

Supplementary Table 7. Tumor RNA Sequencing

Durvalumab monotherapy arm			
gene	log2FoldChange	pvalue	padj
SEMA3A	1.695062585	3.12E-06	0.05177346
MFSD2A	-1.625482454	4.61E-06	0.05177346
CPM	-1.533789428	1.26E-05	0.07078467
COL7A1	1.600358439	9.83E-06	0.07078467
SPATA31A7	-5.905841366	2.69E-05	0.09861845
PLA2G4F	-1.791252627	4.39E-05	0.09861845
HPGD	-1.524416071	4.22E-05	0.09861845
DIO2	1.361386452	3.27E-05	0.09861845
OR2A4	-4.490420754	4.50E-05	0.09861845
SLC26A9	-2.7856324	3.32E-05	0.09861845
RNA5S9	-3.597278806	4.83E-05	0.09861845

Durvalumab + Oleclumab arm			
gene	log2FoldChange	pvalue	padj
GPX2	-4.0774704	3.74E-18	6.39E-14
PDK4	3.76706965	1.62E-16	1.38E-12
TSC22D3	3.60070276	6.66E-16	3.79E-12
FKBP5	2.70268737	8.91E-14	3.80E-10
DUSP1	3.43890151	8.97E-13	3.06E-09
HBA1	4.23179515	1.94E-12	5.51E-09
HBB	4.46879135	2.95E-12	7.20E-09
CEACAM5	-2.9888098	1.42E-10	3.03E-07
KLRD1	2.55404739	1.61E-10	3.05E-07
CXCR4	2.15046287	3.33E-10	5.68E-07
CABYR	-2.6103425	5.04E-10	7.82E-07
PER1	2.48896302	1.12E-09	1.60E-06
CD69	2.99078992	1.65E-09	2.17E-06
CHRD1	2.06896528	2.17E-09	2.65E-06
FAM107A	3.05095261	3.10E-09	3.53E-06
TXNIP	1.65606804	3.65E-09	3.89E-06
RGS2	2.25395133	6.77E-09	6.80E-06
ZBTB16	4.84871171	9.15E-09	8.68E-06
KRT80	-2.0396194	1.03E-08	9.23E-06
DEPP1	2.30137459	1.26E-08	1.08E-05
AFAP1-AS1	-3.0486829	1.64E-08	1.33E-05
RGS1	4.64514465	2.45E-08	1.90E-05
KLF9	2.01732451	3.39E-08	2.52E-05
SRGN	1.69552509	3.55E-08	2.53E-05
LAMB3	-1.7446958	3.70E-08	2.53E-05

CLEC4E	2.79583707	4.73E-08	3.10E-05
BRDT	-2.9547255	5.61E-08	3.55E-05
LGSN	-2.6962289	6.07E-08	3.70E-05
PIK3IP1	1.50052048	6.85E-08	4.03E-05
SCN7A	1.9831659	8.09E-08	4.61E-05
SCARA5	3.37531927	8.91E-08	4.91E-05
LINC02446	2.87077403	1.14E-07	6.10E-05
SLA	1.93245147	1.44E-07	7.25E-05
MMP19	2.03868645	1.42E-07	7.25E-05
ETS1	1.39001622	1.79E-07	8.71E-05
TCF21	1.64574461	1.96E-07	9.30E-05
MAP3K9	-1.6531635	2.26E-07	0.00010443
CAVIN2	1.82670865	2.37E-07	0.00010649
SLC6A4	3.90201207	2.52E-07	0.00010764
OGFRL1	1.7532429	2.48E-07	0.00010764
ZFP36	2.06556852	4.17E-07	0.00017355
CCL4	2.10760413	4.77E-07	0.00019381
BCL2	1.23996544	5.26E-07	0.00020891
ERBB4	2.19191256	5.71E-07	0.0002166
DDIT4	1.87117204	5.63E-07	0.0002166
ADAMTS1	2.29752374	6.73E-07	0.00024965
CYP24A1	-2.2773589	7.83E-07	0.00028451
AKR1C2	-2.3587938	1.08E-06	0.00038457
DSP	-1.597455	1.14E-06	0.00039729
CCN2	1.91092042	1.25E-06	0.00042808
ZFP36L2	1.50976392	1.37E-06	0.00044909
APOLD1	1.90067275	1.37E-06	0.00044909
B4GALNT3	-1.4123885	1.50E-06	0.00048177
KCNE1	2.10032017	1.63E-06	0.00051616
CCL5	1.26863503	1.70E-06	0.00052846
ITIH5	1.74034252	1.83E-06	0.00053102
ZFAND5	1.06591284	1.83E-06	0.00053102
MET	-1.2046001	1.83E-06	0.00053102
IQANK1	-1.9165979	1.83E-06	0.00053102
JCHAIN	1.22104138	1.99E-06	0.00056697
SOX4	-1.4525482	2.37E-06	0.00065387
RAB15	-1.3750179	2.37E-06	0.00065387
ACADL	3.09027829	2.51E-06	0.0006806
NLRP3	1.95976125	2.57E-06	0.00068506
ITK	1.565554	2.66E-06	0.00069812
KLRK1	1.66778613	2.80E-06	0.00072506
FOS	3.96467753	2.92E-06	0.00074522

PLAU	-1.4621657	3.07E-06	0.00077043
GRHL2	-1.7008261	3.36E-06	0.00083127
AKR1C3	-1.6830476	3.60E-06	0.0008558
CTLA4	1.69922382	3.59E-06	0.0008558
KLF2	1.56524243	3.61E-06	0.0008558
SMAP2	1.58881828	3.87E-06	0.00090493
SLC29A4	-2.1112949	4.31E-06	0.00099399
EPCAM	-1.7200131	4.62E-06	0.00105251
TNXB	1.30883329	4.85E-06	0.00108867
INMT	1.63952604	5.05E-06	0.00111964
MARVELD2	-1.7263656	5.14E-06	0.00112421
AFF3	1.45036581	5.23E-06	0.00113104
MMP13	-2.4912315	5.33E-06	0.0011381
RNF43	-1.4015048	5.47E-06	0.00115335
ADAMTS15	1.98948346	5.73E-06	0.00118007
CCN1	2.11141868	5.74E-06	0.00118007
OGN	2.59719876	5.94E-06	0.00120747
ELN	1.76957079	6.01E-06	0.00120747
LRRK2	1.84462947	6.20E-06	0.00123039
JAML	1.23643467	7.37E-06	0.00144715
TMC5	-1.7796278	8.65E-06	0.00166207
IQGAP2	1.04145026	8.66E-06	0.00166207
MS4A7	1.29714618	8.91E-06	0.00169042
BTNL9	1.61755315	9.34E-06	0.00175241
CLDN18	2.32460067	9.61E-06	0.00178313
NOS1AP	-1.46117	9.79E-06	0.00179788
SLED1	2.76673822	1.00E-05	0.00181815
CD8A	1.35571146	1.01E-05	0.00181837
CLEC3B	1.90527101	1.04E-05	0.00183104
NUDT16	1.06504469	1.04E-05	0.00183104
PDE3B	1.30892154	1.05E-05	0.00183736
LINC01123	-1.737911	1.07E-05	0.00184242
MAP2	-1.2341606	1.12E-05	0.00191355
STAT4	1.30740984	1.16E-05	0.00196308
MMP11	-1.636639	1.18E-05	0.00197488
PSTPIP2	1.48023371	1.26E-05	0.00207449
ETV4	-1.9698556	1.26E-05	0.00207449
SCML4	1.41209788	1.29E-05	0.00209353
SLC11A1	1.59027779	1.30E-05	0.00209353
MGP	1.40093488	1.32E-05	0.00210532
ADCYAP1	2.69083781	1.57E-05	0.0024771
ABI3BP	1.47979184	1.62E-05	0.00253185

PRRG3	2.05256071	1.68E-05	0.00260738
THBS1-IT1	2.07241758	1.71E-05	0.00261262
LINC02471	4.10260836	1.71E-05	0.00261262
IL1RL1	1.98154419	1.77E-05	0.00267436
KLRC1	2.90768747	1.81E-05	0.0027156
FAM83G	-1.4905762	1.84E-05	0.00273684
MEX3A	-1.5824302	1.89E-05	0.00277703
SFN	-1.7756195	1.94E-05	0.00283834
CELSR1	-0.9847327	1.99E-05	0.00287945
CLEC2D	0.95302514	2.03E-05	0.00291076
LAMC2	-1.2791322	2.16E-05	0.00307568
SH3BP5	1.13300407	2.27E-05	0.00319777
TLR2	1.18883147	2.53E-05	0.00354238
ATF3	2.03128132	2.60E-05	0.00361348
ADAMTS9	1.14033095	2.70E-05	0.00370282
SLC44A5	-1.8374911	2.71E-05	0.00370282
EDNRB	1.28426378	3.06E-05	0.00414598
SERPINE1	1.68138029	3.12E-05	0.00416699
UGDH	-1.3082198	3.11E-05	0.00416699
IL18R1	1.35599752	3.16E-05	0.00418514
LAPTM4B	-1.447631	3.32E-05	0.00436481
C6orf223	-2.2357413	3.38E-05	0.00440647
BIRC3	1.15793129	3.52E-05	0.00452849
LTF	1.98325987	3.53E-05	0.00452849
GZMK	1.55800041	3.57E-05	0.00455089
GPX3	1.05728368	3.66E-05	0.00463002
PTPRH	-2.1010595	3.70E-05	0.00464442
C7	1.8906617	3.80E-05	0.00473838
PTPRC	0.93952998	3.95E-05	0.00485268
SLC12A7	-1.0462768	3.95E-05	0.00485268
TRIM17	-1.6626892	4.04E-05	0.00493063
FOSB	5.30113454	4.23E-05	0.00512329
PRF1	1.46878332	4.32E-05	0.00517393
RAB25	-1.9013567	4.33E-05	0.00517393
GADD45B	2.02131542	4.40E-05	0.00518487
ANGPTL1	2.39162614	4.40E-05	0.00518487
SPTB	-1.6343567	4.62E-05	0.00539808
PIP4K2A	0.91930445	4.68E-05	0.00544151
CD163	1.27556922	4.77E-05	0.00550364
BCAR1	-1.233044	5.01E-05	0.00566782
PRKCH	1.10674364	4.96E-05	0.00566782
EMP1	1.85567129	5.03E-05	0.00566782

SPINT1	-1.2815657	5.05E-05	0.00566782
PRAME	-2.2919788	5.50E-05	0.00606135
ERICH6B	3.43655532	5.49E-05	0.00606135
DTX4	-1.0650814	5.48E-05	0.00606135
KCTD12	0.96234002	5.63E-05	0.00616613
DSG2	-1.4492183	5.74E-05	0.00623913
SLC1A3	1.20122135	5.79E-05	0.0062611
GPIHBP1	2.32476984	5.91E-05	0.00635068
BNIP3	-1.5413467	6.00E-05	0.00639901
USP53	1.08069344	6.03E-05	0.00639901
GPR21	-4.6036376	6.15E-05	0.00648304
ERAP2	1.04151592	6.28E-05	0.00654169
PHLDA3	-1.3898025	6.28E-05	0.00654169
KLF4	2.2195551	6.65E-05	0.00685178
FHL1	1.96585419	6.66E-05	0.00685178
MMRN1	1.85503526	7.17E-05	0.00732623
GFOD1	1.16497703	7.27E-05	0.00738891
CD36	1.57309379	7.35E-05	0.00741275
TOM1L1	-1.226686	7.38E-05	0.00741275
ESRP1	-1.584139	7.84E-05	0.00782712
SALL4	-1.7885234	7.98E-05	0.00792364
METTL7A	1.21746486	8.30E-05	0.00819264
XKR4	2.8538541	8.55E-05	0.00839144
HAPLN1	2.89747893	8.82E-05	0.00860079
PDE4B	1.19172186	9.05E-05	0.0087799
ESRP2	-1.4173858	9.44E-05	0.00905751
TAMALIN	1.43415668	9.41E-05	0.00905751
MT2A	1.61288235	9.64E-05	0.00919572
SMAD9	1.58891923	9.89E-05	0.00938019
RGL3	-1.1948256	0.00010271	0.00968925
CDC6	-1.6857878	0.00010908	0.01023349
CSRNP1	1.74128272	0.00011093	0.01035025
STOM	0.90783898	0.00011328	0.01051207
CD226	1.23435626	0.00011505	0.01061805
FOXO1	0.98308985	0.00011595	0.0106439
GEM	1.38512733	0.00011664	0.01064957
DUSP2	1.87800452	0.00011771	0.0106685
SESN1	1.28857247	0.00011809	0.0106685
GPR171	1.81530847	0.00012053	0.01083111
SLC19A2	1.43916388	0.00012367	0.0110551
FGL2	1.28077509	0.00012938	0.0114565
FHL5	1.84807585	0.00013009	0.0114565

CXCR6	1.58757427	0.00013017	0.0114565
LONRF1	1.14567707	0.00013355	0.01169385
ITM2B	0.87655059	0.00013633	0.01187618
CEBPD	1.03455834	0.0001393	0.01207313
CAPN12	-1.5353935	0.00014051	0.01211318
IPCEF1	1.11461744	0.00014118	0.01211318
VEGFA	-1.1544792	0.00014381	0.01218616
HCLS1	0.97031956	0.00014417	0.01218616
CNTNAP5	3.83988098	0.00014287	0.01218616
SPRY1	1.15909868	0.00014571	0.01221619
NECTIN4	-1.6084478	0.00014596	0.01221619
TMEM132A	-1.317254	0.00014833	0.01235376
HSPB6	1.86728374	0.00015315	0.01265467
CELF2	1.1875171	0.00015342	0.01265467
TMEM63C	-1.6835853	0.00015433	0.01266801
KIAA1217	-1.055154	0.00015672	0.01274201
BTG1	1.17025814	0.00015604	0.01274201
C5	1.30256442	0.00016007	0.01278176
FGD6	-1.3014465	0.00016077	0.01278176
REEP6	-1.8086838	0.00015922	0.01278176
KLF15	1.69085667	0.00016095	0.01278176
PLS1	-1.4586358	0.00015824	0.01278176
GRB7	-1.4412806	0.0001618	0.01279
CGN	-1.0059907	0.00016669	0.01311583
SLC6A3	-2.4627688	0.00016917	0.01324931
H4C15	-1.8928142	0.00017104	0.01333474
MTM1	1.12917706	0.00017259	0.01339419
SLC16A14	-1.6602042	0.00017795	0.01374794
DCX	3.16986193	0.00018314	0.01408503
PWAR5	1.1218244	0.00018448	0.01412501
FYN	0.82568352	0.00018608	0.01418374
IRX3	-1.2320433	0.00018763	0.01421434
PTGER4	1.16654887	0.00018815	0.01421434
ZNF503	-1.2278959	0.00018999	0.01425584
XAGE1B	-4.6660929	0.00019037	0.01425584
AREG	1.59422824	0.00019174	0.01429575
SIK1	0.95646013	0.000193	0.01432713
FRZB	1.19404539	0.00019764	0.01460852
GRIN2D	-1.6674001	0.00019871	0.01462385
ITM2A	1.59666059	0.00020388	0.01487644
PGAP6	-1.2312762	0.00020316	0.01487644
POMT2	-1.1276013	0.00020749	0.01507502

KLF6	1.51780636	0.00021155	0.01528619
CYTIP	1.13083078	0.00021218	0.01528619
ERBB3	-1.2396165	0.00021856	0.01567958
RSPO3	1.25069967	0.00022007	0.01572156
RCAN1	1.26106758	0.00022144	0.0157533
SAMSN1	1.09930201	0.0002225	0.0157631
KIAA1549	-1.0710694	0.00023214	0.01637828
CHL1	-1.1174176	0.00023503	0.01651422
KCNMA1	1.47897215	0.00024458	0.01711484
CRIM1	1.19607885	0.00024622	0.01715872
COL10A1	-1.5417098	0.00025258	0.0173892
VWF	1.11106354	0.00025212	0.0173892
PTGS2	1.50899326	0.00025252	0.0173892
SAPCD2	-1.9560407	0.00025871	0.01773974
JPT1	-1.4318581	0.00026237	0.017919
AVIL	-1.3702024	0.00026479	0.0180119
B2M	0.80712895	0.00026644	0.0180525
MROH6	-1.3741784	0.00027236	0.01838056
UNC5B	-1.0616017	0.00027394	0.01838282
PTPRU	-1.0192067	0.00027562	0.01838282
ANGPT1	1.21653758	0.00027455	0.01838282
GABPB1-IT1	0.9719565	0.00028414	0.01865926
ZNF260	-1.0181434	0.00028167	0.01865926
FDCSP	2.69739104	0.00028348	0.01865926
KIAA1522	-1.3288873	0.00028247	0.01865926
ARRDC2	1.01631566	0.00028868	0.01888492
DNAH14	-1.4684609	0.00029105	0.01896704
TPO	3.90998494	0.00030085	0.01935879
SBSPON	2.11901581	0.0003016	0.01935879
LDB3	1.74143733	0.00030103	0.01935879
LINC01106	-1.4969507	0.00030008	0.01935879
IL6ST	0.87262761	0.00030932	0.01978004
NELL2	1.27148289	0.00031134	0.01983495
HOXC9	-2.1033321	0.00032152	0.02031353
ALKAL2	2.74940937	0.00032099	0.02031353
PIK3R5	1.10002859	0.00032242	0.02031353
BAIAP2L1	-1.0770313	0.00032387	0.02032987
G6PD	-1.2892909	0.00033072	0.02068364
TAF11L10	10.8305469	0.0003389	0.02111839
DTHD1	1.45447025	0.00034796	0.02160392
CXCL2	1.55473284	0.00035363	0.02183414
CRISPLD2	1.19857063	0.00035423	0.02183414

TRAF4	-1.1782145	0.0003566	0.02190109
FABP4	4.36581056	0.0003603	0.02204941
OR2M4	3.40589485	0.00036428	0.02221343
GDF10	2.38989559	0.00037493	0.0227811
CEACAM6	-1.5407596	0.00038085	0.02305871
H3C14	-6.4398174	0.00038774	0.02339295
ANKRD44	0.85559721	0.00039187	0.02355884
GJB2	-1.3586023	0.00039806	0.02384747
LARGE2	-1.9069092	0.0004085	0.02438715
MCL1	0.86388371	0.00041039	0.02441487
GLUL	0.90038751	0.00041551	0.02463345
ITPRIP	1.20977647	0.00041823	0.02470911
SLC2A3	1.42738682	0.00042161	0.02482236
TACC1	1.05190268	0.00044129	0.02589194
SBK1	-1.3965861	0.00044319	0.02591468
ZNF812P	2.53954276	0.00044716	0.02605713
NQO1	-1.5067906	0.00045084	0.02609343
SFTPC	3.89997028	0.0004504	0.02609343
CMC1	1.13317839	0.00045245	0.02609839
CCDC85C	-1.1031745	0.00045646	0.02624134
ITGA3	-0.9348765	0.00046291	0.02652282
GDF7	1.63402224	0.00047001	0.02683916
EBF1	1.25113377	0.00048331	0.02750704
EPPK1	-1.3689482	0.0004854	0.02753377
N4BP2L1	0.95629874	0.00048733	0.02755164
IGSF10	1.45631521	0.0005	0.02817517
RASSF7	-1.3803071	0.00050392	0.02830243
ANLN	-1.254534	0.00050883	0.02848421
ROCK1	0.73464477	0.00052432	0.02869324
SLCO4A1	1.84577303	0.00052126	0.02869324
JAG2	-1.5489136	0.00052387	0.02869324
DNAAF1	2.16167612	0.00051926	0.02869324
HLA-DPB1	0.86337264	0.00052397	0.02869324
NACC1	-1.0045425	0.00051868	0.02869324
CDC20	-1.6264147	0.00051492	0.02869324
CD74	0.69899464	0.00053743	0.02922301
CYBRD1	0.79562417	0.00053696	0.02922301
CXCL9	0.81327409	0.00054467	0.02944091
COLGALT2	2.11115018	0.00054488	0.02944091
SMARCA2	0.84102367	0.00055353	0.02944822
MX2	-0.8921613	0.00055709	0.02944822
AHNAK2	-0.949268	0.00055189	0.02944822

SAMHD1	1.00752518	0.00055627	0.02944822
TRHDE-AS1	2.42478073	0.00055545	0.02944822
MUC20	-1.3149777	0.00055036	0.02944822
LAD1	-1.8050034	0.00055427	0.02944822
PIK3R1	0.98743109	0.00056103	0.02947402
AGRN	-0.9797033	0.00056024	0.02947402
ENO3	-1.6093415	0.0005655	0.0296178
EGLN3	-1.3968286	0.0005855	0.03047513
CNTFR	3.33506411	0.00058437	0.03047513
PDCD4	0.78881666	0.00058723	0.03047513
CD302	0.82151566	0.00059722	0.03089971
AQP1	1.06331646	0.00060111	0.03100693
CLIC5	1.02708709	0.00060313	0.03101749
CD3D	1.36674397	0.00061325	0.03144353
PLXNB3	-1.824316	0.00061845	0.03161521
MMP15	-1.7410595	0.00062513	0.03186122
FAM180A	2.0193613	0.00063053	0.03204084
EVPL	-1.4059602	0.00063396	0.03211933
JUP	-0.965244	0.00064726	0.03269614
AKNA	0.81437435	0.00065018	0.03274689
GASK1A	1.62852594	0.00065622	0.03295388
INAVA	-1.3674654	0.00066742	0.03341796
ZNF331	1.07833775	0.00066941	0.0334198
PLCH1	-1.1697457	0.00067343	0.03352215
OSGIN1	-1.7003037	0.00067955	0.03372861
MAL2	-1.2093307	0.00068841	0.03406951
IRAK3	1.01597575	0.00069271	0.03418282
SNORA49	1.47843081	0.00070795	0.03483459
C18orf15	1.89088045	0.00072366	0.03550516
GPR39	-1.7496945	0.00072596	0.03551585
RGCC	1.17266746	0.00073063	0.03556082
MAP3K13	-0.8774166	0.00073104	0.03556082
FOXA1	-1.4125045	0.00073863	0.03573543
PRR36	-1.7177192	0.00073882	0.03573543
SPTBN2	-0.8313745	0.00075316	0.03632637
PKP1	-1.6846535	0.00075823	0.03646762
TNFSF12-TNFSF13	10.1617806	0.00077406	0.03712457
SERINC2	-1.1444594	0.00078695	0.03763711
LLGL2	-1.1639332	0.00079385	0.03786107
IL7R	1.11848949	0.00080523	0.03829677
MAGED4B	-1.7073819	0.00080758	0.03830166
FOXO3	0.77794789	0.00083739	0.03948978

SNORD97	1.37258877	0.00084066	0.03948978
HBA2	4.19050205	0.00084188	0.03948978
ABCB6	-1.096648	0.00084101	0.03948978
LYVE1	1.42248354	0.00086548	0.04048543
TRIM47	-1.2469262	0.00087567	0.04085024
CD3E	0.98117819	0.00090862	0.04227206
PTK2B	0.84968014	0.00091548	0.04236024
RCSD1	1.04097448	0.00091505	0.04236024
SPARCL1	1.13328297	0.00093139	0.04298006
DLGAP2	2.33007064	0.0009399	0.04325553
DOCK10	0.74769352	0.0009456	0.0434011
AKR1C1	-1.501738	0.00095265	0.04360753
NR4A1	2.68611553	0.00095527	0.04361047
SCGB3A1	4.38237628	0.00095836	0.04363455
TMEM184B	-0.8331736	0.00096555	0.04378936
LDLRAD4	0.81389369	0.00097134	0.04378936
ERBB2	-1.0890956	0.00097201	0.04378936
SLC4A7	0.83754518	0.00097182	0.04378936
PHLDA2	-2.4700975	0.00097536	0.04382425
GAS1	1.44090897	0.00098369	0.04408252
CCND3	1.08351665	0.00099444	0.04433198
SGK1	1.10151772	0.00099361	0.04433198
MARVELD3	-1.3160076	0.00101224	0.04500762
CAPN6	2.87939991	0.00103002	0.04549937
COASY	-0.9009832	0.00103396	0.04549937
PPP2R2B	1.66306615	0.00102711	0.04549937
CCDC150	-1.6884938	0.00103272	0.04549937
SH2D4A	-1.0343468	0.00104713	0.0458816
SLC8A1	1.15049737	0.00104802	0.0458816
MKI67	-1.2746744	0.00105531	0.04608293
NFIL3	1.08649259	0.00106515	0.04627589
PTEN	0.72129797	0.00106466	0.04627589
RNF144B	1.14724956	0.00109009	0.04723898
GABRA2	2.78249005	0.00109729	0.04741769
C1QTNF7	1.4926658	0.00110254	0.04741769
XCR1	1.68137965	0.00110152	0.04741769
RNASE4	1.22915446	0.00110875	0.04756483
RPPH1	0.79168075	0.00111266	0.04761306
SIRT7	-0.9172433	0.00111905	0.04776674
S1PR1	0.97581412	0.00112475	0.04789014
ITGA8	1.11418306	0.00113193	0.0480761
FAM83H	-1.2919419	0.00114204	0.04826529

ACKR2	1.86895028	0.00113955	0.04826529
KCNK3	1.71514321	0.00115565	0.04871988
ENC1	-1.2386076	0.00116135	0.04883968
PREX2	0.8712644	0.00118299	0.04962728
LAMA3	-0.9322394	0.00118872	0.04974578
CCDC141	0.84401118	0.00119274	0.04979162
IRS2	0.97994289	0.00121031	0.05039573
AKAP12	1.09590372	0.00121901	0.05039573
NFKBIA	0.79191389	0.00121364	0.05039573
HOXD1	-2.7639606	0.00121833	0.05039573
ZDHHC11	-1.4448926	0.00122554	0.05054301
LCP1	0.8896729	0.0012359	0.05084757
NWD2	2.711993	0.00125337	0.05144247
OCIAD2	-1.2556796	0.00127333	0.05213641
GPR183	1.24010879	0.00128094	0.05219854
ID2	1.13479101	0.00128096	0.05219854
SH2D1A	1.0071675	0.00131002	0.0528975
RELN	1.08705208	0.00130389	0.0528975
DPYD	0.81608246	0.00131051	0.0528975
CACNB2	1.35705544	0.00130987	0.0528975
NKX2-1-AS1	-2.2691034	0.00131493	0.05295074
AZGP1	1.77976773	0.00133487	0.05350146
IQGAP3	-1.7084908	0.00133274	0.05350146
RUSC1	-1.1083088	0.00134259	0.05355932
NTNG1	1.97704531	0.00134208	0.05355932
C15orf39	-0.9537236	0.00135488	0.05392343
ZWINT	-1.3044877	0.00137013	0.05427453
TRAT1	1.21065044	0.00137323	0.05427453
CYP4B1	1.5174537	0.00137212	0.05427453
RASGEF1B	0.91816944	0.00137838	0.0543522
SLC9A9	1.04457588	0.00138593	0.0545237
AJUBA	-1.1591524	0.00139047	0.05457665
CXADR	-1.2122875	0.0014044	0.05480574
BCL11B	0.85187385	0.00139983	0.05480574
TMEM92	-1.9442934	0.00140593	0.05480574
SOX12	-1.0022986	0.00141654	0.05501467
BCL9	-1.241522	0.00141774	0.05501467
MAMDC2	1.59905717	0.00143672	0.0555393
NEDD9	0.87394718	0.00143778	0.0555393
ACSL1	1.13316888	0.00144899	0.0555393
CAMSAP3	-1.2016845	0.00144483	0.0555393
AZIN2	-1.1268442	0.00145077	0.0555393

H3C15	9.63067075	0.00144818	0.0555393
ARID5B	0.71685026	0.00145458	0.05556038
CD72	1.10254931	0.00145975	0.05563341
ITPR1	0.83470108	0.00146611	0.05575143
GPNMB	0.70553282	0.00147368	0.0559147
CCNH	1.04867415	0.00148306	0.05614598
SPDYA	1.48115911	0.00150298	0.0567742
CHP2	3.56342088	0.00151269	0.05688916
GPRC5C	-0.9973607	0.00151105	0.05688916
CANT1	-0.8194929	0.00155054	0.05818439
IRF4	-1.1402956	0.00155539	0.05823853
PRSS8	-1.214419	0.00155901	0.0582461
RNY1	1.72865584	0.00156543	0.05835833
ADAMTS9-AS1	1.9283391	0.00158176	0.05871085
THEMIS2	0.96435978	0.00158149	0.05871085
FBXO40	2.36132613	0.00161451	0.05979646
SH3BGRL	0.74245196	0.00161813	0.0598007
DMBT1	3.27993857	0.00163105	0.0601479
CST7	1.16629953	0.00164036	0.060361
F11R	-0.9470602	0.00165896	0.06091403
THBS1	0.96911686	0.0016794	0.06140055
TONSL	-1.161306	0.00167651	0.06140055
THBD	1.07799402	0.00168976	0.06164731
ARHGEF16	-1.2639468	0.00170021	0.06189633
IFNGR1	0.76916523	0.00170917	0.06209017
BCAM	-0.8403947	0.00171299	0.06209683
CXCL12	0.76009854	0.00172215	0.0622967
CASC9	-2.3025492	0.00176221	0.06361098
RAP1A	0.75526005	0.00176744	0.06366501
DLG5	-0.8404718	0.00178696	0.06423265
KIF12	-2.9111689	0.00180319	0.06454432
C11orf96	1.33617436	0.00180064	0.06454432
ABCC3	-1.4546835	0.00181153	0.0647071
LGI3	2.9689801	0.00185375	0.06607722
HAND2-AS1	2.36476851	0.00186716	0.06632162
VWA2	-1.3581764	0.00186838	0.06632162
RAPGEF5	0.70797861	0.00187612	0.06645817
FAM157A	-1.3063723	0.00189786	0.06708932
RHOB	1.03110988	0.00193194	0.06815261
MFS1	0.8265634	0.001943	0.06840159
KSR2	-1.6411267	0.00200023	0.07027152
CNOT6L	0.83705222	0.00200808	0.07040236

SASH1	1.12118416	0.00201641	0.07054959
ARHGAP10	1.19621853	0.00202835	0.07069589
MGAM2	3.24419167	0.00203356	0.07069589
PRKCB	0.89885958	0.00203715	0.07069589
MARCO	1.23403922	0.00203579	0.07069589
TBX15	-1.5878812	0.00208338	0.07215326
CLIC6	-0.9207794	0.00210558	0.07222907
UCHL1	-1.131538	0.00211379	0.07222907
SEMA3A	-0.9074259	0.00209384	0.07222907
SNCA	2.12321976	0.00211509	0.07222907
SOD2	0.76495336	0.00211732	0.07222907
GGTA1	0.91208041	0.00212364	0.07222907
GLRX3	-1.0113086	0.00210557	0.07222907
TIGIT	0.89938589	0.00210091	0.07222907
SLC12A8	-1.128721	0.0021213	0.07222907
PGR	1.27095201	0.00213128	0.07234472
ABCA8	1.27097526	0.00214131	0.07254114
PCDH15	2.02017589	0.00216729	0.07313105
ULK1	-0.7767545	0.00216699	0.07313105
FENDRR	1.3692138	0.00218697	0.07364942
PTGFR	1.67282967	0.00219833	0.07388632
MAPK4	2.24267663	0.00221065	0.07400894
IRX5	-1.3727722	0.00220893	0.07400894
ANKRD65	-1.1194569	0.00221682	0.07407036
HLA-DOA	0.84236985	0.00225321	0.07513926
GNLY	1.14426465	0.00227932	0.07586177
GLP2R	2.90408137	0.00228745	0.07597563
NWD1	2.39023882	0.00229164	0.07597563
DNAJC18	1.02266172	0.00229787	0.07598578
SIX5	-1.0154288	0.00230085	0.07598578
MYH14	-0.8191762	0.00231051	0.0761575
TIPARP	1.13178604	0.0023163	0.07620143
HLA-E	0.63719694	0.00232412	0.07626482
LAMA2	0.92264205	0.00232716	0.07626482
PPP1R13B	-1.0059917	0.00236217	0.07711589
SORT1	0.7266356	0.00235812	0.07711589
FXD1	2.06979681	0.0023688	0.07718482
PTPN22	1.02308722	0.00239063	0.07762368
NKG7	1.26363409	0.00239136	0.07762368
AGAP12P	-2.2796699	0.00240227	0.07782979
SH3TC1	1.03306769	0.00241561	0.07811395
LINC00702	1.65753605	0.00242605	0.07830312

LINC01550	1.25395353	0.00243817	0.07854593
LINC00472	1.35154625	0.0024872	0.07953056
EPHA10	-2.0919237	0.00247381	0.07953056
SRD5A3	-1.0585088	0.00248075	0.07953056
ARHGAP30	0.64765991	0.00248737	0.07953056
AGTR1	1.98329613	0.00249204	0.07953104
VDR	-0.9356982	0.00250111	0.07967169
SERPINB9	0.74660863	0.00250677	0.07970328
RPL21P123	1.49331497	0.00252565	0.08015427
ABCA4	-1.6321199	0.0025306	0.08016214
HECA	0.76126286	0.00253682	0.08021047
PTK7	-0.8123686	0.00257549	0.0812826
PI16	2.98319754	0.00259659	0.08164688
PTPRB	0.94836099	0.00259224	0.08164688
VIM	0.72389468	0.00262562	0.08240792
RNA5-8SP6	1.69133824	0.002634	0.08251898
VIPR1	1.37648364	0.00264356	0.08266706
NAP1L3	1.3850356	0.00267045	0.08335523
ZC3H6	0.8347229	0.00267775	0.08343052
TOP2A	-1.3215401	0.00269125	0.08369834
PLEKHA2	0.80300767	0.00272353	0.08454838
SRGAP3-AS2	2.79348196	0.00273629	0.08479026
OVOL2	-1.4891879	0.00274736	0.08481154
EGR1	2.64673373	0.00275283	0.08481154
MGAT4C	1.97295731	0.00274524	0.08481154
CBX2	-1.9741738	0.00275685	0.08481154
UBE2O	-0.9021445	0.00277189	0.08487631
HLA-DPA1	0.73648921	0.00277042	0.08487631
AGER	0.95393575	0.00277387	0.08487631
BARX1	-2.5390186	0.0027965	0.08541575
NRAD1	2.31380093	0.0028513	0.08677905
TFRC	0.7662352	0.002849	0.08677905
PTPRF	-0.9831605	0.00289037	0.08781185
PLSCR4	0.88890997	0.00291779	0.08848739
ARHGEF38	-1.2553935	0.00292824	0.08848988
OMD	1.58564561	0.00292814	0.08848988
ABCC10	-0.8685358	0.0029441	0.08849605
DENND3	0.71849749	0.00294918	0.08849605
SELE	1.88915622	0.00294901	0.08849605
TMEM184A	-1.1134504	0.00293589	0.08849605
SEMA4C	-0.8348814	0.00296695	0.08887304
RNF212	-1.875609	0.00298801	0.08934726

PDLIM3	1.32399969	0.00300141	0.08943471
CSKMT	1.0776428	0.00300065	0.08943471
RNF149	0.79344273	0.00301548	0.08969733
LSAMP	0.71702711	0.00303252	0.08975492
MAP3K21	-1.1453264	0.00303238	0.08975492
KRT18	-0.9577968	0.00303318	0.08975492
KIF18B	-1.5098685	0.00304323	0.08989625
HJURP	-1.6537548	0.00305176	0.08999266
LMCD1	0.93553974	0.00308847	0.09023491
AOC1	-1.9705075	0.00309326	0.09023491
HTRA3	-1.1512301	0.00308344	0.09023491
SSH2	0.80961618	0.00308306	0.09023491
RASSF10	-1.4983015	0.00307406	0.09023491
ART4	1.5227229	0.00309697	0.09023491
JUN	1.2796568	0.00309368	0.09023491
WNT7B	-1.2817553	0.00310391	0.09028317
SKAP1	0.96895314	0.00315111	0.09134472
TRBC2	0.83006011	0.00315058	0.09134472
MAFB	0.67794877	0.00317468	0.09187198
CPNE4	-2.006487	0.00318306	0.09195879
CACNB3	-0.9549221	0.00321039	0.09259149
IMPA2	-1.0265497	0.0032284	0.09295384
SRXN1	-1.302589	0.00326078	0.09372819
IGFBP2	-1.2012863	0.00328076	0.094144
HHIP	1.60182031	0.00329557	0.09424871
KCNQ3	-1.2752452	0.00330097	0.09424871
CADM3-AS1	1.74425341	0.00329346	0.09424871
STAG3L5P-PVRIG2P-PILRB	-1.1010054	0.00331366	0.0944532
JUNB	1.19593786	0.00332407	0.09459205
LRRFIP1P1	-0.7842945	0.00333231	0.0946687
RERG	1.03821657	0.00336336	0.09529035
LPTM5	0.74451153	0.00336572	0.09529035
CAV1	1.03040432	0.00337094	0.09529035
TNFAIP3	0.90121464	0.00337818	0.0953372
FMN1	0.82686611	0.00340464	0.09560987
SDCBP	0.74564263	0.00339765	0.09560987
ITGA10	1.48371052	0.00339963	0.09560987
RNF125	0.91958717	0.00344373	0.09584331
ADH1B	2.54326145	0.00344002	0.09584331
XRCC2	-1.4444557	0.00344207	0.09584331
CTSW	1.37561168	0.00341877	0.09584331
ECRG4	2.19496792	0.00344663	0.09584331

EPS8L2	-0.8649876	0.00343883	0.09584331
HLA-A	0.60854434	0.00345887	0.09602732
DAPP1	0.88502344	0.0034695	0.09603061
KCNC1	2.11111914	0.00347257	0.09603061
HSPB8	1.27182656	0.00347586	0.09603061
GALNT16	1.28732269	0.00352468	0.0966424
CLN8	0.76247333	0.00353197	0.0966424
GNB4	0.73465722	0.00353087	0.0966424
FUT3	-1.6188586	0.0035286	0.0966424
PLA2G2A	1.76428643	0.00352306	0.0966424
LIMS4	2.0847005	0.00352055	0.0966424
UBASH3B	0.98119928	0.00354053	0.09672151
CCDC137	-1.0105553	0.00355542	0.0969732
SPATA31E3P	-8.8445683	0.00357486	0.09724449
ZNRD2-DT	-1.371593	0.00357676	0.09724449
LINC01429	-1.7258272	0.00360073	0.09770273
PCDH10	2.4072875	0.00361078	0.09770273
CLDN5	0.99506558	0.00360768	0.09770273
C1orf158	2.93617402	0.00361713	0.09771962
PDZRN3	1.05208288	0.00363421	0.09782388
HLA-DQA1	0.97690363	0.00363817	0.09782388
SMIM35	1.98868999	0.00363603	0.09782388
TNFSF8	1.16805719	0.00366625	0.09842381
BRSK1	-1.5563021	0.00367828	0.09859188
MS4A2	1.02949724	0.00368543	0.09860543
TXNRD1	-0.8862679	0.00369034	0.09860543
AURKA	-1.3894131	0.00371096	0.09884691
BIRC5	-1.2242686	0.00370605	0.09884691
N4BP3	-1.1234189	0.00372654	0.09910726
GLIPR2	0.88090745	0.00373626	0.09921135
UBE2C	-1.5788559	0.00375124	0.09934466
CCT5	-0.9083878	0.00376325	0.09934466
DIPK1B	-1.2316929	0.00376318	0.09934466
COA7	-0.9982759	0.00376455	0.09934466
DOCK11	0.64884045	0.00379648	0.09972477
CILP	1.04845187	0.00379209	0.09972477
DNAH5	-1.0970699	0.00378667	0.09972477
PRDM9	2.64277437	0.00380885	0.0998959
IL33	1.26462635	0.00381616	0.09993433

Durvalumab + Monalizumab arm			
gene	log2FoldChange	pvalue	padj
PDK4	4.13508986	2.71E-21	6.00E-17
RNA5SP202	7.00192199	1.20E-17	1.33E-13
TSC22D3	3.64457875	4.57E-17	3.37E-13
FKBP5	2.78123399	6.85E-14	3.79E-10
CPM	3.33693179	2.88E-13	1.27E-09
DUSP1	3.07555496	5.05E-12	1.86E-08
RGS1	4.28912482	1.29E-11	4.08E-08
RNA5-8SN3	3.89326612	1.52E-11	4.12E-08
GOLGA6L1	-6.2133572	1.67E-11	4.12E-08
CXCR4	4.33866585	2.15E-11	4.75E-08
LINC01451	-3.5696556	5.40E-11	1.09E-07
SRGN	3.65111381	6.42E-11	1.18E-07
RNU1-27P	-3.3603711	1.04E-10	1.78E-07
FAM83F	-3.2794541	1.70E-10	2.68E-07
NDNF	2.99954263	2.20E-10	3.25E-07
SCGB3A2	4.35049968	2.37E-10	3.28E-07
JCHAIN	4.27508062	2.95E-10	3.78E-07
C4BPA	4.10560813	3.08E-10	3.78E-07
APOC1	4.3624075	4.99E-10	5.81E-07
SOST	-4.2933752	7.18E-10	7.94E-07
LINC02446	4.86486836	8.79E-10	9.26E-07
IL7R	2.91776667	1.54E-09	1.55E-06
BIRC3	2.80840816	2.41E-09	2.32E-06
HLA-DRA	3.05204119	2.90E-09	2.61E-06
CXCL13	3.96297753	2.95E-09	2.61E-06
AQP4	3.17215186	3.23E-09	2.65E-06
NAPSA	3.25788886	3.12E-09	2.65E-06
SFTPD	4.35211229	3.45E-09	2.73E-06
KLF9	2.45229163	4.36E-09	3.33E-06
SLA	3.00618837	4.64E-09	3.43E-06
LRP1B	-3.6461735	5.55E-09	3.78E-06
CD163	2.9309886	5.44E-09	3.78E-06
CD8A	3.12474665	5.64E-09	3.78E-06
ALOX15B	2.9713908	6.05E-09	3.94E-06
SERPINA1	2.6191246	7.28E-09	4.60E-06
SPEG	-2.3284186	8.20E-09	5.04E-06
SMAP2	3.00498124	9.08E-09	5.43E-06
SFTPC	7.52865645	9.57E-09	5.57E-06
CYP4F11	-2.9134969	2.38E-08	1.35E-05
HLA-DPA1	2.91118524	3.05E-08	1.69E-05

PGC	3.50681062	3.57E-08	1.93E-05
FGG	4.27877548	3.75E-08	1.93E-05
IRAK3	2.26202	3.73E-08	1.93E-05
APOE	3.34567985	4.73E-08	2.38E-05
UGT1A1	-2.9627852	4.92E-08	2.42E-05
CACNA1B	-3.5949711	5.28E-08	2.49E-05
RNU4-2	2.83691133	5.21E-08	2.49E-05
TRBC2	3.68914966	5.78E-08	2.62E-05
B2M	2.81029303	5.80E-08	2.62E-05
LRRK2	2.31714612	7.09E-08	3.14E-05
CALML3	-3.8632505	8.80E-08	3.82E-05
TFPI2	3.53718628	9.57E-08	4.00E-05
GZMK	4.95530559	9.58E-08	4.00E-05
DEPP1	2.52559085	1.14E-07	4.68E-05
CD69	3.48670999	1.26E-07	5.05E-05
PTPN22	3.10037481	1.40E-07	5.53E-05
SNORD22	2.94231039	1.63E-07	6.35E-05
IGKV1-39	3.73530324	1.83E-07	6.98E-05
HAP1	-2.4053229	1.96E-07	7.35E-05
RGS2	2.65819432	2.08E-07	7.68E-05
LCP1	2.63237053	2.31E-07	7.98E-05
CNNM1	-3.2742095	2.28E-07	7.98E-05
GJB6	-3.7538894	2.30E-07	7.98E-05
CTSS	2.96086143	2.24E-07	7.98E-05
LINC01694	-3.0690633	2.44E-07	8.31E-05
H4C12	5.42163733	2.51E-07	8.41E-05
SAMSN1	2.80185119	2.79E-07	8.94E-05
MRC1	2.80433593	2.78E-07	8.94E-05
CLDN18	3.56849836	2.72E-07	8.94E-05
IFNGR1	2.19238848	3.12E-07	9.87E-05
KRT5	-2.6111528	3.45E-07	0.00010754
CD53	2.99636817	3.77E-07	0.00011438
ZBTB16	2.75292641	3.76E-07	0.00011438
IGLV3-25	3.14856973	4.02E-07	0.00012022
SHISA9	-2.853326	4.42E-07	0.00013032
ANKRD62	-3.537262	4.67E-07	0.00013602
FBP1	2.75694547	5.17E-07	0.00014851
ANP32C	-5.5973855	5.40E-07	0.00015312
SNORD97	2.48206882	5.99E-07	0.00016781
VSIG4	2.82278642	6.30E-07	0.00017425
SOX2-OT	-2.3112322	6.69E-07	0.00018279
RN7SL128P	5.90191011	6.96E-07	0.00018514

AIF1	2.93458691	7.03E-07	0.00018514
DMRT2	-2.9151974	6.91E-07	0.00018514
SNHG8	2.27640672	7.38E-07	0.00019215
TRAC	3.18282784	8.16E-07	0.00020359
CCL18	3.22605841	8.19E-07	0.00020359
IGHV3-7	3.00440215	8.10E-07	0.00020359
UGT1A7	-2.8077066	8.01E-07	0.00020359
EMB	2.8622286	8.29E-07	0.00020392
ITK	3.1323904	8.48E-07	0.00020616
RGS6	-2.8486721	8.66E-07	0.00020824
SLC47A2	-3.8434454	8.93E-07	0.00021242
CCL5	3.01069862	9.16E-07	0.00021569
PRR15L	2.93316129	9.46E-07	0.00021893
LAPTM5	2.71565805	9.50E-07	0.00021893
IGLV3-1	2.68347072	9.70E-07	0.00022121
ALOX5AP	2.94346641	1.04E-06	0.00023557
ARHGD1B	2.60447655	1.26E-06	0.00028105
CCN2	2.47106461	1.34E-06	0.00029589
CST7	3.82298002	1.37E-06	0.0002967
RNU2-2P	2.42528183	1.36E-06	0.0002967
LPL	2.86931698	1.43E-06	0.00030677
PAPOLA-DT	-4.3661879	1.44E-06	0.00030677
MARCO	3.54624453	1.52E-06	0.00031936
DLX6-AS1	-2.6679832	1.77E-06	0.00037039
HLA-DQA1	2.63506389	1.92E-06	0.00039271
TRIM7	-2.5546323	1.90E-06	0.00039271
SNHG25	4.54611932	1.93E-06	0.00039272
EIF4E3	2.0633784	2.01E-06	0.00039851
SFTPA1	6.31359043	2.02E-06	0.00039851
TRBC1	4.15286164	2.01E-06	0.00039851
CXCL12	2.68957976	2.14E-06	0.00041986
SERPINB1	2.13890459	2.21E-06	0.00042926
MS4A4A	3.28792402	2.31E-06	0.00043767
CD96	2.81062662	2.31E-06	0.00043767
CR2	4.21042054	2.31E-06	0.00043767
RHOU	2.11474886	2.36E-06	0.00043852
FZD10	-3.0381195	2.36E-06	0.00043852
DDX60	2.23737447	2.42E-06	0.00044613
SPATA31E3P	-6.3515245	2.44E-06	0.00044706
GDA	-3.0399847	2.51E-06	0.00045573
SLC39A8	2.37038101	2.71E-06	0.00048756
CYBB	2.62603675	2.96E-06	0.00052687

CYP4F3	-2.589755	3.02E-06	0.00052687
RNY1	3.86276613	3.00E-06	0.00052687
GOLGA6L2	-3.8271192	3.00E-06	0.00052687
HDAC1P2	-2.7848484	3.09E-06	0.00053413
SLC6A14	2.08878439	3.14E-06	0.00053847
CLEC2B	3.43096048	3.21E-06	0.0005464
IDO1	2.65527232	3.27E-06	0.00055242
HOPX	1.93017863	3.31E-06	0.00055415
CD2	2.83925724	3.37E-06	0.00056031
MIR205HG	-2.1700846	3.39E-06	0.00056041
TFPI	2.26742367	3.43E-06	0.00056145
FAR2P1	-3.7685038	3.67E-06	0.00059255
ACSL5	2.28739517	3.66E-06	0.00059255
CALN1	-3.5089855	3.71E-06	0.00059446
SALL3	-5.2482184	3.78E-06	0.00060115
CD74	2.46252756	3.83E-06	0.0006048
LINC02076	-3.5121182	3.90E-06	0.00061165
NDUFA4L2	-2.1808953	3.97E-06	0.00061859
SSPOP	-2.5079468	4.14E-06	0.00064118
TCIM	2.15952102	4.19E-06	0.00064466
CACNA2D2	2.29529205	4.31E-06	0.00065829
COL17A1	-2.9373611	4.54E-06	0.00068793
HLA-DRB1	2.31759576	4.75E-06	0.0007131
CLCA2	-2.8700833	4.77E-06	0.0007131
IGKV1-5	2.92953737	5.04E-06	0.00074672
KIT	2.22921246	5.06E-06	0.00074672
QRICH2	-2.063505	5.14E-06	0.00074797
SHOX2	-2.2914127	5.14E-06	0.00074797
RNASE1	2.16102879	5.23E-06	0.00075586
SIM2	-3.0939921	5.34E-06	0.00076507
SMPDL3A	2.20375997	5.36E-06	0.00076507
IFIT2	2.27734459	5.55E-06	0.00077381
CELF2	2.3576	5.59E-06	0.00077381
C16orf89	2.46428429	5.47E-06	0.00077381
GOLGA6C	-5.806155	5.59E-06	0.00077381
DPP4	2.09483471	5.56E-06	0.00077381
ZFP36L2	1.9585674	5.77E-06	0.00079357
CYP2W1	-5.442857	5.85E-06	0.00079414
SNORD15A	3.17075914	5.84E-06	0.00079414
PLIN2	2.32640235	5.90E-06	0.00079567
TP63	-2.3234724	5.93E-06	0.00079567
GMFG	3.29441375	6.05E-06	0.00080597

DSG3	-2.834926	6.20E-06	0.00081167
IGHV3-21	3.6519277	6.19E-06	0.00081167
STAR	-3.0546262	6.18E-06	0.00081167
LIPA	2.79113134	6.33E-06	0.00082394
USH1G	-4.0044277	6.41E-06	0.00083011
SLC4A11	-2.7173085	6.58E-06	0.00084113
FAM169B	-5.0662829	6.57E-06	0.00084113
KLRD1	2.45479481	6.81E-06	0.00085089
ETS1	2.43953296	6.77E-06	0.00085089
CXCL2	2.5360865	6.76E-06	0.00085089
CD52	3.31816647	6.80E-06	0.00085089
LUM	2.86040471	6.94E-06	0.00086232
TMSB4X	2.15806407	7.04E-06	0.00087006
POTEF	-4.2364197	7.23E-06	0.00088859
STEAP4	1.99257267	7.32E-06	0.00089016
NKG7	3.41513793	7.31E-06	0.00089016
CYTIP	2.85524994	7.64E-06	0.00092368
KRT6A	-2.8426666	8.18E-06	0.00098331
HLA-A	1.95304309	8.60E-06	0.00102836
IGHV4-59	3.18897558	8.68E-06	0.00103236
NNMT	1.89407345	8.80E-06	0.00103236
KYNU	2.16908471	8.78E-06	0.00103236
LINC01744	-5.9082116	8.82E-06	0.00103236
SDC4	1.82501714	9.19E-06	0.00107067
IGHG2	2.66417199	9.33E-06	0.00107482
LINC01833	-4.9802548	9.32E-06	0.00107482
TRAT1	3.18313133	9.90E-06	0.00113522
PTPRC	2.55381508	9.98E-06	0.00113837
EVI2A	2.93491274	1.08E-05	0.0012258
ROS1	2.59456731	1.09E-05	0.00123159
MTCL1	-2.1863187	1.14E-05	0.00126345
KLRC4-KLRK1	3.47785153	1.13E-05	0.00126345
DOCK11	2.43181248	1.13E-05	0.00126345
FAM71F1	-3.4077246	1.14E-05	0.00126415
MGAT4A	2.28448043	1.16E-05	0.00127942
NOS1	-2.3613906	1.18E-05	0.00129495
SH3BGRL	2.36631037	1.21E-05	0.00131644
IGHV3-11	3.73574588	1.23E-05	0.00132674
SNORD15B	2.4775103	1.23E-05	0.00132674
C17orf99	-3.8295803	1.24E-05	0.00132717
AP3B2	-3.0407321	1.26E-05	0.00135032
CYRIA	2.36330583	1.28E-05	0.00135911

MAFA	-6.0500311	1.32E-05	0.00139254
MGAT4C	-2.694217	1.34E-05	0.00141009
GPR171	2.96766418	1.35E-05	0.00141714
IRX4	-3.9968092	1.36E-05	0.00141742
SFTPA2	6.07843899	1.38E-05	0.00143487
MPP1	2.30039855	1.39E-05	0.00143546
ARL6IP5	2.00097968	1.40E-05	0.00143632
GZMA	2.96044232	1.44E-05	0.00146572
PKP1	-2.7347046	1.43E-05	0.00146572
IGHM	2.65075178	1.49E-05	0.00150819
IGHV3-15	3.2562187	1.50E-05	0.0015121
SGMS2	1.90209183	1.52E-05	0.00152841
IL6ST	2.16604024	1.53E-05	0.00153139
MNDA	2.47025528	1.56E-05	0.00155327
HSD17B11	1.8888291	1.58E-05	0.00157025
SH2D1A	3.10041078	1.61E-05	0.00158014
TBR1	-3.9654994	1.61E-05	0.00158014
HOXA11-AS	-4.5603376	1.62E-05	0.00158014
IKZF1	2.3521503	1.61E-05	0.00158014
PLEKHG4B	-2.5661512	1.64E-05	0.00158778
ST8SIA2	-3.9822583	1.65E-05	0.00159026
HLA-DPB1	2.35684512	1.66E-05	0.00159894
ACSBG1	-3.3259503	1.68E-05	0.00160042
SLAMF6	2.78115088	1.69E-05	0.00160042
IGSF9	-2.5997865	1.68E-05	0.00160042
CYB5A	2.08516527	1.70E-05	0.0016079
KRT13	-2.8042101	1.72E-05	0.00162169
CMPK1	1.82937603	1.73E-05	0.00162169
CCL4	2.47656835	1.83E-05	0.00170075
SFTPB	5.29798865	1.83E-05	0.00170075
PDE3B	1.98895038	1.84E-05	0.00170549
SNORA18	2.97397349	1.85E-05	0.00170896
CD84	2.4313133	1.86E-05	0.00171134
PTGER4	2.43336643	1.88E-05	0.0017194
FAM230D	-5.7125565	1.94E-05	0.00175457
ASAH1	1.81924449	1.94E-05	0.00175457
ENPP2	2.52735931	1.93E-05	0.00175457
TAGAP	2.40795421	2.03E-05	0.00182173
RAB3B	-2.4839622	2.12E-05	0.00190168
GLUL	1.60008665	2.15E-05	0.00191802
SLED1	3.04819472	2.20E-05	0.00195777
SLC34A2	2.12110512	2.22E-05	0.00196721

DLX2	-5.2636865	2.27E-05	0.00200323
CHRD1	2.78699988	2.29E-05	0.00200708
RNA5-8SN1	-14.293601	2.30E-05	0.00201392
MS4A1	3.0970622	2.35E-05	0.002044
HLA-B	1.97403333	2.36E-05	0.0020446
SLC11A1	1.95895184	2.39E-05	0.00206552
SMIM3	2.46241377	2.48E-05	0.0021368
LAMA1	-1.8114041	2.50E-05	0.00214405
BCL2A1	2.33680601	2.56E-05	0.00217047
KPNA2P3	-3.242921	2.57E-05	0.00217047
CD3E	2.69667339	2.57E-05	0.00217047
RNU4-1	2.46088566	2.55E-05	0.00217047
FOXE1	-3.1733805	2.60E-05	0.0021906
RRAGD	1.83265359	2.63E-05	0.00220784
JAML	2.36994784	2.67E-05	0.00221825
CD3G	2.64918292	2.66E-05	0.00221825
IGKV1-12	2.92047625	2.75E-05	0.00228326
BMP7	-2.2554908	2.77E-05	0.00228979
SORT1	1.97548518	2.80E-05	0.00230007
DUOX2	-2.4378155	2.82E-05	0.0023122
IGLL5	2.65545179	2.97E-05	0.0024235
BTBD10P1	-4.8343667	3.04E-05	0.0024706
CD79A	3.0957574	3.07E-05	0.00248696
TLR4	2.18558527	3.09E-05	0.00249849
HLA-DMA	2.05881395	3.13E-05	0.00251728
MSR1	2.33835429	3.15E-05	0.00252758
IGKV1D-33	3.23333318	3.20E-05	0.00255643
SGPP1	2.68881764	3.22E-05	0.00256446
IGHV1-24	4.06829641	3.28E-05	0.00260075
TLR2	1.7189645	3.33E-05	0.00263432
C1orf162	2.70369511	3.41E-05	0.00268857
GABRQ	-3.940421	3.58E-05	0.00280126
FLG-AS1	-2.2716174	3.57E-05	0.00280126
LGALS3	1.8469173	3.61E-05	0.00281608
TYROBP	2.32589522	3.65E-05	0.00283404
PREX1	2.15412543	3.85E-05	0.00297677
INTS9-AS1	-3.9952119	3.88E-05	0.00299017
PCYT1B	-2.1920044	3.90E-05	0.00299311
ATP6V1B2	1.86488481	3.92E-05	0.00299956
FNIP2	1.93104264	3.94E-05	0.00300305
WHSC1L2P	-3.2809281	3.98E-05	0.0030156
TXNIP	1.98859741	3.98E-05	0.0030156

CLEC4E	2.93006614	4.00E-05	0.00302029
CD68	2.16568719	4.11E-05	0.00307257
FAM71A	-4.6874187	4.10E-05	0.00307257
IVL	-4.824333	4.11E-05	0.00307257
XKR7	-4.1369928	4.17E-05	0.00307345
PIK3AP1	1.97964166	4.16E-05	0.00307345
LINC02915	-4.8281239	4.13E-05	0.00307345
NCF2	2.09956011	4.14E-05	0.00307345
SDCBP	1.83632443	4.25E-05	0.00312663
GADD45B	2.12411779	4.39E-05	0.00321722
GOLGA6L7	-3.4193831	4.42E-05	0.00322693
IGLV2-8	2.74586381	4.45E-05	0.00323939
ARHGEF6	2.36530303	4.47E-05	0.00324672
SCML4	2.53165264	4.50E-05	0.00325342
FOS	2.05396357	4.52E-05	0.00325616
SOX21	-2.5907461	4.56E-05	0.00326392
IGKV2D-28	2.50768995	4.56E-05	0.00326392
HHIP	2.09275415	4.60E-05	0.00327807
ANKRD11P1	-3.3023685	4.61E-05	0.00327807
MT2A	2.11233189	4.64E-05	0.00328186
ACP7	-3.2538107	4.64E-05	0.00328186
SLC7A14	-3.3910599	4.73E-05	0.0033223
FCER1G	2.23606105	4.73E-05	0.0033223
FLRT3	2.05672703	4.79E-05	0.00335758
VGF	-4.4934994	4.81E-05	0.00335844
NPC2	1.85095072	4.86E-05	0.00337913
ACSL1	1.68952674	4.93E-05	0.00342132
GPR183	2.64600582	4.98E-05	0.00344486
CARD14	-3.0246813	5.04E-05	0.00344928
RASD1	2.13093482	5.03E-05	0.00344928
IFI30	1.94308447	5.05E-05	0.00344928
GRHL3	-2.9400151	5.01E-05	0.00344928
LINC01152	-4.9502466	5.07E-05	0.0034514
MAN1A1	2.10408002	5.15E-05	0.00349865
PLBD1	2.32026226	5.27E-05	0.00356622
FGR	2.09194926	5.31E-05	0.0035797
ANXA5	1.72637936	5.34E-05	0.00359093
GOLGA6L6	-3.725669	5.40E-05	0.00361071
MGP	3.14297408	5.39E-05	0.00361071
PIK3R1	1.82464191	5.48E-05	0.0036527
STAT4	2.22961141	5.52E-05	0.00367092
RGPD2	2.10538732	5.59E-05	0.00370207

TICRR	-2.2821018	5.66E-05	0.00373853
SOX6	-1.8443131	5.72E-05	0.00377003
CD302	2.4066442	5.91E-05	0.00387817
ITGB2	2.02926946	5.97E-05	0.00390757
NROB1	-4.0402101	6.02E-05	0.00393284
DRAM1	2.07269716	6.07E-05	0.00395384
CCN1	2.28791497	6.10E-05	0.00396161
PLA2G7	2.53284332	6.18E-05	0.00399986
C3AR1	2.2795274	6.31E-05	0.00406987
IGHV6-1	3.9755202	6.39E-05	0.00410063
EVPLL	-3.3781109	6.38E-05	0.00410063
MS4A7	2.21849891	6.47E-05	0.00413784
ACP5	2.21963182	6.52E-05	0.00416112
TRIM22	1.85306091	6.69E-05	0.00425163
TP53INP1	1.99607456	6.71E-05	0.00425163
IL18RAP	2.46745711	6.75E-05	0.00426839
CHRM3	-1.9362057	6.78E-05	0.00427399
SNORA74B	2.50793119	6.84E-05	0.00429805
RNF165	-2.0542574	6.86E-05	0.00429997
UQCRB	1.59260567	6.92E-05	0.00430287
LPXN	2.4258369	6.89E-05	0.00430287
C1QA	2.09486611	6.91E-05	0.00430287
C7	2.57035426	7.02E-05	0.00432809
ADAMDEC1	3.15383845	7.02E-05	0.00432809
LINC00861	2.6612963	7.02E-05	0.00432809
SNORA12	4.24082542	7.17E-05	0.0044052
HMGA2	-2.4529593	7.22E-05	0.00442665
LINC00668	-2.9435692	7.26E-05	0.00443645
TMEM242-DT	-4.8251085	7.32E-05	0.00446228
H3C14	-9.7345353	7.35E-05	0.00447047
CRNN	-3.4219136	7.42E-05	0.00449563
KCNJ5	2.53394282	7.71E-05	0.00466202
YEATS2-AS1	-3.4132081	7.73E-05	0.00466202
TMPRSS4	-2.2317244	8.05E-05	0.00484066
COL14A1	2.42477315	8.12E-05	0.00485573
C1QB	2.11225121	8.10E-05	0.00485573
NCKAP1L	2.19327443	8.23E-05	0.0049013
DOCK8	2.04641912	8.24E-05	0.0049013
ANKRD18A	-2.2209954	8.26E-05	0.0049013
LINC00029	-5.2283802	8.53E-05	0.00504754
IGHG4	2.49624003	8.61E-05	0.00508254
LINC02393	-4.6442323	8.64E-05	0.00508456

JAKMIP1	3.7412374	8.72E-05	0.00511817
NEK2P1	-5.6025511	8.81E-05	0.00515734
KC6	-2.51614	8.83E-05	0.00515774
LINC00632	2.0908273	9.00E-05	0.00522808
NDRG4	-1.9165106	9.00E-05	0.00522808
PSMB8	1.67001608	9.06E-05	0.00524818
GLIPR1	2.07056459	9.09E-05	0.00525453
SUSD2	2.20612824	9.50E-05	0.00547615
C2orf83	-4.5102824	9.65E-05	0.00554734
MPP3	-2.1756852	9.75E-05	0.00559234
A2M	2.18044232	9.81E-05	0.00561093
ADA2	2.04341809	9.97E-05	0.00562949
IGLV2-14	2.56297462	9.96E-05	0.00562949
TPPP2	-4.9800615	0.00010023	0.00562949
FBXO27	-2.3361437	9.94E-05	0.00562949
DPYD	1.9087153	9.94E-05	0.00562949
NPM1P12	-5.8549669	0.00010018	0.00562949
CNTNAP5	-4.6398696	9.93E-05	0.00562949
MIR3648-1	-9.5061571	0.00010078	0.00563175
HNMT	2.40944836	0.00010064	0.00563175
IGLC1	2.37329626	0.00010224	0.00568472
PSG7	-5.1873158	0.00010209	0.00568472
FAM83C	-2.9220209	0.00010352	0.00569228
PARM1	1.57834048	0.00010294	0.00569228
CRTAC1	3.81722408	0.00010378	0.00569228
SNORA31B	2.88332797	0.00010459	0.00569228
KIAA1549L	-2.4976166	0.00010469	0.00569228
SOAT1	2.20916875	0.00010462	0.00569228
EVI2B	2.50234973	0.0001033	0.00569228
SIGLEC14	2.97645609	0.00010465	0.00569228
SLC38A11	-1.8944334	0.00010323	0.00569228
NOLC1P1	-4.7777825	0.00010667	0.00572255
FGFBP1	-2.6764048	0.0001068	0.00572255
CD8B	2.80669719	0.00010732	0.00572255
CTSB	1.6090643	0.00010665	0.00572255
ZDHHC19	-6.0434578	0.00010679	0.00572255
ERFE	-3.5516876	0.00010661	0.00572255
SLC1A6	-3.4494938	0.00010696	0.00572255
IGFL4	-3.5200564	0.00010717	0.00572255
TRIM29	-1.8578993	0.00010826	0.00575862
RAPGEFL1	-1.8862625	0.00010867	0.00576691
GFI1	2.49413776	0.0001091	0.00577597

CITED2	1.82664579	0.0001106	0.00580171
SVOP	-4.0266577	0.00011034	0.00580171
CXCL10	2.23662572	0.00011043	0.00580171
GLI2	-1.8681899	0.00011064	0.00580171
DLGAP1-AS2	-1.8405996	0.00011172	0.00584442
GOLGA8G	-4.6298915	0.00011325	0.00591048
ATP6V0D2	3.72172539	0.00011387	0.00592893
OR5M1	-4.6957828	0.0001146	0.00595282
HERPUD1	2.17024627	0.00011636	0.00603037
CNTN5	-2.6387525	0.00011666	0.00603164
PITX1	-2.8005926	0.00011724	0.00603374
RAP1A	1.77178467	0.00011718	0.00603374
OSGIN2	1.773317	0.0001176	0.00603794
RAB8B	1.76260579	0.00012032	0.00616336
RNA5-8SP6	3.13168313	0.00012113	0.00616425
CHAC1	-2.9022127	0.00012117	0.00616425
HEXB	1.85633432	0.00012098	0.00616425
KIAA0087	-3.89518	0.00012306	0.00624611
MAT2B	1.86386528	0.00012387	0.00627242
GJA8	-6.0597028	0.00012415	0.00627242
CCR4	2.40002885	0.00012564	0.00633341
ITM2A	3.62385178	0.00012608	0.00634086
TGFBR2	1.90641241	0.00012725	0.00638043
FTL	1.9619669	0.00012744	0.00638043
DCX	-4.3166658	0.00012813	0.00640021
LINC02003	-5.6586758	0.00013071	0.00649996
GPRC5A	1.65788168	0.00013063	0.00649996
ABCA3	2.11240373	0.0001327	0.00657385
SNORA73B	1.80038764	0.00013279	0.00657385
TBC1D26	-4.5498016	0.00013403	0.0066203
UGT1A6	-2.4571917	0.0001348	0.00664366
FAM107B	1.67907744	0.0001379	0.00675249
LRP2	2.4073237	0.00013779	0.00675249
CD47	1.64468556	0.00013792	0.00675249
PTGDS	2.34319037	0.00014154	0.00689895
KLRC4	3.85942993	0.00014138	0.00689895
ENPP4	2.3269303	0.00014284	0.00691646
AQP9	2.19199011	0.0001427	0.00691646
GBP5	2.1476799	0.00014264	0.00691646
FCHO2	1.87612639	0.00014492	0.00700195
CD48	2.53794832	0.0001477	0.00712099
B3GALT5	-2.1328165	0.00014915	0.00717252

NIFKP4	-5.7918333	0.0001498	0.00717252
GPR34	2.3380092	0.00014957	0.00717252
DQX1	-3.7477934	0.00015007	0.00717252
LINC02312	-4.0171274	0.00015102	0.00718707
TCHHL1	-3.2055341	0.0001509	0.00718707
HLTF	1.85512223	0.00015222	0.00722857
COLGALT2	-2.1329805	0.00015313	0.00725622
TRIM16L	-1.9615452	0.00015386	0.00727518
PCED1B-AS1	2.53358747	0.00015456	0.00729261
CTSE	2.42734431	0.00015515	0.00730513
TRIQK	1.98108677	0.00015557	0.00730929
DTD1-AS1	-6.3129913	0.00015647	0.00732936
BATF	3.08299532	0.00015677	0.00732936
CTSL	1.68222142	0.00015732	0.00732936
BSN	-2.4787046	0.00015709	0.00732936
SESN1	1.9894493	0.0001592	0.00740101
ITGB6	1.65544346	0.00015959	0.00740357
RBMX2P2	-5.5930564	0.00015999	0.00740532
FOLR1	2.35500281	0.00016029	0.00740532
DLGAP1	-2.0593549	0.0001607	0.00740858
GRM5-AS1	-3.3848577	0.00016148	0.0074292
SIK1B	1.50023633	0.00016389	0.00752434
OR5A1	-3.790636	0.00016498	0.00755882
KIZ-AS1	-4.1230482	0.0001654	0.00756212
DSC3	-1.7753779	0.00016617	0.00758186
ONECUT3	-3.7425577	0.0001683	0.00766321
DPYSL5	-3.2470059	0.00016911	0.00768411
MIR193BHG	-2.1377263	0.00016952	0.00768729
ASPG	-3.4326478	0.00017227	0.00779569
ERRFI1	1.71925111	0.00017287	0.00780696
IGKV1-17	3.17149555	0.00017405	0.00784428
TNK1	-2.4344202	0.00017467	0.00785609
KCNIP4-IT1	-2.3587741	0.00018059	0.00810593
SLAMF8	2.12972566	0.00018096	0.00810622
THBS1-IT1	2.28416708	0.00018137	0.00810801
FAM138F	-3.1405603	0.00018269	0.00813427
SNORD89	3.43363476	0.00018245	0.00813427
PTMAP9	-4.7714298	0.00018568	0.00825098
RCOR2	-2.8421199	0.00018795	0.00831483
NBN	1.71431217	0.0001878	0.00831483
RNU1-4	-9.3491778	0.00018825	0.00831483
CLIC2	1.92698225	0.00018952	0.00833761

XAGE1A	3.03215389	0.00018947	0.00833761
RWDD1	1.87024462	0.00019093	0.00836639
NRG1	-1.792736	0.00019078	0.00836639
SERINC1	1.59052197	0.0001915	0.00837505
KLRK1	2.23816082	0.00019218	0.00837937
IGKV3-11	2.72350311	0.00019236	0.00837937
LINC01492	-5.164466	0.00019529	0.00846273
KLRG1	3.27428049	0.00019496	0.00846273
SH2D6	-3.2200183	0.00019542	0.00846273
IGLV1-51	3.17297677	0.00019656	0.00847884
CHI3L2	3.00657821	0.00019626	0.00847884
TRIM72	-3.0815139	0.00019736	0.00849077
TEX15	-3.2807325	0.0001976	0.00849077
CXCR6	2.49467262	0.00019939	0.00855115
C10orf71	-2.9107623	0.00020043	0.0085789
PTP4A2	1.49029939	0.00020192	0.00862596
NT5E	1.74611558	0.00020335	0.00867045
PARP8	1.8909794	0.0002043	0.00869403
LINC01979	-3.5011203	0.00020534	0.00872143
FAM138D	-4.2856746	0.00020768	0.00873714
MFN1P1	-5.2077302	0.00020756	0.00873714
LRRC4	-1.5874949	0.00020701	0.00873714
GNB4	1.9060569	0.00020643	0.00873714
MS4A6A	2.04079597	0.00020659	0.00873714
IGLV1-40	2.77328047	0.00021081	0.00883539
SLC40A1	2.13697581	0.00021045	0.00883539
MFAP1P1	-2.4655542	0.00021594	0.00903335
GABRA5	-3.0373476	0.00021824	0.00911213
CTAGE15	-3.0722666	0.00021994	0.00914847
GOLGA6L22	-2.6985566	0.00021954	0.00914847
CCER1	-3.7635676	0.0002243	0.00931226
ITM2B	1.86272588	0.0002255	0.00934473
CD37	2.27553985	0.00022677	0.00937992
LGMN	1.6574333	0.00022837	0.00942833
HRG	-3.5956917	0.0002293	0.00944901
SLC5A10	-3.1167927	0.00023068	0.00948844
BFSP1	-2.4254367	0.00023117	0.00949066
DCN	1.94552758	0.00023227	0.00951825
CCDC80	1.77113892	0.00023284	0.00952419
FAM170B-AS1	-5.5582873	0.00023508	0.00957878
NAT16	-3.8810601	0.00023591	0.00957878
FAR2P2	-1.973063	0.00023548	0.00957878

NPM1P42	-4.71117	0.00023538	0.00957878
NPIPA8	-4.4136593	0.00023683	0.00958119
CHIT1	2.50198531	0.00023668	0.00958119
ZBED9	-2.1513336	0.00023808	0.00959887
NMI	1.85502461	0.00023814	0.00959887
CDHR2	-4.9085621	0.00023976	0.00964654
RN7SL767P	3.65848112	0.00024046	0.00965707
ZIC5	-3.346313	0.00024166	0.00968805
KRT14	-2.7335028	0.00024237	0.00969884
CRTAM	2.49576063	0.00024299	0.00970606
SLC2A12	-1.8069686	0.00024435	0.00974276
SRGAP3-AS3	-6.1082361	0.00024684	0.00980619
CLEC18C	-2.7471408	0.00024682	0.00980619
MELTF	-2.0478462	0.00024727	0.00980619
IQGAP2	1.824151	0.00024911	0.00986163
AP3S1	1.5893482	0.00025198	0.00995707
SLC22A3	2.30870332	0.0002585	0.01019653
SP9	-4.5199312	0.00026009	0.0102229
TMED5	1.71814949	0.00025994	0.0102229
TMEM176B	1.80242061	0.00026076	0.01023117
IGLV3-21	2.51386555	0.0002677	0.01044942
IGLC2	2.15495661	0.00026774	0.01044942
CPEB1-AS1	-2.6408773	0.00026683	0.01044942
IL2RG	2.46853866	0.00026941	0.01048335
RNASE6	2.36004072	0.00026956	0.01048335
WIF1	3.23390866	0.00027212	0.01056463
KRT8P42	-4.0075516	0.00027406	0.01058415
FGFBP2	-2.7855018	0.00027352	0.01058415
FLG	-2.8326712	0.00027402	0.01058415
CAP1	1.62986401	0.00027565	0.01062703
FRRS1L	-2.2501971	0.00027639	0.01063674
FAM83B	-1.8896306	0.00027852	0.01070025
C15orf39	-1.6105729	0.00027956	0.01072155
KLF6	1.50486143	0.00028058	0.0107422
GRM4	-3.1748099	0.00028323	0.01080632
NPM1P3	-4.7181651	0.00028294	0.01080632
CLIP1-AS1	-4.0042445	0.00028623	0.01090188
SSTR5-AS1	-4.3515994	0.00029006	0.01102878
NGFR	-1.9695659	0.00029192	0.01104893
RGS20	-3.290575	0.00029209	0.01104893
SNORA53	2.23964882	0.00029117	0.01104893
PI3	2.51859584	0.00029537	0.01110753

TREM1	1.83028522	0.00029524	0.01110753
THRSP	-5.0338245	0.00029596	0.01110753
CDHR1	-2.3651836	0.00029615	0.01110753
CDC42	1.91740544	0.00029416	0.01110753
PER1	1.61089197	0.00029724	0.01112966
HOXD10	-2.8453475	0.00030043	0.01122996
EPSTI1	1.95408112	0.00030146	0.01123065
SMIM10L2A	-2.2707916	0.0003014	0.01123065
TIPARP	1.64115491	0.00030341	0.01128446
SEZ6L	-3.3007217	0.00030415	0.011293
FN1	1.63070681	0.00030686	0.01137438
VSIR	1.839579	0.00030868	0.01141059
TLX2	-4.1282824	0.00030887	0.01141059
CHRNA7	-2.1898546	0.00031043	0.01144927
IGHV1-18	2.26839444	0.00031221	0.01147665
MAP6D1	-2.9163686	0.00031189	0.01147665
GLS	1.53136391	0.00031488	0.01153635
RASGEF1B	1.67815328	0.00031465	0.01153635
C1QC	1.89901193	0.00031558	0.01154286
ITGAX	1.80458654	0.00031651	0.01154454
RAB27A	1.7100402	0.00031667	0.01154454
ANKRD44	2.01618234	0.00031834	0.01158653
TPRX1	-5.736397	0.00031935	0.01160419
RPS4Y1	1.9272502	0.00032303	0.01171869
CLCN2	-1.7007899	0.00032404	0.01173613
TMX4	1.83381689	0.00032498	0.01175076
TBXAS1	2.06138321	0.00033038	0.01192661
WARS1	1.59127031	0.00033297	0.01200031
VNN2	2.64009611	0.00033356	0.01200237
LRRC3B	-3.1350771	0.00033522	0.01200799
GZMB	2.19077023	0.00033535	0.01200799
HLA-C	1.51062309	0.00033433	0.01200799
SOX2	-1.7217702	0.0003362	0.01201901
LIX1L	2.22988576	0.00033754	0.01204738
OR8D1	-4.9863343	0.00034095	0.01214948
FAM83G	-2.0794687	0.00034171	0.01215696
TNFSF13B	2.16038458	0.0003452	0.0122418
TLX1	-5.04379	0.00034491	0.0122418
TMEM117	-1.7447507	0.000348	0.01231376
SNX10	1.85209759	0.00034948	0.01231376
OR5A2	-4.1568939	0.00035057	0.01231376
CFH	1.85750856	0.00034944	0.01231376

IL17RE	-2.0384946	0.00035036	0.01231376
XRCC6P3	-4.1871509	0.00034882	0.01231376
TXNDC2	-2.7382216	0.00035314	0.01235038
HLA-F	1.7745949	0.00035328	0.01235038
LINC01206	-2.213179	0.00035257	0.01235038
TFEC	2.31044044	0.00035548	0.01237996
BAHCC1	-1.8174052	0.00035637	0.01237996
GRIP1	-2.3082533	0.00035545	0.01237996
KLRC2	5.32473361	0.00035626	0.01237996
COX7C	1.9292567	0.00035867	0.01242091
HSPA1A	1.59903861	0.00035832	0.01242091
DDX11L1	-4.3908307	0.00035973	0.01243815
B4GALNT3	-2.030185	0.00036334	0.01245961
IGLV1-44	2.17202931	0.00036211	0.01245961
IGHA2	2.11010154	0.00036199	0.01245961
FGL2	1.91065452	0.00036243	0.01245961
RPSAP31	-6.0292739	0.00036293	0.01245961
SCN7A	1.88690568	0.00036373	0.01245961
CLIP2	-1.4705474	0.00036483	0.01247813
ANXA8	-1.6009612	0.00036541	0.01247879
BDNF	-2.6041076	0.00036798	0.01254692
COL27A1	-1.7177442	0.00037386	0.01265023
ALPL	1.71153067	0.00037375	0.01265023
FCGR3A	1.93136029	0.00037359	0.01265023
MED12L	-1.9227112	0.00037386	0.01265023
DUSP5P1	-3.7808487	0.00037221	0.01265023
FOXI3	-3.1843043	0.00037902	0.01280526
RPL12P8	-5.8287877	0.00038052	0.01283622
RNVU1-7	-1.3637989	0.00038328	0.01290948
SNX18P27	-5.4195134	0.00038725	0.01302359
MFAP4	1.88133065	0.00039145	0.01314461
CTBP2P9	-5.3211473	0.0003949	0.01324054
POSTN	1.73511816	0.00039976	0.01335563
FLJ12825	-4.334629	0.00039911	0.01335563
NEB	-1.6743596	0.00040014	0.01335563
SPRY1	1.51040561	0.00040389	0.01346028
IGKV3-15	2.46005961	0.00040587	0.01350587
DCC	-1.8471226	0.00040692	0.01352073
MPEG1	2.0021988	0.0004095	0.01358599
SNORA8	2.80322566	0.00041052	0.01359945
STK4	1.58852943	0.00041168	0.0136176
APOC2	2.8989301	0.00041356	0.01365915

RCCD1-AS1	-4.0340433	0.00041927	0.0138273
SERPING1	1.6006034	0.00042225	0.01390474
PDCD1	2.58937672	0.00042544	0.01398883
PLP1	-3.3656888	0.00042735	0.01403087
SPATA31A6	-4.3004274	0.00042859	0.01405066
DDIT4	1.44120252	0.00042964	0.01405898
C3	1.59396321	0.00043065	0.01405898
ITGB4	-1.8748872	0.00043075	0.01405898
AHRR	-2.1448251	0.00043227	0.014088
TREM2	3.22267591	0.0004332	0.0140976
GDAP1L1	-5.2111742	0.00043431	0.01411289
HMCN1	2.12619778	0.0004352	0.01412099
MMP11	-2.0849743	0.0004385	0.01419811
FRMD1	-3.5520014	0.00043886	0.01419811
SEZ6	-5.2281331	0.00043999	0.01421382
GPX3	1.87495976	0.00044183	0.0142527
GPR21	-3.8786221	0.00044353	0.01428642
IGHG3	1.87413045	0.00044995	0.01447242
CYP4F8	-4.4281933	0.00045175	0.01449172
WNT9A	-2.2470281	0.00045186	0.01449172
MPPED1	-3.2640519	0.00045318	0.01451291
ADH7	-2.1665399	0.00045631	0.01457165
RPTN	-2.784772	0.00045633	0.01457165
IGLC3	2.2081001	0.00045854	0.01462104
LAP3	1.73918544	0.00046128	0.01468726
MICC	-4.6552797	0.00046658	0.01483476
ARPC3	1.67372445	0.00046831	0.01486838
PPFIA4	-1.9918142	0.00046901	0.01486936
ITGAM	1.95112367	0.00047075	0.01488191
FGF23	-3.8035867	0.0004702	0.01488191
RNA5S9	3.79551773	0.00047287	0.01492755
RPL17-C18orf32	3.88580675	0.00047636	0.01501634
NRARP	-1.5574883	0.00047996	0.01510483
PSMB9	1.87632302	0.00048054	0.01510483
AATBC	-2.0709571	0.00048406	0.0151406
LINC00705	-5.2688936	0.0004839	0.0151406
CLEC7A	2.14452366	0.00048441	0.0151406
CASC19	-2.5598097	0.000483	0.0151406
PRF1	2.12139223	0.00048643	0.01518223
FOXQ1	-2.6424495	0.00048946	0.0152339
CBX2	-1.8746624	0.00048939	0.0152339
HLA-DQB1	1.72863855	0.00049581	0.01540982

XG	-2.7366026	0.00050087	0.01553752
BTK	2.31819457	0.00050152	0.01553752
SPECC1-DT	-4.0744002	0.00050203	0.01553752
GVINP1	1.84777647	0.00050346	0.0155601
COX6B2	-3.6186498	0.00050744	0.01566134
CTAGE14P	-5.2550325	0.00050902	0.01568813
NEFM	-2.5547404	0.00051141	0.01571797
B4GALNT4	-2.4585696	0.00051127	0.01571797
ANKRD19P	-3.2613946	0.00051305	0.01572481
EMILIN3	-3.0796258	0.00051254	0.01572481
KCNJ9	-3.0831636	0.00051582	0.01578774
LAMP3	1.95599142	0.00051656	0.01578871
MIR210HG	-2.1199737	0.00051983	0.01586653
SALL4P6	-5.2595151	0.00052058	0.01586754
OTULINL	1.65827978	0.00052195	0.01588752
AMY1C	3.81953722	0.00052311	0.01590088
PTMAP4	-4.536672	0.00052555	0.01595335
IGHA1	2.06039352	0.00052799	0.01600337
GASK1B	1.55788021	0.00052914	0.01600337
IL20RB-AS1	-4.8283202	0.00052937	0.01600337
SLC19A2	1.5855905	0.0005302	0.01600641
SURF6P1	-5.6196489	0.00053364	0.01602289
NEDD9	1.47191277	0.00053305	0.01602289
LY6K	-3.4454922	0.00053151	0.01602289
SLC36A2	-5.2230208	0.00053273	0.01602289
IGHV4-39	2.70822599	0.00053532	0.01602394
ITGBL1	1.92011933	0.00053543	0.01602394
ALOX5	1.74926681	0.00053584	0.01602394
CICP27	-3.7922935	0.0005386	0.01608466
COTL1	1.56667127	0.00053993	0.01609086
HCLS1	1.84730999	0.00054026	0.01609086
ITIH6	-3.8920589	0.00054478	0.01619955
RASSF2	1.87671101	0.00054538	0.01619955
TMPRSS13	-2.2258932	0.00054645	0.01620962
LINC01856	-4.1712636	0.00054941	0.0162683
IGKC	2.03011509	0.0005499	0.0162683
CCL3-AS1	4.14884175	0.00055272	0.01629244
TENM4	-1.6279453	0.00055269	0.01629244
BNC1	-2.6219178	0.00055292	0.01629244
LINC01521	-2.1749848	0.00055633	0.01634034
MUC6	-2.3206486	0.00055721	0.01634034
NASPP1	-2.8433648	0.00055726	0.01634034

DDAH1	1.44769165	0.0005575	0.01634034
KRT17P4	-4.8303569	0.00056434	0.01651876
PARP15	2.16939452	0.00056661	0.01656355
PRELID3A	-2.1001714	0.00056935	0.01660756
SRRM3	-2.3560132	0.00056962	0.01660756
DGKK	-4.8261305	0.00057684	0.01677383
TNNI3	-3.607876	0.00057667	0.01677383
PPIAP30	-4.3064837	0.00057969	0.01679397
THOC1-DT	-2.3181021	0.00057927	0.01679397
PTEN	1.48730168	0.00057981	0.01679397
IL15	1.70424825	0.00058126	0.01681406
PPP2R2C	-2.0463499	0.0005836	0.01685965
OR51L1	-2.7517896	0.00058465	0.01686802
STX7	1.74843058	0.00058952	0.01687972
NKX1-2	-3.8451075	0.00058784	0.01687972
MYZAP	3.5494283	0.0005904	0.01687972
LINC01964	-3.3206208	0.00058829	0.01687972
ANKRD30A	-3.8358946	0.00059037	0.01687972
OR5AN1	-3.5679489	0.00058889	0.01687972
KRT15	-2.3173596	0.00058953	0.01687972
TBC1D28	-4.7547653	0.00059246	0.01691691
NYAP1	-2.3892079	0.00059937	0.01709216
PRPF38AP1	-3.518428	0.00060432	0.01721094
OR10AH1P	-5.2584739	0.00060938	0.01733291
C2	1.68647757	0.00061062	0.01734589
UGT1A2P	-2.9431043	0.00061802	0.01753351
FLJ36000	-4.781939	0.00062304	0.01763064
RGS10	1.77868082	0.00062228	0.01763064
KRT18P8	-4.4933307	0.00062469	0.01763217
AJUBA-DT	-2.7226444	0.00062776	0.01763217
NPM1P11	-4.2535065	0.00062652	0.01763217
PELATON	2.15825013	0.00062691	0.01763217
MTND5P28	-5.4048521	0.00062787	0.01763217
ACSM2A	-2.9839731	0.00062548	0.01763217
HLA-DMB	1.99523164	0.00062938	0.01765177
LILRB4	1.97700446	0.00063016	0.01765177
DNAH17	-2.0871144	0.00063179	0.01765254
SLC30A1	1.77085428	0.00063107	0.01765254
AMH	-2.1763739	0.00063375	0.01768496
SKAP1	2.09735874	0.00063461	0.01768681
SOD2	1.3188623	0.00063699	0.01773084
LRRFIP1P1	-1.5795466	0.00063982	0.01778708

ERICH6B	-3.4518249	0.00064762	0.01795879
ADCY8	-2.7239969	0.00064746	0.01795879
IL1RL1	2.13498016	0.00065346	0.01809813
FAM43A	-1.8321422	0.00065831	0.01820965
FLG2	-3.1550678	0.00066003	0.01821173
TCHH	-2.3087884	0.00065985	0.01821173
GALNT9	-3.6890303	0.0006629	0.01826801
GABRG3	-2.9161735	0.00066629	0.01831597
ZNF587P1	-4.9383188	0.00066554	0.01831597
PIK3IP1	1.47295262	0.00067147	0.01841267
IGKV1-27	2.68350579	0.00067147	0.01841267
RGCC	2.1463251	0.00067316	0.01841327
HLA-E	1.51765186	0.00067294	0.01841327
FGF7	1.89045074	0.00067399	0.01841327
GAPDHP49	-4.798396	0.00068878	0.01879409
ERICH3-AS1	-3.4177889	0.00069245	0.01887101
RARRES1	2.37059592	0.00069769	0.01899029
CDH8	-2.7074245	0.00069904	0.01900366
BANK1	1.88019801	0.00070799	0.0191529
EFCAB6-DT	-2.9864473	0.00070735	0.0191529
CEBPE	-4.0628029	0.00070789	0.0191529
CCDC185	-3.2678591	0.0007056	0.0191529
IL12RB1	3.10756109	0.0007114	0.01922176
IGSF6	1.87083671	0.00072179	0.01947867
UBE2D1	1.62896385	0.00072532	0.01955015
PKP3	-2.185769	0.00072857	0.01961365
SLC22A11	-4.1048092	0.00073082	0.01965046
SPATA31D3	-3.6150403	0.00073363	0.01967828
C1QL1	-4.8354192	0.00073329	0.01967828
MMP9	1.89454921	0.00074012	0.01978207
MUC17	-2.8245699	0.00074018	0.01978207
HSD17B4	1.3660625	0.00073932	0.01978207
MMP7	2.8638429	0.00074637	0.01990358
GPRIN3	1.86142671	0.00074653	0.01990358
AJUBA	-1.6683016	0.00075808	0.02018714
ST8SIA5	-3.2202427	0.00076293	0.020292
IFITM2	1.47968118	0.00076437	0.02030569
NBEAP3	-4.654082	0.00076999	0.0204306
SOX10	-3.7642364	0.0007733	0.02046934
ATP6V1C1	1.58351321	0.00077277	0.02046934
IGKV1-6	3.53622814	0.00077793	0.02056722
JRK	-1.4722653	0.0007794	0.02058163

CPA4	-4.2744773	0.00078988	0.02078382
COL3A1	1.61969927	0.00078832	0.02078382
IGFL2-AS1	-3.4175754	0.00078937	0.02078382
NALF2	-3.048991	0.00079747	0.02092312
ZFHX2	-1.5772785	0.00079894	0.02092312
EVX1	-4.4253686	0.00079639	0.02092312
KNL1	-1.6397689	0.00079895	0.02092312
HNRNPCP4	-3.9889042	0.00081091	0.02121103
LAIR1	1.88091554	0.0008167	0.02133741
SFTA2	2.69612258	0.00082231	0.02145873
BARX1	-2.9234378	0.00082394	0.02146377
MFAP3L	-2.1550525	0.00082445	0.02146377
MBD3	-1.4654131	0.0008324	0.02164534
MOXD1	1.97363157	0.00083389	0.02165873
TNFRSF1B	1.75770874	0.00084201	0.02184398
TRGC2	2.88488873	0.00084562	0.02191177
IGSF1	-3.7078605	0.00084684	0.02191771
PDSS2	1.93679873	0.0008522	0.02203077
LINC01122	-3.669329	0.00085543	0.02208856
RBPJ	1.34694928	0.00085644	0.02208883
WDR87	-2.5297777	0.0008586	0.02211862
TGM2	1.57024028	0.00086244	0.02214034
STK24-AS1	-2.9455345	0.00086049	0.02214034
GPR176-DT	-2.8850468	0.00086157	0.02214034
DAB2	1.7059368	0.00086421	0.0221601
CAT	1.71767248	0.00086535	0.02216345
MAGEA7P	-5.0380022	0.00087266	0.02229912
FYN	1.73819123	0.00087194	0.02229912
PCK1	-3.5841863	0.00087714	0.02238787
LINC01121	-3.0100201	0.00089132	0.02272357
ICAM1	1.47939676	0.00089413	0.0227689
LINC01460	-2.7124807	0.00089745	0.02282716
CTSW	2.19581368	0.00090191	0.02291428
TMEM44	-1.5037615	0.00090606	0.0229933
CSF2RA	1.70288785	0.00090758	0.02300558
LY96	2.93959528	0.0009105	0.02305322
APBB1IP	2.02693662	0.00091596	0.02305956
LINC01634	-3.6492005	0.00091593	0.02305956
A2M-AS1	1.99326618	0.00091274	0.02305956
METAP2P1	-3.3767592	0.00091554	0.02305956
LINC02389	-2.6584498	0.00091331	0.02305956
KCTD12	1.7024438	0.00091871	0.02307204

NAALADL2-AS2	-4.2850475	0.00091847	0.02307204
FABP4	2.94628216	0.00091959	0.02307204
SNORA49	2.62409958	0.00092145	0.02309271
PANX2	-1.8811713	0.00092415	0.02313409
ABCA1	1.54636111	0.0009263	0.02316161
KRT18P5	-2.0019146	0.00092775	0.02317178
FLJ16779	-2.4334435	0.00093913	0.02330421
HINT3	1.53447037	0.00093937	0.02330421
AGGF1P4	-4.5649421	0.00093603	0.02330421
ZDHHC22	-3.7831522	0.00093805	0.02330421
ADGRF5	1.73456834	0.00093624	0.02330421
OR4F5	-5.7549754	0.00093676	0.02330421
CNTNAP2	-1.9117933	0.00094068	0.02331062
LINC02875	-2.8958853	0.00094366	0.02335834
TRAM1	1.45728595	0.00094755	0.02342819
SAMD9	1.63798637	0.00095663	0.02360012
CD3D	2.45827331	0.00095645	0.02360012
AIPL1	-4.3270054	0.0009587	0.02362487
SPDYE8	-11.15128	0.00096019	0.02363515
RAB27B	1.61887911	0.00096502	0.02365524
PEBP4	3.58641169	0.00096581	0.02365524
HOXC-AS2	-3.4998786	0.00096742	0.02365524
CTSH	1.51580809	0.00096468	0.02365524
CPEB1	-2.1643988	0.00096552	0.02365524
SPDYE10P	-3.2692082	0.0009664	0.02365524
SAMHD1	1.65399834	0.00097028	0.02369893
CSKMT	1.8061243	0.00097686	0.02383338
KIRREL1-IT1	-4.3371711	0.00097838	0.02384416
SFRP4	1.61469381	0.00098286	0.02392713
MAN2A1	1.62274011	0.00098515	0.02393007
EPS15	1.60326752	0.00098451	0.02393007
CNOT6L	1.49223389	0.00098955	0.0240108
CRISPLD2	1.3030956	0.0009928	0.02406324
SFRP2	1.87025649	0.00099704	0.0241396
GIMAP7	2.05861405	0.00099875	0.02415059
TRPV3	-1.6954243	0.00099968	0.02415059
ARHGEF4	-1.9521293	0.00100262	0.02416886
WWP1P1	-3.5099289	0.0010018	0.02416886
SMARCE1P3	-3.6951276	0.00100628	0.02419623
MIP	-5.3333933	0.00100704	0.02419623
OR14J1	-4.0708233	0.00100529	0.02419623
HOXA13	-2.7433657	0.00100818	0.0241973

RPS29	1.70079238	0.00102317	0.02442576
KNOP1P2	-2.9659723	0.00101962	0.02442576
SARAF	1.39998043	0.00102407	0.02442576
FLJ40194	-3.6421413	0.00102288	0.02442576
IQGAP3	-2.0163999	0.00102432	0.02442576
FHAD1-AS1	-3.4442601	0.00102075	0.02442576
SERPINB5	-1.6100097	0.0010283	0.0244847
POU6F2	-3.1474581	0.001029	0.0244847
LUNAR1	-3.5138487	0.00103156	0.0245191
ILF2P1	-3.7949073	0.00103425	0.02454764
NLGN1	-2.0278818	0.00103497	0.02454764
IL1R1	1.2679519	0.00103696	0.02456842
PITPNM2-AS1	-3.8338573	0.00103969	0.02460664
PAK6	-1.8958004	0.00104231	0.02464248
TAP1	1.40918257	0.00104432	0.024643
OR7A17	-4.2414925	0.00104456	0.024643
RPL19P18	-5.4004271	0.00104634	0.02465868
HMGB3P30	-4.8649889	0.00104945	0.02467947
MLIP-AS1	-4.679657	0.00104845	0.02467947
LINC00511	-1.7716806	0.00105069	0.02468226
SLC6A19	-3.7255668	0.00105405	0.02473504
PITPNM3	-1.7599558	0.00105764	0.02478316
CXXC4-AS1	-4.8152992	0.00105946	0.02478316
MDGA1	-1.4058287	0.00105937	0.02478316
AKAP8P1	-5.0241894	0.00106361	0.02483
HPGD	1.91252983	0.00106371	0.02483
RPS13P3	-5.858148	0.00106678	0.02483113
DGKB	-2.6390124	0.00106825	0.02483113
OR2F1	-2.4640088	0.00106667	0.02483113
IGF2BP2-AS1	-3.0017615	0.00106727	0.02483113
SELENOP	2.2620242	0.00106941	0.02483213
STK17B	1.7731232	0.0010736	0.02490333
TEDC2-AS1	-2.7026101	0.00107914	0.02500558
STARD3NL	1.54349075	0.00108205	0.02504673
ABCB10P1	-3.9735484	0.0010876	0.02507178
LINC02620	-4.8509499	0.00108446	0.02507178
FAM222A-AS1	-5.0304394	0.00108766	0.02507178
PYHIN1	2.51001033	0.00108588	0.02507178
HNRNPA3P10	-3.9264785	0.00108885	0.02507311
RESF1	1.45119834	0.0010928	0.02513778
HENMT1	2.72420893	0.0010947	0.02515531
TMEM132E-DT	-4.1345506	0.00110528	0.0253722

SIK1	2.18684933	0.00111283	0.02551158
NUS1P4	-4.0231173	0.00111366	0.02551158
F2RL2	-1.6249515	0.00111695	0.02553481
ZDBF2	-1.3121086	0.00111698	0.02553481
GPNMB	1.81235467	0.00112008	0.02557912
OR52I2	-3.4570465	0.00112581	0.02568363
SAT1	1.34988662	0.00112982	0.02569909
NIPAL1	-1.9512349	0.00112773	0.02569909
ESPL1	-1.8026433	0.00112997	0.02569909
PSAP	1.50143768	0.00113187	0.02570695
LITAF	1.3883761	0.00113264	0.02570695
CD226	1.76401698	0.00113924	0.02574229
APOL6	1.6478874	0.00113814	0.02574229
CHURC1	1.44226654	0.00113607	0.02574229
CD63	1.45579776	0.00114002	0.02574229
TNFAIP3	1.48204163	0.00113968	0.02574229
CCDC27	-3.8585502	0.0011413	0.02574505
PTPRT	-1.6643503	0.00114391	0.02577753
CFAP97D1	-2.9137795	0.00114814	0.02584662
MASP1	-1.7260873	0.00114992	0.02586038
TRIM67	-3.1917937	0.00115343	0.025913
SELL	1.88895511	0.00115767	0.02598178
INMT	1.5971457	0.00116246	0.02603648
MMP2-AS1	4.2806718	0.0011623	0.02603648
PRKACB	1.49821182	0.00116542	0.02607647
MIER1	1.38539011	0.00116792	0.02610598
TMEM200C	-1.9463493	0.0011692	0.02610822
FKBP11	1.5823542	0.0011747	0.02620466
RTKN2	1.8258671	0.00117734	0.02623708
DENND6A	1.54499795	0.0011826	0.02627194
RN7SL396P	4.10694295	0.00118399	0.02627194
VCAM1	1.57941642	0.00118484	0.02627194
ERBIN	1.34397125	0.00118303	0.02627194
SYT6	-3.5887976	0.00118197	0.02627194
CPVL	1.92114708	0.00118752	0.02630493
LINC02012	-2.7402677	0.00119686	0.02648524
ARPC4	1.38710482	0.00120263	0.02658636
GIMAP4	1.82535609	0.00120416	0.0265937
FRMD7	-4.6986933	0.00121059	0.02670905
ZPR1P1	-3.1095834	0.00121827	0.0268516
ABCB1	2.15459934	0.00122641	0.02700416
CABYR	-1.8868645	0.00123164	0.02701193

HMGB1P17	-3.9175114	0.00122938	0.02701193
CPA3	2.37063313	0.00123056	0.02701193
STAT1	1.55268214	0.00122823	0.02701193
CCND3	1.36692934	0.00124541	0.02726852
FDCSP	5.14367699	0.00124581	0.02726852
PLEK	1.79596871	0.00125165	0.02735455
NEURL3	-3.8982464	0.00125221	0.02735455
TMEM119	1.80046487	0.00125719	0.02743634
CCR5	2.18503174	0.00125929	0.02745493
CSF1R	1.61228498	0.00126127	0.02747114
GVINP2	-5.3615247	0.0012646	0.02751654
RTKN	-1.7759432	0.00126672	0.02753553
PAK5	-2.6088631	0.00127045	0.0275359
IGF1R	-1.735284	0.00127047	0.0275359
SLC43A3	1.57504484	0.0012699	0.0275359
SNX2	1.38597273	0.0012728	0.02755945
MCM2	-1.6029982	0.00127818	0.0276489
COL7A1	-1.5325575	0.0012824	0.0277131
HCCAT5	-5.1992372	0.00128863	0.0277663
BAALC	-1.8983094	0.00128647	0.0277663
GOLGA8A	-1.3823649	0.00128786	0.0277663
PCLO	-1.478631	0.00129135	0.02779799
PKD2L1	4.64541038	0.00129309	0.0278084
HMGB3P11	-3.7579886	0.00129567	0.02783674
RNA5-8SN4	8.90665538	0.00130198	0.0279182
STAP1	3.50925652	0.00130119	0.0279182
IGDCC3	-3.2563724	0.00130769	0.02798626
KRT18P41	-5.0864635	0.00130743	0.02798626
AHSG	-3.7905412	0.00131138	0.02803809
UBE2HP1	-3.9819329	0.00131503	0.02808912
KCNC1	-2.620798	0.0013191	0.02814878
LINC01544	-3.2519197	0.00132312	0.02815619
PKD1P3	-1.5946284	0.00132177	0.02815619
SP6	-1.86827	0.00132326	0.02815619
LINC00939	-2.3610601	0.001332	0.02826481
LINC01104	-3.6852156	0.0013322	0.02826481
TAF13	2.20075205	0.00132977	0.02826481
CMAHP	1.77231692	0.00134097	0.02842379
KIF1A	-2.1161926	0.00134729	0.02853042
GZMH	2.72840478	0.00135199	0.02860251
SNHG1	1.311649	0.00135448	0.02862781
KCNH7-AS1	-5.2697487	0.0013592	0.02870003

RHOB	1.53233354	0.0013609	0.02870867
CYBA	1.85928812	0.00136325	0.02873076
CD40LG	2.77100138	0.00137068	0.02873999
CD164	1.28302384	0.00136855	0.02873999
MIA2-AS1	-3.2115198	0.00136913	0.02873999
ANKS4B	-3.1390916	0.00137897	0.02873999
ARHGAP15	1.8813838	0.00138	0.02873999
GPSM3	1.97628813	0.00137134	0.02873999
KIF4B	-3.7391642	0.00138161	0.02873999
KLF2	1.70314396	0.00137157	0.02873999
PSMG3-AS1	-1.7255509	0.0013755	0.02873999
CLRN1	-5.9201312	0.00137166	0.02873999
LINC02817	-3.8151247	0.0013813	0.02873999
HMG2N2P18	-5.7490246	0.00138187	0.02873999
RPL21P123	2.30336147	0.00137591	0.02873999
BCAN-AS1	-2.2045813	0.0013797	0.02873999
CLIC4	1.6529876	0.00139147	0.02889106
SNORC	-2.5650498	0.00139174	0.02889106
TEX55	-5.4376959	0.00140557	0.02915075
ATP13A5	-2.220923	0.00141948	0.02941177
OR8D4	-3.6619448	0.00142223	0.02944107
KRT16P6	-3.8687951	0.00142637	0.02945624
IL12RB2	2.13838179	0.00142829	0.02945624
UCN2	-3.0692215	0.0014275	0.02945624
CYP4B1	1.58633688	0.00142562	0.02945624
PRDM9	-3.1891042	0.00143898	0.02961269
DIRAS1	-2.1567392	0.001441	0.02961269
GPR161	-1.6202492	0.00144123	0.02961269
OR6N2	-5.4885507	0.00143867	0.02961269
POLH-AS1	-4.4085767	0.00144885	0.02974184
SPDYE6	-4.3092585	0.00145234	0.02978584
LTA4H	1.28737306	0.00145568	0.02982658
ASS1P6	-4.9500577	0.00146077	0.02987553
C8orf86	-4.0364835	0.00146032	0.02987553
LINC02582	-4.4561661	0.00146925	0.02995091
AHNAK2	-1.718579	0.00147635	0.02995091
PRDM1	1.72223806	0.0014769	0.02995091
KDM4F	-4.6353604	0.00147591	0.02995091
PRDX3	1.5063589	0.00147799	0.02995091
AGGF1P8	-4.3096239	0.00147431	0.02995091
DPP3P1	-4.4366806	0.00146912	0.02995091
SMO	-1.8218693	0.00147301	0.02995091

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CD28	1.91482403	0.00147715	0.02995091
KCNQ5-DT	-3.5805531	0.00148139	0.02999239
MMP2	1.37886975	0.00148471	0.03003222
CTSZ	1.46498897	0.00149461	0.03017723
PDE7A	1.59011451	0.00149452	0.03017723
FBXO39	-3.0013534	0.00149817	0.0302106
OR2V2	-3.57447	0.00149899	0.0302106
FAM95C	-1.8391723	0.0015019	0.03024165
C5orf15	1.59127565	0.00150537	0.03028395
ADRA2B	-2.5016896	0.00150804	0.03031009
CDR2-DT	-2.850113	0.00151971	0.03051695
ANP32BP3	-3.9951823	0.00152806	0.03065671
GOLGA6A	-3.2734754	0.00153376	0.03071545
FERMT3	1.88636646	0.00153241	0.03071545
NTRK2	-1.4052245	0.00153807	0.03077384
TOPAZ1	-4.7263532	0.00154382	0.03086111
SVIP	1.80877672	0.00154528	0.03086239
CHMP2B	1.51216627	0.00155181	0.03096491
ADAM23	-1.7142391	0.00155646	0.03097386
SEMA3F	-1.4435467	0.00155496	0.03097386
SNORA74A	2.70870378	0.00155627	0.03097386
SDK2	-1.9721421	0.00156521	0.03111998
NSA2	1.53374024	0.00157013	0.03118982
SCLT1	1.71754473	0.00157379	0.03123447
RNU1-11P	5.2289286	0.0015865	0.03145844
RPS2P7	-5.4598626	0.00159655	0.0315609
LINGO1	-1.9513095	0.00159408	0.0315609
HSPB6	2.01244112	0.00159737	0.0315609
CCR1	1.8779805	0.00159482	0.0315609
GBP4	1.77029584	0.0016014	0.03161227
BTN3A1	1.59055022	0.00160299	0.03161548
HOXA10-AS	-3.5969336	0.00160716	0.03164124
FMO5	1.67045743	0.00160601	0.03164124
LINC00638	-2.2174348	0.00161233	0.03165459
ANHX	-3.5316727	0.00161283	0.03165459
LMO3	1.59488473	0.00160996	0.03165459
RBFOX3	-2.7733334	0.00161356	0.03165459
MAOB	1.98336223	0.00162161	0.03178232
RHBDD3	-1.6792124	0.00162438	0.03178232
MAPT-AS1	-3.2442869	0.00162361	0.03178232
SNORA81	3.87437197	0.00162662	0.03179812

F13A1	1.61715803	0.00162836	0.03180396
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OTOP3	-4.2219521	0.00164625	0.0320968
SLC30A7	1.34672989	0.00164941	0.03210178
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LINC00661	-3.7752739	0.00166592	0.03239468
ANKRD18DP	-2.9172784	0.0016674	0.03239505
KLHL13	-2.3640228	0.00167095	0.03240702
REG3G	-5.3474033	0.00166991	0.03240702
DMXL2	1.3808957	0.0016746	0.03244938
UBTFL8	-4.9433875	0.00167964	0.03251857
CBX1P5	-4.0216553	0.00168362	0.03256718
PAX6	-2.5409487	0.00168969	0.03265606
LINC01007	-4.7311639	0.00169181	0.03266844
IGHV3-74	2.73365463	0.00169726	0.03271658
TMEM78	-5.3563707	0.00169595	0.03271658
CYLD	1.59573946	0.00170259	0.03276234
NR2E3	-2.7045043	0.00170204	0.03276234
OR5AS1	-2.866243	0.00170826	0.03284278
IFIT3	1.51875326	0.00171192	0.03288452
SYT9	-3.0011648	0.0017139	0.03289413
TMCO5A	-4.2335438	0.00171923	0.03296784
MCM3AP-AS1	-1.6721532	0.00172412	0.0330302
TIMP3	1.54264581	0.00172905	0.0330302
LRRC37A5P	-3.8901329	0.00172908	0.0330302
C1orf54	2.22846477	0.00172888	0.0330302
MAPT	-2.2641213	0.00173005	0.0330302
LHX5	-2.9089504	0.00173144	0.0330302
GEM	1.86106723	0.00173823	0.03313119
REEP3	1.31667078	0.00174345	0.03318542
LINC00221	-3.5821922	0.00174628	0.03318542
INPP5D	1.6640147	0.00175031	0.03318542
NEFHP1	-2.5581897	0.00175062	0.03318542
USP31	-1.3646212	0.00175157	0.03318542
TMEM221	-3.9493938	0.00174629	0.03318542
FBXO40	-2.6534784	0.00174722	0.03318542
SOX11	-2.523015	0.00175363	0.03319604
HCP5	1.46096897	0.00176148	0.03331605
MYO18B-AS1	-3.0578388	0.00176529	0.03335952
STK10	1.69569691	0.0017685	0.03339176
CTSO	1.53965659	0.00177201	0.03340111
SPOCK2	1.58013296	0.00177105	0.03340111

PER3	1.3038121	0.00177844	0.03349366
DCK	1.4606909	0.00178252	0.03354205
ZIC1	-1.748416	0.00179035	0.03366078
RAC2	1.81568774	0.00179283	0.03367863
ANP32BP1	-2.6589209	0.00180023	0.03378911
SNX3	1.35698995	0.00180889	0.03390339
CTLA4	2.18031902	0.00180939	0.03390339
SEMA5B	-1.8176628	0.00181447	0.03396984
ODAPH	-3.6302247	0.00182676	0.03414221
CASP4	1.50448106	0.00182646	0.03414221
IGHV3-33	1.93134016	0.00183491	0.03423675
LCP2	1.74328221	0.00183369	0.03423675
RPL22P1	1.64654554	0.00184488	0.03433587
HLA-DOA	1.77867066	0.00184459	0.03433587
GALR2	-4.5613348	0.0018427	0.03433587
ERVW-1	-2.9511893	0.00185354	0.03441906
RAB20	1.45170446	0.00185402	0.03441906
NECTIN1	-1.8399053	0.0018518	0.03441906
UCP2	1.47827337	0.0018632	0.03455116
LINC02487	-3.1013055	0.00186425	0.03455116
WASHC2A	1.31528481	0.00186786	0.03458908
LINC01581	-4.1056885	0.00187095	0.03461734
NOTCH1	-1.1990124	0.0018791	0.0347391
GTF2IRD2P1	-3.5071551	0.00188389	0.03479842
MICOS10	1.81128823	0.00189029	0.03488766
LINC00426	2.15815814	0.00191412	0.03527095
KIF19	-1.9979854	0.00191425	0.03527095
TMEM154	1.32480071	0.00191921	0.0353035
UBD	1.99574284	0.00191792	0.0353035
MTMR6	1.63359169	0.00192272	0.03533871
TBC1D29P	-2.7136786	0.00193122	0.03546555
SMIM14	1.35758408	0.00193339	0.03546678
UBTFL5	-4.3426393	0.00193449	0.03546678
RCCD1	-1.4853769	0.00194224	0.03557933
NRBF2P6	-2.9469485	0.00194535	0.03560688
PTGIS	1.94063223	0.00195219	0.03570247
EEF1A1P6	1.73392239	0.00195593	0.03574138
WAS	1.75175243	0.00195761	0.03574255
PPM1E	-2.4066072	0.00196183	0.03576042
PTPRD-AS1	-2.0792712	0.00196412	0.03576042
VN1R11P	-3.5157221	0.00196462	0.03576042
TERC	-2.0131812	0.00196505	0.03576042

GBP1	1.55201239	0.00197192	0.03585588
KLF7P1	-4.475182	0.00197586	0.03589803
FTLP3	2.61022313	0.00198523	0.03600908
NRXN3	-1.4390829	0.00198509	0.03600908
C1S	1.43965501	0.00199191	0.03610065
PRB2	-2.8014167	0.00199622	0.03611965
CEBPB	1.21471826	0.00199503	0.03611965
CHRN2	-2.8234015	0.00199816	0.03612523
SLC46A3	1.8548077	0.0020035	0.0361923
PRPH	-3.1963797	0.0020058	0.03620414
NSMCE1-DT	-2.0737481	0.00201196	0.03628581
CACNA2D3	-1.8037385	0.00201507	0.03630113
KLHL29	-1.4310055	0.00201609	0.03630113
C12orf56	-2.6194412	0.00202333	0.03640181
SLC30A3	-3.009198	0.00202616	0.03642309
KLRG2	-2.4683777	0.00203864	0.03661093
OPN5	-3.6027269	0.00204088	0.03661093
HNRNPA1P2	-2.7776686	0.00204157	0.03661093
IGHV4-34	2.32951473	0.00204817	0.03666991
HOXC8	-2.0097336	0.002048	0.03666991
SRPK3	-2.7081234	0.00205387	0.03671249
DMRT3	-2.5448821	0.00205317	0.03671249
TSBP1	-2.6401556	0.00205664	0.03673244
PLAAT4	1.58905329	0.0020656	0.03683288
UBE2W	1.25947912	0.00206407	0.03683288
PLPP1	2.02555617	0.00206782	0.03684285
MARK2P16	-3.735282	0.00207626	0.03696339
AKNA	1.44990006	0.00209428	0.03722428
PEX5L	-1.9658778	0.00209316	0.03722428
MMP19	1.60728382	0.00210265	0.03734308
CHCHD4P2	-4.5760913	0.00211641	0.03734768
PKD1	-1.192183	0.00211067	0.03734768
FBXW7	1.60409494	0.00211484	0.03734768
SNX18P3	-1.6739961	0.00210544	0.03734768
RNF14P4	-3.4649855	0.00211196	0.03734768
FOXL2NB	-2.5595174	0.00211636	0.03734768
CD300LD-AS1	-4.1844066	0.00210813	0.03734768
KIF3C	-1.4798714	0.00210933	0.03734768
BMP2K	1.47760793	0.00212223	0.03739079
CDC42SE2	1.57356614	0.00212184	0.03739079
PTGER2	2.20791053	0.00213031	0.03747341
NETO2	-1.758804	0.00212876	0.03747341

NT5C1B	-3.8985617	0.00214399	0.0376842
PDGFC	1.50026106	0.00215689	0.03785536
EVPL	-1.4984486	0.00215715	0.03785536
MAPK8IP2	-2.2597264	0.00216007	0.03787647
GAREM2	-1.8892399	0.00216482	0.03792976
GNLY	1.88104091	0.00217479	0.03807428
SPECC1L-ADORA2A	-10.245196	0.0021792	0.03809126
CASS4	1.72746423	0.00217914	0.03809126
SNORA7A	2.18402238	0.00218191	0.03810852
BSN-DT	-2.5542592	0.00218403	0.03811552
TLR3	1.62679465	0.00218595	0.03811893
KIAA0895LP1	-3.3368292	0.00220448	0.03839278
POLR1G	-1.6633289	0.00220513	0.03839278
LIFR	1.57939989	0.00221128	0.03846965
ADORA2A-AS1	-3.3675808	0.00221729	0.03854384
OR10H5	-3.0075506	0.00222137	0.03858461
TCEAL8	1.74762922	0.00222699	0.03864896
IGLV2-23	1.83390897	0.00222857	0.03864896
RAB6B	-1.7997353	0.00223324	0.0386996
L3MBTL2-AS1	-1.9315469	0.00224134	0.03877915
PPP1R13B-DT	-3.4942764	0.00224024	0.03877915
SAR1A	1.41748394	0.00224378	0.03878219
C11orf96	1.81719673	0.00224677	0.03878219
SELENOF	1.71350085	0.00224603	0.03878219
MT1E	2.70326585	0.00225134	0.03883073
SOX15	-2.902963	0.00225726	0.0388824
GIMAP5	1.80369816	0.00225785	0.0388824
ROPN1B	-2.5492474	0.0022608	0.03890295
HOGA1	-2.1835825	0.00227261	0.0390008
OR4G1P	-5.5232782	0.0022721	0.0390008
SAMD3	2.0137249	0.00227075	0.0390008
CSRNP1	1.55280268	0.00227619	0.0390008
RPL23AP87	-2.7864147	0.00227729	0.0390008
PPM1B-DT	-3.0937814	0.00227882	0.0390008
CSDE1	1.36752361	0.00227648	0.0390008
SRP72P1	-4.356701	0.00229155	0.03910925
TSPAN13	1.53611278	0.00229329	0.03910925
GABRE	-1.4853772	0.00229399	0.03910925
KNOP1P4	-2.5481344	0.00229249	0.03910925
PTAFR	1.72831498	0.0022921	0.03910925
MMRN1	1.66772519	0.00230199	0.03914697
ADH1C	3.38292575	0.00230474	0.03914697

LINC02833	-4.4742747	0.00231744	0.03914697
SLC13A5	-2.7599145	0.00231725	0.03914697
XRCC6P1	-5.1019415	0.00231582	0.03914697
WDR72	-2.0476947	0.00231082	0.03914697
SLC7A7	1.65402215	0.00231101	0.03914697
NTN4	1.40704071	0.00231046	0.03914697
AKAP13	1.2040778	0.00231636	0.03914697
RRN3P4	-3.9435795	0.00230343	0.03914697
SULT1A4	-3.8731011	0.00231494	0.03914697
CXCL16	1.79340282	0.00230584	0.03914697
TENT5A	1.36517326	0.00232727	0.03924729
SERPINB9	1.59450067	0.0023287	0.03924729
ZNF286B	-1.7167929	0.00232807	0.03924729
KIF18B	-1.7981798	0.0023319	0.03927138
TVP23C-CDRT4	-2.4440399	0.00234342	0.03943533
TBC1D8-AS1	-2.148924	0.00235178	0.03954609
LINC01641	-3.8761692	0.00235485	0.03956755
FRG2LP	-4.3994636	0.00235955	0.03961637
LINC02128	-4.6797077	0.00236342	0.03965134
AP1S2	1.90472851	0.00237193	0.03976094
KCNK9	-2.8769873	0.00237355	0.03976094
IGLV3-10	3.2070047	0.00237765	0.0397996
FBLN5	1.4008123	0.00238196	0.03981314
TUBG1P	-3.8614929	0.00238206	0.03981314
CD14	1.98453551	0.00239508	0.04000062
TSBP1-AS1	-1.7995099	0.00241086	0.04023369
KRT17	-1.4839448	0.00241282	0.04023603
ST13P7	-3.3298602	0.00241604	0.04025942
FOXM1	-1.7077943	0.00242404	0.04036239
LINC01391	-3.3744652	0.00243186	0.04046217
CCDC140	-3.5557151	0.00243503	0.04048448
KRT8P12	-1.6515303	0.00243777	0.04049956
E2F7	-1.6908691	0.00244052	0.04051479
RARS1P1	-4.3777938	0.00244498	0.04052806
PDCD4	1.1615377	0.00244498	0.04052806
NAMPT	1.38938677	0.00244847	0.04055554
CFHR4	-5.5778174	0.00245143	0.04057418
FAM230H	-2.9242149	0.00245616	0.04062201
CALCRL	1.65432473	0.00246522	0.04068055
OR4Q2	-4.0471012	0.00246616	0.04068055
HOXA11	-3.3437164	0.00246705	0.04068055
BHLHE41	1.82800045	0.00246605	0.04068055

CCL3	2.15819722	0.00249369	0.04108918
CXCR3	2.21754724	0.0024959	0.041095
KRT8P24	-3.828813	0.00249812	0.04110105
RNF144B	1.44556729	0.00250418	0.04117015
RNASEH1P1	-5.1507068	0.00250893	0.04119807
FYB1	1.80281681	0.0025096	0.04119807
NANOGP1	-4.4265875	0.00251925	0.04129514
ATXN3L	-4.4279013	0.00251844	0.04129514
FKBP4P2	-4.2202598	0.00252624	0.04134846
DSPP	-2.95396	0.00252461	0.04134846
TPSAB1	1.776504	0.00253849	0.04151823
LPIN2	1.26086186	0.00254059	0.04152197
LINC02687	-4.3663553	0.00254283	0.04152796
ZFP36	1.37513717	0.0025543	0.04168446
OLFML2A	-1.3346919	0.00256359	0.0418052
NDUFA5	1.35838824	0.00256811	0.04184802
DDX3ILA1	-2.5033504	0.00257792	0.04197703
SPRN	-2.4980859	0.00258238	0.04201873
LINC00703	-3.3750072	0.00258793	0.04207819
SFT2D1	1.7974212	0.00259542	0.04216891
OTUD4P1	-2.8655605	0.00260706	0.04231364
INSYN1	-2.4361384	0.00260815	0.04231364
MYCL-AS1	-5.0625188	0.00262362	0.0425023
GNS	1.19817675	0.00262347	0.0425023
SNORA5A	2.75469482	0.00262921	0.04252594
ARID5B	1.1646564	0.00263085	0.04252594
EPHA7	-2.2972136	0.0026282	0.04252594
SEC24A	1.48353018	0.00263876	0.04262267
C3orf86	-4.2635062	0.00265761	0.04289585
PLXNB3	-1.8396364	0.00267527	0.04314938
PTPRH	-2.5712506	0.00268274	0.04323724
CCDC92B	-3.0540238	0.00268462	0.04323724
SH3BGRL3	1.35334696	0.00270405	0.04351856
DDX60L	1.47214003	0.00270635	0.04352377
KRT9	-3.540514	0.00271166	0.04357759
LUARIS	-3.5362616	0.00271868	0.04365862
ST8SIA3	-2.90015	0.00272282	0.04369352
SPATA31E2P	-6.5279942	0.00273925	0.04392532
EPHB6	-2.0522236	0.00274705	0.04401837
COLEC12	1.42854875	0.00275478	0.04411043
PPP1R3G	-2.355783	0.00276364	0.04418823
NPHP3-ACAD11	5.51241153	0.00276244	0.04418823

RBMXP3	-3.2983755	0.00278212	0.04438758
CDCA3	-2.1175722	0.0027789	0.04438758
KCNH1	-2.5812585	0.00278139	0.04438758
GAPT	2.29247862	0.00279837	0.04461468
WNK2	-1.5757623	0.00280196	0.04462449
OR10AC1	-3.6304527	0.00280302	0.04462449
NWD2	-3.1212144	0.00282404	0.04492675
CICP19	-3.8058815	0.00283829	0.04512103
PI4K2B	1.3752117	0.00284369	0.04517447
CAMK2N2	-4.4832047	0.00285494	0.04528808
PLSCR4	1.52364508	0.00285339	0.04528808
ESPN	-2.090462	0.00286212	0.04536957
RTP3	-5.6016825	0.00286451	0.04537498
KRT77	-3.1786249	0.00287166	0.04542141
SCTR	2.41384972	0.00287168	0.04542141
GBP3	1.32768489	0.0028736	0.04542141
HECA	1.31952883	0.00288337	0.04554327
TLR7	2.01191899	0.0028929	0.04566119
OPRK1	-2.8119561	0.00290021	0.04574397
LINC01902	-2.4309308	0.00291497	0.04590501
SNORA23	1.77711356	0.00291669	0.04590501
FEZF1-AS1	-2.10056	0.00291586	0.04590501
NEXN	1.55474597	0.00291872	0.04590501
OSTM1	1.60898831	0.00292412	0.04595724
IGLV3-19	1.98222049	0.00293137	0.04600588
SUCLG2	1.34181263	0.00292934	0.04600588
ATF4P1	-3.7622931	0.00293357	0.0460078
SLC41A2	1.27657087	0.00294658	0.04617904
CCL14	2.10628303	0.00297113	0.04636993
LINC02011	-5.0178921	0.00297264	0.04636993
ADAM11	-2.3073425	0.00297341	0.04636993
GREM1-AS1	-4.2835671	0.00297343	0.04636993
TASOR	1.29518153	0.00296897	0.04636993
COL6A6	2.0297719	0.002972	0.04636993
NOTCH2	1.24095417	0.00297145	0.04636993
MIR7515HG	-3.3618208	0.00298302	0.04648678
COTL1P1	-3.8002531	0.0030029	0.04648967
SLC18B1	2.24127226	0.00299711	0.04648967
LMAN1L	-3.1806942	0.0029929	0.04648967
ENOX1-AS1	-3.4239834	0.0029854	0.04648967
RPL34	1.54517668	0.00300421	0.04648967
DIRC3	-1.9551469	0.00300194	0.04648967

NRXN2	-2.2834261	0.00299661	0.04648967
RBFOX1	-3.1221423	0.00300391	0.04648967
FBXO41	-1.3413033	0.00299997	0.04648967
EEF1GP4	-5.2061564	0.00300103	0.04648967
GTSE1	-1.9353676	0.00301127	0.04656636
TYRO3	-1.6535809	0.00302398	0.04660006
APOLD1	1.36013802	0.00301575	0.04660006
SIX5	-1.569733	0.00301901	0.04660006
SCARNA5	1.43833631	0.00302184	0.04660006
CFLAR	1.28178919	0.00302309	0.04660006
SBF1P1	-3.0246559	0.00303459	0.04673099
GTPBP3	-1.5369234	0.00303955	0.04677477
TSPY3	-3.0493071	0.00306822	0.04692239
HMSD	-2.682176	0.0030624	0.04692239
CRMP1	-1.6829689	0.00305922	0.04692239
DPP6	-2.2813532	0.00306781	0.04692239
LINC00602	-5.4103023	0.00305926	0.04692239
CCNG1	1.48605245	0.00305165	0.04692239
PRKCH	1.42317277	0.00306468	0.04692239
TRIM49D1	-5.0457924	0.0030669	0.04692239
SCAND2P	-1.2150187	0.00306296	0.04692239
LINC01721	-5.4663074	0.00307819	0.04697204
IGBP1P4	-3.1467977	0.00307516	0.04697204
LTB4R2	-1.5684993	0.00307873	0.04697204
HINT1	1.32322225	0.00308208	0.04697204
GOLGA6B	-5.4757334	0.00308161	0.04697204
EGR4	-5.0000398	0.00308913	0.04704707
PRIMA1	-2.0822555	0.00309773	0.04709675
KRT18P66	-4.5349147	0.00310061	0.04709675
SLC7A13	-5.0249929	0.00310067	0.04709675
UBLCP1	1.64743794	0.00310091	0.04709675
PIK3CG	1.7555506	0.00310651	0.0471495
AFF3	1.45605491	0.00311062	0.04717953
TRPV6	-2.2207929	0.00311329	0.04718766
JMJD7-PLA2G4B	-1.5000472	0.00311725	0.04719915
NMRAL2P	-1.8261487	0.00311831	0.04719915
SPARC	1.45369136	0.00312446	0.04725982
ISL1-DT	-2.6199917	0.00313165	0.04729969
CCDC103	-2.4988124	0.00312939	0.04729969
POM121L2	-3.332281	0.00313497	0.04729969
WIPF1	1.49349432	0.00313778	0.04729969
FUCA1	1.81475235	0.00313701	0.04729969

OGFRL1	1.23973017	0.00314957	0.04742889
LINC02897	-2.9582616	0.00315064	0.04742889
CAPZA1	1.15082908	0.00315313	0.0474341
STOM	1.41311054	0.00317327	0.04770471
CLEC18B	-2.891728	0.00317669	0.04772374
MAFB	1.35269122	0.0031921	0.04792259
CNN3	1.35622664	0.00319613	0.04795062
ACTA2	1.40122926	0.00320107	0.04799218
GNPTAB	1.21430888	0.00320417	0.04800613
GRIN2A	-2.1547797	0.00320878	0.04804262
MAP3K8	1.3918551	0.00321709	0.04813452
MALL	1.36555812	0.00322848	0.04827231
FBF1	-1.349511	0.00323101	0.04827754
CMKLR1	1.75510334	0.00323407	0.04829066
RAB6A	1.20234623	0.00325752	0.04860796
PCDH19	-1.7023646	0.00326385	0.04866971
CAPZB	1.27476647	0.00326874	0.04870969
CYP3A7	-4.4055408	0.00327839	0.04882071
E2F6P3	-3.475707	0.00328643	0.04887464
MRGPRX3	-4.3996882	0.00328588	0.04887464
CRYBG1	1.15304086	0.00329217	0.04892712
PLAC8	1.51902132	0.00330386	0.04893658
KIAA0040	1.54155385	0.00330161	0.04893658
RAD23BP1	-3.5488633	0.00329758	0.04893658
TUBB8P11	-4.5940118	0.00330387	0.04893658
PNRC2	1.20182696	0.00329526	0.04893658
PPP1R3A	-3.0737864	0.00331222	0.04899466
ANP32D	-3.2254539	0.00331066	0.04899466
LINC02204	-2.7610406	0.00331896	0.04902892
CYP2B7P	1.57217358	0.00331862	0.04902892
NPHP3-AS1	-3.2198566	0.00333147	0.04918092
SEC22B	1.24660686	0.00333444	0.04919187
SH2D5	-3.6819541	0.00333975	0.04923739
SLC30A2	-3.5024716	0.00334616	0.04926627
FMO6P	-2.0117925	0.00334458	0.04926627
SLC9A2	-2.1968727	0.0033559	0.04935712
SDC3	1.21779742	0.00335679	0.04935712
RNU12	2.71184416	0.0033632	0.04941844
AREG	2.06517717	0.00338218	0.0495828
STAG1-DT	-3.2928274	0.003378	0.0495828
TUBAP14	-3.9865657	0.00338334	0.0495828
MCEMP1	2.76890634	0.0033789	0.0495828

SLPI	2.04577776	0.00339117	0.04963169
IFITM3	1.26466354	0.0033903	0.04963169
TINCR	-2.203321	0.00339365	0.0496352
CSNKA2IP	-4.545598	0.0033973	0.04965578
MUC5AC	-2.0881726	0.00340158	0.04968547
IGFBP7	1.4403821	0.00340787	0.04974461
LAD1	-1.874805	0.00341432	0.04980584
CKAP2P1	-4.1662731	0.00342944	0.04996062
AZGP1P1	-4.779567	0.00342775	0.04996062
SPCS3	1.50038016	0.00344916	0.05021472
FAM205A	-3.7651652	0.00347918	0.05058026
TMEM59	1.21360319	0.00347663	0.05058026
HNRNPA1P23	-2.9261583	0.00348112	0.05058026
RAET1L	-3.8200924	0.00348563	0.05061248
FXYD5	1.39982356	0.0034936	0.05069497
SNORA3B	4.44850792	0.00350034	0.05075952
TUBBP6	-3.8450287	0.00351578	0.05095003
G6PC2	-3.592339	0.00352743	0.05108547
NAMA	-3.0326124	0.00353769	0.05120055
RABEP2	-1.3124995	0.00354144	0.05122121
FUT8	1.49784992	0.00354456	0.0512329
NKX3-2	-4.0489447	0.00354724	0.05123821
TMEM100	2.16043122	0.00355022	0.05124777
S100A8	2.40532995	0.00355274	0.05125074
FLI1	1.81049041	0.00356767	0.05138433
ZDHHC20	1.40440354	0.00357129	0.05138433
GNG2	1.76911709	0.00356513	0.05138433
GNG5	1.30090181	0.00357073	0.05138433
CROCC2	-1.6403522	0.00357719	0.05143582
ZNF219	-1.3790134	0.00359119	0.05147784
LCN15	-4.4537641	0.00358966	0.05147784
FPR3	1.68732452	0.00358611	0.05147784
OR7D4	-3.6853447	0.0035855	0.05147784
MLLT11	-1.6079409	0.00359175	0.05147784
ACTB	1.26377482	0.00359791	0.05149943
HOXA10	-2.2532283	0.00359568	0.05149943
GCM2	-3.7109184	0.00361772	0.05174957
BTLA	1.90986623	0.00362683	0.05181289
NDUFS5	1.74263198	0.0036267	0.05181289
MAP3K1	1.34889295	0.00363186	0.05184627
PRAMEF25	-4.9001354	0.00363385	0.05184627
NEFMP1	-2.9185192	0.00364254	0.05193677

RSPO3	1.75030301	0.00364604	0.05195314
LYZ	1.88866055	0.00365796	0.05208945
FTOP1	-4.0809587	0.0036615	0.05209062
ADPGK-AS1	-2.2419959	0.00366275	0.05209062
C1QBPP1	-3.7982136	0.00367098	0.0521406
HNRNPA1P42	-4.924574	0.00367038	0.0521406
ZNF22	1.75152288	0.00367421	0.05215301
HLA-DQA2	2.32402223	0.00367841	0.05217921
LHX8	-3.8747919	0.00368248	0.05220353
LINC01913	-3.3928297	0.00369007	0.05227219
GUSBP14	-9.7065459	0.00369262	0.05227219
TSSC2	-1.8815896	0.00369446	0.05227219
CIAO2AP2	-3.6400028	0.00369678	0.05227219
ERAP2	1.49068492	0.00370684	0.05228079
OR5B3	-5.101104	0.00370532	0.05228079
CCDC13-AS1	-4.542781	0.00370235	0.05228079
ALDH1L1-AS2	-3.6668991	0.00370555	0.05228079
SNRPB2	1.4242013	0.00371281	0.05229844
TTC9B	-4.2559713	0.00371258	0.05229844
FLT3	2.48505882	0.00371866	0.05231424
TMBIM4	1.40258124	0.00371825	0.05231424
TLL2	-2.4150054	0.00372788	0.05234412
DTX2P1	-1.8353385	0.00372572	0.05234412
KLRC1	2.99656373	0.00372455	0.05234412
LCORL	1.39047323	0.00374145	0.05242895
PPFIA3	-1.8080193	0.00373861	0.05242895
SPATA41	-2.0425571	0.0037434	0.05242895
PELI1	1.1747992	0.00374298	0.05242895
MIR1302-9HG	-2.4732954	0.00374668	0.05244166
GJA3	-3.1461214	0.00375813	0.05256225
PPM1F-AS1	-1.8357717	0.00376005	0.05256225
ARSJ	-1.4089085	0.00376762	0.05263484
TSIX	-2.1858439	0.00377246	0.0526693
TC2N	1.3553515	0.0037771	0.05270084
TIGIT	1.94157321	0.00378094	0.05272114
RHOA	1.2292588	0.00378428	0.05273448
LY86	2.36168717	0.00379676	0.0528454
TDGF1	-3.1968909	0.00379702	0.0528454
LINC01516	-4.6317987	0.00380374	0.05290022
SLC2A3	1.49205446	0.00380574	0.05290022
GLCCI1	1.66445879	0.00380861	0.05290696
SELENBP1	1.54434066	0.0038147	0.05294583

CASP8	1.35063298	0.0038162	0.05294583
KHDC1-AS1	-1.4249645	0.00382042	0.05297122
RPL23	1.56400818	0.00382792	0.05304202
GLI4	-1.3595335	0.00383273	0.05304589
HMGB4	-3.1883398	0.003833	0.05304589
PJA2	1.37525888	0.00384466	0.05316685
ELFN1	-2.0631487	0.00384654	0.05316685
ERP27	2.55485831	0.00385041	0.05318713
TMEM132A	-1.6380298	0.00387602	0.05350743
AGGF1P2	-1.762781	0.00388636	0.05358336
P2RY13	1.75713806	0.00388575	0.05358336
MAPK4	-1.9967811	0.0038981	0.05360381
KIAA0408	1.83595544	0.00390027	0.05360381
MAGEA9B	-4.0716644	0.00389713	0.05360381
TXK	2.03750051	0.00389408	0.05360381
ATL3	1.43986294	0.0039048	0.05360381
ZNF469	-1.4892042	0.00390387	0.05360381
C4orf54	-2.3297951	0.00389828	0.05360381
NLRP3	1.5762734	0.00391707	0.05373894
ELF3-AS1	-1.6606795	0.00393115	0.05389866
NUTM2D	-1.6687339	0.00393955	0.05398032
MAPK6-DT	-3.190668	0.00394855	0.0540368
FGD4	1.18147727	0.00394797	0.0540368
GNG11	1.66022746	0.00396243	0.05409286
KCNA1	-2.7349457	0.00396121	0.05409286
KRT37	-4.4084698	0.00395886	0.05409286
NR1I3	-4.771346	0.00395714	0.05409286
KCNE1	1.49710431	0.00396652	0.05411537
CCDC186	1.27036531	0.00398161	0.05428777
SH3KBP1	1.313158	0.00398838	0.05432187
MUC12	-2.0558233	0.00398902	0.05432187
GAS1	1.41933824	0.00399937	0.05437727
EPHA5	-2.7064851	0.00400046	0.05437727
SLC13A4	-1.9646459	0.00399827	0.05437727
CSGALNACT2	1.329124	0.00400484	0.05440333
MBNL1	1.3787853	0.0040108	0.05445089
PLCXD3	1.66086407	0.00401744	0.05445305
TOMM40P3	-4.4180315	0.00401834	0.05445305
RPL5P6	-3.483928	0.00401694	0.05445305
PMS2P7	-1.9033951	0.00403274	0.05461475
SUCLA2P2	-4.5345669	0.00403575	0.05462214
NLRC4	2.0400207	0.00403947	0.05463896

SNX18P7	-3.2718285	0.00404226	0.05464334
VHLL	-4.8530393	0.0040474	0.05467945
LINC00458	-4.5932554	0.00405484	0.05471321
LHFPL2	1.36358578	0.00405436	0.05471321
ACAA2	1.4690215	0.00407151	0.05473777
FAM204CP	-3.3900352	0.00406223	0.05473777
IGHV5-51	2.20969397	0.00406598	0.05473777
PTPRCAP	1.91962835	0.00406757	0.05473777
DENND2C	-1.4075871	0.00407114	0.05473777
KRT18P37	-3.4734883	0.00406816	0.05473777
INKA2-AS1	-2.741614	0.00407452	0.05474506
PPTC7	1.45677988	0.00407956	0.05477942
IGHG1	1.6446183	0.00408778	0.05484639
CYFIP2	1.4460983	0.0040895	0.05484639
GPC6	1.50708957	0.00409789	0.05485837
THEMIS3P	-4.4749208	0.00409763	0.05485837
SLC25A1P1	-4.9242254	0.00410775	0.05485837
IRF8	1.6875675	0.0041048	0.05485837
NAAA	1.4592055	0.00410678	0.05485837
ABCG4	-2.7773998	0.00410539	0.05485837
VIM	1.40276818	0.00410024	0.05485837
SETP22	-3.7150634	0.00413402	0.05517599
LMLN2	-3.0043903	0.00413827	0.05519932
FNDC9	-5.4539965	0.00414175	0.05521252
LBX1	-2.662987	0.00414655	0.0552432
ALOX12B	-4.2447644	0.00416254	0.05542284
XIST	-2.2146382	0.00416571	0.05543171
MEI1	2.30213375	0.00417466	0.05547167
CSPG4P11	-1.7047043	0.00417874	0.05547167
WNT8A	-4.8380085	0.00417502	0.05547167
POLQ	-1.2833313	0.00417632	0.05547167
ARHGAP18	1.40320066	0.00418615	0.05553682
CELSR2	-1.3243947	0.0041926	0.05555478
RGL1	1.36603443	0.00419504	0.05555478
MAPRE3-AS1	-3.0526422	0.00419338	0.05555478
ARID3A	-1.2853421	0.00420904	0.05570688
HIPK1	1.23808863	0.00421653	0.05574548
MOCS2	1.32948586	0.00421774	0.05574548
SLC20A1	1.10598407	0.00421952	0.05574548
KRTAP19-5	-4.8345799	0.00422538	0.05578967
OCSTAMP	-4.7648704	0.00423785	0.05583668
TRAV17	3.83282872	0.0042386	0.05583668

TG	-2.3183711	0.00423271	0.05583668
SLC1A3	1.31929668	0.00423904	0.05583668
GTSE1-DT	-2.3415473	0.00424625	0.05583899
FTH1P10	1.65045006	0.00424953	0.05583899
NEK6	1.22877169	0.00425183	0.05583899
KIAA0319	-1.6457293	0.00424331	0.05583899
CREB3L3	-2.6369579	0.00425103	0.05583899
LINC02412	-5.0753647	0.00425828	0.05589053
LHFPL4	-2.5893145	0.00426603	0.05595906
PLTP	1.38605144	0.00427509	0.05597833
DLK1	-3.2113604	0.00427434	0.05597833
POLR2K	2.00213806	0.00427335	0.05597833
DNAH17-AS1	-3.1354882	0.00428365	0.05605723
TBC1D3I	-3.5536047	0.00428748	0.05607425
RPL3L	-4.0376788	0.00429021	0.05607684
RNF152	-1.2203541	0.00430573	0.05611396
TUBB8B	-3.1664315	0.00430241	0.05611396
ARHGAP39	-1.6830745	0.00429996	0.05611396
PXK	1.82953983	0.00429663	0.05611396
PICART1	-2.5909961	0.00430457	0.05611396
TPH2	-3.8381702	0.00432495	0.05626505
SH3GL1P3	-4.5006102	0.00432064	0.05626505
KCNN1	-2.7517607	0.00432289	0.05626505
SF3A3P1	-3.0573922	0.00432787	0.05627
MYO5BP1	-4.1878717	0.00433996	0.05636161
NRAS	1.19281983	0.00434001	0.05636161
ZC3H12D	1.6686798	0.00434833	0.05643644
DACT2	-2.2164927	0.00436513	0.05654807
SLF1	1.45883313	0.00436013	0.05654807
LETM1P2	-2.809109	0.00436715	0.05654807
MCL1	1.1137711	0.00436435	0.05654807
PPP2R3B	-1.3987555	0.00437068	0.05656066
CORO1A	1.63245302	0.00437941	0.05664057
TMEM33	1.19083631	0.00439026	0.05664837
SERPINB13	-2.5145522	0.00438605	0.05664837
PTPN1	1.23511718	0.00438901	0.05664837
DLX1	-2.8756166	0.00438884	0.05664837
NDUFA5P9	-4.393561	0.00441076	0.05681358
PNMA8B	-1.5490859	0.00440908	0.05681358
MYT1L	-2.2936767	0.00440643	0.05681358
IGLV2-11	1.85394404	0.00441481	0.05683265
H4C15	-1.5637781	0.00441754	0.05683476

TRIM40	-3.5158371	0.00442468	0.05689354
LINC02895	-2.7934509	0.00445891	0.05707085
SLIT1	-2.28305	0.00445062	0.05707085
CCDC136	-1.5197478	0.0044591	0.05707085
PIGK	1.43165735	0.00445512	0.05707085
LINC01918	-4.7232652	0.0044546	0.05707085
SELPLG	1.48990284	0.00445545	0.05707085
LINC00184	-2.7972951	0.00444854	0.05707085
GPBAR1	-2.8574297	0.00445371	0.05707085
EPB41L5	1.40012367	0.00446899	0.05716437
IGLV4-69	2.39585554	0.00447451	0.05720191
ST8SIA6-AS1	-3.9982223	0.00448011	0.05722774
DSG1	-3.8340218	0.00448946	0.05722774
RNF175	-2.4638437	0.00448823	0.05722774
RPL19P14	-3.099329	0.00448476	0.05722774
LINC02026	-2.1551679	0.00448465	0.05722774
PPP3CB	1.43110853	0.00449962	0.05732412
SLC7A11	-1.6480885	0.00451101	0.05736975
KRT18P20	-4.0017104	0.00451357	0.05736975
CBLB	1.23417095	0.00451048	0.05736975
FOXN4	-4.1286935	0.00450803	0.05736975
KANK1P1	-3.9807853	0.00452214	0.05741282
PPP2R3C	1.68116003	0.00452209	0.05741282
TLR8	1.81251386	0.00454417	0.05751383
UBXN2B	1.76856921	0.0045457	0.05751383
ABCD2	1.99370868	0.00453623	0.05751383
CFAP53P1	-2.7940837	0.00454539	0.05751383
IGKV1-16	1.96878865	0.00454112	0.05751383
TEX38	-3.819546	0.00453748	0.05751383
RANBP9	1.45188874	0.00455376	0.057583
OR5AU1	-2.2640676	0.00455722	0.05759377
ZNF123P	-4.0641308	0.00456755	0.05764312
HNRNPA1P39	-4.5521939	0.00456894	0.05764312
CYP27A1	1.73284291	0.00456394	0.05764312
MSN	1.23680321	0.00457231	0.05765276
RPL5P26	-3.6946496	0.00457747	0.05768497
TNFAIP8	1.30284666	0.00458501	0.0577143
CP	1.46842435	0.00458401	0.0577143
PROM2	-1.598072	0.0046009	0.05788136
NHLH2	-2.1978136	0.00462095	0.05806764
TRAF3IP3	1.77739938	0.0046207	0.05806764
KDM4E	-3.7788568	0.00462511	0.05808691

EHHADH-AS1	-5.0271896	0.00464097	0.05825297
SEMA6C	-1.552342	0.00465771	0.05842991
BSNDP2	-5.0065239	0.00466205	0.05845124
WIPF3	-1.5128352	0.00466699	0.05846096
LNCOC1	-2.2557984	0.00466811	0.05846096
FAM99A	-3.9409309	0.00467213	0.05846322
KIF3AP1	-2.6866016	0.00467447	0.05846322
OR1I1	-2.8042506	0.00467885	0.05846322
NABP1	1.26571115	0.00467881	0.05846322
DND1P1	-3.0943251	0.00470783	0.05879205
LINC01554	-2.4900743	0.00471171	0.05880734
LINC01293	-3.4905734	0.00471473	0.05881181
NPAS4	-3.0306185	0.0047191	0.05882039
GABARAPL2	1.27211276	0.00472073	0.05882039
FOXN3P1	-4.1236851	0.00473734	0.05889915
NDFIP1	1.43453338	0.0047377	0.05889915
CELF2-AS2	-3.8884449	0.00473191	0.05889915
PLIN4	-1.8340401	0.00473426	0.05889915
GPR174	1.94746632	0.0047408	0.05889957
LYSMD1	-1.505281	0.00474305	0.05889957
ACSL4	1.09459457	0.00474681	0.05890921
LEPR	1.77655851	0.00474915	0.05890921
RNF183	-2.4026644	0.00475368	0.05893233
B3GAT2	-3.1227672	0.00475741	0.05894552
PSME1	1.19931797	0.00476414	0.05899194
MARK2P10	-4.6748061	0.00476714	0.05899194
LILRB2	1.53606527	0.00476915	0.05899194
RNU5B-1	2.85288751	0.00477714	0.0590577
KRT16P2	-2.1503323	0.00479069	0.05912613
RNASE7	-4.0339664	0.00478741	0.05912613
ALDH3B1	1.31774005	0.00479027	0.05912613
MIRLET7BHG	-1.2077679	0.00481284	0.05930834
PPP4R4	-1.950472	0.00481349	0.05930834
HERC5	1.68006522	0.00481302	0.05930834
PPP6C	1.39869413	0.00482335	0.05933064
GNPDA2	1.51004254	0.00482168	0.05933064
OPRD1	-2.3027829	0.00481925	0.05933064
ABI3BP	1.95601451	0.00483196	0.05937293
RPL23AP20	-3.5566232	0.00483215	0.05937293
SPATA31C1	-2.5516352	0.00485199	0.05953433
EPPK1	-1.7082971	0.00485294	0.05953433
ENPP7	-2.8452921	0.00485336	0.05953433

CCL21	1.72135353	0.00485735	0.05955028
PAUPAR	-3.0062557	0.00486697	0.05963517
BTG1	1.38246901	0.00487271	0.05963954
NMNAT3	-1.3964984	0.00487071	0.05963954
C8orf74	-3.910796	0.00488776	0.05975757
CSRNP3	-1.4124184	0.00488508	0.05975757
CPB1	-2.8818026	0.00489439	0.05980564
DAZAP2	1.24852578	0.00491322	0.05996947
YBX2P2	-2.2638126	0.00491303	0.05996947
P2RY10	2.15414448	0.00493049	0.06008072
TBX1	-1.7448362	0.0049317	0.06008072
TMED7	1.29300149	0.00493319	0.06008072
HRAT92	-2.1495399	0.00493166	0.06008072
SERPINA13P	-4.7664607	0.00493678	0.06009137
AKAP3	-2.5854276	0.00495259	0.06012757
GPR149	-2.221628	0.00494272	0.06012757
LRRC25	2.09542575	0.00494642	0.06012757
GCGR	-3.3436642	0.00495133	0.06012757
SBNO1-AS1	-2.285767	0.00495334	0.06012757
EAF2	2.48122317	0.00495809	0.06015219
GCAWKR	-2.0535389	0.0049627	0.06017509
PRRG2	-2.4946417	0.00496909	0.06020912
TEX45	-3.7693999	0.00497095	0.06020912
CALHM1	-3.3650496	0.00499276	0.06044024
MGAT4FP	-3.4433014	0.00500226	0.0605221
TCF21	1.8570906	0.00501437	0.06053627
TMEM30A	1.21524457	0.00501188	0.06053627
SP100	1.34091908	0.00500942	0.06053627
TP53TG3D	-3.7114491	0.00500868	0.06053627
PRLHR	-3.1175034	0.00502858	0.06067478
SI	-5.394557	0.00506273	0.06094052
LINC02028	-2.3264285	0.00506438	0.06094052
ACSM2B	-2.2101197	0.00506222	0.06094052
ECE2	-4.9812737	0.00506344	0.06094052
RNU1-1	-7.5961013	0.00506387	0.06094052
CALML3-AS1	-2.2349158	0.00506928	0.06096046
FEM1C	1.20180099	0.00507154	0.06096046
APC2	-2.3764884	0.0050799	0.06099459
ROPN1	-3.2631946	0.00507956	0.06099459
P3H4	-1.3845988	0.00509353	0.06112512
ZMAT4	-2.6519024	0.00510236	0.06118206
BST2	1.24436919	0.0051038	0.06118206

MARCHF10-DT	-4.1984181	0.00512583	0.06141285
SASH3	1.76643392	0.00512878	0.06141486
IGF2BP1	-2.1855011	0.00513452	0.06145039
SERPINE1	1.4226165	0.00515551	0.06166829
LY6G6D	-4.6922975	0.00516628	0.06176371
HS3ST2	2.32889469	0.00517133	0.06179065
KRT18P36	-3.9791567	0.00518086	0.06183779
VIPR1	1.30298325	0.00517953	0.06183779
PABPN1P1	-4.9073884	0.00518987	0.06191197
B3GNT4	-2.5527474	0.00519522	0.0619424
NDUFB1	1.47163309	0.00519861	0.06194942
KCNG1	-2.1503325	0.00520417	0.06198231
SP140	1.54300696	0.00521276	0.06205123
FNDC5	-2.8415354	0.00521605	0.06205696
SLC30A10	-3.2837593	0.00523425	0.0622401
PTOV1-AS1	-1.5008475	0.0052505	0.0623662
PCDHB1	-2.195603	0.00524914	0.0623662
SCN8A	-1.6406843	0.0052606	0.06245265
RBM19	-1.1909458	0.00526379	0.06245709
CRYBG2	-2.2743176	0.00528345	0.06265678
LINC01305	-2.8643975	0.00529167	0.06272055
LINC00958	-2.2569434	0.0052992	0.06274267
GJC1	-1.2887189	0.00529769	0.06274267
FIBIN	1.76132671	0.00530341	0.06275896
CFC1B	-4.527258	0.00531202	0.06282717
TMPRSS11F	-2.7950434	0.00533837	0.06310513
XRCC2	-1.4765655	0.0053494	0.06320174
NDE1P2	-3.3126735	0.00536387	0.06330509
PSMB2	1.43618672	0.00536257	0.06330509
LINC00560	-3.2749634	0.00538526	0.06335481
SHROOM3	1.29945248	0.00538223	0.06335481
NOX5	-2.3013201	0.0053808	0.06335481
SALRNA3	-2.9774771	0.00538475	0.06335481
ASPN	1.75021796	0.00537452	0.06335481
DIAPH1	1.14171914	0.00538437	0.06335481
DNAJB3	-4.2255093	0.00539167	0.06339656
SSU72P3	-4.1718993	0.00539622	0.0634163
TGFBR3L	-5.3737704	0.0053998	0.06342476
LOXL1-AS1	-1.6652216	0.00540445	0.06344568
GABPA	1.41781964	0.00541181	0.06347964
SEPTIN7P7	-3.877324	0.00541556	0.06347964
ACTL8	-4.2019173	0.00541595	0.06347964

RPL30	1.35856618	0.00542898	0.06356499
SPN	1.62431659	0.00542705	0.06356499
HMGB1P45	-4.0989387	0.00544666	0.06373827
PRMT5-AS1	-2.5122653	0.00546434	0.06374854
AOC3	1.53321277	0.00545771	0.06374854
SERPINA10	-3.5537369	0.0054677	0.06374854
LSP1	1.61128104	0.00546639	0.06374854
TRPM3	-1.971534	0.00545085	0.06374854
CLIC5	1.49791928	0.00546391	0.06374854
MRE11P1	-3.7153081	0.00545417	0.06374854
XKR5	-3.1431513	0.0054759	0.06375232
AGGF1P1	-2.0327218	0.00547667	0.06375232
BTN3A2	1.31613142	0.00547225	0.06375232
DLX5	-1.6831899	0.00549143	0.06375644
ESYT3	1.35782059	0.00548856	0.06375644
EIF3E	1.34041624	0.00548284	0.06375644
CALHM3	-4.3273499	0.00548693	0.06375644
SUSD4	-1.4953542	0.00548677	0.06375644
ATP6V1E2	-1.4928144	0.00549563	0.06377179
GATA3	1.87771594	0.00550404	0.06383591
CDX2	-3.5378018	0.00551271	0.06390301
SLC38A3	-3.9245577	0.00554337	0.06422478
LAMB3	-1.6318672	0.00554939	0.06426081
ALLC	-4.0986177	0.00557021	0.06446824
LINC02902	-3.3411287	0.00557511	0.06449122
DMRT1	-3.6908002	0.00558125	0.06452848
C16orf82	-3.5826942	0.00558604	0.06453121
OR2L5	-4.5397144	0.00558732	0.06453121
RPL4P2	-4.12838	0.00559616	0.06459959
ABCA9-AS1	-4.5696507	0.00560443	0.06463532
RBMX2P5	-3.3534723	0.0056051	0.06463532
EXOC5	1.31563503	0.00563285	0.06475285
FERMT1	-1.6759454	0.00562406	0.06475285
LINC01553	-2.6746538	0.00562687	0.06475285
SALL1P1	-3.6714964	0.00563064	0.06475285
VCAN	1.19721412	0.00562237	0.06475285
PAX3	-3.1489993	0.00562987	0.06475285
DDX43P2	-3.2927686	0.00564057	0.0647633
ST13P15	-1.8155626	0.00564253	0.0647633
NEUROD6	-3.843808	0.00563671	0.0647633
ATP6V1B1	-2.3018436	0.00565184	0.06476933
OR6B1	-2.6741275	0.00564727	0.06476933

PITX2	-2.6730175	0.00565006	0.06476933
LINC02394	-5.0812227	0.00566953	0.06493842
HTR2C	-3.4452342	0.00568355	0.06504865
CSPG4P10	-1.4951868	0.00568797	0.06504865
NEK7	1.76091204	0.0056878	0.06504865
FAM47C	-3.3723495	0.00570576	0.06512894
RPL13P6	-4.9533016	0.00570623	0.06512894
FBN1	1.09698012	0.00570677	0.06512894
EPS8L2	-1.287721	0.00570056	0.06512894
LINC00365	-2.5967091	0.00572052	0.06521864
PRKAR1A	1.19522817	0.00571817	0.06521864
NEK4P2	-4.3264947	0.00573367	0.06533312
SAPCD2	-1.7399493	0.00573647	0.06533312
LINC00710	-3.7392789	0.00573988	0.06533835
SLC12A5	-2.5701053	0.00575711	0.06545351
RANP6	-4.2128395	0.00576473	0.06545351
TP1P2	-2.4070646	0.00576496	0.06545351
MZB1	1.69156842	0.00576774	0.06545351
LOX	1.29675435	0.00576317	0.06545351
IGKV1-33	4.37782907	0.00575601	0.06545351
VGLL3	1.3879272	0.00577409	0.065492
SNAP25-AS1	-3.0683009	0.00577991	0.06552444
RCSD1	1.46973544	0.00580332	0.06575614
LPP-AS2	-1.3708594	0.00580768	0.06577187
DNAJC27-AS1	-2.2600894	0.00581716	0.06583656
FCGR2C	1.64058643	0.00581935	0.06583656
MALT1	1.17983404	0.00583499	0.06584523
NCOA7	1.29538853	0.00583325	0.06584523
GSN-AS1	-1.9113554	0.00582901	0.06584523
OGDHL	-2.7588022	0.00583372	0.06584523
HOXB3	-1.2631324	0.00583424	0.06584523
COPS4	1.63722755	0.00583903	0.06585725
LHCGR	-2.3680826	0.00585373	0.06598938
RALBP1P1	-3.1384619	0.00585731	0.06599609
TM4SF4	-4.5182313	0.0058751	0.06616291
UBE2L6	1.35316249	0.00588424	0.06621339
COX17	1.54407472	0.00588557	0.06621339
SERPINB6	1.18489284	0.00589705	0.06630883
AKR1B1P1	-4.2709582	0.00590044	0.06631332
MZF1-AS1	-1.5764788	0.00591626	0.06645102
SUMO1	1.49140697	0.0059187	0.06645102
S1PR5	-1.6960341	0.00594427	0.06670422

RPS3AP25	-3.8401472	0.00596657	0.06692053
ARPC1B	1.33664799	0.00598208	0.06706047
NFKB1	1.12767169	0.00599157	0.06707853
CACNA1A	-2.0858926	0.00598792	0.06707853
DOCK10	1.4244421	0.00599278	0.06707853
GLRX	1.49083746	0.00599927	0.06710035
SBSN	-2.896505	0.0060008	0.06710035
CDY2A	-3.8044627	0.00602811	0.06716823
SLCO3A1	-1.3058408	0.00602623	0.06716823
CRY1	1.36924798	0.00602	0.06716823
MAP3K10	-1.406233	0.00601262	0.06716823
RPS3AP50	-4.0862784	0.00601824	0.06716823
ANKRD13C	1.27856804	0.00602316	0.06716823
CASP4LP	1.59839168	0.00602219	0.06716823
KRT42P	-2.3573843	0.00603234	0.06718151
TRIM16	-1.4249701	0.00603748	0.06720498
IGBP1P2	-2.799053	0.00604402	0.06723243
PRKCB	1.64380357	0.00604603	0.06723243
ZAN	-2.4848832	0.00607815	0.06755564
HSP90AB7P	-3.6764669	0.00608638	0.0676104
RPL36AL	1.27654863	0.00609529	0.0676104
PGLYRP2	-3.0739567	0.00609397	0.0676104
PITRM1-AS1	-2.5055154	0.00609237	0.0676104
ELL2	1.19324956	0.0061166	0.06781279
CABP5	-3.9790472	0.00613284	0.0679587
OR2T1	-3.7424742	0.00613642	0.06796433
CHRN4	-2.9036078	0.0061446	0.06798694
SYT13	-2.7024576	0.00614428	0.06798694
AGTR2	4.00932823	0.00615811	0.06810237
RPL29P30	-3.1309939	0.00618997	0.06838631
AHCYL2	1.1947602	0.00618917	0.06838631
TMEM170B	1.30427595	0.00620019	0.06846506
GPR33	-4.3076324	0.00620489	0.06848278
CSF2RB	1.43678314	0.00620861	0.06848971
PRSS51	-3.0173123	0.00621705	0.06850123
GRAMD4P7	-5.1991584	0.00622823	0.06850123
CKMT1B	-2.1238973	0.00622114	0.06850123
ARF6	1.09483118	0.00621584	0.06850123
RECQL	1.365361	0.00622483	0.06850123
FCGR2B	1.4285143	0.00622524	0.06850123
KRT18P13	-3.6225525	0.00623155	0.06850368
SCRT2	-3.0438534	0.00624138	0.06857089

RPS12P26	-2.2696894	0.00624386	0.06857089
LY75	1.48821525	0.00625372	0.06864517
PIP5K1P1	-4.2777962	0.00625828	0.06866116
LINC01250	-4.2086282	0.00626357	0.06868516
MKI67P1	-3.9722142	0.00627035	0.06872534
POU3F2	-3.0281705	0.00628936	0.06885519
TUBB3P1	-3.0545245	0.00628587	0.06885519
IFI6	1.43354524	0.00629153	0.06885519
TSPAN5-DT	-1.722691	0.00630301	0.06887872
OXGR1	-2.5530203	0.00630152	0.06887872
RBP4	4.711676	0.00629885	0.06887872
MESTIT1	-2.8325441	0.00631356	0.06895996
OR2A5	-2.4562878	0.00631766	0.06897064
LINC01255	-4.8551578	0.00632581	0.06901017
POTEH-AS1	-3.1700363	0.00632752	0.06901017
DDX6P2	-5.163193	0.0063351	0.06902117
MIR155HG	2.75180864	0.00634162	0.06902117
MAGIX	-1.6550256	0.00633283	0.06902117
MIR122HG	-2.9806464	0.00634412	0.06902117
SLC35G5	-3.4332658	0.00633922	0.06902117
MKRN9P	-2.9422516	0.00635451	0.06910022
UPRT	1.8656142	0.0063806	0.06931581
IFITM1	1.31250189	0.00638032	0.06931581
KRT17P2	-4.2547988	0.00639582	0.06944708
DDX43P1	-2.8972717	0.00639987	0.06945695
GPR1-AS	-2.675083	0.00641922	0.06963284
DDI1	-3.3876348	0.00642938	0.06970889
LINC02334	-2.6656655	0.00645253	0.06972012
PNCK	-2.2836489	0.0064477	0.06972012
GLIPR2	1.38491815	0.0064431	0.06972012
DLX6	-1.9370637	0.00644649	0.06972012
LINC00927	-3.7622246	0.00645146	0.06972012
RAB15	-1.2956337	0.00643981	0.06972012
PTCHD3	-4.0755741	0.00645563	0.06972012
VWCE	-2.0019389	0.00643512	0.06972012
EIF4A1	1.504642	0.00646113	0.06974557
OSBPL9	1.19042731	0.00647536	0.06986503
FAM174C	-1.604498	0.00648322	0.06991577
ARMC1	1.33973841	0.00649189	0.06997517
AIM2	1.57119094	0.00649514	0.06997612
IGLV8-61	2.76170116	0.00651421	0.07001116
CACNA1G	-1.8052367	0.00650806	0.07001116

CELP	-3.2279623	0.00651307	0.07001116
GDI2P1	-3.8994621	0.00650734	0.07001116
TMEM167B-DT	-2.0368674	0.00651244	0.07001116
PPP1R26-AS1	-1.8771735	0.00654253	0.07021325
TMEM14EP	3.1406378	0.0065376	0.07021325
CHAF1A	-1.3306276	0.00653966	0.07021325
C5AR1	1.56103055	0.00655378	0.07026585
CCPG1	1.07831826	0.0065515	0.07026585
MTND4P26	-3.8358002	0.00657262	0.07039957
HNRNPA1P6	-3.3315997	0.00657021	0.07039957
ANKRD20A4P	-3.0287618	0.00659044	0.07042983
TNFRSF9	1.72627399	0.00657995	0.07042983
ADGRL4	1.79390809	0.00659136	0.07042983
SKP1	1.19798396	0.00659133	0.07042983
LYSMD3	1.23841374	0.0065852	0.07042983
UBL3	1.30732456	0.0066107	0.07056831
PSMA5	1.23792184	0.00660981	0.07056831
CARD16	1.586304	0.00661501	0.07058034
SGTB	1.39383057	0.00663708	0.07078164
SH3BP5	1.27332878	0.00664356	0.07081659
PNMA6E	-3.1621977	0.00665494	0.07090377
KRT8P47	-3.5343112	0.00665843	0.07090689
ZNF831	1.51512653	0.00666889	0.07098408
PRSS40A	-3.0031157	0.00667839	0.07105097
KREMEN2	-2.9686145	0.00669304	0.0711385
TEX19	-3.3934076	0.0066923	0.0711385
PPP1R26P2	-2.8990432	0.00670225	0.07118587
HMGB1P33	-3.4462287	0.00670393	0.07118587
SCN9A	-1.3000045	0.0067434	0.07157063
LINC00402	2.27769614	0.00675583	0.07166816
NCF1	1.58941266	0.00676293	0.07169491
RAB40B	-1.3253026	0.00676483	0.07169491
CHGA	-2.3696978	0.00677838	0.07179108
WDR64	-2.1617462	0.00678039	0.07179108
IFNA17	-4.4379092	0.00680512	0.07201845
MAGEA11	-3.1491877	0.00682948	0.07206072
BMS1P8	-3.9393351	0.00682268	0.07206072
MPC1	1.64453588	0.00683064	0.07206072
SLC28A2	-2.8575946	0.00682149	0.07206072
NPY4R	-4.5792748	0.00682474	0.07206072
MXRA7P1	-2.0195606	0.00682029	0.07206072
LINC01341	-1.5798664	0.00683191	0.07206072

NAP1L1	1.45103605	0.00684606	0.07216066
GRIK5	-1.7478568	0.00684791	0.07216066
HOXC-AS3	-3.2692825	0.0068608	0.0722277
WNT10A	-1.8609182	0.00685854	0.0722277
SPEM3	-2.9790851	0.0068683	0.07227225
IFIT5	1.3602225	0.0068856	0.07241988
HS3ST4	-3.4422259	0.00689523	0.07244453
ANAPC15P2	-5.1886949	0.00689166	0.07244453
CELSR3	-1.5731801	0.00689886	0.07244453
KRBOX1-AS1	-3.9287828	0.00690104	0.07244453
MS4A2	1.67684554	0.00692034	0.0725783
SNORD10	1.44484428	0.0069194	0.0725783
SIX3	-3.0598322	0.00692713	0.07261511
NDUFB4P11	-2.8959798	0.0069318	0.0726296
LINC02709	-2.6513367	0.00694745	0.07272476
HK3	1.77271064	0.00694612	0.07272476
IAPP	-3.766562	0.00695278	0.07274611
COL6A4P1	-2.4751751	0.00696729	0.07282906
COL4A6	-1.6072449	0.00696594	0.07282906
ATG9B	-1.6449708	0.00698472	0.07297679
KCNQ1OT1	-1.1083029	0.00699898	0.07309128
ARHGEF39	-1.840778	0.00700523	0.07312207
DNAJA1P1	-3.0443976	0.00704045	0.07334238
CTAGE12P	-3.1693524	0.00703267	0.07334238
VEGFA	-1.4463353	0.00704291	0.07334238
GJA5	1.36424267	0.00703363	0.07334238
HSPB9	-2.9476085	0.00704055	0.07334238
SNX18P8	-3.4248778	0.00704885	0.07335093
LHFPL3-AS2	1.81850242	0.00705036	0.07335093
ASTN1	-2.3180617	0.00705457	0.07336025
TGM1	-2.1104453	0.00706467	0.07336187
TMPRSS11A	-3.0061916	0.00706054	0.07336187
SCGB3A1	1.79643679	0.00706219	0.07336187
PROX1-AS1	-2.3701664	0.00707232	0.07339548
MYO15A	-1.7112592	0.00707454	0.07339548
ITGAL	1.77904356	0.00707806	0.07339759
C16orf74	-1.8479094	0.00708759	0.07346195
ELF2P3	-4.1713615	0.00709446	0.07349879
PUS1	-1.2849717	0.00711232	0.07364932
HOMER2P2	-3.3837576	0.00712169	0.07371183
ACTG1P13	-4.5352475	0.00713333	0.07379778
BAGE2	-2.8850165	0.00715212	0.07388854

TMPRSS2	1.30752876	0.00714741	0.07388854
MGC15885	-3.5469372	0.00714911	0.07388854
OR4K13	-2.8651691	0.00716587	0.0739961
CCDC74B	-1.5874254	0.00717739	0.07408043
TRPM2	1.42481416	0.00719074	0.07418362
RBM17P3	-2.9197155	0.00719788	0.07419376
TIGD3	-2.8755685	0.00719843	0.07419376
FAM47B	-4.638288	0.00720967	0.07424053
SETP7	-4.0918405	0.00720794	0.07424053
RPS3AP34	-1.971971	0.00722054	0.07427372
BASP1	1.30095795	0.00722297	0.07427372
ZNF692	-1.2387422	0.00722187	0.07427372
RECQL4	-1.5560288	0.00724095	0.07442409
SLCO1A2	-2.058776	0.00724934	0.07447573
NELL1	-2.2128404	0.00726578	0.07455216
IGHV3-53	2.00299073	0.00726728	0.07455216
RAB5A	1.20947895	0.00726294	0.07455216
ATP8A1	1.37934127	0.00727363	0.07455216
SRRM5	-1.8066871	0.0072725	0.07455216
CD38	1.68408676	0.00729384	0.0746972
CYP4V2	1.22965415	0.00729453	0.0746972
PLN	1.66526135	0.00730766	0.07479699
KIF2A	1.12242022	0.00732229	0.07491212
HOXB-AS2	-4.1206121	0.00733588	0.0750165
CYYR1	1.74190269	0.00734898	0.0750288
SH3GLB1	1.28910498	0.00734658	0.0750288
TIGD5	-1.5739155	0.00735065	0.0750288
GTF2B	1.37393969	0.007346	0.0750288
LINC01108	-2.9724102	0.0074043	0.07533318
LINC01630	-2.493636	0.00740392	0.07533318
MAS1	-2.4686085	0.007399	0.07533318
SLC6A2	-3.5231439	0.00739907	0.07533318
IGKV3-20	3.9766807	0.00738581	0.07533318
ACTN2	-2.1082728	0.0073875	0.07533318
CD55	1.31224692	0.00739687	0.07533318
PTGS2	1.70366395	0.00742013	0.0754596
PGR-AS1	-4.3852393	0.00742949	0.07548536
FAM166A	-3.4889906	0.00742908	0.07548536
TMEM79	-1.692435	0.00743357	0.07549222
TCAM1P	-2.6806578	0.00746073	0.07572284
RPL22	1.24024175	0.00746313	0.07572284
BASP1-AS1	-2.3050768	0.00747541	0.07581275

OSBPL8	1.08190048	0.00749255	0.07595171
CST9	-3.8853705	0.0074964	0.07595598
TAF1L	-2.1530276	0.00750101	0.07596786
LMNTD2-AS1	-1.5368432	0.0075137	0.07606163
KLHL33	-1.8042738	0.0075296	0.07609519
PPFIA1P1	-3.8470462	0.0075283	0.07609519
HMGB3P6	-3.0935357	0.00753287	0.07609519
LPCAT2BP	-3.9484679	0.00752365	0.07609519
PDE11A	-2.0078569	0.00753421	0.07609519
IZUMO1	-2.3951533	0.0075396	0.07611487
GPR158	-2.66719	0.00755171	0.0762024
ALDH2	1.22161177	0.00755992	0.07625046
LINC02193	-1.7939124	0.00756405	0.07625736
PACSIN3	-1.5305687	0.00758258	0.07640939
TMEM71	2.13088633	0.00759345	0.07646843
CASP1	1.46715751	0.00759535	0.07646843
TMCO1-AS1	-2.0482798	0.00760027	0.07648316
MED28P3	-5.1541996	0.00761027	0.07651417
TIMP2	1.12414659	0.00761027	0.07651417
JDP2	1.16513052	0.0076196	0.07653841
RIC3-DT	-3.6804055	0.00761647	0.07653841
GEMIN8P4	-2.5292933	0.00763	0.07660807
CCNB1IP1	-1.3529173	0.00765522	0.07672391
STRC	-1.6568477	0.00765387	0.07672391
ANTXR2	1.17350188	0.00765887	0.07672391
SHCBP1L	-3.7390439	0.00764865	0.07672391
CTSK	1.16648573	0.00765772	0.07672391
ADRB3	-3.4110346	0.00766598	0.07676042
VPS33B-DT	-3.334848	0.00766976	0.07676117
IFNG	2.95923698	0.007673	0.07676117
MINDY3	1.55556318	0.00769393	0.07693584
NUTM2A	-2.1095705	0.00770672	0.0770289
SFRP1	-1.4901787	0.00772505	0.07712011
ARRB1	1.38073277	0.00772733	0.07712011
SLAMF7	1.64781253	0.0077284	0.07712011
STYXL2	-2.0821792	0.00773323	0.07712011
SLC2A1	-1.4583621	0.00773327	0.07712011
ITPKA	-2.6025164	0.00774509	0.07720323
DPT	1.27888146	0.00777882	0.07750454
KCTD9	1.24436963	0.00778965	0.07757748
HOTAIR	-3.4667265	0.00779793	0.07760466
FCGR2A	1.24199271	0.00779939	0.07760466

SPARCL1	1.4658052	0.00781314	0.07767156
RTCA-AS1	2.62830311	0.00781313	0.07767156
MAN1B1-DT	-2.0609897	0.00782057	0.07767562
TAGLN	1.31377478	0.00781977	0.07767562
RAB6C-AS1	-3.5500391	0.00782941	0.07769371
IGKV2-24	2.35189211	0.00782603	0.07769371
VSIG10	-1.2925424	0.00783505	0.07771482
MOB4	1.19702901	0.00784474	0.07777612
ADGRF5P2	-3.6198558	0.00785616	0.07785446
PRRT4	-3.8760641	0.00786569	0.07791401
MED15P5	-4.7767723	0.00787055	0.07792727
PKDREJ	-2.2218727	0.00788616	0.07801198
FAM78A	1.38467174	0.00788554	0.07801198
DUX4L52	-3.5758489	0.00789501	0.07802978
NFE2L1-DT	-1.6737529	0.00789397	0.07802978
IKZF3	1.58719394	0.00790375	0.07808133
SLC9A3-AS1	-1.3833849	0.00791275	0.07813533
KLHL6	1.40553141	0.0079188	0.07816017
LINC01016	-1.9864269	0.00792595	0.07819583
HCG9	-3.5482232	0.00793127	0.07821344
HAS3	-1.3369231	0.00794201	0.0782845
SENP7	1.50142699	0.00794746	0.07830337
LINC01998	-3.6515981	0.00797077	0.07849807
GTF3C6	1.28412034	0.0080005	0.07875578
ZEB1-AS1	-1.4135601	0.0080078	0.0787926
IGHV4-61	2.39645757	0.00801231	0.07880199
LONP1	-1.2512584	0.00802615	0.07890299
POLR3GP2	-3.4139711	0.00804006	0.07896955
TIMP1	1.49055929	0.008038	0.07896955
NCF1B	1.76616718	0.00806063	0.07913646
LAPTM4A	1.27122823	0.0080681	0.07913961
HSPA5P1	-4.5419767	0.00806516	0.07913961
RPS13	1.41272447	0.00807528	0.07917495
CA5B	1.61146888	0.0080804	0.07919005
SYT16	-2.0852689	0.00808617	0.07921154
ETS1-AS1	-3.8252198	0.00809749	0.07928734
RIMS4	-2.1686368	0.00812203	0.07946505
LILRA6	1.75087286	0.00812282	0.07946505
KRT18P1	-3.2773441	0.00813772	0.07957556
PIKFYVE	1.26937843	0.00814517	0.07959742
HS2ST1	1.1544883	0.00814714	0.07959742
IL10RA	1.64135255	0.0081645	0.07969666

IQCJ	-2.7111522	0.00816415	0.07969666
PARP1P1	-3.3349725	0.00817108	0.07972571
NEURL1	-2.4603117	0.00817848	0.07976271
GP1BB	-2.5670324	0.00820407	0.07994181
PPM1L-DT	-1.9686799	0.00820206	0.07994181
LIMCH1	1.28263418	0.00823581	0.08018051
USP33	1.127047	0.00823367	0.08018051
SCEL	1.31113563	0.00826941	0.08040148
RHBDL3	-2.1608091	0.00826397	0.08040148
SPCS2	1.47918187	0.00826759	0.08040148
OXA1L-DT	-2.7086595	0.00828339	0.08040198
CST1	-2.2854286	0.00828763	0.08040198
MKRN7P	-2.7619741	0.00827792	0.08040198
IGHV3-72	4.23853614	0.00828501	0.08040198
GTF2IP13	-1.2689925	0.00827562	0.08040198
FOXS1	-3.065124	0.00831005	0.08058416
NOVA1	-1.7229683	0.00832941	0.08070308
SYT14P1	-3.9839331	0.00832961	0.08070308
CSNK1G3	1.11370148	0.00835705	0.08093356
OR1M1	-4.0569664	0.00836112	0.08093758
LINC01602	-4.1966557	0.00836503	0.08094
ADIPOQ-AS1	-2.8037931	0.0083794	0.08100818
TTC1	1.24567266	0.00837723	0.08100818
CICP18	-1.46691	0.00839208	0.08109532
DBIL5P	-1.6318851	0.00841746	0.08130507
NMNAT1P4	-3.8154526	0.00843139	0.08135919
FER1L5	-1.7489106	0.00842749	0.08135919
LCK	1.76545645	0.00843409	0.08135919
BARX1-DT	-3.468806	0.00845087	0.08137915
FAM223B	-5.481795	0.00844695	0.08137915
RAB32	1.83097636	0.00844392	0.08137915
CLEC17A	4.57113274	0.00844766	0.08137915
KIF7	-1.5967861	0.00845798	0.08141216
DNASE1	-1.1906404	0.00848415	0.08162856
BEND7	-1.2470113	0.00850228	0.08176745
RPS10P16	-4.5124818	0.00852049	0.08190703
THRAP3P3	-1.9882063	0.00852855	0.08194469
PAQR5-DT	-1.8771048	0.00853552	0.08194469
CCT7P1	-4.7523266	0.00853543	0.08194469
HMGB3P31	-3.2929735	0.00856402	0.08207212
TCN2	1.44956468	0.00857185	0.08207212
NOS3	-1.4054704	0.00856365	0.08207212

TP73	-1.684932	0.00856273	0.08207212
NKAIN1	-2.9314625	0.00857284	0.08207212
PLA2G4B	-1.7040081	0.00857475	0.08207212
EFHD1	2.25572955	0.00856473	0.08207212
HMGB1P24	-1.8627788	0.00858006	0.08208737
MYH7B	-1.761451	0.00859007	0.08211301
ZNF652P1	-2.849096	0.00859016	0.08211301
CNIH1	1.62585669	0.00859424	0.08211652
HSFX1	-3.6703053	0.00860029	0.08213891
SYNGR1	-1.2913387	0.00860534	0.08214572
LINC-PINT	1.14639205	0.00860843	0.08214572
LINC01297	-3.1497112	0.00861997	0.08222039
ZBTB7C	-1.4544063	0.00864436	0.08234658
TMX1	1.28714783	0.00863873	0.08234658
ACTG1P9	-3.382464	0.00864232	0.08234658
TENT5C	1.56545084	0.00865688	0.08243037
TOPORSLP	-2.8990459	0.00867618	0.08244689
CUL4AP1	-3.6795489	0.00866236	0.08244689
PGAM1P8	-2.0308723	0.00867331	0.08244689
RBMS3-AS2	-4.2703889	0.00867725	0.08244689
COL1A2	1.1912906	0.00867351	0.08244689
SLC8A1	1.32459611	0.00868179	0.08245466
CHKA	1.22704434	0.00870472	0.08254541
PDLIM3	1.24320887	0.00870527	0.08254541
RCAN3	1.08324225	0.00870627	0.08254541
ITGA9-AS1	-1.5572764	0.00869999	0.08254541
FCMR	1.75974351	0.00871003	0.08254575
COP1P1	-3.3801221	0.0087309	0.08256666
RN7SL413P	-3.6406008	0.00873036	0.08256666
MAGED4	-1.9012164	0.00872142	0.08256666
OR4K17	-2.9449474	0.00872357	0.08256666
COL5A2	1.16761695	0.00871821	0.08256666
IGF2BP3	-1.7830278	0.00875194	0.08273028
PHC2	1.09878406	0.00877125	0.08287745
TP53AIP1	-3.0670247	0.00878637	0.08298488
RPS27L	1.18534399	0.00881299	0.08320082
HOXA-AS3	-1.9615074	0.00882392	0.08326844
DNAJC5B	1.92092787	0.00883157	0.08330515
AKR1C8P	-2.5297308	0.00885131	0.08345576
MEOX2	1.6914277	0.00888127	0.08347334
GDF3	-3.768927	0.00886785	0.08347334
LEPROTL1	1.1188178	0.00886555	0.08347334

NPM1P23	-3.3805672	0.00887881	0.08347334
CALM3	1.10499685	0.00888335	0.08347334
CEP57L1P1	-4.0906758	0.00887515	0.08347334
RNASEK-C17orf49	-2.7565248	0.00888234	0.08347334
MGAT5B	-2.3337448	0.00887091	0.08347334
FAM238C	-1.7311636	0.0088959	0.0835492
DOCK3	-1.4330191	0.00889898	0.0835492
PHOX2A	-3.1378064	0.00890857	0.08360377
SPTLC2	1.13854874	0.00891796	0.0836564
SPON1	1.49264432	0.00893038	0.08366657
AMN	-2.2067802	0.00892642	0.08366657
OR51M1	-3.8596209	0.00892868	0.08366657
HOMEZ	-1.2196947	0.00893464	0.08367103
IGF1	1.42855692	0.00894893	0.08368807
GAD1	-2.1518402	0.0089504	0.08368807
ABCB6	-1.4740322	0.00895159	0.08368807
ARPC5	1.13533361	0.00894087	0.08368807
C18orf32	1.26600746	0.00897801	0.08389965
JAK2	1.33788903	0.00899104	0.08398592
LINC01934	1.71514143	0.0089972	0.08400799
LILRB5	1.59107893	0.0090285	0.08426474
FBN2	-1.1430517	0.00904515	0.08434898
PLEKHG5	-1.1584413	0.00904181	0.08434898
OFD1P17	-2.6591001	0.00906687	0.08451593
PLXDC2	1.36715292	0.00909225	0.08468119
ELOAP1	-4.0786791	0.0090897	0.08468119
H2AL3	-4.8146402	0.00910118	0.08472868
CADPS2	1.16326099	0.0091183	0.08485234
CADM1	1.33275445	0.00913053	0.08493039
RIMBP3	-1.6690833	0.00913894	0.08497296
CRH	-2.7144836	0.00914675	0.08500982
DTX2P1-UPK3BP1-PMS2P11	-1.1469642	0.00916089	0.08506983
HNRNPA1P16	-1.6675385	0.0091605	0.08506983
POMP	1.52978797	0.00916487	0.08507105
CTAGE16P	-3.4808758	0.00918335	0.08515241
RPL9	1.33828736	0.00918637	0.08515241
SSH2	1.06626938	0.00918656	0.08515241
DYNLL2-DT	-2.23153	0.00918903	0.08515241
SNX19P2	-3.3831236	0.00922331	0.08533494
DBF4P1	-4.1370434	0.00922707	0.08533494
SOX21-AS1	-1.9476479	0.009228	0.08533494
GASAL1	-1.844026	0.00922279	0.08533494

FAM83A-AS1	-4.2975795	0.00922144	0.08533494
IGHV3-48	1.84204679	0.00924123	0.0853859
CICP14	-3.1783845	0.00924057	0.0853859
HS6ST3	-2.2633868	0.00925102	0.08540497
HMGB1P25	-3.8686608	0.00924807	0.08540497
PNMA6F	-4.4666095	0.0092596	0.085413
TSKS	-2.7414828	0.00925857	0.085413
UBTFL7	-4.7770235	0.00928804	0.08563959
PCAT5	-3.3786832	0.00930786	0.08575393
DAPP1	1.45561893	0.00931207	0.08575393
XIAPP2	-3.506423	0.00931043	0.08575393
TMEM239	-2.7169984	0.00933003	0.08578763
GSG1L	-2.4928425	0.00933123	0.08578763
NKD2	-1.4346928	0.00932636	0.08578763
RPL22P12	-4.1406095	0.00932342	0.08578763
GXYLT2	1.49158288	0.00933881	0.08582164
CCDC168	-2.0248019	0.00935913	0.08597265
WASHC4	1.02099777	0.00937371	0.0860118
IL33	1.76971803	0.00936978	0.0860118
GPD1L	1.1606306	0.00937505	0.0860118
CCL4L2	1.9501543	0.00938326	0.08605144
LINC01287	-3.1590118	0.00940899	0.0860734
FOXD4L1	-3.8935726	0.00940218	0.0860734
KRT82	-3.2344305	0.00940034	0.0860734
NR4A1	1.37352194	0.00940101	0.0860734
PPP1R16A	-1.4554458	0.00940669	0.0860734
IL32	1.33954643	0.00939772	0.0860734
PP7080	-1.9217948	0.00942116	0.0861491
TPD52L3	-2.6453891	0.00945802	0.08645049
ARHGEF38	1.28510956	0.0094723	0.08650948
MNX1	-2.6330292	0.00946929	0.08650948
NFE2L3P1	-3.0933671	0.00948189	0.08656137
DDX53	-3.364763	0.0094937	0.08663344
USP6	-1.9850053	0.00950654	0.08664344
OLFM1	-1.9111145	0.00949997	0.08664344
SIX3-AS1	-4.3410489	0.00950405	0.08664344
NLRC3	1.64772974	0.00951716	0.08670453
C2orf78	-2.5633632	0.00953258	0.08680921
HMGB1P37	-3.4189395	0.00953731	0.08681655
PES1P2	-2.4306929	0.00955768	0.08693052
LINC02857	-2.9008139	0.00955399	0.08693052
TNNT1	-2.4812642	0.00956563	0.08696702

BCDIN3D-AS1	-2.1053589	0.00958362	0.08709483
KRT18P67	-4.2506383	0.00959233	0.08713818
IL6R-AS1	-2.6114538	0.00962806	0.08742692
VWA5B2	-2.4568513	0.00963227	0.0874292
ATP13A4-AS1	-4.2050168	0.00966172	0.08760262
ISCU	1.16827998	0.00965782	0.08760262
SLC16A13	-1.606516	0.00966325	0.08760262
EFS	-1.4475474	0.00968527	0.08773039
GNAI2	1.14216741	0.00968141	0.08773039
RTRAF	1.457	0.00972207	0.08774053
FNBP1	1.13653764	0.00970621	0.08774053
SNORA24	2.98071751	0.00971259	0.08774053
UBE2N	1.28345759	0.00970118	0.08774053
EOMES	1.91473333	0.00972132	0.08774053
HSPE1P18	4.35525935	0.009695	0.08774053
ZNF285B	-3.5077541	0.00969269	0.08774053
APBA2	-1.179546	0.00971851	0.08774053
ZNF296	-2.0571573	0.00971368	0.08774053
ANXA6	1.28253856	0.00973035	0.08777845
RGMA	-1.6497418	0.00973775	0.08777845
BCLAF1P1	-2.5313747	0.00974214	0.08777845
SP110	1.35686155	0.0097385	0.08777845
OR2T5	-8.7352904	0.00975013	0.08781463
HNRNPA1P69	-3.7749195	0.00976224	0.08788794
NKX2-3	-3.8563298	0.00977351	0.08794044
ZNF436-AS1	-1.606138	0.00977602	0.08794044
ENTPD6	-1.1616317	0.00980912	0.08819174
TMEM140	1.50930117	0.00981192	0.08819174
LINC00336	-3.0842759	0.00982274	0.08825315
CIITA	1.40546257	0.00982834	0.0882676
OMD	1.90994075	0.00985689	0.08848181
YBX1P9	-3.334641	0.00986019	0.08848181
GPR78	-2.0588279	0.00987656	0.08857033
IGHV1-46	2.59973646	0.00987806	0.08857033
BUB1B	-1.4141808	0.00989622	0.08866128
CALM1	1.2928327	0.00989409	0.08866128
GJD2	-3.562622	0.00990854	0.08873577
C6orf223	-2.1032429	0.00993833	0.08896656
MCTP1	1.16507834	0.00994806	0.08901766
PPP1R16B	1.41895837	0.00995337	0.0890292
EBAG9	1.31740416	0.00995805	0.08903505
KRT18P23	-3.3699624	0.00996779	0.08906998

SCN5A	-2.1849836	0.00997001	0.08906998
FOXD2	-2.4567592	0.00997622	0.08908947
ZNF826P	1.71439473	0.00999173	0.08919197
FAM217A	-4.0236793	0.00999599	0.08919408
CTBS	1.27154403	0.01000059	0.08919911
SETP1	-2.9322827	0.01000841	0.08922725
KLC2	-1.2949542	0.01001584	0.08922725
ZNF540	2.27787123	0.01001436	0.08922725
EDEM1	1.12470871	0.01005541	0.08954374
PABPC1P2	-4.1346609	0.01006665	0.0896078
SLAIN1	1.71986908	0.01007671	0.08966124
SEPTIN7	1.21620691	0.01008104	0.08966376
FGFR1OP2P1	-4.1142088	0.01008625	0.08967406
IL2RB	1.44082186	0.0101076	0.08968552
LBH	1.12761679	0.01010781	0.08968552
EEF1DP1	-3.0859654	0.01009658	0.08968552
TNK2-AS1	-2.1659447	0.01010673	0.08968552
RPSA	1.19007098	0.01009317	0.08968552
FGD5P1	-2.2588789	0.0101159	0.08972135
COMMD8	1.90059803	0.01013528	0.08982666
AZI2	1.41854524	0.01013589	0.08982666
TMEM65	1.24812399	0.01014869	0.08990404
TATDN2P1	-3.5263259	0.01016119	0.0899788
TNKS2	1.07202896	0.01016741	0.08999783
CDH2	1.86917251	0.01017732	0.09004959
SNRPD1	1.18636652	0.01020532	0.09014201
MAMDC2	1.87734913	0.01020814	0.09014201
DNM1P34	-4.2118127	0.01020062	0.09014201
STXBPL5L	-1.9433185	0.01019957	0.09014201
MUC19	-2.3222503	0.01019285	0.09014201
PRM2	-4.0418153	0.01022365	0.09017109
TAS2R40	-4.8838186	0.01021693	0.09017109
CD300A	1.32121009	0.01022053	0.09017109
HOXC12	-3.0250006	0.0102354	0.09020949
OLFML2B	1.24804406	0.01023616	0.09020949
SETP20	-2.342605	0.01024774	0.0902756
CLDN19	-3.1873593	0.01025341	0.0902896
LGALS9	1.26240104	0.010301	0.09047379
RAP2A	1.17911317	0.01030284	0.09047379
CZIB-DT	-2.1700998	0.01030295	0.09047379
OLFML3	1.3010265	0.01029798	0.09047379
OR51F2	-4.7917281	0.01028877	0.09047379

CICP26	-3.6439707	0.01028655	0.09047379
PIMREGP1	-4.080874	0.01030257	0.09047379
IDI1P3	-3.9568587	0.0103164	0.09052202
HOXB9	-2.7367688	0.0103248	0.09052202
DNAJA1P4	-4.6682513	0.01032276	0.09052202
FKBP14-AS1	-2.6709288	0.01032397	0.09052202
CCDC74A	-1.7808647	0.01033087	0.09053938
IGHV2-5	2.2811153	0.01033845	0.09056991
LINC00643	-2.7494062	0.01035212	0.09061787
TBCA	1.35932138	0.01035117	0.09061787
TMBIM6	1.06159835	0.0103867	0.09088466
SLC6A10P	-3.3066759	0.01039251	0.09088716
ADGRA1-AS1	-3.625674	0.0103952	0.09088716
EPOP	-1.6805021	0.01040339	0.09092282
HERC4	1.07102424	0.01041244	0.09096596
RPL4P5	-2.5411354	0.01041788	0.09097762
SERINC4	-2.5697876	0.01045651	0.09127897
OR4F17	-2.323296	0.01047187	0.09137696
FAM186A	-2.0543662	0.01048505	0.0914559
ELMOD3	-1.0936259	0.01052779	0.09179255
OR4Q3	-2.4548022	0.01056924	0.09208683
CTXN3	-3.4262442	0.01056986	0.09208683
MXRA5	0.99789922	0.01059092	0.09209904
STT3B	1.28177897	0.0105937	0.09209904
TMEM14C	1.39270339	0.01059624	0.09209904
RARRES2	1.21965648	0.01058098	0.09209904
NACA	1.11770537	0.01058726	0.09209904
CD86	1.61696879	0.01057766	0.09209904
HOXC6	-1.6206608	0.01060764	0.09216195
MKRN8P	-3.0488455	0.01063688	0.09237971
EN1	-2.8008334	0.01065136	0.09246918
SRGAP2C	1.06597184	0.01065558	0.09246955
MAPRE2	1.31340957	0.01066618	0.09252522
LINC01931	-4.1810347	0.01067451	0.09256124
IGLV1-47	3.68521341	0.01068356	0.09260337
RN7SL674P	2.11192599	0.01069005	0.09262339
ZNF880	1.33115504	0.01069589	0.09263596
NCF1C	1.84394319	0.01069987	0.09263596
ST13P21	-3.331226	0.01071976	0.09277184
THEMIS	1.58542577	0.01072655	0.09279431
SLC16A6	1.61520842	0.01073123	0.09279849
SQOR	1.12835835	0.01074479	0.09287947

C4orf33	1.47313826	0.01074954	0.09288422
ZNF718	1.52032959	0.0107613	0.09294961
HOMER2P1	-3.2177875	0.01078379	0.09310751
SLC35G3	-3.8797579	0.01080276	0.0932349
SERINC3	1.04085439	0.01081528	0.09329483
LINC01280	-3.441973	0.01081814	0.09329483
HADHAP2	-2.6726351	0.01084068	0.09341642
TBC1D2B	1.06881188	0.01083833	0.09341642
ABCC3	-1.172099	0.0108557	0.09347965
TMEM151A	-3.4411951	0.01085646	0.09347965
ASNSP6	-2.8998003	0.01089697	0.09379189
TMPOP2	-2.9802636	0.01090627	0.09383547
NSFP1	8.59428936	0.01095305	0.09420137
ACTBL2	-3.8018362	0.01097547	0.09435749
BNIP3L	1.33659857	0.01100046	0.09453557
MIR9-3HG	-1.6561598	0.01101005	0.09458129
TMEM132B	-1.9162561	0.0110403	0.09480436
BZW1P1	-3.4328645	0.01105499	0.09489366
BCL11A	-1.1301394	0.01107658	0.0950421
EEF1GP2	-3.7439243	0.01108928	0.09511425
SEPTIN5	-1.4388218	0.01112919	0.09512134
OSTC	1.270141	0.0111271	0.09512134
IFNWP15	-4.2225335	0.01109971	0.09512134
CCNG2	1.17574496	0.01111746	0.09512134
TAF11L11	-3.5207458	0.01111175	0.09512134
LINC01579	-3.2574995	0.01112924	0.09512134
LMOD2	-3.6645031	0.01112414	0.09512134
CD27	1.7984007	0.01112767	0.09512134
KIAA0513	1.15529551	0.0111255	0.09512134
PDE4B	1.51971233	0.0111331	0.09512134
CXCL5	2.03561733	0.01114283	0.09516777
WFIKKN2	-2.8514808	0.01116544	0.09517719
HEXD-IT1	-1.5039012	0.01115062	0.09517719
RPL12P38	-2.5028927	0.01116518	0.09517719
HMGB1P9	-3.3723808	0.01115762	0.09517719
PCAT6	-2.402847	0.01116219	0.09517719
ZNF79	-1.2245968	0.01117627	0.09518793
LRP8	-1.3103559	0.01117155	0.09518793
ANKRD18B	-2.1896024	0.01118021	0.09518793
COX6C	1.33798883	0.0111839	0.09518793
LINC02280	-1.7745048	0.01121093	0.09534458
CRYZ	1.19536327	0.01120818	0.09534458

RAX	-2.7485078	0.01123513	0.09539327
SPATA31D2P	-2.3515858	0.01122115	0.09539327
CD36	1.31397348	0.01123462	0.09539327
TSSK1A	-3.9668053	0.01124191	0.09539327
PTCH1	-1.0981136	0.01122577	0.09539327
RRM2B	1.02816728	0.01124252	0.09539327
GRM3	-3.2356129	0.01124762	0.09539998
CENPCP1	-2.4826668	0.01125491	0.09542527
ACTR3BP1	-4.3986032	0.01126217	0.09545021
RBBP4	0.99670235	0.01127304	0.0955058
RAPGEF4-AS1	-2.7618716	0.01128424	0.09552748
SPI1	1.31184486	0.01128117	0.09552748
LINC01563	-4.0288739	0.0112909	0.09554733
HACD4	1.28488548	0.01132493	0.09576209
LRRTM1	-2.2847343	0.01132293	0.09576209
KLF15	1.65830528	0.01134253	0.09587428
LINC01443	-4.2404605	0.01136746	0.0960249
GABRA1	-3.230035	0.01136903	0.0960249
C22orf31	-3.8693864	0.01137541	0.09604213
LACTB	1.14608641	0.01139144	0.09614079
SLC11A2	0.98254762	0.01140258	0.09619816
LINC01230	-2.7158741	0.01141524	0.09626827
CYP17A1	-2.6327872	0.01143842	0.09633477
HELLPAR	-1.5463721	0.01143522	0.09633477
ERH	1.1628286	0.0114292	0.09633477
SDK1	-1.2948646	0.01144054	0.09633477
UAP1-DT	-4.2703407	0.0114622	0.09648039
UBE2O	-1.0946273	0.01148047	0.0965975
HIKESHI	1.46485273	0.01149056	0.09660886
LINC02767	-1.6844504	0.01148671	0.09660886
TMEM167A	1.05974738	0.01152972	0.09690136
SAMD9L	1.37663357	0.01153739	0.09692895
ASPSCR1	-1.0411276	0.01155702	0.0970003
XXYL1	-1.2098282	0.01155903	0.0970003
IPCEF1	1.48940927	0.01155691	0.0970003
VMP1	1.11586693	0.01156564	0.09701899
LINC01141	-3.7951365	0.01157881	0.09709265
FOXD4	-2.9948114	0.01158839	0.09713615
PLGLB2	-1.7240016	0.01159783	0.09714174
WDR48	1.11446754	0.01159537	0.09714174
FAM204A	1.33139268	0.01160895	0.09716126
CHST11	1.28778557	0.01160776	0.09716126

MIR181A1HG	1.43783374	0.01162529	0.09726127
LYST	1.12988826	0.01162989	0.09726296
CCL8	2.7561176	0.01166026	0.09733629
ACTG1P22	-2.5809902	0.01165003	0.09733629
CD6	1.65386458	0.01165277	0.09733629
GUCY2C	-3.9479244	0.01166065	0.09733629
KNG1	-2.2813526	0.01166022	0.09733629
USP53	1.02276193	0.01166631	0.09734686
RNF145	1.18016554	0.01168253	0.09744546
BLOC1S2	1.33479276	0.01169705	0.09752975
EDC3	-1.2057986	0.01172201	0.09763646
ST13P10	-2.7203707	0.01172749	0.09763646
SUDS3P1	-1.8468016	0.01172676	0.09763646
RPL22P24	-3.3033769	0.01172413	0.09763646
GABARAP	1.06796078	0.01174292	0.09772814
PABPC1P13	-3.5309209	0.0117535	0.09777942
HIC2	-1.1736751	0.01176542	0.097805
SLC22A31	2.54893757	0.01176183	0.097805
ELDR	-2.883685	0.0117806	0.09789443
LINC00652	-3.7304429	0.01179238	0.09791882
PHF11	1.16485227	0.01178819	0.09791882
SACM1L	1.19307795	0.01180827	0.09801395
BMS1P4-AGAP5	8.5066061	0.01182863	0.09813388
CXCL9	1.66145664	0.01183602	0.09813388
IGKV1D-16	4.30807911	0.01183241	0.09813388
ATP5MG	1.04911615	0.01185211	0.09823049
LARP4P	-1.9642729	0.0118608	0.09826572
PLEKHA2	1.19863461	0.01187061	0.09831014
METTL27	-2.0329838	0.01188237	0.09835211
ZNF750	-1.4775619	0.01188456	0.09835211
FGF9	-2.0997969	0.01190306	0.09846831
RNF149	1.20408193	0.01192385	0.09859975
FZD10-AS1	-1.6250721	0.01192786	0.09859975
PARK7	1.18604856	0.01193285	0.09860421
ATP5PF	1.21410381	0.01195524	0.09875234
FABP5P7	3.16564386	0.01197515	0.09887991
IL13RA1	1.0066201	0.01198847	0.09895298
DDX50P2	-3.6690005	0.01200455	0.09904877
C15orf48	2.20606595	0.01201734	0.09911729
SCIMP	1.42057212	0.01204485	0.09912376
HOXC9	-1.7593495	0.01203199	0.09912376
NCLP2	-3.3143043	0.01203977	0.09912376

LINC02068	-1.9602436	0.01203917	0.09912376
GDF11	-1.1983554	0.0120315	0.09912376
MUC20P1	-1.260832	0.012045	0.09912376
TMEM63C	-1.7529211	0.01206419	0.09924476
FAM186B	-2.0092201	0.01212624	0.09945945
CCDC90B-AS1	-2.8698052	0.01212316	0.09945945
KRT8P43	-3.3943193	0.01210443	0.09945945
NFKBIA	1.03590868	0.01211616	0.09945945
RPH3A	-2.2894064	0.01212071	0.09945945
DRD4	-3.0401935	0.01210239	0.09945945
ZSCAN31	-1.6868341	0.01211479	0.09945945
HRNR	-1.878788	0.01210042	0.09945945
KREMEN1	-1.4445678	0.01214041	0.09953873
LINC02503	-2.6809959	0.01215688	0.09959519
SEPHS1P7	-4.9423587	0.01216032	0.09959519
POTEJ	-4.5856954	0.01216079	0.09959519
PAG1	1.41717271	0.01220413	0.09991313