.11	-0.02075	0.68598	0.776442
ANKDD1A	15q22.31	-0.02075	0.685992	0.776442
MRPS18B	6p21.33	-0.02073	0.686291	0.776737
MGST1	12p12.3	0.02072	0.686446	0.776867
SP9	2q31.1	0.020705	0.686665	0.777072
PTPRG	3p14.2	0.020699	0.686746	0.77712
HIST1H2AD	6p22.2	0.020679	0.687036	0.777404
SLC66A2	18q23	0.020676	0.687075	0.777404
CETN1	18p11.32	-0.02067	0.687136	0.77743
GNAS-AS1	20q13.32	-0.02065	0.687453	0.777744
SEC23IP	10q26.11-q26.12	0.020643	0.687554	0.777814
UBTFL1	11q14.3	-0.02064	0.687658	0.77787
ATP13A5	3q29	0.020634	0.687681	0.77787
PLA2G12A	4q25	-0.02063	0.687742	0.777895
LINC00661	19p13.12	-0.02062	0.687917	0.778049
HEXIM1	17q21.31	0.02061	0.688023	0.778112
TSTD1	1q23.3	-0.02061	0.688051	0.778112
SPDYE4	17p13.1	0.020569	0.688609	0.778699
PPP1R7	2q37.3	-0.02056	0.688693	0.778751
DBH	9q34.2	-0.02054	0.68909	0.779111
NOL11	17q24.2	0.020534	0.68911	0.779111
HERC4	10q21.3	0.020533	0.689129	0.779111
LOC100130449	2q37.3	-0.02052	0.689313	0.779276
IRX5	16q12.2	-0.0205	0.689574	0.779527
SNX25	4q35.1	-0.02048	0.689833	0.779767
ZNF827	4q31.21-q31.22	-0.02048	0.689864	0.779767
NUDCD2	5q34	-0.02048	0.68992	0.779786
SLMAP	3p14.3	-0.02047	0.689982	0.779812
TMPRSS15	21q21.1	-0.02046	0.690221	0.780038
NLGN4Y	Yq11.221	-0.02045	0.690277	0.780057
CELF5	19p13.3	0.020442	0.690428	0.780184
ARMH3	10q24.32	-0.02043	0.690569	0.780299
FAM222A-AS1	12q24.11	0.020429	0.690626	0.780316
RTL8A	Xq26.3	-0.02043	0.690662	0.780316
FOXD4L5	9q21.11	0.020404	0.690977	0.780628
PTPMT1	11p11.2	-0.02039	0.691243	0.780885
BLCAP	20q11.23	0.020379	0.691336	0.780946
SLC34A2	4p15.2	-0.02036	0.691544	0.781137
LINC01845	5q33.3	0.020359	0.691619	0.781177
ASCL3	11p15.4	0.020352	0.691726	0.781254
NAPA	19q13.32-q13.33	-0.02035	0.691816	0.781306
IL4R	16p12.1	0.020343	0.69185	0.781306
OR5M10	11q12.1	-0.02033	0.691995	0.781425
GAS2L1P2	9q22.33	-0.02033	0.692084	0.781482
KLF11	2p25.1	0.020324	0.692134	0.781495
ADAMTS15	11q24.3	0.020293	0.692574	0.781948
C4ORF36	4q21.3	-0.02025	0.693134	0.782526
HLA-H	6p22.1	-0.02025	0.693165	0.782526
GSTM1	1p13.3	0.020246	0.693245	0.782572
MORC2-AS1	22q12.2	-0.02024	0.693286	0.782575
DEDD2	19q13.2	0.020216	0.693682	0.782978
OR5K4	3q11.2	-0.02021	0.693775	0.782995
GP1BA	17p13.2	-0.02021	0.693775	0.782995

GLYATL2	11q12.1	0.020186	0.694111	0.783329
DKFZP58611420	7p14.3	-0.02018	0.69424	0.783431
ESYT3	3q22.3	0.02017	0.694338	0.783497
SLC38A7	16q21	-0.02016	0.694463	0.783514
PPP1R32	11q12.2	-0.02016	0.694465	0.783514
DELE1	5q31.3	-0.02016	0.694485	0.783514
GFOD2	16q22.1	-0.02016	0.69451	0.783514
ZNF496	1q44	0.020151	0.694615	0.783571
PPT2	6p21.32	0.020148	0.694665	0.783571
ATG3	3q13.2	0.020147	0.694677	0.783571
LIPF	10q23.31	-0.02014	0.694738	0.783595
GTF2A2	15q22.2	-0.02011	0.695244	0.784107
S100A13	1q21.3	-0.0201	0.695287	0.784107
LINC00305	18q22.1	-0.0201	0.695309	0.784107
TBC1D16	17q25.3	-0.0201	0.695418	0.784151
PRAC2	17q21.32	-0.02009	0.695427	0.784151
IKZF3	17q12-q21.1	-0.02007	0.695855	0.78459
ZNF346	5q35.2	-0.02006	0.695923	0.784623
CORO6	17q11.2	0.020054	0.696019	0.784686
SCGB2B2	19q13.11	-0.02005	0.696098	0.784706
TSPAN16	19p13.2	0.020043	0.69617	0.784706
PRODH2	19q13.12	0.020042	0.69619	0.784706
BANF2	20p12.1	0.020042	0.696193	0.784706
IRS4	Xq22.3	-0.02003	0.696296	0.784777
OR5AR1	11q12.1	-0.02002	0.696564	0.785036
EIF4EBP2	10q22.1	0.019998	0.696826	0.785287
AUTS2	7q11.22	0.019994	0.696885	0.785309
LOC643923	11q22.3	-0.01998	0.697124	0.785535
XRRA1	11q13.4	-0.01996	0.697403	0.785804
TMEM89	3p21.31	0.019949	0.697526	0.785899
DUOXA1	15q21.1	0.019933	0.697752	0.78611
GLG1	16q23.1	-0.0199	0.698182	0.786549
OR2M4	1q44	0.019857	0.698852	0.78726
PDIA3	15q15.3	-0.01985	0.698977	0.787356
SAT1	Xp22.11	-0.01984	0.699048	0.787393
DRD3	3q13.31	-0.0198	0.699662	0.788023
RNF227	17p13.1	-0.0198	0.699695	0.788023
PDE4C	19p13.11	0.019797	0.699726	0.788023
INIP	9q32	0.019785	0.69989	0.788164
DNAH8	6p21.2	-0.01978	0.699944	0.78818
CHIA	1p13.2	0.019776	0.700029	0.788231
RAB15	14q23.3	0.019757	0.700294	0.788486
CSPG4	15q24.2	-0.01975	0.700341	0.788494
INPP5D	2q37.1	-0.01975	0.700437	0.788508
DSC3	18q12.1	-0.01975	0.700459	0.788508
OR6K6	1q23.1	-0.01974	0.700472	0.788508
CST13P	20p11.21	-0.01973	0.700647	0.788661
TCAF1	7q35	-0.01972	0.700801	0.78879
TMIGD1	17q11.2	0.019708	0.701008	0.788979
ST7-AS2	7q31.2	-0.01969	0.701215	0.789129
CSNK1G1	15q22.31	0.019693	0.701221	0.789129
PHF3	6q12	0.01969	0.701261	0.789131
S100A12	1q21.3	-0.01968	0.701478	0.78933
DKFZP434H168	16q13	-0.01967	0.701558	0.789376
MSX2P1	17q22	-0.01966	0.701642	0.789426
NOP14-AS1	4p16.3	0.019658	0.701721	0.789471
LINC01816	2p13.3	-0.01963	0.702082	0.789798
SEMG2	20q13.12	0.019633	0.702091	0.789798

CCDC22	Xp11.23	0.01962	0.702281	0.789968
TTI2	8p12	-0.01962	0.702328	0.789976
HES6	2q37.3	-0.0196	0.702515	0.790142
KIR2DS4	19q13.42	-0.0196	0.702559	0.790147
SPINK9	5q32	-0.0196	0.702629	0.790182
TEX12	11q23.1	0.019589	0.702727	0.790248
PXYLP1	3q23	0.019561	0.703125	0.79065
COLCA1	11q23.1	0.019533	0.703536	0.791043
OR1B1	9q33.2	-0.01953	0.703575	0.791043
RPL10L	14q21.2	-0.01953	0.703593	0.791043
PRAME	22q11.22	-0.01952	0.703742	0.791167
ACER3	11q13.5	-0.01951	0.703881	0.791279
C9ORF153	9q21.33	0.019502	0.703988	0.791346
SEC24A	5q31.1	-0.0195	0.704028	0.791346
ZSWIM6	5q12.1	-0.01949	0.70409	0.791346
RPSAP9	9q21.13	0.019494	0.704099	0.791346
ATG9A	2q35	-0.01949	0.704149	0.791346
SYDE2	1p22.3	-0.01949	0.704179	0.791346
HLA-F-AS1	6p22.1	0.019477	0.704348	0.79145
SMR3A	4q13.3	0.019477	0.70435	0.79145
USP50	15q21.2	-0.01947	0.704513	0.791589
DNAAF4	15q21.3	-0.01945	0.704794	0.79186
FBXO6	1p36.22	-0.01944	0.704875	0.791907
TOP1P1	1q24.3	0.019437	0.704918	0.791911
NOX1	Xq22.1	0.019431	0.705006	0.791965
GALNT2	1q42.13	0.019427	0.705071	0.791994
GLS2	12q13.3	-0.0194	0.705504	0.792402
DDX27	20q13.13	-0.01939	0.705535	0.792402
TRIM43	2q11.1	0.019391	0.70559	0.792402
FMR1NB	Xq27.3-q28	0.019391	0.705593	0.792402
LINC01144	1p34.1	0.019384	0.705694	0.792472
LOC154449	6q27	-0.01937	0.705891	0.792648
BPIFA2	20q11.21	-0.01936	0.706094	0.792832
PPIG	2q31.1	-0.01932	0.706552	0.793272
STARD6	18q21.2	0.019324	0.706565	0.793272
OR1N1	9q33.2	-0.01931	0.706799	0.793451
WASF1	6q21	0.019307	0.706804	0.793451
C11ORF65	11q22.3	-0.0193	0.706973	0.793596
RNF6	13q12.13	0.019282	0.707166	0.793768
HDAC8	Xq13.1	0.019271	0.707325	0.793902
DDIT4	10q22.1	-0.01926	0.707456	0.794005
ITGB1BP2	Xq13.1	0.019252	0.707603	0.794098
LYZL4	3p22.1	0.019251	0.707618	0.794098
TMX2	11q12.1	-0.01925	0.707665	0.794106
OR6B1	7q35	-0.01923	0.707917	0.794333
PLA2G2E	1p36.13	0.019228	0.707946	0.794333
IL26	12q15	-0.01922	0.708095	0.794419
FAM74A1	9p12	0.019217	0.708103	0.794419
HS6ST2	Xq26.2	0.019214	0.708152	0.79443
CLTA	9p13.3	0.019201	0.708342	0.794599
RIPK4	21q22.3	-0.01919	0.708461	0.794671
RING1	6p21.32	-0.01919	0.708486	0.794671
BEST2	19p13.13	-0.01919	0.708547	0.794695
RAP1GAP	1p36.12	0.019174	0.708732	0.794858
RPL36	19p13.3	0.019164	0.708873	0.794971
SLC2A13	12q12	-0.01915	0.709104	0.795186
SPG11	15q21.1	0.019138	0.709254	0.795309
ATP1A1	1p13.1	-0.01913	0.709316	0.795335

NR1I2	3q13.33	0.019118	0.709541	0.79552
KIR2DL1	19q13.42	-0.01912	0.709561	0.79552
DMRTC1	Xq13.1	-0.01911	0.709711	0.795644
PYY	17q21.31	-0.0191	0.709767	0.795662
OR5B2	11q12.1	0.019097	0.709854	0.795715
MYH1	17p13.1	-0.01909	0.709896	0.795717
IFT74	9p21.2	-0.01909	0.71	0.79579
CCDC81	11q14.2	0.019081	0.710075	0.795829
DCAF7	17q23.3	-0.01907	0.710241	0.795968
SDF4	1p36.33	0.019067	0.710278	0.795968
GNRH2	20p13	0.019044	0.710615	0.796247
GANAB	11q12.3	0.019042	0.710647	0.796247
LAMC3	9q34.12	-0.01904	0.710647	0.796247
GPR22	7q22.3	-0.01903	0.710861	0.796442
EIF4ENIF1	22q12.2	0.019013	0.711075	0.796638
TRIM47	17q25.1	0.018985	0.711472	0.797038
USP6	17p13.2	0.018978	0.71157	0.797103
TCHH	1q21.3	-0.01897	0.711742	0.797238
ZNF438	10p11.23	-0.01896	0.71177	0.797238
C2ORF50	2p25.1	-0.01892	0.712381	0.797812
KDM7A	7q34	-0.01892	0.712385	0.797812
DCLK3	3p22.2	-0.01892	0.712402	0.797812
PPAN-P2RY11	19p13.2	-0.01892	0.712463	0.797836
RPL27	17q21.31	-0.0189	0.712763	0.798127
KIAA0319L	1p34.3	-0.01889	0.712885	0.798219
DUPD1	10q22.2	-0.01887	0.713192	0.798519
GNAT2	1p13.3	0.018858	0.71332	0.798617
CMC1	3p24.1	0.018842	0.713548	0.798828
ANKRD26P1	16q11.2	-0.01883	0.713747	0.798979
TRPV6	7q34	0.018825	0.713796	0.798979
NAA60	16p13.3	-0.01882	0.713855	0.798979
MPHOSPH6	16q23.3	-0.01882	0.713883	0.798979
EREG	4q13.3	-0.01882	0.713883	0.798979
RTCA	1p21.2	-0.0188	0.714097	0.799175
HIPK2	7q34	0.01877	0.7146	0.799692
LOC391343	2p25.3	0.018755	0.714817	0.799805
CUTALP	9q33.2	0.018754	0.714831	0.799805
APOA5	11q23.3	-0.01875	0.714836	0.799805
SPACA1	6q15	-0.01875	0.714861	0.799805
INTS12	4q24	-0.01874	0.714966	0.799834
TMEM205	19p13.2	-0.01874	0.714966	0.799834
ZBED5	11p15.4	-0.01873	0.715156	0.800001
C10ORF120	10q26.13	0.01872	0.715326	0.800147
KCTD1	18q11.2	0.018714	0.715417	0.800204
HOMEZ	14q11.2	-0.01871	0.715495	0.800247
SNORA80E	1q22	0.018689	0.715774	0.800514
MTERF3	8q22.1	-0.01869	0.715827	0.800529
ZNF823	19p13.2	0.018662	0.716166	0.800863
OSM	22q12.2	-0.01864	0.716441	0.801089
OVOL1	11q13.1	0.018643	0.716448	0.801089
HDC	15q21.2	-0.01862	0.716721	0.80135
CYP2A7	19q13.2	-0.01861	0.716863	0.801463
GRM4	6p21.31	-0.01861	0.716921	0.801484
KISS1	1q32.1	0.018562	0.717624	0.802224
RPTOR	17q25.3	-0.01855	0.717855	0.802438
INPP5B	1p34.3	-0.01854	0.717971	0.802523
ANKFY1	17p13.2	0.018523	0.718187	0.802693
DHRS7B	17p11.2	-0.01852	0.718241	0.802693

SLC22A12	11q13.1	-0.01852	0.718243	0.802693
GPHA2	11q13.1	-0.01851	0.718343	0.802759
PLXNB3	Xq28	-0.0185	0.718457	0.802842
PLXND1	3q22.1	-0.01849	0.718677	0.803043
SPIRE1	18p11.21	-0.01848	0.718755	0.803086
PTPRO	12p12.3 12p13-p12	-0.01847	0.718899	0.803202
ATOH1	4q22.2	0.01847	0.71896	0.803225
LYZL6	17q12	0.018457	0.719152	0.803333
GGACT	13q32.3	-0.01846	0.719172	0.803333
MAP3K19	2q21.3	0.018456	0.719177	0.803333
B9D1	17p11.2	0.018451	0.719248	0.803367
CHAD	17q21.33	0.018445	0.719326	0.80341
CST9	20p11.21	-0.01842	0.719754	0.803843
TRNT1	3p26.2	0.018407	0.719885	0.803944
ALKBH2	12q24.11	-0.0184	0.719969	0.803956
ADAM8	10q26.3	-0.0184	0.719976	0.803956
FAM45A	10q26.11	0.018398	0.720023	0.803964
IQCF6	3p21.2	0.018379	0.72029	0.804217
PCBP4	3p21.2	-0.01837	0.720421	0.8043
C12ORF77	12p12.1	-0.01837	0.720444	0.8043
MMD2	7p22.1	-0.01836	0.720529	0.804318
PLS1	3q23	0.018362	0.720541	0.804318
UBE2V1	20q13.13	-0.01835	0.720757	0.804515
SYNE4	19q13.12	-0.01833	0.72096	0.804696
ACAP1	17p13.1	-0.01832	0.721147	0.80486
UCA1	19p13.12	-0.01831	0.721304	0.804963
TAF2	8q24.12	-0.01831	0.721319	0.804963
BCAR4	16p13.13	0.018297	0.721483	0.805018
LOC100129055	10p11.1	0.018297	0.721483	0.805018
NFKB1	4q24	-0.0183	0.721489	0.805018
CYFIP1	15q11.2	0.018292	0.721564	0.805057
EP300	22q13.2	0.018286	0.721649	0.805107
SFT2D1	6q27	0.018275	0.721816	0.805248
TEKT4	2q11.1	-0.01825	0.722244	0.80568
EGLN2	19q13.2	0.018243	0.722284	0.80568
SNORA66	1p22.1	0.018232	0.722439	0.805763
EPHB2	1p36.12	0.01823	0.722469	0.805763
FAM126B	2q33.1	-0.01823	0.722479	0.805763
MAD2L2	1p36.22	-0.01822	0.72257	0.805819
ZNF74	22q11.21	-0.01821	0.722708	0.805922
NYX	Xp11.4	-0.01821	0.722742	0.805922
C17ORF98	17q12	0.018192	0.72302	0.806162
CITED4	1p34.2 1p35-p34	0.018191	0.723038	0.806162
SNUPN	15q24.2	-0.01818	0.723148	0.806209
ZNF343	20p13	0.018182	0.723161	0.806209
PRDM9	5p14.2	0.018174	0.723282	0.806243
ASB13	10p15.1	0.018173	0.723299	0.806243
ZKSCAN8	6p22.1	0.018172	0.723312	0.806243
UBA2	19q13.11	0.018165	0.723422	0.80632
GRK5	10q26.11	-0.01816	0.723544	0.806412
NDUFB11	Xp11.3	0.018145	0.723701	0.806529
HDHD5-AS1	22q11.1	0.018144	0.72373	0.806529
TMPRSS11A	4q13.2	-0.01813	0.723978	0.806748
VSNL1	2p24.2	0.018123	0.724028	0.806748
PECR	2q35	0.018122	0.724047	0.806748
RFXANK	19p13.11	-0.01811	0.724157	0.806826
CCDC113	16q21	0.018096	0.724428	0.807074
CAPZA3	12p12.3	-0.01809	0.72446	0.807074

FAM209B	20q13.31	-0.01809	0.72455	0.807129
TMEM168	7q31.1	-0.01807	0.724758	0.807308
PZP	12p13.31	-0.01807	0.724791	0.807308
UBE2NL	Xq27.3	-0.01806	0.72495	0.80744
GFRA4	20p13	-0.01806	0.725008	0.80746
SLC9C1	3q13.2	0.018019	0.725556	0.808025
OXA1L	14q11.2	0.018004	0.725762	0.808175
TAS2R7	12p13.2	-0.018	0.725772	0.808175
ALG2	9q22.33	-0.018	0.725859	0.808228
NIPAL1	4p12	-0.01798	0.726067	0.808414
MLNR	13q14.2	0.017978	0.726146	0.808458
C9ORF64	9q21.32	-0.01795	0.726502	0.808808
DEUP1	11q21	-0.01795	0.726564	0.808833
OR1L4	9q33.2	0.01794	0.726709	0.808949
P2RY1	3q25.2	0.017935	0.726783	0.808987
ADAM11	17q21.31	0.017908	0.72717	0.809372
MBD3L1	19p13.2	0.017887	0.727486	0.809589
KRTAP19-8	21q22.11	0.017887	0.727486	0.809589
TEX47	7q21.13	0.017887	0.727486	0.809589
PIAS1	15q23	0.017844	0.728111	0.810239
PRM1	16p13.13	-0.01782	0.728401	0.810517
BLMH	17q11.2	0.017806	0.728666	0.810749
TRDMT1	10p13	-0.0178	0.728691	0.810749
C1QL2	2q14.2	0.017793	0.728851	0.810883
TSPEAR-AS2	21q22.3	-0.01778	0.72901	0.810986
CPS1-IT1	2q34	-0.01778	0.729025	0.810986
MINAR1	15q25.1	0.017764	0.729277	0.811221
GTF2F2	13q14.12-q14.13	0.017757	0.729384	0.811296
LINC01124	2q31.1	-0.01775	0.729431	0.811303
ZNF217	20q13.2	0.017742	0.729605	0.811451
FAM138F	19p13.3	-0.01773	0.729709	0.811522
C2ORF73	2p16.2	-0.01772	0.729883	0.811646
COLQ	3p25.1	-0.01772	0.729912	0.811646
MTIF2	2p16.1	0.017718	0.729958	0.811646
KLF3-AS1	4p14	0.017716	0.729983	0.811646
USH1C	11p15.1	-0.01771	0.730122	0.811725
PPL	16p13.3	-0.01771	0.730135	0.811725
VNN3	6q23.2	0.017698	0.730253	0.811811
STAP2	19p13.3	-0.01768	0.730456	0.811983
TRPC5	Xq23	0.017681	0.730489	0.811983
GORAB	1q24.2	0.017677	0.730548	0.812004
POLR1D	13q12.2	-0.01767	0.730589	0.812004
ANXA2	15q22.2	-0.01767	0.730646	0.812022
FABP12	8q21.13	0.017659	0.730816	0.812166
SCD	10q24.31	0.017654	0.730892	0.812205
TMC7	16p12.3	-0.01765	0.730961	0.812237
EPOR	19p13.2	-0.01765	0.731016	0.812254
NDUFA13	19p13.11	-0.01764	0.731116	0.812319
ADAM3A	8p11.22	-0.01763	0.731299	0.812362
SLC25A36	3q23	0.017626	0.731306	0.812362
ZNF620	3p22.1	0.017626	0.731308	0.812362
PLCZ1	12p12.3	-0.01762	0.731316	0.812362
NFIA	1p31.3	0.017612	0.731504	0.812525
TSHB	1p13.2	0.017607	0.731577	0.812526
MYO1C	17p13.3	-0.01761	0.731586	0.812526
RCL1	9p24.1	0.017598	0.731706	0.812614
VN1R10P	6p22.1	0.017579	0.731996	0.812874
SLC6A13	12p13.33	0.017577	0.732021	0.812874

MAL2	8q24.12	-0.01757	0.732189	0.812964
POMZP3	7q11.23	-0.01756	0.732214	0.812964
TTC9	14q24.2	-0.01756	0.732223	0.812964
TRPV3	17p13.2	-0.01755	0.732343	0.813051
LOC284788	20p11.21	0.017534	0.732649	0.813346
GATC	12q24.31	0.017527	0.732746	0.813408
IQCF2	3p21.2	-0.01752	0.732885	0.813518
DAPK1	9q21.33	-0.01751	0.733009	0.813611
FAM167A-AS1	8p23.1	-0.0175	0.733167	0.813705
KCNU1	8p11.23	-0.0175	0.733189	0.813705
TCAM1P	17q23.3	-0.0175	0.733216	0.813705
UGGT1	2q14.3	-0.01749	0.733265	0.813714
LYPD4	19q13.2	-0.01748	0.733496	0.813925
SAMD8	10q22.2	-0.01747	0.73363	0.814029
EFHC1	6p12.2	-0.01746	0.733695	0.814032
PDK1	2q31.1	0.017462	0.733714	0.814032
C6ORF118	6q27	0.01745	0.733882	0.814172
INO80B	2p13.1	-0.01745	0.733947	0.814172
GNL1	6p21.33	0.017438	0.734052	0.814172
PABPC3	13q12.13	-0.01744	0.734064	0.814172
PSMA2	7p14.1	0.017433	0.734134	0.814172
MYOF	10q23.33	-0.01743	0.734134	0.814172
NFIC	19p13.3	0.017431	0.734162	0.814172
MX1	21q22.3	0.017431	0.734165	0.814172
PPP1R3A	7q31.1	0.017415	0.734403	0.814391
IFNG	12q15	-0.0174	0.734592	0.814554
SAP30L	5q33.2	-0.0174	0.734636	0.814559
TMEM173	5q31.2	0.017395	0.734696	0.81458
MDFI	6p21.1	-0.01738	0.734876	0.814701
MGA	15q15.1	0.017379	0.734921	0.814701
OTUD4	4q31.21	0.017379	0.734927	0.814701
GMPR	6p22.3	-0.01737	0.735015	0.814754
SRR	17p13.3	-0.01737	0.735107	0.81481
GAD2	10p12.1	0.017359	0.735215	0.81486
DCUN1D4	4q12	0.017358	0.735234	0.81486
POLG2	17q23.3	-0.01735	0.735303	0.814886
CERS6	2q24.3	-0.01735	0.735338	0.814886
C2CD4D-AS1	1q21.3	-0.01734	0.735478	0.814967
TBC1D1	4p14	-0.01734	0.735493	0.814967
SCARNA7	3q25.33	0.017332	0.735614	0.815056
DDI1	11q22.3	0.017316	0.735847	0.815269
AP3M2	8p11.21	0.017299	0.736093	0.815497
TPD52	8q21.13	-0.01729	0.736223	0.815596
ANO7	2q37.3	0.017279	0.7364	0.815747
PALM2	9q31.3	0.017266	0.736584	0.815905
ZNF114	19q13.33	0.017261	0.736652	0.815935
PFN3	5q35.3	0.017252	0.736785	0.816002
PPP1R3G	6p25.1	-0.01725	0.73684	0.816002
LOC440040	11p11.12	-0.01725	0.736862	0.816002
OR51S1	11p15.4	-0.01725	0.736875	0.816002
FAM53A	4p16.3	0.017235	0.737045	0.816132
MMEL1	1p36.32	-0.01723	0.737074	0.816132
C9ORF106	9q34.11	-0.01723	0.737146	0.816167
MOS	8q12.1	-0.01721	0.737413	0.816378
KCNE5	Xq23	0.017209	0.737418	0.816378
KCNK15	20q13.12	0.017198	0.737582	0.816514
KLF15	3q21.3	-0.01719	0.737631	0.816518
RGPD5	2q13	-0.01719	0.737667	0.816518

DENND2A	7q34	-0.01718	0.737795	0.816605
ALG12	22q13.33	0.017181	0.737827	0.816605
OR52B2	11p15.4	0.017176	0.737913	0.816655
PAGE1	Xp11.23	-0.01716	0.738152	0.816874
H1FX	3q21.3	-0.01713	0.738656	0.817374
PHB	17q21.33	0.017122	0.738694	0.817374
SF3A3	1p34.3	0.01712	0.738726	0.817374
UMODL1-AS1	21q22.3	-0.0171	0.739042	0.817678
B9D2	19q13.2	-0.01709	0.739179	0.817784
TNRC6B	22q13.1	0.017081	0.739299	0.817872
STX19	3q11.2	0.017074	0.7394	0.817939
SNORA58	3q22.1	-0.01706	0.739607	0.818123
GUCY2EP	11q13.5	0.017049	0.739772	0.81826
CYP4F29P	21q11.2	0.017025	0.740129	0.818609
ROPN1	3q21.1	0.01702	0.740202	0.818646
ATP8B1	18q21.31	0.017017	0.740246	0.818648
JAK2	9p24.1	-0.01701	0.740363	0.818733
AMT	3p21.31	-0.017	0.740522	0.818863
SPACA5	Xp11.23	0.016994	0.740588	0.818891
PARK7	1p36.23	0.01699	0.740639	0.818902
DPPA2	3q13.13	0.016969	0.740952	0.819203
MT1B	16q13	0.016959	0.741101	0.819313
CFL1	11q13.1	0.016957	0.741133	0.819313
KRT34	17q21.2	-0.01695	0.741277	0.819403
CCDC103	17q21.31	-0.01694	0.741318	0.819403
CD200R1L	3q13.2	-0.01694	0.741337	0.819403
TBC1D3P1-DHX40P1	17q23.1	-0.01693	0.741453	0.819486
NDST2	10q22.2	-0.01692	0.741681	0.819693
FAM169B	15q26.3	-0.01691	0.741883	0.81987
NOBOX	7q35	0.016892	0.74208	0.820019
LILRB5	19q13.42	0.016891	0.742103	0.820019
SPRR2F	1q21.3	-0.01689	0.742181	0.820019
OR2A12	7q35	0.016886	0.742181	0.820019
FLJ37453	1p36.21	-0.01688	0.742322	0.820129
TEFM	17q11.2	0.01687	0.742404	0.820175
PSMD13	11p15.5	0.01685	0.742709	0.820435
TP53I13	17q11.2	0.016849	0.742721	0.820435
MDK	11p11.2	-0.01684	0.742899	0.820586
BMP15	Xp11.22	-0.01682	0.743102	0.820765
C16ORF70	16q22.1	0.016818	0.74317	0.820795
LINC00346	13q34	0.016812	0.743267	0.820839
CCDC167	6p21.2	0.016808	0.743321	0.820839
PPM1F	22q11.22	0.016807	0.743334	0.820839
KY	3q22.2	-0.0168	0.743394	0.820861
SIX5	19q13.32	-0.01679	0.743552	0.82099
ZNF648	1q25.3	-0.01678	0.743727	0.821135
ZNF652	17q21.32-q21.33	0.016778	0.743765	0.821135
BAIAP3	16p13.3	0.016768	0.743908	0.821247
GMPPA	2q35	-0.01676	0.743959	0.821258
ZNF613	19q13.41	-0.01676	0.744	0.821258
ERGIC1	5q35.1	-0.01676	0.744066	0.821286
	2-Mar 1q41	0.016745	0.744257	0.821451
SSX3	Xp11.23	-0.01673	0.74448	0.821652
LACTB2	8q13.3	-0.01672	0.744625	0.821767
PRKCI	3q26.2	-0.01671	0.744822	0.821939
TESC	12q24.22	0.016655	0.745584	0.822734
XKR7	20q11.21	0.016647	0.745697	0.822814
EFNB2	13q33.3	-0.01664	0.745752	0.822829



ERBB2	17q12	-0.01662	0.746146	0.823218
MPST	22q12.3	0.016606	0.746298	0.823331
SETD3	14q32.2	0.016604	0.74633	0.823331
RSAD1	17q21.33	-0.01659	0.746479	0.82345
RPS19	19q13.2	-0.01658	0.746711	0.823661
IL13	5q31.1	-0.01657	0.746793	0.823706
MYO1H	12q24.11	-0.01657	0.746888	0.823765
RHBDF2	17q25.1	-0.01656	0.746975	0.823815
OOSP2	11q12.1	0.016556	0.747032	0.823833
NAPSA	19q13.33	-0.01654	0.747281	0.824063
DLG5-AS1	10q22.3	0.01652	0.747575	0.824342
DBIL5P	17p13.3	-0.01651	0.747712	0.824419
ADGRG7	3q12.2	-0.01651	0.747732	0.824419
TXK	4p12	-0.01651	0.747769	0.824419
ZNF670	1q44	0.0165	0.747868	0.824461
NDUFA11	19p13.3	-0.0165	0.747899	0.824461
GOLPH3L	1q21.3	0.016493	0.747969	0.824461
BPIFB3	20q11.21	-0.01649	0.747972	0.824461
NLRP6	11p15.5	0.016485	0.748094	0.82455
GPATCH2L	14q24.3	0.016475	0.748233	0.824658
SEM1	7q21.3	0.016472	0.748284	0.824669
TRPA1	8q21.11	-0.01646	0.748513	0.824761
MPDU1	17p13.1	-0.01645	0.748535	0.824761
TDRG1	6p21.2	-0.01645	0.748562	0.824761
EMILIN3	20q12	-0.01645	0.748586	0.824761
PPP1R17	7p14.3	-0.01645	0.748605	0.824761
CDHR5	11p15.5	-0.01645	0.748615	0.824761
KLHL8	4q22.1	-0.01645	0.748675	0.824782
CAPN12	19q13.2	-0.01642	0.749053	0.825116
BPESC1	3q23	0.016419	0.74906	0.825116
LINC00476	9q22.32	0.016415	0.749123	0.825119
SLC5A3	21q22.11	0.016413	0.749146	0.825119
DIPK1B	9q34.3	0.016397	0.749394	0.825347
NFKBIL1	6p21.33	0.016388	0.749518	0.825438
PRMT8	12p13.32	-0.01637	0.749788	0.82569
BAIAP2L1	7q21.3-q22.1	0.01636	0.749931	0.82573
LINC01566	16p11.1	0.016359	0.749946	0.82573
ANKRD26P3	13q12.11	-0.01636	0.749947	0.82573
CREG2	2q11.2	0.016345	0.750157	0.825915
HRCT1	9p13.3	-0.01634	0.750288	0.826013
RPS27	1q21.3	-0.01633	0.750367	0.826056
FOPNL	16p13.11	-0.01633	0.750424	0.826073
KCNQ1DN	11p15.4 11p15.5	0.01632	0.750518	0.826131
YWHAE	17p13.3	-0.01631	0.750724	0.826174
MRPL21	11q13.3	0.016304	0.750755	0.826174
ZFP42	4q35.2	-0.0163	0.750836	0.826174
KIF1BP	10q22.1	0.016298	0.750854	0.826174
TMCO4	1p36.13	0.016297	0.75087	0.826174
STOML3	13q13.3	-0.0163	0.750874	0.826174
OR2AE1	7q22.1	-0.0163	0.750883	0.826174
ARSH	Xp22.33	0.016295	0.750887	0.826174
ZNF530	19q13.43	0.016286	0.751026	0.826281
HNRNPCL3	1p36.21	-0.01623	0.751887	0.827183
CRH	8q13.1	0.016223	0.751959	0.827217
ATXN1L	16q22.2	0.016205	0.752223	0.827462
TBL1X	Xp22.31-p22.2	0.016197	0.752344	0.82749
SOHLH1	9q34.3	0.016195	0.752369	0.82749
RELL1	4p14	0.016195	0.752372	0.82749

ZNF10	12q24.33	-0.01619	0.752427	0.827504
C22ORF24	22q12.3	0.01616	0.752894	0.827967
OR1E2	17p13.2	-0.01616	0.75293	0.827967
GPD1	12q13.12	-0.01615	0.753075	0.828079
SLC25A33	1p36.22	0.016144	0.753127	0.828079
ARHGEF35	7q35	0.016142	0.753156	0.828079
IGF1R	15q26.3	-0.01613	0.753392	0.828267
ZNF716	7p11.2	-0.01612	0.75341	0.828267
NAT16	7q22.1	-0.01612	0.753463	0.828279
NOXO1	16p13.3	0.016108	0.753659	0.82845
GYS2	12p12.1	-0.01609	0.753947	0.828721
TRIM75P	4q32.3	0.016079	0.754095	0.828825
ZNF682	19p12	0.016077	0.754124	0.828825
ADM	11p15.4	0.016067	0.754268	0.828937
C17ORF97	17p13.3	0.01606	0.754367	0.829
MGAM2	7q34	0.016057	0.754415	0.829008
ETFDH	4q32.1	-0.01604	0.754634	0.829203
PTDSS1	8q22.1	-0.01603	0.754755	0.829291
SH2D5	1p36.12	-0.01603	0.754808	0.829304
CINP	14q32.31	-0.01601	0.755074	0.82955
PGA5	11q12.2	-0.01599	0.755426	0.829891
OPRM1	6q25.2	-0.01598	0.755487	0.829913
TRAPPC2L	16q24.3	-0.01598	0.755557	0.829944
TAOK1	17q11.2	0.015976	0.755619	0.829967
PRAMEF20	1p36.21	-0.01597	0.755732	0.830045
MYL7	7p13	-0.01595	0.75595	0.830239
SKI	1p36.33-p36.32	-0.01595	0.756027	0.830265
HSP90AA1	14q32.31	-0.01595	0.756056	0.830265
IMMP1L	11p13	0.015933	0.756259	0.830442
SEC61A1	3q21.3	0.015911	0.756573	0.830741
MPRIP	17p11.2	0.015906	0.756656	0.830783
POMP	13q12.3	-0.0159	0.756707	0.830783
INSM2	14q13.2	-0.0159	0.756751	0.830783
ZBTB32	19q13.12	-0.0159	0.756777	0.830783
PDSS2	6q21	-0.01587	0.757118	0.831067
BIVM	13q33.1	-0.01587	0.757118	0.831067
SCFD2	4q12	0.01585	0.757479	0.831417
OR6W1P	7q34	0.015828	0.757814	0.831739
GUCA1C	3q13.13	0.01582	0.757924	0.831814
YY1	14q32.2	0.015817	0.757977	0.831826
MANEAL	1p34.3	0.015802	0.758194	0.832019
APOA2	1q23.3	-0.01578	0.758458	0.832222
ZNF786	7q36.1	-0.01578	0.758462	0.832222
ZNF317	19p13.2	0.01576	0.758823	0.832523
TFCP2L1	2q14.2	0.015759	0.758826	0.832523
TRIP11	14q32.12	0.015757	0.758861	0.832523
KCNIP4-IT1	4p15.2	0.015745	0.759044	0.832678
USP27X-AS1	Xp11.23	-0.01573	0.759332	0.832949
GPR142	17q25.1	-0.01571	0.75962	0.833218
ANG	14q11.2	0.015701	0.759688	0.833248
VPS36	13q14.3	-0.01569	0.759829	0.833356
AHCY	20q11.22	-0.01567	0.760106	0.833615
KLHL1	13q21.33	-0.01567	0.760168	0.833637
TAS1R1	1p36.31	-0.01565	0.760453	0.833895
GOLGA8DP	15q11.2	-0.01565	0.760487	0.833895
PPA2	4q24	-0.01564	0.760573	0.833944
TRAF3IP1	2q37.3	0.015635	0.760666	0.834
CA2	8q21.2	-0.01562	0.760828	0.834133

LOC727896	18p11.31	0.01562	0.760896	0.834161
ZNF280B	22q11.22	0.015614	0.760975	0.834203
C16ORF92	16p11.2	-0.0156	0.761123	0.834319
	3-Mar 5q23.2	0.015582	0.761458	0.834641
POU3F2	6q16.1	-0.01558	0.761528	0.834672
SNORA50A	16q21	0.015571	0.761617	0.834724
PSMA4	15q25.1	0.015563	0.761742	0.834778
C22ORF34	22q13.33	-0.01556	0.76175	0.834778
LINC00905	19p13.12	0.015551	0.761923	0.834922
CATSPER2P1	15q15.3	-0.01554	0.762021	0.834976
FN3KRP	17q25.3	-0.01554	0.762056	0.834976
ZBTB42	14q32.33	-0.01554	0.762126	0.835007
CAMTA1	1p36.31-p36.23	-0.01553	0.762216	0.835025
KIF26A	14q32.33	0.01553	0.762225	0.835025
RPN1	3q21.3	0.015524	0.762318	0.835059
THBS3	1q22	-0.01552	0.76234	0.835059
DDRGK1	20p13	-0.01551	0.762455	0.835133
CLDN12	7q21.13	0.015512	0.762491	0.835133
GANC	15q15.1	0.015506	0.762583	0.835188
UBXN7	3q29	0.015492	0.762791	0.835335
WSB2	12q24.23	-0.01549	0.762801	0.835335
CLPSL2	6p21.31	-0.01548	0.762919	0.835419
ATP5CKMT	5p15.2	-0.01547	0.763152	0.835629
CNMD	13q14.3	-0.01546	0.763238	0.835677
RPLP2	11p15.5	0.015444	0.763514	0.835933
PAG1	8q21.13	-0.01544	0.763629	0.836014
IRF9	14q12	-0.01541	0.763949	0.836318
HIGD2B	15q24.1	0.015411	0.764001	0.836329
PNMT	17q12	-0.01539	0.764251	0.836558
TOX3	16q12.1	0.015359	0.764768	0.837078
METTL2A	17q23.2	0.015344	0.764995	0.837281
ASIC4	2q35	-0.01532	0.765332	0.837603
SLC39A12	10p12.33	-0.01531	0.765441	0.837677
KCNQ2	20q13.33	0.015307	0.765544	0.837743
FHDC1	4q31.3	0.015301	0.765626	0.837788
FAM184B	4p15.32-p15.31	0.015288	0.765827	0.837961
C5ORF60	5q35.3	0.015278	0.765974	0.838077
GORASP1	3p22.2	0.015256	0.766295	0.838349
GOLGA6L6	15q11.2	-0.01526	0.766306	0.838349
PAX8-AS1	2q14.1	-0.01525	0.766433	0.838441
HGC6.3	6q27	0.015235	0.766616	0.838552
MED16	19p13.3	0.015234	0.766634	0.838552
SNORA70	Xq28	-0.01523	0.76667	0.838552
EPHX2	8p21.2-p21.1	-0.01523	0.766702	0.838552
NUDT16P1	3q22.1	0.015206	0.767048	0.838885
POM121L9P	22q11.23	-0.0152	0.767162	0.838964
ZNF696	8q24.3	0.015189	0.767304	0.839074
SLC25A21	14q13.3	0.015185	0.767357	0.839086
VN1R2	19q13.42	-0.01518	0.7675	0.839184
CGB7	19q13.33	0.015173	0.76753	0.839184
TRMT9B	8p22	-0.01515	0.767816	0.83944
DERL3	22q11.23	-0.01515	0.767852	0.83944
PPP4R1	18p11.22	-0.01515	0.76789	0.83944
BCKDHA	19q13.2	0.015129	0.768185	0.839681
CELF2	10p14	0.015129	0.768195	0.839681
CABP5	19q13.33	0.015121	0.768312	0.839683
RAD50	5q31.1	-0.01512	0.768342	0.839683
ARHGEF28	5q13.2	0.015118	0.768352	0.839683

MBOAT2	2p25.1	-0.01512	0.768364	0.839683
KRTCAP3	2p23.3	0.015098	0.768646	0.839812
SCGB1D4	11q12.3	-0.01509	0.768707	0.839812
CSH1	17q23.3	-0.01509	0.768707	0.839812
TSPY1	Yp11.2	-0.01509	0.768707	0.839812
ACVR2B	3p22.2	-0.01509	0.768717	0.839812
IFIT1B	10q23.31	0.015093	0.768734	0.839812
CAMKMT	2p21	-0.01508	0.768993	0.840049
CDK6	7q21.2	-0.01507	0.769134	0.840157
UCHL3	13q22.2	-0.01506	0.769188	0.840171
OLMALINC	10q24.31	0.015053	0.76932	0.840268
KIR2DL3	19q13.42	0.015042	0.769485	0.840369
LINC01959	5q31.1	0.015041	0.769505	0.840369
ECD	10q22.2	0.015039	0.769538	0.840369
SEPTIN9	17q25.3	0.015032	0.769631	0.840425
GSG1	12p13.1	-0.01503	0.769735	0.840493
NF1	17q11.2	-0.01502	0.769804	0.840522
CNTLN	9p22.2	-0.01502	0.769871	0.84055
LINC00552	13q34	0.015006	0.77002	0.840659
TEX37	2p11.2	-0.015	0.770055	0.840659
GAGE10	Xp11.23	-0.01498	0.770442	0.841035
METRNL	17q25.3	0.014974	0.770506	0.84106
CYB561	17q23.3	0.014951	0.770836	0.84135
FAM9A	Xp22.31	0.01495	0.770856	0.84135
ST20-AS1	15q25.1	-0.01494	0.771054	0.841471
LINC00691	3p24.2	0.014936	0.771059	0.841471
SMIM13	6p24.2	0.014934	0.771093	0.841471
CIRBP	19p13.3	-0.01492	0.771231	0.841542
LINC00442	13q12.11	-0.01492	0.771242	0.841542
CRY1	12q23.3	-0.01492	0.771314	0.841575
DMRT2	9p24.3	-0.01491	0.771394	0.841617
KIAA1211	4q12	0.014886	0.771818	0.842033
GUCY2GP	10q25.2	-0.01488	0.771885	0.842039
PEX10	1p36.32	-0.01488	0.771953	0.842039
DNAJC17	15q15.1	0.014876	0.771966	0.842039
SCARNA27	6p24.3	0.014874	0.771991	0.842039
SPIN3	Xp11.21	-0.01486	0.772136	0.842145
NYAP2	2q36.3	-0.01486	0.772173	0.842145
RRP7A	22q13.2	0.01484	0.772498	0.842454
RAPGEF4-AS1	2q31.1	-0.01484	0.77257	0.842486
ZDHHC20	13q12.11	0.014819	0.772803	0.842513
SNORA4	3q27.3	-0.01482	0.772808	0.842513
ATP6V0A1	17q21.2	-0.01482	0.772823	0.842513
DLK2	6p21.1	-0.01482	0.772824	0.842513
SAA1	11p15.1	-0.01482	0.772842	0.842513
CCDC60	12q24.23	-0.01482	0.772855	0.842513
CARD11	7p22.2	-0.01481	0.772973	0.842513
GTF2H2C	5q13.2	0.014807	0.772993	0.842513
HEATR9	17q12	-0.01481	0.773002	0.842513
GFOD1	6p23	0.014805	0.773015	0.842513
GPD1L	3p22.3	-0.0148	0.773092	0.84254
PDCD2	6q27	0.014798	0.773124	0.84254
PUF60	8q24.3	-0.01478	0.773372	0.842764
LATS1	6q25.1	-0.01477	0.773583	0.842949
CTBP1-DT	4p16.3	-0.01476	0.773677	0.842969
MRGPRX1	11p15.1 11	0.01476	0.773686	0.842969
RTP2	3q27.3	-0.01475	0.773838	0.843089
MTX2	2q31.1	-0.01473	0.774104	0.843321

SEC23B	20p11.23	0.01473	0.774136	0.843321
IL17RD	3p14.3	-0.01472	0.774284	0.843436
COX7C	5q14.3	0.014705	0.774515	0.843582
C15ORF48	15q21.1	-0.0147	0.774521	0.843582
TPRKB	2p13.1	-0.0147	0.774544	0.843582
BAG1	9p13.3	-0.0147	0.774589	0.843585
OR6B3	2q37.3	-0.01467	0.775033	0.844024
MAOA	Xp11.3	-0.01467	0.775083	0.844032
TBC1D26	17p12	-0.01466	0.775193	0.84405
SUCLG2	3p14.1	-0.01465	0.775286	0.84405
KRTAP4-8	17q21.2	0.014644	0.775421	0.84405
RNASEH2C	11q13.1	-0.01464	0.775424	0.84405
PSMB6	17p13.2	-0.01464	0.775475	0.84405
PKN2	1p22.2	-0.01464	0.775492	0.84405
PRUNE2	9q21.2	-0.01464	0.775495	0.84405
OR2M5	1q44	-0.01463	0.775563	0.84405
OR5I1	11q12.1	-0.01463	0.775563	0.84405
OR8B12	11q24.2	-0.01463	0.775563	0.84405
OR4C16	11q11	-0.01463	0.775563	0.84405
USP9X	Xp11.4	0.014627	0.775678	0.844129
QARS	3p21.31	0.014608	0.775964	0.844394
ZNF407	18q22.3	0.014599	0.776092	0.844488
WIPF2	17q21.2	0.014596	0.776134	0.844488
ARHGEF19	1p36.13	0.014584	0.776311	0.844634
LRBA	4q31.3	-0.01457	0.776491	0.844784
CKB	14q32.33	-0.01456	0.776642	0.844885
USH1G	17q25.1	-0.01456	0.776668	0.844885
CDHR2	5q35.2	-0.01456	0.776735	0.844912
TMEM211	22q11.23	-0.01455	0.776824	0.844963
SPATA31D4	9q21.32	-0.01454	0.777002	0.845078
MMP23A	1p36.33	-0.01454	0.777014	0.845078
EFNA1	1q22	0.014522	0.777243	0.845281
LOC100130093	1q42.13	0.014509	0.777439	0.845449
OTUD6A	Xq13.1	-0.0145	0.777512	0.845482
FTX	Xq13.2	0.014488	0.777748	0.845692
BIN3	8p21.3	0.014485	0.777793	0.845695
MFSD9	2q12.1	0.014462	0.778137	0.846024
OR8D2	11q24.2	0.014436	0.778522	0.846395
AREG	4q13.3	-0.01442	0.778771	0.846621
CYP1A1	15q24.1	-0.0144	0.77901	0.846834
FAM76B	11q21	0.0144	0.779061	0.846844
HRG	3q27.3	-0.01439	0.779219	0.84697
TMEM95	17p13.1	0.014384	0.779301	0.847013
TCEANC2	1p32.3	0.014372	0.779489	0.847171
UNC13A	19p13.11	0.014361	0.779643	0.847293
OR5T2	11q12.1	-0.01435	0.779817	0.847436
SYAP1	Xp22.2	0.014332	0.780074	0.847602
ZNF816	19q13.41	-0.01433	0.780074	0.847602
DALRD3	3p21.31	0.014331	0.780097	0.847602
ZNF70	22q11.23	-0.01432	0.780267	0.847741
STARD5	15q25.1	0.014313	0.78037	0.847807
KIAA0232	4p16.1	0.014289	0.780718	0.848139
GSTA3	6p12.2	-0.01427	0.781017	0.8484
TEX45	19p13.2	-0.01427	0.781043	0.8484
MIS12	17p13.2	-0.01425	0.781378	0.848718
DISP2	15q15.1	0.014219	0.781777	0.849106
PSD2	5q31.2	0.01421	0.781906	0.8492
RIMKLA	1p34.2	-0.0142	0.782051	0.849311

HNF4G	8q21.13	-0.01419	0.782216	0.849443
NPY4R	10q11.22	-0.01417	0.782444	0.849595
NCBP2AS2	3q29	0.014173	0.782467	0.849595
CCDC173	2q31.1	-0.01417	0.782483	0.849595
MBOAT4	8p12	0.014166	0.782566	0.849639
NLRP5	19q13.43	-0.01416	0.782621	0.849653
RPL11	1p36.11	0.014158	0.782683	0.849674
RNF17	13q12.12	0.014152	0.78278	0.849734
SCML4	6q21	-0.01414	0.782934	0.849855
UBXN2B	8q12.1	-0.01413	0.783047	0.849931
NEO1	15q24.1	-0.01412	0.783292	0.850151
C1QTNF12	1p36.33	-0.01411	0.783404	0.850219
TTLL8	22q13.33	-0.01411	0.783477	0.850219
RAP1GDS1	4q23	-0.0141	0.783482	0.850219
REC114	15q24.1	-0.01409	0.783697	0.850406
SS18L2	3p22.1	-0.01407	0.783978	0.850665
ACAD10	12q24.12	0.014062	0.78412	0.850773
ANAPC11	17q25.3	-0.01405	0.784287	0.85086
EIF5B	2q11.2	0.01405	0.784304	0.85086
SSR1	6p24.3	0.014048	0.784333	0.85086
UPP2	2q24.1	0.014045	0.78437	0.85086
LDLRAD2	1p36.12	-0.01403	0.784658	0.851127
NEMF	14q21.3	-0.01402	0.784803	0.851238
CBX4	17q25.3	0.013993	0.785158	0.851576
PSMB10	16q22.1	-0.01399	0.785235	0.851614
MIPOL1	14q13.3-q21.1	-0.01398	0.785414	0.851762
TBL1Y	Yp11.2	-0.01396	0.785647	0.851969
SZT2	1p34.2	0.013951	0.78579	0.852066
SIN3A	15q24.2	0.013948	0.785822	0.852066
PFKFB4	3p21.31	-0.01393	0.78609	0.85231
HMX3	10q26.13	0.013918	0.786278	0.852468
SYTL4	Xq22.1	0.013911	0.786385	0.852538
PIGS	17q11.2	0.013891	0.78668	0.852812
ATP6V0B	1p34.1	0.013887	0.786748	0.852839
RP1	8q11.23-q12.1	-0.01388	0.786846	0.852899
XIST	Xq13.2	-0.01387	0.786934	0.852915
IL18RAP	2q12.1	-0.01387	0.786975	0.852915
TNK1	17p13.1	0.013871	0.786988	0.852915
NCDN	1p34.3	0.013861	0.787126	0.853018
CCER1	12q21.33	0.013848	0.787327	0.853166
CFAP97D1	17q21.31	-0.01385	0.787347	0.853166
CFAP74	1p36.33	0.013831	0.787581	0.853372
NDUFA1	Xq24	0.01382	0.787745	0.853479
ENTPD6	20p11.21	0.013819	0.787765	0.853479
NDUFB2	7q34	-0.01381	0.787855	0.853502
USP32P1	17p11.2	0.013812	0.787871	0.853502
FAM166B	9p13.3	0.013798	0.788081	0.853683
SNORA1	11q21	0.013786	0.788256	0.853827
R3HDM4	19p13.3	-0.01375	0.788856	0.85443
EEF1DP3	13q13.1	-0.01373	0.789026	0.854568
IGSF3	1p13.1	-0.01373	0.789114	0.854617
ERLIN2	8p11.23	-0.01372	0.789237	0.854704
TUSC2	3p21.31	0.013711	0.789376	0.854808
YWHAEP7	17q12	-0.01371	0.789434	0.854826
PRPF40A	2q23.3	0.013685	0.789776	0.855118
TBX20	7p14.2	0.013684	0.78979	0.855118
C1GALT1	7p22.1-p21.3	-0.01368	0.789873	0.855162
TMEM31	Xq22.2	0.013673	0.789951	0.8552

TMEM223	11q12.3	-0.01367	0.789999	0.855206
CTRB2	16q23.1	-0.01367	0.790054	0.855219
SNORA26	4q12	-0.01365	0.790281	0.855399
TEC	4p12-p11	0.013649	0.790306	0.855399
ZKSCAN1	7q22.1	-0.01364	0.790412	0.855468
ACTR3B	7q36.1-q36.2	0.013626	0.790664	0.85568
POLR2B	4q12	0.013624	0.790693	0.85568
C2ORF78	2p13.1	0.013614	0.790844	0.85579
COX6C	8q22.2	0.013611	0.790881	0.85579
KRTAP1-3	17q21.2	-0.01359	0.791204	0.856068
OTOP3	17q25.1	0.013588	0.791233	0.856068
ASXL1	20q11.21	0.013585	0.791265	0.856068
PCDHGC4	5q31.3	0.013576	0.791413	0.856181
BMP2	20p12.3	0.013567	0.79155	0.85626
THAP7	22q11.21	0.013564	0.791588	0.85626
PRRT1	6p21.32	-0.01356	0.791614	0.85626
KCNJ16	17q24.3	-0.01355	0.791731	0.85634
SDCCAG8	1q43-q44	-0.01355	0.791844	0.856416
NEU2	2q37.1	0.013534	0.792041	0.856498
MSH3	5q14.1	0.013533	0.792047	0.856498
MYC	8q24.21	0.013533	0.792047	0.856498
TUBE1	6q21	0.013525	0.792173	0.856588
PACRGL	4p15.31	0.013519	0.792264	0.856639
MAS1	6q25.3	-0.0135	0.792588	0.85686
SLC22A24	11q12.3	-0.0135	0.792594	0.85686
POU2F3	11q23.3	-0.0135	0.792597	0.85686
MEIOB	16p13.3	-0.01349	0.792643	0.856864
HSD17B2	16q23.3	-0.01349	0.792733	0.856915
CASP1	11q22.3	0.013477	0.792898	0.857047
RPRML	17q21.32	0.013464	0.793083	0.857181
GSK3B	3q13.33	-0.01346	0.793108	0.857181
AFF1	4q21.3-q22.1	-0.01345	0.793315	0.85728
FAM136BP	6p25.2	-0.01345	0.793325	0.85728
KIF13B	8p12	0.013448	0.793328	0.85728
KIAA1324	1p13.3	-0.01344	0.79346	0.857377
FAM238A	10p12.1	-0.01344	0.793519	0.857394
GPATCH8	17q21.31	0.013413	0.793852	0.857707
CCDC43	17q21.31	-0.0134	0.794029	0.857839
MGC16142	-	0.013399	0.794059	0.857839
SAMD3	6q23.1	-0.01336	0.794605	0.858383
DGKK	Xp11.22	0.01336	0.794652	0.858387
ABCC6P1	16p12.3	-0.01335	0.794799	0.8585
WDTC1	1p36.11	-0.01335	0.794861	0.85852
ARHGAP12	10p11.22	-0.01334	0.794909	0.858526
TLE3	15q23	-0.01333	0.795032	0.858613
CORO1B	11q13.2	0.013328	0.795129	0.858671
MDM1	12q15	0.013325	0.795178	0.858677
RINT1	7q22.3	0.0133	0.795557	0.85904
NOS3	7q36.1	-0.0133	0.795615	0.859056
CREBBP	16p13.3	0.013292	0.795676	0.859076
PAF1	19q13.2	0.013281	0.795838	0.859166
SCGB3A2	5q32	0.013278	0.795887	0.859166
APC	5q22.2	0.013278	0.795888	0.859166
OR51M1	11p15.4	0.013252	0.796278	0.85954
LINC00320	21q21.1	-0.01324	0.796445	0.859629
LINC00314	21q21.3	0.013241	0.796445	0.859629
C10ORF55	10q22.2	-0.01324	0.79649	0.859631
DEFB125	20p13	-0.01323	0.796606	0.859709

SYK	9q22.2	0.013216	0.796819	0.859893
RAP2C	Xq26.2	-0.01321	0.796919	0.859955
LMAN2	5q35.3	-0.0132	0.79702	0.860017
SSX2IP	1p22.3	-0.0132	0.79713	0.860089
OSBPL10	3p23	-0.01318	0.797392	0.860326
FRMD8	11q13.1	-0.01316	0.797651	0.860559
FBXL21P	5q31.1	0.013149	0.797817	0.860692
WDR13	Xp11.23	0.013139	0.797968	0.860809
PSAPL1	4p16.1	-0.01312	0.798264	0.861081
SHARPIN	8q24.3	0.013113	0.798364	0.861142
ZSWIM2	2q32.1	-0.01311	0.79848	0.861221
LINC01205	3q13.13	-0.01309	0.798769	0.861486
DEFB103A	8p23.1	-0.01307	0.798945	0.86163
CYP2A13	19q13.2	0.013071	0.799005	0.861649
SPATA31D5P	9q21.32	0.013059	0.799179	0.861748
RPSA	3p22.1	-0.01306	0.799183	0.861748
PMCHL1	5p14.3	0.013047	0.799366	0.861899
ATP6V0A2	12q24.31	0.013032	0.799578	0.862061
VMP1	17q23.1	-0.01303	0.799646	0.862061
SNORA2B	12q13.11	0.013024	0.799701	0.862061
CES2	16q22.1	-0.01302	0.799708	0.862061
FAM187B	19q13.12	0.013022	0.799731	0.862061
FABP2	4q26	-0.01301	0.799854	0.862146
CEP57	11q21	0.012988	0.800246	0.862522
PER3	1p36.23	0.012972	0.800489	0.862738
LINC00602	6q27	-0.01295	0.800803	0.86303
ACTR5	20q11.23	-0.01293	0.80118	0.863389
SPAG11B	8p23.1	-0.01292	0.801305	0.863478
AJUBA	14q11.2	-0.01291	0.801387	0.86352
UPB1	22q11.23	-0.01289	0.801661	0.863769
XAGE3	Xp11.22	-0.01289	0.801782	0.863853
CYP4F11	19p13.12	0.012874	0.801961	0.863999
PRSS33	16p13.3	0.012857	0.802216	0.864227
APOBEC3A	22q13.1	0.012847	0.802366	0.864343
C19ORF33	19q13.2	0.012838	0.802503	0.864443
TAL2	9q31.2	0.012823	0.802737	0.864648
HSPA7	1q23.3	0.012818	0.802811	0.864682
TSNAXIP1	16q22.1	0.012806	0.802991	0.864829
TCTN2	12q24.31	-0.01279	0.803174	0.864974
MS4A6E	11q12.2	-0.01279	0.803242	0.864974
UBFD1	16p12.2	0.012788	0.803255	0.864974
CLDN3	7q11.23	0.012784	0.803314	0.864991
PPY2P	17q11.2	-0.01278	0.803362	0.864996
MECP2	Xq28	0.012774	0.803476	0.865067
PTPRE	10q26.2	-0.01277	0.803541	0.865067
CYTOR	2p11.2	-0.01277	0.803557	0.865067
TIGD4	4q31.3	0.012763	0.80363	0.865099
DCDC1	11p13	-0.01276	0.803687	0.865114
KCNK16	6p21.2	-0.01275	0.803871	0.865265
TULP1	6p21.31	-0.01274	0.80396	0.865314
CATSPERG	19q13.2	-0.01272	0.804231	0.86556
FSD2	15q25.2	0.012717	0.804332	0.865584
OTOL1	3q26.1	-0.01272	0.804343	0.865584
MMACHC	1p34.1	0.012713	0.804388	0.865584
SYT7	11q12.2	-0.01271	0.804427	0.865584
USP16	21q21.3	-0.01271	0.804472	0.865587
ANKEF1	20p12.2	-0.0127	0.804534	0.865606
GLUD2	Xq24	-0.01269	0.804696	0.865733



CEMIP	15q25.1	-0.01269	0.804738	0.865733
MTRF1	13q14.11	0.012687	0.804784	0.865736
SLC12A5	20q13.12	0.012677	0.804931	0.865848
C19ORF18	19q13.43	-0.01266	0.805153	0.86604
PQBP1	Xp11.23	-0.01265	0.805284	0.866134
PGPEP1L	15q26.3	-0.01264	0.80542	0.866148
DUSP2	2q11.2	0.012644	0.805426	0.866148
HIST1H1A	6p22.2	-0.01264	0.805427	0.866148
FAAP24	19q13.11	0.012604	0.806029	0.866728
GRM2	3p21.2	-0.0126	0.806083	0.866728
LINC00261	20p11.21	0.0126	0.806095	0.866728
CELF3	1q21.3	0.012586	0.806301	0.866902
EGFR	7p11.2	0.012565	0.806625	0.867204
TTY2	Yp11.2	-0.01255	0.806809	0.867355
SBDSP1	7q11.23	0.012528	0.807178	0.867636
STOX1	10q22.1	-0.01253	0.80719	0.867636
TPH1	11p15.1	-0.01253	0.807214	0.867636
DYTN	2q33.3	0.012524	0.807243	0.867636
OR7E5P	11q12.1	0.012472	0.808029	0.868434
P2RX5	17p13.2	-0.01246	0.808164	0.868533
ME3	11q14.2	-0.01243	0.808613	0.868968
TPRA1	3q21.3	0.012421	0.808801	0.869124
GOLGA6L1	15q11.2	0.012406	0.809015	0.869307
PRAMEF6	1p36.21	0.012398	0.809137	0.86936
C7ORF33	7q36.1	-0.0124	0.809151	0.86936
ZNF799	19p13.2	0.012395	0.809195	0.86936
DOCK9	13q32.3	-0.01237	0.809549	0.869691
TSNAX-DISC1	1q42.2	0.012368	0.809597	0.869691
BLOC1S1	12q13.2	0.012363	0.809676	0.869691
ITPKB	1q42.12	-0.01236	0.809682	0.869691
NIPBL	5p13.2	0.012358	0.809747	0.869691
ZBTB8A	1p35.1	0.012357	0.809763	0.869691
MSLN	16p13.3	-0.01234	0.809997	0.86986
NUP160	11p11.2	0.012341	0.810007	0.86986
KLK9	19q13.41	0.012336	0.810085	0.869871
KLKB1	4q35.2	-0.01233	0.810105	0.869871
PURB	7p13	-0.01233	0.81017	0.869894
DNAJB1	19p13.12	-0.01232	0.810306	0.869961
PRNT	20p13	0.01232	0.810323	0.869961
TRIP12	2q36.3	-0.01231	0.810404	0.869961
CHD3	17p13.1	0.012314	0.810414	0.869961
SDC4P	22q12.2	-0.01231	0.810449	0.869961
CADPS	3p14.2	0.012306	0.810531	0.870002
EPGN	4q13.3	-0.0123	0.810685	0.870121
ZBTB11	3q12.3	0.012276	0.810983	0.870394
FOXR1	11q23.3	0.012273	0.811029	0.870397
GADD45G	9q22.2	-0.01226	0.811217	0.870552
ODF4	17p13.1	0.012252	0.811351	0.870649
PHLDA1	12q21.2	-0.01224	0.811493	0.870712
REG1CP	2p12	0.012242	0.811503	0.870712
TWF1	12q12	-0.01224	0.811558	0.870712
SHANK3	22q13.33	-0.01223	0.811627	0.870712
DIS3	13q21.33	-0.01223	0.811627	0.870712
SDE2	1q42.12	-0.01223	0.811705	0.870749
ADAM9	8p11.22	-0.01221	0.811916	0.870929
PCCB	3q22.3	0.012205	0.812056	0.871033
OR13F1	9q31.1	0.012193	0.812235	0.871135
XYLT2	17q21.33	-0.01219	0.812238	0.871135

MYH8	17p13.1	-0.01219	0.812316	0.871171
NCR1	19q13.42	0.012169	0.812598	0.871426
C22ORF15	22q11.23	-0.01217	0.81264	0.871426
TMEM8B	9p13.3	-0.01216	0.812736	0.871482
WDR43	2p23.2	0.012156	0.812804	0.871508
SECTM1	17q25.3	-0.01215	0.812876	0.871539
PAR6B	20q13.13	-0.01213	0.813149	0.871785
CKAP4	12q23.3	0.012116	0.813406	0.872014
CRKL	22q11.21	-0.01209	0.813826	0.872417
ANK3	10q21.2	-0.01208	0.813875	0.872423
OR51F1	11p15.4	0.012067	0.814149	0.872596
OR5M11	11q12.1	0.012065	0.814169	0.872596
THOC5	22q12.2	-0.01206	0.814207	0.872596
PGPEP1	19p13.11	-0.01206	0.81421	0.872596
CCNC	6q16.2	0.012057	0.814295	0.87264
RPP25L	9p13.3	0.012044	0.814487	0.872794
SMARCC1	3p21.31	0.012042	0.814526	0.872794
GABRB2	5q34	0.012025	0.814777	0.87299
SNRNP40	1p35.2	0.012024	0.814796	0.87299
KRTAP10-9	21q22.3	-0.01201	0.814993	0.873154
TENT5D	Xq21.1	-0.01199	0.815254	0.873363
LY6G5C	6p21.33	0.011991	0.815301	0.873363
ZNF221	19q13.31	0.011989	0.815324	0.873363
CLK4	5q35.3	0.011986	0.815363	0.873363
ALG14	1p21.3	-0.01198	0.815418	0.873376
ZMIZ1-AS1	10q22.3	-0.01198	0.815474	0.873389
NFATC4	14q12	0.011968	0.815643	0.873523
SLC22A14	3p22.2	0.01196	0.815768	0.873611
RHD	1p36.11	0.011936	0.816121	0.873942
PHC3	3q26.2	-0.01193	0.816177	0.873955
HID1	17q25.1	0.011903	0.816624	0.874386
SNORA22	7q11.21	-0.01188	0.816924	0.874661
B3GAT3	11q12.3	0.011867	0.817177	0.874862
TIRAP	11q24.2	-0.01187	0.817199	0.874862
F2RL1	5q13.3	0.01185	0.817428	0.875061
KCNK18	10q25.3	0.011847	0.817474	0.875062
HRH3	20q13.33	-0.01184	0.817537	0.875083
ESPNP	1p36.13	0.011836	0.81764	0.875147
ISL1	5q11.1	0.011817	0.817928	0.875408
TDRD10	1q21.3	-0.01181	0.818011	0.875451
MED20	6p21.1	-0.01181	0.818077	0.875468
MAP3K15	Xp22.12	-0.0118	0.818121	0.875468
ERRFI1	1p36.23	0.011802	0.818158	0.875468
LRRC27	10q26.3	0.011798	0.81822	0.875482
LOC143188	10q25.2	0.011795	0.818259	0.875482
FAM219B	15q24.1-q24.2	0.011792	0.818311	0.875485
OXSM	3p24.2	0.011788	0.818364	0.875485
KLHL30	2q37.3	-0.01179	0.818393	0.875485
ACSS1	20p11.21	-0.01178	0.81853	0.875585
TMEM229A	7q31.32	-0.01177	0.818591	0.875603
MC3R	20q13.2	-0.01176	0.818726	0.875688
PARP9	3q21.1	0.011762	0.818758	0.875688
ANKRD49	11q21	-0.01176	0.818833	0.875722
RALBP1	18p11.22	-0.01175	0.818957	0.875808
LINC01565	3q21.3	-0.01174	0.819112	0.875927
LIN37	19q13.12	0.011731	0.819234	0.875997
SLC2A2	3q26.2	-0.01173	0.819298	0.875997
EIF4E	4q23	-0.01173	0.819309	0.875997

PGBD4	15q14	-0.01172	0.819381	0.876027
ELOB	16p13.3	-0.0117	0.819632	0.876249
ANKRD20A20P	9q13	0.0117	0.819704	0.87627
YTHDC1	4q13.2	-0.0117	0.819739	0.87627
STK32C	10q26.3	-0.01169	0.819832	0.876323
DNAH10	12q24.31	-0.01167	0.820083	0.876515
SLC4A4	4q13.3	-0.01167	0.820106	0.876515
ACOT13	6p22.3	0.011671	0.820144	0.876515
SPIN2B	Xp11.21	0.011665	0.820235	0.876566
CAPN9	1q42.2	-0.01166	0.820287	0.876575
CA12	15q22.2	-0.01164	0.820656	0.876874
GUSBP1	5p14.3	-0.01163	0.820705	0.876874
TANGO6	16q22.1	-0.01163	0.820757	0.876874
POLR2L	11p15.5	0.011626	0.820812	0.876874
B4GALT6	18q12.1	0.011625	0.820832	0.876874
CTAG1B	Xq28	-0.01162	0.820841	0.876874
HGD	3q13.33	0.011621	0.820891	0.876874
FLJ13224	12p11.21	-0.01162	0.820917	0.876874
AIFM3	22q11.21	0.011602	0.821191	0.877119
MMP1	11q22.2	-0.0116	0.821259	0.877146
POLDIP3	22q13.2	-0.01157	0.821644	0.87751
NRN1	6p25.1	0.011558	0.821843	0.877676
ZNF876P	4p16.3	-0.01154	0.822099	0.877868
LBX1	10q24.32	-0.01154	0.822123	0.877868
CCR9	3p21.31	-0.01154	0.822154	0.877868
NAT8B	2p13.1	0.01152	0.822426	0.87811
ERH	14q24.1	0.01151	0.822584	0.878228
CDC16	13q34	-0.01151	0.822623	0.878228
NECTIN1	11q23.3	-0.0115	0.822714	0.878278
CYLC1	Xq21.1	0.011483	0.822984	0.878478
NKX2-4	20p11.22	0.011481	0.823011	0.878478
ASXL3	18q12.1	-0.01148	0.823033	0.878478
PSMC1	14q32.11	0.011473	0.823139	0.878544
PCMT1	6q25.1	-0.01146	0.823364	0.878737
PIP5KL1	9q34.11	0.011444	0.823574	0.878915
SCAP	3p21.31	0.011436	0.823697	0.878999
LCE1F	1q21.3	0.011429	0.823804	0.879049
GTF2IRD1P1	7q11.21	0.011425	0.823867	0.879049
LOC641367	19p12	0.011423	0.823894	0.879049
ADAMTS19	5q23.3	-0.01142	0.823919	0.879049
SLC35F6	2p23.3	-0.01141	0.824118	0.879214
CEBPZ	2p22.2	0.011395	0.824314	0.879376
PARD6A	16q22.1	0.011377	0.824595	0.879629
GDPD2	Xq13.1	0.011373	0.824653	0.879644
ITM2C	2q37.1	0.011351	0.82499	0.879957
SNX30	9q32	0.011347	0.825052	0.879976
GPN3	12q24.11	-0.01134	0.825124	0.880006
THAP7-AS1	22q11.21	0.011333	0.825264	0.880098
KRT37	17q21.2	-0.01133	0.825321	0.880098
LRTM2	12p13.33	0.011328	0.825342	0.880098
BICRAL	6p21.1	-0.01131	0.825627	0.880355
ERICH4	19q13.2	-0.0113	0.825766	0.880456
FAM99B	11p15.5	-0.01129	0.82592	0.880574
TRIM60	4q32.3	-0.01128	0.826124	0.880744
LINC00895	22q11.21	-0.01126	0.826304	0.880889
LINC01098	4q34.3	0.011255	0.82645	0.880998
ZFP91	11q12.1	-0.01125	0.826528	0.881035
REG1B	2p12	-0.01125	0.826591	0.881055

PRAMEF14	1p36.21	0.011235	0.826743	0.88117
ENPP7	17q25.3	-0.01123	0.826806	0.881191
ITLN1	1q23.3	-0.01123	0.826879	0.881221
KRTAP17-1	17q21.2	-0.01122	0.826936	0.881235
GTF2A1	14q31.1	-0.01122	0.827022	0.881243
IFRD1	7q31.1	-0.01122	0.827031	0.881243
EMG1	12p13.31	0.011207	0.827172	0.881346
IGF2BP2	3q27.2	0.011192	0.827407	0.881549
CNDP2	18q22.3	0.011184	0.827528	0.881631
AWAT1	Xq13.1	0.011179	0.827602	0.881663
SCRN2	17q21.32	-0.01116	0.827858	0.881889
MRPS9	2q12.1	0.011147	0.828077	0.882075
DSTYK	1q32.1	0.011138	0.828224	0.882185
RORC	1q21.3	0.011133	0.828296	0.882215
SASH1	6q24.3-q25.1	0.011126	0.828397	0.882276
C3ORF49	3p14.1	-0.01112	0.828561	0.882398
TRPT1	11q13.1	-0.01111	0.8286	0.882398
HHEX	10q23.33	-0.0111	0.828871	0.88264
PSMA3	14q23.1	0.011084	0.829035	0.882767
DIS3L	15q22.31	0.011081	0.829081	0.882769
SLC25A24	1p13.3	-0.01106	0.829447	0.883112
TBX2	17q23.2	-0.01105	0.829591	0.883167
KRTAP4-2	17q21.2	-0.01105	0.829608	0.883167
PELI3	11q13.2	-0.01105	0.829633	0.883167
QRFPR	4q27	-0.01104	0.829675	0.883167
ZNF443	19p13.2	-0.01104	0.829777	0.883229
SMU1	9p21.1	0.011032	0.829833	0.883241
EDEM1	3p26.1	-0.01102	0.830003	0.883375
IFNL3	19q13.2	-0.011	0.830287	0.883631
SLC12A2	5q23.3	0.010988	0.8305	0.883777
PRKAG3	2q35	0.010987	0.830513	0.883777
PLAGL1	6q24.2	-0.01096	0.830928	0.884141
ALB	4q13.3	-0.01096	0.830943	0.884141
COA4	11q13.4	0.010951	0.831059	0.884217
PML	15q24.1	-0.01094	0.831213	0.884334
LINC01020	5p15.32	0.010918	0.831566	0.884616
RAB9BP1	5q21.2-q21.3	-0.01092	0.831566	0.884616
MAGEB10	Xp21.3	-0.01091	0.831633	0.88464
PRLR	5p13.2	-0.0109	0.83189	0.884866
PPP1CA	11q13.2	-0.01088	0.832103	0.885045
C17ORF67	17q22	-0.01087	0.83223	0.885134
FSCB	14q21.2	0.010867	0.832337	0.885201
ZFX	Xp22.11	-0.01086	0.832394	0.885214
PLA2G2F	1p36.12	-0.01084	0.832758	0.885554
RAET1G	6q25.1	-0.01083	0.83295	0.88571
NHEG1	6q23.3	0.010822	0.833026	0.88571
KITLG	12q21.32	0.010818	0.833078	0.88571
LRP11	6q25.1	0.010818	0.833081	0.88571
DDX60	4q32.3	0.010806	0.833265	0.88582
SNORA80A	21q22.11	-0.0108	0.833303	0.88582
ROBO3	11q24.2	-0.0108	0.833341	0.88582
GOT1L1	8p11.23	0.0108	0.833362	0.88582
GALNT8	12p13.32	0.010794	0.833451	0.885868
CCNYL1	2q33.3	0.010783	0.833611	0.885915
FOXR2	Xp11.21	0.010781	0.833651	0.885915
POC1B	12q21.33	-0.01078	0.833657	0.885915
NRDE2	14q32.11	-0.01078	0.833677	0.885915
GRB10	7p12.1	0.010776	0.833716	0.885915

LIN7B	19q13.33	-0.01077	0.833795	0.885951
SLC35B4	7q33	-0.01077	0.833873	0.885988
ABCB9	12q24.31	-0.01071	0.834662	0.886779
NUTM2A-AS1	10q23.2	0.01065	0.835632	0.887762
LOC646762	7p14.3	0.010647	0.835678	0.887763
COX20	1q44	-0.01063	0.835966	0.887983
FABP9	8q21.13	0.010628	0.835973	0.887983
CDC73	1q31.2	0.01062	0.8361	0.888027
MICALCL	11p15.3	0.010619	0.836103	0.888027
PCGF1	2p13.1	0.010608	0.836283	0.888171
CLDN7	17p13.1	0.0106	0.836392	0.888198
GFI1B	9q34.13	0.010598	0.836428	0.888198
FAM47A	Xp21.1	-0.0106	0.83647	0.888198
FNTB	14q23.3	0.010593	0.836503	0.888198
CLRN2	4p15.32	-0.01059	0.836572	0.888198
ZNF28	19q13.41	0.010588	0.836575	0.888198
POU4F1	13q31.1	0.010584	0.836642	0.888222
SIX6	14q23.1	-0.01058	0.836694	0.88823
LINC02593	1p36.33	-0.01056	0.83705	0.888561
BAGE	21p11.1	-0.01053	0.837419	0.888906
RSF1	11q14.1	0.010515	0.837689	0.889146
GATA4	8p23.1	-0.0105	0.837971	0.889371
TARBP2	12q13.13	-0.0105	0.837991	0.889371
DDX60L	4q32.3	-0.01048	0.838181	0.889526
LRP3	19q13.11	0.010442	0.838798	0.890077
SRPRB	3q22.1	-0.01044	0.838833	0.890077
TG	8q24.22	-0.01044	0.838833	0.890077
KRTAP13-2	21q22.11	0.010436	0.838898	0.890083
KRTDAP	19q13.12	-0.01043	0.838928	0.890083
PIK3R3	1p34.1	0.010419	0.839157	0.890279
DLX1	2q31.1	-0.0104	0.839388	0.890442
BRAF	7q34	-0.0104	0.839449	0.890442
KLRC1	12p13.2	-0.0104	0.839454	0.890442
TET2	4q24	-0.0104	0.839488	0.890442
PITPNC1	17q24.2	-0.01039	0.83958	0.890492
OR7G2	19p13.2	-0.01039	0.83966	0.890529
DENND2D	1p13.3-p13.2	0.010367	0.839951	0.890791
RPL9	4p14	-0.01035	0.840161	0.890929
OR10G2	14q11.2	0.010349	0.840226	0.890929
DLGAP3	1p34.3	0.010348	0.840239	0.890929
TTC38	22q13.31	-0.01035	0.840259	0.890929
CAPNS1	19q13.12	-0.01033	0.840502	0.891139
CUL1	7q36.1	-0.01032	0.840607	0.891166
ZG16	16p11.2	-0.01032	0.840616	0.891166
IREB2	15q25.1	0.010314	0.840751	0.89122
COX4I1	16q24.1	0.010313	0.840764	0.89122
IL1B	2q14.1	0.010311	0.8408	0.89122
RXFP2	13q13.1	-0.01031	0.840879	0.891256
ZNF80	3q13.31	-0.01026	0.841577	0.891949
OR2C1	16p13.3	0.010244	0.841823	0.892115
B3GNT6	11q13.5	-0.01024	0.841873	0.892115
IL22	12q15	0.010239	0.841893	0.892115
SIX2	2p21	0.010238	0.841912	0.892115
NDUFA3	19q13.42	0.010233	0.841994	0.892155
PRDX1	1p34.1	-0.01021	0.842279	0.89241
SNU13	22q13.2	-0.01021	0.842381	0.89247
PNLDC1	6q25.3	-0.0102	0.84244	0.892473
MYDGF	19p13.3	0.010201	0.842473	0.892473

AIM2	1q23.1-q23.2	-0.01019	0.842622	0.892583
MPLKIP	7p14.1	-0.01017	0.842886	0.892817
AXDND1	1q25.2	0.010161	0.843082	0.892977
RNMT	18p11.21	-0.01015	0.843218	0.89304
ETV5	3q27.2	-0.01015	0.843231	0.89304
KRTAP8-1	21q22.11	-0.01015	0.843307	0.893055
OR10H5	19p13.12	-0.01014	0.843376	0.893055
LINC00207	22q13.31	-0.01014	0.843379	0.893055
USP27X	Xp11.23	-0.01013	0.843576	0.893211
AKAP4	Xp11.22	0.010126	0.843615	0.893211
FER1L6	8q24.13	-0.01012	0.843711	0.893264
CARHSP1	16p13.2	-0.01011	0.843799	0.893311
ARFRP1	20q13.33	0.010107	0.84391	0.893382
FAM99A	11p15.5	0.010104	0.843961	0.893387
SUPT6H	17q11.2	-0.01009	0.84412	0.893509
ATP5F1A	18q21.1	0.010089	0.844179	0.893525
ZNF204P	6p22.1	0.01008	0.844317	0.893623
RNF20	9q31.1	0.010066	0.844527	0.893779
OR10J1	1q23.2	-0.01006	0.844573	0.893779
BTBD17	17q25.1	0.010062	0.844598	0.893779
ACER1	19p13.3	-0.01005	0.844805	0.893945
ERG28	14q24.3	-0.01005	0.844844	0.893945
ADAMTS20	12q12	-0.01001	0.845362	0.894445
HIST1H2BA	6p22.2	0.010004	0.845476	0.894519
CT47A11	Xq24	0.009989	0.845714	0.894723
OR4D6	11q12.1	-0.00998	0.845894	0.894812
C15ORF61	15q23	-0.00998	0.845916	0.894812
CLEC4GP1	19p13.2	0.009974	0.845931	0.894812
CYSRT1	9q34.3	0.009962	0.84612	0.894963
RDH8	19p13.2	0.009955	0.846223	0.895026
STK31	7p15.3	-0.00992	0.846763	0.89555
OACYLP	18q21.32	0.009908	0.846944	0.895662
MAP3K7	6q15	-0.00991	0.846977	0.895662
QDPR	4p15.32	0.009904	0.847003	0.895662
ZNF805	19q13.43	-0.0099	0.847095	0.895712
TTYH1	19q13.42	0.009894	0.847161	0.895733
DRAIC	15q23	0.009885	0.847299	0.895833
MAPK8IP2	22q13.33	0.009826	0.848192	0.89673
ITPRIPL1	2q11.2	-0.0098	0.84858	0.897079
ZNF527	19q13.12	0.009798	0.848629	0.897079
LANCL3	Xp21.1	-0.00979	0.848682	0.897079
TUFT1	1q21.3	0.009793	0.848702	0.897079
EGR1	5q31.2	0.00977	0.849047	0.897396
TSSC4	11p15.5	-0.00974	0.849441	0.897766
PCK2	14q11.2-q12	-0.00974	0.849569	0.897854
REG3A	2p12	-0.00972	0.849816	0.898055
PTH2	19q13.33	0.009718	0.849849	0.898055
VCL	10q22.2	-0.00971	0.849901	0.898062
HYMAI	6q24.2	0.009698	0.850148	0.898276
RPL4	15q22.31	-0.00968	0.850355	0.898447
FRMD4B	3p14.1	-0.00966	0.850661	0.898653
RNF217-AS1	6q22.31	0.009664	0.850662	0.898653
BEND2	Xp22.13	-0.00966	0.850685	0.898653
FKBP6	7q11.23	-0.00966	0.850779	0.898669
KRT2	12q13.13	-0.00966	0.85079	0.898669
INTS2	17q23.2	0.009651	0.850871	0.898708
PPARGC1A	4p15.2	0.009638	0.851059	0.898858
NR3C2	4q31.23	-0.00962	0.851269	0.899033

ULBP1	6q25.1	-0.00961	0.851525	0.89912
SPATA48	7p12.2	-0.00961	0.85153	0.89912
TMPRSS4	11q23.3	-0.00961	0.851532	0.89912
JADE1	4q28.2	-0.00961	0.851562	0.89912
OPRD1	1p35.3	-0.0096	0.851576	0.89912
HIGD1C	12q13.12	0.0096	0.851641	0.899142
SLC25A43	Xq24	0.009595	0.851726	0.899147
MRPS22	3q23	0.009594	0.851736	0.899147
RIMS3	1p34.2	0.009588	0.851821	0.89919
OR2T2	1q44	0.009573	0.852065	0.899399
CT47B1	Xq24	-0.00956	0.85225	0.899547
ZNF468	19q13.41	-0.00955	0.852423	0.899683
ZNF513	2p23.3	0.009543	0.852512	0.899729
KCNG4	16q24.1	-0.00954	0.85259	0.899764
KRTAP19-3	21q22.11	0.009524	0.852806	0.899944
OR10S1	11q24.1	-0.00951	0.852978	0.900079
TTY4C	Yq11.23	0.009498	0.853206	0.900272
ABRACL	6q24.1	-0.00949	0.853344	0.90037
ALG1L2	3q22.1	0.00947	0.853629	0.900623
ANKRD22	10q23.31	0.009459	0.853801	0.900758
TLN1	9p13.3	0.009453	0.853897	0.900811
DNAH5	5p15.2	-0.00945	0.853943	0.900812
TAB3	Xp21.2	-0.00944	0.854022	0.900848
FOSL2	2p23.2	0.009428	0.854275	0.901068
SALL1	16q12.1	-0.00939	0.854785	0.901537
PDZK1IP1	1p33	-0.00939	0.854838	0.901537
CACNA1I	22q13.1	-0.00939	0.854855	0.901537
KRR1	12q21.2	-0.00938	0.854976	0.901579
TRIM51	11q12.1	0.009381	0.854994	0.901579
C20ORF141	20p13	-0.00938	0.855045	0.901579
TENT4B	16q12.1	0.009376	0.855075	0.901579
KRTAP5-4	11p15.5	0.009366	0.855225	0.901685
AGPAT1	6p21.32	0.009363	0.855266	0.901685
ZFPL1	11q13.1	0.009358	0.855341	0.901717
CMTM7	3p22.3	-0.00935	0.85547	0.901805
UCMA	10p13	0.009338	0.85565	0.901948
OR12D2	6p22.1	-0.00933	0.855754	0.902009
OR4A47	11p11.2	0.009323	0.855873	0.902087
CRYGA	2q33.3	0.009309	0.856087	0.90223
IFNA4	9p21.3	0.009309	0.856099	0.90223
ABHD2	15q26.1	-0.00929	0.856385	0.902415
OR2B3	6p22.1	-0.00929	0.8564	0.902415
MS4A10	11q12.2	0.009288	0.856409	0.902415
HIST2H2BE	1q21.2	-0.00928	0.856536	0.902472
CBLIF	11q12.1	-0.00928	0.856554	0.902472
LINC02685	11p11.2	-0.00928	0.856598	0.902472
GFI1	1p22.1	-0.00925	0.85707	0.902921
EFCAB10	7q22.3	-0.00922	0.857501	0.903328
HDAC3	5q31.3	-0.00921	0.857603	0.903388
CLSTN1	1p36.22	-0.00919	0.857949	0.903705
HSPA8	11q24.1	-0.00916	0.85839	0.904122
VSTM2B	19q12	-0.00913	0.858884	0.904595
ZDHHC24	11q13.2	-0.00911	0.859151	0.904819
CTH	1p31.1	0.009107	0.859187	0.904819
ANKRD27	19q13.11	0.009099	0.859312	0.904903
ARRDC2	19p13.11	0.009088	0.859474	0.905026
SIRT5	6p23	0.009069	0.859764	0.905219
RABEPK	9q33.3	-0.00907	0.859764	0.905219

BCL7A	12q24.31	0.009067	0.859793	0.905219
HIST1H2AA	6p22.2	-0.00906	0.85991	0.905247
LINC00293	8q11.1	-0.00906	0.85991	0.905247
NUS1	6q22.1	-0.00904	0.860176	0.905479
SLC13A4	7q33	0.009037	0.860249	0.905509
GPR15	3q11.2	0.009034	0.860305	0.90552
CSNK2A1	20p13	-0.00903	0.860396	0.905569
MPHOSPH10	2p13.3	-0.00902	0.860551	0.905684
KRTAP2-1	17q21.2	-0.00901	0.860667	0.905759
OR2M3	1q44	-0.009	0.860851	0.905881
MAPK1IP1L	14q22.3	-0.009	0.860874	0.905881
PIAS2	18q21.1	0.008982	0.861095	0.906066
CA4	17q23.1	-0.00895	0.861511	0.906456
FAM30A	14q32.33	-0.00895	0.861629	0.906531
BMP7	20q13.31	-0.00894	0.861701	0.906531
CLN8	8p23.3	0.008941	0.861718	0.906531
DPY19L1	7p14.2	0.008938	0.861767	0.906535
SPANXA2	Xq27.2	-0.00893	0.861929	0.906657
OSBP2	22q12.2	0.00892	0.862052	0.90674
LINC00114	21q22.2	0.008888	0.862527	0.90717
ALG1	16p13.3	-0.00889	0.862552	0.90717
KRTAP10-11	21q22.3	-0.00888	0.862718	0.907297
DCAF6	1q24.2	0.008835	0.86334	0.907903
PIM1	6p21.2	-0.00882	0.863554	0.908037
OSGIN1	16q23.3	-0.00882	0.863561	0.908037
TBCCD1	3q27.3	-0.00882	0.863603	0.908037
CXORF38	Xp11.4	-0.00881	0.863683	0.908073
AIMP1	4q24	0.008801	0.863874	0.908226
SLC35A3	1p21.2	-0.00877	0.864306	0.908624
ARMC3	10p12.2	0.008769	0.86435	0.908624
RRP8	11p15.4	0.008767	0.864388	0.908624
GAGE12D	Xp11.23	-0.00876	0.864512	0.908707
CDK5R1	17q11.2	0.008727	0.865008	0.90918
SNORA23	11p15.4	-0.00872	0.865128	0.909259
NIPAL2	8q22.2	0.008706	0.865315	0.909407
TRAPPC10	21q22.3	0.0087	0.865411	0.90946
GSTA2	6p12.2	-0.00869	0.865541	0.909532
TRIM16L	17p11.2	-0.00869	0.865594	0.909532
GSX1	13q12.2	-0.00869	0.865615	0.909532
SMTN	22q12.2	0.008681	0.865704	0.909538
GPR83	11q21	0.008678	0.865749	0.909538
MELTF	3q29	0.008678	0.865757	0.909538
LRRC75B	22q11.23	-0.00866	0.865952	0.909694
RAB27B	18q21.2	0.008646	0.866248	0.909931
CYREN	7q33	-0.00864	0.866308	0.909931
HDGFL1	6p22.3	-0.00864	0.866316	0.909931
GLB1L3	11q25	-0.00864	0.866369	0.909931
ZNF493	19p12	0.008635	0.866404	0.909931
MCTS1	Xq24	-0.00861	0.86677	0.910268
ZNF273	7q11.21	-0.00861	0.866862	0.910317
OR1S1	11q12.1	-0.00859	0.867026	0.910441
LHX2	9q33.3	0.008587	0.867146	0.910519
AMELY	Yp11.2	0.00858	0.867249	0.910579
SLC35G1	10q23.33	-0.00857	0.86743	0.910722
SPAG6	10p12.2	-0.00856	0.867504	0.910752
LRP2BP	4q35.1	0.008558	0.867588	0.910793
PPP1R12B	1q32.1	0.00855	0.86772	0.910839
IL20	1q32.1	-0.00855	0.867724	0.910839



TGM4	3p21.31	0.008529	0.868039	0.911094
OR52E4	11p15.4	0.008528	0.868058	0.911094
SPRR2C	1q21.3	0.008516	0.86824	0.911238
DENND6B	22q13.33	-0.00851	0.868311	0.911243
RIPK3	14q12	-0.00851	0.868336	0.911243
DMRTB1	1p32.3	-0.00848	0.868753	0.911633
ANKRD40CL	17q21.33	0.008473	0.868889	0.911697
KDM5B	1q32.1	-0.00847	0.868905	0.911697
NACA	12q13.3	-0.00846	0.86907	0.911783
LINC00926	15q21.3	0.008456	0.869153	0.911783
HIST1H3A	6p22.2	0.008455	0.869163	0.911783
KRT9	17q21.2	0.008455	0.869169	0.911783
NDUFC1	4q31.1	0.008445	0.869318	0.911882
CXCL11	4q21.1	0.008441	0.869391	0.911882
PDCL3	2q11.2	0.00844	0.8694	0.911882
MED7	5q33.3	-0.00843	0.869523	0.911963
TM4SF20	2q36.3	-0.0084	0.869995	0.91241
ALG10	12p11.1	0.008371	0.87046	0.912761
NME6	3p21.31	0.008371	0.870464	0.912761
ERICH6	3q25.1	0.008371	0.870466	0.912761
NT5M	17p11.2	0.008362	0.870589	0.912842
CHRM3	1q43	-0.00835	0.87081	0.913026
RPS19BP1	22q13.1	-0.00832	0.871283	0.913474
TAAR1	6q23.2	-0.00829	0.871663	0.913824
NR2F1	5q15	-0.00829	0.871725	0.913836
SLC30A9	4p13	0.008286	0.871765	0.913836
HSD11B2	16q22.1	-0.00827	0.871966	0.913999
LINC00526	18p11.31	-0.00825	0.872293	0.914294
PPP2R1A	19q13.41	0.008241	0.872449	0.914409
CCZ1B	7p22.1	0.008222	0.872739	0.914666
DHPS	19p13.13	0.008214	0.872865	0.914705
EFCAB3	17q23.2	0.008214	0.872868	0.914705
ASF1A	6q22.31	-0.00819	0.873202	0.91499
EDF1	9q34.3	-0.00819	0.873232	0.91499
NAT1	8p22	-0.00817	0.873486	0.915209
CYP4X1	1p33 1	-0.00817	0.873605	0.915286
SUN3	7p12.3	0.00816	0.873696	0.915324
CELA2A	1p36.21	-0.00815	0.873795	0.915324
NOD1	7p14.3	-0.00815	0.87381	0.915324
GALR2	17q25.1	-0.00815	0.873824	0.915324
FAIM	3q22.3	0.008146	0.873912	0.915368
PSG10P	19q13.2	-0.00813	0.874152	0.915557
RNU6ATAC	9q34.2	-0.00813	0.874212	0.915557
ERCC8	5q12.1	0.008125	0.874229	0.915557
C1ORF109	1p34.3	-0.00811	0.874467	0.915758
RIPPLY3	21q22.13	-0.0081	0.874542	0.915788
PM20D2	6q15	0.008102	0.874593	0.915794
CACNA1E	1q25.3	-0.00809	0.874792	0.915954
ZNF192P1	6p22.1	0.008084	0.874856	0.915974
OTUB1	11q13.1	0.008081	0.874907	0.915979
ABCB7	Xq13.3	-0.00806	0.875214	0.916253
MIR503HG	Xq26.3	0.008055	0.875308	0.916271
WDFY1	2q36.1	-0.00805	0.875323	0.916271
NELFCD	20q13.32	-0.00804	0.875482	0.916389
TMC1	9q21.13	0.008036	0.875607	0.916472
SLC17A6	11p14.3	-0.00803	0.875767	0.916592
GPR101	Xq26.3	0.008008	0.876023	0.916812
LINC02159	5q34	-0.008	0.876143	0.91689

KCNE3	11q13.4	-0.00799	0.876305	0.917011
ZNF395	8p21.1	0.007985	0.876384	0.917046
PNMA5	Xq28	-0.00798	0.876437	0.917053
KLK13	19q13.41	0.007975	0.876541	0.917056
ZNF41	Xp11.3	0.007973	0.876563	0.917056
MATN4	20q13.12	0.007972	0.876577	0.917056
PRSS40A	2q21.1	0.007968	0.876638	0.917073
SLC27A2	15q21.2	-0.00796	0.876804	0.91715
TYW1	7q11.21	0.007958	0.876804	0.91715
GPR137C	14q22.1	-0.00795	0.876874	0.917175
OR52R1	11p15.4	-0.00794	0.877091	0.917354
SLC9A7	Xp11.3 Xp11.3	0.00792	0.87738	0.917608
ADAMTSL5	19p13.3	0.007876	0.878051	0.91816
CALHM4	6q22.1	-0.00787	0.878114	0.91816
DENND3	8q24.3	-0.00787	0.878177	0.91816
INSR	19p13.2	-0.00786	0.878253	0.91816
MEIOC	17q21.31	0.007862	0.878276	0.91816
PORCN	Xp11.23	-0.00786	0.878279	0.91816
CACNA1D	3p21.1	-0.00786	0.878352	0.91816
TBC1D7	6p24.1	0.007856	0.878365	0.91816
CFHR2	1q31.3	0.007854	0.878399	0.91816
NMRK2	19p13.3	-0.00785	0.878409	0.91816
ECSIT	19p13.2	0.007853	0.878411	0.91816
KCND1	Xp11.23	-0.00784	0.878534	0.918217
GSS	20q11.22	-0.00784	0.878603	0.918217
TTC39A	1p32.3	0.00784	0.878603	0.918217
BAALC-AS2	8q22.3	0.007836	0.878671	0.918222
SPATA45	1q32.3	-0.00783	0.8787	0.918222
ZNF91	19p12	0.007767	0.879738	0.91918
MRPL51	12p13.31	0.007764	0.879771	0.91918
NOCT	4q31.1	0.007764	0.879781	0.91918
DNMT3L	21q22.3	-0.00776	0.8798	0.91918
MST1	3p21.31	-0.00775	0.879923	0.919247
SLC16A10	6q21	-0.00775	0.879956	0.919247
TGIF1	18p11.31	-0.00775	0.880055	0.919303
MTCH2	11p11.2	0.007736	0.880201	0.919366
ZNF77	19p13.3	0.007736	0.880208	0.919366
COL23A1	5q35.3	-0.00773	0.88033	0.919418
PIN4P1	15q15.3	0.007727	0.88035	0.919418
SPATA31A5	9q12	-0.00772	0.880424	0.919448
GCLM	1p22.1	0.007711	0.880598	0.919579
GAGE4	Xp11.4-p11.2	-0.00771	0.880671	0.919579
ASPSCR1	17q25.3	-0.0077	0.880687	0.919579
ST6GALNAC2	17q25.1	0.00768	0.881075	0.919931
ZNF488	10q11.22	0.007677	0.881116	0.919931
OR4K1	14q11.2	-0.00767	0.881289	0.920063
ACTG1	17q25.3	0.007658	0.881409	0.92014
GABRA4	4p12	0.007635	0.881755	0.920454
MDH1B	2q33.3	-0.00763	0.881823	0.920477
ATP5PF	21q21.3	0.007618	0.882018	0.920632
ASXL2	2p23.3	-0.00761	0.882097	0.920667
ZNF577	19q13.41	0.007607	0.88219	0.920716
NXPE1	11q23.2	0.007561	0.882902	0.9214
SPATA17	1q41	-0.00756	0.882938	0.9214
DUSP27	1q24.1	0.007551	0.883055	0.921474
BUD23	7q11.23	0.007539	0.883239	0.921583
RFX6	6q22.1	0.007537	0.883273	0.921583
FAM122A	9q21.11	-0.00753	0.883319	0.921583

GABRR3	3q11.2	-0.00753	0.883342	0.921583
FZD3	8p21.1	0.007507	0.883722	0.921931
OR10A4	11p15.4	-0.0075	0.883776	0.921939
PSMB3	17q12	0.007492	0.883958	0.92208
GAB2	11q14.1	0.007482	0.88412	0.922158
PRAMEF2	1p36.21	0.007481	0.884124	0.922158
KRT82	12q13.13	-0.00747	0.884269	0.922261
WASHC2C	10q11.22	0.007459	0.884474	0.922417
GJB2	13q12.11	0.007456	0.88451	0.922417
MADD	11p11.2	0.007443	0.884716	0.922501
DSG3	18q12.1	0.007442	0.884722	0.922501
FAM8A1	6p22.3	0.007442	0.884729	0.922501
C12ORF50	12q21.32	0.007439	0.884781	0.922507
CD177	19q13.31	0.00743	0.884918	0.922601
SLC23A2	20p13	-0.00742	0.885001	0.922602
ITPRIP	10q25.1	0.007424	0.88501	0.922602
ESF1	20p12.1	-0.00741	0.885246	0.922799
NKX2-2	20p11.22	-0.0074	0.885298	0.922805
BAG2	6p12.1	-0.00739	0.885501	0.922914
CDK7	5q13.2	0.007391	0.885514	0.922914
DNASE1	16p13.3	-0.00739	0.88554	0.922914
DEFB136	8p23.1	0.007381	0.885674	0.922929
SATB2	2q33.1	-0.00738	0.885693	0.922929
SLC16A5	17q25.1	-0.00738	0.885693	0.922929
STX18	4p16.3-p16.2	0.007375	0.885759	0.92295
DBI	2q14.2	0.007348	0.88617	0.92333
HPN-AS1	19q13.11-q13.12	0.007336	0.886352	0.923471
NUDT13	10q22.2	0.007311	0.886741	0.923829
ANKRD20A4	9q13	-0.00731	0.886829	0.923872
ZC3H13	13q14.13	-0.0073	0.886918	0.923917
CHIC1	Xq13.2	-0.00728	0.88715	0.924111
BCL7C	16p11.2	0.007265	0.887448	0.924373
WAC	10p12.1 10p12.1-p11.2	-0.00725	0.887637	0.924515
PRDM4	12q23.3	-0.00725	0.887677	0.924515
ZNF815P	7p22.1	-0.00724	0.88789	0.92469
TNP2	16p13.13	0.007225	0.888069	0.924828
N4BP2	4p14	-0.00721	0.888303	0.925023
ENO2	12p13.31	-0.0072	0.888432	0.92511
TMEM209	7q32.2	-0.0072	0.888508	0.925141
INTS10	8p21.3	0.007188	0.888634	0.92521
BBS7	4q27	0.007186	0.888667	0.92521
MRPL54	19p13.3	-0.00718	0.888833	0.925335
PSKH2	8q21.3	-0.00716	0.889082	0.925546
DHX8	17q21.31	-0.00713	0.889506	0.925939
SLC46A3	13q12.3	0.007123	0.889632	0.926022
BPTF	17q24.2	0.007116	0.889744	0.926091
INS	11p15.5	0.007103	0.889939	0.926245
RBBP8NL	20q13.33	0.007098	0.89003	0.926291
SLC22A15	1p13.1	0.007034	0.891014	0.927268
ASZ1	7q31.2	0.007021	0.891204	0.927417
LOC100130691	2q31.2	0.007008	0.891408	0.927582
RPA1	17p13.3	-0.00699	0.89169	0.927751
HOXC5	12q13.13	0.006989	0.891708	0.927751
TUBB2A	6p25.2	-0.00699	0.89175	0.927751
CCDC24	1p34.1	0.006985	0.891757	0.927751
CISD1	10q21.1	-0.00698	0.891833	0.927772
HDAC7	12q13.11	-0.00698	0.891879	0.927772
RTL9	Xq23	-0.00697	0.891935	0.927772

HSD17B4	5q23.1	-0.00697	0.891962	0.927772
SPATA31D1	9q21.32	-0.00695	0.892313	0.928041
CYB5B	16q22.1	-0.00695	0.892377	0.928041
PIK3CB	3q22.3	0.006943	0.892416	0.928041
SHQ1	3p13	0.006939	0.892476	0.928041
SKAP1	17q21.32	-0.00693	0.892542	0.928041
DRC7	16q21	-0.00693	0.892543	0.928041
FAM133B	7q21.2	-0.00693	0.892572	0.928041
KRTAP10-5	21q22.3	0.006931	0.892592	0.928041
AUP1	2p13.1	-0.00692	0.892725	0.928132
OR52D1	11p15.4	0.006913	0.892867	0.928232
LBX2	2p13.1	-0.0069	0.893143	0.92847
KIR2DL4	19q13.42	-0.00688	0.893303	0.928588
PRLH	2q37.3	0.006871	0.893516	0.928761
GRHR	9p13.2	0.006868	0.89357	0.92877
CNGA2	Xq28	-0.00686	0.893635	0.928788
DCAF8L2	Xp21.3	-0.00685	0.893888	0.929004
CLDN22	4q35.1	-0.00684	0.894025	0.929098
COX7B2	4p12	0.00683	0.894155	0.929185
TUBAL3	10p15.1	-0.00682	0.894346	0.929324
C7ORF71	7p15.2	-0.00681	0.894382	0.929324
OXTR	3p25.3	-0.00679	0.894827	0.929738
RPL7A	9q34.2	0.006782	0.89489	0.929749
HOXD1	2q31.1	0.006779	0.89493	0.929749
LDHAL6A	11p15.1	0.006765	0.895144	0.929891
PADI3	1p36.13	0.006763	0.895179	0.929891
PNMA3	Xq28	0.006761	0.895206	0.929891
TBRG1	11q24.2	-0.00676	0.895272	0.929911
NAPG	18p11.22	-0.00675	0.895451	0.930049
KRTAP21-1	21q22.11	0.006736	0.89559	0.930145
LZIC	1p36.22	-0.00673	0.89569	0.9302
HDAC2	6q21	0.006677	0.896509	0.931003
LOC284379	19q13.42	-0.00667	0.896612	0.931031
CACNB2	10p12.33-p12.31	0.006669	0.896629	0.931031
AMTN	4q13.3	0.006662	0.896736	0.931094
ADORA2A-AS1	22q11.23	0.006653	0.896881	0.931151
VIL1	2q35	0.006653	0.896884	0.931151
NACA2	17q23.2	-0.00665	0.896981	0.931203
NOTCH2NLA	1q21.1	-0.00664	0.89705	0.931227
SPATS2	12q13.12	0.006636	0.897133	0.931265
NDUFB7	19p13.12	-0.00663	0.8972	0.931285
FAM45BP	Xq26.1	-0.00662	0.897455	0.931502
PATE2	11q24.2	0.006588	0.897876	0.93189
ACCS	11p11.2	0.006571	0.898139	0.932115
NSUN3	3q11.2	-0.00652	0.898907	0.932864
MCTS2P	20q11.21	0.006501	0.899226	0.933147
C11ORF24	11q13.2	0.006484	0.899476	0.933358
TNFSF9	19p13.3	-0.00648	0.899596	0.933434
MRPL57	13q12.11	-0.00646	0.899789	0.933585
TAF9	5q13.2	0.00646	0.899855	0.933606
WRN	8p12	-0.00645	0.900047	0.933757
ZCCHC13	Xq13.2	-0.00641	0.900676	0.934361
GHSR	3q26.31	-0.0064	0.90085	0.934485
C7ORF69	7p12.3	0.006393	0.900888	0.934485
SLC13A2	17q11.2	-0.00638	0.901103	0.934659
LINC00298	2p25.1	0.006369	0.901256	0.934769
BABAM2-AS1	2p23.2	0.006364	0.901329	0.934796
MYCBP2	13q22.3	0.006357	0.901439	0.934848

PPM1N	19q13.32	0.006355	0.901472	0.934848
INCA1	17p13.2	-0.00634	0.901668	0.934983
RFX3	9p24.2	0.00634	0.901704	0.934983
HIST1H3E	6p22.2	0.006334	0.901804	0.934983
ZNF529	19q13.12	0.006333	0.901807	0.934983
BTBD9	6p21.2	0.006331	0.901847	0.934983
PPP1R42	8q13.1	-0.00633	0.901883	0.934983
DNAI2	17q25.1	-0.00632	0.901996	0.935052
ZNF845	19q13.42	-0.00631	0.90209	0.935101
FAM89A	1q42.2	0.006311	0.902146	0.935111
ZFP64	20q13.2	0.006294	0.902415	0.935296
ZBTB21	21q22.3	-0.00629	0.902418	0.935296
INHBC	12q13.3	0.006275	0.902711	0.935451
WDR54	2p13.1	-0.00627	0.902721	0.935451
PDZD11	Xq13.1	0.006272	0.90275	0.935451
OR10H4	19p13.12	-0.00627	0.902754	0.935451
RPL13AP17	7q21.11	0.006268	0.902812	0.935463
RADX	Xq22.3	-0.00626	0.902913	0.935519
LINC00294	11p13	0.006241	0.903235	0.935804
OVCH1	12p11.22	-0.00623	0.903341	0.935835
JUP	17q21.2	-0.00623	0.903358	0.935835
TMTC4	13q32.3	-0.00623	0.903465	0.935896
ARAF	Xp11.3	-0.00618	0.904202	0.936612
OR3A2	17p13.3	-0.00617	0.904352	0.936719
BPY2	Yq11.223	0.006164	0.904425	0.936746
ARID1B	6q25.3	0.006159	0.904501	0.936776
L3HYPDH	14q23.1	0.006152	0.904611	0.936795
OPN4	10q23.2	-0.00615	0.904613	0.936795
ABTB2	11p13	-0.00615	0.904697	0.936834
CYP4Z2P	1p33	0.006142	0.904754	0.936844
CUTA	6p21.32	0.006128	0.904979	0.937029
MYL1	2q34	0.00612	0.905105	0.937111
TNNI3	19q13.42	0.006113	0.9052	0.937161
TKFC	11q12.2	-0.00611	0.905312	0.937228
METTL21EP	13q33.1	-0.00609	0.905587	0.937395
FOLH1B	11q14.3	-0.00609	0.905612	0.937395
RFFL	17q12	-0.00608	0.905651	0.937395
FAM136A	2p13.3	-0.00608	0.905661	0.937395
COX10	17p12	0.006069	0.905893	0.937588
ARHGAP10	4q31.23	-0.00606	0.90595	0.937598
LYPLA2P1	6p21.32	0.006059	0.906043	0.937638
EHHADH	3q27.2	-0.00606	0.906083	0.937638
FSCN1	7p22.1	-0.00604	0.906315	0.937831
TST	22q12.3	0.006037	0.906375	0.93784
ODC1	2p25.1	0.006034	0.906418	0.93784
ZNF778	16q24.3	0.006019	0.906661	0.938043
C9ORF139	9q34.3	-0.00602	0.906707	0.938043
MYCN	2p24.3	0.006008	0.906834	0.938125
LINC01554	5q15	-0.006	0.907	0.938248
TBC1D12	10q23.33	0.005992	0.90708	0.93825
COX6A2	16p11.2	0.005991	0.907096	0.93825
AZGP1	7q22.1	-0.00598	0.907183	0.938292
FURIN	15q26.1	0.005982	0.907232	0.938295
TAS2R60	7q35	-0.00596	0.907511	0.938535
BCYRN1	2p21	-0.00595	0.907799	0.938784
DDHD1	14q22.1	0.00594	0.907871	0.93881
GALNTL6	4q34.1	0.005895	0.908574	0.939488
SLC3A2	11q12.3	0.005872	0.908928	0.93976

RPSAP58	19p12	-0.00587	0.908938	0.93976
DDX10	11q22.3	0.005869	0.908978	0.93976
RFX8	2q11.2	-0.00586	0.909083	0.939814
INSM1	20p11.23	-0.00586	0.909124	0.939814
NDUFV2	18p11.22	-0.00585	0.909287	0.939833
NECAB3	20q11.22	0.005848	0.909297	0.939833
ANXA8L1	10q11.22	-0.00585	0.909336	0.939833
SUPT7L	2p23.3	0.005845	0.90935	0.939833
LTN1	21q21.3	0.005843	0.909376	0.939833
S100A5	1q21.3	-0.00584	0.909457	0.939867
NT5E	6q14.3	0.005814	0.909829	0.940203
KRTAP26-1	21q22.11	0.005807	0.909926	0.940255
TTC4	1p32.3	-0.0058	0.910061	0.940267
NBEAL1	2q33.2	0.005798	0.910065	0.940267
SPRR2E	1q21.3	-0.0058	0.910078	0.940267
G6PC2	2q31.1	-0.00578	0.910279	0.940426
PPP6R3	11q13.2	-0.00577	0.91047	0.940575
SLC7A6OS	16q22.1	-0.00576	0.910593	0.940654
MRPL43	10q24.31	-0.00576	0.91073	0.940746
SH3TC2	5q32	0.005751	0.910793	0.940763
SLC32A1	20q11.23	-0.00574	0.911016	0.940945
RNF219	13q31.1	0.005727	0.911172	0.941056
C12ORF40	12q12	0.005723	0.911222	0.941056
SEC61G	7p11.2	-0.00572	0.911265	0.941056
DKFZP434A062	9q34.3	0.00569	0.911737	0.941495
RAB40AL	Xq22.1	0.005686	0.911798	0.94151
KANSL2	12q13.11	-0.00567	0.91206	0.941732
MMP21	10q26.2	-0.00566	0.91216	0.941786
CA7	16q22.1	0.00565	0.91235	0.941933
SLC35B1	17q21.33	0.005644	0.912449	0.941967
SPATA41	15q26.3	-0.00564	0.912476	0.941967
OR5L1	11q12.1	-0.00563	0.91264	0.942041
SAXO1	9p22.1	-0.00563	0.912703	0.942041
IP6K2	3p21.31	-0.00562	0.912785	0.942041
PTCD3	2p11.2	0.00562	0.912825	0.942041
CDH7	18q22.1	-0.00562	0.912825	0.942041
EIF3IP1	7q31.1	0.005619	0.91283	0.942041
DCTN3	9p13.3	-0.0056	0.913171	0.942344
ZC3HAV1	7q34	-0.00556	0.913676	0.942748
LGALS4	19q13.2	-0.00556	0.91368	0.942748
RPIA	2p11.2	-0.00556	0.913703	0.942748
MYH7B	20q11.22	0.005549	0.913916	0.942908
PIP5K1B	9q21.11	0.005547	0.913953	0.942908
SNTG1	8q11.21	-0.00554	0.91413	0.943042
RAP2B	3q25.2	-0.00553	0.914202	0.943068
ZAN	7q22.1	0.005516	0.914433	0.943258
NRAP	10q25.3	-0.00551	0.914537	0.943317
COPB2	3q23	-0.0055	0.914728	0.943465
FRA10AC1	10q23.33	-0.00548	0.914941	0.943636
EML3	11q12.3	-0.00548	0.914994	0.943642
KCNK7	11q13.1	0.005464	0.91523	0.943837
TAS2R40	7q34	0.00546	0.915291	0.943851
MMP3	11q22.2	0.005452	0.915416	0.943932
PROK2	3p13	-0.00545	0.915476	0.943944
PIP	7q34	-0.00543	0.915757	0.944186
FXD5	19q13.12	0.005413	0.916019	0.944407
NMT1	17q21.31	-0.0054	0.916162	0.944464
ITPA	20p13	-0.0054	0.916169	0.944464

HES1	3q29	0.005399	0.916235	0.944484
TEX33	22q12.3	-0.00539	0.916301	0.944504
TOB2P1	6p22.1	0.00539	0.916372	0.944528
IL19	1q32.1	-0.00538	0.916582	0.944631
PABPC1	8q22.3	-0.00537	0.916631	0.944631
PRR27	4q13.3	-0.00537	0.916645	0.944631
SHCBP1L	1q25.3	0.005369	0.916697	0.944631
ALX1	12q21.31	0.005368	0.916708	0.944631
OR1L1	9q33.2	-0.00536	0.916766	0.944643
SUGT1P3	13q14.11	-0.00535	0.916917	0.944732
HOXB13	17q21.32	0.005353	0.916947	0.944732
BTBD7	14q32.12	-0.00535	0.91704	0.944763
PIH1D2	11q23.1	-0.00534	0.917072	0.944763
DDOST	1p36.12	-0.00532	0.917413	0.945052
NPW	16p13.3	-0.00532	0.917447	0.945052
MTRR	5p15.31	0.005316	0.917513	0.945072
TNFRSF1B	1p36.22	0.005266	0.918292	0.945826
SSMEM1	7q32.2	-0.00526	0.918374	0.945862
KIAA1211L	2q11.2	-0.00525	0.918482	0.945892
POP4	19q12	-0.00525	0.918498	0.945892
SNORA75	2q37.1	0.005246	0.918601	0.945949
METTL2B	7q32.1	-0.00524	0.918728	0.946031
LINC01134	1p36.32	-0.00523	0.918798	0.946055
OR2K2	9q31.3	-0.00523	0.918895	0.946084
GLA	Xq22.1	0.005225	0.918921	0.946084
ZNF267	16p11.2	-0.00522	0.919021	0.946138
LGALS13	19q13.2	-0.00522	0.919071	0.946142
PITPNA	17p13.3	0.005201	0.919294	0.946322
SFXN5	2p13.2	-0.00519	0.91951	0.946496
NUDT2	9p13.3	0.005183	0.919574	0.946505
ELMOD3	2p11.2	-0.00518	0.91962	0.946505
ZC3H8	2q14.1	-0.00518	0.91966	0.946505
CRAT	9q34.11	0.005169	0.919797	0.946593
GAS2L2	17q12	-0.00517	0.91984	0.946593
SBF1P1	8q12.1	-0.00516	0.919977	0.946685
SP140L	2q37.1	-0.00514	0.920173	0.946822
TCL6	14q32.13	-0.00514	0.920204	0.946822
GALT	9p13.3	0.005136	0.920303	0.946874
PPP1R11	6p22.1	-0.00513	0.920353	0.946877
PIK3R2	19p13.11	-0.00513	0.920456	0.946934
OR51B4	11p15.4	0.005119	0.920563	0.946971
MAGEB16	Xp21.1	0.005118	0.920586	0.946971
TMEM241	18q11.2	-0.00508	0.921112	0.947463
TMEM39B	1p35.2	0.005076	0.921228	0.947496
KCNT1	9q34.3	0.005075	0.921238	0.947496
ASIC5	4q32.1	-0.00507	0.921318	0.947525
ZFYVE21	14q32.33	0.005067	0.921361	0.947525
HOXB1	17q21.32	-0.00505	0.921588	0.94771
PPP6C	9q33.3	-0.00504	0.921741	0.947818
RFX2	19p13.3	-0.00504	0.921838	0.947869
GGN	19q13.2	-0.00503	0.921926	0.947911
AKAP14	Xq24	0.005017	0.922139	0.948081
TMEM38A	19p13.11	0.005014	0.922191	0.948086
DUX4L6	4q35.2	0.004998	0.922444	0.948297
OR51G2	11p15.4	-0.00499	0.922509	0.94831
CASTOR2	7q11.23	0.004991	0.92255	0.94831
ANKRD66	6p12.3	-0.00497	0.922911	0.948631
ARF3	12q13.12	0.004945	0.923253	0.94891

CBX8	17q25.3	-0.00494	0.923276	0.94891
SAG	2q37.1	0.004937	0.923383	0.948971
S100A7A	1q21.3	0.004931	0.923478	0.94902
TRIM54	2p23.3	-0.00492	0.923572	0.949053
C2ORF80	2q33.3	0.00492	0.92364	0.949053
PSMB5	14q11.2	0.004919	0.923653	0.949053
GUCY2F	Xq22.3-q23	0.004914	0.923734	0.949088
SDR9C7	12q13.3	-0.00489	0.924064	0.949379
ADRA2B	2q11.2	-0.00487	0.924366	0.949639
NARS	18q21.31	0.004864	0.924506	0.949703
N4BP2L2	13q13.1	0.004863	0.924522	0.949703
KRTAP9-8	17q21.2	-0.00482	0.92517	0.950294
TBX22	Xq21.1	0.00482	0.925193	0.950294
ACSF3	16q24.3	0.004808	0.925368	0.950426
SOX9	17q24.3	0.004802	0.925462	0.950473
TMEM61	1p32.3	-0.00477	0.925935	0.95091
APOBEC2	6p21.1	0.004761	0.926103	0.951034
COPZ1	12q13.13	0.004751	0.926255	0.951141
ORMDL1	2q32.2	-0.0047	0.927061	0.951898
VNN1	6q23.2	0.004697	0.927098	0.951898
RTF1	15q15.1	-0.00469	0.927134	0.951898
KLK12	19q13.41	-0.00467	0.927528	0.952253
METTL21A	2q33.3	-0.00464	0.928044	0.952734
ZNF780A	19q13.2	-0.00463	0.928101	0.952743
PMFBP1	16q22.2	0.004605	0.928517	0.953097
SPAG17	1p12	0.004604	0.92854	0.953097
SLFN14	17q12	-0.0046	0.928592	0.953101
ICA1	7p21.3	0.004585	0.92883	0.953281
MAGEB18	Xp21.3	0.004583	0.928862	0.953281
RGPD4	2q12.3	-0.00458	0.928965	0.953338
PIGG	4p16.3	0.004544	0.929464	0.9538
BRDTP1	Xq21.33	-0.00453	0.92966	0.953953
CNTFR	9p13.3	-0.00452	0.929813	0.954061
OR52I2	11p15.4	-0.00451	0.92997	0.954174
TRIM49	11q14.3	-0.0045	0.930136	0.954248
CSF3	17q21.1	-0.0045	0.930174	0.954248
HAGH	16p13.3	-0.0045	0.930214	0.954248
RUFY2	10q21.3	-0.00449	0.930234	0.954248
ASB18	2q37.2	-0.00448	0.930466	0.954437
TMEM121B	22q11.1	0.004472	0.93058	0.954506
SLC35B2	6p21.1	0.004466	0.930664	0.954543
COL4A6	Xq22.3	0.004448	0.930952	0.95478
GRIK3	1p34.3	0.004445	0.930995	0.95478
DPRX	19q13.42	0.004441	0.931061	0.95478
PTK2B	8p21.2	0.004439	0.931087	0.95478
MSMO1	4q32.3	-0.00444	0.931134	0.95478
CCDC96	4p16.1	0.004431	0.93121	0.95481
PMS2P5	7q11.23	0.004417	0.931434	0.954957
OR10AG1	11q12.1	0.004414	0.931482	0.954957
PLCD3	17q21.31	0.004413	0.931497	0.954957
HSF1	8q24.3	0.004409	0.931554	0.954967
CD101	1p13.1	-0.0044	0.931721	0.955089
TTC36	11q23.3	0.004355	0.932392	0.955698
PRKAB2	1q21.1	-0.00435	0.932411	0.955698
RPL22	1p36.31	-0.00432	0.932861	0.956111
SLC10A4	4p11	0.004317	0.932977	0.956181
APOC3	11q23.3	-0.0043	0.93324	0.956401
CNIH2	11q13.2	0.004289	0.933408	0.956524



LAMB1	7q31.1	-0.00427	0.933714	0.95679
SMAD5	5q31.1	0.004257	0.933911	0.956942
SRPK3	Xq28	-0.00425	0.933998	0.956982
MAGEB1	Xp21.2	-0.00422	0.93451	0.957458
DSP	6p24.3	-0.00421	0.934601	0.957486
FNDC11	20q13.33	0.00421	0.934633	0.957486
LINC00957	7p13	-0.0042	0.934725	0.957531
HLA-B	6p21.33	-0.0042	0.934818	0.957578
CCDC155	19q13.33	0.004194	0.934886	0.957598
TMEM150B	19q13.42	0.004178	0.935128	0.957798
CAV3	3p25.3	-0.00417	0.935255	0.957878
FMO9P	1q24.1	0.004163	0.935367	0.957924
AP4E1	15q21.2	-0.00416	0.935395	0.957924
CELA3A	1p36.12	-0.00414	0.935666	0.958114
DEFB109A	8p23.1	-0.00414	0.935693	0.958114
PPP2R2C	4p16.1	-0.00414	0.935735	0.958114
NDUFB3	2q33.1	-0.00414	0.935772	0.958114
NUP35	2q32.1	0.004102	0.936312	0.958603
JOSD2	19q13.33	-0.0041	0.936346	0.958603
GATA2	3q21.3	0.00409	0.936496	0.958708
MS4A12	11q12.2	-0.00408	0.936715	0.958883
VPS8	3q27.2	0.004049	0.93713	0.959124
SYCP1	1p13.2	0.004047	0.937155	0.959124
DSCR4	21q22.13	-0.00405	0.937191	0.959124
PKD1L3	16q22.2	-0.00404	0.937243	0.959124
SFTA2	6p21.33	-0.00404	0.937253	0.959124
PBX2	6p21.32	0.004038	0.937306	0.959124
ZDHHC5	11q12.1	0.004035	0.937353	0.959124
SIRT3	11p15.5	0.004032	0.937386	0.959124
PNPLA2	11p15.5	0.004031	0.937406	0.959124
TAF10	11p15.4	-0.00403	0.937437	0.959124
GMCL1	2p13.3	0.004027	0.937477	0.959124
TAF1D	11q21	0.003992	0.938017	0.959627
CBWD1	9p24.3	-0.00397	0.938301	0.959868
ALAS1	3p21.2	-0.00396	0.938511	0.960034
KIF19	17q25.1	0.003949	0.938679	0.960158
ADGRA1	10q26.3	0.003942	0.938786	0.960201
LY75	2q24.2	-0.00394	0.938818	0.960201
KIR3DL1	19q13.42	0.003928	0.939011	0.96035
IKZF4	12q13.2	0.003916	0.939193	0.960487
CACNA1F	Xp11.23	0.003912	0.939252	0.960498
TERB1	16q22.1	0.003908	0.939322	0.960521
TMEM33	4p13	0.003896	0.939505	0.960659
CST8	20p11.21	0.003874	0.939845	0.960958
MRGPRG-AS1	11p15.4	0.003866	0.939961	0.961027
AKAIN1	18p11.31	-0.00386	0.940118	0.961139
NBR2	17q21.31	-0.00385	0.940169	0.961142
PLEKHM1	17q21.31	0.003849	0.940236	0.961147
FAM238B	10p12.1	0.003846	0.94027	0.961147
GPAT3	4q21.23	-0.00382	0.940723	0.961525
CCDC28B	1p35.2	-0.00382	0.940736	0.961525
SLC13A1	7q31.32	-0.0038	0.940952	0.961697
EPG5	18q12.3-q21.1	-0.00379	0.94118	0.961881
KIAA1328	18q12.2	0.003781	0.94128	0.961934
MRPL34	19p13.11	0.00377	0.941457	0.962065
SSX9P	Xp11.23	0.003741	0.941896	0.962457
YBX3	12p13.2	-0.00374	0.941951	0.962457
SLPI	20q13.12	0.003736	0.941984	0.962457

CDRT15	17p12	-0.0037	0.942548	0.962984
YTHDF1	20q13.33	0.003691	0.942682	0.963043
EXOSC4	8q24.3	-0.00369	0.942725	0.963043
PODXL	7q32.3	-0.00368	0.942859	0.963043
KAT7	17q21.33	0.003675	0.942922	0.963043
SCARB1	12q24.31	-0.00367	0.942952	0.963043
EPB42	15q15.2	-0.00367	0.94297	0.963043
OR2A25	7q35	0.003671	0.942988	0.963043
OR6C1	12q13.2	0.003671	0.94299	0.963043
STK39	2q24.3	-0.00366	0.943166	0.963173
FGF7P3	9p12	-0.00364	0.943443	0.963407
TSPOAP1	17q22	-0.00363	0.943576	0.963494
CST9L	20p11.21	0.00363	0.943629	0.963499
NIF3L1	2q33.1	0.003621	0.943763	0.963546
TRPC7	5q31.1	-0.00362	0.943772	0.963546
ORM2	9q32	0.003614	0.943878	0.963605
IQCK	16p12.3	0.0036	0.944094	0.963776
SULT1A2	16p11.2	0.003595	0.944164	0.963799
ITSN1	21q22.11	-0.00357	0.944561	0.964155
LINC00964	8q24.13	0.003564	0.944654	0.9642
OPN5	6p12.3	0.003544	0.944951	0.964455
AQP3	9p13.3	-0.00351	0.945526	0.964992
SMAP2	1p34.2	0.0035	0.945643	0.965054
BCL2L14	12p13.2	0.003497	0.945683	0.965054
OR11G2	14q11.2	-0.00348	0.945882	0.965208
NAA11	4q21.21	0.00345	0.946411	0.965699
ZRSR2	Xp22.2	0.003446	0.946477	0.965717
ZDHHC21	9p22.3	-0.00344	0.946547	0.96574
CDH4	20q13.33	0.003434	0.946667	0.965812
SOX15	17p13.1	-0.00343	0.946736	0.96583
GSDMD	8q24.3	0.003426	0.946781	0.96583
NKD2	5p15.33	-0.00342	0.946854	0.965856
LRTM1	3p14.3	-0.00342	0.946921	0.965874
ELFN2	22q13.1	-0.0034	0.947138	0.966037
WFDC5	20q13.12	-0.0034	0.947176	0.966037
ASB1	2q37.3	0.003397	0.947232	0.966044
HLA-L	6p22.1	0.003386	0.947404	0.966126
RALGAPA1	14q13.2	0.003386	0.947409	0.966126
HOXC13	12q13.13	0.003377	0.94755	0.966222
GPRC5A	12p13.1	0.003364	0.947746	0.966372
FAF2	5q35.2	-0.00336	0.947836	0.966372
UROS	10q26.2	-0.00336	0.947843	0.966372
POTEG	14q11.2	0.003348	0.948002	0.966485
MIEN1	17q12	-0.00333	0.94832	0.96676
UBE4A	11q23.3	-0.00332	0.948504	0.966893
BARHL2	1p22.2	-0.00331	0.948547	0.966893
HCAR2	12q24.31	0.003299	0.948761	0.967062
FGD2	6p21.2	-0.00329	0.948846	0.9671
SNORA5B	7p13	-0.00328	0.949008	0.967215
ABCA5	17q24.3	-0.00328	0.949108	0.967268
TBL1XR1	3q26.32	-0.00327	0.949249	0.967362
CCNT2	2q21.3	0.003241	0.949659	0.967731
TMEM11	17p11.2	0.003234	0.949773	0.967798
NXF4	Xq22.1	0.003223	0.949936	0.967915
FKBP3	14q21.2	0.003217	0.950037	0.967924
TBCA	5q14.1	0.003215	0.950053	0.967924
XKRY2	Yq11.222	-0.00321	0.950121	0.967924
GAL3ST3	11q13.1	0.003209	0.950147	0.967924

LRRC66	4q12	-0.00321	0.950187	0.967924
PLSCR2	3q24	0.003201	0.950277	0.967967
PPP1CC	12q24.11	-0.00319	0.950524	0.96817
OR1L3	9q33.2	-0.00318	0.950584	0.968181
SLC22A3	6q25.3	-0.00317	0.950821	0.968374
PGA4	11q12.2	0.003161	0.950898	0.968402
FADD	11q13.3	-0.00314	0.951276	0.968738
CFAP77	9q34.13	-0.0031	0.95182	0.9692
OR11H6	14q11.2	0.003098	0.951869	0.9692
NXF2B	Xq22.1	0.003096	0.951903	0.9692
ACTA1	1q42.13	0.003095	0.951923	0.9692
NXNL2	9q22.1	-0.00309	0.951982	0.969211
SLC16A14	2q36.3	0.003078	0.952191	0.969374
GAGE13	Xp11.23	0.003074	0.952246	0.969381
PTGDR2	11q12.2	-0.00306	0.952395	0.969461
FLJ30679	16q24.1	0.00306	0.952469	0.969461
C22ORF23	22q13.1	0.003057	0.952505	0.969461
SLC12A7	5p15.33	-0.00306	0.952518	0.969461
NAXD	13q34	0.003047	0.952665	0.969558
RNF10	12q24.31	-0.00304	0.952725	0.969558
SLC5A5	19p13.11	-0.00304	0.952759	0.969558
RUNX1-IT1	21q22.12	0.003038	0.952814	0.969564
ZFAT-AS1	8q24.22	-0.00302	0.95301	0.969679
IL17RE	3p25.3	0.00302	0.953079	0.969679
OR5F1	11q12.1	-0.00302	0.953089	0.969679
ABHD15	17q11.2	0.003018	0.953119	0.969679
BTG3	21q21.1	0.002999	0.953417	0.969923
ZDHHC13	11p15.1	0.002996	0.953457	0.969923
RNASET2	6q27	-0.00297	0.953874	0.970299
C16ORF46	16q23.2	-0.00295	0.954137	0.970516
CEACAM16	19q13.31-q13.32	-0.00295	0.954223	0.970526
LOC646214	15q11.2	0.002941	0.954319	0.970526
GCH1	14q22.2	-0.00294	0.954345	0.970526
PER4	7p21.3	-0.00294	0.954353	0.970526
CYB561A3	11q12.2	0.002936	0.954389	0.970526
DRGX	10q11.23	0.002887	0.955157	0.971225
POM121L4P	22q11.21	0.002886	0.955173	0.971225
NRG1	8p12	0.002882	0.955232	0.971236
FBXO47	17q12 17q12	-0.00288	0.955334	0.971291
CLEC2D	12p13.31	0.002868	0.955451	0.97136
INTS9	8p21.1	0.002864	0.955505	0.971365
GRB7	17q12	-0.00283	0.956063	0.971883
LMOD2	7q31.32	-0.00282	0.956118	0.97189
CUL7	6p21.1	-0.00282	0.95622	0.971912
SUCLG1	2p11.2	-0.00282	0.956236	0.971912
OSR2	8q22.2	0.002798	0.956524	0.972154
NKX6-1	4q21.23	0.002789	0.956664	0.972239
FAM171A1	10p13	-0.00279	0.956704	0.972239
RYR3	15q13.3-q14	-0.00278	0.956833	0.97232
CISD3	17q12	0.002763	0.957072	0.972446
GSDMC	8q24.21	-0.00276	0.957091	0.972446
SPG21	15q22.31	-0.00276	0.957102	0.972446
LOC388242	16p11.2	-0.00276	0.957162	0.972457
TEX38	1p33	0.002735	0.957512	0.972686
BCO1	16q23.2	-0.00273	0.957563	0.972686
	4-Mar 2q35	0.002731	0.957568	0.972686
KTI12	1p32.3	-0.00273	0.957586	0.972686
MAPK1	22q11.22	-0.00272	0.95771	0.972686

ZNF804B	7q21.13	0.002722	0.957716	0.972686
VAMP7	Xq28 and Yq12	0.002721	0.957727	0.972686
AHDC1	1p36.11-p35.3	0.002708	0.957924	0.972837
LINC01734	20q12	-0.00269	0.958246	0.973094
SLC6A16	19q13.33	0.002686	0.958275	0.973094
KCNK10	14q31.3	0.002682	0.95833	0.973101
CLIP2	7q11.23	0.002674	0.958462	0.973186
LINC00161	21q21.3	0.002663	0.958633	0.973304
MRPL42	12q22	-0.00266	0.958676	0.973304
FOXN3-AS2	14q32.11	0.002654	0.958765	0.973306
KRTAP5-11	11q13.4	-0.00265	0.958774	0.973306
IRAK1BP1	6q14.1	0.002636	0.95904	0.973526
SMIM4	3p21.1	0.002631	0.959127	0.973565
HTR1A	5q12.3	-0.00263	0.959182	0.973571
MC1R	16q24.3	-0.00261	0.959511	0.973856
LINC02112	5p15.31-p15.2	-0.00258	0.959901	0.974203
TMEM225	11q24.1	-0.00257	0.960043	0.974281
ATF7IP2	16p13.2-p13.13	0.00257	0.960076	0.974281
OR51G1	11p15.4	-0.00256	0.960299	0.974459
ANKRD42	11q14.1	-0.00254	0.96047	0.974536
TRAPPC5	19p13.2	0.002542	0.96051	0.974536
RHO	3q22.1	0.00254	0.960536	0.974536
CDC40	6q21	-0.00253	0.960681	0.974536
TECRL	4q13.1	-0.00253	0.96072	0.974536
LRP10	14q11.2	-0.00253	0.960744	0.974536
NAIF1	9q34.11	-0.00253	0.960758	0.974536
CMPK2	2p25.2	0.002524	0.960778	0.974536
LHFPL4	3p25.3	0.002522	0.960813	0.974536
RFX5	1q21.3	-0.00251	0.960961	0.974637
ELF4	Xq26.1	0.002501	0.961135	0.974726
ETFA	15q24.2-q24.3	0.002498	0.961185	0.974726
FMNL2	2q23.3	0.002498	0.961195	0.974726
DCBLD1	6q22.1	-0.00249	0.961309	0.974792
C1ORF158	1p36.21	0.002486	0.96137	0.974804
ASB15	7q31.32	-0.00248	0.961469	0.974813
FAH	15q25.1	-0.00247	0.96155	0.974813
LINC01128	1p36.33	0.002474	0.961566	0.974813
SEC13	3p25.3	0.002473	0.961573	0.974813
SOX14	3q22.3	0.002443	0.962047	0.975243
LINC00636	3q13.12	-0.00243	0.962196	0.975335
ZP3	7q11.23	0.002431	0.962235	0.975335
DEF6	6p21.31	-0.0024	0.962713	0.97577
FAM9C	Xp22.2	0.002395	0.962783	0.975792
FAM183A	1p34.2	-0.00238	0.963072	0.975992
RABL2B	22q13.33	0.002376	0.963077	0.975992
BPIFB1	20q11.21	-0.00236	0.9633	0.976168
BLID	11q24.1	0.002357	0.963377	0.976197
CD46	1q32.2	0.002339	0.963655	0.976429
PBRM1	3p21.1	-0.00232	0.964003	0.976732
NEUROD4	12q13.2	-0.00231	0.964153	0.976834
TGM6	20p13	-0.0023	0.96429	0.976924
TSPY2	Yp11.2	0.00229	0.964415	0.977001
KHDC1	6q13	-0.00228	0.964528	0.977064
MEGF8	19q13.2	0.00228	0.964575	0.977064
FAM9B	Xp22.31	0.002265	0.964804	0.977247
CYP4Z1	1p33	0.002247	0.965085	0.977482
SAR1B	5q31.1	0.002239	0.965215	0.977564
WARS	14q32.2	-0.00223	0.965293	0.977594

CBFA2T2	20q11.21-q11.22	0.00222	0.965507	0.977762
LETMD1	12q13.12	-0.00219	0.966005	0.978217
SCRT2	20p13	0.00218	0.966127	0.978242
GAS6	13q34	0.002175	0.966203	0.978242
LINC01600	6p25.2	0.002174	0.966221	0.978242
NAT9	17q25.1	0.002174	0.966226	0.978242
MYCNOS	2p24.3	0.002168	0.966316	0.978284
MEMO1	2p22.3	0.00216	0.96643	0.97835
SNCB	5q35.2	0.002147	0.96664	0.978513
ATP8A1	4p13	0.002135	0.966824	0.97865
GUSB	7q11.21	-0.00213	0.966968	0.978739
CYB5D1	17p13.1	0.002123	0.967012	0.978739
ZMAT1	Xq22.1	-0.00212	0.967059	0.978739
OR10A3	11p15.4	0.002111	0.96719	0.978806
AKAP9	7q21.2	-0.00211	0.967222	0.978806
TPRXL	3p25.1	-0.0021	0.967416	0.978952
PAIP2B	2p13.3	-0.00209	0.967476	0.978964
NBPF1	1p36.13	0.002082	0.96765	0.97909
PRG2	11q12.1	0.002064	0.96793	0.979324
FITM1	14q12	0.002036	0.968359	0.979652
C7ORF61	7q22.1	-0.00203	0.9684	0.979652
PRAMEF18	1p36.21	-0.00203	0.968401	0.979652
PCYOX1L	5q32	-0.00201	0.96874	0.979913
PACC1	1q32.3	-0.00201	0.968757	0.979913
DEFB109B	8p23.1	0.002005	0.968845	0.979934
HPS3	3q24	0.002002	0.968891	0.979934
CEP126	11q22.1	-0.002	0.968924	0.979934
PDZD9	16p12.2	-0.002	0.968974	0.979934
CEP44	4q34.1	0.001979	0.969245	0.980159
LAG3	12p13.31	-0.00197	0.969349	0.980214
LGR6	1q32.1	-0.00196	0.969566	0.980385
FSD1	19p13.3	0.001952	0.96967	0.98044
OR8K3	11q12.1	-0.00195	0.969772	0.980494
SELENON	1p36.11	-0.00194	0.969877	0.980551
PWWP2A	5q33.3	-0.00193	0.969934	0.980559
ZNF292	6q14.3	-0.00192	0.970205	0.980765
OR8S1	12q13.11	-0.00192	0.970236	0.980765
SYCE1L	16q23.1	0.001895	0.970552	0.981035
PIKFYVE	2q34	0.001883	0.970733	0.981168
SPANXN5	Xp11.22	0.001855	0.971178	0.981569
RIC8B	12q23.3	-0.00182	0.971723	0.98207
DPP7	9q34.3	-0.00182	0.971793	0.982091
FBXO16	8p21.1	0.001806	0.971933	0.982183
URI1	19q12	-0.00179	0.972161	0.982321
APOOL	Xq21.1	-0.00179	0.972168	0.982321
SOX2	3q26.33	-0.00176	0.972602	0.98271
AADAC	3q25.1	0.001747	0.972849	0.982911
LINC00671	17q21.31	-0.00173	0.973046	0.983059
TEX13A	Xq22.3	-0.00173	0.973177	0.983143
LRRC36	16q22.1	0.001705	0.973504	0.983423
OTOP2	17q25.1	-0.0017	0.973565	0.983435
ITFG2	12p13.33	0.001697	0.973629	0.98345
SMNDC1	10q25.2	0.001693	0.973693	0.983465
AHSA1	14q24.3	-0.00169	0.973811	0.983535
OR52L1	11p15.4	-0.00168	0.973875	0.98355
C1QL1	17q21.31	0.001672	0.97401	0.983637
CDX2	13q12.2	0.001657	0.974251	0.983831
WDYHV1	8q24.13	0.001642	0.974475	0.984007

NHLRC3	13q13.3	-0.00164	0.974586	0.984069
PCID2	13q34	-0.00163	0.974662	0.984097
NMS	2q11.2	0.001626	0.97473	0.984115
MMP12	11q22.2	-0.00162	0.97486	0.984197
GCM2	6p24.2	0.001596	0.975191	0.984482
KEL	7q34	0.001591	0.975268	0.984509
FBXW8	12q24.22	-0.00158	0.975402	0.984595
DAPK3	19p13.3	-0.00156	0.975713	0.984859
REG1A	2p12	0.001558	0.97578	0.984877
PGA3	11q12.2	0.00154	0.976062	0.985112
PROP1	5q35.3	-0.00154	0.97611	0.985112
GABRB1	4p12	0.001532	0.976191	0.985144
DHDDS	1p36.11	0.001505	0.976609	0.985516
CEACAM8	19q13.2	0.001497	0.97674	0.985598
NPPC	2q37.1	0.001466	0.977217	0.985988
KBTBD12	3q21.3	0.001465	0.977225	0.985988
EIF3G	19p13.2	-0.00146	0.977368	0.986083
FAM106A	17p11.2	0.001446	0.977533	0.98617
RPS6KA5	14q32.11	0.001444	0.977552	0.98617
LINC00467	1q32.3	0.001426	0.97784	0.986363
PIK3R4	3q22.1	0.001423	0.97788	0.986363
LINC00589	8p12	-0.00142	0.977892	0.986363
TNFAIP2	14q32.32	-0.00142	0.97797	0.986363
RABEP2	16p11.2	-0.00142	0.97799	0.986363
OR52A5	11p15.4	-0.0014	0.978281	0.986607
IQSEC2	Xp11.22	0.001386	0.978465	0.986616
RPS6KA3	Xp22.12	-0.00138	0.978509	0.986616
DHX32	10q26.2	0.001382	0.978526	0.986616
HCAR3	12q24.31	-0.00138	0.978559	0.986616
RGL3	19p13.2	-0.00138	0.978582	0.986616
ZCCHC7	9p13.2	0.001378	0.978586	0.986616
NR5A1	9q33.3	0.001367	0.978753	0.986696
SRA1	5q31.3	-0.00136	0.978793	0.986696
WDR92	2p14	-0.00136	0.978855	0.986696
LINC02610	2q37.3	0.00136	0.978862	0.986696
PARP15	3q21.1	0.001355	0.97894	0.986702
USH2A	1q41	-0.00135	0.978967	0.986702
CACNG2	22q12.3	-0.00132	0.979483	0.987173
TMEM62	15q15.2	-0.0013	0.979847	0.987432
NHLRC1	6p22.3	0.001294	0.979884	0.987432
SLC25A13	7q21.3	0.001294	0.979889	0.987432
STK38	6p21.31	0.001287	0.979991	0.987485
ZNF84	12q24.33	-0.00128	0.980068	0.987513
PTS	11q23.1	0.00127	0.980258	0.987598
CTAGE10P	13q14.2	-0.00127	0.980307	0.987598
ELOF1	19p13.2	0.001266	0.980322	0.987598
FER1L5	2q11.2	-0.00126	0.980348	0.987598
VPS13C	15q22.2	0.001255	0.980492	0.987667
PLEKHA8P1	12q12	-0.00125	0.980516	0.987667
OR1L6	9q33.2	-0.00124	0.980775	0.987879
SNORA54	11p15.4	-0.00123	0.980866	0.98792
UPK1B	3q13.32	0.001224	0.980976	0.987982
NCS1	9q34.11	-0.00121	0.981118	0.988075
CGAS	6q13	0.001209	0.981215	0.988123
LINC00158	21q21.2	0.00119	0.981505	0.988318
SPINK5	5q32	-0.00119	0.981539	0.988318
REL	2p16.1	0.001186	0.98157	0.988318
DSCR10	21q22.13	-0.00118	0.981606	0.988318

OR2W3	1q44	-0.00117	0.981856	0.988513
OR13C3	9q31.1	0.001161	0.981948	0.988513
MS4A5	11q12.2	-0.00116	0.981948	0.988513
ANKRD36BP2	2p11.2	-0.00116	0.982043	0.988559
AK8	9q34.13	-0.00115	0.982105	0.988571
GNA14	9q21.2	-0.00113	0.982362	0.988781
FOXD2	1p33	-0.00113	0.982466	0.988836
WARS2	1p12	-0.00111	0.982797	0.989119
HNF1B	17q12	0.001075	0.983299	0.989574
DAOA	13q33.2 13q34	0.001066	0.983431	0.989658
TMPRSS11B	4q13.2	0.001052	0.983643	0.989821
ZNF132	19q13.43	0.001011	0.984293	0.990425
SLC52A3	20p13	-0.00099	0.984574	0.990658
JUND	19p13.11	0.000965	0.984999	0.991036
OR2A14	7q35	-0.00096	0.985097	0.991085
LILRP2	19q13.42	0.000951	0.985221	0.99116
GALNT3	2q24.3	-0.00093	0.9855	0.991391
PDIA4	7q36.1	-0.00093	0.985601	0.991433
A1CF	10q11.23	-0.00092	0.985641	0.991433
PSG8	19q13.2	0.000904	0.985954	0.991698
NIT2	3q12.2	-0.0009	0.986056	0.991749
KRTAP5-3	11p15.5	-0.00089	0.986142	0.991749
GPBP1	5q11.2	0.000891	0.986153	0.991749
ZNF285	19q13.31	0.000882	0.986292	0.991808
RPL13AP6	10q25.2	-0.00088	0.98638	0.991808
ABL1	9q34.12	0.000875	0.986407	0.991808
SSC4D	7q11.23	0.000874	0.98641	0.991808
FAM66A	8p23.1	0.000869	0.9865	0.991848
CLEC18C	16q22.1	0.000864	0.986572	0.991872
LRRC69	8q21.3	0.000858	0.986665	0.991915
KHDC3L	6q13	0.000849	0.986804	0.991959
CT45A3	Xq26.3	0.000847	0.986839	0.991959
ZC3H14	14q31.3	-0.00084	0.986872	0.991959
OR5H2	3q11.2	-0.00084	0.986924	0.991959
CLDN18	3q22.3	-0.00084	0.986956	0.991959
CXORF49B	Xq13.1	0.000832	0.987063	0.992017
ZNF611	19q13.41	-0.00081	0.987468	0.992373
AP5B1	11q13.1	0.000802	0.987538	0.992378
GDF9	5q31.1	0.0008	0.987571	0.992378
LINC00667	18p11.31	-0.0008	0.987632	0.992389
RASL10A	22q12.2	-0.00079	0.98777	0.992478
CYP4F3	19p13.12	0.000781	0.987856	0.992514
NSUN4	1p33	-0.00078	0.987916	0.992525
PDE6C	10q23.33	-0.00077	0.987991	0.992551
DTD1	20p11.23	-0.00075	0.988398	0.992909
LSM8	7q31.31	0.000719	0.988829	0.993077
ACTRT2	1p36.32	-0.0007	0.989168	0.993077
RBMY1A3P	Yp11.2	-0.0007	0.989168	0.993077
FAM197Y2	Yp11.2	-0.0007	0.989168	0.993077
TFAP2D	6p12.3	-0.0007	0.989168	0.993077
KRTAP20-4	21q22.11	-0.0007	0.989168	0.993077
P2RX6P	22q11.21	0.000697	0.989168	0.993077
TSPY4	Yp11.2	-0.0007	0.989168	0.993077
CBLL2	Xp22.11	-0.0007	0.989168	0.993077
DEFB107A	8p23.1	-0.0007	0.989168	0.993077
PRAMEF22	1p36.21	-0.0007	0.989168	0.993077
DPPA5	6q13	0.000696	0.989183	0.993077
TAS2R39	7q34	0.000694	0.989209	0.993077

KCNA10	1p13.3	-0.00068	0.989396	0.993164
CLK1	2q33.1	0.000679	0.989445	0.993164
NCSTN	1q23.2	0.000679	0.989445	0.993164
AVPR1B	1q32.1	-0.00067	0.989612	0.993261
LINC01553	10q21.2	0.000667	0.989641	0.993261
C2ORF83	2q36.3	-0.00065	0.989932	0.993503
CFD	19p13.3	-0.00063	0.990194	0.993717
RESP18	2q35	-0.00062	0.990352	0.993826
SLC38A8	16q23.3	0.000598	0.990702	0.994117
RAB41	Xq13.1	-0.0006	0.990742	0.994117
KCNG2	18q23	-0.00059	0.990904	0.99423
PSMD9	12q24.31	-0.00058	0.991048	0.994283
SAA4	11p15.1	0.000575	0.991056	0.994283
PLA2G10	16p13.12	0.000554	0.991382	0.994498
NDUFS5	1p34.3	0.000553	0.991412	0.994498
HEATR5A	14q12	0.00055	0.991446	0.994498
DNAH12	3p14.3	0.000548	0.991475	0.994498
CSN2	4q13.3	0.000546	0.991519	0.994498
SEMA3F	3p21.31	0.000532	0.991724	0.994654
C2ORF27B	2q21.2	0.000515	0.992003	0.994884
RNF126P1	17q22	-0.0005	0.992154	0.994981
SNX22	15q22.31	0.000502	0.992199	0.994981
SLC12A1	15q21.1	-0.00048	0.992499	0.995232
DCAF4	14q24.2	0.000479	0.99255	0.995234
OAS2	12q24.13	0.000472	0.99267	0.995304
PLA2G4A	1q31.1	-0.00047	0.992757	0.995342
FAM27E5	17p11.2	0.000454	0.992942	0.995477
HTN3	4q13.3	0.00043	0.993314	0.995743
FAM98A	2p22.3	0.000429	0.993336	0.995743
VPS16	20p13	0.000425	0.9934	0.995743
CRB2	9q33.3	0.000424	0.993407	0.995743
FKBP8	19p13.11	-0.00041	0.993704	0.995946
ALG9	11q23.1	0.000402	0.993745	0.995946
SPRYD7	13q14.2	-0.0004	0.993778	0.995946
RPS24	10q22.3	0.000396	0.993838	0.995946
LOC100130331	1q43	0.000393	0.993895	0.995946
GP9	3q21.3	0.000392	0.993907	0.995946
EXOSC1	10q24.1	0.000385	0.994016	0.995992
EFCAB8	20q11.21	-0.00038	0.994053	0.995992
KIAA0895	7p14.2	0.000378	0.994123	0.996012
TTY9B	Yq11.222	-0.00037	0.994174	0.996014
FBP1	9q22.32	0.000359	0.99442	0.996211
NME2	17q21.33	0.000322	0.994989	0.996731
SNORA16A	1p35.3	0.000313	0.995128	0.99682
MTLN	2q13	0.000309	0.99519	0.996833
SLC16A11	17p13.1	0.000299	0.995351	0.996888
CDHR1	10q23.1	0.000298	0.995374	0.996888
WFDC6	20q13.12	-0.0003	0.995395	0.996888
ANXA2R	5p12	0.000287	0.995545	0.996988
RTL4	Xq23	-0.00028	0.995633	0.997027
PHACTR2	6q24.2	-0.00027	0.995789	0.997133
NLN	5q12.3	-0.00027	0.995873	0.997167
SYTL2	11q14.1	0.000244	0.996207	0.997413
COQ6	14q24.3	0.000243	0.996217	0.997413
TRMO	9q22.33	-0.00024	0.996316	0.997461
DDX50	10q22.1	-0.00022	0.996518	0.997614
INPP5J	22q12.2	0.000208	0.996759	0.997806
FAM120C	Xp11.22	0.000202	0.996856	0.997853



SLC35E1	19p13.11	0.000197	0.99694	0.997887
PEX11B	1q21.1	0.000191	0.997034	0.997931
TRIM16	17p12	0.000176	0.997265	0.998101
LAIR2	19q13.42	0.000173	0.997304	0.998101
BCL2L2	14q11.2	-0.00015	0.997603	0.99835
TMSB4Y	Yq11.221	-0.00015	0.997709	0.998374
HIST2H4A	1q21.2	0.000144	0.997763	0.998374
LRRIQ1	12q21.31	0.000143	0.997776	0.998374
ATP10B	5q34	0.000129	0.997997	0.998546
SPATA31A3	9q21.11	-0.00012	0.998188	0.998669
RIIAD1	1q21.3	0.000114	0.998221	0.998669
PEBP1	12q24.23	0.000101	0.998436	0.998835
LAT	16p11.2	#####	0.998503	0.998852
LCE3C	1q21.3	#####	0.99861	0.99891
CLDN8	21q22.11	7.48E-05	0.998837	0.999087
PUDP	Xp22.31	6.00E-05	0.999068	0.999268
DSG4	18q12.1	4.76E-05	0.999261	0.999367
SAA2	11p15.1	4.71E-05	0.999267	0.999367
SURF4	9q34.2	#####	0.999403	0.999453
PCM1	8p22	3.09E-05	0.99952	0.99952