

Mononuclear Phagocytes in Intestinal Homeostasis and Inflammation

Appendix

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Appendix

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gene	probe ID	log ₂ FC	P Value	adj. P Value
SLPI	2810487	5.327487555	4.18E-05	0.007050607
SLC11A1	3850497	4.41986644	2.66E-07	0.000589151
F10	1230639	4.40404426	3.18E-06	0.002050915
IL10	1260632	4.309704349	1.42E-05	0.003880538
CD14	6020674	4.151236924	4.39E-06	0.002050915
CHI3L1	150114	4.107447926	2.66E-08	0.000145937
SAA3	6400719	4.041240154	7.08E-07	0.001144799
MMP13	5690131	4.010841805	0.000663426	0.036533121
EMR1	1030411	3.989759755	0.000601293	0.034583259
IRAK3	1030497	3.984277227	0.000591594	0.034279332
KLRA2	1190102	3.96828561	1.13E-05	0.003369269
C1QB	580332	3.906896211	1.12E-08	0.000145937
INHBA	3060458	3.893554566	4.87E-06	0.002061229
LPL	5360300	3.846215047	4.37E-08	0.000145937
PLA2G7	4120255	3.538526465	9.97E-06	0.003225682
GAB1	7200678	3.338122972	0.000293892	0.022163656
MMP14	3520066	3.318708769	0.000191045	0.018089825
CLECSF8	10170	3.257685758	8.85E-07	0.001144799
9930027N05RIK	3420044	3.255743755	4.14E-06	0.002050915
FCGR3	3830678	3.218063347	1.02E-05	0.003230529
EMR1	2710110	3.214158809	0.000845066	0.042607253
SLP	60368	3.209317165	4.70E-08	0.000145937
APOE	7210687	3.206888705	8.62E-07	0.001144799
CSF1R	3400369	3.196724434	1.02E-06	0.001153573
ITGB5	1770152	3.196133673	0.000105348	0.012983763
IL23A	5820670	3.196012014	0.000247674	0.020267572
RASGRP1	5860296	3.178274599	0.000247977	0.020267572
CLECSF9	1780437	3.148478006	2.80E-05	0.005804709
H2-BF	5260541	3.057196641	0.000255188	0.020544565
ARG2	670600	3.030291589	0.000308588	0.022711199
SLC11A1	6940735	3.022330123	1.42E-05	0.003880538
BLVRB	4010446	3.012184998	0.000339372	0.023955034
SLC7A11	520470	2.991557948	0.00062078	0.035054869
CHI3L3	2570240	2.955219098	0.000181566	0.017530344
HP	840044	2.883835729	8.40E-07	0.001144799
FCGR2B	1110326	2.868007779	1.40E-05	0.003880538
CAPG	20064	2.852103642	8.54E-06	0.002947867
FPR-RS2	7650048	2.841439249	4.23E-07	0.000821228
C1QR1	6060050	2.836556294	0.000438918	0.028281997
SPON1	2100762	2.80645699	1.79E-07	0.000464415
FCRL3	830632	2.794447428	0.000473799	0.029909017
YBX3	6510112	2.77340313	0.000856457	0.042765034
GP38	1340446	2.7592224	3.61E-06	0.002050915
CXCL1	3610082	2.748817398	5.45E-06	0.002168471
VCAM1	2850575	2.747297323	3.62E-05	0.006447778

BC049354	2760259	2.740572862	0.000116853	0.014066712
RHOU	430181	2.698105062	1.21E-05	0.003478981
CCL5	1690768	2.695604861	0.000918902	0.043926071
MS4A6D	3180025	2.634410939	2.18E-06	0.001781128
ELL	2190445	2.631644554	8.12E-05	0.011059517
LYZ	2360719	2.619955354	0.00032736	0.023643062
FCGR2B	5700220	2.591451486	5.63E-06	0.002187642
SPATA13	4220673	2.5821236	0.000749103	0.039433302
TGFBI	450133	2.577374613	3.25E-08	0.000145937
SQRDL	2600424	2.563126905	0.000411191	0.027287969
NRG1	2490039	2.542987121	2.93E-05	0.00583879
IL1RN	3390131	2.525330277	4.23E-05	0.007064963
SMOX	1660367	2.518981776	7.97E-06	0.002878522
PRDX5	4920100	2.516975208	1.13E-06	0.001153573
KLF7	4640338	2.497572478	0.000772457	0.04038886
MXI1	1050553	2.45969708	0.000394378	0.026431888
LYZS	7380022	2.453786519	3.80E-06	0.002050915
CHI3L3	3870242	2.446566749	0.000649462	0.036148752
IGSF6	5670382	2.435763192	5.76E-05	0.008855422
ALAS1	5720180	2.424914072	0.001269496	0.052564623
SMOX	5050008	2.421241753	1.10E-05	0.003359877
TNFSF13	2340543	2.416879838	0.000914508	0.043926071
PDLIM4	2940615	2.412280319	7.40E-05	0.01052729
LY6C	5550671	2.407030826	0.000134219	0.015076877
TGFBI	4060327	2.406574388	2.34E-06	0.001815055
TRAF3	270025	2.405026681	0.00057807	0.033792608
TREM3	4290035	2.401571819	0.000950781	0.044606294
C1QG	3710170	2.392754205	2.88E-05	0.00583879
CDC42EP2	3780338	2.386699829	0.000406608	0.027099656
CHI3L4	2600180	2.383378547	0.001083177	0.047922079
CIB2	6840634	2.369546938	0.00039358	0.026431888
1300002F13RIK	4570368	2.350560345	0.000103083	0.012909483
CSF3R	6840040	2.348038469	0.000217054	0.019350428
ETS2	7510154	2.346338567	1.21E-06	0.001153573
TRAF3	5420441	2.333415053	0.000577136	0.033792608
1600010D10RIK	5080528	2.324962464	0.000146351	0.016004865
CYP4F18	6020487	2.309760419	0.000289512	0.022163656
2410039M03RIK	4490008	2.277979256	3.08E-06	0.002050915
CLECSF9	4590458	2.261303205	1.99E-05	0.004830529
CDC42EP4	4010133	2.256908609	0.001099545	0.048370626
CCL9	7050538	2.256619232	0.000172803	0.017330125
LY6F	2630577	2.252276156	8.41E-06	0.002947867
ECM1	1710242	2.245631495	0.000124017	0.014456684
HDC	2970324	2.222834624	0.000379355	0.025951541
PRDM4	1570139	2.2121552	4.02E-05	0.006941488
IL1RN	7650747	2.1988879	9.84E-05	0.012623617

5730528L13RIK	5900682	2.19710167	8.50E-05	0.011422838
4933405A16RIK	430360	2.196100013	4.91E-06	0.002061229
CYP4F18	2120392	2.163053069	1.90E-05	0.004769555
9030216K14RIK	2480768	2.155580955	1.08E-06	0.001153573
NPN3	610463	2.149533869	4.43E-06	0.002050915
4932439K10RIK	2810091	2.146626389	0.000324787	0.023568328
GPR84	7000259	2.14444452	8.00E-05	0.011059517
CEBPB	4230348	2.138277536	0.000237578	0.019942389
ENTPD4	5690463	2.132658882	0.000530447	0.032558523
GP49A	5820739	2.122777044	0.000126393	0.01453897
TNF	4050626	2.120728742	0.000120567	0.014292266
HIVEP3	2350300	2.108450721	0.000195153	0.01836681
ADSSL1	3190689	2.106329514	1.17E-05	0.003432
TNF	4830097	2.090780268	3.21E-05	0.006004136
CXCL2	4150750	2.070204185	4.08E-05	0.006961822
ZMYM2	6560040	2.055290169	0.000330457	0.023648245
2310022A10RIK	7570612	2.045113805	0.000796276	0.040944932
MDM2	670068	2.040505695	2.56E-05	0.005538794
GP49A	4120356	2.01304978	0.000159834	0.016825576
CCRL2	5130156	2.008616743	0.000198443	0.018563981
MIR16	5270709	2.008380744	9.37E-06	0.00310431
LYZS	830240	2.005825848	0.000385351	0.026246091
MOCS1	60600	2.000302409	0.001026772	0.046758765
SCARF1	110692	1.980520861	4.69E-06	0.002061229
MAFB	6060403	1.978305569	2.17E-05	0.004956487
CSF3R	5900259	1.957336868	0.001009028	0.046129114
SLC2A1	6350044	1.949943159	0.000345538	0.024170522
1600029O10RIK	2680475	1.943394857	0.000954911	0.044665091
LY6I	5810672	1.906878235	0.000258928	0.02070353
HAK	7200242	1.900292652	7.81E-06	0.002878522
ADSSL1	1770468	1.885475207	0.000854478	0.042765034
9830148G24RIK	1090647	1.879013738	0.000174718	0.017330125
IRG1	7560307	1.878227358	2.05E-05	0.004830529
9930022N03RIK	5050086	1.871215887	4.12E-06	0.002050915
GBP1	5690246	1.866307389	0.000924102	0.043926071
ZSWIM4	7510240	1.861756216	0.000764022	0.040082773
C4	7510243	1.861597749	1.37E-06	0.00118538
SLC31A2	6560270	1.859445104	0.000303358	0.022539914
CAPG	3400082	1.84828529	4.49E-06	0.002050915
GDF15	650524	1.840496757	0.001162423	0.050003513
SCL0002883.1_98	6980102	1.825640657	7.33E-06	0.002777289
SLC15A3	6130445	1.812838175	0.000446642	0.028542829
RSN	6900091	1.80732047	0.000181749	0.017530344
SLC15A3	3290427	1.801409049	0.00028731	0.022163656
MEFV	4220437	1.799653308	0.000260896	0.02070353
PRDX5	3850433	1.788944573	2.71E-05	0.005684

SOD2	4860224	1.785450656	0.000149432	0.016114804
2600005C20RIK	150646	1.751678253	0.000238952	0.019949901
FZD1	5570309	1.744741549	2.93E-05	0.00583879
PFKL	6650711	1.741624877	0.000307083	0.02270804
SMPDL3B	3440132	1.737584593	0.001354018	0.0548996
CLECSF5	5390463	1.718542741	3.51E-06	0.002050915
IER3	6520075	1.717302368	3.39E-06	0.002050915
2600005C20RIK	6420196	1.706504288	0.000221424	0.019426475
DOK3	610291	1.68837164	0.000225241	0.019650404
FCER1G	2230039	1.679666723	1.68E-05	0.004360304
CSTB	3120465	1.675764156	1.87E-05	0.004753562
GRINA	2140753	1.674678964	1.08E-05	0.003348168
ERN1	3360189	1.673210416	0.000343789	0.024157021
DPEP2	6250148	1.659915364	0.000374895	0.025874388
PILRA	5910482	1.653082868	0.001208485	0.051415241
PIGA	7160458	1.648204494	0.001252801	0.052564623
DPEP2	7150333	1.643878557	0.000712359	0.038014511
RUSC2	1190465	1.64174991	3.56E-05	0.006447778
TPD52	1230673	1.637990572	4.89E-05	0.00775579
MDM2	3310243	1.636263498	0.000100241	0.012759421
1200016E24RIK	3310215	1.626820459	0.000234552	0.019890856
PLEC1	6960201	1.6230659	0.000788463	0.040712127
9930031P18RIK	5560204	1.613504134	1.95E-05	0.004812657
BLVRB	1440717	1.61142372	0.000173072	0.017330125
SEPN1	6550603	1.606271894	0.000168142	0.017183971
A430073A17RIK	5050240	1.592308819	0.00099885	0.046013854
RUSC2	6100471	1.58572151	4.51E-05	0.007374155
MAN2A1	3400050	1.583378624	0.000261311	0.02070353
CXCL2	5390639	1.574722669	0.000851192	0.042765034
MAPKAPK3	5360477	1.574642541	0.000420783	0.027687899
EMILIN2	5910164	1.57000058	0.000172522	0.017330125
MOCOS	6480201	1.565816407	2.15E-05	0.004956487
CRYBA4	7050255	1.563008468	0.000560416	0.033792608
CD81	2370364	1.556888397	0.000541426	0.032971763
2310016C08RIK	4290152	1.544464263	0.000702561	0.037620908
TPD52	1820414	1.533878772	0.000740544	0.039115355
GLB1L	3130546	1.533125113	4.68E-05	0.007575275
6720458D17RIK	4920491	1.53271631	0.000699852	0.037605541
F830005D05RIK	50128	1.529297407	0.000507099	0.031578647
CLECSF5	6580162	1.517939027	4.07E-06	0.002050915
PLAUR	5720497	1.507324125	9.13E-05	0.012011076
SLP	130348	1.482968009	5.31E-06	0.002168471
ITPKC	6380086	1.481007555	0.000567267	0.033792608
APBB3	5390364	1.478862416	7.94E-05	0.011059517
RAI14	2450735	1.478297196	0.000335574	0.023904266
LRRC5	3830021	1.472303295	0.001168511	0.050126529

TRPS1	6940181	1.469913369	0.000291542	0.022163656
TGM2	7000187	1.467870649	9.77E-05	0.012623617
9130404D14RIK	4290324	1.464460648	0.000247396	0.020267572
FURIN	6960189	1.464437779	0.000134953	0.015076877
SLC25A28	6590093	1.454241859	0.000289939	0.022163656
IGFBP4	3400747	1.443781829	0.000295687	0.022182219
LDH2	240259	1.432149187	3.28E-05	0.006061725
LAMP2	5270358	1.425135925	2.57E-05	0.005538794
TNFAIP2	1070630	1.423242765	0.00017788	0.017482945
C630022N07RIK	3360564	1.414996655	0.001286508	0.052712863
BC005537	4900725	1.405780978	0.000533411	0.032611571
FVT1	4290593	1.402249154	0.000161938	0.016825576
TXNRD1	1580338	1.396206205	0.000114844	0.013932903
CTSC	1710754	1.377752675	0.000228248	0.019668381
MAP3K7IP3	4390255	1.377391916	0.000462646	0.029444394
TLR7	1570487	1.366615066	0.000696592	0.037560335
MRC1	4730220	1.36208838	0.001150208	0.049753716
INPPL1	1990440	1.360300998	0.000227011	0.019668381
TLR1	6940719	1.34811671	0.00088915	0.043457356
TNIP1	3170204	1.342567073	0.001066303	0.047582224
CASP4	4210762	1.340928693	0.001000697	0.046013854
EMR4	1710603	1.338024416	0.000619033	0.035054869
PILRB	4570204	1.326396096	0.000508644	0.031578647
CTSB	110121	1.325406216	0.000231481	0.019750914
PDCD1LG1	3870561	1.324166827	0.000433201	0.028147218
MAPKAPK3	7040161	1.320590751	0.001342407	0.05457131
INPPL1	5670072	1.318028616	0.000362129	0.025217524
PTGS1	6620445	1.303834088	0.000215651	0.019350428
NR1H3	4900630	1.291152092	3.65E-05	0.006447778
GSTM1	3850129	1.289231088	0.000124747	0.014456684
AUH	780274	1.288598202	9.37E-05	0.012227155
MGST1	7610114	1.282477401	0.000485432	0.030519335
ABHD1	5340500	1.274560299	8.72E-05	0.011570307
TLR5	2100468	1.274383597	6.36E-05	0.009588123
EMILIN2	5490026	1.264741482	0.000944321	0.044437479
CASP4	5290017	1.259063426	0.001097436	0.048370626
IDB3	110471	1.251678287	0.000133909	0.015076877
MCL1	60048	1.248301094	3.91E-05	0.006822846
PLTP	610414	1.247561142	0.001118105	0.048867185
9430080K19RIK	50242	1.238585704	0.000941301	0.044437479
P4HA1	5870040	1.232860916	0.000913005	0.043926071
PECR	2260561	1.229409097	0.001059357	0.047408506
EPB4.1L2	1770424	1.223179079	0.001259417	0.052564623
LRP1	2570615	1.206471997	0.000692471	0.037560335
D12WSU95E	4570400	1.191363627	6.66E-05	0.00985539
MMP2	3870072	1.15024664	0.000526434	0.032440467

TCE4	2060050	1.148431333	0.001273496	0.052564623
RNASE4	5810398	1.147083642	0.000130638	0.014916756
D8ERTD587E	3140471	1.143843197	0.001173018	0.050181263
VCAM1	4830475	1.123944712	1.65E-05	0.004336397
PAPD1	2360475	1.122071817	3.08E-05	0.005972057
ZC3H12A	6060349	1.115149389	0.000588183	0.034209355
A130086G11RIK	6840181	1.105842368	6.86E-05	0.009953708
JUNDM2	5860717	1.094977704	0.00050535	0.031578647
ABCC5	7560475	1.077063921	0.000394707	0.026431888
SLC22A4	290504	1.058084069	0.000253297	0.020544565
ATP6V0C	2030725	1.054242459	0.0012836	0.052712863
1700051E09RIK	3610491	1.053932582	0.000941878	0.044437479
OASL2	4830010	1.05177897	0.000636095	0.03566037
IL12A	2070468	1.048962484	6.56E-05	0.009791576
9930108O06RIK	3400521	1.031109366	0.000841623	0.042571851
2310043N10RIK	1690497	1.026901435	0.00081519	0.041577087
CSF2RB2	5820528	1.011128972	0.000430878	0.028113906
CAMK2D	3190468	0.993395547	0.000873209	0.043322883
SQSTM1	4560619	0.989854156	0.000881462	0.04343555
SYK	5890671	0.984420843	0.000430625	0.028113906
RBBP9	2230424	0.908250457	0.000161072	0.016825576
5430434G16RIK	2570689	0.905750547	0.000596585	0.034440055
G1P2	460221	0.876180596	0.000614758	0.035054869
CCL7	4670674	0.84812178	0.001270398	0.052564623
2310022A10RIK	780767	0.843208744	0.000696354	0.037560335
RBBP9	3370270	0.821511149	0.00031084	0.022768994
RBPM5	4050121	0.808903311	0.000816602	0.041577087
5330408N05RIK	2480010	0.804814676	0.000655024	0.036198812
ATP6V0B	870386	0.774624245	0.001001525	0.046013854
CCR5	1780324	0.764082675	0.001044497	0.047151166
SMOX	1580379	0.755940837	0.000564677	0.033792608
MTDNA_ND4	240367	0.751275472	0.000903915	0.043728625
ADCY7	5420082	0.746090392	0.00082706	0.041971955
1700051E09RIK	5670674	0.727791586	0.000725001	0.038556663
CCR5	1240646	0.72774995	0.001081078	0.047922079
2610020H15RIK	4280274	0.715697725	0.000924968	0.043926071
SLC7A8	6550687	0.714207159	0.001009975	0.046129114
MT-ND4	6250689	0.702788381	0.000574698	0.033792608
DUSP7	2120438	0.685824613	0.000876988	0.043371798
3110009E18RIK	5360131	0.682679282	0.00127612	0.052564623
1110006I15RIK	3440209	-0.658977427	0.001256016	0.052564623
PPP1R14A	4040215	-0.7861989	0.001032629	0.04680677
LOC268569	1230681	-0.796752172	0.000255335	0.020544565
LOC194913	7000435	-0.798975553	0.000898169	0.043586474
D19WSU12E	6290356	-0.81150768	0.001000873	0.046013854
CST3	6130669	-0.817053558	0.000323392	0.023568328

HERPUD1	1050619	-0.818150828	0.000883871	0.04343555
H2AFZ	3140500	-0.842875802	0.000328862	0.023643062
NME4	7510070	-0.856863289	0.000299364	0.022350137
HSPE1	2650709	-0.865300335	0.001049614	0.047244814
MPP6	2810673	-0.878672066	0.000394887	0.026431888
PARK7	4730739	-0.896437052	0.001332145	0.054296255
LOC329076	6380039	-0.897771858	0.000895704	0.043586474
LOC381330	4560692	-0.898937673	0.001155661	0.049850711
KEO4	3370288	-0.912805249	0.000734058	0.0389051
H2AFY	3370711	-0.923969724	0.00015883	0.016825576
E030003N15RIK	6330575	-0.926150582	0.001214226	0.051498285
PIP5K2A	3140678	-0.938217817	0.000209097	0.019277493
BCAP37	7000019	-0.949709969	0.000685658	0.037359915
PGLYRP1	3140246	-0.952736173	0.000218065	0.019350428
A030009H04RIK	1090053	-0.961345898	0.000921096	0.043926071
XCR1	6180240	-0.991317736	0.001132393	0.04911991
HIST1H3I	5690561	-1.007872344	0.001083154	0.047922079
GOT2	3870113	-1.011973417	6.18E-05	0.00940501
FBL	2140113	-1.014042467	0.000159853	0.016825576
EXOSC8	4670451	-1.032055596	0.000273897	0.021481556
TALDO1	7150121	-1.041798664	0.00022127	0.019426475
LOC268695	5360152	-1.060400273	0.000243879	0.020252358
LOC269355	6520088	-1.085211811	0.00097529	0.045345167
MCM2	1770612	-1.09529323	0.000606199	0.034736767
1110012M11RIK	5390021	-1.096686095	0.0011195	0.048867185
RANGAP1	4830528	-1.1198191	0.001033854	0.04680677
AARSD1	520500	-1.135986696	0.000889912	0.043457356
HSPCB	2190047	-1.148410222	7.30E-05	0.010495069
SAE1	2630291	-1.154572792	0.00125479	0.052564623
PIGF	2230228	-1.161515918	0.0012707	0.052564623
VRK1	3610731	-1.162134269	0.000578842	0.033792608
PPP2R4	1510088	-1.187086667	0.00012198	0.014350182
HSPD1	4120671	-1.187140649	0.000266013	0.0209691
PDIR	2900333	-1.189017121	8.53E-05	0.011422838
GRASP	3840040	-1.203375708	0.000789127	0.040712127
H2AFV	6520446	-1.206551867	0.001122355	0.048867185
RANGAP1	2070253	-1.222331422	0.001292955	0.052837621
NAPSA	380369	-1.241523589	0.000292196	0.022163656
AP1S3	6840338	-1.244306969	0.000215557	0.019350428
KLR11	1240639	-1.246761659	0.000781712	0.040599368
IRF4	1010397	-1.25784747	0.001217069	0.051498285
SEMA7A	780554	-1.266912231	0.000561061	0.033792608
TRIM59	5220056	-1.271229662	0.000168199	0.017183971
ARPC5L	5900253	-1.27362799	0.000235683	0.019890856
TIMELESS	3850070	-1.332706071	3.15E-05	0.006004136
DTYMK	940170	-1.34210871	0.000775283	0.040400585

TRIM59	7570196	-1.347931513	0.000111524	0.013636657
DPP4	3060546	-1.355848343	0.000147638	0.016032695
KLRI1	780037	-1.362958766	0.000864783	0.043042335
MDH2	1110541	-1.368983456	0.000973276	0.045345167
NAPSA	5690500	-1.377939245	0.000629442	0.035415208
DEADC1	2810139	-1.398878638	0.000117823	0.014074399
TPX2	3140707	-1.401053907	0.000676307	0.036980194
ACTN1	4590136	-1.430720977	0.000420737	0.027687899
GCAP27	4860041	-1.434968635	0.000372842	0.025847594
FGF22	1240019	-1.441267169	0.000337441	0.023927473
PYGB	3170110	-1.448458383	0.000616791	0.035054869
LSP1	380482	-1.452534417	4.95E-05	0.007757582
EPHB2	3830241	-1.454217611	4.51E-05	0.007374155
1600029D21RIK	1300092	-1.511930425	9.40E-06	0.00310431
H2AFX	1090327	-1.51426713	0.000438661	0.028281997
NGFRAP1	360491	-1.514521752	0.000377005	0.025904934
OXCT	3420500	-1.517629504	0.000209794	0.019277493
BC065078	6370739	-1.519263852	3.20E-05	0.006004136
H2-OB	6760167	-1.559672717	0.000569118	0.033792608
BEX6	870603	-1.563328624	0.000510415	0.031578647
CBFA2T3H	5890110	-1.570004452	6.86E-05	0.009953708
RNASE6	430703	-1.578068837	0.0006532	0.036198812
SIRT3	5550554	-1.584851814	0.00112342	0.048867185
ECE1	5700722	-1.585100931	0.000443992	0.028490732
SEPT6	5260762	-1.592649434	0.000466743	0.029583862
LMYC1	1580445	-1.611303412	0.000565079	0.033792608
RGS12	5130487	-1.616183467	5.09E-05	0.007900752
CYB5	7560639	-1.624763506	0.00064817	0.036148752
CYB5	2810072	-1.63090374	0.000288785	0.022163656
CDCA3	1050170	-1.651532947	7.46E-05	0.01052729
PRC1	780475	-1.653225456	0.000674953	0.036980194
PPM1M	4180575	-1.661716683	0.000217421	0.019350428
AMICA1	3850692	-1.669456719	0.000798919	0.040945266
COX6A2	2470356	-1.6815502	0.00010151	0.012815824
CD24A	3390110	-1.68426714	0.000199769	0.01857615
PLP2	1740379	-1.6848458	0.000294012	0.022163656
ITGAE	1300059	-1.764651533	0.000185276	0.017651228
FPGS	4670270	-1.782671136	1.26E-06	0.001153573
LMTK2	2030376	-1.822377594	0.000144526	0.015917281
PPIH	3830592	-1.832650492	0.000180554	0.017530344
SNX22	2810451	-1.865897953	0.000104777	0.012983763
1110012O05RIK	2140450	-1.870102374	0.000136175	0.015104765
9130227C08RIK	3990445	-1.872851131	0.001196182	0.051031633
AKR7A5	3180068	-1.955841649	0.000162524	0.016825576
CDC42EP3	4150739	-1.968169284	0.000578176	0.033792608
MCM5	6220270	-1.985143046	2.71E-05	0.005684

POLD1	5220358	-1.985226432	0.00122595	0.051733098
2410015N17RIK	1980446	-1.989877175	2.04E-05	0.004830529
PBK	2900300	-2.081081333	2.60E-06	0.001920514
KLRD1	4890279	-2.11288572	2.96E-06	0.002050915
1110017L21RIK	6450634	-2.119913812	3.65E-05	0.006447778
2810046M22RIK	7200719	-2.128688622	0.001058426	0.047408506
CDH1	5820184	-2.138991796	8.10E-05	0.011059517
NUP210	1230703	-2.149532713	2.30E-05	0.005171368
STMN1	3120392	-2.208081372	0.000183837	0.017622293
TNNI2	2260066	-2.236050492	0.000213078	0.019350428
PRNP	6770379	-2.316863197	2.54E-05	0.005538794
UHRF1	4560397	-2.360166762	4.86E-05	0.00775579
TIMELESS	160703	-2.532324005	0.000229247	0.019668381
KIF22	4210246	-2.56122269	0.00017521	0.017330125
ITGAE	7100687	-3.309384287	3.00E-05	0.005889375
ITGAE	520196	-3.385309605	1.51E-05	0.004036495

Table 1 Microarray analysis of CX₃CR1^{int} CD64⁺ and CX₃CR1^{int} CD64⁻ MNPs from inflamed large intestine.

Full list of genes which were significantly differentially expressed (adjusted p value < 0.05) by CX₃CR1^{int} CD64⁺ vs. CX₃CR1^{int} CD64⁻ MNPs both isolated from inflamed colonic and caecal lamina propria 21 days after induction of *Hh* + anti-IL-10R colitis. Genes are arranged in order of descending log₂-transformed fold change. Positive log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁺ MNPs, negative log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁻ MNPs.

gene	probe ID	log ₂ FC	P Value	adj. P Value
P2RY14	6580379	5.266198338	2.85E-06	0.004029415
CYFIP2	7550059	4.382477821	2.57E-06	0.004029415
COX10	4150196	4.139409653	1.12E-06	0.004029415
2610101N10RIK	3830707	3.998836172	0.000109788	0.015222354
PIK3CB	3440286	3.89739615	5.65E-05	0.012374876
CSPG6	1190037	3.730047786	5.69E-06	0.004702891
P2RY14	1240538	3.718931173	0.000103956	0.014675698
SFXN1	4180577	3.717810568	1.08E-05	0.005219814
ATG5	4810064	3.671299194	0.000276434	0.021638005
CEPT1	650437	3.649572784	1.59E-06	0.004029415
WDR68	2190437	3.599991269	0.000126977	0.016031069
GPR43	6520725	3.594876501	1.85E-05	0.007307766
PHC1	5670326	3.578524683	5.17E-06	0.004702891
IFT20	3940575	3.568156943	3.00E-05	0.009302303
POLR2L	6290075	3.566763646	0.000180073	0.018834095
4932414K18RIK	3130129	3.481890657	4.89E-06	0.004702891
OXCT	3420500	3.476437606	2.07E-06	0.004029415
IGFBP7	5360685	3.445978852	0.002824377	0.047621887
PRMT3	1990152	3.434528146	1.25E-05	0.005898794
ATG5	3850450	3.391731801	0.001173213	0.034505349
STAG3	160753	3.346912389	0.000440345	0.026482524
4930453N24RIK	610670	3.334381974	4.39E-06	0.004702891
4930487N19RIK	4480494	3.297162187	0.000233897	0.020678502
SERPINB6B	5820056	3.283312737	0.000253418	0.020825279
BLM	4850669	3.278943313	0.000673838	0.029607403
LMTK2	2030376	3.275793301	8.76E-06	0.005171009
1110001K21RIK	3830020	3.263015201	6.71E-05	0.013023529
PIGF	2230228	3.260121333	3.57E-06	0.004620266
1110007L15RIK	2680612	3.237256489	1.30E-05	0.005944875
CCT6A	4560703	3.221371333	0.00022895	0.020551223
2310001A20RIK	1430170	3.181942858	0.000218544	0.020382728
1810014F10RIK	2480022	3.156349913	0.001520929	0.037230513
BLM	5960189	3.150925351	0.000823827	0.030860554
TRIT1	3170102	3.145359317	5.66E-05	0.012374876
CDCA3	1050170	3.138118975	2.81E-06	0.004029415
RBM14	2120653	3.106997873	7.74E-07	0.004029415
UNG	3130750	3.086051866	0.00019165	0.019451839
DNAJA3	2000128	3.071799658	0.001061184	0.033024293
CCT6A	360301	3.068586868	7.31E-05	0.013199486
GORASP2	4880411	3.060177679	8.31E-05	0.013206792
DNAJC5	580706	3.05890899	0.000508692	0.026825522
DAP3	6200176	3.049808125	2.48E-06	0.004029415
THOC3	1770471	3.049791086	0.000576606	0.027811477
CSTF1	4060474	3.040737623	1.04E-05	0.005219814
MRE11A	5870193	3.039306112	9.66E-06	0.005171009

CDCA4	4920468	3.017826397	0.002368766	0.044614928
SQLE	6450056	3.015403629	0.000276516	0.021638005
1110032N12RIK	2370138	3.011612972	3.59E-05	0.009943256
TMOD3	990692	3.003397381	9.53E-05	0.013798175
NCL	460497	2.998724428	0.000715543	0.02973996
ZFP535	4180647	2.995525266	9.69E-05	0.013798175
TMEM32	6250523	2.963064665	0.000504313	0.026825522
LEPROTL1	4050039	2.959310469	0.000120099	0.015823309
4921506I22RIK	2340670	2.9567197	0.002119368	0.042737922
PRNP	6770379	2.954756709	1.88E-05	0.007307766
1500001M20RIK	3390152	2.941171777	0.00025207	0.020825279
3010031K01RIK	2490274	2.939761347	0.002261816	0.04397917
SEC24C	620048	2.939463847	2.07E-05	0.007638987
CLEC9A	4060609	2.927288814	0.000936018	0.032127841
DAP3	6100014	2.915590158	2.27E-05	0.007963067
NCL	630088	2.909840397	0.000724373	0.02973996
STAG2	5080192	2.880714378	0.000138261	0.016548269
2310010I15RIK	6650040	2.872344731	0.002244274	0.043799351
GORASP2	5050162	2.823205009	0.000516122	0.026833442
COPS5	70731	2.813972829	2.24E-05	0.007963067
ZCCHC8	5050338	2.8099914	0.003140928	0.05023221
ARMC8	2470259	2.796101506	0.001015537	0.03284073
TUBB2B	1030133	2.793557148	0.000503375	0.026825522
GPIAP1	1510201	2.787862245	2.43E-05	0.008034779
9430023L20RIK	1410730	2.787116536	6.19E-05	0.012802582
BC003965	4860382	2.76645327	8.76E-05	0.013210252
ING1L	160176	2.761264963	1.01E-06	0.004029415
GART	4250681	2.751244246	0.002021601	0.042000222
SEC15L1	4830703	2.74376367	9.65E-05	0.013798175
COPS5	2970563	2.74314621	7.01E-05	0.013097542
2310033F14RIK	3710136	2.732256128	8.81E-06	0.005171009
NAP1L1	1110273	2.710018378	0.001076824	0.033112865
HIST1H2AG	7160253	2.70662986	0.003358978	0.051594029
ADK	6380095	2.704719441	0.000443561	0.026482524
RAB35	3850239	2.699575318	0.000148977	0.016983041
APG3L	3120253	2.692980574	0.00212825	0.042737922
1300006C06RIK	2000274	2.68777237	0.000940964	0.032127841
ZMYM2	6560040	2.684658467	0.000213023	0.020382728
2700084L06RIK	4780681	2.681163141	0.000277285	0.021638005
CPEB2	2370707	2.675935868	0.001034602	0.032893064
SNORA65	360097	2.672038022	0.000144189	0.016962953
ZFP236	4490025	2.650267777	0.002277109	0.044036394
1700027M01RIK	1010356	2.648440181	0.000351556	0.023965141
ZDHHC3	3140735	2.64148159	0.00246577	0.045231422
1110007A13RIK	7200491	2.641290918	0.001596494	0.037966801
BCAP29	2760349	2.636381325	0.002141752	0.042891582

ALS2	5910681	2.625945599	0.003379383	0.051856164
GAPVD1	460767	2.620841507	0.000244436	0.020825279
1500003D12RIK	3390259	2.619110071	0.000140617	0.016669074
ILF2	4220546	2.607180152	0.000508102	0.026825522
SNX2	4560528	2.60535632	2.43E-05	0.008034779
5330401P04RIK	6480711	2.603367526	3.95E-05	0.010213738
1110007L15RIK	5270747	2.601645847	9.43E-05	0.013798175
BC027231	6520154	2.59332074	0.000194003	0.019562808
A430106J12RIK	3400440	2.591279715	0.000814368	0.030857191
MFAP1B	4390075	2.580877361	0.000732996	0.02973996
TRIM59	5220056	2.571679232	4.21E-06	0.004702891
A130062D16RIK	1940097	2.570031538	8.00E-05	0.013206792
TIMM17A	2350204	2.566967661	6.17E-05	0.012802582
CSNK2A2	7320390	2.561250908	0.001275905	0.035246596
GAPVD1	4220088	2.55321872	0.000705109	0.02973996
5730538E15RIK	2680528	2.543191145	0.002104385	0.042661874
KPNB1	3800452	2.52680205	0.001120137	0.033931407
LLGL1	770259	2.521236398	0.002385487	0.044614928
TMEM160	4780239	2.507748972	0.000690469	0.029666179
RAB2	3190735	2.504697136	0.002005553	0.041804347
1110018G07RIK	3420075	2.502676967	0.000464933	0.026510944
SET7	4480411	2.502618605	0.001536438	0.037230513
TRIM59	7570196	2.499877051	5.22E-06	0.004702891
CHIC2	4540154	2.498528306	0.00040363	0.025583555
PSMD7	5290474	2.497417326	0.001808387	0.040277867
NCK2	3120091	2.487636011	0.001889091	0.040857513
AKAP9	730725	2.486431678	0.003781417	0.054951571
1700041B20RIK	4040689	2.480267097	0.001667064	0.038789663
ZDHC3	5360414	2.47165525	0.001437575	0.036717267
1110001J03RIK	4120017	2.468082539	8.18E-06	0.005171009
CLSPN	7570278	2.464861562	0.000841912	0.031139335
PPP2R5C	4250372	2.463793809	0.00012207	0.015929677
0610012D17RIK	5910372	2.459112312	0.002592052	0.046218029
DDX26	5310288	2.455370332	0.002670124	0.046484704
AGGF1	4730646	2.45472579	0.002376968	0.044614928
2810403A07RIK	730300	2.442711315	0.00105039	0.032910939
2810025O06RIK	2570176	2.432058561	0.000160399	0.017791652
POLR2H	1660593	2.429503797	0.002734697	0.04687319
PPA1	2000669	2.42824319	3.25E-05	0.009352701
CDC42EP3	4150739	2.421698866	0.000560887	0.027726514
A530060O05RIK	6280521	2.415190831	0.000793391	0.030655513
2410017I18RIK	5340373	2.404179828	0.003708358	0.054430143
SLC25A38	6660079	2.403647773	0.001000494	0.032751135
LOC381297	5870692	2.375704315	0.001947075	0.041193639
2810037C03RIK	4200047	2.367064336	8.26E-05	0.013206792
1700027M01RIK	780121	2.366428084	0.00062054	0.028425878

1110032N12RIK	1430647	2.358719363	0.000125021	0.016031069
PPT1	990064	2.355083182	0.000135821	0.016548269
CCNG1	3710014	2.351081007	0.002696996	0.046500524
ZFP236	4730086	2.350235483	0.002645355	0.046307432
1300006C19RIK	620113	2.339339129	7.02E-06	0.005171009
2610318C08RIK	1990270	2.335067848	0.003561274	0.053278436
TAPBPL	6480131	2.32631326	2.31E-05	0.007963067
AW742319	4150669	2.313375169	0.001138432	0.034139166
NUDC	2900291	2.307457096	3.20E-05	0.009352701
1110034O24RIK	1110563	2.298320058	0.000224448	0.020382728
POM121	7210280	2.284839854	0.000759182	0.03030678
CHCHD7	7570025	2.279704377	0.001199322	0.034617619
STK2	6560477	2.276121957	0.001109382	0.033713499
CHIC2	110138	2.275894351	0.000207868	0.02030178
TRAK2	730092	2.274081731	0.0006015	0.028050135
APPBP1	4280592	2.272946923	0.000660679	0.029566804
ARL6	870753	2.272517905	6.66E-05	0.013023529
NPN3	610463	2.256103668	1.42E-05	0.006152415
9430008C03RIK	6100470	2.255502886	0.00211342	0.042737922
CLSPN	2600019	2.254146589	0.00094307	0.032127841
AXIN	290632	2.249073876	0.000159593	0.017791652
DDX1	780097	2.247306732	0.003786347	0.054951571
EXOSC7	6520192	2.245708132	0.002291432	0.044183111
LSM8	6380626	2.242359597	0.003182687	0.050381185
SIAT10	4150670	2.239562542	0.000201109	0.019891888
SNRK	5890564	2.226101947	0.00049627	0.026758961
D7WSU128E	3800437	2.225098934	0.00035359	0.023965141
NUP85	1300477	2.223604199	0.000232268	0.020678502
NFE2L1	1850564	2.211875974	0.000777329	0.030552571
SMPDL3B	3440132	2.192860985	0.001123313	0.033937596
MSH6	7610338	2.184746218	0.002614659	0.046218029
BFAR	4200753	2.184107483	0.001396154	0.036488559
PPIH	3830592	2.182142092	0.00021936	0.020382728
1810046J19RIK	7040286	2.180396901	0.00013789	0.016548269
VAMP3	5700168	2.170137288	0.001537375	0.037230513
HRB	3780463	2.165401457	0.000827932	0.030906155
2700023B17RIK	7570291	2.160565087	0.000624186	0.028508766
2810012G08RIK	6760521	2.15647428	0.000414466	0.025908718
CARD10	7330196	2.152555451	0.000700379	0.029693712
MSN	1780474	2.133691138	0.000529039	0.02684941
CSNK2A2	7160477	2.131988206	0.001149111	0.034139166
SMARCD1	1230379	2.127987162	9.18E-05	0.013579189
AV340375	2350170	2.12705003	0.002100982	0.042648564
BC037674	6380475	2.122930514	0.003291787	0.051183082
LOC654842	6510152	2.115104879	0.000247402	0.020825279
1200015F23RIK	5310722	2.110474636	0.001053134	0.032910939

ZDHHC13	7200296	2.105892174	0.002899649	0.048470024
SFXN1	2900592	2.102034842	0.002387835	0.044614928
MSH6	1230315	2.098412996	0.003314231	0.051415283
1700022N24RIK	5820242	2.09783482	0.001053303	0.032910939
DARS	3450689	2.094332065	0.000327516	0.023118185
NUDT5	1690291	2.084218385	0.001070225	0.033112865
MRPL17	6350332	2.074448482	8.59E-05	0.013206792
CHD9	6900048	2.067016967	0.000224349	0.020382728
PYCR2	4260019	2.064195332	0.00129267	0.035343227
2010007E07RIK	7000112	2.064079867	0.002046387	0.042146347
C430003P19RIK	2320369	2.061280589	0.001767133	0.040047011
ITGAE	7100687	2.060781733	0.002776832	0.047337924
5930412E23RIK	4230377	2.059077239	0.000529069	0.02684941
GPS1	620682	2.057534292	0.000758188	0.03030678
TRAPPC1	4570037	2.054697841	0.000385117	0.025022936
BC006933	4220139	2.053656919	0.003099009	0.050077534
IFT20	4610167	2.050486538	0.003151026	0.050238486
BFAR	630674	2.033607126	0.001417045	0.036488559
SATB1	70386	2.030291986	0.00051016	0.026825522
3632431M01RIK	2470164	2.027279292	8.93E-05	0.013341198
MFN2	2450066	2.019207195	0.000783046	0.030552571
GPR18	2750543	2.006465944	0.002631671	0.046218029
ITGAE	520196	2.00005905	0.002194322	0.043188367
LOC382790	780328	1.99999068	0.001499709	0.037230513
1700037H04RIK	5690228	1.998030583	0.000574926	0.027811477
SNAPC3	6860082	1.995709436	0.00030884	0.022789886
1810008O21RIK	4760041	1.990705229	0.000492416	0.026728748
RG9MTD1	10739	1.984292187	0.000489615	0.026728748
ARL6IP1	4280072	1.983775589	0.000563211	0.027726514
1200003I07RIK	2850082	1.981885391	0.001254651	0.034981409
4832412D13RIK	7510427	1.973540055	0.001513883	0.037230513
1110032A13RIK	3710678	1.956419473	0.00140914	0.036488559
DENR	2350139	1.955840021	0.000492544	0.026728748
4931406P16RIK	1440142	1.949272078	0.000171138	0.018525489
1300007B12RIK	7400475	1.948160686	0.002036503	0.042054333
MRPS15	5090332	1.947303619	0.000721797	0.02973996
CANT1	5910113	1.939604541	0.001282089	0.035246596
BCAS1	6560347	1.934884517	0.000290122	0.02241447
CKN1	4570209	1.929947776	0.00293007	0.048791504
1810030A06RIK	5870504	1.929526286	0.00052383	0.026846722
MTCH1	2650538	1.912693954	9.13E-06	0.005171009
TRAF6	5220482	1.910848676	0.000575202	0.027811477
8430410K20RIK	2570494	1.90889775	0.001499421	0.037230513
MKI67IP	6200603	1.907022924	0.003759237	0.054814266
PSMD13	4230215	1.906932967	0.000150921	0.016983041
A630056H20RIK	1050440	1.905022065	0.001401528	0.036488559

2610529H08RIK	5260528	1.904532434	0.000560017	0.027726514
CDC27	1190630	1.900369267	0.000120236	0.015823309
LOC380692	6860307	1.898023022	0.00162569	0.038192652
PUM1	7560131	1.892042689	0.001512235	0.037230513
MYNN	6330170	1.887977715	7.12E-05	0.013097542
ANKRD10	3390450	1.879878502	0.001841525	0.040391297
CRBN	5290754	1.879471713	0.003772328	0.054951571
GTF2H1	5890605	1.874594376	0.000498602	0.026791681
4632411B12RIK	1660520	1.874082206	0.001450953	0.036937452
1200008O12RIK	3710050	1.871868203	0.000112548	0.015329694
CD47	4060767	1.869250947	0.000431699	0.026482524
DHX30	1260692	1.867253371	0.001607543	0.038112264
RIPK1	1300402	1.861399385	0.00029349	0.022562441
1600002K03RIK	460632	1.855330877	0.001326338	0.035543887
1600010D10RIK	5080528	1.851705809	0.002393151	0.044614928
HPRT	4060703	1.844176336	0.002540786	0.04587892
SLC25A20	1090037	1.843810793	0.00095472	0.032127841
ST7L	4640468	1.842511302	0.002389232	0.044614928
RBBP6	7000373	1.839277622	0.002768757	0.047300358
SCL0003903.1_2	6100286	1.834404922	0.002812217	0.047571804
5530400K22RIK	7050594	1.831095011	0.002487936	0.045453129
FKBP1A	1340491	1.828270114	0.001275599	0.035246596
6030457N17RIK	3710079	1.823795168	8.13E-05	0.013206792
FBXO4	5910300	1.812221113	0.002970356	0.04896673
RPO2TC1	610278	1.810603887	0.001282396	0.035246596
SCP2	6100408	1.801779074	0.002607956	0.046218029
RPIA	6250291	1.79689078	0.00019107	0.019451839
AW549877	4010021	1.79262748	0.002334077	0.044418975
BCAS2	7510253	1.790359061	0.000149488	0.016983041
RABGGTB	4880040	1.776157463	5.38E-05	0.012281718
PHF12	4200471	1.757655709	0.000908714	0.032005917
WDR45L	1260341	1.757025567	0.001651049	0.038555102
E030003N15RIK	6330575	1.754644742	6.35E-05	0.012802582
GOSR2	2100129	1.753655645	0.003043993	0.049601435
FNTB	2690102	1.747512132	0.002831115	0.047683711
TRPS1	6940181	1.73970337	0.000367299	0.024375155
ARF3	5570280	1.73913887	7.44E-06	0.005171009
SRI	7650451	1.738845253	0.000996638	0.032751135
PSMC2	4640128	1.736625528	0.001241312	0.034978245
BC017643	240487	1.730585307	7.60E-05	0.013206792
NMT1	360050	1.726819205	6.30E-05	0.012802582
SCL0002883.1_98	6980102	1.720565617	5.13E-05	0.012281718
RSN	6900091	1.716905672	0.000983857	0.032715868
NSMAF	2490369	1.712438199	0.000354948	0.023965141
PIGA	7160458	1.712303953	0.003350838	0.051594029
SRP72	1240070	1.710541058	0.000610358	0.028125352

MCM6	270379	1.701435601	0.000486002	0.026684382
VRK1	3610731	1.700328862	0.000174172	0.018525489
SFRS7	5700541	1.69987712	8.53E-05	0.013206792
VTI1B	4260739	1.698083344	0.003248677	0.050958285
B930004C15RIK	5570537	1.697251001	0.000800325	0.030762103
CHD9	6290731	1.693052367	0.001324548	0.035543887
SBK	60639	1.683008645	0.00092046	0.032005917
D19WSU12E	6290356	1.682117665	2.63E-05	0.008514786
PCBD2	3310538	1.681636161	0.000957897	0.032127841
RAB32	1780619	1.681441321	0.001088755	0.033347694
NRG4	5860500	1.680274717	0.000316249	0.023027539
2310051F07RIK	5340609	1.677825522	0.002821775	0.047621887
BC016198	7200386	1.672077861	0.002629827	0.046218029
D19ERTD721E	6040037	1.669082586	7.92E-05	0.013206792
CDCA4	7160066	1.667061768	0.000723203	0.02973996
ICSBP1	4610373	1.665711932	8.69E-05	0.013210252
1810059G22RIK	130382	1.665060133	0.00092241	0.032005917
PCNA	6350240	1.664912788	0.002399291	0.044674562
LOC385662	1300204	1.659912458	0.000694399	0.029666179
GOSR2	4670156	1.658061429	0.002719207	0.046682774
NSMAF	2970554	1.654052227	0.000878648	0.031642257
PUM1	7320441	1.650493075	0.001188158	0.03455225
MFNG	7320731	1.649576188	0.00195233	0.04119959
SCL000121.1_106	3060360	1.632749223	0.000458566	0.026510944
TNFRSF13C	2710520	1.627977098	0.00158698	0.037914165
BC010304	3130142	1.623573116	3.90E-05	0.010213738
GABARAPL2	5910189	1.623533389	0.001606674	0.038112264
ATP1B3	4480603	1.622370897	0.001924931	0.04101185
TANK	7000209	1.621765691	0.003438377	0.052296336
1200011O22RIK	4230470	1.617173545	0.001469091	0.037028921
3930401E15RIK	7610139	1.61654966	0.002381925	0.044614928
PACS1	6100162	1.61079687	0.003178424	0.05036505
2900036G02RIK	4780711	1.61052384	7.80E-05	0.013206792
1110019J04RIK	5130609	1.609218218	0.000947682	0.032127841
PIGF	3840561	1.608845114	0.000309062	0.022789886
TOP2A	4250403	1.592539033	0.001585021	0.037914165
POLE	4060441	1.589305074	5.29E-05	0.012281718
PRDM2	6840170	1.585512334	0.002768065	0.047300358
STAG2	4860500	1.58220418	0.003400425	0.05192251
TRAK2	6510431	1.564147899	0.002185739	0.04314639
PSMD10	6510136	1.562916861	0.003134111	0.05023221
BCAP31	3610424	1.56091668	0.002144826	0.042891582
PRC1	780475	1.550765124	0.003444997	0.052345751
SEPT15	2680487	1.545871399	0.002438914	0.045079716
ZFP68	1070053	1.541035777	0.00037893	0.024801994
WASF2	1240270	1.526620565	0.001986855	0.041582038

2410118P20RIK	5270309	1.522651149	0.001229528	0.034905548
DNAJC19	2070543	1.518436125	0.002529811	0.045799999
EIF3S6IP	630600	1.517986118	0.00352476	0.053090197
ZFP597	2120689	1.517972187	0.002802138	0.047452995
H2-OB	6760167	1.516123419	0.002406415	0.044701412
LOC245828	4280482	1.514265137	0.000138533	0.016548269
IARS	4230093	1.508950957	0.002493433	0.045500026
2810474O19RIK	4920647	1.506039291	4.18E-05	0.010651737
AA408296	4920746	1.503231935	0.00284069	0.047741421
AKAP8	6560484	1.501221136	0.00327174	0.051137294
NDUFV1	70286	1.499591868	7.98E-05	0.013206792
CD209E	6020630	1.497545377	0.001527158	0.037230513
EIF2B1	2510079	1.497417543	0.000824723	0.030860554
A930006D20RIK	3400152	1.495379148	0.00110212	0.033624394
ASE1	1190328	1.489289979	0.002265654	0.04397917
1110014J01RIK	7150386	1.483151612	6.14E-05	0.012802582
LAMP2	5270358	1.480219716	8.50E-05	0.013206792
8030462N17RIK	3180274	1.479888093	0.001840874	0.040391297
MAPRE2	6860543	1.476715609	0.000468167	0.026510944
VTI1B	4780437	1.454807189	0.001480856	0.037150589
MCM5	6220270	1.453373207	0.000952897	0.032127841
HEATR3	6370678	1.452558742	0.000888483	0.03171941
IARS	4220270	1.449072774	0.001958558	0.041267904
MAN2A1	3400050	1.435789337	0.00181945	0.040372329
PNPT1	10372	1.435198364	0.000674536	0.029607403
ZC3HDC5	3190609	1.433111621	0.00012596	0.016031069
SRI	2370632	1.418975252	0.001017219	0.03284073
PPM1M	4180575	1.413103273	0.002275989	0.044036394
3010027N08RIK	6350139	1.411132951	0.001712721	0.039287459
D930036F22RIK	1190110	1.409300995	0.003543119	0.053263409
AP3M2	3180475	1.39816078	0.00296679	0.048959913
1700001A24RIK	3450544	1.391424365	0.003399139	0.05192251
DCUN1D4	6960148	1.389193172	0.000246102	0.020825279
5730527J01RIK	4060014	1.38321641	0.00218941	0.04314639
4930562C03RIK	2450707	1.382839049	0.000226666	0.020464539
SDC3	6760762	1.381532242	0.002203022	0.043304721
QARS	3890224	1.38120046	0.000860045	0.031351248
1110054N06RIK	6130575	1.38060185	0.000603681	0.028062672
NXT1	6370097	1.372318282	0.003043179	0.049601435
DHODH	6060215	1.355028606	0.001308496	0.035400073
GOSR2	4280020	1.354380639	0.002717866	0.046682774
DMWD	630053	1.353753	0.000921447	0.032005917
RBM18	5900017	1.351363236	0.000323718	0.023059718
4933434E20RIK	110594	1.342276209	0.000522419	0.026846722
TMEM23	3800228	1.337127475	0.000256517	0.020965528
QARS	5340487	1.335472686	0.000130708	0.016369024

RAB6	5870184	1.332614482	0.001911194	0.040992997
UBE2N	6480368	1.326114563	0.000730687	0.02973996
B230114J08RIK	1010669	1.325550686	0.001127722	0.034004657
2610021K21RIK	2350470	1.323288401	0.000493989	0.026728748
LOC384710	4280519	1.319609384	0.000380119	0.024801994
SLC25A5	5870092	1.317449493	0.00130344	0.035386568
TEX292	4040343	1.316732057	0.001143026	0.034139166
FRAP1	1850403	1.316626171	0.000762425	0.030358219
G630041M05RIK	10609	1.314847314	0.001507003	0.037230513
PELI1	2970592	1.314033396	5.70E-05	0.012374876
B230114J08RIK	160717	1.311026262	0.000634259	0.028799438
ZFX	4670138	1.310572425	0.000350508	0.023965141
IVNS1ABP	650168	1.308689786	6.87E-05	0.013097542
4732471D19RIK	3390608	1.3072259	0.000401929	0.025580177
KLF3	580465	1.3057029	0.00363007	0.054088181
RALB	1230747	1.300476226	0.000213147	0.020382728
1500012F01RIK	2760615	1.299968324	0.001043413	0.032893064
FBXO25	830176	1.299045985	0.000306733	0.022789886
ACADL	7160202	1.295932965	0.002217958	0.043543191
6330439P19RIK	5340446	1.293730056	0.000134097	0.016548269
2610028H07RIK	4120685	1.29321842	0.000181804	0.018834095
MAP3K7IP3	4390255	1.285336194	0.002543801	0.045880015
SCL0003876.1_26	3120138	1.284634119	0.002187351	0.04314639
GOLGA3	4540482	1.283808317	7.00E-05	0.013097542
BC005537	4900725	1.282862108	0.003281432	0.051162
2700033B16RIK	4010670	1.279611333	0.002817485	0.047609053
PDIR	2900333	1.271203887	0.000221162	0.020382728
PPP2R4	1510088	1.268920465	0.000312286	0.022874934
E130306D19RIK	2710703	1.268031717	0.00026176	0.021249043
IER2	1660538	1.26451768	0.002084481	0.042487401
GMFB	7610669	1.252778268	0.000444108	0.026482524
NUCB2	6510706	1.250681739	0.000410208	0.025894827
FXC1	3420632	1.247054722	0.000830104	0.030912915
DDX50	2350487	1.243473606	0.00244106	0.045079716
CTSC	1710754	1.24247914	0.001668587	0.038789663
D8ERTD587E	3140471	1.230884702	0.002570865	0.046218029
3110040M04RIK	1240707	1.220741192	0.00026883	0.021558958
PSMD4	1440750	1.209702551	0.002308636	0.044321112
TOR2A	6290554	1.207470437	0.002355597	0.044614928
BC008163	1400685	1.203994888	5.32E-05	0.012281718
RRM1	2340243	1.193595612	0.001682591	0.038998434
LOC223594	3850008	1.193248906	0.000281514	0.021858164
OAZ2	5560180	1.193047715	0.001821356	0.040372329
6430706D22RIK	1710332	1.192735114	0.002446745	0.045115315
GAB3	270431	1.192506898	0.000847769	0.031270791
TCE4	2060050	1.191785884	0.003423043	0.052216539

GAB3	4830487	1.19098267	0.002693204	0.046500524
C920005C14RIK	6060315	1.179308049	0.00014687	0.016983041
PCBP2	4220670	1.176502994	0.002652626	0.04633591
LOC218814	4390026	1.17383011	0.002173957	0.043115418
SLC25A14	6290747	1.172368934	0.002120497	0.042737922
COMMD9	290309	1.170750625	0.003135089	0.05023221
6430540M20RIK	460242	1.170019965	0.001856086	0.040574763
2310079N02RIK	7150349	1.169882499	0.001332123	0.035543887
NPM1	6840433	1.166707665	0.000923347	0.032005917
POLDIP3	580356	1.160822134	0.002156954	0.042891582
OSBPL2	6270022	1.16036914	0.002629853	0.046218029
2010205O06RIK	4060377	1.157438178	0.00060719	0.028062672
SMC6L1	1820296	1.157082561	0.002036281	0.042054333
WBSCR5	6370553	1.151802711	0.002026241	0.042010008
HTATIP2	2710152	1.15177063	0.003169323	0.050354491
APEX1	6550382	1.147524347	0.000221818	0.020382728
AGPAT4	7570315	1.145467646	0.000715834	0.02973996
H2-T23	2350181	1.143050144	0.001619351	0.038154585
DFNA5H	6840435	1.142096359	0.000586451	0.027811477
2700029M09RIK	2490762	1.141138175	0.003025442	0.049463765
ARHGAP6	7550333	1.133781931	0.001197584	0.034617619
AVPI1	7040133	1.13290235	0.001278207	0.035246596
MORF4L1	510438	1.130821471	0.000416987	0.025908718
EIF2S3Y	6960730	1.124824759	0.002863043	0.047965319
SLA	110064	1.124240259	0.002087571	0.042487401
ZFP715	3400600	1.122546992	0.000167288	0.018320899
ARMCX3	4570168	1.121757053	0.003503369	0.052962379
PCBP2	2680170	1.121161207	0.002502599	0.045542242
CRIP1	4860035	1.120965849	0.000304937	0.022789886
D930015E06RIK	990671	1.117790525	0.002622387	0.046218029
DNAJC15	1450066	1.115185906	0.000148591	0.016983041
FER1L3	1710162	1.109849911	0.003210783	0.050623905
BCAP31	1500274	1.102454336	0.001650929	0.038555102
ARAF	3360403	1.097232278	0.000750634	0.030276884
QDPR	4780463	1.092135684	0.003341705	0.051594029
CUL1	4640367	1.090966831	0.002837876	0.047741421
AP1S3	6840338	1.090657041	0.001885031	0.040826572
STK4	6550754	1.082455672	0.003155874	0.050264171
PABPC1	5290403	1.080980256	0.002963299	0.048959913
THTPA	4560379	1.07769117	0.001148332	0.034139166
AI850995	3370196	1.07761838	0.003652794	0.054090546
6230401I02RIK	4640685	1.065967675	0.001502892	0.037230513
FPGS	4670270	1.053224177	0.000274403	0.021638005
MGAT4A	5310240	1.052180286	0.001875513	0.040734043
TIRAP	780619	1.05117106	0.003124261	0.050224278
D17H6S56E-5	3170494	1.048857184	0.000569657	0.027811477

GTF3A	3940605	1.046548309	0.001154176	0.034139413
MAK3	5900059	1.037588255	0.002931449	0.048791504
MPP6	2810673	1.032211333	0.000520743	0.026846722
9030624J02RIK	1190647	1.029083409	0.003560563	0.053278436
BICD2	5810181	1.027838358	0.002289908	0.044183111
PYCRL	1660682	1.024621507	0.00091103	0.032005917
LOC235857	4560646	1.024444056	0.000317335	0.023027539
BC035537	50576	1.020842819	0.000858617	0.031351248
BC023823	870048	1.019907619	0.002675275	0.046500524
6430604K15RIK	5960450	1.019363284	0.001211979	0.03484655
CCT4	670561	1.017323581	0.000905568	0.032005917
RALA	1340326	1.011673604	0.001860934	0.040574763
IVNS1ABP	1450482	1.005961136	0.000516659	0.026833442
AHSA1	6110240	1.001825724	0.00057283	0.027811477
D030026J11RIK	1070603	0.996664823	0.001140523	0.034139166
SNIP1	1580537	0.995594519	0.002293231	0.044183111
HNRPM	6840754	0.985489884	0.00279376	0.047414533
CAT	4760356	0.984430702	0.003394266	0.05192251
HNRPM	6130692	0.968935515	0.000645635	0.029061044
4933434E20RIK	2120201	0.951699158	0.001920457	0.04101185
NUDC-PS1	2140092	0.94882745	0.002603426	0.046218029
ITGAE	6450471	0.945898596	0.001656571	0.03862596
LRRC59	5090360	0.945298516	0.001793412	0.040277867
MPHOSPH6	4040593	0.935706211	0.000589219	0.027811477
LOC245251	4040500	0.929159517	0.002383943	0.044614928
4933434I06RIK	6110259	0.918093893	0.0017153	0.039287459
PDHB	3440187	0.914153242	0.00058385	0.027811477
IGF2R	4150008	0.905698064	0.003254996	0.05099809
SLC15A4	6020368	0.904552238	0.003057333	0.049766579
1700091G21RIK	2510619	0.896948749	0.003631757	0.054088181
D11ERTD603E	4540424	0.894415082	0.002384113	0.044614928
BCAP37	7000019	0.892326445	0.003460191	0.05247393
LOC244710	1780047	0.879729142	0.00211745	0.042737922
DCK	2190671	0.867697531	0.00240649	0.044701412
1190002H09RIK	940379	0.865991004	0.001225393	0.034905548
TIMELESS	3850070	0.851786922	0.002479607	0.045407799
E430030L01RIK	5910593	0.846637523	0.000636646	0.028823549
CCM1	4150332	0.827219971	0.001228838	0.034905548
UCP1	2630639	0.805032007	0.003120932	0.050224278
CENPI	6110646	0.801424359	0.001905559	0.040941154
A130038L21RIK	2320653	0.797804528	0.001862954	0.040574763
OTUB2	4880673	0.787091925	0.001915446	0.04101185
NPAT	7210088	0.7849419	0.002130153	0.042737922
ORC1L	3440392	0.783157893	0.003343803	0.051594029
2610510D13RIK	5220576	0.780021761	0.002681656	0.046500524
9830002I17RIK	6270634	0.779396075	0.003780158	0.054951571

BAT1A	4120390	0.770279632	0.003109303	0.050191654
SURF6	1570215	0.757487245	0.002622213	0.046218029
PAPD1	2360475	0.754079739	0.001803863	0.040277867
CAML	4230497	0.752230887	0.001462931	0.036992482
TNFSF4	870451	0.706450031	0.001721029	0.039360623
A830007F21RIK	4010403	0.697210896	0.00347019	0.05257423
G630041M05RIK	4290494	0.678412821	0.002610414	0.046218029
CMTM8	3830427	0.674544506	0.002963266	0.048959913
LRRK2	7200767	0.666454107	0.003336917	0.051594029
COQ5	3780408	0.644722428	0.00335745	0.051594029
OLFR1331	4860204	-0.606559372	0.003557142	0.053278436
G630008F16RIK	5890079	-0.640115381	0.00345328	0.052420311
4930500E24RIK	4390349	-0.669614271	0.002677236	0.046500524
LOC333749	4390446	-0.671327175	0.003521675	0.053090197
BCL11A	1570022	-0.672418724	0.002801372	0.047452995
ELMO1	3800195	-0.679220887	0.002016796	0.041982342
WBP2NL	6940500	-0.682556962	0.003357333	0.051594029
D230040N21RIK	4230349	-0.683411713	0.002452014	0.045115315
A130041O12RIK	6370021	-0.690763546	0.00317385	0.050354491
NOL3	6020603	-0.693925676	0.002367299	0.044614928
IL17	20347	-0.69415717	0.002385045	0.044614928
LOC384196	2490482	-0.697803746	0.003648168	0.054090546
A830081I21RIK	1340369	-0.699195185	0.002863278	0.047965319
CACNB1	20100	-0.702310322	0.003174515	0.050354491
A830006F12RIK	4230601	-0.705084793	0.001415448	0.036488559
B230353G19RIK	3710102	-0.705537124	0.001465025	0.036992482
D10BWG1379E	3850709	-0.713484051	0.001714055	0.039287459
2810481F14RIK	4880475	-0.7147629	0.001378348	0.03621721
TCP10A	630113	-0.716868987	0.002485191	0.045453129
IGKV6- 15_Y15976_IG_KAPPA_VA RIABLE_6-15_15	6840279	-0.720995988	0.001472806	0.037028921
TMPRSS4	2140274	-0.728876961	0.001646111	0.038555102
U2AF2	3440431	-0.730136326	0.002633972	0.046218029
LOC229494	7650709	-0.731362314	0.003656871	0.054090546
9330161C17RIK	4480338	-0.731691351	0.00158415	0.037914165
ASAH3	3830753	-0.731881035	0.0014145	0.036488559
EVX1	1500066	-0.733684796	0.001894559	0.04089883
ACYP1	1820576	-0.734968544	0.002941753	0.048806068
A930012E17RIK	4050577	-0.73539121	0.002598791	0.046218029
RAI3	2690221	-0.73700373	0.003357467	0.051594029
OLFR1436	1820255	-0.739246748	0.001340003	0.035692812
LOC384349	1570731	-0.741218895	0.002390719	0.044614928
SLC2A10	4900682	-0.742355433	0.001140546	0.034139166
SPACA4	6520291	-0.743281536	0.003654574	0.054090546
2610007K22RIK	1820097	-0.743693141	0.00347449	0.052588061

BCHE	2760327	-0.744017873	0.001151969	0.034139166
ALDRL6	3850349	-0.745909694	0.00197154	0.041424292
BC024063	5310349	-0.745923795	0.003212245	0.050623905
GPRC5A	6060026	-0.749312579	0.001360178	0.036044707
OLFR168	7040431	-0.750442236	0.001150027	0.034139166
FOXN4	60136	-0.751245407	0.001829367	0.040391297
NEUROG1	4610541	-0.753049919	0.001878155	0.040734448
MYRIP	6960372	-0.75664471	0.001080064	0.033146857
FMO2	6380021	-0.758926921	0.001509645	0.037230513
LOC243428	7200672	-0.760581275	0.001034579	0.032893064
4833424O15RIK	7000669	-0.761755386	0.001003549	0.032751135
PDE1A	5910731	-0.762234145	0.001832375	0.040391297
DNAHC8	3850112	-0.767393788	0.001556684	0.037536877
ADRB3	7560349	-0.769221612	0.001300167	0.035359523
SEMA4A	4490554	-0.770357914	0.00321432	0.050623905
2310016G11RIK	4780603	-0.771394119	0.003506042	0.052962379
ACAT3	4730328	-0.780686055	0.001375207	0.03621721
IL13	5270719	-0.782808417	0.002129509	0.042737922
AA792892	1440674	-0.783626414	0.003083168	0.049925454
4432405B04RIK	5960047	-0.783890204	0.001866459	0.040594167
BTD	1510521	-0.785066873	0.0021512	0.042891582
SDS	4290259	-0.785806572	0.002507477	0.045542242
LOC384410	3390709	-0.788778189	0.002591572	0.046218029
A930013K19	6960204	-0.789732478	0.001418371	0.036488559
LOC229048	3360014	-0.792052274	0.003725965	0.054531797
LOC232993	4880047	-0.793407325	0.001672909	0.038831995
FOSL1	3840253	-0.794629429	0.001308361	0.035400073
GJB5	6060097	-0.804206473	0.002245108	0.043799351
9630019K15RIK	4670424	-0.804770945	0.000725155	0.02973996
BTBD14B	160196	-0.805102878	0.003436743	0.052296336
D2ERTD217E	7050603	-0.806038852	0.002659539	0.046404479
5330403J18RIK	5960500	-0.808606898	0.000921146	0.032005917
1700020N15RIK	2600709	-0.81055303	0.000642748	0.029015203
RAB39B	2350746	-0.810980878	0.000672077	0.029607403
PKP1	3940070	-0.812051569	0.001621613	0.038154585
MAT2A	4070296	-0.812069004	0.00109643	0.033516668
ALDH18A1	4150168	-0.815019143	0.002965587	0.048959913
FBXO36	3400091	-0.815318264	0.001702214	0.039219111
D230012E17RIK	5290022	-0.816774844	0.002500606	0.045542242
CART	4050706	-0.817739797	0.001926443	0.04101185
1110049N09RIK	2570014	-0.819261749	0.000997608	0.032751135
MAPK8	1340768	-0.819443136	0.003257783	0.05099809
ABCC6	1050369	-0.823382421	0.000547203	0.027411361
ALDOB	7400133	-0.826771711	0.000913504	0.032005917
SH3MD1	6450767	-0.827799045	0.0008977	0.031900181
CCL11	6060520	-0.827852266	0.001488383	0.037219163

ALOX12B	50196	-0.83136207	0.002264452	0.04397917
NGFR	4050064	-0.831814553	0.001582566	0.037914165
LOC385063	4860632	-0.836034014	0.001297291	0.035343227
D17WSU92E	6330025	-0.836424622	0.002325928	0.044418975
D630043K02RIK	1240082	-0.83678659	0.000781948	0.030552571
ZFP533	2940521	-0.842034443	0.003753482	0.05479759
LMNB1	6380619	-0.842861389	0.000982307	0.032715868
GLIS1	1770376	-0.844526903	0.002435549	0.045079716
LOC381928	2650519	-0.845281157	0.000799829	0.030762103
G430055L02RIK	1500402	-0.845752102	0.000691379	0.029666179
RAPGEF4	2450601	-0.846497102	0.001244869	0.034978245
LRRFIP1	4880500	-0.846642135	0.002129466	0.042737922
B130055N23RIK	2450736	-0.847011674	0.000674122	0.029607403
4931403M11RIK	1820348	-0.848848405	0.002506841	0.045542242
HDAC9	4540369	-0.850671829	0.000957144	0.032127841
PCDHA11	1660278	-0.851851351	0.001042858	0.032893064
A730008L03RIK	150059	-0.851978296	0.000605699	0.028062672
LOC385120	2690538	-0.853065893	0.000663682	0.029607403
PHR1	20563	-0.854578139	0.003081526	0.049925454
ZFP92	1780278	-0.855001878	0.003189912	0.050392814
PXT1	1440369	-0.855696396	0.000943486	0.032127841
9430045C13RIK	4830278	-0.855747666	0.001547843	0.037381726
HLF	380736	-0.856148935	0.000534174	0.026932406
LOC383836	4810709	-0.858979926	0.001245603	0.034978245
BC011209	4480575	-0.865226609	0.001213986	0.03484655
A830020B06RIK	1660088	-0.867127378	0.002344374	0.044560317
TAPBP	20358	-0.867498697	0.001596369	0.037966801
1700073K01RIK	4290377	-0.868047443	0.003655426	0.054090546
BC052486	5890441	-0.869636568	0.000869906	0.031433399
FBXL7	4010592	-0.870004404	0.001797215	0.040277867
LOC328031	4560369	-0.870205303	0.001250958	0.034981409
OLFR593	1820253	-0.871090077	0.001254726	0.034981409
IDH3G	7380719	-0.871454626	0.000802283	0.030762103
5133400O11RIK	7380044	-0.871786498	0.003548689	0.053278436
OLFR66	3390646	-0.872458596	0.002648013	0.046307432
4930428J16RIK	5690468	-0.872554586	0.000691617	0.029666179
2810432L12RIK	2000066	-0.87373348	0.000399928	0.025562738
CNOT6L	2900725	-0.877094474	0.00068414	0.029666179
ZCWCC3	1240672	-0.880774758	0.000400009	0.025562738
UNC119	60278	-0.881645995	0.000865963	0.031419468
LOC383303	5810025	-0.88378761	0.000914551	0.032005917
TNC	4050598	-0.884807219	0.000818817	0.030857191
R3HDM	2190519	-0.885801449	0.000657472	0.029508344
CNTNAP4	3390286	-0.88824987	0.000818182	0.030857191
LOC329360	4010484	-0.890035608	0.000486295	0.026684382
RAD51L3	3290736	-0.89194384	0.002410197	0.044716782

LOC381983	580709	-0.892286418	0.000858874	0.031351248
C030014F05RIK	5260519	-0.894203077	0.003022692	0.049463765
4930564D02RIK	5220561	-0.894676882	0.000354118	0.023965141
B230219J02RIK	4780484	-0.895821891	0.000599111	0.028022884
HOXA4	6770519	-0.895933583	0.002995726	0.049228171
OLFR1113	3460441	-0.898000132	0.002983649	0.049133712
ALX3	730709	-0.902306528	0.000450215	0.026482524
TREX2	4060204	-0.902432856	0.00106879	0.033112865
2010015L04RIK	6100747	-0.902452117	0.003609436	0.053924044
LOC329240	3290709	-0.902815079	0.002697983	0.046500524
1190003J15RIK	6660475	-0.903498005	0.001120923	0.033931407
KHK	20010	-0.904762192	0.002186766	0.04314639
GRIPAP1	7380427	-0.906804487	0.002099692	0.042648564
4933417E01RIK	380070	-0.907220946	0.003397137	0.05192251
TMEM8	2260129	-0.908259238	0.001810416	0.040277867
2310026J01RIK	3940215	-0.908554466	0.001421571	0.036488559
LOC230896	110463	-0.908816583	0.002058804	0.042345909
LOC384723	5720709	-0.909865756	0.00035318	0.023965141
LILRB4	650717	-0.910716344	0.001225344	0.034905548
IL1RL2	2570279	-0.911830194	0.002070151	0.042372186
CHST8	4590113	-0.912481032	0.000740412	0.029942325
ATP5L	1300341	-0.915823297	0.001318063	0.035543887
PALMD	5080279	-0.917118034	0.00037792	0.024801994
CNR1	1440647	-0.917755021	0.000902167	0.031985751
GRINA	2140753	-0.918769418	0.002609877	0.046218029
C030032C09RIK	4010687	-0.919372429	0.001186156	0.03455225
ASS1	7560338	-0.919817172	0.001035638	0.032893064
AA536749	1300674	-0.919996782	0.002712721	0.046682774
6430704M03RIK	670601	-0.920462598	0.001044258	0.032893064
C330016O10RIK	4070017	-0.920598904	0.001027436	0.032893064
3222401M22RIK	6590243	-0.922311415	0.001536715	0.037230513
KCNA10	2650736	-0.923330574	0.001523585	0.037230513
D13BWWG1146E	1170709	-0.923332505	0.002534696	0.045822233
MBIP	7380601	-0.924614005	0.000619932	0.028425878
AW049900	1340296	-0.92616126	0.000297651	0.0227696
1700006D24RIK	6060593	-0.929334002	0.000880253	0.031642257
LOC382044	4760672	-0.930151835	0.002316302	0.04433143
SLCO1A5	20647	-0.932076306	0.000417102	0.025908718
FXYS5	5310672	-0.932648532	0.002023064	0.042000222
A130022L12RIK	6280762	-0.933002948	0.001803775	0.040277867
D030011O10RIK	2690348	-0.933234716	0.000858599	0.031351248
FOXG1	7650494	-0.936088402	0.002692787	0.046500524
E230022H04RIK	1820327	-0.937411235	0.000273976	0.021638005
D5ERTD579E	2070538	-0.937687748	0.000820659	0.030857191
9630028B13RIK	4220458	-0.939491901	0.001199005	0.034617619
D15ERTD735E	6620397	-0.940401612	0.00051297	0.026825522

C030016K15RIK	3710477	-0.94122072	0.00366925	0.054196936
5930404A08RIK	6280431	-0.941338708	0.00208494	0.042487401
UBE2D1	1820685	-0.942160072	0.000554595	0.027603541
CXCL16	6250112	-0.942393394	0.000786095	0.030594671
LIMK2	10066	-0.942607663	0.000533948	0.026932406
1810058I24RIK	7330619	-0.94481246	0.001457527	0.036983562
PAK2	5310059	-0.946449865	0.001852455	0.040573736
0610025P10RIK	6270482	-0.951897369	0.001350334	0.035906411
SLC22A7	3520332	-0.952022946	0.001571828	0.037843276
HNRPK	6200673	-0.952097757	0.001484234	0.037175276
2310014L17RIK	3840475	-0.952361384	0.001058521	0.033007591
BOP1	380437	-0.953305856	0.0008422	0.031139335
D330020F13RIK	1440709	-0.95806017	0.001800795	0.040277867
SCL0001131.1_227	2690010	-0.959708383	0.000473061	0.026510944
ATP6V1C2	6940762	-0.961422164	0.003657355	0.054090546
RHPN1	6370278	-0.96241647	0.002274065	0.044036394
IQCA	510672	-0.963872177	0.002070995	0.042372186
OLFR270	1010431	-0.964971598	0.000686262	0.029666179
C230060F13RIK	6040019	-0.967228918	0.000701758	0.029693712
IFT140	4180411	-0.968161635	0.001071253	0.033112865
A730024F05RIK	2000402	-0.970223716	0.000446057	0.026482524
TMEM1	5960059	-0.971649488	0.000674932	0.029607403
6030408B16RIK	4590451	-0.981699926	0.000809937	0.030857191
STAT6	3940161	-0.982723001	0.00355991	0.053278436
MBD3L2	20047	-0.982732859	0.000238366	0.020679234
FPGS	2690008	-0.982830325	0.001163285	0.034343443
LEPRE1	2630278	-0.983077174	0.001323464	0.035543887
HTR4	1440672	-0.984956845	0.002562953	0.046171803
TGFBI	450133	-0.987889646	0.000222007	0.020382728
IL18BP	6330601	-0.988244939	0.003273803	0.051137294
MTHFS	5490068	-0.989814802	0.000513052	0.026825522
FBXL12	2690437	-0.992666522	0.00017393	0.018525489
ZFP312	360047	-0.994368061	0.002584028	0.046218029
SLITRK1	4040672	-0.995454438	0.003671529	0.054196936
TNXB	1820070	-0.996019503	0.001075396	0.033112865
WARS	2350397	-0.997498473	0.00323188	0.050797428
SCL0001259.1_60	2900519	-0.997934683	0.001287435	0.035322582
LRRC20	6130338	-0.998061777	0.000997545	0.032751135
CST11	4390468	-1.000269683	0.001016448	0.03284073
RIPK2	6400403	-1.000453467	0.001730529	0.039512058
IDB3	110471	-1.000573709	0.002171783	0.043115418
SLC4A3	1820538	-1.001166223	0.000586866	0.027811477
ADAM22	2690544	-1.00198335	0.00088489	0.03171941
MGLL	2350451	-1.002468531	0.002224491	0.043616304
OLFR910	1440754	-1.004201126	0.000724194	0.02973996
IAN1	5690519	-1.006420625	0.001047455	0.032910939

2610511M17RIK	5080553	-1.007817402	0.001491819	0.037230513
LOC211208	3120369	-1.008060834	0.000978431	0.032675389
GLS	4050209	-1.008094377	0.002524127	0.04579109
1700025B16RIK	2450747	-1.010520852	0.002147769	0.042891582
ACOT2	2470025	-1.011901246	0.000589205	0.027811477
2310066N05RIK	20431	-1.012784496	0.002231497	0.043670534
OLFR1384	4900204	-1.013028813	0.001145457	0.034139166
NUP88	6020601	-1.015043284	0.000333109	0.023406588
4631434O19RIK	3170743	-1.015071882	0.002884918	0.048275742
ULK1	6330736	-1.016025501	0.000791456	0.030655513
ZDHH14	6250519	-1.018097465	0.002393215	0.044614928
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5730402C02RIK	6590070	-1.022156673	0.001709172	0.039287459
ARL4C	6560743	-1.023136174	0.003716091	0.054492148
OLFR206	1500349	-1.023524235	0.000470952	0.026510944
PPEF2	1440762	-1.026513074	0.001746794	0.039761169
LOC228790	6860500	-1.030471056	0.001927919	0.04101185
SOX12	6590672	-1.031768771	0.001219462	0.034874803
WDR34	2690224	-1.031858819	0.000442906	0.026482524
PREI4	1820132	-1.032225152	0.001233679	0.03495949
ABP1	4040504	-1.032323482	0.001800986	0.040277867
MAD	3190026	-1.033154906	0.002632778	0.046218029
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4930565B19RIK	2630523	-1.037199154	0.002467063	0.045231422
RNASEN	3290689	-1.03852497	0.002639944	0.046270535
PCDHB8	2260414	-1.041464841	0.000111689	0.015329694
OXT	360132	-1.041790299	0.000442325	0.026482524
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LOC384636	6380575	-1.047352409	0.000687045	0.029666179
LOC236060	4880672	-1.04844442	0.003026785	0.049463765
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DES	1780411	-1.058395235	0.001365124	0.036114168
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GM166	2000672	-1.060063952	0.000756003	0.03030678
KRTAP5-1	6330438	-1.064080291	0.002790245	0.047406685
A330080J22RIK	1820162	-1.065036712	0.00022052	0.020382728
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LOC384384	4230519	-1.066303755	0.001199116	0.034617619
OLFR618	7050601	-1.068267237	0.001375506	0.03621721
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CLEC1A	6510519	-1.069659684	0.003001212	0.049266196

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ETS2	7510154	-1.07419097	0.001391773	0.036469492
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FCER1G	2230039	-1.081193049	0.001428411	0.036543326
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9030418K01RIK	1450053	-1.082842437	0.003150046	0.050238486
TRCG1	2690431	-1.085164305	0.001006217	0.032751135
ACTR3B	3370746	-1.08565199	0.000189018	0.019438829
1810037O03RIK	4390278	-1.088937685	0.002606591	0.046218029
LOC227092	110653	-1.091607453	0.001323622	0.035543887
TCF19	6330725	-1.093732172	0.003276554	0.051137294
6230412O07RIK	4060762	-1.097150618	0.000364429	0.024374131
GJA6	3610707	-1.097556183	0.000707766	0.02973996
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SAMD11	150164	-1.109766147	0.000354698	0.023965141
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LOC382765	5910079	-1.112107035	0.000805279	0.030800917
LOC331336	3060369	-1.112288769	0.001769093	0.040047011
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FXVD5	4780196	-1.115843322	0.00331933	0.051442997
POU5F1	3450519	-1.116514309	0.00021259	0.020382728
VDP	4290746	-1.117332998	0.003632814	0.054088181
5830411E10RIK	2140441	-1.118159583	0.001998661	0.041772824
EVI1	360402	-1.119750368	0.001440951	0.036743057
USP12	6510279	-1.119778616	0.001293012	0.035343227
IL15	2690768	-1.122418063	0.00025346	0.020825279
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V1RA2	1850672	-1.12478076	0.001798087	0.040277867
CLDN9	5700037	-1.128254139	0.000793581	0.030655513
MMP13	2060040	-1.128680515	0.001840482	0.040391297
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LOC212815	5810128	-1.13090337	0.001619324	0.038154585
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P2RX5	6330451	-1.161645233	0.001732739	0.039512058
OC90	1820767	-1.162577888	7.41E-05	0.013206792
MAPK13	1440671	-1.16570085	0.001006336	0.032751135
C630028F04RIK	3940592	-1.167544588	0.000527261	0.02684941
OLFR378	2710692	-1.169181599	0.001578443	0.037914165
WDR13	2690369	-1.169614036	0.002530517	0.045799999
C8B	4880736	-1.171970179	0.001020518	0.032878902
4632434I11RIK	1500519	-1.172796752	0.001253047	0.034981409
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NDUFA8	4220519	-1.174600524	0.003611373	0.053924044
HAMP	6280692	-1.17593789	0.003117945	0.050224278
LYRM5	1820088	-1.17754569	0.000359315	0.024155018
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MJ-6000-172_3824	3850519	-1.181324456	5.74E-05	0.012374876
F730014I05RIK	2810347	-1.187303476	0.003313133	0.051415283
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5330427M13RIK	2370519	-1.19267379	0.000198197	0.0197295
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AQR	4810497	-1.197449994	0.00368491	0.054219643
WFDC6A	580537	-1.203325483	0.00075386	0.03030678
OLFR538	2900672	-1.206393797	0.001859281	0.040574763
PLEC1	360014	-1.208788356	0.003692937	0.054255073
LOC383873	1440349	-1.209637459	0.000441729	0.026482524
DOCK4	4480022	-1.210607801	0.001415259	0.036488559
LOC234187	150519	-1.210691018	0.000482487	0.026663828
ILDR1	6840703	-1.211096175	0.001940213	0.041129697
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2610022G08RIK	1440059	-1.21202359	0.000196552	0.01969198
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2410001H17RIK	290735	-1.215304481	0.001456573	0.036983562
ATXN7L2	2000047	-1.216577206	0.000780334	0.030552571
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C730026J16	5910672	-1.224853304	0.001330989	0.035543887
FIZ1	5390288	-1.230163972	0.003429886	0.052269579
HARS	2690762	-1.230899798	0.00081954	0.030857191

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DPP7	2490682	-1.236315479	0.002452004	0.045115315
LRP1	2570615	-1.243612986	0.002030915	0.042050765
1700087121RIK	3610672	-1.244867865	0.000150662	0.016983041
NDUFS6	5910475	-1.245864998	0.001392647	0.036469492
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ELAVL4	3170088	-1.252606847	0.00077263	0.030529693
TNFAIP2	1070630	-1.255946312	0.001527896	0.037230513
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PRPF39	4390021	-1.258806848	0.001535107	0.037230513
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RHOX12	730113	-1.262317922	0.002455111	0.04511884
LOC386205	3460601	-1.262668686	0.001751345	0.039761169
LOC382406	20736	-1.264405675	0.003726012	0.054531797
OLFR748	6060632	-1.26462471	0.001263029	0.035149787
ABCA14	5700750	-1.268907046	0.001527025	0.037230513
CSNK1D	5550360	-1.270720709	0.002720582	0.046682774
ACAA2	5090414	-1.27137706	0.001505821	0.037230513
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MID1	630519	-1.273057809	0.000448972	0.026482524
MT1	5220279	-1.273123086	0.00045883	0.026510944
PIRA2	2000044	-1.273271731	0.000730266	0.02973996
LOC385843	7570040	-1.27466894	0.001837784	0.040391297
2810011L19RIK	3400767	-1.280828328	0.000591804	0.02784887
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STXBP5L	4590672	-1.284210447	0.000309657	0.022789886
KLRB1D	3930349	-1.285567748	0.003123843	0.050224278
CTRL	4490324	-1.288873473	0.000443098	0.026482524
MRGPRG	3170167	-1.292909145	0.003683267	0.054219643
D12ERTD647E	1110280	-1.294989947	0.001005198	0.032751135
RBMV1A1	1030725	-1.295402489	0.000468349	0.026510944
DMTF1	6060278	-1.301499796	0.000588068	0.027811477
1810009A16RIK	1940392	-1.301814477	0.0012181	0.034874803
IGK-V1	2030372	-1.30333505	4.96E-05	0.012214632
E130001F20RIK	2810653	-1.305698446	0.000302271	0.022786229
4933409N07RIK	60463	-1.309495947	0.000181925	0.018834095
D7ERTD462E	6620528	-1.309589253	0.000250561	0.020825279
ZFP473	2070079	-1.311060425	0.003138571	0.05023221
A430034D21RIK	50138	-1.312246341	0.000447155	0.026482524
TNF	4830097	-1.313657046	0.002783149	0.047337924
PENK1	2260520	-1.314720944	0.002617748	0.046218029
NEU2	6280672	-1.322388898	0.001462988	0.036992482
STIM2	7380669	-1.326409989	0.002935809	0.048806068
GMPPA	3190121	-1.330067423	0.000136752	0.016548269

RNF31	4260730	-1.331131705	0.000733492	0.02973996
4732441L2ORIK	4670072	-1.33244229	0.000701472	0.029693712
EG384814	6420273	-1.336887441	0.002065535	0.042372113
MAFB	6060403	-1.33838778	0.001296248	0.035343227
2310016C08RIK	3360241	-1.339372582	0.000175656	0.018556216
5830468K18RIK	1660209	-1.343887218	0.003754565	0.05479759
AKAP1	2750079	-1.344942487	0.001327861	0.035543887
ARID4A	5270601	-1.346765993	0.000771985	0.030529693
DHX40	4670678	-1.34743356	0.000954601	0.032127841
LMAN1	3170010	-1.349753251	0.001789133	0.040277867
A630084D02RIK	1050138	-1.350870873	0.002754534	0.047161145
QRICH1	1430487	-1.353962805	0.000413326	0.025908718
KCNMB4	6520730	-1.358048482	0.000671261	0.029607403
TCIRG1	4760324	-1.358834413	0.003079359	0.049925454
KPNA6	6960672	-1.359227793	0.000853988	0.031351248
MAPKAP1	2680095	-1.365881375	0.002259581	0.04397917
IDB1	6200692	-1.377140019	0.001039731	0.032893064
D12ERTD647E	160437	-1.379716963	0.000342049	0.023926494
4933404K08RIK	110242	-1.39826389	0.001696848	0.039219111
TIMM44	6220450	-1.413022846	0.001273416	0.035246596
BC019977	5220170	-1.413073274	0.000398147	0.025562738
MAPK13	730059	-1.421800081	0.001610004	0.038112431
LOC218476	6650601	-1.424134174	0.0017495	0.039761169
D930024N12RIK	5890746	-1.424604082	0.000476223	0.026510944
COG4	4490053	-1.425816658	0.001008117	0.032751135
RETNLA	1110709	-1.426074676	0.00092637	0.032020567
G431001I09RIK	7560326	-1.433710951	0.001896269	0.04089883
1110030J09RIK	4920543	-1.433885413	2.96E-05	0.009302303
LOC235997	650348	-1.441375725	0.002306505	0.044321112
A930008A22RIK	6450600	-1.441460814	0.001973983	0.041424292
ZFP212	6510278	-1.453354174	7.17E-05	0.013097542
CXCL1	3610082	-1.453408296	0.001902269	0.040941154
MS4A6D	3180025	-1.457989119	0.000676926	0.029611243
STK38L	6450438	-1.463764793	0.003687033	0.054219643
PPARBP	3140673	-1.467802213	0.003166848	0.050354491
A430108B07RIK	2480711	-1.476976477	0.000220296	0.020382728
CSF2RA	5550437	-1.479844608	0.000462721	0.026510944
PLEKHM2	730148	-1.481722658	0.003684168	0.054219643
NR1D2	1260039	-1.485498553	0.00190614	0.040941154
OASL1	240187	-1.496835011	0.001613077	0.038127051
LOC208166	2140324	-1.503125822	0.002668997	0.046484704
HCPH	2810541	-1.505013016	0.002232881	0.043670534
D10ERTD641E	2230324	-1.50852081	0.001941404	0.041129697
2510015F01RIK	2320414	-1.510839052	0.001420731	0.036488559
UQCR	770086	-1.515178692	0.002857939	0.047965319
THRAP4	610040	-1.515670304	0.00103296	0.032893064

E230008N13RIK	10746	-1.523761561	0.00338364	0.051870232
4933417K04RIK	1820672	-1.532851915	0.00353834	0.053243098
LOC384943	6860669	-1.53441443	0.00192735	0.04101185
ABHD4	6370270	-1.53614522	0.000932707	0.03211533
1110058L19RIK	3370338	-1.543318714	0.001628154	0.038192746
YTHDF2	4280551	-1.548986636	0.000927893	0.032020567
1300003K24RIK	2120524	-1.55878718	0.003288643	0.051183082
1810062O14RIK	4850544	-1.559977104	0.00372933	0.054531797
APG7L	5310746	-1.575691795	0.000109196	0.015222354
HOXA13	270731	-1.57582789	0.003066026	0.049803684
SCL0002855.1_1056	1820402	-1.57864959	0.002925224	0.048791504
POLR2E	7000026	-1.581357547	0.003516326	0.053066108
LOC384100	5820189	-1.582404484	0.003091743	0.050012168
IGLC2_J00595_IG_LAMBDA _CONSTANT_2_14	130162	-1.587637839	0.00046807	0.026510944
LOC381196	6660669	-1.587689855	0.003784094	0.054951571
FURIN	6960189	-1.595875031	0.000302076	0.022786229
HCPH	4060240	-1.605716966	0.000961426	0.032176706
RAI16	3370537	-1.60818246	0.000839601	0.031139335
NDUFB3	2900301	-1.612269438	0.000732137	0.02973996
6330400D04	5700681	-1.613565569	0.003344198	0.051594029
LMAN2L	6940086	-1.622860591	0.002188609	0.04314639
STIM1	4280138	-1.625698144	0.001039126	0.032893064
LOC380920	1050338	-1.626757018	0.003246308	0.050958285
RABL4	6840347	-1.628113275	0.003641446	0.054090546
IL1RN	7650747	-1.632449336	0.002596902	0.046218029
SEC31L1	990689	-1.63414557	0.001178845	0.03455225
FOXO1	6580682	-1.6413437	3.24E-05	0.009352701
AMICA1	3850692	-1.646200851	0.003004513	0.049268306
SEPN1	6550603	-1.655161959	0.000541555	0.027216229
APOE	7210687	-1.661715124	0.000476306	0.026510944
LMYC1	1580445	-1.67521315	0.001596518	0.037966801
IGSF6	5670382	-1.680855628	0.002572122	0.046218029
MYST1	6370674	-1.684120498	0.001807874	0.040277867
FAS	5890221	-1.685651249	0.001969008	0.041424292
LOC211895	1110441	-1.697430805	0.002903797	0.048487165
C1QB	580332	-1.705555314	3.41E-05	0.009615798
GP49A	4120356	-1.719451273	0.001697239	0.039219111
UBE2D3	770653	-1.765038647	0.001405302	0.036488559
KLF16	2470070	-1.794582557	0.002781553	0.047337924
D4ERTD22E	4920564	-1.795401621	0.000870395	0.031433399
TNFRSF13B	4280296	-1.802059763	0.000319553	0.023059718
FCGR2B	5700220	-1.816984516	0.000320816	0.023059718
CEACAM2	1570367	-1.837905216	0.00051243	0.026825522
SMOX	1660367	-1.844663103	0.000325585	0.023086786
IL1RN	3390131	-1.852519737	0.001377531	0.03621721

LOC245666	2260392	-1.895665384	0.002075372	0.042405859
ECM1	1710242	-1.90343352	0.001425141	0.036519816
SLC29A3	4290367	-1.907363395	0.001515381	0.037230513
THOC6	3520711	-1.913802049	0.000237171	0.020679234
RPS6KA2	3890064	-1.915160827	0.000812137	0.030857191
SIAT4A	5490008	-1.919894483	0.00016753	0.018320899
DCI	5390128	-1.926034752	8.37E-05	0.013206792
CCL7	4670674	-1.92837767	1.76E-05	0.007180765
OASL2	4830010	-1.939102601	3.71E-05	0.01009528
D2BWG0891E	6960026	-1.940866636	0.001182138	0.03455225
SMOX	5050008	-1.941335063	0.000235569	0.020678502
NIT1	7560300	-1.941491105	1.67E-05	0.006997162
CCL17	6620437	-1.949643721	7.63E-05	0.013206792
CLECSF9	4590458	-1.953246145	0.000243213	0.020825279
MSR2	940541	-1.960453025	0.002580432	0.046218029
RSHL2	2450553	-1.962591423	3.06E-05	0.009305314
ABI3	6450687	-1.976823022	0.0002042	0.020069762
CYP4F18	6020487	-2.02407141	0.00244137	0.045079716
DOK3	610291	-2.04239657	0.000245183	0.020825279
SMURF2	60523	-2.062864895	0.002781358	0.047337924
RMND1	1170022	-2.118587507	0.000460004	0.026510944
OASL1	4780253	-2.12929482	0.001952663	0.04119959
SLC25A28	6590093	-2.131039473	8.30E-05	0.013206792
CAPG	3400082	-2.144425989	6.78E-06	0.005171009
FCGR2B	1110326	-2.146228594	0.000464154	0.026510944
GCNT1	290358	-2.150573281	1.78E-06	0.004029415
LOC433224	1470519	-2.156001605	0.000173991	0.018525489
IL18	3420301	-2.166476518	0.000449004	0.026482524
CD209D	6250497	-2.216535454	0.002152824	0.042891582
WHSC1L1	3990743	-2.233915014	0.000419818	0.025973497
BRF1	4570739	-2.246230906	0.00039498	0.025556848
HAK	7200242	-2.266712406	9.54E-06	0.005171009
NIT1	4560739	-2.269761902	5.17E-05	0.012281718
1700109H08RIK	3310291	-2.2763366	0.002003994	0.041804347
GLT8D1	2190687	-2.283639555	0.002333812	0.044418975
1810045K06RIK	5960475	-2.29180228	0.001539184	0.037230513
CCL9	7050538	-2.349923992	0.000518544	0.026841579
SNX8	60544	-2.367402936	0.000118436	0.015823309
CD209C	1570056	-2.39855595	0.000262722	0.021249043
BC016188	3170152	-2.402051953	0.000113524	0.015329694
RAI14	2450735	-2.416888838	4.40E-05	0.011031572
INPPL1	5670072	-2.433708696	1.95E-05	0.007403872
INPPL1	1990440	-2.44608175	1.43E-05	0.006152415
LY6A	1690187	-2.450825168	0.00232859	0.044418975
6330505F04RIK	2710400	-2.460960237	3.89E-05	0.010213738
ZBTB33	2360291	-2.531899899	0.001518378	0.037230513

E330036I19RIK	4850373	-2.535998153	0.001028161	0.032893064
4930477M19	5820767	-2.556466544	6.46E-07	0.004029415
P2RX5	1740332	-2.56242034	0.00058524	0.027811477
2310022A10RIK	7570612	-2.566365617	0.000680703	0.029666179
APOBEC1	1110088	-2.597803597	0.001977289	0.041437682
CAPG	20064	-2.647578371	6.62E-05	0.013023529
DOK2	4540564	-2.802399799	0.000249363	0.020825279
F13A1	6960451	-2.844381618	5.75E-06	0.004702891
AA467197	7160047	-3.006763283	0.000365714	0.024374131
XIST	3450373	-3.080477366	0.00012344	0.015974163
BC003277	2750594	-3.097545438	0.000269331	0.021558958
AXL	7100577	-3.234776111	0.00118416	0.03455225
PANX1	4150148	-3.329137257	9.36E-06	0.005171009
SLC11A1	3850497	-3.369745674	1.04E-05	0.005219814
H2-BF	5260541	-3.617529372	0.000322452	0.023059718
SDCCAG33	5810184	-3.635785333	0.00055133	0.027529288

Table 2 Microarray analysis of CX₃CR1^{int} CD64⁻ and CX₃CR1^{int} CD64⁺ MNPs from resting large intestine.

Full list of genes which were significantly differentially expressed (adjusted p value < 0.05) by CX₃CR1^{int} CD64⁻ vs. CX₃CR1^{int} CD64⁺ MNPs both isolated from resting colonic and caecal lamina propria of uninfected mice. Genes are arranged in order of descending log₂-transformed fold change. Positive log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁻ MNPs, negative log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁺ MNPs.

gene	probe ID	log ₂ FC	P Value	adj. P Value
SMPDL3B	3440132	5.962361714	3.99E-07	0.00062231
FPR-RS2	7650048	5.909783596	3.00E-09	4.66E-05
P2RY14	6580379	5.52505244	9.71E-07	0.000741431
FCRL3	830632	5.469795918	8.62E-06	0.002033875
SLPI	2810487	5.313296274	9.51E-05	0.006128196
TNFSF13	2340543	4.734014712	1.83E-05	0.002875835
CHI3L1	150114	4.552718107	2.85E-08	0.000221464
SAMHD1	5310743	4.520587017	1.24E-07	0.000332478
INHBA	3060458	4.325608463	5.11E-06	0.001619878
MMP14	3520066	4.311729435	6.62E-05	0.005069994
P2RY14	1240538	3.953612988	3.46E-05	0.003815799
IFT20	3940575	3.945420147	7.14E-06	0.001849206
BLVRB	4010446	3.853723848	0.000134205	0.007048516
LPL	5360300	3.849716538	1.05E-07	0.000332478
ATG5	4810064	3.808163596	0.000113942	0.006753457
F10	1230639	3.794989099	2.27E-05	0.003122482
2810021O14RIK	4880639	3.777136911	6.34E-06	0.001842205
DNAJC19	2070543	3.764836541	2.32E-06	0.001029168
UPP1	1050095	3.749337107	0.000155186	0.007743316
PIK3CB	3440286	3.740327507	3.93E-05	0.00408028
ZFP535	4180647	3.736937194	9.78E-06	0.002169273
A630077B13RIK	5690192	3.688580307	0.000913044	0.01754785
POLR2L	6290075	3.663999006	7.84E-05	0.005432278
C3	5860347	3.632662698	0.003621105	0.035839473
FER1L3	1710162	3.631910374	3.67E-07	0.00062231
MIR16	4890500	3.536610229	0.004162753	0.038732499
SEPX1	4010343	3.472350325	0.000406524	0.011791249
DNAJC5	580706	3.469244643	0.000115332	0.006803524
PLA2G7	4120255	3.468959705	2.66E-05	0.00337821
PGM2	650564	3.453567747	0.001399794	0.021458445
2310033F14RIK	3710136	3.408141988	7.97E-07	0.000741431
2300009A05RIK	4560386	3.40560561	7.31E-05	0.005133475
ATG5	3850450	3.402594835	0.000642446	0.014868175
MRPL17	6350332	3.397810139	1.06E-06	0.000741431
9030619K07RIK	4900678	3.385994736	0.000166797	0.008004208
LY6F	2630577	3.383031965	8.67E-07	0.000741431
0610010E21RIK	7160209	3.37971317	0.000106169	0.006591864
CEPT1	650437	3.364917981	1.47E-06	0.000913562
4932414K18RIK	3130129	3.357472111	3.21E-06	0.001197465
1110018G07RIK	3420075	3.333827498	3.28E-05	0.003691554
LOC381297	5870692	3.310387721	0.000120894	0.00695322
KLRA2	1190102	3.284862033	0.000101919	0.006381842
1500003D12RIK	3390259	3.279849125	1.41E-05	0.002493896
HP	840044	3.278435319	7.37E-07	0.000741431
DNASE1L3	6520193	3.275691306	2.03E-05	0.002967744

ZMYM2	6560040	3.272166091	2.70E-05	0.00337821
RSN	6900091	3.262298983	5.46E-06	0.001694499
GPR43	6520725	3.260554408	1.94E-05	0.002902752
SDC3	6760762	3.244166684	2.94E-06	0.001197465
VT11B	4260739	3.229813954	2.39E-05	0.003229738
PGM2	4200575	3.218391305	0.001050198	0.018523575
CSTF1	4060474	3.217626272	3.39E-06	0.001197465
1200002N14RIK	5270100	3.210352268	0.004646106	0.041656686
SAA3	6400719	3.206095237	9.92E-06	0.002169273
4930563C06RIK	3060152	3.203921338	0.000707118	0.015664532
NDG2	4040435	3.203316712	1.28E-07	0.000332478
SLP	60368	3.196764279	1.18E-07	0.000332478
BC013529	5670075	3.195910546	1.61E-05	0.002694086
1500012F01RIK	540138	3.17625859	0.000185904	0.008310877
GAS7	3830577	3.172056719	0.000444313	0.012298986
CHI3L3	2570240	3.16290673	0.000245263	0.009642248
LLGL1	770259	3.15840492	0.000319098	0.010725691
MRPL14	7380725	3.152551516	0.000332602	0.010939907
1700012G19RIK	5900360	3.150058572	0.000396659	0.011773783
6030457N17RIK	3710079	3.133465631	6.90E-07	0.000741431
AGRN	4040270	3.127696881	0.002123725	0.026086839
FCGR3	3830678	3.127150734	2.90E-05	0.003422031
COX10	4150196	3.120604837	4.92E-06	0.001590989
RAB35	3850239	3.112210082	2.78E-05	0.003422031
EIF4EBP1	240615	3.109420252	2.85E-05	0.003422031
4933430F08RIK	7160246	3.097374705	4.12E-05	0.004098772
PRUNE	4120711	3.09098085	0.003336662	0.034201337
CSNK2A2	7320390	3.081858813	0.000207674	0.008720854
CLECSF8	10170	3.061921152	3.39E-06	0.001197465
ARRDC4	6060564	3.044532633	0.000150558	0.007590946
1110001J03RIK	4120017	3.037040617	8.21E-07	0.000741431
TMEM1	2490491	3.034993682	2.60E-05	0.00337821
2610101N10RIK	3830707	3.023854026	0.000401354	0.011790923
SCL0002883.1_98	6980102	3.012782761	3.60E-07	0.00062231
RAB2	3190735	3.010707853	0.000346382	0.011113575
NPN3	610463	3.009750157	7.76E-07	0.000741431
1110007L15RIK	2680612	3.00280196	1.15E-05	0.002252829
BC049354	2760259	2.995625697	0.000136972	0.00716172
BC003236	3710598	2.994835882	0.000249813	0.009674184
PRDX5	4920100	2.988546097	7.10E-07	0.000741431
1500001M20RIK	3390152	2.987500562	0.000120085	0.006949569
C2TA	2630463	2.984978609	0.001413885	0.021505562
STAT1	240725	2.983934135	0.001335433	0.020993816
LYPLA3	3170577	2.974693958	0.002969162	0.031864623
ARL10B	1110382	2.973926112	0.000435668	0.012190065
C730025P13RIK	290048	2.973638907	0.00061868	0.014620389

CHI3L3	3870242	2.956499716	0.000388827	0.01169875
1110032A13RIK	3710678	2.95551348	4.63E-05	0.004284029
TMEM160	4780239	2.952952758	0.000123057	0.006991929
COG8	6510296	2.944335007	0.00294667	0.031732947
CDC42EP2	3780338	2.943135	0.000209111	0.008752797
NFE2L1	1850564	2.94261092	5.87E-05	0.004805456
IGTP	6290037	2.931749048	1.07E-06	0.000741431
NT5C	3390468	2.931368451	0.000322448	0.010791575
ARG2	670600	2.930777643	0.000803129	0.016497072
CHI3L4	2600180	2.929616138	0.000589621	0.014286821
MRPS18C	6330041	2.90729794	0.001725216	0.023545704
GPR18	2750543	2.904912865	0.000132023	0.007048516
ILVBL	4890041	2.90472126	5.40E-05	0.004684467
BC025206	4780047	2.902680067	0.00267712	0.02997739
MFN2	2450066	2.902598999	3.37E-05	0.003754375
TAPBPL	6480131	2.888979436	2.24E-06	0.001029168
CYFIP2	7550059	2.87242531	3.12E-05	0.003567217
1700022N24RIK	5820242	2.865314493	6.85E-05	0.005079854
4930453N24RIK	610670	2.864470721	6.97E-06	0.001849206
TREM3	4290035	2.861615559	0.000631254	0.014785444
VTI1B	4780437	2.852061928	7.08E-06	0.001849206
VCAM1	2850575	2.850267571	6.24E-05	0.004993855
GLG1	4880674	2.849783939	0.001038901	0.018458911
IGFBP7	5360685	2.848656746	0.004948404	0.043315076
PSMD10	3450041	2.837547134	0.003455145	0.034813371
C230050J15RIK	5900561	2.834113882	0.002738602	0.030333634
SPON1	2100762	2.833745923	4.01E-07	0.00062231
MRPS24	4070543	2.825721312	0.003818979	0.036858253
BC003965	4860382	2.817741619	3.97E-05	0.00408028
HK3	4810575	2.806083179	0.004781155	0.042475144
ERN1	3360189	2.804384395	1.93E-05	0.002902752
GTPBP2	3850142	2.803121606	0.004993703	0.043468171
PARL	6180341	2.799301517	0.0013857	0.021368955
CTSC	990246	2.798787858	4.20E-05	0.004098772
8430408H12RIK	630546	2.798559275	0.003851857	0.036999708
SLC15A3	6130445	2.787493099	4.84E-05	0.004367619
GPR35	4760154	2.782793736	0.001709214	0.023447333
PDLIM4	2940615	2.779496355	5.96E-05	0.004818824
BC003236	6100719	2.778596066	0.000272276	0.010019363
RDH11	5670224	2.773135015	0.000564614	0.013958544
CANT1	5910113	2.763086975	6.35E-05	0.005002499
MAPK9	2690292	2.76303205	0.006941434	0.053074118
AI481105	4490239	2.760663875	0.000355676	0.011295074
1190002C06RIK	3370398	2.759341683	2.10E-05	0.002982637
PHC1	5670326	2.749404683	1.89E-05	0.002902752
AIP	940435	2.74932104	0.000474326	0.012729639

0610012D17RIK	5910372	2.745552088	0.000749416	0.01600781
SLC15A3	3290427	2.740352865	3.24E-05	0.003671307
TMOD3	990692	2.735925172	9.68E-05	0.006183835
LY6I	5810672	2.728290647	4.53E-05	0.004241828
C130020C07RIK	3610634	2.72735252	7.01E-06	0.001849206
NDUFA1	3890739	2.719115206	0.000636434	0.014817369
ZDHHC4	1440685	2.712606579	0.004799403	0.042588527
CSNK2A2	7160477	2.708284722	0.000126657	0.007048516
SRD5A2L	5910397	2.689302711	7.42E-05	0.005189942
1110001K21RIK	3830020	2.683874485	0.000140626	0.007255106
AI481100	2230386	2.667402756	0.000132089	0.007048516
LEPROTL1	4050039	2.661355615	0.000133424	0.007048516
0610010E21RIK	3390088	2.647880395	0.000500933	0.013030137
GNGT2	7330379	2.647135178	1.51E-05	0.002577319
5133401N09RIK	3710470	2.63736375	0.000394774	0.011756694
GBP2	2100068	2.634621398	9.23E-05	0.006044655
TIMM17A	2350204	2.632021427	2.64E-05	0.00337821
ALDH4A1	5870754	2.624386434	0.003154715	0.033145853
IFT20	4610167	2.620276092	0.000384832	0.011671999
TXN1	5870241	2.615521163	0.000285237	0.010174133
HSPC171	2470193	2.609569011	0.005125816	0.044295382
CTSC	1030368	2.60361069	0.000439198	0.012200909
SNX2	4560528	2.601668163	1.25E-05	0.002273906
ACP2	5260253	2.599945932	0.001473655	0.021968434
GORASP2	4880411	2.59717988	0.000139194	0.007215096
PPP2R5C	4250372	2.597102495	4.35E-05	0.004172765
PRDX5	3850433	2.590138582	3.86E-06	0.001333548
GBP2	1400041	2.583358325	0.000704461	0.01562797
CXCL9	10598	2.580255681	0.000491517	0.012844241
UCK1	2600050	2.575836703	0.005381038	0.045737347
GBP1	5690246	2.570302396	0.00023247	0.009255233
GPR84	7000259	2.565956152	4.91E-05	0.004377633
RHOA	430181	2.565663312	4.02E-05	0.00408028
PSMD13	4230215	2.562669083	8.97E-06	0.002049542
PPARD	240717	2.556720277	6.83E-05	0.005079854
GORASP2	5050162	2.549939661	0.000553541	0.013902572
CNIH4	4880554	2.541761305	0.000157557	0.007807971
LAMP1	1570131	2.538266206	0.000107313	0.00661293
HDC	2970324	2.531251648	0.000335318	0.010962429
NRP	6940187	2.531145187	0.005079602	0.04401849
D19ERTD721E	6040037	2.524930238	1.81E-06	0.000913863
GNA13	6840521	2.524823717	6.96E-05	0.005079854
TRAK1	4570575	2.521103954	6.75E-05	0.005079854
GBP4	60553	2.505072632	0.003260901	0.033804092
2310006J04RIK	1740497	2.503103096	0.003922204	0.037410932
CCL5	1690768	2.487843118	0.002951344	0.031732947

DAP3	6200176	2.479002569	6.03E-06	0.001814504
1110007L15RIK	5270747	2.469441669	7.14E-05	0.005112393
1110034O24RIK	1110563	2.467975253	7.17E-05	0.005112393
COMMD7	2140605	2.464432842	0.003730557	0.036298129
RAB5C	650064	2.455990528	0.002512765	0.028912332
MIR16	5270709	2.455601572	4.75E-06	0.00156875
IDH3B	2570441	2.453615064	0.002991141	0.03194856
CDC42EP4	4010133	2.447277688	0.001330798	0.020980777
NRP	360743	2.437472664	0.006689874	0.051891637
CDCA4	4920468	2.432960187	0.004816011	0.042662774
PYGL	1030142	2.42824615	0.001473616	0.021968434
NMT1	360050	2.427738531	2.48E-06	0.001042388
VAMP3	5700168	2.423937582	0.000422208	0.011944238
GTF2F2	6280070	2.423571491	0.001212686	0.020178813
CCNH	4150040	2.422615935	0.000110658	0.006660824
9930027N05RIK	3420044	2.419798281	8.56E-05	0.005770455
1600029O10RIK	2680475	2.418086291	0.000477239	0.012729639
DAP3	6100014	2.408590702	4.72E-05	0.004315786
JMJD2B	1980521	2.408302741	0.002399886	0.028112717
1600010D10RIK	5080528	2.407871884	0.000248504	0.009671737
1700037H04RIK	5690228	2.406781716	8.58E-05	0.005770455
LOC654842	6510152	2.404702417	5.26E-05	0.004616447
2310039H08RIK	2340598	2.403939822	0.002027415	0.025526732
AA960436	7650612	2.395596719	0.006551552	0.051357421
C1QB	580332	2.389682148	1.33E-06	0.000857549
ADAM17	5900653	2.388461661	0.004488388	0.040719215
PRKRIP1	6350309	2.381075578	0.002484959	0.028754792
PIGF	2230228	2.379352842	1.94E-05	0.002902752
NME1	2070520	2.376647046	0.001190316	0.020026449
TRAF6	5220482	2.35610785	7.27E-05	0.005130333
F730031O20RIK	2630605	2.353331116	0.00530164	0.045285569
H2-BF	5260541	2.347409014	0.002784794	0.030655832
0910001L09RIK	6550632	2.346110439	0.003813761	0.036852989
RNF34	6100593	2.343568758	0.00249298	0.028826129
C1QR1	6060050	2.342655948	0.002909967	0.031490511
MRPL36	6060014	2.340668861	0.003110461	0.032800525
ALDH3B1	5720136	2.339909798	0.000134353	0.007048516
STX8	3990441	2.339237714	0.001304344	0.020774523
NDUFB2	1260370	2.339023212	0.001014311	0.018221786
H2-T17	2230731	2.338429708	0.001914933	0.024884517
2700084L06RIK	4780681	2.336236813	0.000379695	0.011621313
TRIOBP	6580241	2.335628014	0.000311884	0.010551722
GAB1	7200678	2.332687416	0.005321904	0.045433673
9430023L20RIK	1410730	2.330945837	0.000115663	0.006803524
2310061N23RIK	4830543	2.327742866	9.19E-05	0.006044655
SEC24C	620048	2.325063405	5.90E-05	0.004805456

CD14	6020674	2.323362882	0.000628864	0.014769135
CTSC	1710754	2.321557243	1.18E-05	0.002260583
AGGF1	4730646	2.320593905	0.001929589	0.024980777
NCOA5	4390184	2.320373628	0.000725852	0.015897425
ANAPC7	1430091	2.319461426	0.000615444	0.014589542
AXIN	290632	2.318387942	6.75E-05	0.005079854
TNFAIP1	3940520	2.317948091	0.006419267	0.050704376
HMGA1	6980274	2.317553683	0.000122748	0.006991929
TMEM49	4210228	2.313490542	0.000824037	0.016640399
LY6C	5550671	2.304265532	0.000389235	0.01169875
H2-T9	780221	2.302619991	0.002611726	0.029539329
COX6B	4900379	2.302480816	0.000291393	0.010284203
SORT1	1470091	2.301962809	0.000275548	0.010060068
CSF1R	3400369	2.30170284	2.90E-05	0.003422031
ITGB5	1770152	2.298801692	0.001931993	0.024980777
MFAP3	670719	2.296964582	0.002439782	0.028465349
2410004B18RIK	3450309	2.29368638	0.005616929	0.046920539
MALT-1	4070768	2.291070615	0.006760456	0.052230408
SQRDL	2600424	2.284827248	0.001745053	0.023654478
DOT1L	2710504	2.278371485	0.000784463	0.016257558
LAMP2	5270358	2.27737808	1.71E-06	0.000913863
SFXN1	4180577	2.275107844	0.000195502	0.00852795
D930007N19RIK	2120202	2.273471887	0.003102015	0.03276952
BNIP3L	3390053	2.273358442	0.003248233	0.03377861
D530030D03RIK	620360	2.269975716	0.000822567	0.01663657
ACP2	6480497	2.265643692	0.006768095	0.052235322
TRIOBP	7210196	2.261734773	0.001518231	0.022206242
TMEM49	6480458	2.25953533	0.002201127	0.026740885
1810008O21RIK	4760041	2.257965585	0.000111313	0.006660824
MRPS30	3780022	2.254441818	0.003391758	0.034546433
TRAPPC1	4570037	2.254107015	0.000108514	0.006634327
MRPS15	5090332	2.249925493	0.000147506	0.007510251
2410039M03RIK	4490008	2.248823015	7.97E-06	0.001969847
PFKL	6650711	2.247898245	0.000113658	0.006753457
SLC2A1	6350044	2.24092433	0.000286865	0.010174133
OXCT	3420500	2.239917154	2.89E-05	0.003422031
FAIM	2850609	2.23803377	0.001291633	0.020742256
AV340375	2350170	2.235911632	0.000878467	0.017246025
1500012F01RIK	2760615	2.235018962	1.25E-05	0.002273906
STAG2	5080192	2.234449629	0.000421451	0.011944238
5730528L13RIK	5900682	2.229214999	0.000168512	0.008017861
VAMP3	110747	2.228817311	0.001985774	0.02525895
ASB8	270309	2.228220994	0.005705656	0.047179516
WDR68	2190437	2.228039231	0.001650393	0.023026915
2410025L10RIK	4670689	2.225817892	0.00565365	0.047000724
1810059A23RIK	2940044	2.223460124	0.005331068	0.045486897

CCNG1	3710014	2.218461551	0.002219043	0.026787729
KPNB1	3800452	2.213087017	0.001448925	0.021711137
TIMM10	2320296	2.210353522	0.002700825	0.030086881
1810046J19RIK	7040286	2.205412148	6.65E-05	0.005069994
SNRK	5890564	2.205252514	0.000286964	0.010174133
SRF	1230731	2.204424799	0.006383723	0.050533284
RNF135	6650088	2.202552966	0.003926326	0.037410932
RALB	1230747	2.200819221	2.25E-06	0.001029168
MRPS18A	1090121	2.197571095	0.000174896	0.008156039
MFN1	1850706	2.197550299	0.001043393	0.018496397
1110007A13RIK	7200491	2.196513648	0.002785158	0.030655832
9830148G24RIK	1090647	2.195417629	0.000128426	0.007048516
4930555L03RIK	3170619	2.191117096	0.001022076	0.018243472
5730538E15RIK	2680528	2.188889171	0.002974791	0.031880967
FBXL20	3800630	2.186556903	0.000753835	0.016014086
IRG1	7560307	2.184636766	1.53E-05	0.002580992
LYZS	7380022	2.180103808	2.15E-05	0.002982637
AUH	780274	2.177807464	4.39E-06	0.001481678
H2-T23	2350181	2.169124008	1.01E-05	0.002169273
TMEM38B	4540626	2.164274927	0.001532353	0.022257694
ARHGDIB	1090180	2.163511509	0.000127204	0.007048516
4933405A16RIK	430360	2.162658972	1.28E-05	0.002291099
CLCN7	6200433	2.160782155	0.002105811	0.026059849
CAR13	3170593	2.156471214	0.006636144	0.051706868
PRDM4	1570139	2.155471259	0.000108161	0.006634327
1810011O16RIK	5260438	2.151405512	9.31E-05	0.006063031
SLC41A3	6550500	2.148431323	0.004058071	0.038100233
1200003I07RIK	2850082	2.14197074	0.000422267	0.011944238
PRMT3	1990152	2.127827605	0.000206649	0.008720271
SCL000911.1_939	7330181	2.121810434	0.003486462	0.035042897
AI450540	2470609	2.115625277	0.004232078	0.039119007
MOCS1	60600	2.114013305	0.001458304	0.021795956
2700023B17RIK	7570291	2.111641142	0.000397754	0.011773783
9030216K14RIK	2480768	2.109935229	3.01E-06	0.001197465
CSPG6	1190037	2.105160987	0.000191362	0.008456711
ATP6V1D	1500608	2.102085274	1.07E-05	0.002218384
1200015E14RIK	2650431	2.09957953	0.006724287	0.052079075
PPA1	2000669	2.097619087	4.87E-05	0.004368651
1810035L17RIK	7210019	2.096976298	0.005003639	0.043513994
ALDH3B1	6400669	2.091106723	0.003840754	0.036953578
HELB	6560564	2.089857904	0.003362515	0.034352957
GAS7	4830138	2.084773692	0.002062263	0.025702147
NRG1	2490039	2.08327917	0.000267123	0.009986884
PSMB10	5870398	2.08001316	0.004918108	0.043225138
1700064K09RIK	650328	2.076519572	0.002327321	0.027525494
2610024H22RIK	6100132	2.071209514	0.001337039	0.020993816

SIAT7D	3310187	2.070626342	0.00101975	0.018243472
TMEM65	160519	2.060525742	0.004241566	0.039160099
DENR	2350139	2.059130817	0.000187534	0.008344476
RBX1	2370370	2.054986403	0.003157624	0.033153988
SCARF1	110692	2.053543149	8.32E-06	0.002019696
BLVRB	1440717	2.051243349	6.92E-05	0.005079854
CHIC2	4540154	2.045693309	0.000822776	0.01663657
BC027231	6520154	2.044856718	0.00052173	0.013458373
SNAPAP	4010091	2.044671955	0.00045643	0.012487241
NUDC	2900291	2.04207235	4.02E-05	0.00408028
CPT2	1500017	2.036065273	0.007214785	0.054286574
SMOX	620008	2.035631169	0.000230869	0.009216366
NSF	6180437	2.034216729	0.002384517	0.028031162
FCGR1	4220603	2.032656529	0.00183783	0.024309759
BC060631	4050360	2.031644244	0.001649197	0.023026915
APOE	7210687	2.026897543	6.39E-05	0.005002499
1600019D15RIK	4540070	2.025029925	0.000481139	0.012729639
POM121	7210280	2.019595135	0.000933067	0.017719967
MRPS33	990630	2.01725221	0.000482945	0.012751237
SLC31A2	6560270	2.007780039	0.000383547	0.01165578
ALAS1	5720180	2.006276756	0.007168746	0.05411933
NDUFS4	1300544	2.002030056	0.000555583	0.013914954
APOB48R	4220189	2.000393293	0.0002281	0.00915289
TYKI	1410554	2.000146974	2.02E-05	0.002967744
CD47	4060767	1.995788597	0.000148108	0.007511642
1500032D16RIK	6180092	1.994595157	3.69E-05	0.003927795
FZD1	5570309	1.994376836	2.49E-05	0.003305677
PACS1	6100162	1.993855582	0.000480531	0.012729639
1810037J08RIK	7160086	1.992935712	0.002061594	0.025702147
PSMB10	6350343	1.989620432	0.005831781	0.047789828
1600002K03RIK	460632	1.985411062	0.000478608	0.012729639
5930416I19RIK	1050424	1.985317895	0.005420436	0.045946479
FADS1	610274	1.9790763	0.001767239	0.023762257
LLGL1	2120110	1.978090085	0.001404592	0.021469488
COPS5	70731	1.97635013	0.000148501	0.007511642
AP4S1	6100020	1.974020941	0.003198373	0.033491258
NMI	6550367	1.971178438	3.59E-05	0.003869837
H2-T10	870446	1.962903505	0.001321544	0.020941071
OASL2	4830010	1.959959824	1.75E-05	0.002795546
APBA3	1400735	1.957968404	0.001439733	0.021711137
2310079N02RIK	7150349	1.957522473	2.04E-05	0.002967744
MIPEP	1030731	1.955428082	0.003697382	0.036291337
0610041G09RIK	430068	1.950696878	0.000775226	0.016209837
1500032D16RIK	450161	1.946870105	0.000117338	0.006850175
CIB2	6840634	1.944939074	0.002742564	0.030354722
CENPB	6220091	1.944697857	2.64E-05	0.00337821

PTTG1IP	6330309	1.942669286	0.004227966	0.039114701
AI316787	1980014	1.939840618	0.001212951	0.020178813
RBM14	2120653	1.938967805	1.43E-05	0.002493896
1300006C06RIK	2000274	1.931343743	0.003955143	0.037565389
CPT2	3370609	1.928343582	0.005696187	0.047151433
ATP2A3	2570672	1.927010557	0.000831792	0.01671008
MRPL54	1070358	1.925915154	0.001606657	0.022775796
F830005D05RIK	50128	1.918462853	0.000233631	0.009255233
PRM1	2680050	1.916988912	0.0004373	0.012200909
1700112E06RIK	6590382	1.914217861	0.00057435	0.014067957
SUGT1	580152	1.908987256	0.000320201	0.010739515
VAMP4	1230543	1.908144871	0.006081072	0.049107103
PDCD5	4670670	1.900731998	2.15E-05	0.002982637
SRD5A2L	2230278	1.89888078	0.000386458	0.01169846
PSMD7	5290474	1.898204121	0.005193869	0.044619945
SREBP2	4830129	1.898197319	0.001253184	0.020417143
COPS5	2970563	1.895270928	0.000481183	0.012729639
MGC18837	2100678	1.894388578	8.63E-05	0.00577355
9930022N03RIK	5050086	1.894366704	8.78E-06	0.002033875
CCT6A	4560703	1.891748507	0.003701402	0.036291337
MAN2A1	3400050	1.890489953	0.000166148	0.008004208
IFITM3	3840292	1.886163215	0.001482837	0.022019449
ATP1B3	4480603	1.885585862	0.000414592	0.011941963
SLC25A20	1090037	1.877932112	0.000469215	0.012700806
1810063B05RIK	7100634	1.877547209	0.002599535	0.029444335
SEC15L1	4830703	1.876695083	0.000689374	0.015470076
TPD52	1230673	1.871410505	4.18E-05	0.004098772
1110032N12RIK	2370138	1.87135193	0.000526632	0.013529049
SRD5A2L	5260451	1.870198045	0.000348621	0.011139389
TXN2	7550711	1.866963971	0.001901577	0.02480884
SFXN1	2900592	1.865144351	0.002820449	0.030887694
NCL	460497	1.864167938	0.006900015	0.05280943
1110032O16RIK	510608	1.861202107	0.003729667	0.036298129
SRI	7650451	1.857651507	0.000356967	0.011312948
FBXO6B	1260128	1.857321477	0.000174053	0.008141167
FBXL12	4150440	1.855448875	0.003894413	0.037170461
ZFP277	2750037	1.853473548	0.000940834	0.017719967
RIT1	5910427	1.852830118	0.002534519	0.029003466
FLII	4220050	1.852062056	0.003728115	0.036298129
2310056P07RIK	1300411	1.851969446	0.000301215	0.010365899
SDHC	5670100	1.85144323	0.001965805	0.025104429
H2-T22	4480685	1.851416694	0.000456742	0.012487241
LST1	5860154	1.851392935	0.005546375	0.046563476
IFITM1	5820068	1.850532155	0.001474088	0.021968434
STXBP2	1070152	1.849268128	6.17E-05	0.004961471
1110012E06RIK	5090368	1.84567304	0.000477604	0.012729639

CORO1A	1500463	1.845443044	0.004982921	0.043433512
LEMD2	2470528	1.8425176	0.000734924	0.015897425
PRM1	3440753	1.842433646	0.000702854	0.01562797
LOC245828	4280482	1.839610727	1.75E-05	0.002795546
COX6C	5490050	1.838182429	0.00257309	0.029230081
PCBD2	3310538	1.837964623	0.000293357	0.010290224
NFKB2	2070014	1.836342589	0.001410733	0.021498803
DAZAP1	4780192	1.832051982	0.005194981	0.044619945
HRB	3780463	1.832046947	0.001336557	0.020993816
SRI	2370632	1.83196777	9.85E-05	0.006243476
LYZ	2360719	1.831035748	0.005797837	0.047612171
GNG12	3440243	1.830052253	0.00117314	0.019823381
2810037C03RIK	4200047	1.823918211	0.000269839	0.009986884
NCL	630088	1.820007724	0.006748144	0.05216124
MIF	4040093	1.812654229	2.69E-05	0.00337821
2410001E19RIK	1780348	1.807098067	0.002552392	0.029144193
GRPEL1	7380273	1.80685508	0.003934689	0.037439821
SERPINA3G	1050092	1.805633785	0.0002138	0.008826312
USMG5	7560687	1.803949561	8.44E-05	0.005748531
1200015F23RIK	5310722	1.801672502	0.001596583	0.022683745
PLAC8	5860243	1.801638294	3.07E-05	0.00352835
SORT1	2810468	1.800166593	0.000917599	0.01759632
PTPN1	1430110	1.79931112	0.000181442	0.008210621
ARL6IP4	20037	1.799057369	0.00053198	0.013587372
RUSC2	6100471	1.797772915	4.07E-05	0.004088682
RTN3	1440327	1.796363108	0.007046189	0.053553283
MSCP	2760475	1.795207882	0.000480876	0.012729639
CHIC2	110138	1.792544364	0.000561303	0.013924075
MRPL27	1440010	1.792379653	0.003392576	0.034546433
VRK2	3870332	1.788761058	0.002922275	0.031557723
AP2M1	7650438	1.787964407	0.001070481	0.018678085
UPP1	3520594	1.787508419	9.33E-05	0.006063031
EVI2A	6760255	1.787334252	0.001493641	0.022025657
CSF3R	5900259	1.786656553	0.003423064	0.03465239
RBAK	2480152	1.786022722	0.001449833	0.021711137
CHCHD8	5860139	1.783204349	0.0020012	0.025368676
GAPVD1	460767	1.780581222	0.001661622	0.023090292
GPC1	7210039	1.778874471	0.003232578	0.033713035
RUSC2	1190465	1.778801178	4.47E-05	0.004225081
BCL2L2	5080338	1.777094589	0.001986038	0.02525895
MTCH1	2650538	1.777002908	7.99E-06	0.001969847
C130067A03RIK	4830110	1.776783364	0.003568254	0.03546676
NDUFB5	4900538	1.775736544	0.00470557	0.042044183
MSCP	2320553	1.775100318	0.000447073	0.012309575
TGFBI	4060327	1.771986976	5.37E-05	0.004684467
BC037034	6450059	1.770190178	0.001942791	0.024999964

DNAJC15	1450066	1.769519358	2.48E-06	0.001042388
NDUFS4	6840670	1.769351067	0.001848975	0.024374132
D11LGP2E	6330592	1.767199088	0.003416973	0.03465239
6330412F12RIK	1470475	1.766802922	0.003722435	0.036298129
TPD52	1820414	1.766438967	0.000611117	0.014589542
6720456B07RIK	1770477	1.766205891	0.001309236	0.020809756
TRPS1	6940181	1.76398272	0.000179332	0.008210621
CCT6A	360301	1.763580316	0.00161376	0.022794394
2410003K15RIK	4040184	1.760879963	0.002529473	0.029003466
1810059G22RIK	130382	1.760839158	0.000352103	0.011227533
NDUFV1	70286	1.76062026	1.26E-05	0.002273906
9030624J02RIK	1190647	1.759837745	5.85E-05	0.004805456
G1P2	460221	1.756930347	9.69E-06	0.002169273
COX5B	2570373	1.756373576	0.00020322	0.008646026
1810006K21RIK	3440093	1.756318296	0.000752928	0.016014086
CHMP7	6280356	1.754534797	0.000780999	0.016236897
1110003O08RIK	1570554	1.75344048	0.001784135	0.02392559
TPI1	3990477	1.753114353	0.001635944	0.022977819
1600013P15RIK	2470402	1.746463366	0.003838791	0.036953578
2010005O13RIK	7380546	1.745285436	0.004413128	0.04019441
PSMB7	3360376	1.743553044	0.002120821	0.026086839
BFAR	4200753	1.74344728	0.003111287	0.032800525
BC060631	2510376	1.73388276	0.002991384	0.03194856
APBB3	5390364	1.733467987	5.65E-05	0.004805456
ELK3	6110519	1.73216447	0.003169685	0.03323568
RRAS	5890064	1.731970386	9.18E-05	0.006044655
PGK1	5690341	1.728980219	0.00030359	0.010365899
BNIP2	2370326	1.725901143	0.002018816	0.025468924
CLIC4	2000719	1.724801056	0.004492435	0.040719215
1110002M09RIK	2900681	1.724762009	0.004445408	0.04044097
IL15	6940402	1.720880117	0.000565885	0.013958544
1700029G01RIK	1110021	1.719878896	0.003976735	0.037632365
2700061N24RIK	4540278	1.71982274	0.000629607	0.014769135
1810054O13RIK	2750184	1.718731656	0.000794572	0.016429972
DMAP1	4180392	1.707318778	0.000167386	0.008004208
EG622339	7200403	1.70657428	0.000393672	0.011756694
MSH6	7610338	1.704261676	0.006304927	0.050081434
GSR	6860369	1.701648541	0.00069825	0.015601619
1190005P17RIK	7150753	1.698768406	0.003678009	0.036195062
PSMD10	6510136	1.697677116	0.001099035	0.018984334
DYRK1A	990056	1.696298323	0.004013014	0.037906381
THAP7	270376	1.695584699	0.000819826	0.01663657
GAPVD1	4220088	1.695436025	0.004776646	0.04245938
CYP4F18	2120392	1.690644859	0.000247598	0.009671737
MOCOS	6480201	1.688908586	2.80E-05	0.003422031
CEBPB	4230348	1.688854882	0.002217789	0.026787729

C1QG	3710170	1.686940773	0.00071321	0.015754541
D11LGP2E	5720397	1.677441342	0.002952805	0.031732947
PRDX2	1690753	1.67592692	0.003304882	0.034032836
1700022N24RIK	60056	1.674639474	0.00230938	0.02739021
2310005E10RIK	2120243	1.674470518	0.007067256	0.053613789
ARL6IP4	770682	1.674233458	0.000613484	0.014589542
CSTB	3120465	1.672859528	4.30E-05	0.004172765
MRPL46	2100427	1.669380532	0.00585172	0.047902669
IRF7	6590653	1.666084647	0.000106546	0.006591864
CLECSF5	5390463	1.66232568	1.06E-05	0.002214269
9930031P18RIK	5560204	1.662089295	3.57E-05	0.003869837
IFT52	7560671	1.661892972	0.00246893	0.028629981
XPA	540762	1.658799924	0.002532289	0.029003466
SRP14	450195	1.658382476	0.004228475	0.039114701
A630082K20RIK	2940600	1.658057321	0.001614212	0.022794394
RNUXA	730528	1.657909826	0.005167207	0.044504473
GAPD	6940475	1.65368068	2.93E-05	0.003422031
MGC18837	5810541	1.650790538	0.000153045	0.007666569
AW742319	4150669	1.649874874	0.00487757	0.042963008
UAP1L1	1410113	1.649398285	0.003852697	0.036999708
MGC68323	650347	1.64793866	0.000138097	0.007196312
TRAK2	730092	1.647476413	0.002531086	0.029003466
LASS2	4200327	1.64110867	0.004029862	0.037976837
SEC61G	4540129	1.641060681	0.000120277	0.006949569
UPP1	4120243	1.640832276	0.00034345	0.011111311
BFAR	630674	1.636719821	0.003008537	0.032065592
BCAP31	3610424	1.631498915	0.000931155	0.017719967
SEPT15	2680487	1.631142238	0.001006051	0.018183146
MAPRE2	6860543	1.627911901	0.000128947	0.007048516
COMMD6	2710653	1.622463034	0.004741564	0.042244262
PFDN5	650598	1.619062798	6.41E-05	0.005002499
GPS1	620682	1.618395131	0.001918735	0.024892261
SLP	130348	1.617817862	6.41E-06	0.001842205
GPR109A	5700161	1.616156976	0.001040187	0.018460643
PYCR2	4260019	1.61572209	0.003242393	0.033770035
DHX30	1260692	1.615648675	0.002220092	0.026787729
CRIP1	4860035	1.613753993	1.15E-05	0.002252829
GP38	1340446	1.611569674	0.000401617	0.011790923
TGFBI	450133	1.604076534	3.25E-06	0.001197465
LYZS	830240	1.60355193	0.003137346	0.032985679
1810017G16RIK	670014	1.595131086	0.004639078	0.041617706
AIF1	1400672	1.592107339	0.000109399	0.006660824
PIGA	7160458	1.59175574	0.00301865	0.032129277
2310061J03RIK	2370408	1.591075657	0.001561964	0.02239681
ABHD1	5340500	1.586878206	4.01E-05	0.00408028
TEX2	2760601	1.586665541	0.001385197	0.021368955

1300007B12RIK	7400475	1.58559095	0.003966203	0.037574311
6720456B07RIK	6620554	1.582556832	0.001846505	0.024374132
1110020P15RIK	5290475	1.581797573	0.003540553	0.035334989
A530060O05RIK	6280521	1.57984518	0.005728574	0.047343818
IFI205	1710619	1.578705917	0.001534687	0.022257694
DNASE1L1	7210719	1.577497909	0.001697862	0.023359134
TPI1	6110170	1.574715846	0.003872297	0.037078277
2900008M13RIK	5960086	1.572411446	0.000766346	0.016147329
FBXO4	5910300	1.569915582	0.004004091	0.03784512
HVCN1	620646	1.569356554	0.000268464	0.009986884
2600001B17RIK	840291	1.56926068	0.004277418	0.039420781
MS4A6B	3610286	1.566258642	0.000476506	0.012729639
NUBP1	6450220	1.560571148	0.001244847	0.020417143
2810025O06RIK	2570176	1.55752263	0.001642435	0.022977819
OSBPL2	6270022	1.555847776	0.00022483	0.009068514
HIVEP3	2350300	1.552653493	0.002830052	0.030949212
MAPKAPK3	5360477	1.551735937	0.000956733	0.017835653
RHOG	2630703	1.54623457	6.94E-05	0.005079854
LSM3	3830022	1.543517568	0.000975319	0.01796646
SCOTIN	6960674	1.54310936	0.000911394	0.01754785
MRPL43	3120689	1.542882875	0.004819862	0.042672538
1110012M11RIK	5390021	1.542781572	0.00024748	0.009671737
ELL	2190445	1.539348365	0.005133246	0.044313082
HAGH	2600541	1.538754032	0.004688911	0.041943601
CLASP1	3610379	1.536736808	0.004498957	0.040737202
ZMYND15	1820739	1.536228344	0.002112526	0.026059849
APPBP1	4280592	1.535429733	0.004107105	0.038351917
PSEN2	990682	1.532095683	0.001885974	0.024756802
LY86	430167	1.529379732	0.001954393	0.025056115
TBCA	4560047	1.525610654	0.000278628	0.010085818
TGM2	7000187	1.524408475	0.00016421	0.007944002
F730045P10RIK	4640754	1.521195819	0.000719087	0.015839284
2410015M20RIK	3830288	1.51530092	0.002513468	0.028912332
A930029N17RIK	7560170	1.514386324	0.000177762	0.008210621
SLC7A11	3800458	1.514241209	0.002204156	0.026740885
GAPD	3290020	1.511259188	0.000443745	0.012298986
FXC1	3420632	1.508608622	0.000124461	0.007002762
UBXD1	1780168	1.5074428	4.15E-05	0.004098772
FIS1	4890750	1.506451587	0.000132429	0.007048516
PNP	4890113	1.505399175	0.006279845	0.049984474
LENG9	4210300	1.502339943	0.001747119	0.023654478
RIPK1	1300402	1.50177502	0.0006667	0.01518797
ARRB2	1110451	1.499803623	0.001527175	0.022246162
RAB32	1780619	1.497876436	0.001268542	0.020501265
GRINA	2140753	1.489809078	5.83E-05	0.004805456
CTDSP1	6620377	1.489525954	0.003110293	0.032800525

1700027M01RIK	1010356	1.489469715	0.006630635	0.05170351
ESD	5860491	1.487504212	0.000431451	0.012093876
MRPL12	4640553	1.486470627	0.002744416	0.030354722
POLR2K	6350446	1.486342758	0.001567975	0.02244155
BACL2	4590164	1.485795041	0.000697062	0.015597516
GAPD	5870154	1.485700083	4.33E-05	0.004172765
TES3	2630044	1.48458467	0.003399542	0.034549406
CLECSF5	6580162	1.482631126	1.13E-05	0.002252829
1110020P15RIK	870382	1.479569109	0.00316036	0.033160295
LSM5	6420605	1.479535884	0.003522156	0.035287462
5330431N19RIK	3290743	1.478546201	0.006934585	0.053047865
SLC10A3	5270500	1.472807115	0.000974301	0.01796646
C4	7510243	1.472572634	1.92E-05	0.002902752
1810030A06RIK	5870504	1.471810688	0.001638455	0.022977819
GLB1L	3130546	1.471356602	0.000139386	0.007215096
9430029K10RIK	4900685	1.469911101	0.000609419	0.014589542
CRYBA4	7050255	1.468751669	0.001683208	0.023278434
9630037P07RIK	6550523	1.468547687	0.000937283	0.017719967
6720458D17RIK	4920491	1.467486482	0.001847777	0.024374132
THAP4	1500341	1.464791445	0.00652103	0.051273458
FVT1	4290593	1.462854057	0.000261078	0.009912682
LOC385662	1300204	1.461781161	0.000874938	0.017246025
NDUFS4	4490154	1.460799106	0.002766084	0.03050747
GNGT2	5720615	1.46018586	1.64E-05	0.002716132
1110032N12RIK	1430647	1.455360892	0.001658949	0.023084067
SUV420H1	6290242	1.453864532	0.002948962	0.031732947
3110003A17RIK	6370707	1.450131679	0.001914808	0.024884517
D7WSU128E	3800437	1.448481679	0.002959598	0.031783958
TAP2	4490017	1.447279769	0.007054216	0.053553283
IFITM1	4010019	1.446136918	0.002114361	0.026059849
2700082D03RIK	3060139	1.442957535	0.003673782	0.036176391
ZFP511	5220301	1.442488922	0.004367464	0.039872049
PPIH	3830592	1.436627136	0.001827433	0.024263928
D8ERTD587E	3140471	1.43241467	0.000567241	0.013959885
SETD8	6020725	1.431841159	0.001901214	0.02480884
2410005K17RIK	5720630	1.430933465	0.000367653	0.011487498
HTATIP2	2710152	1.428674239	0.000472319	0.012729639
IFIT2	360041	1.426320095	0.006236968	0.049770745
PSMD4	1440750	1.41827636	0.000478954	0.012729639
PDCD1LG1	3870561	1.413089201	0.000589035	0.014286821
GABARAPL2	5910189	1.412215039	0.002150177	0.026270736
MRE11A	5870193	1.41193637	0.001100284	0.018984787
SLC11A1	6940735	1.411681131	0.00476837	0.042434393
MCF2L	4810546	1.411275626	0.002125047	0.026086839
PSMB9	2450064	1.411068699	1.45E-05	0.002503775
BCAP31	1500274	1.409454494	0.000182411	0.008210621

RPIA	6250291	1.405347055	0.000542589	0.013767753
ASS1	7560338	1.401299393	3.04E-05	0.003519986
SLC25A5	5870092	1.401032993	0.00048963	0.012843093
VPS28	2490014	1.400772943	0.000295197	0.010290224
PRKRIP1	7050753	1.392773618	0.005936791	0.048358733
CREB3	540037	1.3917385	0.004284301	0.039432962
BCAS2	7510253	1.384541646	0.000463037	0.012610273
EMR4	1710603	1.382782222	0.001025666	0.018281247
TXNDC4	7650653	1.381123318	0.004150208	0.038661414
H2-Q5	3130240	1.380183537	0.002313926	0.02739021
CAPN1	5690021	1.379940087	0.001875743	0.024664192
AI837181	4010722	1.378836868	0.003304185	0.034032836
NENF	2230403	1.376520132	0.001799097	0.024063896
SNX1	630215	1.373670335	0.002246572	0.027025581
1200011O22RIK	4230470	1.371908449	0.002287649	0.02728487
DDX52	4290170	1.368903411	0.004712531	0.042057989
0610007H07RIK	5810274	1.367846314	0.002033889	0.025526732
MLF2	990148	1.367576843	0.000168989	0.008017861
ESRRA	2000474	1.367275391	0.003507967	0.035236236
ILVBL	5080458	1.364072827	0.00034628	0.011113575
SCOTIN	1260673	1.363697784	0.001746932	0.023654478
NDUFS3	1260450	1.363553099	0.001687573	0.023278434
SLC11A1	3850497	1.362720443	0.002705487	0.030095638
OGFR	5690717	1.359729451	0.000240474	0.009477985
LOC382127	110400	1.35445953	4.43E-05	0.004221328
MGST1	7610114	1.35270387	0.000710578	0.015718763
GMFG	7050450	1.348987999	0.000132267	0.007048516
1300006C19RIK	620113	1.346169748	0.000202339	0.00863499
PSMB7	3060537	1.346113536	0.001003424	0.018183146
HTATIP2	2340382	1.345351785	0.000979666	0.017982539
2310051F07RIK	5340609	1.343834563	0.00587041	0.047979789
EFHD2	1190020	1.342880157	0.004548744	0.04109217
PPT1	990064	1.340694613	0.002873519	0.031226651
ATP6V0C	2030725	1.340123346	0.000565315	0.013958544
SOCS3	1570594	1.337286908	0.000626232	0.014753989
9430029K10RIK	2060164	1.336996101	0.000217487	0.008911249
BIRC1E	5360278	1.334871981	0.003419795	0.03465239
AIF1	290068	1.334656672	0.002636287	0.029769967
PILRA	3520039	1.334417806	0.007161553	0.054091323
STX8	3710332	1.332145237	0.001726302	0.023545704
PTGS1	6620445	1.329195642	0.000403326	0.011791249
LDH2	240259	1.327418122	0.00012636	0.007048516
2600005C20RIK	6420196	1.32655039	0.002293519	0.027306244
GPR108	6400097	1.325828209	0.006968396	0.053127851
TCE4	2060050	1.323890036	0.001051465	0.018523575
RAMP1	4010243	1.323656876	0.000401661	0.011790923

TMEM63A	5260097	1.320943592	0.001076678	0.018723106
CAMK1	7100014	1.319462784	0.000828212	0.016681337
XDH	5340577	1.311868852	0.002853788	0.031099285
ARBP	5570093	1.308933329	0.002390216	0.028055679
SDHD	6350603	1.307257667	0.001216497	0.020199133
PSMC2	4640128	1.303562018	0.003963806	0.037574311
LAIR1	7040348	1.302783592	0.002275164	0.027219589
LY6E	4780184	1.299027458	0.004653729	0.041675891
D15MGI27	2810088	1.297565377	0.005114022	0.044242705
CYFIP2	7330333	1.295013472	0.001016863	0.018234254
TRPC4AP	3890202	1.287574379	0.003037787	0.032292551
PEA15	4210538	1.287399144	0.004604456	0.041498895
ZDHHC12	2190543	1.287249862	0.000694312	0.015558402
GPI1	6370100	1.28689606	0.005983545	0.048521394
ARID1A	6620767	1.285744634	0.001816007	0.02420667
ATP5J2	610681	1.28556676	0.007139956	0.054007001
FCER1G	2230039	1.284854291	0.000256368	0.009854315
EHD4	5080184	1.284696859	0.001610807	0.022794394
G6PDX	240653	1.284248381	0.000478733	0.012729639
SDC1	5810767	1.283085009	0.000970764	0.017949974
LYRM5	2600097	1.280413993	0.006190259	0.049550787
ACADL	7160202	1.279721323	0.001377285	0.021357638
ZCRB1	7320246	1.279402662	0.006125637	0.049313126
POLDIP3	580356	1.278466476	0.000669493	0.01518797
IGSF6	5670382	1.277939258	0.007116565	0.053856304
LY6E	6550376	1.277915969	0.00083144	0.01671008
C230009C22RIK	5960717	1.274895696	0.004472044	0.040611913
2510003E04RIK	3800091	1.272746201	0.002565201	0.029204546
STARD5	2100327	1.263857069	0.002466105	0.028629981
BST1	1690170	1.263284805	0.000942378	0.017719967
SYF2	3360132	1.263284733	0.000589726	0.014286821
4930432N22RIK	150053	1.262815519	0.001619222	0.022817948
RBPMS	4050121	1.260028785	8.57E-05	0.005770455
HSD3B7	2470242	1.249799258	0.0041301	0.038520318
SAS	6520598	1.249148476	0.004940116	0.043315076
ATP6V1E1	4610291	1.247272328	0.001374896	0.021350765
P4HA1	5870040	1.244340385	0.001725202	0.023545704
ABR	6180463	1.243189039	0.003410916	0.03464232
6330578E17RIK	5690735	1.239615199	0.000738785	0.015897425
SATB1	70386	1.238981368	0.005778099	0.047550665
CRSP2	7560411	1.238667216	0.001911372	0.02487988
2310036D04RIK	6620735	1.237460724	0.001439925	0.021711137
1110019J04RIK	5130609	1.236714477	0.002708039	0.03010246
9130404D14RIK	4290324	1.23530839	0.001545147	0.022269032
RNF26	1230138	1.234180576	0.006001599	0.0486424
NPC2	6040224	1.23417257	0.000640243	0.014861478

2310014H01RIK	1400398	1.233287044	0.00597331	0.048463706
4922504H04RIK	730228	1.230560539	0.001652165	0.023030946
NDUFA10	770221	1.229504287	0.001003568	0.018183146
TNFSF5IP1	1710202	1.229290782	0.002340877	0.027601731
TLR5	2100468	1.228331762	0.000181627	0.008210621
GI_6679936_REF_NM_008084.1_328	2140433	1.227859581	0.000152708	0.007666569
2600005C20RIK	150646	1.224764491	0.004490669	0.040719215
D14ERTD668E	2810040	1.2229093	0.005285494	0.0451725
1500034E06RIK	4590377	1.221902818	0.004204263	0.039047846
ABCC5	7560475	1.219822556	0.000362032	0.01139455
GNAI2	4220753	1.215929311	0.000110844	0.006660824
VCAM1	4830475	1.215315703	2.11E-05	0.002982637
GMFG	1070091	1.214889028	0.000214583	0.008826312
A130062D16RIK	1940097	1.21444371	0.005380796	0.045737347
NOSIP	4810246	1.213169367	0.003345854	0.034205241
IFITM1	5960577	1.212958889	0.000544436	0.013778714
DEADC1	2810139	1.212859356	0.000662021	0.015140676
WBSCR5	6370553	1.211358607	0.000842435	0.016902033
SAMHD1	3190577	1.210818491	0.001506194	0.022149332
ARL6IP4	6180288	1.208123996	0.001620023	0.022817948
COG2	7400343	1.207585623	0.001338555	0.020996379
FRAP1	1850403	1.206935033	0.000742201	0.015897425
CASP8	1190068	1.205697382	0.00124999	0.020417143
LRRC59	240403	1.20515195	0.002647868	0.029839433
LOC384593	7040438	1.200354814	0.00197044	0.025142942
GORASP2	3420300	1.200132262	0.0024686	0.028629981
CDCA3	1050170	1.198164806	0.001363298	0.021237105
MS4A6D	3180025	1.197796336	0.001321407	0.020941071
PLTP	610414	1.197730171	0.002811064	0.030828398
GIT2	7400132	1.194755089	0.002539803	0.029021778
ATP5O	4540554	1.192966315	0.00368192	0.036210598
BRI3	870437	1.192264302	0.000817754	0.01663657
PGD	70630	1.187286929	0.00107579	0.018723106
GPIAP1	1510201	1.178954622	0.00401635	0.037914831
BIRC1E	2060674	1.174313514	0.003764061	0.036555407
TRAP1	7150292	1.173463742	0.005756744	0.047475555
9130019I15RIK	2850458	1.172942429	0.001004149	0.018183146
MAP3K7IP3	4390255	1.171793188	0.002563655	0.029204546
PNPT1	10372	1.171739811	0.001368817	0.021284553
1110017O22RIK	4760376	1.169246398	0.00666858	0.051821627
ATP13A1	7100292	1.169110999	0.003040229	0.032292551
AI851076	150743	1.167105299	0.006858301	0.052671888
LOC384710	4280519	1.167061301	0.000469461	0.012700806
SESTD1	5260670	1.166721001	0.002246766	0.027025581
ZC3HDC5	3190609	1.165927095	0.000279528	0.010094851

UNC93B1	2100689	1.165097708	0.001590289	0.022661882
GSTM1	3850129	1.159466922	0.000549593	0.013832473
BC017643	240487	1.152831928	0.000658016	0.015105032
4933407C03RIK	4850021	1.152329901	0.000917832	0.01759632
PHF12	4200471	1.152071619	0.006349311	0.050356713
ZFAND2B	2070170	1.151734343	0.007053846	0.053553283
TXNL4B	630259	1.150990143	0.003510318	0.035237053
CRELD2	290685	1.149150484	0.006040752	0.048903363
PAPD1	2360475	1.147566665	5.89E-05	0.004805456
ABCD1	6220438	1.14351487	0.003886452	0.037140131
4933411K20RIK	4060037	1.142577999	0.006072217	0.049061114
1700001A24RIK	3450544	1.140185993	0.00617584	0.049460866
IFITM2	840349	1.139703337	0.001409216	0.021496779
MAPKAPK3	7040161	1.139229913	0.006024573	0.048803126
GRN	2000246	1.136946781	0.001527623	0.022246162
SEC5L1	5550608	1.136857041	0.006386044	0.050533284
MMP2	3870072	1.130568223	0.001203198	0.020155835
MRPS15	5960491	1.130413447	0.001520074	0.022206242
BC027373	3780372	1.127066305	0.00729704	0.054794844
ICSBP1	4610373	1.126740274	0.00067337	0.015198788
AGPAT4	7570315	1.126629029	0.000438956	0.012200909
2810432D09RIK	1940368	1.126315173	0.003456901	0.034813371
RAB11B	3610193	1.117565006	0.004598279	0.041482838
PIP5K1C	4490592	1.117542759	9.66E-05	0.006183835
PRNP	6770379	1.117498997	0.006139999	0.049319328
RPS27	6420242	1.113189704	0.001535063	0.022257694
NDUFA5	6560152	1.113162367	0.005184393	0.0445853
SOD2	4860224	1.112762744	0.005811501	0.047673953
SAMHD1	6860278	1.111683485	0.007020594	0.053442548
ODF2	2570468	1.110502528	0.004023709	0.037961226
RPL22	4640239	1.104653327	0.006165662	0.04943034
MISC12	6650097	1.103855228	0.000752363	0.016014086
CSNK1G2	6480168	1.102897186	0.00327854	0.03389595
RPL24	510674	1.102154328	0.001656965	0.023077142
CORO1A	4290661	1.099642847	0.002973488	0.031880967
COX8A	7100632	1.099328401	0.001085282	0.018830549
GTF2H1	5890605	1.098941599	0.007024163	0.053443519
IGFBP4	3400747	1.098703871	0.003322752	0.034126334
IL15	4480735	1.098444417	0.000398045	0.011773783
PKM2	3780291	1.09643048	0.000659216	0.015105032
CDC5L	3120398	1.096062043	0.007222572	0.05431444
B2M	6110736	1.093501435	0.003341915	0.03420513
6430706D22RIK	1710332	1.091552607	0.002410755	0.028169005
ARPC5L	5900253	1.088652639	0.001363474	0.021237105
NR1H3	4900630	1.087179485	0.000272126	0.010019363
VDAC1	6840731	1.086881928	0.005972604	0.048463706

HIST2H2AA1	7050546	1.086832856	0.005826779	0.047774051
B930004C15RIK	5570537	1.086575677	0.006475138	0.051032701
FH1	3870100	1.08584959	0.003963324	0.037574311
FXVD5	2630008	1.084267542	0.00176418	0.023760579
TEX292	4040343	1.079555437	0.002203654	0.026740885
LAIR1	5080685	1.078888084	0.003282858	0.03389595
ITM2B	2970286	1.077931558	0.005586503	0.046741815
NUCB2	6510706	1.077911648	0.000599682	0.014415574
CLK2	2370093	1.077481267	0.003872847	0.037078277
CDC27	1190630	1.077250822	0.002662534	0.029942759
CAMK2D	3190468	1.076629192	0.0010636	0.018578896
AP1B1	2340121	1.076509417	0.003701815	0.036291337
LOC223594	3850008	1.073960009	0.000309911	0.01050787
LOC235857	4560646	1.07192231	0.000123688	0.006991929
MRPL23	6590767	1.071442602	0.00059654	0.014384572
RP9	6760017	1.071031889	0.002339987	0.027601731
PLCG2	1940255	1.070854103	0.000579472	0.014171053
SLC22A4	290504	1.06992392	0.000497506	0.0129627
EIF2B5	2370187	1.06858313	0.002669874	0.029974769
XPO6	7040681	1.067935592	0.001512279	0.022177095
A130086G11RIK	6840181	1.067674207	0.000193061	0.008493061
D030051N19RIK	270730	1.066457164	0.001545403	0.022269032
3632431M01RIK	2470164	1.06598937	0.003228255	0.033713035
LSM6	1090221	1.06581752	0.00166237	0.023090292
CLIP1	2140338	1.062200297	0.004953801	0.043315076
1110039B18RIK	870408	1.059442321	0.001252779	0.020417143
RAB6	5870184	1.056067813	0.004339707	0.039735438
E030003N15RIK	6330575	1.05572572	0.001075422	0.018723106
ZFAND2B	1010195	1.05557547	0.006121056	0.049313126
HPCAL1	4290100	1.052410853	0.004043325	0.038030768
ADSSL1	3190689	1.050964698	0.002844805	0.031058717
RBMS1	540603	1.050086931	0.002576062	0.029242447
PLEKHB2	5900201	1.046386875	0.006869834	0.052677405
AGPAT6	3420020	1.04368722	0.000931348	0.017719967
LOC383850	3290477	1.043424898	0.005754532	0.047475555
WTAP	2100360	1.042304227	0.004732448	0.042187243
CORO1B	3840092	1.041335652	0.000414389	0.011941963
9130017C17RIK	2810424	1.040102783	0.000639491	0.014861478
B430201A12RIK	2320390	1.03886478	0.006164539	0.04943034
RAD23B	5290672	1.038760232	0.006812249	0.052447899
FBXO42	3990739	1.038662891	0.00073031	0.015897425
NFKBIE	6420450	1.03749146	0.000938034	0.017719967
FLOT1	2480719	1.032103182	0.000283239	0.010174133
DRAP1	1230538	1.03061413	0.002207744	0.026755041
CDC5L	2970452	1.028144603	0.002364763	0.027820009
COX4I1	1070762	1.026074204	0.002016182	0.025468924

TMUB1	7040592	1.01509518	0.005661987	0.047000724
GSTP1	5290358	1.015072217	0.003572738	0.03546676
GNAI2	2320041	1.013463343	0.002446609	0.028522849
LOC208092	870523	1.013389976	0.000273863	0.010030241
4930438M06RIK	3140021	1.0118419	0.004559655	0.041166796
PSMC2	4390672	1.011759791	0.00332719	0.034126769
9930108O06RIK	3400521	1.011623068	0.001895793	0.024801828
NFIX	270026	1.008625798	0.003726688	0.036298129
2010005J08RIK	2750612	1.008142873	0.004927841	0.043247044
1810055D05RIK	5260356	1.007273646	0.005412241	0.04592715
CD52	6290768	1.007051822	0.006297126	0.050070697
2700029M09RIK	2490762	1.006958693	0.003673775	0.036176391
BC022145	430358	1.006779129	0.003421255	0.03465239
ATP5E	6280612	0.999921928	0.001096727	0.018965561
RBBP9	2230424	0.994449951	0.000186244	0.008310877
TOR2A	6290554	0.994042934	0.004266442	0.039342976
RUVBL2	2470386	0.992352196	0.000867697	0.017235846
CTDSPL	6980273	0.988383037	0.005646708	0.047000724
EIF2S3Y	6960730	0.984449745	0.00364647	0.036044581
PHTF1	4560086	0.981585347	0.002808027	0.030816851
RNASE4	5810398	0.978764142	0.000806935	0.016536545
LRRC59	290594	0.974627148	0.00578914	0.047591085
AW490415	4210307	0.961305374	0.00494416	0.043315076
CD300A	2490097	0.960963119	0.000110852	0.006660824
TEX264	240594	0.960118977	0.000527083	0.013529049
ACAA1	3180022	0.959341897	0.002857628	0.031119293
NUDC-PS1	2140092	0.950101211	0.001494128	0.022025657
RSN	1940767	0.9488942	0.005787414	0.047591085
1110008P14RIK	1050673	0.944991736	0.004620995	0.041558809
DSCR3	4610039	0.942178771	0.006137828	0.049319328
CTSZ	4150725	0.942103274	0.004864564	0.042921481
RBBP9	3370270	0.941401367	0.000262902	0.009933327
SLC39A13	4230086	0.939348635	0.005681773	0.0470572
UBXD1	3890543	0.93920216	0.007055832	0.053553283
ENO1	3170397	0.938966673	0.001590666	0.022661882
EDF1	1850477	0.935631009	0.002409676	0.028169005
ATP5H	5560255	0.927209226	0.005767022	0.047513414
NOSIP	3420477	0.926960695	0.005226136	0.044822122
9830002117RIK	6270634	0.924928622	0.00077157	0.016191504
IL12A	2070468	0.920515956	0.000354903	0.011293638
RPL37A	6520619	0.919281033	0.005133572	0.044313082
IDE	1510477	0.917603691	0.00725083	0.054500551
BC003281	6130682	0.917286982	0.004030255	0.037976837
PNPLA2	2900730	0.915865696	0.006744233	0.052156973
ARPC3	3710242	0.911339149	0.006201148	0.049586834
UBE2N	6480368	0.910336513	0.004095181	0.038295506

OAZ2	5560180	0.909554506	0.005141515	0.044344877
SLC4A2	3800333	0.901495688	0.006771183	0.052235322
B2M	5570253	0.900727415	0.002389961	0.028055679
ADCY7	5420082	0.898394932	0.000510601	0.01319321
ZFP26	6980685	0.896855653	0.003537231	0.03532454
ATP5H	2690148	0.896190083	0.00573683	0.047386828
TSPAN31	3520075	0.894521498	0.007318147	0.054829242
WDR45L	1770025	0.892128209	0.006892398	0.052777141
GSDMDC1	1980102	0.886614859	0.002503137	0.028879065
FAU	290433	0.885965848	0.001946614	0.025023982
SPARC	510050	0.883897749	0.00336748	0.034360533
E030020A01RIK	4670253	0.878164687	0.005623837	0.046952992
LOC381010	3850324	0.876098822	0.001857814	0.024469889
D930015E06RIK	990671	0.874348461	0.006230246	0.049768255
RPS29	5270543	0.873192905	0.001528537	0.022246162
CXCL16	430019	0.872372884	0.002676005	0.02997739
LOC237512	2030551	0.869093397	0.005554067	0.046574746
1700051E09RIK	3610491	0.868955193	0.005671284	0.047000724
5330408N05RIK	2480010	0.864909308	0.000845337	0.016938375
SCL0004214.1_77	1430148	0.863429461	0.005647197	0.047000724
2700088M22RIK	2470132	0.861751744	0.004826137	0.042703746
5430434G16RIK	2570689	0.846480162	0.001843776	0.024367658
EXOSC10	10113	0.837100126	0.004607782	0.041504784
CXCL16	630274	0.83653738	0.001537626	0.022269032
LOC383099	6860403	0.832583062	0.002018948	0.025468924
2010315L10RIK	70504	0.829403325	0.00377913	0.036655912
COX5B	3830068	0.826284533	0.005953262	0.048402204
1110019N10RIK	780041	0.826193949	0.004612063	0.04151926
PARK7	4730739	0.824233791	0.004221262	0.039112155
TRAFD1	4570747	0.821679146	0.003125714	0.032907944
ALG1	5860068	0.81986839	0.00670276	0.051965634
RPS23	4850519	0.810356407	0.003714575	0.036298129
SPIC	1450086	0.808634162	0.006797695	0.052387792
GNG5	7610543	0.803408884	0.002331245	0.027550921
TNFSF5IP1	3850471	0.801069525	0.005460234	0.046132738
CYBB	3400458	0.797018408	0.003700927	0.036291337
3110009E18RIK	5360131	0.796985296	0.000972816	0.017962973
2310022A10RIK	780767	0.796242011	0.001998721	0.025357957
GOLGA3	4540482	0.794798284	0.000978186	0.017982539
ORF18	4850736	0.794740633	0.006962099	0.053127851
1810009M01RIK	3450180	0.781877384	0.001168141	0.019803562
AF322649	1010170	0.776778194	0.000780519	0.016236897
GADD45A	3890332	0.768751851	0.006284162	0.049993212
DUSP7	2120438	0.763730449	0.000899517	0.017482601
F630001K14RIK	3190086	0.762995305	0.005860791	0.047951648
1110004F10RIK	5810010	0.75991831	0.002536332	0.029003466

MORF4L1	510438	0.757686341	0.002887994	0.031318194
TREM2	6770114	0.75713416	0.003229845	0.033713035
RNASEH2A	6560008	0.756287421	0.001698272	0.023359134
GTF3A	3940605	0.754354938	0.004656299	0.041675891
A930021H16RIK	6650349	0.75378919	0.00409286	0.038295506
CCR5	1780324	0.751179084	0.002294716	0.027306244
SLC7A8	6550687	0.750290204	0.001489032	0.022025657
AI839550	7000424	0.748661407	0.002455337	0.028560993
HIST2H2AA2	1110670	0.742368848	0.007213373	0.054286574
D19WSU12E	6290356	0.731011506	0.003663658	0.036145457
SCL0002018.1_19	5960048	0.728763232	0.002022528	0.025493377
BCAP37	7000019	0.723726386	0.006632326	0.05170351
CD52	1170181	0.719829573	0.002270173	0.027219589
PPP2R4	1510088	0.711831199	0.006120776	0.049313126
IER3	6520075	0.703520738	0.003461849	0.034840604
2310016E02RIK	4060056	0.699443594	0.003926835	0.037410932
MPHOSPH6	4040593	0.698005588	0.002088749	0.025928204
LOC226017	3370286	0.695944883	0.002278997	0.027223495
ARF3	5570280	0.693223675	0.002272408	0.027219589
1810054G18RIK	6520082	0.691420626	0.002952012	0.031732947
TMEM77	3290025	0.690981243	0.007078873	0.053649493
1700051E09RIK	5670674	0.688584654	0.002050884	0.025622022
GSTP1	4290040	0.687925218	0.00273552	0.03032112
APOBEC3	7210349	0.677455373	0.004280016	0.039421333
C1RL	5490133	0.633985155	0.005753893	0.047475555
CCR5	1240646	0.626798349	0.005035913	0.043737525
IL1RN	4260441	0.624895745	0.00559791	0.046812034
RPL3L	1850100	0.621574913	0.006871566	0.052677405
VPS25	1660037	0.615191988	0.00426569	0.039342976
1810014F10RIK	2340458	0.614804964	0.006686755	0.051891637
SMOX	1580379	0.60590534	0.004286357	0.039432962
PLCB3	1090672	0.604155191	0.004374855	0.039916056
2610020H15RIK	4280274	0.601773135	0.005018967	0.043614743
LOC385238	5890433	0.594720638	0.003367682	0.034360533
6030411F23RIK	5860327	0.588511398	0.006770865	0.052235322
CD300A	130706	0.579288669	0.003249742	0.03377861
RPS28	4810044	0.559621131	0.007115779	0.053856304
LOC380771	5810717	0.545047892	0.007322806	0.054829242
4933424A10RIK	2340671	0.541435298	0.006402937	0.050601123
PRTN3	1780068	0.534943371	0.006707397	0.05197563
FAHD2A	3180446	0.519954297	0.006487165	0.051084779
FANCC	4480692	0.511263242	0.005375781	0.045737347
TEX14	5900541	0.507834257	0.005965836	0.048463706
4632407M08RIK	1990184	-0.492598449	0.007192384	0.054230957
TRGV4_AF037352_T_CELL_RECEPTOR_GAMMA_VARIA	4830747	-0.494920783	0.006567431	0.051429975

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OLFR1331	4860204	-0.541034481	0.004054123	0.038086193
FOSL2	2260484	-0.543568041	0.006389706	0.050533284
D430019H16RIK	3360278	-0.551304069	0.005559957	0.046574746
SLC12A6	4780358	-0.552628105	0.006956816	0.053127851
9627020_131	3130333	-0.552988722	0.004034128	0.037990282
PIGH	1570458	-0.554915917	0.00588833	0.048075642
C530024P05RIK	2690484	-0.558871876	0.005650452	0.047000724
A430096A09RIK	730333	-0.567125211	0.005655531	0.047000724
OLFR1500	4040114	-0.56753489	0.006582891	0.051499101
POSH-PENDING	6840019	-0.574540415	0.004947343	0.043315076
A830081I21RIK	1340369	-0.576286455	0.005094674	0.044124479
B930076A02	7570500	-0.577037421	0.002704854	0.030095638
LOC381904	610086	-0.583388169	0.003700334	0.036291337
A930038I05RIK	2370411	-0.586616296	0.004096556	0.038295506
H2AFY	3370711	-0.586775343	0.00550444	0.046380058
4930481F22RIK	6060692	-0.588219114	0.003040031	0.032292551
D10BWG1379E	3850709	-0.592717476	0.002998301	0.031985818
LOC384196	2490482	-0.594902196	0.005334156	0.045488256
BC042513	4880528	-0.597417371	0.006834441	0.052592684
CST3	6130669	-0.600661624	0.004351334	0.039771155
1700023B02RIK	2680458	-0.60491414	0.005355469	0.045594886
E130102H24RIK	6940156	-0.607960578	0.003536687	0.03532454
BC048390	7610168	-0.608013714	0.004089714	0.038295506
BTD	1510521	-0.61088001	0.005349655	0.045570376
D130054A02RIK	6290273	-0.610931163	0.006779068	0.052270182
GSTM6	5080746	-0.613678498	0.004462547	0.04054938
IDH3G	7380719	-0.617280344	0.003724923	0.036298129
ATP5L	1300341	-0.619937868	0.007320622	0.054829242
NOVA2	4590370	-0.62033754	0.002796383	0.030710773
4933412A06RIK	1090161	-0.623604236	0.003456588	0.034813371
KHDRBS2	1740204	-0.626077926	0.006441637	0.050829357
LHX8	4590300	-0.629219344	0.004494348	0.040719215
A830048E23RIK	1990162	-0.629973968	0.001639226	0.022977819
4631403P03RIK	1110672	-0.630537807	0.006211004	0.049640086
DEFB51	110719	-0.631381184	0.002877428	0.031247261
A230044L11RIK	7560079	-0.631961321	0.003269888	0.033874643
D130016K21RIK	4070521	-0.633319105	0.003573807	0.03546676
2810481F14RIK	4880475	-0.633739368	0.001648404	0.023026915
LOC381525	20204	-0.63430065	0.006623152	0.05170351
NEDL1	240349	-0.635456769	0.003432995	0.034707672
CCT8	4250386	-0.639731319	0.005774752	0.047548318
G630008F16RIK	5890079	-0.645296534	0.001930409	0.024980777
A830025F02RIK	4860156	-0.647232568	0.00210827	0.026059849
PIGO	1770646	-0.647922361	0.003375776	0.034420498

D17WSU92E	6330025	-0.650357429	0.005767454	0.047513414
ASB9	6270156	-0.652190577	0.00557782	0.046694322
D930024H10RIK	5050189	-0.65470793	0.005004572	0.043513994
MTAP4	3420148	-0.655645397	0.002693086	0.030047933
PPM1L	20615	-0.65663003	0.005637355	0.047000724
ABPA	5220504	-0.657588529	0.004353978	0.039772309
1700057G04RIK	7330747	-0.659505726	0.002400506	0.028112717
KCNK9	6620619	-0.659674977	0.002306468	0.02739021
LOC241877	6060437	-0.659885338	0.005671927	0.047000724
RIPK3	6480133	-0.663079411	0.006674174	0.051821627
PIP5K2A	3140678	-0.664070866	0.003761199	0.036550477
ICAM4	6280092	-0.665013501	0.002208768	0.026755041
GRB10	6520368	-0.665619202	0.003872509	0.037078277
AI317395	6220646	-0.667075931	0.003657401	0.036106659
AA408296	4150356	-0.667608795	0.004328109	0.039676033
LOC333749	4390446	-0.669951885	0.002093848	0.025970735
9330161C17RIK	4480338	-0.670514078	0.001547294	0.022269032
A330043L12	2570736	-0.673141987	0.004715683	0.04206194
FMO2	6380021	-0.678409437	0.001716116	0.023521244
MT-ND4	6250689	-0.679459393	0.00144791	0.021711137
LOC224046	7330112	-0.680681792	0.002639786	0.029769967
SPACA4	6520291	-0.681932253	0.003551954	0.035426004
D16BWG1494E	4760452	-0.682750608	0.006123001	0.049313126
GAMMA GLUTAMYL TRANSPEPTIDASE TYPE III	6940047	-0.684781768	0.001248031	0.020417143
NOL3	6020603	-0.684926798	0.001478058	0.02200648
SLC43A1	520221	-0.68504313	0.004835552	0.042716441
PFKM	4540593	-0.685279807	0.002086513	0.025928204
2810409C01RIK	7330563	-0.685980405	0.003514612	0.035250704
A530046H20RIK	2690270	-0.689299513	0.003252413	0.033783759
LOC231462	360370	-0.689410603	0.001131222	0.019346643
TMPRSS4	2140274	-0.69124929	0.001301747	0.020774523
LOC381986	510369	-0.695266216	0.004296437	0.039478918
3110021E02RIK	2690164	-0.695956409	0.002030847	0.025526732
A130041O12RIK	6370021	-0.696885311	0.001757931	0.023738178
FTH1	7570382	-0.6979542	0.005897857	0.048128126
4933416C03RIK	4120475	-0.698428755	0.003574311	0.03546676
OLFR952	2690441	-0.699323707	0.003450329	0.034813371
GOT2	3870113	-0.700292992	0.001551928	0.022314714
AW060207	4390577	-0.701484743	0.003129147	0.032921761
4930500E24RIK	4390349	-0.702780077	0.001149857	0.019571237
CXCL16	6250112	-0.704607069	0.002680062	0.02997739
CHD5	1070133	-0.704977804	0.003234985	0.033715491
FOXN4	60136	-0.705337246	0.001541792	0.022269032
LOC229494	7650709	-0.705445068	0.002662821	0.029942759
SLC17A2	20382	-0.706785176	0.004390713	0.040013724

4432405B04RIK	5960047	-0.707884739	0.001992096	0.025315271
WBP2NL	6940500	-0.708809251	0.001564686	0.022415137
DEFB17	7040402	-0.708872481	0.007176941	0.054154867
SPAG6	5090474	-0.709383462	0.002693459	0.030047933
EVX1	1500066	-0.710269681	0.001323108	0.020944497
ELMO1	3800195	-0.710319121	0.000869048	0.017235846
CDC25B	4230632	-0.713648914	0.003055423	0.032387485
GRB2	4290020	-0.714375493	0.005255749	0.045017392
6330500D04RIK	4010519	-0.715050922	0.005280264	0.045152656
LEP	6280059	-0.715844936	0.002041387	0.025585716
C030006K11RIK	6060685	-0.716387237	0.006887089	0.052762507
GZMD	2760520	-0.717205351	0.001984353	0.02525895
PAPLN	2680672	-0.717764032	0.001748686	0.023654478
CACNB1	20100	-0.718531704	0.001614646	0.022794394
D630011D02RIK	4040392	-0.718602575	0.003707162	0.036298129
ASAH3	3830753	-0.718706936	0.000894949	0.017415621
ACAT3	4730328	-0.718780515	0.001304331	0.020774523
2900092C05RIK	3370736	-0.720294438	0.00614185	0.049319328
TCP10A	630113	-0.721462761	0.001379465	0.021357638
SCNM1	7610689	-0.722232776	0.006595961	0.051575369
CDK2	2000440	-0.7223278	0.001746738	0.023654478
A930012E17RIK	4050577	-0.724902981	0.001641801	0.022977819
LOC384349	1570731	-0.727378038	0.001547317	0.022269032
B230353G19RIK	3710102	-0.728858341	0.000670112	0.01518797
A830006F12RIK	4230601	-0.730724539	0.000632902	0.01479989
IL17	20347	-0.731250765	0.000992462	0.018110397
1500005C15RIK	4070008	-0.731661918	0.001935126	0.024999964
UNC5A	7570670	-0.733450691	0.003568981	0.03546676
OLFR1436	1820255	-0.735082203	0.000781052	0.016236897
MCAM	7160041	-0.73751309	0.002850675	0.031087171
A930013K19	6960204	-0.739269161	0.001213666	0.020178813
RBM13	1400519	-0.740535118	0.001904317	0.02480884
U2AF2	3440431	-0.740740768	0.001395527	0.021456579
IRAK1BP1	6220369	-0.741447066	0.001918499	0.024892261
HBB-B1	6770100	-0.741655941	0.005609122	0.046880545
PTPRR	1940736	-0.742847618	0.006805147	0.052419213
BC052055	6660743	-0.742927248	0.002048576	0.025613795
PDE1A	5910731	-0.743365968	0.001221133	0.020225722
LOC384348	1850239	-0.744671644	0.005629997	0.04697916
OLFR100	3120279	-0.744711358	0.00074089	0.015897425
BC052486	5890441	-0.746066434	0.001286315	0.020742256
SLC2A10	4900682	-0.746293006	0.000615394	0.014589542
LOC217246	3930519	-0.747045421	0.002761687	0.030480622
CCL11	6060520	-0.747239798	0.001594967	0.022681541
GJB5	6060097	-0.747513819	0.002015787	0.025468924
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SON	3290132	-0.748618315	0.002691753	0.030047933
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LILRB4	650717	-0.750998783	0.002274824	0.027219589
FOSL1	3840253	-0.751006402	0.00105316	0.018523575
PKP1	3940070	-0.75121175	0.001494948	0.022025657
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ADRB3	7560349	-0.751686078	0.000846463	0.016939083
2700038C09RIK	360603	-0.754377032	0.00396818	0.037574311
PROM1	2760167	-0.756000187	0.006259213	0.049889971
AA792892	1440674	-0.757043073	0.002212547	0.026767584
MYO18A	3450148	-0.757293222	0.004136463	0.038556507
2610007K22RIK	1820097	-0.757490193	0.001825716	0.024263928
4930438O03RIK	5700672	-0.757728667	0.003716926	0.036298129
5330403J18RIK	5960500	-0.75848686	0.000774192	0.016209837
4932416G22RIK	5270273	-0.758972419	0.003100014	0.03276952
4933417E01RIK	380070	-0.758973239	0.005521291	0.046471614
KTN1	6220672	-0.759832185	0.005844561	0.047869301
LOC380854	5080519	-0.763163422	0.001127217	0.019342046
RAI3	2690221	-0.767116348	0.001542823	0.022269032
OLFR168	7040431	-0.767616074	0.000554169	0.013902572
IL13	5270719	-0.768477782	0.001369262	0.021284553
3010002L02RIK	520059	-0.768712731	0.005952971	0.048402204
2310016G11RIK	4780603	-0.770365442	0.002075185	0.025821754
D930038M13RIK	2810576	-0.770921772	0.001181249	0.019917066
GIPC1	7210736	-0.770969497	0.005938573	0.048358733
CD44	4880138	-0.771546234	0.006968989	0.053127851
ALDRL6	3850349	-0.771626113	0.000909225	0.017543881
OLFM1	4590215	-0.772349399	0.006322522	0.050195521
MT-ND1	130204	-0.776797453	0.001523353	0.022233225
GPRC5A	6060026	-0.777717313	0.000600972	0.014424253
HLF	380736	-0.778481872	0.000548179	0.013829047
MINPP1	6280349	-0.782414298	0.007313476	0.054829242
DNAHC8	3850112	-0.782728465	0.000775575	0.016209837
SULT1D1	6060575	-0.782818853	0.006645838	0.051730934
GABRA4	4490601	-0.784353698	0.003782295	0.036663708
2700045P11RIK	3930709	-0.78521132	0.001020823	0.018243472
RAB39B	2350746	-0.785315704	0.000456305	0.012487241
MT1	5220279	-0.785397746	0.004992605	0.043468171
MYRIP	6960372	-0.785788692	0.000469429	0.012700806
DHX16	10474	-0.786897919	0.003884997	0.037140131
5730522G15RIK	70452	-0.78705331	0.002817503	0.030877203
BC011209	4480575	-0.787364924	0.001237974	0.020364934
RGS11	3290725	-0.788304677	0.007082918	0.053653971

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KCNA10	2650736	-0.79174974	0.002223324	0.026805899
BC024063	5310349	-0.792810713	0.001293062	0.02074376
HOXA4	6770519	-0.793366756	0.003566566	0.03546676
A830020B06RIK	1660088	-0.793463188	0.002311547	0.02739021
NEUROG1	4610541	-0.794532249	0.000761033	0.016122893
LOC232993	4880047	-0.794902071	0.000937701	0.017719967
BCHE	2760327	-0.795183996	0.000415266	0.011941963
MAPK13	1440671	-0.796642446	0.00553179	0.046504604
A730089K16RIK	110253	-0.800536432	0.002297727	0.027321141
B130017I01RIK	6580279	-0.801771185	0.003875204	0.037078277
ALDOB	7400133	-0.80246277	0.000615327	0.014589542
G430055L02RIK	1500402	-0.80251316	0.00053712	0.013673656
2900024C23RIK	60601	-0.803832225	0.0057977	0.047612171
SVS6	6520050	-0.804117731	0.004912695	0.043223365
OLFR166	5810746	-0.805081372	0.004802356	0.0425904
ACAA2	4010398	-0.806619375	0.003316156	0.034126297
PRRX2	5080736	-0.80869196	0.003258397	0.033804092
CD97	4670753	-0.80881445	0.005227179	0.044822122
TBX22	2690088	-0.809780454	0.006535177	0.051279619
NUDT13	4070026	-0.809983051	0.00258849	0.029340628
IL6RA	6100369	-0.810093446	0.005121734	0.044284747
SEPM	5550195	-0.810465418	0.004001892	0.03784512
ABCC6	1050369	-0.810495796	0.000331248	0.010939907
TSR2	4200041	-0.810684865	0.001051432	0.018523575
TMEM8	2260129	-0.811805913	0.002055571	0.025659937
LOC384410	3390709	-0.812962601	0.00124389	0.020417143
9630019K15RIK	4670424	-0.813695702	0.000369946	0.011512799
KRT2-4	4920438	-0.814202722	0.005929301	0.048358733
RAPGEF4	2450601	-0.815390885	0.000887351	0.017311157
C530028I08RIK	4920039	-0.816995659	0.004971358	0.043409018
HPA	1190577	-0.820044759	0.005411963	0.04592715
ACYP1	1820576	-0.820699376	0.000860652	0.017200859
LOC277016	7100224	-0.821070877	0.003798271	0.036749756
4930428J16RIK	5690468	-0.821346727	0.000566288	0.013958544
9430045C13RIK	4830278	-0.821922227	0.001129512	0.019342885
ERAL1	2000468	-0.822367507	0.00272582	0.0302568
CART	4050706	-0.822719034	0.0010583	0.018528004
OLFR1113	3460441	-0.823958915	0.002896592	0.031367627
LOC328031	4560369	-0.823983689	0.000994333	0.018123242
SMARCA4	4810370	-0.824995857	0.007270106	0.054618998
OLFR66	3390646	-0.827235604	0.002116136	0.026059849
1700073K01RIK	4290377	-0.827724854	0.002846066	0.031058717
RAB26	6770037	-0.829148836	0.002291317	0.027306244

1700020N15RIK	2600709	-0.829421806	0.000300984	0.010365899
MAT2A	4070296	-0.830071394	0.000529577	0.013548269
EGFL9	6330672	-0.830476696	0.000798322	0.016463676
2810432L12RIK	2000066	-0.833783899	0.000296673	0.010290224
NGFR	4050064	-0.83526488	0.000872287	0.017235846
DES	1780411	-0.836275531	0.00323111	0.033713035
TBX3	990487	-0.836415823	0.001732186	0.023595717
NKX1-2	4880286	-0.837610422	0.001823736	0.024263928
1700006D24RIK	6060593	-0.838847212	0.000945755	0.017737473
2310014D11RIK	2060671	-0.840923868	0.001958795	0.025056115
LOC545253	3120730	-0.842713919	0.006615474	0.051701913
MARS	2940017	-0.843035102	0.001295476	0.020746709
6330565B04RIK	5870356	-0.843668304	0.004835824	0.042716441
LOC381928	2650519	-0.843761603	0.000446136	0.012309575
LOC243428	7200672	-0.844618224	0.000286006	0.010174133
P4HB	2680692	-0.84514705	0.001054468	0.018523575
MECP2	2940168	-0.845321783	0.004238453	0.039154631
D230012E17RIK	5290022	-0.84625749	0.001158832	0.019688728
DUSP15	3180553	-0.846984087	0.004978116	0.043429866
D830013F15RIK	3440594	-0.848263165	0.006391099	0.050533284
ZFP533	2940521	-0.848424442	0.002114292	0.026059849
AW049900	1340296	-0.848879399	0.000289623	0.010244992
LOC272683	5490156	-0.851759229	0.002720048	0.030214326
LOC278105	6980091	-0.851876444	0.003222307	0.033696439
ZCWCC3	1240672	-0.852998474	0.000268408	0.009986884
RGS1	450368	-0.853781628	0.002501706	0.028879065
LOC383347	4480465	-0.854712451	0.003280087	0.03389595
2700078E11RIK	6200605	-0.855989011	0.002912332	0.031494152
NLRP14	4670731	-0.857260715	0.002681123	0.02997739
C130026L21RIK	160037	-0.857334526	0.001592314	0.02266457
2900060B14RIK	6110180	-0.857686693	0.006113125	0.049313126
LOC329240	3290709	-0.858795632	0.002115618	0.026059849
UBE2D1	1820685	-0.859148946	0.00055851	0.013914954
D5ERTD579E	2070538	-0.859323358	0.000800444	0.016463709
MBIP	7380601	-0.861897978	0.000540583	0.013739296
LOC381092	3450035	-0.861940935	0.004953656	0.043315076
LOC386117	2480519	-0.862641002	0.007194009	0.054230957
TNC	4050598	-0.862700367	0.000533878	0.013613458
0610025P10RIK	6270482	-0.863995067	0.001399013	0.021458445
SLCO1A5	20647	-0.864556074	0.000374883	0.011619875
LOC383836	4810709	-0.864738752	0.000668471	0.01518797
LOC385063	4860632	-0.865164207	0.000582855	0.014209033
OLFR593	1820253	-0.865512789	0.00073319	0.015897425
A730008L03RIK	150059	-0.865663882	0.000296865	0.010290224
4930564D02RIK	5220561	-0.865926362	0.000238055	0.009406498
B230219J02RIK	4780484	-0.866447997	0.000408939	0.011825721

ALOX12B	50196	-0.86772463	0.000995517	0.018123538
RTN2	6060523	-0.868570961	0.006653963	0.051768233
RUSC1	5910762	-0.86947221	0.004189565	0.038934627
SDS	4290259	-0.869523419	0.000765502	0.016147329
SH3MD1	6450767	-0.869558669	0.000357944	0.011320813
STAT4	3170273	-0.869825335	0.004332161	0.039689755
U2AF2	2750528	-0.871059415	0.006739685	0.05214777
LRRFIP1	4880500	-0.871097593	0.001021033	0.018243472
4833424O15RIK	7000669	-0.871543878	0.000225703	0.009080166
FNBP1	6620180	-0.871602262	0.002627536	0.029696506
CNTNAP4	3390286	-0.872034843	0.000509826	0.01319321
BCL11A	1570022	-0.872100263	0.000303721	0.010365899
4931403M11RIK	1820348	-0.872452523	0.001221697	0.020225722
LOC381983	580709	-0.872898318	0.000548567	0.013829047
PALMD	5080279	-0.873246175	0.000284364	0.010174133
1190003J15RIK	6660475	-0.874730666	0.000771424	0.016191504
LIMK2	10066	-0.87541811	0.000476624	0.012729639
LOC386149	5260465	-0.8759746	0.002533652	0.029003466
PXT1	1440369	-0.876005587	0.000447971	0.012312458
CNR1	1440647	-0.877073205	0.00067197	0.015189267
A930021K2ORIK	360563	-0.877260565	0.001260085	0.020425744
B230114J08RIK	1010669	-0.877551674	0.007215371	0.054286574
FOXP3	1570241	-0.8784617	0.001227248	0.020252859
DNMT2	5310446	-0.880368403	0.00298715	0.03194728
POLR3A	6130646	-0.882019886	0.002187433	0.026621199
9430028I06RIK	2690524	-0.88333199	0.001556905	0.022344893
EEF1G	3890626	-0.883795016	0.004458137	0.040533027
3222401M22RIK	6590243	-0.884781651	0.001129757	0.019342885
BC019977	5220170	-0.884892858	0.004082953	0.038267591
RHEB	1050541	-0.885314045	0.005642382	0.047000724
D230014K01RIK	6980647	-0.886298625	0.006853442	0.052671888
MYBBP1A	1090524	-0.886382138	0.005484985	0.046266339
IGHV1S123_AF025448_IG_HEAVY_VARIABLE_1S123_197	1820553	-0.886494385	0.003098972	0.03276952
CLK4	7100519	-0.886748059	0.001585166	0.022625045
NPM3	7210709	-0.88751089	0.003398896	0.034549406
SON	3780156	-0.88752724	0.003533173	0.03532454
LOC383303	5810025	-0.888116879	0.000490434	0.012843093
E030010A14	4900440	-0.888821803	0.003398588	0.034549406
POP7	1410358	-0.888905185	0.001888626	0.024770671
BOP1	380437	-0.890266405	0.000727653	0.015897425
RS1H	1450402	-0.891978092	0.004971932	0.043409018
ISY1	5260195	-0.894804865	0.000882576	0.017246025
D630043K02RIK	1240082	-0.895060911	0.00027368	0.010030241
EXOSC8	4670451	-0.895944819	0.001419275	0.021565479

1110049N09RIK	2570014	-0.897301994	0.000302069	0.010365899
SH3BGRL	3170129	-0.897757303	0.003934384	0.037439821
HPCA	1260110	-0.898077835	0.005968825	0.048463706
LEPRE1	2630278	-0.899595336	0.001303762	0.020774523
PHR1	20563	-0.900328754	0.001305893	0.020777888
LRRC20	6130338	-0.902167802	0.001061558	0.018564119
4122402O22RIK	3180678	-0.903105869	0.006344298	0.050342673
FYN	6960494	-0.903124502	0.001428675	0.021675298
GLIS1	1770376	-0.90472485	0.000912454	0.01754785
SLC45A4	4220672	-0.90532017	0.003793485	0.036749241
IL1RL2	2570279	-0.905505842	0.001237913	0.020364934
OLFR213	6770270	-0.90605757	0.001760218	0.023748409
CTNNA1	70753	-0.906565851	0.00309872	0.03276952
IQCA	510672	-0.907607869	0.001717863	0.023524426
ZFP92	1780278	-0.907924646	0.001290568	0.020742256
2500003M10RIK	160008	-0.910173592	0.00332126	0.034126334
ADARB1	5310369	-0.910779044	0.003835286	0.036953578
2210418H06RIK	1660670	-0.911222661	0.006155636	0.049400963
SCL0001131.1_227	2690010	-0.911775115	0.000362477	0.01139455
2310026J01RIK	3940215	-0.912261292	0.000780258	0.016236897
LOC236311	1510519	-0.913607374	0.003796145	0.036749756
LOC384723	5720709	-0.914964451	0.000182388	0.008210621
1500041I23RIK	2630736	-0.915024041	0.002308244	0.02739021
PCDHA11	1660278	-0.915062889	0.00036104	0.01139455
2310039L15RIK	110333	-0.915312732	0.004909288	0.043217877
2900002G04RIK	6940072	-0.915498878	0.004849962	0.042816975
FBXL7	4010592	-0.916707382	0.000732347	0.015897425
NEU3	5340291	-0.917785967	0.006169645	0.049436745
MBD3L2	20047	-0.918698232	0.000202404	0.00863499
LOC385120	2690538	-0.918711742	0.000219567	0.008972777
LAMP2	6330561	-0.919411559	0.002448384	0.028522849
HDAC9	4540369	-0.919529379	0.000315905	0.010664546
MGLL	2350451	-0.919536153	0.002161726	0.026370337
TAF9	3850458	-0.919959442	0.004229093	0.039114701
MAPK8	1340768	-0.920343637	0.000928503	0.017713416
1810058I24RIK	7330619	-0.920445797	0.000970956	0.017949974
C030032C09RIK	4010687	-0.920778054	0.000656914	0.015105032
SAMSN1	6020400	-0.922612163	0.000881651	0.017246025
CD53	6560301	-0.926289445	0.001217489	0.020199133
GIP	6270445	-0.92680719	0.002567696	0.02921154
FBXO36	3400091	-0.927720455	0.000417001	0.011944238
CHST8	4590113	-0.927752327	0.000364174	0.011424772
LOC229048	3360014	-0.928676752	0.000820152	0.01663657
ALDH18A1	4150168	-0.928701767	0.000762634	0.01613481
LOC386288	630241	-0.928756382	0.004972931	0.043409018
AA536749	1300674	-0.928842658	0.001483183	0.022019449

LOC382044	4760672	-0.929201539	0.001341504	0.021002461
ATP6V1C2	6940762	-0.931009983	0.002602515	0.0294566
D13BWG1146E	1170709	-0.931187354	0.00139034	0.021419236
5730402C02RIK	6590070	-0.931504634	0.001726998	0.023545704
CTSR	1450102	-0.932033191	0.002065665	0.025723909
OLFR965	160674	-0.932672643	0.003278992	0.03389595
WIG1	1440494	-0.93347012	0.001383569	0.021368955
5930404A08RIK	6280431	-0.933877832	0.001254892	0.020417143
SCRN1	7040519	-0.934328469	0.001929872	0.024980777
2610511M17RIK	5080553	-0.934437654	0.001355328	0.021152652
BC065078	6370739	-0.934848646	0.00183124	0.024263928
CST11	4390468	-0.935806787	0.000869739	0.017235846
C030014F05RIK	5260519	-0.936226083	0.001329495	0.020980777
GMEB2	5490431	-0.936543712	0.001230773	0.020289467
CABYR	4880224	-0.937807525	0.00586517	0.047962203
D9ERTD402E	2340390	-0.939426303	0.006084548	0.04910964
IAN1	5690519	-0.939485214	0.000909247	0.017543881
NFKBIZ	6650458	-0.940095497	0.006538325	0.051279619
B130055N23RIK	2450736	-0.940142021	0.000181244	0.008210621
6030408B16RIK	4590451	-0.941160657	0.000589722	0.014286821
A730024F05RIK	2000402	-0.942058996	0.000294752	0.010290224
ACYP2	2690402	-0.943323056	0.004920324	0.043225138
1100001D10RIK	2690201	-0.944237356	0.004984128	0.043433512
ZBTB16	1820164	-0.944311531	0.002034009	0.025526732
A130022L12RIK	6280762	-0.945800082	0.000941698	0.017719967
LOC329360	4010484	-0.946611091	0.000172444	0.00810718
SCL0001259.1_60	2900519	-0.94729306	0.001007774	0.018183146
DPEP2	1980458	-0.947349236	0.006135959	0.049319328
KHK	20010	-0.947791304	0.000937175	0.017719967
LOC333459	520047	-0.948212632	0.00255776	0.029184026
CD80	4280095	-0.949675882	0.005534195	0.046504604
OLFR206	1500349	-0.950151463	0.000421285	0.011944238
SCL0001076.1_117	2350092	-0.950197624	0.000925702	0.017681706
BC003885	1660075	-0.952276445	0.003047377	0.032346353
LOC385256	2650369	-0.953526574	0.005659519	0.047000724
TAPBP	20358	-0.953606607	0.000488964	0.012843093
OLFR1384	4900204	-0.953664202	0.000943383	0.017719967
LMNB1	6380619	-0.956332681	0.000233513	0.009255233
CDC42EP1	1260072	-0.957732748	0.005424238	0.045953626
HNRPH1	3390546	-0.95774036	0.002128214	0.026105088
FOXG1	7650494	-0.960523614	0.00133167	0.020980777
ATP2B1	4780039	-0.960691304	0.007301581	0.054802444
FBXL12	2690437	-0.965513523	0.000111521	0.006660824
HTR4	1440672	-0.966126108	0.001667722	0.023102629
C78339	1030753	-0.966554764	0.004833215	0.042716441
FUSIP1	6020626	-0.967593931	0.000983301	0.017985483

IQGAP1	3830377	-0.967989784	0.007047301	0.053553283
HIATL1	7650132	-0.969223019	0.002254505	0.02707673
LOC381300	6110491	-0.97001562	0.005416048	0.04593436
D330020F13RIK	1440709	-0.970614087	0.00094368	0.017719967
4632415L05RIK	7510753	-0.971181381	0.004634606	0.041617706
TNXB	1820070	-0.971625199	0.00070407	0.01562797
A130033B22	2630307	-0.972121622	0.004600003	0.041482838
GLIPR1	2810685	-0.972560467	0.003716363	0.036298129
ZFP312	360047	-0.972993424	0.001706958	0.023437085
TMEM1	5960059	-0.973107316	0.000366096	0.011461897
ALX3	730709	-0.973915776	0.000143467	0.00737574
A930002I21RIK	3830209	-0.976565924	0.004299081	0.039479848
SLC22A7	3520332	-0.977026874	0.000753153	0.016014086
ZBTB33	2630546	-0.97814782	0.000879333	0.017246025
GTL2	6940750	-0.978719162	0.002920947	0.031557723
LOC383301	360192	-0.98057634	0.003425461	0.034654057
6430704M03RIK	670601	-0.981106173	0.000380916	0.011621313
OLFR910	1440754	-0.981783246	0.000462261	0.012610273
HERPUD1	1050619	-0.981808371	0.000559143	0.013914954
SLC12A1	1340603	-0.982320304	0.00517418	0.04453982
LOC218241	4070520	-0.983733102	0.003846775	0.036988583
D030011O10RIK	2690348	-0.983924159	0.000333163	0.010939907
ELAVL4	3170088	-0.985411788	0.001951099	0.025040181
TREX2	4060204	-0.985796575	0.000331063	0.010939907
9630028B13RIK	4220458	-0.986294213	0.000487952	0.012843052
D15ERTD735E	6620397	-0.986435883	0.000200723	0.00863499
A230021I18RIK	610347	-0.986816935	0.005953178	0.048402204
IRAK4	5220452	-0.988093335	0.001782948	0.02392559
RNF148	6200736	-0.989464223	0.002339945	0.027601731
PREI4	1820132	-0.989547739	0.000906408	0.017543881
A130049L09RIK	7050132	-0.989647461	0.005701886	0.047173459
KRTAP5-1	6330438	-0.990110509	0.002494966	0.02882762
FPGS	2690008	-0.990936151	0.000616314	0.014589542
LOC212815	5810128	-0.993150768	0.002046513	0.025608624
DMRT2	6770161	-0.99557269	0.004425011	0.040279009
SLC4A3	1820538	-0.997117084	0.000328918	0.010914022
1700028D13RIK	7550692	-0.998164234	0.00068781	0.015457303
6330417K15RIK	4760192	-0.998170585	0.003859855	0.037045542
NUP88	6020601	-0.998453987	0.000200076	0.00863499
MMP13	2060040	-0.99911648	0.002213251	0.026767584
BC034054	2810575	-1.000162848	0.003516217	0.035250704
2500003M10RIK	7610594	-1.001264913	0.002008205	0.025436718
DSPP	2970279	-1.003572306	0.00074138	0.015897425
PCDHB8	2260414	-1.003645554	7.60E-05	0.00529021
HERPUD1	50129	-1.00480203	0.000821021	0.01663657
GRIK2	7550601	-1.004876507	0.002671459	0.029974769

CNOT6L	2900725	-1.006577386	0.000145941	0.007455014
CAMK2G	1820133	-1.006702013	0.000255483	0.00984465
RAD51L3	3290736	-1.00691765	0.000643915	0.014880001
MCM5	6220270	-1.007714794	0.004877146	0.042963008
LOC328703	4890114	-1.010010258	0.001555312	0.022342685
PPEF2	1440762	-1.010709876	0.001094759	0.018952625
C330016O10RIK	4070017	-1.012512866	0.000303063	0.010365899
6430596G11RIK	5550307	-1.012673333	0.006235202	0.049770745
E330036I19RIK	1770639	-1.012990837	0.002699159	0.030086881
TRCG1	2690431	-1.013438933	0.000870657	0.017235846
F830004M19RIK	1740369	-1.0138243	0.004343154	0.039743572
ACOT2	2470025	-1.013831139	0.000317244	0.010686523
C230060F13RIK	6040019	-1.015779891	0.000276621	0.010060068
E230022H04RIK	1820327	-1.017295209	8.19E-05	0.005652399
ACOT7	6840392	-1.017350476	0.000334166	0.010947818
SLITRK1	4040672	-1.017709952	0.001892783	0.024783333
D12WSU95E	4570400	-1.017732064	0.000431264	0.012093876
NR1D1	3310672	-1.018635474	0.001489654	0.022025657
OLFR982	70279	-1.020027139	0.002245575	0.027025581
2310014L17RIK	3840475	-1.021796011	0.000369806	0.011512799
SOX12	6590672	-1.022392591	0.000724389	0.015888475
A930006D11	3310736	-1.022899524	0.000881081	0.017246025
C030016K15RIK	3710477	-1.023252124	0.00129878	0.020771113
1110030J09RIK	4920543	-1.023272021	0.000172804	0.00810718
1810029G24RIK	5130497	-1.023698452	0.006968828	0.053127851
LOC384636	6380575	-1.023877182	0.000438207	0.012200909
STARD7	3180367	-1.024196705	0.001202186	0.020155835
OLFR270	1010431	-1.025213378	0.000249668	0.009674184
1700013L23RIK	3780601	-1.025468534	0.004710456	0.042057989
KEO4	3370288	-1.027195031	0.000703897	0.01562797
SF1	4590431	-1.02720322	0.001448043	0.021711137
RHPN1	6370278	-1.027362767	0.00086682	0.017235846
TRP53INP1	5260201	-1.027825076	0.001442926	0.021711137
MID1	630519	-1.030089959	0.000982146	0.017985483
R3HDM	2190519	-1.03203746	0.000125749	0.007048516
IFT140	4180411	-1.032701211	0.000389481	0.01169875
D930046M13RIK	5340114	-1.033905031	0.003211406	0.033605073
H1FX	1450735	-1.03512452	0.006872588	0.052677405
1810030N24RIK	1820451	-1.035653881	0.004756076	0.04234926
LTA4H	2000112	-1.037482636	0.000419601	0.011944238
TUBA6	6840021	-1.038730672	0.001255816	0.020417143
KLRB1B	7380390	-1.043029761	0.001740715	0.023654478
PELI1	3360220	-1.044198586	0.003554702	0.035430664
LOC227092	110653	-1.044249722	0.00098721	0.01803574
POU5F1	3450519	-1.045152775	0.000178712	0.008210621
1700028I04RIK	4570475	-1.046050126	0.005440766	0.046018938

SKD3	4780747	-1.046928622	0.003667439	0.036159788
BCL2L11	1780735	-1.047208946	0.00547435	0.046226853
ZDHC14	6250519	-1.049889084	0.001139138	0.019439204
TGIF	4850682	-1.050432464	0.001001094	0.018183146
1190002A17RIK	4670386	-1.052784507	0.005108228	0.044217208
STIM2	7380669	-1.052901024	0.006387524	0.050533284
SYT9	6380750	-1.052914259	0.002882265	0.031277911
TIMM44	6220450	-1.053385874	0.00421538	0.039104323
LOC211208	3120369	-1.053591535	0.000405428	0.011791249
G630058F05RIK	4560195	-1.053859764	0.00318799	0.033405055
C8B	4880736	-1.054825808	0.001115605	0.019206467
BC056485	520709	-1.056107703	0.001763172	0.023760579
ADAM22	2690544	-1.05664407	0.000343424	0.011111311
GCH1	4060348	-1.056942863	0.00667178	0.051821627
D7ERTD462E	6620528	-1.057135921	0.000571037	0.014031074
ACTR3B	3370746	-1.057183302	0.000120383	0.006949569
USP12	6510279	-1.057229641	0.001047309	0.018523575
2810409K11RIK	3370176	-1.057742832	0.006070003	0.049061114
AY078069	630091	-1.05885637	0.005078226	0.04401849
AK3	1710674	-1.058874716	0.001170086	0.019814903
5930402A21	3290554	-1.059611112	0.003863517	0.037057789
UNC119	60278	-1.063991828	0.000132613	0.007048516
RAET1C	1820500	-1.065369977	0.006426967	0.050739389
ZFP622	1440224	-1.068350355	0.000296491	0.010290224
HOMER1	1510672	-1.069755729	0.000526473	0.013529049
LOC384384	4230519	-1.069991516	0.000656124	0.015105032
2810449M09RIK	3780672	-1.070933422	0.00021249	0.008826312
HSPCB	2190047	-1.071347452	0.000259442	0.009874681
4631434O19RIK	3170743	-1.07160787	0.001201068	0.020155835
HNRPK	1690113	-1.072462012	0.000201869	0.00863499
4921511C16	2600324	-1.072870386	0.001748035	0.023654478
ADRA2A	830736	-1.073007873	0.00422006	0.039112155
OLFR618	7050601	-1.073665979	0.000749222	0.01600781
LOC236060	4880672	-1.075499363	0.001510339	0.022177095
ELF3	4290075	-1.076740004	0.000403842	0.011791249
LOC385642	3460338	-1.077823554	0.001404662	0.021469488
D630002J18RIK	510709	-1.07986224	0.002034331	0.025526732
GLS	4050209	-1.07986359	0.000948824	0.017752153
LOC331336	3060369	-1.080220091	0.001208868	0.020178813
EVI1	360402	-1.082275412	0.001008878	0.018183146
CNGA1	7040601	-1.08619889	0.003577386	0.035474607
IKZF5	5290215	-1.086804459	0.001209975	0.020178813
CAMK2A	2630600	-1.087364922	0.004042889	0.038030768
ARID4A	5270601	-1.087521093	0.001664597	0.023100559
B230209C24RIK	6980735	-1.089135531	0.002035037	0.025526732
MAP4K6-PENDING	6270500	-1.089333397	0.00188186	0.024723697

LYRM5	1820088	-1.090306078	0.000326573	0.010861329
IL15	2690768	-1.091257318	0.000164114	0.007944002
6230412O07RIK	4060762	-1.092337766	0.00020184	0.00863499
V1RA2	1850672	-1.093034017	0.001224502	0.020232692
AU014645	2000156	-1.093146175	0.004165726	0.038736259
CCL7	4670674	-1.093828664	0.000508394	0.013180059
DGKZ	4070136	-1.095181981	0.003320336	0.034126334
ACOT7	2470315	-1.095282225	0.000979473	0.017982539
ZC3H7A	2690114	-1.095997651	0.000418636	0.011944238
MTDNA_CYTB	6960022	-1.096535733	0.001048035	0.018523575
1200016B10RIK	10427	-1.097429642	0.006631407	0.05170351
VIL2	5560497	-1.098499791	0.001343	0.021002461
4932439E07RIK	270603	-1.099791501	0.001312841	0.02084572
MON1B	4540148	-1.100535686	0.002949054	0.031732947
LOC331539	4060411	-1.100751288	0.004921247	0.043225138
ABP1	4040504	-1.103433911	0.000668996	0.01518797
MARCKS	1820224	-1.104313618	0.000627061	0.014753989
2310066N05RIK	20431	-1.10509306	0.000737812	0.015897425
CLEC1A	6510519	-1.105427786	0.001430051	0.021675298
OXT	360132	-1.106219835	0.000157879	0.007807971
OLFR786	1500136	-1.10708581	0.000340184	0.011074866
PAK2	5310059	-1.107155976	0.000380471	0.011621313
MGL2	1010047	-1.10765198	0.000379959	0.011621313
A330080J22RIK	1820162	-1.108656446	8.79E-05	0.005858606
SFRS6	2630445	-1.109452269	0.001938515	0.024999964
FKBPL	5720040	-1.110576073	0.001793657	0.024011808
LOC228790	6860500	-1.1106744	0.000681924	0.015347233
FGF22	1240019	-1.111418104	0.00344427	0.034776374
4930565B19RIK	2630523	-1.111964092	0.000920805	0.017631537
C530047L02RIK	6290753	-1.112658376	0.002836551	0.030998453
LOC383293	4590762	-1.112731511	0.001829971	0.024263928
GM166	2000672	-1.11321825	0.000299263	0.010350243
IL18BP	6330601	-1.1156743	0.000903411	0.017514449
OLFR378	2710692	-1.115718931	0.001199994	0.020155835
A430083B19RIK	3060736	-1.116848164	0.000613025	0.014589542
QPCT	990687	-1.120001463	0.000935594	0.017719967
ZFP264	6840504	-1.12027589	0.001582565	0.022608689
LOC434858	4730612	-1.121212019	0.002750968	0.030405542
SCL0001379.1_70	6590369	-1.122599341	0.001996247	0.025347283
NRAS	4150634	-1.123226037	0.001434217	0.021707563
ZFP661	3130255	-1.12414227	0.002998992	0.031985818
TUG1	6860717	-1.125797927	0.00105762	0.018528004
LOC381255	6110576	-1.128842244	0.002759075	0.03047345
A830008O07	3130553	-1.130307669	0.002314119	0.02739021
CLDN9	5700037	-1.13223942	0.000427127	0.012037858
COQ10B	4220239	-1.133510877	0.006494175	0.051114062

OLFR503	3850634	-1.13488055	0.000178012	0.008210621
IGH-VJ558	6380762	-1.136378198	0.000404031	0.011791249
LOC382765	5910079	-1.139661143	0.000377046	0.011621313
ARHGAP25	5890768	-1.139819302	0.002175467	0.026501713
TGOLN2	3520630	-1.140489042	0.002286421	0.02728487
MFGE8	6510465	-1.142566776	0.006261546	0.049889971
SLC20A1	1340240	-1.142820473	0.000268795	0.009986884
GJA6	3610707	-1.150670607	0.000282392	0.010174133
SP8	430392	-1.151401627	0.003801605	0.036759109
PLEC1	360014	-1.151669848	0.002890064	0.03131877
ATF7IP	4570709	-1.153855455	0.003013212	0.032093398
1700020C11RIK	110601	-1.15474911	0.000341458	0.011093099
LOC383873	1440349	-1.155138699	0.00032663	0.010861329
GPBP1	5390608	-1.15541906	0.006497984	0.051118135
C630028F04RIK	3940592	-1.157010545	0.000304701	0.010376538
TOR1B	1450731	-1.157482434	0.002976872	0.031881275
PLEKHE1	110220	-1.161155886	0.002096118	0.025978148
1810037O03RIK	4390278	-1.161478326	0.001009329	0.018183146
C730026J16	5910672	-1.163736921	0.001036615	0.018439397
HAVCR2	870066	-1.164749485	0.000336639	0.010982508
P2RX5	6330451	-1.167687868	0.000952548	0.017778992
CDC45	3310196	-1.168683797	0.002659307	0.029942759
1300019J08RIK	7550026	-1.169377016	0.005435218	0.046018938
EIF3S10	1300491	-1.17136822	0.002562752	0.029204546
WDR13	2690369	-1.171385087	0.001448779	0.021711137
HPS3	4540370	-1.171857075	0.006267476	0.049911607
D930020L01	1440500	-1.171919188	0.000862638	0.017218379
DHX40	4670678	-1.172244145	0.001291277	0.020742256
LOC632687	360767	-1.172302549	0.000213938	0.008826312
AW228700	2260592	-1.172373665	0.001802144	0.024083896
2610022G08RIK	1440059	-1.173164983	0.00013068	0.007048516
GNAO1	4880369	-1.175498472	0.000377436	0.011621313
H2AFZ	6510575	-1.175706939	0.00026992	0.009986884
WFDC6A	580537	-1.175751054	0.000483642	0.012751237
DOCK4	4480022	-1.176098643	0.000958811	0.017852975
FRG1	3370154	-1.176369399	0.000264826	0.009966249
DNAH2	2900747	-1.177954926	0.004624485	0.041558809
2810457I06RIK	540382	-1.17804124	0.002733996	0.03032112
PLP2	1740379	-1.179354807	0.005275151	0.045133783
DAPK1	5690102	-1.184266692	0.000741501	0.015897425
OLFR538	2900672	-1.184717469	0.00118716	0.019995017
3110047P20RIK	2070239	-1.187304531	0.000345774	0.011113575
LOC212399	2120372	-1.188478927	0.001263428	0.020458576
PER2	5900497	-1.18994072	0.004523468	0.040887621
LOC386205	3460601	-1.191416652	0.00143069	0.021675298
5330427M13RIK	2370519	-1.192158393	0.000105052	0.006551635

9030418K01RIK	1450053	-1.192203951	0.001014994	0.018221786
LOC218482	2370189	-1.192891823	0.005241319	0.044918564
IVNS1ABP	3710717	-1.193094986	0.002505892	0.028889376
4930544D05RIK	1170014	-1.1931348	0.000100026	0.006288684
D330004O07RIK	2360347	-1.195800131	0.00063473	0.01479989
LSP1	380482	-1.19647199	0.000417522	0.011944238
LOC276809	6520114	-1.198699062	0.000529576	0.013548269
C130023A14RIK	6290386	-1.199784886	0.000716501	0.015804752
PRKAR2A	1090035	-1.202591747	0.003963092	0.037574311
MTHFS	5490068	-1.202893642	7.12E-05	0.005112393
D030022P06RIK	3520044	-1.20305427	0.000783255	0.016257558
CLDN15	6420594	-1.205594039	0.005559874	0.046574746
TLE1	610341	-1.207699542	0.006528572	0.051279619
OC90	1820767	-1.208531103	2.88E-05	0.003422031
OLFR272	1500600	-1.209528668	0.000162688	0.007944002
NEU2	6280672	-1.20974423	0.001443934	0.021711137
4632434I11RIK	1500519	-1.209847611	0.000573635	0.014067957
ELOVL5	4150184	-1.209868751	0.000222929	0.009038822
RAI12	5700215	-1.210759609	0.001581248	0.022608689
HNRPK	6200673	-1.211003245	0.000167517	0.008004208
MJ-6000-172_3824	3850519	-1.211368841	2.45E-05	0.00328215
RBMV1A1	1030725	-1.213097642	0.000395196	0.011756694
MCM2	1770612	-1.213890578	0.000641832	0.014868175
SEMA5A	5290274	-1.214000185	0.003774528	0.036634155
LOC382406	20736	-1.21410331	0.002787206	0.030655832
ZRANB1	3120228	-1.217378731	0.003288821	0.033934954
5830434K11RIK	5090162	-1.217864803	0.000722462	0.015868621
LOC234187	150519	-1.218214288	0.000250628	0.009681603
TNFSF9	380348	-1.220461089	0.000758719	0.016095826
TNFAIP3	430523	-1.22148334	6.65E-05	0.005069994
CNP1	5390072	-1.221686546	0.002530302	0.029003466
PRKWNK1	4060543	-1.225292746	0.004118437	0.03843462
SAMD11	150164	-1.227771095	9.37E-05	0.006063031
RMND1	1170022	-1.229580206	0.006945346	0.053077895
FOS	510368	-1.231302904	0.001810681	0.024156409
IFRD1	1660253	-1.231343762	0.000405933	0.011791249
EG384814	6420273	-1.231409412	0.001957311	0.025056115
CHKA	6960497	-1.232351206	0.006304845	0.050081434
TP120A-PENDING	4900136	-1.234602085	0.003652325	0.036079484
1810026B05RIK	3400136	-1.234707208	0.001540916	0.022269032
4933428I03RIK	360709	-1.235023757	0.000909448	0.017543881
1110058L19RIK	3370338	-1.235375225	0.003534296	0.03532454
OVOL2	830601	-1.236417582	0.000379234	0.011621313
LOC385843	7570040	-1.237759973	0.00125824	0.020417143
ATP8B2	3450356	-1.238702441	0.001726818	0.023545704
D330004F16RIK	610301	-1.239533408	0.000817934	0.01663657

AKAP1	2750079	-1.239802217	0.001249745	0.020417143
LOC219145	1050047	-1.240267453	0.003943782	0.037503365
IFNA1	4070047	-1.244675083	0.003478158	0.034982066
ABCA14	5700750	-1.246918869	0.000964424	0.017894379
RNPS1	2750356	-1.246930492	0.001941824	0.024999964
ZFP709	3830128	-1.247588583	0.001978068	0.025219559
TNFRSF13B	4280296	-1.248297232	0.00187568	0.024664192
E330022B15RIK	2000343	-1.250119896	0.001114676	0.019206467
HARS	2690762	-1.250487386	0.000406988	0.011791249
KLRI1	1240639	-1.252079337	0.001533918	0.022257694
RHOX12	730113	-1.252539929	0.001486212	0.022025657
1810009A16RIK	1940392	-1.253014691	0.000872083	0.017235846
CDH1	5820184	-1.254672016	0.005044291	0.043785796
LOC225927	1570750	-1.258804172	7.21E-05	0.005112393
1700085B03RIK	4730288	-1.259899153	0.006043245	0.048903363
CRTAP	7050056	-1.260030293	0.001767365	0.023762257
RPO1-4	6380370	-1.260757423	0.0032933	0.033958602
4833427B12RIK	1780338	-1.261621241	0.004507947	0.040775662
E130001F20RIK	2810653	-1.262432419	0.000204049	0.0086576
CDC2L2	6450066	-1.263309392	0.006198586	0.049586834
ACAA2	5090414	-1.264337206	0.000881113	0.017246025
OLFR748	6060632	-1.265726457	0.00070424	0.01562797
LOC385392	1820242	-1.26738014	0.005669491	0.047000724
1110020P09RIK	3390678	-1.267389838	8.25E-05	0.005665546
ILDR1	6840703	-1.268409171	0.000826143	0.016661271
CTRL	4490324	-1.269877629	0.000265056	0.009966249
STXBP5L	4590672	-1.269945426	0.000178961	0.008210621
DMTF1	6060278	-1.270584941	0.000377034	0.011621313
SLC1A7	2070309	-1.271141357	0.001598832	0.022694938
TNFRSF19L	7200601	-1.272045933	0.002409096	0.028169005
2810003O05RIK	5860168	-1.273099655	0.001687502	0.023278434
C330018L13RIK	2510131	-1.274965547	0.004929311	0.043247044
GARNL1	2600288	-1.27518649	0.002868561	0.031194597
D430042L13RIK	1470180	-1.275695962	0.005441031	0.046018938
CNOT10	5810035	-1.277125852	0.006987403	0.053242091
2810011L19RIK	3400767	-1.279006594	0.000325939	0.010861329
LOC226691	6290592	-1.280566801	0.001328569	0.020980777
B930011P16RIK	2970040	-1.282494288	0.005885261	0.048075642
LMAN1	3170010	-1.28268024	0.001399346	0.021458445
NAPA	3990114	-1.284070727	0.001640417	0.022977819
D9ERTD280E	6290279	-1.287293214	0.003894334	0.037170461
LOC433224	1470519	-1.2878006	0.002670298	0.029974769
BC085271	6960563	-1.290493525	0.007143844	0.054010104
RBM12	4290019	-1.290848194	0.004098598	0.038295506
LMAN2L	6940086	-1.293057876	0.004774194	0.04245938
HBS1L	1030296	-1.294195589	0.000654116	0.015093266

IFNA1	4780072	-1.295120869	0.003525658	0.035299768
DPP4	3060546	-1.296161045	0.000430195	0.012093876
RHOBTB2	6980551	-1.299396322	0.005345946	0.045563774
1700087121RIK	3610672	-1.300816941	5.77E-05	0.004805456
4933409N07RIK	60463	-1.302768296	9.95E-05	0.006281017
UBAP2	6980639	-1.303903149	0.003831026	0.036951556
WDR34	2690224	-1.304335363	4.56E-05	0.004241828
PPID	2230221	-1.305832067	0.00666807	0.051821627
5730405I09RIK	2750575	-1.306227868	0.003954936	0.037565389
5830415F09RIK	1740736	-1.307733746	0.002398785	0.028112717
4933404K08RIK	110242	-1.308886432	0.001455258	0.021771389
CUL3	510440	-1.31000577	0.001346298	0.021032862
COG4	4490053	-1.310714146	0.000964492	0.017894379
AMPD2	5820133	-1.310797564	0.001756018	0.02373299
OLFR724	6280369	-1.31412261	0.001005535	0.018183146
KLR1	780037	-1.315924063	0.002140945	0.026219817
POLR2E	3930086	-1.317142291	0.005152111	0.044399078
PENK1	2260520	-1.318309884	0.00149002	0.022025657
PTBP1	5820070	-1.319701153	0.004622812	0.041558809
5730453I16RIK	4260279	-1.319815337	0.001118496	0.019231772
D3UCLA1	5220142	-1.322039295	0.004508456	0.040775662
CD70	1340524	-1.325647618	0.005805458	0.047649558
PRPF39	4390021	-1.328613543	0.000612391	0.014589542
DNAJB1	4540020	-1.328630026	0.006052647	0.048953938
SLC35B1	2350594	-1.328770549	0.002011207	0.025453985
A430034D21RIK	50138	-1.328912712	0.000221687	0.009017477
NISCH	6760706	-1.329331968	0.006356589	0.050388707
AQR	4810497	-1.329644929	0.001143605	0.019494012
MRGPRG	3170167	-1.330304884	0.001827244	0.024263928
4933417K04RIK	1820672	-1.330531239	0.004692988	0.041955906
PPRC1	5550092	-1.334833625	0.000205789	0.008707607
1700040I03RIK	6450008	-1.335749684	0.001167555	0.019803562
PEP4	3400551	-1.336981012	0.007199071	0.054242779
ICAM1	1450095	-1.337704991	0.000159325	0.007829629
1700025B16RIK	2450747	-1.340874374	0.000190745	0.008456711
SFRS2	5130612	-1.342205859	0.001382327	0.021368955
9530013D10RIK	630408	-1.342926424	0.002681344	0.02997739
PLSCR1	6130328	-1.345153509	0.005142966	0.044344877
AMICA1	3850692	-1.346912241	0.005547197	0.046563476
KPNA6	6960672	-1.350582796	0.000492132	0.012844241
SIAT4A	5490008	-1.351433922	0.000948088	0.017752153
8430410A17RIK	6330048	-1.354315956	0.005389094	0.045780766
YTHDF2	4280551	-1.35540806	0.001211448	0.020178813
PIRA2	2000044	-1.356089904	0.000262164	0.009929612
PSMD1	4860180	-1.357821471	0.002513106	0.028912332
4732441L20RIK	4670072	-1.361313278	0.00033322	0.010939907

ZFP212	6510278	-1.362794457	5.91E-05	0.004805456
2410015N17RIK	1980446	-1.363624682	0.000634504	0.01479989
FCGR2B	1780500	-1.367548027	0.000558007	0.013914954
DAB2	1940347	-1.369998242	0.005664566	0.047000724
AYTL2	3930195	-1.370284826	0.000292498	0.010290224
DCAMKL2	2650136	-1.370735566	0.005521022	0.046471614
1110020A09RIK	3420347	-1.375170553	0.000214439	0.008826312
HAVCR2	60603	-1.37519707	0.001413947	0.021505562
LOC218476	6650601	-1.380415542	0.001209528	0.020178813
KLRB1D	3850274	-1.380913512	0.000721802	0.015868621
NFKB1	4180669	-1.387113492	0.001687908	0.023278434
SMEK1	7380768	-1.396442643	0.002582606	0.029295319
IL18	3420301	-1.396649991	0.003838389	0.036953578
QRICH1	1430487	-1.397357888	0.000179279	0.008210621
2010305C02RIK	150196	-1.399372354	0.000503819	0.013083292
LAPTM4B	6330608	-1.40144502	0.006847409	0.052666373
1110007C02RIK	130735	-1.402416772	0.001392831	0.02143634
KCNMB4	6520730	-1.402631016	0.000295706	0.010290224
GCAP27	4860041	-1.403719986	0.000893631	0.01741179
FOSL2	7400044	-1.404638275	0.001379436	0.021357638
RNASEN	3290689	-1.407212214	0.000210065	0.008769093
PLP2	6980021	-1.411036933	0.002483245	0.028754792
0610007P06RIK	3520475	-1.411733099	0.006625435	0.05170351
LOC245666	2260392	-1.414971833	0.006477265	0.051032701
RGS1	4830072	-1.415730603	0.001481055	0.022019449
CEACAM2	1570367	-1.417427652	0.001500837	0.022091468
3230401D17RIK	3370349	-1.422717377	0.00092432	0.017677058
IL2RG	1850402	-1.423672936	0.001897489	0.024803125
PANX1	4150148	-1.424961134	0.001778406	0.023890024
STAT5A	7650575	-1.425524382	0.001691032	0.023300833
RBM12	4610594	-1.428217153	0.006577429	0.051482308
5830468K18RIK	1660209	-1.430110386	0.001519534	0.022206242
IGK-V1	2030372	-1.438706437	1.22E-05	0.002273906
SCL0002855.1_1056	1820402	-1.440936346	0.00292719	0.031588831
KNSL5	1850037	-1.441261505	0.003590139	0.035564879
NR1D2	1260039	-1.445607263	0.001289055	0.020742256
BHLHB2	1230341	-1.451637923	0.000133273	0.007048516
A830054O07RIK	3400544	-1.452062789	0.002138519	0.026210788
DAB2	1050609	-1.453055956	0.005483506	0.046266339
1110007C24RIK	4230019	-1.453745474	0.001176208	0.019853626
STK38L	6450438	-1.454080472	0.002257938	0.027097006
LOC235997	650348	-1.454259169	0.001255789	0.020417143
RAB6IP1	3180114	-1.462496705	0.000155574	0.007743316
BAG3	6660653	-1.469376935	0.00463869	0.041617706
FLNB	5700093	-1.470435072	0.000544796	0.013778714
2310016C08RIK	3360241	-1.470836254	4.72E-05	0.004315786

LOC268569	1230681	-1.472053615	6.65E-06	0.001845403
2610039C10RIK	1260609	-1.472506489	0.004076033	0.038245754
RAD23B	5390482	-1.473089073	0.005047707	0.043790976
D12ERTD771E	540634	-1.475210011	0.001408267	0.021496779
VCL	4120703	-1.479226993	0.000877926	0.017246025
LOC386192	4220386	-1.481037675	0.002639269	0.029769967
DAPP1	4250537	-1.482549071	0.000258996	0.009874681
AA175286	3940242	-1.484518696	0.002466593	0.028629981
LOC384943	6860669	-1.486127276	0.001342848	0.021002461
DNAJA3	2970328	-1.486601055	0.002161597	0.026370337
NGFRAP1	360491	-1.486811168	0.000882902	0.017246025
H2AFZ	3140500	-1.487184118	1.25E-05	0.002273906
ACTL6	2650398	-1.488626478	0.002195288	0.026695867
RAB6IP1	520121	-1.488686242	6.66E-05	0.005069994
FLNB	2060433	-1.488813911	0.000597529	0.014386082
SCL000819.1_3	2680753	-1.492128283	0.000969502	0.017949974
RHOBTB2	1690008	-1.492170789	0.005443801	0.046018938
LOC208166	2140324	-1.493615713	0.001607462	0.022775796
PCF11	1510523	-1.493642661	7.10E-05	0.005112393
DPP7	2490682	-1.494652226	0.000418005	0.011944238
DCI	5390128	-1.497353575	0.000257072	0.009856977
TPX2	3140707	-1.498123279	0.000900757	0.01748481
BRD8	6660528	-1.498668972	0.00125814	0.020417143
CCNB1	2190164	-1.500239769	0.001295918	0.020746709
DAPP1	3310487	-1.500639368	0.000202254	0.00863499
STIM1	4280138	-1.505231729	0.000950017	0.017753082
E230008N13RIK	10746	-1.506547061	0.002122796	0.026086839
MACF1	4640528	-1.508545092	0.001491738	0.022025657
SFPQ	4200497	-1.509352527	0.000163641	0.007944002
D930024N12RIK	5890746	-1.511128339	0.000171847	0.00810718
HSD17B4	990685	-1.511445025	0.003280801	0.03389595
PPARBP	3140673	-1.516067631	0.001519363	0.022206242
NUP210	1230703	-1.516879764	0.000581472	0.01419761
SEC31L1	990689	-1.517672483	0.001058101	0.018528004
TRA2A	5490204	-1.519745065	0.004051408	0.038083729
LOC384100	5820189	-1.521894736	0.002278675	0.027223495
LYPLA1	4890603	-1.524156891	0.001667176	0.023102629
INVS	510068	-1.525157543	0.005560537	0.046574746
PBX2	3060162	-1.526769374	0.007149147	0.054023894
HSPCA	1110241	-1.527944907	0.000668503	0.01518797
A930008A22RIK	6450600	-1.539524417	0.000742026	0.015897425
GP49A	4120356	-1.54007664	0.001904203	0.02480884
TACC3	870427	-1.540248533	0.003055071	0.032387485
1810062O14RIK	4850544	-1.542862338	0.002345337	0.027633339
RBM12	2030424	-1.545459363	0.004083289	0.038267591
BC046418	6560273	-1.547365337	0.001834348	0.024284386

JMJD1C	5130241	-1.548375252	0.00073112	0.015897425
TCF19	6330725	-1.555159057	0.00019487	0.008524308
MRPS6	3890102	-1.558876085	0.00334364	0.03420513
RNU6	4570292	-1.565196749	0.003259261	0.033804092
PRLR	2650053	-1.567187082	0.006862321	0.052676711
HSPCA	5870142	-1.569782721	0.000771341	0.016191504
KLRD1	4890279	-1.569978349	6.27E-05	0.00499401
HOXA13	270731	-1.569990142	0.001828861	0.024263928
MUM1	6110242	-1.572904573	0.000811059	0.016594112
BC016188	3170152	-1.573003907	0.001053831	0.018523575
REL	2470392	-1.576067775	0.000247956	0.009671737
BCLAF1	1780253	-1.576084686	0.003760939	0.036550477
APG7L	5310746	-1.577389183	5.65E-05	0.004805456
CD28	940161	-1.583722252	0.006999661	0.053309333
VDP	4290746	-1.585344628	0.000224014	0.009059158
ATAD3A	6270059	-1.586805862	0.000426578	0.012037858
FOSB	6420520	-1.593995114	0.000960068	0.017854959
POLR2E	7000026	-1.59806433	0.001938877	0.024999964
ZFP296	5670154	-1.599480044	0.002143715	0.026233055
TNNI2	2260066	-1.600033053	0.00359107	0.035564879
CLK1	2190220	-1.600473234	0.000593711	0.014360953
1810045K06RIK	5960475	-1.601122284	0.007078662	0.053649493
5830405N20RIK	2900307	-1.601479578	0.001891602	0.024783333
UBE2D3	770653	-1.603601561	0.001447142	0.021711137
CHORDC1	360725	-1.604083782	0.001512367	0.022177095
LOC381196	6660669	-1.605316825	0.002088639	0.025928204
HSPD1	4120671	-1.606879062	6.97E-05	0.005079854
LOC380920	1050338	-1.60694061	0.002043835	0.025595734
CCNB1	7550156	-1.607746042	0.005185205	0.0445853
ITGAE	1300059	-1.608500111	0.00072819	0.015897425
3110001A13RIK	6420088	-1.608654557	0.000123795	0.006991929
ATF3	1090438	-1.610257627	0.000286565	0.010174133
MRGPRA2	1820156	-1.612863918	0.003709455	0.036298129
CD209C	3190634	-1.616004463	0.002828598	0.030949212
MEF2C	5820369	-1.61883012	0.001082909	0.018810394
BC039282	6940477	-1.626185653	0.004799094	0.042588527
ARL6IP2	3420022	-1.631028315	0.004208424	0.039063128
A430108B07RIK	2480711	-1.631459174	5.74E-05	0.004805456
RRAD	5550035	-1.633026261	0.005259784	0.045027117
NTE	1240148	-1.642410419	0.004870576	0.042950132
CD69	540647	-1.642604969	0.000221822	0.009017477
1700020O03RIK	5910056	-1.650461572	0.001701146	0.023377966
IDB1	6200692	-1.651722899	0.000169351	0.008017861
KCNN4	4150224	-1.661937199	2.56E-05	0.003368923
RETNLA	1110709	-1.66397702	0.000180642	0.008210621
YWHAH	2190544	-1.668232479	7.59E-06	0.001932988

SLC38A2	20066	-1.67211016	0.0006195	0.014620389
KIF15	6330114	-1.673047746	0.003558539	0.035446156
FIZ1	5390288	-1.673750493	0.000278488	0.010085818
9430065L19RIK	6060681	-1.674084376	9.76E-05	0.006209358
NCAPH2	1570138	-1.677154708	0.004327078	0.039676033
LOC381140	5900370	-1.687298113	1.10E-05	0.002250619
GP49A	5820739	-1.687724524	0.001224723	0.020232692
KLF16	2470070	-1.697999285	0.002252962	0.02707673
CD24A	3390110	-1.699483977	0.000401108	0.011790923
SMEK1	1470242	-1.702128611	0.001683597	0.023278434
ACTN1	4590136	-1.708322956	0.000270107	0.009986884
RPPH1	1510647	-1.708843002	0.000872392	0.017235846
NIT1	7560300	-1.713255511	2.15E-05	0.002982637
A630084D02RIK	1050138	-1.714421491	0.000344845	0.011113575
EEF1E1	3990376	-1.718191421	0.001943136	0.024999964
RNF135	4490600	-1.721337754	0.002787432	0.030655832
P2RY10	6400070	-1.724456982	0.005501952	0.046380058
HNRPDL	380196	-1.73558098	0.000659489	0.015105032
ZFP131	380240	-1.737696275	0.006142287	0.049319328
2610020N02RIK	4480193	-1.741627982	0.003710008	0.036298129
8030448M07RIK	1470156	-1.744900493	0.000395173	0.011756694
ADNP	4210487	-1.757851913	0.003645921	0.036044581
NOL5	6980722	-1.758382212	0.002146714	0.026249068
USP52	3370692	-1.759532504	0.001620722	0.022817948
NCAPH2	1170019	-1.766281161	0.006727453	0.052079075
PAK1	6560075	-1.768574242	0.00252519	0.029003466
9330180L10RIK	4780561	-1.772169573	0.000764339	0.016147329
LTA4H	7160709	-1.782333434	0.000680429	0.015335816
KIF18A	3180164	-1.786426058	0.002453131	0.028556723
KIF21B	4670100	-1.78647182	0.001268705	0.020501265
HSP105	3290270	-1.7875274	0.004650281	0.041670056
LMNA	4880360	-1.793110449	0.00022984	0.009198925
MSR2	940541	-1.802949856	0.002470486	0.028629981
6330400D04	5700681	-1.804673164	0.000981561	0.017985483
F13A1	6960451	-1.808705513	8.35E-05	0.00571405
MMP1A	6380427	-1.81107299	0.003816061	0.036852989
LPXN	7050433	-1.812795	0.000799912	0.016463709
5033403D15RIK	1260519	-1.817228629	0.001809412	0.024156409
RABL4	6840347	-1.817949159	0.001089909	0.018889733
5830411E10RIK	2140441	-1.828041062	3.96E-05	0.00408028
TYMS-PS	3830735	-1.835720018	0.000257993	0.009867924
SLC30A4	2750746	-1.847735158	0.003342772	0.03420513
CCNL1	5700424	-1.848026242	0.000196294	0.008538496
DHX15	4670768	-1.8527569	0.004322874	0.039674886
MAP3K6	7200025	-1.857025564	0.00324682	0.03377861
MTDNA_ND5	3120520	-1.860830484	9.19E-05	0.006044655

RHOF	3780192	-1.862615628	0.001958658	0.025056115
RNASEN	5360647	-1.868889947	0.002985641	0.03194728
ECE1	5700722	-1.872423054	0.000306966	0.010430782
ZFP131	7330435	-1.87491499	0.006452861	0.050892069
IGSF9	6400184	-1.880447776	0.003420701	0.03465239
RGS1	6840594	-1.881043998	4.49E-05	0.004225081
NAGK	6200370	-1.889458444	0.006856176	0.052671888
SGPP1	2570754	-1.89130565	0.00731489	0.054829242
THOC6	3520711	-1.898204859	0.000133363	0.007048516
MAP3K6	5670240	-1.900806057	0.001793041	0.024011808
LMNA	6350682	-1.904644191	0.004812143	0.042652838
FBXL10	2060646	-1.907259915	7.19E-05	0.005112393
BCL2L11	5820168	-1.907798298	0.001135275	0.019394601
CNOT2	4560347	-1.919312288	0.004350502	0.03977155
RSHL2	2450553	-1.926349135	1.79E-05	0.002830967
CLOCK	4810445	-1.92916312	0.006243998	0.049801254
IGLC2_J00595_IG_LAMBDA _CONSTANT_2_14	130162	-1.933410563	6.35E-05	0.005002499
ARIH1	1690243	-1.940223258	0.000374023	0.011616392
YTHDF3	7610121	-1.953664388	0.006532909	0.051279619
SMARCA2	3420154	-1.955552898	0.000194752	0.008524308
1110012O05RIK	2140450	-1.958060547	0.000214846	0.008826312
STAT4	5560066	-1.988003398	0.000207786	0.008720854
GCNT1	290358	-1.988596938	1.61E-06	0.000913863
RPS6KA2	3890064	-1.989334103	0.000347379	0.011122589
SERTAD2	4670577	-1.998436268	0.004377829	0.039919735
CNOT2	3840315	-2.004605145	0.002859969	0.031122958
IGH-VJ558	240242	-2.011523292	3.38E-05	0.003754375
SPAG9	7160433	-2.015802153	0.000558716	0.013914954
5830435K17RIK	1430315	-2.024114472	0.002354827	0.02772412
EGR1	6620079	-2.032220176	8.68E-06	0.002033875
ITGAE	7100687	-2.034087982	0.001744894	0.023654478
KIF22	4210246	-2.034996761	0.001640214	0.022977819
USP52	4540682	-2.049177369	0.001332156	0.020980777
BRF1	4570739	-2.053894707	0.000390658	0.011711456
ZBTB33	2360291	-2.054911827	0.003058465	0.032397611
TRERF1	6290053	-2.057163495	0.003439862	0.034754473
TGOLN1	3420372	-2.077602465	0.000143915	0.00737574
DHX36	4060047	-2.080745988	0.001119552	0.019231772
TEC	2350270	-2.081763999	0.001960412	0.025056161
1600029D21RIK	1300092	-2.094297934	1.82E-06	0.000913863
NIT1	4560739	-2.095388456	4.77E-05	0.004328151
ITGAE	520196	-2.149788982	0.000798116	0.016463676
HSD17B7	1070097	-2.14987847	0.006639416	0.051706868
LOC328526	4040082	-2.151956084	0.001439489	0.021711137
6330505F04RIK	2710400	-2.164235883	5.11E-05	0.00450607

STK17B	6270091	-2.164318089	0.000117108	0.006850175
1110017L21RIK	6450634	-2.168417565	6.96E-05	0.005079854
FBXL10	1300347	-2.178338866	5.68E-05	0.004805456
USP52	1690121	-2.184281184	0.0005606	0.013924075
BTLA	6980672	-2.204755377	0.005525041	0.046477982
2010001M09RIK	7210672	-2.218169491	0.000732893	0.015897425
ILF3	460301	-2.237802076	0.000160111	0.007843425
4930477M19	5820767	-2.293196274	7.40E-07	0.000741431
EIF2AK3	4230010	-2.296974158	0.00652708	0.051279619
TRERF1	3780403	-2.31606597	4.99E-05	0.004426012
TTC3	4890022	-2.322420229	0.003326425	0.034126769
3632413B07RIK	1510435	-2.365538436	0.002109587	0.026059849
HBS1L	670164	-2.371629445	0.000382973	0.01165578
LSS	5890553	-2.393749664	0.002569711	0.029213057
FOXO1	6580682	-2.39460162	9.19E-07	0.000741431
CDK2	630446	-2.413164292	0.002175909	0.026501713
SMURF2	60523	-2.415222516	0.000595373	0.014378767
SDCBP2	780678	-2.450745152	0.003116074	0.032828711
PBK	2900300	-2.453920407	1.72E-06	0.000913863
IGJ	4250162	-2.4625628	2.12E-06	0.001029168
HSPA1A	2350017	-2.463740856	4.08E-05	0.004088682
TJP2	5360608	-2.549812573	0.001150656	0.019571237
IGL-V1	5080091	-2.567688739	0.001172172	0.019823381
HSPA1B	4040670	-2.575030047	1.16E-05	0.002252829
IGK-C	630730	-2.597780298	1.02E-05	0.002169273
ST6GAL1	1430368	-2.606726899	0.005933009	0.048358733
KIF23	3840523	-2.620186553	0.001276456	0.020605072
CD209A	4780739	-2.629799944	6.08E-06	0.001814504
HMGN3	4250121	-2.635382951	0.00044656	0.012309575
IGK-C	3400100	-2.645516126	3.62E-05	0.003879986
HMGN3	670133	-2.655883239	0.000736753	0.015897425
2610039C10RIK	2680202	-2.663787956	0.000670935	0.01518797
KLRA17	7320138	-2.686705974	0.004291599	0.039457806
LUC7L	4780445	-2.710035252	0.000276108	0.010060068
CCL17	6620437	-2.728359548	3.16E-06	0.001197465
HAK	7200242	-2.742446189	1.10E-06	0.000741431
LMYC1	1580445	-2.750125769	2.93E-05	0.003422031
UHRF1	4560397	-2.752713412	3.57E-05	0.003869837
P2RX5	1740332	-2.760676926	0.000191691	0.008456711
PPP1R10	1430445	-2.763453195	0.000158522	0.007814898
SLCO2B1	3120546	-2.915008651	0.001404524	0.021469488
ZFP473	2070079	-2.946849958	6.53E-06	0.001844514
DUSP4	6270181	-2.987963269	0.00080718	0.016536545
ZFP265	7560112	-3.001697822	0.000813515	0.016622464
SMCR8	6900288	-3.011632294	0.000123819	0.006991929
SDCCAG33	5810184	-3.013668863	0.001026547	0.018281247

BC051080	6330201	-3.019690605	0.002795651	0.030710773
SLC2A3	460327	-3.053125849	0.000185948	0.008310877
MCM10	4220326	-3.058234235	0.000388015	0.01169875
CD209D	6250497	-3.096482938	0.000133618	0.007048516
GPR85	1260364	-3.108699654	0.001011102	0.018192509
XIST	3450373	-3.13908151	5.63E-05	0.004805456
BC051080	6060189	-3.188510866	0.002428791	0.028358416
CD209C	1570056	-3.213857229	1.68E-05	0.002740417
ZRANB2	5080259	-3.318413961	0.00125751	0.020417143
EMP1	7160167	-3.372724287	0.000130889	0.007048516
IRF4	1010397	-3.526710303	1.69E-06	0.000913863
IGL-V1	4730180	-3.60452795	0.000822564	0.01663657
HSPA1A	6270685	-3.642651614	2.33E-05	0.003175523
SRGAP2	4200392	-3.645402897	6.62E-05	0.005069994
CENTD1	1510753	-3.874348719	0.000132713	0.007048516
CTLA4	5560288	-3.929116902	3.76E-05	0.003973505

Table 3 Microarray analysis of CX₃CR1^{int} CD64⁺ MNPs from inflamed and resting large intestine.

Full list of genes which were significantly differentially expressed (adjusted p value < 0.05) by CX₃CR1^{int} CD64⁺ MNPs isolated from inflamed colonic and caecal lamina propria 21 days after induction of *Hh* + anti-IL-10R colitis versus CX₃CR1^{int} CD64⁺ MNPs isolated from resting lamina propria. Genes are arranged in order of descending log₂-transformed fold change. Positive log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁺ MNPs from inflamed lamina propria, negative log₂ fold change indicates higher expression by CX₃CR1^{int} CD64⁺ MNPs from resting lamina propria.

gene	probe ID	log ₂ FC	P Value	adj. P Value
LY6A	1690187	3.810624681	6.86E-05	0.018815129
UPP1	1050095	3.168352856	0.000487697	0.034774061
GBP2	1400041	3.153330546	0.000184928	0.023433298
IFI47	1090139	3.043414074	0.000646294	0.038605391
AA467197	7160047	3.043250674	0.000180772	0.023433298
FPR-RS2	7650048	3.016166111	6.36E-07	0.004935031
TIMM10	2320296	3.00457542	0.000392078	0.031384458
H2-BF	5260541	2.907741745	0.00074726	0.040642641
PHF11	6660327	2.895942764	0.021922684	0.216669672
ZBP1	1690086	2.895203377	0.001384009	0.055679481
SAMHD1	5310743	2.857198307	4.45E-06	0.007686803
OASL2	4830010	2.847283454	1.01E-06	0.005210625
CXCL9	10598	2.731558847	0.000335999	0.030064636
PHF11	1340193	2.727458607	0.026934279	0.24261161
C3	5860347	2.715225324	0.016290651	0.184837803
ABI3	6450687	2.708060156	1.08E-05	0.010629176
DEADC1	2810139	2.688345636	2.10E-06	0.007686803
DNASE1L3	6520193	2.686416948	8.62E-05	0.019984008
MRPS34	2030315	2.672988564	0.018651508	0.199064786
BC049975	4540082	2.591261268	0.022423281	0.219743041
IFITM1	5820068	2.563271959	0.000173165	0.023433298
IFITM1	4010019	2.525421694	5.10E-05	0.017200487
18S_RRNA_X00686_301	3520240	2.495928268	0.011241908	0.152088454
1190002C06RIK	3370398	2.482888235	4.55E-05	0.01665805
GBP2	2100068	2.451650402	0.000153226	0.023101443
1810035L17RIK	4070678	2.451595639	0.017746771	0.193125158
S100A9	1980603	2.409650885	0.030382446	0.256836696
A630077B13RIK	5690192	2.396575374	0.010660343	0.147807566
YPEL5	2490603	2.391607073	0.006404289	0.113157502
SMN1	2750719	2.366762636	0.039932572	0.296704745
4933430F08RIK	7160246	2.354260391	0.000286167	0.027140437
IGTP	6290037	2.328837457	6.30E-06	0.008149555
0610006I08RIK	1940731	2.302710113	0.003176402	0.08140101
INSL6	60050	2.300237781	0.007850847	0.125556962
BC003277	2750594	2.281174804	0.00110158	0.049298082
NR4A3	4260731	2.262763892	0.026065478	0.23684658
0610010E21RIK	7160209	2.257310686	0.001548828	0.05730609
MRPL14	7380725	2.227927891	0.002958381	0.078665592
2310061N23RIK	4830543	2.215860164	0.000130132	0.021459359
0610010E21RIK	3390088	2.197824078	0.001637374	0.058994867
2300009A05RIK	4560386	2.171292907	0.001493094	0.057247117
UROD	4480326	2.133292587	0.043903135	0.313470728
CARD4	2570154	2.1041806	0.005975598	0.109428139
2810405J04RIK	7570068	2.09571134	0.014359195	0.173663509
0610037L13RIK	2070564	2.088754028	0.015749532	0.181435079

AXL	7100577	2.072211204	0.008904194	0.134507024
DNAJC19	2070543	2.065325792	0.000194621	0.023671593
PRKX	1170554	2.064928303	0.012812972	0.162462018
LOC327957	5390088	2.061682372	0.000695466	0.040298086
COTL1	3120703	2.060260058	0.002012319	0.065102724
RNF135	6650088	2.053379101	0.0057778	0.108100541
MRPS18C	6330041	2.052852871	0.011712105	0.155053098
HRMT1L2	6480630	2.043574406	0.024940086	0.231737317
CTNBL1	6130300	2.036084454	0.005933374	0.109252907
SNX17	7040392	2.034710208	0.002497974	0.072483332
SERPINA3G	1050092	2.034159089	9.28E-05	0.019984008
SMPDL3B	3440132	2.031916136	0.001022545	0.047660469
TYKI	1410554	2.030815391	1.80E-05	0.011400357
2610528C06RIK	6200543	2.026137938	0.020664327	0.210700155
COPS7A	6180180	2.017078697	0.035576861	0.281569209
ATP5E	6280612	2.004437156	8.27E-06	0.009884004
PSMB10	6350343	2.004003165	0.005609526	0.106622185
ATP5J2	610681	1.990501017	0.000528415	0.035677176
1810058I14RIK	130270	1.988638861	0.000715798	0.040473342
AMICA1	3850692	1.968745329	0.000565253	0.036727254
IFITM3	3840292	1.968072317	0.001138955	0.050065776
HK3	4810575	1.961352576	0.027278037	0.244573117
RBAK	2480152	1.96078289	0.000806107	0.042170813
LST1	5860154	1.954264994	0.00411788	0.092142025
PSMB10	5870398	1.950668253	0.006946717	0.119183911
1810063B05RIK	7100634	1.949709459	0.002079365	0.065898881
SGSH	4810441	1.937377497	0.001507186	0.05730609
TNFSF14	6250619	1.932681149	0.043049407	0.309354113
IFITM1	5960577	1.931537841	2.05E-05	0.011400357
GLCE	770307	1.930173555	0.048322998	0.330515948
CCL5	1690768	1.924294272	0.011674812	0.155053098
UQCR	770086	1.921170986	0.000362092	0.030577294
SEMA7A	780554	1.909754306	7.16E-05	0.018815129
IFITM2	840349	1.908630644	4.25E-05	0.01665805
PRKX	2100114	1.896821108	0.030713731	0.258511394
2310008H09RIK	6020747	1.894186179	0.000508414	0.035293587
2610528A15RIK	4640670	1.892314392	0.037448304	0.288117642
MMP25	160041	1.891706524	0.040819475	0.301133311
CXCL10	2190215	1.884201872	0.000541021	0.03580211
GPC1	7210039	1.866465804	0.002444035	0.071610211
NFKB2	2070014	1.863089727	0.001289947	0.0531342
HIST1H4A	5220689	1.862240477	0.000775069	0.04150363
LOC383706	3400452	1.860851167	0.000222995	0.024386593
MRPL16	6900470	1.834107264	0.005585744	0.106560917
DDT	1990731	1.832372775	0.00074745	0.040642641
D16ERTD472E	4780112	1.819552886	0.053860705	0.348116183

RAB5C	650064	1.818481628	0.012626397	0.160981379
ACOT8	1240187	1.817243609	0.029796119	0.255496375
COX7B	940692	1.816185911	0.002076407	0.065898881
SLC25A19	5490561	1.813455859	0.006955665	0.119183911
TMSB10	3710278	1.809950246	1.56E-05	0.011109395
NDG2	4040435	1.809562413	1.08E-05	0.010629176
IL16	2760427	1.807305623	0.054567166	0.349865205
ARL10B	1110382	1.804282507	0.008489262	0.130786375
S100A13	1990091	1.801568326	0.001330289	0.053937488
0610007C21RIK	2710446	1.797186839	0.023391235	0.225196827
LOC380706	1110445	1.786886554	0.027588739	0.246193905
2010110K16RIK	3120470	1.786473799	0.028192034	0.248645907
TMEM43	3520634	1.776322715	0.029813193	0.255501695
5330431N19RIK	3290743	1.775824554	0.002494175	0.072483332
CAPN1	5690021	1.770947662	0.000381973	0.031002632
AP4S1	6100020	1.768211425	0.005900858	0.109020353
NDUFA3	6330477	1.759831734	9.64E-05	0.020224889
1110012M11RIK	5390021	1.750943258	0.000102454	0.020668669
1500032D16RIK	450161	1.749316399	0.000246827	0.025383953
AI481100	2230386	1.747669495	0.00209829	0.066094002
LTF	6940037	1.746688742	0.031919719	0.263941059
2210411K11RIK	4390333	1.743297201	0.028965873	0.251439434
HIPK2	4010242	1.733325218	0.031075302	0.259724635
ASS1	7560338	1.72908943	6.30E-06	0.008149555
MIPEP	1030731	1.728942792	0.007235003	0.121199955
2810021O14RIK	4880639	1.726690399	0.001515867	0.05730609
COX6A2	2470356	1.725618365	0.00018512	0.023433298
LDB1	4640452	1.724174126	0.004923775	0.100347178
TREX1	6350189	1.723539641	0.000740337	0.040642641
C79267	6020326	1.720239911	0.004296868	0.094228783
PSME2B	2100497	1.718233007	0.000822339	0.04256702
LSM12	620494	1.717816301	0.002536471	0.072673178
BCAS3	2710709	1.71773237	0.006293685	0.112415789
SNRPD2	1030463	1.717180522	0.001122998	0.049968578
1700012G19RIK	5900360	1.716215274	0.013495736	0.167660228
BCS1L	150647	1.715778778	0.001751958	0.061234215
C130020C07RIK	3610634	1.713661316	0.000206793	0.023787274
AP2M1	7650438	1.713474072	0.001395742	0.055852426
1500034E06RIK	4590377	1.710078909	0.000540081	0.03580211
ATP6AP2	5360338	1.707968924	0.003414182	0.083890567
NDUFB2	1260370	1.707874409	0.006368289	0.113150062
ZFP366	5310204	1.70107217	0.001457336	0.056778907
HIST1H3E	1190047	1.695635179	0.00297753	0.078823693
2310016M24RIK	1780647	1.694792474	0.024604522	0.230401804
BC040823	6590717	1.694725679	0.023359639	0.225171837
A130065C13RIK	3930370	1.692661622	0.01308885	0.164713732

NEDD8	5890164	1.692314116	0.000477326	0.034774061
CNN3	2810280	1.690353127	0.003201935	0.08140101
COX6B	4900379	1.676641869	0.002212617	0.068174059
NDUFA1	3890739	1.674516556	0.010529707	0.146519553
HCST	1510497	1.67390176	0.014899542	0.17643502
MRPL52	10630	1.673897811	0.000272718	0.026804019
NDUFA3	4830187	1.672922735	0.000187116	0.023433298
CAMSAP1	3310634	1.669902866	0.05083912	0.339312532
ARSA	6200743	1.668025857	0.015349032	0.178682619
TBX21	6380209	1.667056497	0.005602941	0.106622185
CD72	5700528	1.666296954	0.000500188	0.034988394
GSTK1	5270377	1.666290426	0.012223828	0.158636712
MMP14	3520066	1.664704202	0.02016014	0.207741744
NDUFB3	2900301	1.657266415	0.000334412	0.030064636
PSMB9	2450064	1.653468965	4.37E-06	0.007686803
2900010M23RIK	1850327	1.646780051	0.026549804	0.240123419
RPL35	2100142	1.642274993	0.004475214	0.095792281
GLT28D1	5700370	1.641143701	0.036079627	0.28228607
BC025206	4780047	1.635700394	0.042820586	0.307994853
LY6E	6550376	1.632759087	0.000161021	0.023433298
RBX1	2370370	1.632178368	0.010854436	0.148972468
NDUFS6	5910475	1.631521854	0.000127089	0.021459359
H2-T10	870446	1.631516892	0.003948484	0.090296426
SLC4A8	4210239	1.623145326	0.048777476	0.331948287
BC031181	2480025	1.619055967	0.000779716	0.041608968
D14ERTD668E	2810040	1.61824615	0.001012806	0.047379099
NDUFB10	1300725	1.618168193	0.001150532	0.050328492
TREX1	5270475	1.614566157	0.001319366	0.053666896
DEB1	1660451	1.613465839	0.031191351	0.260134524
FCRL3	830632	1.60882272	0.01982825	0.205961807
HMG20A	6590075	1.608507682	0.003191307	0.08140101
RPS27	6420242	1.607779991	0.000135425	0.021459359
LY6E	4780184	1.599400096	0.001374797	0.055452534
OCIL	7570181	1.597435936	0.006935452	0.119137872
MRPL17	6350332	1.596956784	0.000281864	0.027018938
H2-T17	2230731	1.592336565	0.015139158	0.178085312
0610007C21RIK	4150678	1.586069526	0.030199921	0.256536447
NDUFS8	5890010	1.585887472	0.002847556	0.077062359
HIST1H2BK	130754	1.585802253	0.000922636	0.045058191
2010012F05RIK	7330719	1.584583024	0.011667007	0.155053098
1810017G16RIK	670014	1.581559651	0.004862792	0.100018945
MRPL33	1980192	1.58145755	0.001881177	0.063094596
PRPF19	6100768	1.581290454	0.014044123	0.172129004
4631403P03RIK	6350681	1.576793004	0.008350364	0.129413977
GBP5	7000440	1.576661756	0.048460275	0.330786644
TAP2	4490017	1.572632464	0.00450393	0.09590462

LOC225897	4480093	1.571253114	0.019109428	0.20145982
H2-T9	780221	1.562156539	0.019570525	0.203703811
2900008M13RIK	5960086	1.560187903	0.000805756	0.042170813
ECD	580196	1.559231786	0.000322991	0.029331763
TMEM1	2490491	1.55845199	0.002343707	0.069456919
PSMB6	5130544	1.558188447	0.006135024	0.111038328
PSMB6	7650110	1.556632808	0.005207442	0.102492221
HSPC171	2470193	1.554856206	0.053150965	0.347675372
FER1L3	1710162	1.554071249	0.000211394	0.024137777
TSPO	6270709	1.553479976	0.003124541	0.081047846
PEX16	7550056	1.550746511	0.028663895	0.251034573
0610012G03RIK	5700132	1.550520119	0.030077905	0.255793966
MRPL23	6590767	1.549842675	4.61E-05	0.01665805
VTI1B	4260739	1.548255153	0.003271316	0.082201075
ARPC5L	5900253	1.547800594	0.000132119	0.021459359
SAMHD1	3190577	1.547729018	0.000307763	0.028447897
TIMM8B	430390	1.544593688	0.048505476	0.330927638
ACAA1	3180022	1.543654761	0.000131702	0.021459359
SAMHD1	6860278	1.543236578	0.001046204	0.048250957
LIMK1	2650156	1.540974332	0.052112067	0.343921926
COMMD3	6840440	1.534610402	0.032092573	0.264665731
HIST1H3D	4890382	1.532044232	0.002106141	0.066207027
PRDX5	3850433	1.527662677	0.000186622	0.023433298
2500002L14RIK	3610398	1.526759147	0.00529064	0.103343835
TAF6	5270291	1.521557511	0.002680871	0.074474496
1500032D16RIK	6180092	1.521540266	0.000251846	0.02556152
TFPT	240538	1.519527858	0.012936846	0.163729647
AIF1	290068	1.517739864	0.00121124	0.051532435
RFC4	3940458	1.515581492	0.009345255	0.138211876
2310039H08RIK	2340598	1.512977819	0.022576578	0.22063668
HIST1H2BP	2370524	1.509939519	0.002853426	0.077062359
PFN1	3800307	1.508908694	0.022663404	0.221059617
MKRN2	6900176	1.508788689	0.008124714	0.127801854
IFITM6	5130059	1.507695151	0.001707114	0.060386731
CCNH	4150040	1.501327374	0.00251475	0.072483332
AIF1	1400672	1.496173849	0.000169166	0.023433298
SF3B2	2190189	1.495392931	0.029758623	0.255496375
AIP	940435	1.49290514	0.015567866	0.180644016
5133401N09RIK	3710470	1.491643272	0.011215859	0.152088454
G431001I09RIK	7560326	1.491309688	0.000842395	0.042890314
RNUXA	730528	1.488035719	0.009133694	0.13664464
PPM1F	870519	1.483137652	0.012136349	0.157912437
LOC384596	5910575	1.480636578	0.001529209	0.05730609
ATP5G1	650161	1.47705078	0.000191359	0.023584274
MRPS18A	1090121	1.474502283	0.0023134	0.069352881
ATP6AP2	6020593	1.46862695	0.003243483	0.081899257

IFT172	3400367	1.468055016	0.032377309	0.265884309
LOC384593	7040438	1.465566057	0.000561185	0.036616142
UBE1L	5130066	1.464980316	0.006145268	0.111094143
MVP	6960035	1.46287989	0.018386845	0.197461488
C2TA	2630463	1.462362637	0.048523552	0.330927638
AES	5570497	1.459360343	0.00061721	0.03788403
D10ERTD641E	2230324	1.458717707	0.001366355	0.055255536
NUDT3	150091	1.4571413	0.011068031	0.150635803
DBNL	6860452	1.456135653	0.036477043	0.284078236
5730455O13RIK	5420484	1.455554088	0.030028858	0.255606756
WBSCR18	5260561	1.455438667	0.004721803	0.098220837
SRPK1	610358	1.454031463	0.012064127	0.15781629
1110007C05RIK	1110504	1.453496493	0.008383004	0.129661023
PGM2	4200575	1.452212915	0.054917168	0.351094568
S100A11	5720523	1.446691348	9.28E-05	0.019984008
COX18	130689	1.445383996	0.054433662	0.349586572
LGALS3BP	160463	1.440980345	0.039740398	0.296649007
HCPH	2810541	1.440487018	0.001679645	0.059823866
HIST1H3B	2600048	1.438458855	0.001666307	0.05962182
SREBP2	4830129	1.436963214	0.006287713	0.112415789
LOC333830	5340133	1.435719103	0.000381508	0.031002632
LOC228730	4640056	1.435670978	0.051809283	0.342889322
1700112E06RIK	6590382	1.433989446	0.003393775	0.083784753
1110002M09RIK	2900681	1.433184217	0.011705494	0.155053098
AW539964	610647	1.431507658	0.007488133	0.12323181
TCEB2	1340563	1.426693503	0.002467473	0.071890024
1190007I07RIK	460228	1.426676223	0.012536034	0.160355907
LOC271041	3800612	1.422202725	0.001210582	0.051532435
LOC224137	2940544	1.418067068	0.000446745	0.033677233
RPS15	5570129	1.416117569	0.000885793	0.044372519
WAS	5340180	1.415484629	0.003812508	0.089044405
1500031N17RIK	990195	1.414080048	0.032936373	0.269194179
FADD	1230347	1.413536388	0.014642223	0.175311552
APOB48R	4220189	1.413426503	0.002138297	0.067082062
MRPS33	6400470	1.411803093	0.031347729	0.260738559
HMGA1	6980274	1.40972649	0.003053414	0.08009539
IRF7	6590653	1.409420605	0.000338806	0.030064636
EPHB2	3830241	1.398330569	0.000132639	0.021459359
PSTPIP1	2360554	1.397201853	0.00295345	0.078665592
IGSF7	6350609	1.394676665	0.004196278	0.093091426
TAP1	5870093	1.39389838	0.004713404	0.098220837
D2ERTD217E	7050603	1.39344988	3.75E-05	0.015721887
TPI1	3990477	1.392194665	0.00613503	0.111038328
NDUFS4	4490154	1.383889483	0.003772981	0.088908378
D2BWG1335E	3310338	1.383642928	0.016310046	0.184837803
HIST1H4J	3870630	1.382309341	0.004459184	0.095719285

PRKRA	3890097	1.382272806	0.028228652	0.248645907
2410015M20RIK	3830288	1.382246073	0.00425608	0.093615667
2310022A10RIK	7570612	1.381433555	0.013684815	0.169331861
PRPF19	7050072	1.379546401	0.053443502	0.347976579
KEAP1	610397	1.375027363	0.043689541	0.312364128
CUEDC2	6860594	1.373887069	0.0036299	0.086322693
NMI	6550367	1.373466225	0.000451593	0.03387819
D2BWG0891E	6960026	1.37273458	0.005275666	0.103311247
CYBA	830369	1.372374661	0.001267894	0.052874501
VTI1B	4780437	1.370684416	0.001217713	0.051666306
LOC381230	5890161	1.370166432	0.006098603	0.110766324
CSRP2	7150278	1.370018751	0.01902355	0.201084309
SNRPF	6510070	1.368094097	0.000550517	0.036224491
GLRX2	5810176	1.366598804	0.007580932	0.123773476
UNC93B1	2100689	1.364345463	0.000585138	0.037009384
ATHL1	5390471	1.361428335	0.019240928	0.201915366
D5ERTD585E	1170730	1.360327145	0.004302256	0.094228783
HIG1	2190326	1.357072471	0.005865987	0.109020353
C730025P13RIK	290048	1.356146528	0.038947345	0.293741291
BC003236	3710598	1.354353661	0.023112123	0.224177483
AW011752	2060487	1.353805264	0.048408065	0.330575566
ARL6IP4	20037	1.352549585	0.003109424	0.081047846
SNX8	60544	1.351280875	0.002525178	0.072483332
ARHGDIB	1090180	1.350110755	0.002710764	0.07490295
FXC1	3440400	1.350041155	0.006868757	0.118516583
DAZAP1	4780192	1.348322331	0.023353507	0.225171837
TBC1D13	5340110	1.344428457	0.024707514	0.230851029
NUBP1	6450220	1.344328169	0.003048679	0.08009539
GRIM19	1070189	1.34148113	0.005310204	0.103523356
PKP3	5260731	1.340162676	0.003841814	0.089544365
THAP7	270376	1.340097306	0.003420121	0.083903723
2700067E09RIK	6450619	1.338726738	0.024424596	0.229733221
CENPB	6220091	1.336785998	0.000373939	0.031002632
SMEK2	1410681	1.335198923	0.039824676	0.296649007
PRSS19	6200446	1.334138428	0.049947408	0.335917408
COX6B	780093	1.333360673	0.011556811	0.154445541
2400001E08RIK	510551	1.333355658	0.020378843	0.2088865
LOC383883	2630192	1.332841125	0.000276213	0.026808244
NDUFA8	4220519	1.329664305	0.000990437	0.04674923
FBXO42	3870180	1.328130578	0.008994526	0.135213942
LRP8	1110026	1.326338407	0.020050237	0.207573417
HINT2	5310110	1.324910466	0.038734663	0.292712327
POLE3	2120014	1.324623478	0.047728912	0.328457354
3110013H01RIK	4280626	1.324432004	0.049540339	0.334634209
PANX1	4150148	1.324229545	0.00274992	0.075182238
LOC383850	3290477	1.320641887	0.001474024	0.056782442

1700048E23RIK	4150551	1.319697757	0.016862365	0.187104082
RAB40C	4590408	1.317847515	0.019062508	0.201238402
RPL36	2140296	1.315436759	0.00010487	0.020668669
INHBA	3060458	1.314572654	0.012350524	0.159030914
OGFR	5690717	1.314275357	0.000303155	0.028359574
NAGLU	3610768	1.312565535	0.041386758	0.302931506
LOC383802	6550452	1.312105261	0.00697603	0.119183911
SLAMF8	2340044	1.311144954	0.000496843	0.034931573
1110032A13RIK	3710678	1.308956486	0.00822684	0.128596947
SLC25A1	6060577	1.305592102	0.009154733	0.13669601
LOC622404	5260379	1.305008299	0.014957418	0.176634025
AARS	2320767	1.304848479	0.034101074	0.275102944
LOC215678	4610309	1.302112397	0.000735917	0.040642641
POLR2I	1410068	1.301291948	0.003192788	0.08140101
LOC240110	2190603	1.301134061	0.003701883	0.087765718
ATP2A3	2570672	1.300906303	0.008156954	0.127871592
RPLP1	6020343	1.298394876	0.00027924	0.026933678
TCEB2	6100484	1.298039645	0.001528032	0.05730609
NFIX	270026	1.297554577	0.000811969	0.042170813
BC003236	6100719	1.296022689	0.02133344	0.21375304
GNAI2	4220753	1.290136811	7.27E-05	0.018815129
LYRM5	2600097	1.289549562	0.005958994	0.109252907
COMMD1	4040739	1.288463603	0.00659756	0.114878673
MRPS33	990630	1.288255995	0.00705135	0.120066249
NDUFB10	2100386	1.28813451	0.00079176	0.041963275
S100A11	3850477	1.2862144	0.000881114	0.044280971
3110001D03RIK	4640168	1.285627766	0.023621792	0.226371495
MRPL33	4150463	1.283812998	0.024792222	0.230952862
SLC2A6	7400286	1.282370757	0.014575144	0.175183754
BC039093	1820215	1.277890642	0.04744721	0.327615704
LOC215098	4590603	1.27608046	0.002592256	0.073650644
D10UCLA1	7210241	1.275910746	0.037834935	0.288858751
PABPN1	4560561	1.275004312	0.03871736	0.292712327
2310056P07RIK	1300411	1.274474915	0.003168957	0.08140101
HAGHL	3840240	1.272662235	0.036083318	0.28228607
ADRBK1	780398	1.272591423	0.001475238	0.056782442
PGLYRP1	3140246	1.272462842	6.23E-05	0.018592621
RBM38	830482	1.272352633	0.016414746	0.1851159
EIF4EBP1	240615	1.271905309	0.0088051	0.133269392
HDC	2970324	1.271418666	0.017560047	0.191900053
SH2B3	5810364	1.269408032	0.01919511	0.20167853
APBA3	1400735	1.26805663	0.015376147	0.178858569
ATP6V1D	1500608	1.266745901	0.000401931	0.031683156
BIRC1B	6130543	1.266171288	0.047297109	0.327161163
MELA	6520315	1.263839849	0.035959714	0.282026102
GNB1L	4060437	1.263485511	0.032865333	0.268896604

NUDT6	4280110	1.261625143	0.024610013	0.230401804
NDUFS4	1300544	1.25828967	0.008554219	0.131393139
H2AFY	6480433	1.258289339	0.044983703	0.317091201
MTMR3	1570497	1.257285815	0.007103665	0.12043334
UBADC1	380564	1.25623912	0.050020931	0.336266253
HIST2H2AA1	7050546	1.25612853	0.002579912	0.073646052
LOC268695	5360152	1.253256237	0.000166234	0.023433298
CNP1	6940079	1.252409427	0.041306289	0.302874233
MIF4GD	6860291	1.251920413	0.009625417	0.140349393
H2-T22	4480685	1.244671592	0.005117514	0.102015248
MAPKAP1	2680095	1.243235541	0.002299079	0.069352881
LOC380625	3120348	1.242504303	0.009886723	0.141764468
THRAP4	610040	1.242119073	0.002006799	0.065102724
C630013N10RIK	1780528	1.241268191	0.030739101	0.258584779
TNFSF13	2340543	1.241109781	0.047640655	0.328367388
1810027O10RIK	4560148	1.240852576	0.001079443	0.048728696
PPS	4850133	1.240682325	0.030544088	0.257642123
RBMS1	10500	1.238921258	0.003189774	0.08140101
LOC269355	6520088	1.238541977	0.000855541	0.043275906
TRIOBP	7210196	1.238067756	0.033167454	0.270655486
MRPS21	2690376	1.236770506	0.000362304	0.030577294
2310016E02RIK	4060056	1.229474817	0.000104486	0.020668669
FXVD5	2630008	1.229080285	0.000806696	0.042170813
SLC35A4	360204	1.226870826	0.009738564	0.140965839
SLC35C2	10204	1.225377102	0.009690905	0.140908303
LOC382061	6660044	1.224297228	0.000840523	0.042890314
HIST1H4K	3370452	1.223355685	0.020331682	0.208545079
PDCD5	4670670	1.221224174	0.000487058	0.034774061
CYP7B1	360187	1.219808332	0.001251308	0.052376171
USMG5	7560687	1.218523731	0.001182896	0.051167651
PPARD	240717	1.217870182	0.007451443	0.12323181
MRPL55	4230398	1.215747909	0.004269406	0.093775956
RPS13	1030612	1.215110927	0.000706318	0.040473342
2310009B15RIK	4010164	1.214078867	0.007746278	0.124913768
LOC269365	4670133	1.212616363	0.000371101	0.030982935
2310002B06RIK	5360368	1.212377866	0.022911755	0.222790632
MRPL2	3180189	1.211218435	0.04065499	0.300633972
NDUFB5	4900538	1.210021083	0.029952808	0.255606756
GBA2	6290056	1.209950718	0.001411155	0.056045587
RTN3	1440327	1.208253442	0.042369528	0.307188575
SRR1	520093	1.208136233	0.010456042	0.146017873
2310002B06RIK	1410288	1.207247727	0.021276523	0.21375304
TXNL4	4490632	1.206572064	0.035673344	0.281569209
CD52	6290768	1.203188545	0.002310773	0.069352881
NME2	3170731	1.200437178	0.000487069	0.034774061
UBE2J1	50452	1.200392448	0.001896906	0.063212565

BCAP31	1500274	1.199754825	0.000541793	0.03580211
LOC239341	7610537	1.199224184	0.021364258	0.21375304
MAPBPIP	4890592	1.199036013	0.001855395	0.062876048
HIST1H4K	3390431	1.198805332	0.0191755	0.201608894
STX8	3990441	1.19812422	0.039110314	0.294255846
D8ERTD354E	5670035	1.197074266	0.003483816	0.084137144
1500012F01RIK	540138	1.196190582	0.040908638	0.301218702
CLK3	4880343	1.195832073	0.011898293	0.156583556
SF3B5	4250164	1.195357598	0.034286024	0.275448143
PSMD13	4230215	1.194090478	0.001785451	0.062030105
TXNL4	2970754	1.193858564	0.015987098	0.183220398
MRPL10	2470743	1.193605496	0.048862452	0.332072215
PTDSS2	630017	1.192734429	0.004181979	0.092906943
DUSP11	630343	1.192055249	0.012987098	0.164098163
EIF2B5	1450468	1.190915589	0.002732133	0.074983506
PIP5K1C	4490592	1.190430318	6.15E-05	0.018592621
2610024N01RIK	240189	1.184765175	0.025638785	0.234761839
1110028E10RIK	2190632	1.184174041	0.005019612	0.100835677
LOC384801	4010241	1.182917053	0.001699162	0.060242647
6030423D04RIK	3390672	1.18063167	0.033939551	0.2743609
FBXW5	4860376	1.178416083	0.049075146	0.333080398
HIST1H2AB	6100113	1.178413064	0.03368819	0.273610828
LOC383775	5910370	1.17272029	0.003792216	0.089017815
T2BP	60626	1.171305449	0.008156503	0.127871592
RPS29	5270543	1.171221125	0.000225264	0.024462457
POLR2J	6660356	1.17054419	0.047088282	0.326007103
ATPIF1	3450762	1.170366325	0.044144626	0.314315408
HIST2H2BE	2340315	1.16807966	0.00063076	0.03841205
GLIPR2	3940639	1.167157882	0.005214061	0.102492606
HCPH	4060240	1.166669884	0.003787393	0.089017815
S100A4	5720646	1.164968059	0.002625146	0.073978245
SRD5A2L	5910397	1.1631726	0.012815762	0.162462018
WARS	2350397	1.16177763	0.000729155	0.0405844
2010007H12RIK	6040324	1.161465731	0.001500391	0.057247117
MKRN1	1230403	1.160786511	0.016752413	0.18675393
LOC245676	1470142	1.160694643	0.003213267	0.08140101
D12ERTD647E	160437	1.160492665	0.000589063	0.037034635
2410001E19RIK	1780348	1.159015774	0.024609747	0.230401804
LY6F	2630577	1.155597173	0.001858465	0.062876048
LOC384525	10228	1.155539801	0.003813158	0.089044405
GGNBP1	60100	1.154224829	0.020446321	0.209439915
GSDMDC1	1980102	1.153861439	0.000480456	0.034774061
DBI	3940411	1.153601319	0.040787438	0.301039985
SIRT3	5550554	1.152754034	0.012443232	0.159695006
2510027N19RIK	6760053	1.149691191	0.02166295	0.215355722
EIF2B3	6760445	1.14732819	0.007329164	0.122118655

PTPN18	4050689	1.146913803	0.003447866	0.083921484
MTMR3	1450437	1.145805961	0.007183779	0.12086339
ATOX1	5960192	1.143179847	0.003249254	0.081906817
GPX4	2480072	1.143015011	0.045241903	0.318189091
D12ERTD647E	1110280	1.143011888	0.001241733	0.05218485
NME2	3830025	1.14212938	0.000512668	0.035293587
BC065078	6370739	1.141775561	0.000516942	0.035363835
CCDC56	4210753	1.1411988	0.037113733	0.287186102
TAF10	2480373	1.136663667	0.000411582	0.031957288
AP2S1	7100181	1.132733261	0.029921308	0.255606756
1810033B17RIK	3170343	1.131665533	0.005939919	0.109252907
HIST1H4M	150291	1.129754363	0.025961982	0.236295657
PYGB	3170110	1.127577087	0.005421215	0.104970131
9430029K10RIK	4900685	1.127108222	0.003127644	0.081047846
RPS23	4850519	1.127002172	0.000486872	0.034774061
PAF53	3780132	1.12693058	0.014635494	0.175311552
6030457N17RIK	3710079	1.125461574	0.001139717	0.050065776
1110002E23RIK	6510095	1.122661395	0.011528175	0.154195543
FXYD5	4780196	1.122547796	0.001874797	0.063016718
EEF1D	4050603	1.120602276	0.013324687	0.166601506
AW049829	670278	1.118828133	0.008168296	0.127871592
SHMT2	4040767	1.118105017	0.053292203	0.347851778
1500011K16RIK	70114	1.11793144	0.052814687	0.346497369
RIT1	5910427	1.116931819	0.03171101	0.262915255
MAPKAP1	1230487	1.116416263	0.004890821	0.100258975
FADD	6450050	1.116110958	0.000691281	0.0402056
MOCS1	60600	1.115669753	0.037348802	0.288086437
TES3	2630044	1.115163225	0.015115628	0.177961018
PRDX5	4920100	1.113609572	0.000924401	0.045058191
ATP5L	2690097	1.113210451	0.004639526	0.097361081
ZNHIT2	5670037	1.112744196	0.024775234	0.230933136
D4ERTD22E	4920564	1.111936148	0.008247925	0.128725652
PLEKHM2	730148	1.111022054	0.010505891	0.146319263
9030624J02RIK	1190647	1.110943435	0.001312756	0.053666896
MAX	3360402	1.110731769	0.040750964	0.3009138
AI840980	7330392	1.109044465	0.015891786	0.182596468
LYZ	2360719	1.107835443	0.054556855	0.349865205
MS4A6B	3610286	1.1064387	0.004029702	0.091271376
FLOT2	4810468	1.105532869	0.016671884	0.186660196
9626100_224	1710136	1.105447091	0.01132864	0.152508771
ORC6L	6060376	1.105008721	0.03467678	0.278005018
XPA	540762	1.101110885	0.021065172	0.212969437
TPI1	6110170	1.101021425	0.023180092	0.224416244
2410016F19RIK	2340470	1.099187193	0.041554525	0.303813659
LLGL1	2120110	1.098144104	0.029754561	0.255496375
STARD5	2100327	1.096151348	0.005518088	0.106052453

NOSIP	4810246	1.095916151	0.005881986	0.109020353
ALDOA	1690537	1.095335278	0.012262719	0.158636712
GPR43	6520725	1.094284219	0.017831442	0.193504163
FLOT1	2480719	1.093897468	0.000190075	0.023584274
RENT1	1770605	1.093239276	0.008915471	0.134546497
SNX22	2810451	1.092217772	0.006206188	0.111675435
CCND3	610717	1.091606851	0.046295542	0.322821498
MKNK2	2690195	1.091503776	0.010955116	0.14988722
FH1	4860435	1.089846452	0.003333636	0.082828858
PIIH	3830592	1.087135535	0.008686197	0.132633196
2510005D08RIK	2750521	1.084411124	0.028558898	0.250447154
RGS12	5130487	1.08252648	0.001607637	0.058603286
ARBP	5570093	1.082314516	0.006922997	0.119055608
HIST1H3A	1740487	1.081952223	0.003227345	0.081624498
MGC68323	650347	1.081648724	0.002156109	0.067270533
1300003K24RIK	2120524	1.080863854	0.013952103	0.171421611
MYBBP1A	1090524	1.08066992	0.001754732	0.061234215
NDUFA7	6620670	1.080595405	0.026149472	0.237332059
EIF2B5	2370187	1.08028081	0.002504753	0.072483332
LOC381292	60497	1.07860843	0.000903612	0.044632274
1810027O10RIK	1190180	1.078177886	0.009229379	0.137274082
AHCYL1	3170114	1.076669679	0.005108059	0.102015248
STX4A	770474	1.076354753	0.030593341	0.257917478
RBMS1	540603	1.075611197	0.002235535	0.068334141
GNAI2	2320041	1.074872077	0.001720568	0.060586617
GNA13	6840521	1.074681934	0.013266212	0.166004039
RING1	7210221	1.07421108	0.005760086	0.107899123
GLIPR2	4120687	1.072195109	0.00801655	0.127121371
STAT2	6220594	1.071770678	0.051167625	0.340583819
COX6A1	1510133	1.071193941	0.004114846	0.092142025
3110056O03RIK	5390168	1.071086789	0.050644094	0.338624474
ABR	6180463	1.070996212	0.007694831	0.124558224
GPR18	2750543	1.070208476	0.036844227	0.286077
1810048P08RIK	2230184	1.06995063	0.001044692	0.048250957
LOC384161	5310564	1.069763921	0.003990273	0.090857692
CHMP2A	1030242	1.068128034	0.009511211	0.139734718
PACS1	6100162	1.066000168	0.016883641	0.187142081
SLC25A12	650390	1.063737541	0.003070021	0.080395196
RALY	6180670	1.063009867	0.017684358	0.192716065
JAK3	3850609	1.060716994	0.014156564	0.17231322
AI837181	4010722	1.060121917	0.013218051	0.165802187
FAS	5890221	1.058414585	0.014757529	0.176028379
TUFM	6250605	1.056184381	0.028562168	0.250447154
TRAM1	7040187	1.055448245	0.031323662	0.260738559
MRPL54	1070358	1.055154652	0.034298005	0.275448143
ATP6V0C	2030725	1.054209446	0.002520968	0.072483332

CBFA2T3H	5890110	1.053360841	0.002043716	0.06538254
ESRRBL1	540440	1.05302309	0.041941092	0.305652177
LOC384836	5890307	1.052717951	0.019282664	0.201915366
CYP4F18	6020487	1.052225976	0.03874124	0.292712327
SSFA1	3190050	1.052001107	0.035327484	0.280757676
ARRB2	1110451	1.051953677	0.010971043	0.149921889
D6ERTD245E	1340450	1.051353981	0.039779783	0.296649007
ATP5K	4880626	1.050756933	0.018481593	0.197884143
POLR2G	7330594	1.049777122	0.001315471	0.053666896
LOC226740	430471	1.04929743	0.001635433	0.058994867
BRI3	870437	1.049030051	0.00181565	0.062795626
2310035K24RIK	940577	1.047968419	0.008791609	0.133269392
TRIOBP	6580241	1.047108129	0.027562427	0.246141232
GNA-RS1	3140543	1.046173528	0.004355712	0.094733686
HRBL	60403	1.046150353	0.05393312	0.348116183
BAT5	7320056	1.04157471	0.046427728	0.323452753
BC002163	2000100	1.039929252	0.034773626	0.278637583
A430084P05RIK	1190477	1.039892517	0.016328421	0.184837803
CAMTA1	2360221	1.037864867	0.014856164	0.176296479
NFE2L1	1850564	1.037842897	0.027747151	0.247209127
9430029K10RIK	2060164	1.037582684	0.001154978	0.050381041
1100001I22RIK	5900504	1.036311085	0.001969748	0.064396258
DBI	4490470	1.036197135	0.015079161	0.177666378
MIF4GD	1340301	1.034504737	0.009971041	0.142447378
SPRR2A	5390259	1.034470261	0.00233279	0.069416952
SEC61G	4540129	1.033020386	0.002458669	0.071768183
FIS1	4890750	1.03286727	0.001598384	0.058403079
RBKS	3180180	1.03249983	0.021576398	0.214781979
TNFRSF13B	4280296	1.030654802	0.005617813	0.106649168
SBF1	510524	1.029344779	0.002649866	0.074045064
RPL37A	6520619	1.029329529	0.002708937	0.07490295
LOC269251	5550286	1.027054687	0.007502281	0.123283514
1300006N24RIK	430520	1.025787665	0.028934971	0.251439434
GM2A	10768	1.025629711	0.005142633	0.102187123
RPS16	4480026	1.025145243	0.001409574	0.056045587
CORO1A	270661	1.024959796	0.03021477	0.256536447
FBXO6B	1260128	1.024177719	0.006918753	0.119055608
ATP5G2	3290468	1.024165246	0.008336351	0.129413977
GIT2	7400132	1.018403011	0.006222933	0.111847133
ZYX	4050400	1.017568816	0.004175772	0.092901959
LOC208092	870523	1.016056816	0.000269005	0.026641074
MRPS15	5090332	1.015105629	0.016601998	0.186415347
APOBEC3	7210349	1.01504929	0.00035047	0.03023584
DRAP1	1230538	1.015019346	0.002416437	0.071069779
PKN2	50437	1.014404406	0.029578107	0.254841261
A030007L17RIK	7380113	1.013341145	0.020978489	0.212508128

LOC211895	1110441	1.01269799	0.024958611	0.231737317
ZCRB1	7320246	1.011824351	0.019452756	0.203011999
9630007E23RIK	1690347	1.011724945	0.036525051	0.284302682
FXR2H	6020324	1.010569991	0.048293142	0.330515948
AZI2	1780681	1.006406014	0.038257232	0.290938569
XCR1	6180240	1.006357366	0.002046231	0.06538254
RPS19	6280541	1.006175396	0.006386221	0.113157502
PSMB7	3360376	1.005060879	0.033639635	0.273385485
RPL19	4900703	1.003279448	0.000418847	0.032359579
UPP1	3520594	1.002522983	0.00388997	0.090025847
RPS20	4900189	1.00223365	0.001670133	0.05962182
5830482F20RIK	4390458	1.001360328	0.002921655	0.078224804
HIST1H3I	5690561	1.001160805	0.002233191	0.068334141
PFDN5	650598	1.00054497	0.001616933	0.058666705
CYB5	2810072	0.999203629	0.010423684	0.145959772
TNFSF5IP1	1710202	0.998717457	0.007453527	0.12323181
DCXR	3140274	0.998539022	0.009631905	0.140349393
PDE6D	1990291	0.998341616	0.005641431	0.106869029
ZDHHC12	2190543	0.996792243	0.003316944	0.082811621
BCAP31	3610424	0.994184118	0.014758771	0.176028379
LOC383131	6270438	0.99342838	0.002879281	0.077491091
2410016F19RIK	5560577	0.993231426	0.039854683	0.296649007
2610018O07RIK	1030445	0.992829468	0.016497058	0.185727376
ARL6IP4	770682	0.992089525	0.012375483	0.159220274
EDF1	1850477	0.990058156	0.001717503	0.060586617
SNRPD3	1030187	0.989842654	0.041630689	0.304227277
CIAPIN1	110445	0.989119936	0.052750729	0.346370429
BC013529	5670075	0.989055616	0.022890981	0.222728099
STK11	7040097	0.988757464	0.005515985	0.106052453
DULLARD	5360291	0.988485655	0.009151651	0.13669601
TCEB2	1740273	0.988116021	0.004233416	0.093381704
RAI16	3370537	0.987751277	0.008361851	0.129462792
SNAPAP	4010091	0.986747504	0.025672732	0.234789074
TXN2	7550711	0.986545141	0.043906077	0.313470728
RNF166	3870246	0.983204317	0.016654544	0.186632202
IFIT2	360041	0.979559493	0.035768396	0.281657323
CLTA	4060491	0.97942717	0.003431283	0.083921484
ISG20	540411	0.977458829	0.009733665	0.140965839
NR1H2	5700142	0.977410862	0.003006288	0.07939567
6330442E10RIK	5270167	0.977275226	0.05105662	0.340018007
GNGT2	7330379	0.977090934	0.009597136	0.140333266
KIF2C	1780543	0.976904431	0.009265954	0.137563098
PSMF1	7560129	0.974753343	0.008115395	0.127801854
RPL27	430470	0.974632015	0.008096632	0.127777025
LYPLA2	50224	0.973103782	0.045450294	0.319220991
2010320M18RIK	2480041	0.972446766	0.041890175	0.305548391

NDUFA10	770221	0.972145773	0.004083503	0.091902501
LSM5	6420605	0.971351237	0.028213397	0.248645907
EFHA1	2630021	0.971232131	0.045159432	0.317752979
AKR7A5	3180068	0.971147903	0.019008366	0.201076917
PNPLA2	2900730	0.970892825	0.004924846	0.100347178
TYROBP	450739	0.96929495	0.010244266	0.144621091
ARPC4	7000064	0.968135584	0.043510797	0.311947906
1110030J09RIK	840278	0.967797649	0.018996552	0.201076917
H2-T23	2350181	0.96442933	0.002594301	0.073650644
ZFP277	2750037	0.96325214	0.029999528	0.255606756
CYB5R3	840309	0.961480834	0.025152663	0.23235913
ARCH	4040253	0.961212437	0.027947969	0.248051094
LOC381046	3800066	0.960764248	0.0003976	0.031501647
FPGS	4670270	0.96076077	0.000275761	0.026808244
AP1B1	2340121	0.958500655	0.006982011	0.119183911
PFKL	6650711	0.957442829	0.018235508	0.19651576
VPS29	3830291	0.957368099	0.007461207	0.12323181
ACADS	270673	0.95627443	0.034017275	0.274703206
CCL4	6940184	0.954325278	0.038915569	0.293644253
BC004728	3610025	0.95351688	0.017650753	0.192620194
EXOSC8	4670451	0.953373679	0.000962298	0.045980058
LOC382843	2340168	0.950963375	0.003999527	0.090935067
BC022593	3180195	0.949693814	0.036205836	0.282817116
AARSD1	520500	0.949142705	0.005025875	0.100835677
PSMB2	3170427	0.949108841	0.024212596	0.228602151
TMUB1	7040592	0.948249053	0.008113519	0.127801854
FARSLA	6110044	0.947338667	0.054664451	0.350055365
SNRPA	1690039	0.947005369	0.011324986	0.152508771
1300010A20RIK	2190102	0.946925823	0.011280658	0.152195781
COTL1	990438	0.945047112	0.029955348	0.255606756
LOC382004	70424	0.944586906	0.001198848	0.051427939
ABCD1	6220438	0.943237365	0.010782889	0.148710018
NDUFV2	4290600	0.942151091	0.045493626	0.319380886
RPL38	2510707	0.942037562	0.005143351	0.102187123
1500011L16RIK	6590497	0.94106054	0.048338353	0.330515948
COPE	4850746	0.940652504	0.044758275	0.31593239
LOC232745	6580446	0.940565069	0.017283077	0.190077125
SCL0004176.1_1597	6060338	0.940407607	0.033031671	0.269831048
NDUFA8	5900242	0.939131673	0.037429617	0.288117642
RPL24	510674	0.938320862	0.004242452	0.093448273
CDK10	5090095	0.938260835	0.007177274	0.12086339
CSNK1D	5550360	0.937934114	0.008718557	0.132866014
ANAPC13	620168	0.934949988	0.005758214	0.107899123
CPSF3	520678	0.933768759	0.039535948	0.295650427
RGS19	2680278	0.933564407	0.004561997	0.096385376
5830405N20RIK	2900307	0.933497449	0.029759354	0.255496375

ALG3	3830092	0.931575162	0.005656067	0.106869029
2310008H09RIK	650164	0.930601551	0.002435137	0.07148439
ATP1A1	5290630	0.929482632	0.037799259	0.288858751
1110006G06RIK	3460762	0.929332832	0.029604695	0.254841261
ACAA2	4640187	0.928536317	0.030954161	0.259270317
CYP4F13	510669	0.927586931	0.051889362	0.342889322
RPS28	4810044	0.925909782	0.000338235	0.030064636
TRAFD1	4570747	0.92479932	0.001547714	0.05730609
PLA2G4B	5390019	0.923855966	0.01587699	0.182596468
RPS21	2970612	0.922647603	0.000395604	0.031501647
FAU	290433	0.92247562	0.001523265	0.05730609
RPS26	610021	0.922394322	0.003794822	0.089017815
HIST1H4M	6370047	0.920789264	0.028325691	0.24887735
RRBP1	1770279	0.919688894	0.019663763	0.204389942
NDUFS7	6290041	0.919009763	0.00995316	0.14232285
SNRPG	6480767	0.918176645	0.015052559	0.177487618
SLC7A11	5080369	0.917422984	0.049486751	0.334558015
ARFRP1	160064	0.917192783	0.018104688	0.195568029
BC004728	2690368	0.917102751	0.003743522	0.088348264
LOC230896	110463	0.916457117	0.001118311	0.049903038
NME7	4780390	0.91629502	0.021604775	0.214926683
CHAF1B	7200270	0.915004839	0.027019758	0.243099549
9626958_317	5220220	0.914386932	0.011936517	0.156820795
2410001H17RIK	290735	0.914355334	0.004519865	0.096017764
BCL11A	460692	0.912164705	0.028335061	0.24887735
STARD10	7570209	0.911454172	0.017389667	0.190709141
COX8A	7100632	0.90883769	0.003404223	0.083784753
ECE1	5700722	0.906630515	0.019540934	0.203658501
RPLP1	540326	0.905766514	0.004612652	0.09705945
2310061J03RIK	2370408	0.905315815	0.028865224	0.251439434
PPP1R14B	2360594	0.905237223	0.048105402	0.329668482
LOC381999	6840575	0.903836948	0.014808143	0.176211228
COX5B	2570373	0.90297666	0.01108902	0.150789304
COMMD10	7510670	0.902889387	0.002195824	0.06806178
LANCL1	1580762	0.902662907	0.001943712	0.063948958
RAD23A	4260753	0.901489109	0.023733776	0.226389314
TRAM1	4480402	0.898247688	0.053923769	0.348116183
FIS1	1190670	0.898190531	0.009389158	0.138555171
ESRRA	2000474	0.897587754	0.028138251	0.248609453
F730045P10RIK	4640754	0.897266141	0.014227063	0.172603172
BEX6	870603	0.896820827	0.021181173	0.213585996
2610318I18RIK	3310278	0.896776505	0.016302578	0.184837803
EIF3S3	6250484	0.896311166	0.009132415	0.13664464
TNFSF5IP1	3850471	0.896189482	0.002908223	0.077999656
0610006I08RIK	3120133	0.896007627	0.04277648	0.307962892
SLC29A3	4290367	0.89380653	0.042545758	0.307188575

A930029N17RIK	7560170	0.892034648	0.00493132	0.100347178
ASCC1	3850577	0.891289241	0.034183921	0.275448143
1810010N17RIK	3360301	0.890630588	0.043602652	0.312103187
VPS28	2490014	0.889818186	0.004888294	0.100258975
1110003O08RIK	1570554	0.889190594	0.04915202	0.333266567
CD8B	1690079	0.889098803	0.010444024	0.146017873
FADD	2340494	0.889069825	0.021675639	0.215355722
FXC1	3420632	0.887330303	0.003741819	0.088348264
SDC3	6760762	0.886786326	0.014532942	0.174947335
MRPS15	5960491	0.885781159	0.006179314	0.111386634
NCSTN	450647	0.885543252	0.023374561	0.2251759
RPS10	150692	0.88365568	0.012595915	0.160776079
SRD5A2L	5260451	0.88309949	0.023712747	0.226389256
RPL29	3060687	0.882930897	0.000383315	0.031002632
1700047117RIK	6590139	0.882197865	0.039886865	0.296649007
MRPS26	3610280	0.88198197	0.047714887	0.328457354
TRPC4AP	3890202	0.879685508	0.021291482	0.21375304
STXBP2	1070152	0.87899717	0.006991857	0.119183911
RHOG	2630703	0.87863187	0.002848771	0.077062359
TBCA	4560047	0.878326657	0.007897295	0.125910774
CSNK1D	2490040	0.878251765	0.019347446	0.202370604
GMFG	7050450	0.877778235	0.002188846	0.067981175
LGALS1	7330278	0.877561001	0.01403994	0.172129004
NME7	450719	0.875930593	0.018967339	0.201073089
LOC384179	4220348	0.875750811	0.013110812	0.164750383
SLC15A3	6130445	0.874994699	0.03976027	0.296649007
EFHA1	2850338	0.874734506	0.005330161	0.103724394
NOSIP	3420477	0.874494661	0.007137958	0.120615187
2410017P09RIK	4880296	0.871683507	0.030317255	0.256697903
RPLP2	2260575	0.87023519	0.05339021	0.347976579
GSDMDC1	7570204	0.869817102	0.013087264	0.164713732
1110039B18RIK	870408	0.869794865	0.004031951	0.091271376
CIZ1	150762	0.867483696	0.054036619	0.348188655
RP9	6760017	0.867109414	0.00758789	0.123773476
CNN2	150039	0.866736435	0.022351541	0.219542743
PHTF1	4560086	0.866580482	0.005651942	0.106869029
1110001J03RIK	4120017	0.86410088	0.005112056	0.102015248
ADD1	4640047	0.862684064	0.052617061	0.34598993
PRKCSH	4070189	0.861994922	0.053608543	0.348116183
LOC218060	1510711	0.860989028	0.01080605	0.148897201
PTPN1	1430110	0.860263262	0.014549182	0.17500716
HIST1H2AI	1110390	0.858565531	0.051781389	0.342889322
1110005A03RIK	2190097	0.857838269	0.004716012	0.098220837
SLC25A28	6590093	0.855593583	0.012751694	0.161914186
1110017O22RIK	4760376	0.854949758	0.02921946	0.252784957
ARID1A	6620767	0.854164555	0.016304695	0.184837803

NDUFV1	70286	0.853414464	0.001845791	0.062876048
PSEN2	990682	0.852621515	0.035794643	0.281657323
BST2	2100139	0.852140913	0.019573166	0.203703811
IDE	1510477	0.850383363	0.010688175	0.14806126
LOC225058	4060209	0.849948507	0.002851127	0.077062359
MGC18837	2100678	0.848761122	0.011963375	0.157040781
COPE	6510097	0.848026458	0.044756934	0.31593239
ANKRD47	6510397	0.847006763	0.009578559	0.140325888
PRKRIP1	7050753	0.846774707	0.054469959	0.349675071
TMEM14C	3710072	0.846223645	0.012104155	0.157912437
KLR11	780037	0.844595697	0.021563599	0.214781979
LAG3	130608	0.843669509	0.005482192	0.106018332
MFN2	2450066	0.842299811	0.044384192	0.315155357
C530044N13RIK	6380193	0.841313605	0.045860261	0.321083859
GPI1	6370100	0.83995179	0.042253797	0.306759801
WDR5	6060088	0.839582149	0.037724114	0.288858751
RPS12	6350128	0.838836514	0.000712948	0.040473342
BCL3	4070020	0.838372303	0.037362746	0.288086437
COX6A1	1170768	0.838267651	0.016751651	0.18675393
FH1	3870100	0.835978295	0.015290944	0.178402003
IRF1	6660634	0.834563621	0.049787559	0.335277972
6330578E17RIK	5690735	0.833886064	0.007550757	0.123687449
RPL30	7320608	0.833425028	0.009524511	0.139797851
BC032203	6940678	0.832997295	0.05489175	0.351076599
LOC380906	6760674	0.832892377	0.035921419	0.281871512
PPP1R14A	4040215	0.831974456	0.001454711	0.056778907
RPS26	4540414	0.831583928	0.008652191	0.132520678
HIST1H4A	6380377	0.831106517	0.014952473	0.176634025
A030009H04RIK	1090053	0.829615791	0.004331634	0.094474631
CPNE2	4540615	0.829496025	0.032017098	0.264324035
DNAJC15	1450066	0.828572173	0.000599193	0.037219465
SRD5A2L	2230278	0.828101245	0.035118648	0.279794818
RPL37	3310041	0.827362106	0.018079504	0.195568029
TAPBPL	6480131	0.827018779	0.009760874	0.140965839
LAMP1	1570131	0.826014834	0.05249199	0.345665186
PPP2R5C	4250372	0.825799556	0.035739218	0.281580066
GRIPAP1	2760113	0.825721569	0.005541508	0.106110748
ARL6IP4	6180288	0.824535374	0.013137118	0.164920217
SMOX	620008	0.824426905	0.034840419	0.278933015
DEPDC1B	10161	0.824001529	0.054303435	0.349472872
LOC381583	7200750	0.823970215	0.054830699	0.350830625
CORO1B	3840092	0.823501239	0.001846618	0.062876048
SPOP	540673	0.822630403	0.020076928	0.207603932
SMARCD2	2510201	0.821124358	0.003924946	0.090113246
KCTD10	6450291	0.821056108	0.033634846	0.273385485
RPP21	4730538	0.820456144	0.048565051	0.330957994

CYFIP2	7330333	0.820305414	0.01311298	0.164750383
GLE1L	360497	0.817453076	0.01520646	0.178085312
MRPL13	3400424	0.817437883	0.04916377	0.333266567
KLRA3	1850553	0.817061475	0.000910749	0.04475639
1110006G06RIK	4640743	0.816565275	0.035101149	0.279794818
SUGT1	580152	0.81612596	0.034007265	0.274703206
LOC237512	2030551	0.815334066	0.00779152	0.125253124
GMFG	1070091	0.813709813	0.002781138	0.075902092
ITGAD	3140095	0.813570469	0.01307229	0.164713732
PSMB1	6400292	0.811688016	0.050238403	0.336998775
D15MGI27	2810088	0.809189662	0.04496391	0.317091201
YEATS4	3870280	0.808872203	0.00754962	0.123687449
REM1	1850156	0.808659929	0.042541095	0.307188575
NME7	770411	0.808550365	0.017501356	0.191528234
B230369L08RIK	7000136	0.808003031	0.015178126	0.178085312
ADRBK1	3120537	0.805421831	0.039301421	0.29463053
IL2RG	270176	0.804409697	0.024571433	0.230401804
B230333C21RIK	5050523	0.804168969	0.043925063	0.313470728
LOC193798	2810600	0.802662806	0.003910261	0.090113246
DPM1	6760475	0.801646013	0.034263545	0.275448143
3010003L21RIK	450475	0.801442744	0.016373651	0.184837803
PARK7	4730739	0.801053984	0.00494337	0.100347178
2210020M01RIK	2490070	0.800343613	0.010386551	0.145654311
IL6ST	5900575	0.80021228	0.035134258	0.279794818
RPL31	4900348	0.798344224	0.006987103	0.119183911
9830002I17RIK	6270634	0.797618879	0.001940694	0.063948958
ZNHIT4	6560246	0.796144237	0.003307899	0.082718784
PPP1R14A	7050484	0.795403092	0.05011775	0.336600062
LETM1	6620152	0.794946473	0.02513848	0.23235913
LOC380707	6520475	0.793316918	0.025330239	0.232891224
PKN1	1070451	0.79028981	0.031161128	0.26008922
RPS27L	2650253	0.789832724	0.002513234	0.072483332
CDC23	3290259	0.788316365	0.007202626	0.120887153
UPP1	4120243	0.785734868	0.02209535	0.217853132
RPL27	3940477	0.784746967	0.031398836	0.260782057
PSMA5	2480671	0.782185657	0.020584408	0.210161261
BCAP37	7000019	0.78110991	0.004382434	0.09518157
HIST1H4M	5890411	0.780989531	0.041105629	0.301953316
BDH	7150243	0.780286426	0.02908824	0.252133178
1810055D05RIK	5260356	0.78012257	0.019273677	0.201915366
MIF	4040093	0.779058663	0.006530873	0.11409728
RQCD1	7650445	0.777267335	0.000957859	0.04590925
LOC383227	4280750	0.777046423	0.007877817	0.125729308
TTC5	2450022	0.775933166	0.024286211	0.228847438
PKN2	1990370	0.775837005	0.030485159	0.257564759
LOC382736	5720044	0.773947968	0.002907789	0.077999656

MED19	540670	0.773381278	0.035665788	0.281569209
FLNB	2060433	0.773105465	0.022331453	0.219529528
HIST1H2BM	5700551	0.772968444	0.023940881	0.227972026
HINT3	2000301	0.77067497	0.031758572	0.263168826
DAB2IP	3290594	0.769953744	0.047600034	0.328335997
4930432N22RIK	150053	0.767661866	0.022336059	0.219529528
KLRI1	1240639	0.767272955	0.020736299	0.21115671
STAT6	3940161	0.767194843	0.008308418	0.129150567
H2AFX	1090327	0.766830103	0.03256413	0.266994918
2610203E10RIK	630168	0.766730254	0.033787694	0.273989085
ALG3	3370671	0.76582799	0.006695407	0.116041266
CD3E	6590239	0.764717647	0.010005467	0.142647787
LOC380775	6560079	0.764266961	0.025199002	0.232566333
SEL1H	5870286	0.763338501	0.047873831	0.328661679
PRM1	2680050	0.763017252	0.053057278	0.347243971
LOC385403	4060719	0.762453109	0.030536379	0.257642123
D19BWG1357E	6980189	0.761988227	0.018429106	0.197652712
5730599I05RIK	730739	0.760340644	0.053887699	0.348116183
2610205H19RIK	6370592	0.76031414	0.054664015	0.350055365
SH3BGL3	3440195	0.758909705	0.013460135	0.167465056
GMNN	2970747	0.756222452	0.01133332	0.152508771
2210012G02RIK	4890753	0.755733001	0.007119441	0.12043334
1810009M01RIK	3450180	0.755629844	0.001443927	0.05676642
F730014I05RIK	2810347	0.755222062	0.02086325	0.211755173
COX7C	2760603	0.75444528	0.013355059	0.166712792
SCOTIN	1260673	0.754362655	0.034864382	0.278933015
PLAC8	5860243	0.753482733	0.008263334	0.12883666
NENF	2230403	0.753231003	0.037090225	0.287186102
NME7	940162	0.752759684	0.028936388	0.251439434
ZFAND2B	1010195	0.752635814	0.030333064	0.256697903
TMEM141	4280433	0.752483932	0.002523889	0.072483332
SHFDG1	5870600	0.749981282	0.006046261	0.110202326
PARVG	3310612	0.74922106	0.032048635	0.264443812
PPP1R11	6510445	0.748778546	0.049675984	0.334671737
ATP5H	5560255	0.748507805	0.016834899	0.187002246
LYZS	7380022	0.747801331	0.017176925	0.189177634
2310046O06RIK	1430142	0.747747446	0.033758096	0.273892097
ERH	7320433	0.746193295	0.027953469	0.248051094
COMT	7610678	0.74607556	0.031060065	0.259724635
TGM2	7000187	0.744241047	0.012286013	0.158726705
HIST1H4F	6370138	0.743972141	0.014852251	0.176296479
1110030J09RIK	4920543	0.742756228	0.00142309	0.056375431
INPP5A	5690687	0.741509069	0.053650596	0.348116183
D19ERTD721E	6040037	0.740809748	0.007455938	0.12323181
MLF2	990148	0.740718045	0.007433488	0.12323181
2700061N24RIK	4540278	0.739598187	0.049025595	0.332889578

NME4	7510070	0.739271832	0.001597483	0.058403079
SARS	3840377	0.738694885	0.001950541	0.064037966
TNFAIP8L2	1300722	0.738400346	0.041082035	0.301922819
S100A6	5080326	0.735996932	0.024049539	0.228474332
GRINA	2140753	0.733899533	0.00554162	0.106110748
SLC10A3	5270500	0.73336937	0.036420123	0.283955841
MAD	3190026	0.73335301	0.010323707	0.145346188
ZFAND2B	2070170	0.732621983	0.052055174	0.343692513
F730014I05RIK	6510086	0.73256695	0.016145593	0.184523448
TIMM44	6220450	0.732336599	0.025350519	0.23293977
MAPK13	730059	0.732212402	0.03051772	0.257642123
1110008P14RIK	1050673	0.732211526	0.016868164	0.187104082
FBL	2140113	0.729993244	0.002731772	0.074983506
3110003A17RIK	6370707	0.727555532	0.053268074	0.347851778
CORO1A	4290661	0.726690077	0.024220484	0.228602151
RNF135	770564	0.726574765	0.025220021	0.232566333
ALOX5AP	5270279	0.726414354	0.030755761	0.258584846
AKR7A5	3780228	0.725800909	0.022998904	0.223498114
0610009O03RIK	2260162	0.725247708	0.01809539	0.195568029
PSMC5	4200504	0.724190207	0.007290053	0.121803
GAPD	5870154	0.715797454	0.005002144	0.100835677
DLGAP4	5260440	0.712819257	0.03080804	0.258682421
BC022145	430358	0.712449857	0.019969054	0.206870871
LOC236223	4570192	0.712413842	0.014616024	0.175311552
SCAP	6330603	0.712375946	0.03504794	0.279794818
SOLH	1230086	0.711562041	0.02135024	0.21375304
LOC216036	3870553	0.710724533	0.015313643	0.17853271
SELPL	1070307	0.708655983	0.00992152	0.142052217
CSF2RA	5550437	0.707514338	0.018076713	0.195568029
1500012F01RIK	2760615	0.707384693	0.017768923	0.193183116
LOC381681	1710128	0.706905314	0.020129676	0.207703477
IRF2	270709	0.706698659	0.021865594	0.216412242
BMYC	4560634	0.705468079	0.033863659	0.274177977
RPS5	6400681	0.703216134	0.02137668	0.21375304
RPL14	1400482	0.701187001	0.029871397	0.255606756
LOC383330	4200048	0.700920668	0.024721828	0.230851029
GAPD	6940475	0.700739733	0.007476494	0.12323181
STX8	3710332	0.699321991	0.042378563	0.307188575
LOC381561	3450630	0.699124937	0.010878751	0.148973653
CAMK1	7100014	0.698874613	0.025487247	0.233919297
GCNT1	290358	0.697430162	0.002548484	0.072882893
9430038I01RIK	5490167	0.697181575	0.036822783	0.286053525
HIST1H2BJ	6040634	0.696985947	0.010010843	0.142647787
RPLP1	5870475	0.69509065	0.006458948	0.113462676
LANCL1	2140553	0.694996681	0.002600497	0.073691821
NAPSA	380369	0.693986211	0.016334558	0.184837803

ALG3	70603	0.691677497	0.016528768	0.185727376
LOC380871	4880037	0.691048138	0.009647099	0.140402809
6720456H2ORIK	2850215	0.689089907	0.023357129	0.225171837
EDEM2	1070678	0.687569186	0.03568431	0.281569209
ARID5A	3180736	0.686837917	0.028918346	0.251439434
FCER1G	2230039	0.686380618	0.010845129	0.148972468
CTSZ	3450091	0.68535222	0.031420132	0.260782057
GRIPAP1	7380427	0.681767649	0.006298006	0.112415789
LSM6	1090221	0.680162953	0.018338436	0.197168114
CCR7	2570291	0.679030065	0.00782339	0.125376087
PIN4	5360615	0.678078349	0.041786158	0.304932916
0610031J06RIK	3800215	0.677183641	0.035121876	0.279794818
PKN1	630358	0.676828393	0.049349545	0.333775732
BSCL2	4590164	0.676315575	0.042084962	0.306249944
FLNB	5700093	0.676037996	0.034973514	0.279374327
IDH3G	7380719	0.673851105	0.002239814	0.068334141
ERH	1300110	0.672857593	0.038763618	0.292712327
NMT1	360050	0.672714467	0.012246124	0.158636712
2510003E04RIK	3800091	0.672439957	0.052794866	0.346497369
RPS17	620433	0.671821253	0.022709724	0.221103012
EXOSC5	5690408	0.669937413	0.007070919	0.120135997
BC021611	840240	0.669336108	0.044052002	0.314138265
ERP29	3830689	0.669194302	0.003444299	0.083921484
PSMB8	2900136	0.668818134	0.008287686	0.128957397
LOC230253	540259	0.668149259	0.038390385	0.291665501
CLTA	3440544	0.667354947	0.018322228	0.197168114
DLM1-PENDING	4810184	0.667278641	0.00848945	0.130786375
TRIP4	3850603	0.666900836	0.053935703	0.348116183
2410011G03RIK	1070376	0.666657403	0.025063821	0.231984975
LOC234640	150224	0.660705155	0.023573555	0.226111019
COX4I1	1070762	0.65967562	0.020473175	0.20957675
PRKACB	4250270	0.659304633	0.043777846	0.312851437
G1P2	460221	0.656904438	0.006614917	0.115031415
RPL23A	7200097	0.656504995	0.031943431	0.263996561
3632413B07RIK	6100333	0.655586375	0.02012546	0.207703477
RAMP1	4010243	0.6548335	0.021217066	0.213740151
GIPC1	7210736	0.649592606	0.014136116	0.17231322
RPS12	7100598	0.649245151	0.020769177	0.211179894
1200009C21RIK	7050162	0.647788142	0.014636628	0.175311552
PPA1	2000669	0.641383056	0.04405906	0.314138265
BTBD14B	5290437	0.640783529	0.006741789	0.116584894
RSHL2	2450553	0.638784083	0.017885897	0.193959564
9530058B02RIK	2060088	0.638613106	0.016801183	0.187002246
RAB4B	4880731	0.638595557	0.011841784	0.156104463
ARHGAP8	4280300	0.63852979	0.012128963	0.157912437
NFKBIE	6420450	0.638368873	0.0141752	0.17231322

HIST1H4I	6250541	0.638114231	0.010123974	0.143444514
BC003281	6130682	0.637000635	0.024614373	0.230401804
HCK	6330079	0.634217741	0.050655203	0.338624474
LOC243617	2810132	0.632799411	0.037463682	0.288117642
9030418K01RIK	1450053	0.630641737	0.029303211	0.253073836
PPP2R4	1510088	0.629997401	0.01145535	0.153751199
HPCAL1	4290100	0.629950583	0.044724875	0.31593239
28S_RRNA_X00525_656	1400706	0.629219026	0.025821116	0.235976927
RPL12	4880064	0.629015307	0.028014822	0.248288901
HIST1H3H	7610152	0.627687464	0.029120573	0.252133178
5830457O10RIK	1990008	0.622692174	0.04273803	0.307877944
BC029214	1110494	0.620813239	0.008231397	0.128596947
GGA1	1050008	0.619857186	0.023279252	0.22495551
PGD	70630	0.618998047	0.032285378	0.265550655
NTAN1	160452	0.616886124	0.034102207	0.275102944
2610510L01RIK	1190653	0.614750617	0.003328393	0.082828858
LOC381919	3870575	0.613847539	0.02370263	0.226389256
RUTBC3	4260253	0.613292073	0.039304673	0.29463053
GI_6679936_REF_NM_008084.1__328	2140433	0.612755223	0.010479275	0.146208825
KARS	3310379	0.612250579	0.027200876	0.244022186
AW107703	7100521	0.612126175	0.052960781	0.347180215
AI132321	5720255	0.609592992	0.029293993	0.253073836
5730496F10RIK	3290598	0.60688584	0.037262453	0.287598722
PSMB7	3060537	0.605811997	0.054033082	0.348188655
TAF6	5130326	0.605592608	0.038458073	0.291894139
RPLP2	240100	0.604277328	0.014415092	0.174199037
LOC230592	4570327	0.602955878	0.017536767	0.191780604
CSTB	3120465	0.601484428	0.021240468	0.213740151
RPS13	4640630	0.600260526	0.005955565	0.109252907
CRSP2	2340068	0.599385363	0.040576255	0.300194697
POLD2	1740670	0.598891775	0.049942552	0.335917408
5730427M17RIK	1440673	0.598867786	0.01566792	0.180990742
D11BWWG0280E	7320435	0.598197523	0.030020905	0.255606756
CASP7	4560612	0.595296371	0.04733513	0.327278377
CTSZ	4150725	0.5922733	0.042155609	0.306476805
NKG7	4040035	0.592264078	0.010017976	0.142647787
RBPMS	4050121	0.592056805	0.009403999	0.138555171
LSM7	7050215	0.591667112	0.041068871	0.301922819
SLC39A7	7100039	0.590726251	0.053054034	0.347243971
9626100_15	870593	0.590375028	0.032734393	0.26796647
GTF3C1	1070070	0.589495384	0.025303025	0.232891224
LOC383308	4780286	0.588763131	0.028445066	0.249702338
SCN4B	6220543	0.588227797	0.040070632	0.297499617
GNB2-RS1	1570039	0.5850873	0.020549515	0.209943043
APITD1	2570398	0.584667007	0.014145384	0.17231322

ATP6V1F	6650301	0.58427093	0.011505726	0.154133434
TNFSF5IP1	2940730	0.582638887	0.021228189	0.213740151
LOC242025	3190424	0.580520083	0.040892898	0.301218702
RPL32	380382	0.579278336	0.026981217	0.24289352
2410015N17RIK	1980446	0.575331631	0.052733888	0.346370429
LOC226574	3800202	0.574949627	0.04337215	0.311385171
AW490415	4210307	0.57482488	0.051256927	0.341032055
RPL35A	3990605	0.574455489	0.02413728	0.228602151
MGC18837	5810541	0.569414697	0.051060725	0.340018007
SLC39A1	1030307	0.568882114	0.051523367	0.342159089
0610007P22RIK	3870091	0.567750298	0.045753167	0.320478544
RNF31	4260730	0.567467125	0.039330871	0.29463053
2310004N24RIK	3170403	0.565691886	0.020847211	0.211730763
LOC328625	60152	0.564508482	0.024217664	0.228602151
JTV1	3310735	0.561888072	0.028198401	0.248645907
LOC268393	5870367	0.559152066	0.016307953	0.184837803
UBL7	10743	0.55896357	0.015204174	0.178085312
5930405J04RIK	2190019	0.557852426	0.040097025	0.297499617
RUVBL2	2470386	0.557668006	0.020332104	0.208545079
MCTS1	3990332	0.556169769	0.03435041	0.275673137
BC023829	6110367	0.556106643	0.041677115	0.304423295
LOC380771	5810717	0.555931893	0.006598736	0.114878673
MID1	630519	0.552590857	0.027046535	0.243199562
HIST1H2BM	2230619	0.551141924	0.008753005	0.133009596
SF3B4	7000750	0.5500399	0.046976179	0.325492412
U2AF2	2750528	0.549878944	0.051864771	0.342889322
LOC229879	4220075	0.549677313	0.045040827	0.317349816
LOC382127	110400	0.548959045	0.012428162	0.159633516
EXOSC10	10113	0.545217998	0.035389717	0.280857399
UBE2L3	2360470	0.544788282	0.006182966	0.111386634
1810013H02RIK	6620082	0.541787629	0.045549882	0.31963132
AP1S3	6840338	0.54090685	0.039299574	0.29463053
NPC2	6040224	0.539394075	0.046648186	0.324406481
GGA1	4640379	0.536661	0.035158934	0.279847817
ALDH18A1	4150168	0.536475339	0.01637386	0.184837803
RAD52	6620209	0.536347985	0.016467097	0.185571516
HSPE1	2650709	0.535857832	0.024689996	0.230831397
GLTSCR2	3780168	0.535207396	0.048104259	0.329668482
GNA11	5720576	0.5349232	0.050377163	0.337492217
RPL21	4490301	0.533801466	0.021834722	0.216382518
SERPINA3H	1450491	0.530132581	0.025067344	0.231984975
1810020C19RIK	5340528	0.526781869	0.04315934	0.310000644
RPL12	1050209	0.524987864	0.051742468	0.342889322
VEGFB	7550626	0.520543025	0.047959641	0.329105287
AI839550	7000424	0.520423032	0.016701536	0.186722928
G6PDX	240653	0.520021328	0.052395642	0.345499754

1810013B01RIK	6370364	0.518958751	0.032370656	0.265884309
CHI3L1	150114	0.51786892	0.048370797	0.330515948
RPL18A	6770246	0.512953222	0.023098951	0.224177483
PTPRS	4390639	0.51209937	0.039413531	0.29496517
SCL000098.1_12_REVCO MP	6590561	0.509625589	0.021812215	0.216297506
NIT1	7560300	0.505887264	0.032713587	0.267937388
TEGT	6480142	0.505370718	0.015584922	0.180644016
IL15	4480735	0.505062596	0.028853269	0.251439434
LOC383793	3440139	0.500148134	0.040895331	0.301218702
MTCH1	2650538	0.499822541	0.023102692	0.224177483
VPS25	1660037	0.499358928	0.012653117	0.161057582
1110021J02RIK	1190500	0.49665641	0.037496668	0.288117642
2010315L10RIK	70504	0.4965023	0.042744855	0.307877944
1110019N10RIK	780041	0.495154284	0.048570627	0.330957994
SRGAP3	1770367	0.493566726	0.052509767	0.345665186
RPS25	2060209	0.491479214	0.029719025	0.255496375
AGPAT6	3420020	0.489920462	0.044424952	0.315155357
1810010N17RIK	3450170	0.488246913	0.053410875	0.347976579
ACTB	1170372	0.487823031	0.027145444	0.243806597
2510040D07RIK	2760494	0.486510656	0.049638736	0.334634209
LOC328660	2570598	0.486033615	0.05262594	0.34598993
9130017C17RIK	2810424	0.482823923	0.037081325	0.287186102
TIMELESS	3850070	0.480827259	0.028125311	0.248609453
LOC383436	4640253	0.476632949	0.017028068	0.188062628
2400009B11RIK	6040747	0.473627797	0.041943769	0.305652177
CRIP1	4860035	0.471386725	0.024220255	0.228602151
LOC385699	4050176	0.469323493	0.040313186	0.298817882
GMPPA	3190121	0.464078533	0.032474456	0.266400328
RING1	3440056	0.463354316	0.030823959	0.258682421
YKT6	4920095	0.462559033	0.049593887	0.334634209
TEX264	240594	0.46038378	0.028896446	0.251439434
2010110M21RIK	3120162	0.460014916	0.04464593	0.315713406
1110004F10RIK	5810010	0.459782233	0.031257025	0.260491742
RBM38	1410424	0.457745583	0.038107008	0.290080255
TBRG1	6020739	0.457272777	0.050441868	0.337779976
STRA13	2120064	0.455638937	0.020305348	0.208545079
LOC382010	730673	0.452622953	0.035861863	0.281688861
LOC272681	7610278	0.452608536	0.039249881	0.29463053
KLRK1	5570204	0.448946484	0.020779373	0.211179894
CAPN1	270537	0.448771314	0.017675186	0.192716065
GNGT2	5720615	0.447374999	0.024170088	0.228602151
ITGA2B	6590433	0.445235697	0.053839697	0.348116183
HIST1H3H	1230338	0.442041404	0.041043329	0.301922819
TALDO1	7150121	0.427056196	0.049637862	0.334634209
CD3E	6520360	0.424935253	0.048070459	0.329668482

FLT3	4810482	0.422777673	0.052707889	0.346370429
RPL41	7160373	0.421725205	0.03157324	0.261912845
D030041G07RIK	6400059	0.421126026	0.04462641	0.315713406
SBF1	5420541	0.415858457	0.027622572	0.24624048
SFXN3	5290762	0.414468787	0.033309985	0.271456774
CD52	1170181	0.411510674	0.036377428	0.283871896
ANPEP	4150193	0.408214623	0.036701613	0.285254933
BTBD14B	160196	0.407036324	0.053441545	0.347976579
RNASEH2A	6560008	0.40398326	0.039252264	0.29463053
RPS24	2710477	0.396807289	0.023319906	0.225171837
2310061F22RIK	6520092	0.396174974	0.030833998	0.258682421
CTSH	3840110	0.395665938	0.028005398	0.248288901
PSME1	940674	0.395041339	0.023493785	0.225485159
D9WSU20E	780021	0.393507986	0.036035154	0.282193601
LOC385238	5890433	0.385924052	0.028661708	0.251034573
EGFL9	6330672	0.381244247	0.04412034	0.314286589
2310047M15RIK	50484	0.377751157	0.051033058	0.340018007
1700056E22RIK	3780754	0.377583007	0.05370316	0.348116183
PPM1F	5890113	0.374848196	0.044609784	0.315713406
HMOX2	5550014	0.370478591	0.035594078	0.281569209
LMNB1	6380619	0.364299807	0.044390189	0.315155357
SNRP1C	70132	0.362381034	0.028249602	0.248665109
SLC35C2	7330243	0.359038695	0.03986369	0.296649007
CCND3	2320050	0.350137761	0.04566612	0.320157644
KLRA9	2490239	0.344164712	0.049648865	0.334634209
RMND5B	3800367	0.343594987	0.041380181	0.302931506
CLN6	380220	0.341421898	0.051405475	0.34172758
SPSB3	3520403	-0.312754872	0.051884913	0.342889322
KBTBD4	7380307	-0.324580759	0.049205893	0.333266567
2410141K03RIK	160605	-0.326096022	0.046726377	0.324514273
2300003P22RIK	5260392	-0.327999219	0.049614845	0.334634209
LOC215958	1070041	-0.342348193	0.051758388	0.342889322
ZBTB1	5910273	-0.34778289	0.054597247	0.349913598
LOC231462	360370	-0.353264133	0.035715847	0.281569209
CD22	940504	-0.356898212	0.05480561	0.350814643
MPHOSPH6	4040593	-0.361380996	0.050135614	0.336600062
MTF2	4050458	-0.366758947	0.042552179	0.307188575
C330027C09RIK	3180646	-0.367863071	0.053312334	0.347851778
ADNP	5290482	-0.374599746	0.026213755	0.237776518
GSE1	7320594	-0.374860039	0.024196625	0.228602151
TOPBP1	3940131	-0.375397229	0.025616457	0.234761839
CSF2RB1	460072	-0.376079532	0.023718016	0.226389256
UNC84A	3780139	-0.376790215	0.040092725	0.297499617
FOXRED2	4290424	-0.382089239	0.0249544	0.231737317
SMO	1070593	-0.395054931	0.047614957	0.328335997
C920008O22RIK	450390	-0.395815185	0.039102505	0.294255846

RAD17	670202	-0.396060165	0.037165382	0.287186102
OTUB2	6580537	-0.398545616	0.039922496	0.296704745
B430315C20RIK	4390465	-0.403988171	0.05068513	0.338678738
BTG1	2680639	-0.404922088	0.050966189	0.339825652
HIPK1	1740682	-0.407908697	0.022198411	0.21859171
ANKRD23	2850064	-0.41305411	0.024574851	0.230401804
SFXN2	70193	-0.417308597	0.02367737	0.226389256
AI480653	5550168	-0.417389482	0.037614472	0.288737095
D830019K05RIK	6960021	-0.418324097	0.048627345	0.331199141
SNX3	870491	-0.419487798	0.022465539	0.219966803
COPB2	2140128	-0.420486052	0.05434582	0.349586572
NET1	3840553	-0.421798491	0.021470677	0.21433337
HK2	2140136	-0.423129867	0.05422013	0.349081424
LILRB4	650717	-0.425219678	0.037821906	0.288858751
ALDOC	6840333	-0.426840138	0.042911009	0.308502341
ZFP259	7570474	-0.429365584	0.03331809	0.271456774
ARF3	5570280	-0.429458635	0.026231441	0.237798039
4933409L06RIK	3710064	-0.431198896	0.035348922	0.280784354
FBXO11	4050612	-0.431291218	0.053687034	0.348116183
BC035537	50576	-0.432172332	0.04431994	0.314985969
B130018C03RIK	380025	-0.432482275	0.014126253	0.17231322
TFB2M	4290328	-0.434302532	0.018966152	0.201073089
C630007L23RIK	3140195	-0.438886088	0.020306999	0.208545079
SAMSN1	6020400	-0.439305774	0.040750374	0.3009138
CAPN2	4480167	-0.44091905	0.029127885	0.252133178
PEX5	5390646	-0.443422539	0.054381076	0.349586572
RABIF	3420128	-0.443876135	0.04353597	0.311984348
D11ERTD603E	4540424	-0.444260232	0.045344081	0.318763346
CARF	1820678	-0.44576491	0.024109015	0.228602151
CARD15	1190288	-0.448923207	0.0456931	0.320202234
LOC383540	650554	-0.45032488	0.036141354	0.282455504
IL27RA	4040315	-0.451913527	0.040695239	0.300788367
BC065123	60382	-0.45249135	0.014165078	0.17231322
HDAC6	3460703	-0.453412012	0.031030937	0.25963331
3110001I22RIK	5270537	-0.453968516	0.025037085	0.23198144
NPAT	6840196	-0.454871427	0.015253393	0.178214133
COPA	5560433	-0.455770706	0.035652609	0.281569209
3200001K10RIK	5090138	-0.458693781	0.034216254	0.275448143
D12ERTD748E	6110685	-0.461075967	0.025266477	0.232856453
ARHGAP6	7100246	-0.461285548	0.010361874	0.145619493
6820416H03RIK	160735	-0.461940345	0.035851348	0.281688861
KLHL11	3520446	-0.46249394	0.02892523	0.251439434
FNBP1	6620180	-0.462885454	0.052594186	0.34598993
RPA2	5310332	-0.464127179	0.040399188	0.2991592
PPP2R5C	1240397	-0.471303023	0.030020667	0.255606756
B430320J11RIK	2940025	-0.471579575	0.012259977	0.158636712

HNRPH1	2120048	-0.475489004	0.014258815	0.172718518
FUSIP1	1440678	-0.476367881	0.042003686	0.305945231
HNRPA1	2360164	-0.476706553	0.03364284	0.273385485
PTMA	3140110	-0.476711511	0.053960148	0.348129264
WDHD1	4280338	-0.477632199	0.009468471	0.139238533
GUSB	7200333	-0.479648302	0.053612842	0.348116183
KLRA7	620379	-0.480171124	0.014914491	0.17643502
SSBP3	1340349	-0.483924462	0.025974415	0.236295657
CAPN2	7040477	-0.483944918	0.011273459	0.152195781
PYCRL	1660682	-0.493982026	0.027480521	0.24596254
LOC272683	5490156	-0.49627986	0.038078879	0.290008295
E130306D19RIK	2710703	-0.498538287	0.029256365	0.252963302
APEX1	6550382	-0.498909854	0.016966608	0.18779362
GAB3	2850364	-0.498954387	0.007799967	0.125259247
SLC15A4	6020368	-0.500153415	0.03539429	0.280857399
2810417H13RIK	7100301	-0.501145314	0.042510963	0.307188575
CHFR	1170327	-0.504129063	0.029395943	0.253605337
IFRD2	3370435	-0.506739178	0.021106571	0.213189928
LOC381038	5700521	-0.50786729	0.053270754	0.347851778
IRAK4	5220452	-0.508399602	0.046591871	0.324160021
2210410P13RIK	3780170	-0.513802559	0.041713277	0.304544181
HIVP2	5130072	-0.514386587	0.011513606	0.154133434
PTPRJ	940500	-0.520090454	0.04934278	0.333775732
5830411G16RIK	60487	-0.520715814	0.013729955	0.169472914
AGPAT4	7570315	-0.521636288	0.029788105	0.255496375
TLOC1	7400598	-0.524878896	0.014058919	0.172129004
RGS1	450368	-0.525105786	0.028944943	0.251439434
BC027231	2450300	-0.525884045	0.005663804	0.106869029
MTDNA_COXIII	5360367	-0.526626757	0.052963483	0.347180215
MGEA5	1690717	-0.52713843	0.024118753	0.228602151
JMJD1A	3060672	-0.527961209	0.035998015	0.28204499
PPP4R1	7000079	-0.530428143	0.046293621	0.322821498
SCL0002883.1_98	6980102	-0.533423513	0.030038554	0.255606756
MAP4K2	1190561	-0.534093861	0.025646621	0.234761839
PFTK1	840392	-0.535241575	0.005381143	0.104454715
A830007F21RIK	4010403	-0.536242989	0.008764562	0.133044852
TNFSF11	2480255	-0.537523835	0.014707187	0.175953698
PTPN11	3990026	-0.537740074	0.042241987	0.306759801
UVRAG1	7000711	-0.538195364	0.053062653	0.347243971
AI467484	4010564	-0.542022823	0.046102416	0.322198209
1110031M08RIK	6370048	-0.546401364	0.053778854	0.348116183
IFI203	1710196	-0.54660006	0.013562685	0.1679966
1110020A09RIK	1990239	-0.54954497	0.015897381	0.182596468
SLC23A2	2140594	-0.550403981	0.028278019	0.248665109
CSAD	3990626	-0.554180996	0.046669851	0.324411872
LOC381250	4480278	-0.555681807	0.017458778	0.191331942

SMAP1	6250168	-0.556507329	0.024335341	0.229171321
1500002B03RIK	5310341	-0.557093571	0.016898116	0.187168933
CAPN2	4390020	-0.558410665	0.003200817	0.08140101
LOC384538	7380014	-0.55895881	0.012844311	0.16269111
PSCDBP	6650070	-0.559096983	0.037158719	0.287186102
ZFP68	3170075	-0.559750646	0.047498752	0.327825834
SULT2B1	6370576	-0.560467774	0.025872507	0.23599106
TNFSF4	870451	-0.560781714	0.003901731	0.090113246
D17H6S56E-5	3170494	-0.561968374	0.012268832	0.158636712
4930503L19RIK	840504	-0.56445341	0.003531635	0.084895902
QARS	5340487	-0.567175301	0.013246351	0.165889182
RABEP1	3440465	-0.568010282	0.042800059	0.307989857
2310001H12RIK	7550184	-0.568075919	0.047841859	0.328587449
GMEB2	5490431	-0.568532265	0.018437602	0.197652712
PPP4R1	4150056	-0.571286128	0.050306531	0.337310069
4930455G09RIK	5050088	-0.572891791	0.04259603	0.307188575
2610507N02RIK	3310014	-0.575037155	0.013782787	0.169732674
METAPL1	1450075	-0.57514079	0.031821488	0.263409321
ICAM1	1450095	-0.576500362	0.021459328	0.21433337
SLA	110064	-0.577834313	0.036542479	0.284302682
SMBP	6480546	-0.578768151	0.028075384	0.248564786
LOC380665	940563	-0.580187731	0.050337269	0.337370502
LRRK2	7200767	-0.581330394	0.004314294	0.094228783
PFKP	290110	-0.581805687	0.037253401	0.287598722
LOC386405	2230082	-0.582321941	0.004784228	0.098902056
RBM15	4780411	-0.582792414	0.019141007	0.201514192
9330112E13RIK	730431	-0.582813607	0.016816629	0.187002246
AI428795	2370762	-0.583878353	0.030039431	0.255606756
PTPN11	4640626	-0.585425845	0.01893838	0.201073089
CCT4	670561	-0.586871106	0.012141635	0.157912437
B230386D16RIK	5810047	-0.587606714	0.012388238	0.159252438
2310016C08RIK	3360241	-0.589266227	0.013699253	0.169375558
CDC2L5	6450711	-0.591383965	0.012599941	0.160776079
LOC193676	5560152	-0.59259433	0.024085984	0.228602151
KCNN4	4150224	-0.59293876	0.015964396	0.183095346
SURF6	1570215	-0.59445664	0.006121892	0.111038328
LOC545007	1990021	-0.595883621	0.005159038	0.102187123
RPS6KA5	4760079	-0.596044318	0.011700287	0.155053098
GLIPR1	2810685	-0.59617347	0.038603018	0.292565284
PAIP2	1710307	-0.596401115	0.039569417	0.295704272
D15ERTD528E	7100678	-0.597767157	0.016657366	0.186632202
5430435G22RIK	4730524	-0.598189286	0.019431755	0.202929201
NSMAF	2490369	-0.598504196	0.05451247	0.349803368
ARAF	3360403	-0.599156722	0.013736005	0.169472914
TCEAL1	840762	-0.599356348	0.00453427	0.096060964
EIF3S10	7320110	-0.600230024	0.030126669	0.256068443

SOCS6	2650544	-0.601308688	0.033714547	0.273681759
LOC386199	1230494	-0.604379721	0.023478713	0.225479864
PDZGEF1	10709	-0.605391799	0.034285333	0.275448143
QARS	3890224	-0.605999971	0.038730425	0.292712327
F630043A04RIK	4830687	-0.607872874	0.003538207	0.084922436
LOC381632	6250504	-0.608276241	0.031380507	0.260782057
PRKCD	3710601	-0.608962087	0.016829748	0.187002246
WDR44	5690364	-0.60990205	0.002296348	0.069352881
GOLGA7	1990088	-0.610516571	0.018182237	0.19621401
2310057H16RIK	670360	-0.611310962	0.010103451	0.143284471
SEPT15	670161	-0.613093077	0.011784253	0.155610901
RBL1	4890291	-0.614195165	0.039859024	0.296649007
AW060232	1740156	-0.614687915	0.041177463	0.302195097
2010300C02RIK	3370465	-0.616063734	0.003960604	0.09031457
GUSB	1190193	-0.618441537	0.004462667	0.095719285
CYP27A1	2940170	-0.61857247	0.026424302	0.239158681
SLC39A13	4230086	-0.62003476	0.039018744	0.293851635
NFATC2IP	540437	-0.622145209	0.013350742	0.166712792
CD97	4670753	-0.624831433	0.018941666	0.201073089
LAMP2	5270358	-0.627977561	0.009884315	0.141764468
NFATC3	1050647	-0.628002999	0.021033486	0.212926342
AI894139	4640184	-0.628040778	0.019584635	0.203703811
TRP53BP2	4830347	-0.629231389	0.032149365	0.264931061
0610041E09RIK	4760364	-0.629690553	0.013432446	0.167275423
QPCT	990687	-0.629960796	0.021342155	0.21375304
RALGPS1	670474	-0.630784204	0.007632931	0.123945054
ZFP68	1070053	-0.631543748	0.030886442	0.258842721
DHX38	7150609	-0.634757565	0.047218367	0.326762042
CD44	4880138	-0.635593706	0.01805506	0.195568029
RNU65	4920634	-0.635658631	0.005886345	0.109020353
4930453N24RIK	610670	-0.636395095	0.054414045	0.349586572
E230024B12RIK	2490243	-0.637216639	0.044604489	0.315713406
HAX1	5910368	-0.637601776	0.035658917	0.281569209
5830411E10RIK	2140441	-0.64019343	0.022684744	0.221059617
PAF1	6020228	-0.645191371	0.015198345	0.178085312
2500003M10RIK	7610594	-0.645534776	0.020159502	0.207741744
5730408I21RIK	1690593	-0.645571992	0.016378184	0.184837803
1700091G21RIK	2510619	-0.647932541	0.012461258	0.159794282
ZFP62	2510196	-0.650245972	0.003278873	0.082257857
LOC381241	4590187	-0.652092328	0.003404481	0.083784753
ACTR3	6250433	-0.653624362	0.050845532	0.339312532
TIRAP	4780521	-0.653744948	0.037492682	0.288117642
ARNT	730356	-0.654271321	0.004745404	0.098386349
LOC224088	2480332	-0.656498533	0.004420898	0.095615768
PPM1L	5050066	-0.657256645	0.021539268	0.214687609
NPM1	6840433	-0.65800163	0.013739867	0.169472914

UBC	5960379	-0.658956318	0.02514978	0.23235913
CALR	650291	-0.65933378	0.005585842	0.106560917
AW060232	3180603	-0.660897864	0.020100538	0.207678816
5830431115RIK	5080619	-0.661067122	0.046070352	0.322119092
DHODH	6060215	-0.66145862	0.03307323	0.27002849
LOC278105	6980091	-0.662451238	0.012250559	0.158636712
KIN	380390	-0.666354482	0.01770422	0.192797221
4933434E20RIK	110594	-0.666703791	0.016507696	0.185727376
JUP	1470603	-0.667597671	0.010220812	0.144421287
GM440	7610280	-0.668945489	0.017383155	0.190709141
EXT2	6770112	-0.671022116	0.039393275	0.294955724
RAP1B	3170292	-0.671173242	0.007638316	0.123945054
PLEK	1820075	-0.672459611	0.034859259	0.278933015
BIRC1E	2060674	-0.673025374	0.050066007	0.336423636
SCL000121.1_106	3060360	-0.674317125	0.033607053	0.273385485
CETN4	6980022	-0.674555618	0.005895164	0.109020353
RAB11A	1010110	-0.674642218	0.004139437	0.092358205
IRAK2	20110	-0.674759687	0.04362547	0.312103187
4933434E20RIK	2120201	-0.676334363	0.007831511	0.12537684
1300006C19RIK	620113	-0.676949678	0.012318572	0.158751122
KEO4	3370288	-0.677742223	0.008030528	0.127121371
ZFP36L1	3140349	-0.677810369	0.044877796	0.316632122
PIGF	3840561	-0.678969875	0.02405535	0.228474332
TRIM35	6060114	-0.679189408	0.014176472	0.17231322
TAF3	2810736	-0.679248489	0.008659486	0.132520678
5430435G22RIK	2940176	-0.681628964	0.036887	0.286120543
MAK10	20112	-0.68362549	0.015641361	0.180990742
LOC386091	6620136	-0.685101842	0.024966917	0.231737317
STK4	6550754	-0.685152999	0.020536839	0.209943043
GRWD1	4830246	-0.68740084	0.005592578	0.106560917
2410003C20RIK	4760164	-0.687539539	0.04464402	0.315713406
RIOK1	3460070	-0.689571376	0.017356854	0.190709141
DDX50	2350487	-0.689758701	0.029906018	0.255606756
ADIPOR1	4560373	-0.690160074	0.022691032	0.221059617
BCL10	7000563	-0.690320919	0.031267732	0.260491742
GGTA1	4250066	-0.691050227	0.005868512	0.109020353
SPAG9	1500382	-0.69163518	0.023630837	0.226371495
WBSCR5	6370553	-0.692473336	0.018442835	0.197652712
CMTM8	3830427	-0.692597327	0.001468246	0.056782442
BICD2	5810181	-0.694935527	0.011679226	0.155053098
IDI1	3140768	-0.695147416	0.049325003	0.333775732
CDV3	2260639	-0.695250243	0.028726723	0.2511809
2610510D13RIK	5220576	-0.697583964	0.003021604	0.079664655
TUBA6	6840021	-0.700637302	0.011379148	0.152860545
IL1RAP	2940373	-0.700860302	0.041163969	0.302195097
PCNT2	3130619	-0.701336532	0.009749546	0.140965839

CSF2RB2	5820528	-0.701532823	0.007488446	0.12323181
NXT1	6370097	-0.702311974	0.047380394	0.327412782
PUM1	7320441	-0.705038811	0.05175604	0.342889322
2810012D02RIK	4560630	-0.707723186	0.025411193	0.233359203
SLC8A1	5890465	-0.708615032	0.017122924	0.188716735
BBS5	460541	-0.709299872	0.041394852	0.302931506
CD69	540647	-0.709729988	0.026088734	0.236919269
TRIM25	10402	-0.710994565	0.047801766	0.328457354
OTUB2	4880673	-0.711346503	0.002034294	0.06538254
PLA1A	5910092	-0.711360616	0.045119545	0.317616234
RNF4	2350187	-0.715381747	0.003879467	0.08991679
RAB32	1780619	-0.715647163	0.049874053	0.335714854
4933408F15	730605	-0.715700657	0.022423743	0.219743041
PLEKHB2	5900201	-0.716875393	0.038773215	0.292712327
3000002G13RIK	2370224	-0.717376026	0.009206494	0.137073488
PEX5	5810132	-0.717688758	0.009750328	0.140965839
ISY1	5260195	-0.718867123	0.00332718	0.082828858
6330575B07RIK	1770373	-0.720447659	0.002229444	0.068334141
RYBP	5090280	-0.720828893	0.011116265	0.151027537
ATP6V1A1	20600	-0.72143678	0.01123303	0.152088454
CAML	4230497	-0.722058375	0.001070212	0.048594527
EIF3S10	1300491	-0.722932401	0.029021704	0.251775444
G630041M05RIK	4290494	-0.723378697	0.001012935	0.047379099
RALA	1340326	-0.72502939	0.007294532	0.121803
ZFP472	7100056	-0.725798858	0.035977443	0.282026102
PDHB	2000372	-0.72608513	0.019902102	0.206314917
EIF3S8	110328	-0.726104308	0.01257959	0.160776079
SUHW3	2120112	-0.727395046	0.004073983	0.091821317
PAPD1	2360475	-0.72858489	0.001273428	0.052874501
COQ7	4120376	-0.730989721	0.054022212	0.348188655
PRKWNK1	460193	-0.731313176	0.007310265	0.121934598
LOC386288	630241	-0.734055438	0.016368134	0.184837803
LOC244710	1780047	-0.73448695	0.003562935	0.085252408
ETS1	6020398	-0.736818696	0.030326256	0.256697903
SCL0001076.1_117	2350092	-0.737281543	0.00422527	0.093334587
MTDNA_ND4	240367	-0.738330889	0.002007062	0.065102724
FNBP4	1740064	-0.740111433	0.036312713	0.283509362
PEX3	1340632	-0.743175726	0.037988999	0.28947888
A830021K08RIK	5130204	-0.743351215	0.002033628	0.06538254
BRCA1	7100044	-0.743455962	0.037706438	0.288858751
C730042F17RIK	6400202	-0.744193042	0.042123327	0.306385547
TCEB1	6590377	-0.744705338	0.048217799	0.330147358
ADSSL1	3190689	-0.745930093	0.017039353	0.188062628
DUSP1	4200100	-0.747124004	0.019092832	0.201421597
CYB5R4	4610468	-0.749430562	0.005837891	0.108878482
2310001H12RIK	4010538	-0.749928741	0.047779952	0.328457354

IL23A	1400369	-0.750386494	0.019245862	0.201915366
COQ5	3780408	-0.751631122	0.000756373	0.040642641
CKN1	7650224	-0.753104982	0.003851867	0.089544365
IAP	6900189	-0.753486105	0.004214505	0.093334587
ELOVL5	4150184	-0.754554163	0.004310348	0.094228783
MKI67	5220553	-0.755586329	0.010859478	0.148972468
D12ERTD7E	4850059	-0.755996167	0.010591405	0.147246137
ALS2CR13	4480341	-0.756644263	0.034400927	0.275935949
2010012O05RIK	5490017	-0.756648036	0.004479472	0.095792281
RGS1	4830072	-0.757598408	0.035719708	0.281569209
CD80	4280095	-0.758863547	0.017035515	0.188062628
IL2RG	1850402	-0.759026566	0.042403512	0.307188575
MPV17	1190162	-0.759077603	0.003254331	0.081906817
LOC269401	5390440	-0.759196016	0.026350929	0.23874188
NPAT	7210088	-0.759340234	0.00149939	0.057247117
PSMD14	1430762	-0.759490318	0.007119388	0.12043334
CRBN	4860064	-0.760625596	0.015494778	0.179968889
HNRPH1	430369	-0.761445589	0.002614983	0.07383287
OSP94	4810730	-0.761591901	0.014819552	0.176211966
CAT	4760356	-0.764646882	0.008168499	0.127871592
CASP4	5290017	-0.765086447	0.027563887	0.246141232
REV1	6420064	-0.766158551	0.009085357	0.13631547
RNU70	6510044	-0.766572638	0.023986376	0.228174835
BC003324	6840685	-0.766637145	0.007278355	0.121794803
POLE	4060441	-0.769639261	0.003404458	0.083784753
TPM4	4040037	-0.771216039	0.047699568	0.328457354
CDV3	3360452	-0.773745827	0.023148968	0.224254729
9230110M18RIK	4730719	-0.775611517	0.005084776	0.1017545
USP7	6370300	-0.776157908	0.012313774	0.158751122
FUT4	5700494	-0.77680743	0.038297897	0.291105257
2610507L03RIK	5960224	-0.777576569	0.033914939	0.2743609
UBA52	2230639	-0.77903567	0.026764248	0.241640699
SLC25A16	3190242	-0.780013187	0.002970452	0.078823693
ICK	6220731	-0.780113257	0.009796589	0.140965839
KRT10	2070593	-0.781442366	0.01341856	0.167236617
1110032N12RIK	1430647	-0.781856052	0.037826158	0.288858751
A530064D06RIK	10253	-0.782933754	0.043508384	0.311947906
E430030L01RIK	5910593	-0.783103809	0.000584272	0.037009384
ODC1	6840121	-0.783197219	0.000668136	0.039152778
GMFB	7610669	-0.783425541	0.004508363	0.09590462
LCP1	1470711	-0.783565674	0.009925086	0.142052217
5830467J12RIK	4640593	-0.784245048	0.007357341	0.122456758
CD244	4540064	-0.785104778	0.009713023	0.140965839
IFITM5	1740100	-0.785801801	0.009634391	0.140349393
ZFP592	3850520	-0.786960014	0.053843568	0.348116183
ITGAE	6450471	-0.788368549	0.002847872	0.077062359

B130020A07RIK	4860202	-0.788649388	0.024471473	0.23003481
CHKA	6960497	-0.790681695	0.04671917	0.324514273
IGH-VJ558	6380762	-0.790971245	0.003808759	0.089044405
1110037N09RIK	5670544	-0.791741276	0.040386887	0.2991592
5830433M19RIK	2600609	-0.791954824	0.018109783	0.195568029
UCP1	2630639	-0.791988622	0.002010165	0.065102724
TBL1XR1	5570307	-0.792811011	0.043605361	0.312103187
CCNC	6040475	-0.793650301	0.003203081	0.08140101
ORC1L	3440392	-0.79414749	0.001800854	0.062422898
ANXA5	2480059	-0.794227139	0.049577529	0.334634209
FZD7	6020424	-0.795473624	0.010310393	0.145290472
NDRG1	6620187	-0.796474629	0.009799633	0.140965839
TBC1D17	4900674	-0.80078695	0.037759462	0.288858751
1600020E01RIK	3800092	-0.801487089	0.006656266	0.115491793
ARHGAP17	5420440	-0.802680569	0.021251516	0.213740151
RAB8B	450309	-0.802862638	0.014066051	0.172129004
MAPRE2	6860543	-0.80316838	0.00983389	0.141267791
KCTD5	6200196	-0.804039879	0.01985896	0.206142906
BBX	4860154	-0.806832692	0.006034799	0.110122676
CLPX	6770647	-0.809469059	0.018319383	0.197168114
TNIP1	3170204	-0.810302788	0.027820976	0.247578523
ARHGEF3	4480468	-0.811466849	0.024995815	0.231737317
CD9	3990674	-0.813201682	0.006412428	0.113157502
D19ERTD703E	6290706	-0.813953329	0.021489926	0.21433337
TMPO	5390494	-0.814390179	0.029932773	0.255606756
KCTD5	1500504	-0.816833744	0.052505213	0.345665186
GPIAP1	1510201	-0.817039496	0.024765648	0.230933136
PBK	2900300	-0.818202756	0.003590159	0.085771656
CD209C	1570056	-0.818732767	0.050618508	0.338624474
OBFC2A	610273	-0.818762471	0.002655407	0.074045064
6030411K04RIK	7510731	-0.819207218	0.009112085	0.136584525
MAK3	5900059	-0.819388403	0.006556469	0.114399342
GPBP1	5390608	-0.819396812	0.032451114	0.266349549
TCEAL8	1070047	-0.819913018	0.038561856	0.292462632
HSPD1	4120671	-0.821222103	0.0051921	0.102397724
RABGGTB	4880040	-0.821830971	0.004459006	0.095719285
ARFRP1	450598	-0.823297554	0.045069392	0.317407066
RG9MTD1	10739	-0.82352839	0.03428387	0.275448143
ITM2B	4060575	-0.825163081	0.043632946	0.312103187
2500003M10RIK	160008	-0.827062538	0.005658752	0.106869029
GALNT3	1940730	-0.829846874	0.003928564	0.090113246
MSRB2	5960341	-0.830955444	0.005495322	0.106018332
PLSCR1	1340148	-0.834976829	0.019153516	0.201514192
SDCCAG1	5890121	-0.835014832	0.002333418	0.069416952
BC023823	870048	-0.835472551	0.00494318	0.100347178
FKBP1A	1340491	-0.839106915	0.041417895	0.30295737

TUG1	6860717	-0.839273436	0.005904187	0.109020353
BTG1	6480703	-0.841496467	0.002331604	0.069416952
D930036F22RIK	1190110	-0.841718058	0.028744781	0.251197357
SERINC1	3450470	-0.843253516	0.050775941	0.33913961
NDRL	3890022	-0.844466776	0.022681735	0.221059617
AI429486	2570202	-0.845853863	0.052232497	0.34457028
SEC24B	6380743	-0.846540022	0.021933462	0.216669672
SCL0001923.1_57	2060438	-0.847273087	0.007568282	0.123713534
3010027N08RIK	6350139	-0.852042557	0.015909807	0.182604134
DXIMX46E	5550553	-0.854516267	0.009379897	0.138555171
2810029C07RIK	3310056	-0.857792039	0.019266929	0.201915366
EIF3S6IP	630600	-0.857811915	0.035823408	0.281671747
MGAT4A	5310240	-0.858794997	0.003612384	0.086043168
CCNT2	5550040	-0.859891313	0.009803793	0.140965839
EI24	3520731	-0.860930119	0.052463047	0.345665186
ARMCX5	6560066	-0.8614768	0.003519864	0.084744127
STARD7	3180367	-0.861818058	0.003378239	0.083669325
CLK2	2370093	-0.861958689	0.012490854	0.160041646
CMAS	1570202	-0.862829771	0.016260607	0.184837803
ZFP297B	70097	-0.86414087	0.044408654	0.315155357
HPGD	2450343	-0.864365198	0.030335596	0.256697903
A130038L21RIK	2320653	-0.869075061	0.000613319	0.037815085
PUM1	7560131	-0.870041698	0.045601828	0.319851307
ITPR1	1710239	-0.870557087	0.037172005	0.287186102
GRWD1	990129	-0.872408502	0.005789934	0.108197212
SBDS	5490369	-0.872657591	0.037990724	0.28947888
HNRPM	1030484	-0.873076237	0.002086926	0.066003812
IFRD1	1660253	-0.873436714	0.003434759	0.083921484
CENPI	6110646	-0.873673414	0.000625438	0.038237871
CCM1	4150332	-0.874578262	0.000477998	0.034774061
PAF1	510110	-0.874760696	0.030972783	0.259286444
FBXO33	1170474	-0.874907448	0.037990275	0.28947888
DARS	3450689	-0.875084343	0.026039199	0.23674632
BTG2	2060246	-0.876109385	0.049209881	0.333266567
ZFP307	2490377	-0.877544114	0.01822014	0.196486494
GOSR2	4280020	-0.879152703	0.016293933	0.184837803
2410118P20RIK	5270309	-0.880004395	0.015177592	0.178085312
ZFP180	5290170	-0.881247798	0.029477473	0.25416751
HMGB2L1	6520576	-0.882252763	0.042382387	0.307188575
TMEM183A	2750673	-0.883800392	0.053850876	0.348116183
SMC1A	3400619	-0.884787261	0.038726345	0.292712327
1190002H09RIK	940379	-0.884833713	0.000596582	0.037206127
MRC1	4730220	-0.885280689	0.021318851	0.21375304
MCL1	60048	-0.885548872	0.000896375	0.044614764
NEDD4L	3800608	-0.888710928	0.03686668	0.286108284
TUBGCP3	3060202	-0.890043772	0.042029735	0.305991444

IARS	4220270	-0.891729304	0.016148327	0.184523448
FOXO1	6580682	-0.892109229	0.001140454	0.050065776
PDHB	3440187	-0.894455747	0.00036864	0.030943832
HDAC2	3780092	-0.895333889	0.04621173	0.322816894
BCL2L11	1780735	-0.898331994	0.012058875	0.15781629
KLF4	1740594	-0.898409317	0.010264942	0.144781371
CLIC4	3400491	-0.900958787	0.006074176	0.110581331
NUP98	4250519	-0.901084415	0.035913719	0.281871512
LOC238836	6560465	-0.901820507	0.00898852	0.135213942
LOC385392	1820242	-0.902999067	0.028687201	0.251034573
GUSB	6180678	-0.903503492	0.006430136	0.113341178
RNMT	6350368	-0.903576467	0.01126243	0.152195781
CEPT1	650437	-0.906124525	0.010095847	0.143284471
MAPRE1	1710703	-0.907602657	0.006455685	0.113462676
CD209E	6020630	-0.908511003	0.014245103	0.172687122
LOC224087	4670196	-0.909134618	0.049185196	0.333266567
LOC219145	1050047	-0.910331634	0.018969159	0.201073089
ATF3	1090438	-0.913368947	0.008708642	0.132845287
TRERF1	3780403	-0.91492424	0.01518067	0.178085312
C130091E20	1070239	-0.914990415	0.012164054	0.158071622
HNRPDL	3190092	-0.916185528	0.003300786	0.082674033
AI747699	2030487	-0.917694301	0.03116917	0.26008922
AW228700	2260592	-0.918517681	0.0071704	0.12086339
MARCKS	1820224	-0.918543184	0.001988797	0.064882413
FOSB	6420520	-0.918613447	0.019505847	0.203429345
LRRK2	7200209	-0.918811707	0.02813674	0.248609453
EPB4.1L2	1770593	-0.919566718	0.007427442	0.12323181
ARHGAP6	7550333	-0.91990454	0.002449952	0.071648408
MT-ND4	6250689	-0.919957351	0.000198717	0.023671593
GOLGA3	4540482	-0.920269544	0.000375957	0.031002632
SNIP1	1580537	-0.922616246	0.00209697	0.066094002
TRA1	6960553	-0.92311755	0.001141302	0.050065776
LOC382063	770403	-0.923394856	0.027940192	0.248051094
APAF1	1990639	-0.923404264	0.044191495	0.314504916
ITGAE	5700017	-0.923681488	0.007614169	0.123943865
PHF17	4150292	-0.925846837	0.037531508	0.288242722
CAPNS1	7210561	-0.92695988	0.038993134	0.293826335
ZFP472	1190768	-0.927037717	0.045370296	0.318803318
MAP4K3	4070689	-0.92761081	0.002180234	0.067849421
GLB1L	3130546	-0.92831024	0.002743491	0.075138761
4933434I06RIK	6110259	-0.928729705	0.000905349	0.044632274
IQGAP1	520148	-0.928732729	0.019034963	0.201084309
2400003C14RIK	780600	-0.928966768	0.004678795	0.097920495
RGS1	6840594	-0.930158961	0.004454774	0.095719285
DOCK11	5310445	-0.930163469	0.048378051	0.330515948
SIRT1	4860762	-0.930280762	0.008667875	0.132520678

SNX3	1690528	-0.931066815	0.007732961	0.124828635
5730525O22RIK	1230040	-0.932981754	0.048780088	0.331948287
IGF2R	4150008	-0.934242494	0.001577235	0.058177863
4121402D02RIK	5570348	-0.935965741	0.0339355	0.2743609
EIF2B1	2510079	-0.936283355	0.007514506	0.123353866
6230401I02RIK	4640685	-0.936624084	0.00189595	0.063212565
B430105G09RIK	940601	-0.937114168	0.005147685	0.102187123
SDCBP	3390021	-0.937508727	0.024743599	0.230915477
MTDNA_ND5	3120520	-0.937544082	0.006897518	0.118880756
LOC386085	1660114	-0.939512713	0.053188386	0.347737105
COPEB	6960196	-0.940199604	0.030319649	0.256697903
DENR	2350139	-0.940877788	0.01834683	0.197168114
D8ERTD587E	3140471	-0.942313229	0.006859659	0.118491266
1110032N12RIK	2370138	-0.942398997	0.023467688	0.225479864
A630084D02RIK	1050138	-0.942939076	0.011652436	0.155053098
LOC225927	1570750	-0.944623999	0.000522553	0.035435453
HSPA9	3130598	-0.944774273	0.007161873	0.12086339
3632431M01RIK	2470164	-0.94663131	0.006234359	0.111922957
NOL5	6980722	-0.947152268	0.044080915	0.31414985
H3F3A	3360669	-0.949616517	0.01559398	0.180644016
PICALM	5290360	-0.949821705	0.004050121	0.09141617
SCP2	6100408	-0.950470396	0.038234641	0.290909234
PRPF38A	6110079	-0.950749577	0.021127041	0.213189928
SBK	60639	-0.951320085	0.013561348	0.1679966
P2RY14	6580379	-0.951997476	0.054062083	0.348208252
INPP5E	3800753	-0.952878758	0.013024438	0.164436175
SGOL1	940427	-0.953131666	0.007681727	0.124519348
SEL1L	3990360	-0.954907886	0.002260585	0.068832605
PCNA	6350240	-0.955242832	0.025654636	0.234761839
RABEP1	4540228	-0.955373031	0.001182526	0.051167651
UHRF2	580717	-0.957476358	0.033863955	0.274177977
1110004P15RIK	870333	-0.958491262	0.016638584	0.186632202
A530055J02RIK	5960102	-0.959469488	0.010870488	0.148973653
LOC386330	4780753	-0.961193679	0.024230739	0.228602151
TGIF	4850682	-0.961872883	0.001728253	0.060615525
LOC218814	4390026	-0.970333939	0.0038647	0.089708416
CCNL	5260047	-0.972559817	0.008096558	0.127777025
4930402E16RIK	6520500	-0.973993136	0.029318039	0.253073836
PCBP4	4560603	-0.976050731	0.032678831	0.267793967
1110020A09RIK	3420347	-0.976883493	0.001962341	0.06428943
IGH-VJ558	240242	-0.977727035	0.003951286	0.090296426
LOC382020	2710753	-0.977760411	0.033860988	0.274177977
E430025L02RIK	7050743	-0.979463068	0.010651289	0.147807566
SMEK1	1470242	-0.979647735	0.028966781	0.251439434
MAP3K1	1030170	-0.98041518	0.025833008	0.235976927
SLC25A14	6290747	-0.983619533	0.003469702	0.084137144

TRIM59	7570196	-0.983738807	0.001857393	0.062876048
ITGAE	1300059	-0.984204984	0.012039202	0.15776942
1700009P03RIK	10678	-0.989106155	0.017010358	0.188062628
1300018I05RIK	6590348	-0.989913644	0.014506274	0.174772431
PPP2CA	4590746	-0.990055554	0.003915117	0.090113246
HNRPC	5960035	-0.991087279	0.054416016	0.349586572
ZCCHC6	4200630	-0.992754207	0.046063196	0.322119092
KCNK13	60524	-0.994235285	0.05389775	0.348116183
COG3	3130079	-0.995420767	0.035566641	0.281569209
MALT1	3830040	-0.995856177	0.001025088	0.047660469
SDCBP	7400358	-0.997429995	0.025304704	0.232891224
2310056B04RIK	6280767	-0.998243004	0.003028471	0.079710386
PHC1	5670326	-1.0030768	0.011825875	0.1560272
RAB8B	1440192	-1.004130507	0.005193846	0.102397724
CLSPN	2600019	-1.004132175	0.038624019	0.292581658
ZFP692	2570343	-1.008464317	0.007107066	0.12043334
RNU6	4570292	-1.009621659	0.028693822	0.251034573
SNAPC3	380504	-1.010432166	0.001920349	0.063720288
D030026J11RIK	1070603	-1.010532276	0.00058203	0.037009384
USP52	1690121	-1.013709983	0.034280324	0.275448143
TRIM59	5220056	-1.013757958	0.001547267	0.05730609
ABCA3	2650204	-1.014777314	0.039155606	0.294453948
EIF4G2	2810156	-1.014803184	0.006026983	0.11010943
CSE1L	1340288	-1.016233918	0.02720006	0.244022186
TCE4	2060050	-1.016327181	0.005010147	0.100835677
SCL0003876.1_26	3120138	-1.018629101	0.004900287	0.100258975
CLSPN	7570278	-1.021598174	0.047396737	0.327412782
SDF2	3310086	-1.021859815	0.040417026	0.2991592
2310051F07RIK	5340609	-1.022651255	0.022273135	0.219188534
DOCK11	2320273	-1.0233296	0.027952944	0.248051094
CD24A	3390110	-1.023408737	0.008276852	0.128917987
CENPJ	2940068	-1.02552791	0.008584563	0.131728928
LOC626391	160079	-1.02669939	0.042496977	0.307188575
2400003C14RIK	50170	-1.028320321	0.001193532	0.051427939
PRSS15	50450	-1.028662418	0.031117722	0.259939274
8430427H17RIK	5490504	-1.028798563	0.035077458	0.279794818
E430026A01RIK	3520274	-1.028964399	0.012108829	0.157912437
NEDD1	2630372	-1.029669256	0.018687788	0.199248313
5830426I05RIK	430333	-1.030276792	0.053719702	0.348116183
IER2	1660538	-1.03060487	0.004022477	0.091271376
SMARCA2	3420154	-1.034747686	0.009311236	0.137971551
2410005K20RIK	2000341	-1.034787967	0.051536487	0.342159089
CRLF3	6980300	-1.034885914	0.00842394	0.130164537
1810044J04RIK	770189	-1.036719369	0.044229452	0.314630858
4930431B09RIK	6840270	-1.041342084	0.010094441	0.143284471
NCOR1	4640358	-1.041378059	0.025885276	0.23599106

ZFP75	2690519	-1.041565059	0.031907837	0.263941059
SFRS2	5130612	-1.043717015	0.005927255	0.109252907
PPP1R12A	6130040	-1.044207892	0.034304637	0.275448143
SLC25A38	940164	-1.046032208	0.036121845	0.282445179
HSP105	3290270	-1.04605428	0.053205188	0.347737105
IVNS1ABP	3710717	-1.047955618	0.005228074	0.102638123
GNB1	6510553	-1.048886305	0.048921671	0.332329232
LOC212399	2120372	-1.049365179	0.00267844	0.074474496
HIPK1	1770521	-1.049423902	0.053928263	0.348116183
3830408G10RIK	2750167	-1.051094943	0.007957434	0.126480028
5830461H18RIK	2480288	-1.052711565	0.0352717	0.280504182
DAPP1	4250537	-1.053649354	0.002306412	0.069352881
CTNNB1	5870370	-1.055422293	0.044263868	0.314731507
EIF2B1	1260192	-1.056176449	0.015884327	0.182596468
RANBP2	2630750	-1.056858091	0.029121827	0.252133178
LOC268569	1230681	-1.057543011	7.68E-05	0.018959357
UBE2D3	1190504	-1.058463184	0.046758784	0.324594171
DNAJB1	4540020	-1.059495358	0.018551517	0.198270139
2310001H12RIK	3990722	-1.061066924	0.031987955	0.264223912
CSPG6	1190037	-1.062117076	0.011654443	0.155053098
LOC245251	4040500	-1.062144811	0.000586278	0.037009384
DHX15	4540131	-1.062441367	0.002648635	0.074045064
1200003O06RIK	5080139	-1.06246995	0.052052624	0.343692513
2610507L03RIK	3990255	-1.065748326	0.053050249	0.347243971
TNFRSF13C	2710520	-1.068177077	0.010021813	0.142647787
MEFV	4220437	-1.069786407	0.011243322	0.152088454
2010321M09RIK	4670255	-1.070019284	0.010850454	0.148972468
A930006D20RIK	3400152	-1.070316704	0.004647986	0.097406978
6720461J16RIK	4560707	-1.074515849	0.008519181	0.131114336
MAP3K1	730753	-1.074720146	0.027601493	0.246193905
UBR1	1690014	-1.075238571	0.037141047	0.287186102
UBE3C	2370131	-1.076967668	0.011890919	0.156583556
COQ10B	4830047	-1.077833197	0.007064833	0.120135997
SAMSN1	2030543	-1.079690843	0.002655876	0.074045064
CUL3	7380008	-1.080555396	0.040134511	0.297635543
PALD	6940068	-1.080630853	0.014917843	0.17643502
WDR51B	2760202	-1.082354754	0.039873881	0.296649007
SMS	110452	-1.083985244	0.008670295	0.132520678
SLC35B1	2350594	-1.086893176	0.006286573	0.112415789
NRF1	2190554	-1.087243544	0.029933136	0.255606756
CARD10	7330196	-1.087785297	0.018730953	0.199501346
SRP9	2450504	-1.08805881	0.047765741	0.328457354
4432411E13RIK	2470189	-1.089390242	0.0323536	0.265884309
GAB3	4830487	-1.091415088	0.002633136	0.073978245
RHOF	3780192	-1.091713	0.029793343	0.255496375
LMO6	3400450	-1.092793662	0.051496479	0.342159089

LOC381105	160487	-1.094088493	0.048847532	0.332072215
RAB6	5870184	-1.094669828	0.003545844	0.084974405
UIMC1	1440520	-1.095794659	0.005183788	0.102397724
RAB10	3450450	-1.095944345	0.004406594	0.095439327
H2AFZ	3140500	-1.096618954	0.000115393	0.021227165
IGJ	4250162	-1.097368517	0.000724553	0.040473342
CREM	3840112	-1.09855658	0.046578254	0.324160021
2010002N04RIK	520025	-1.101962427	0.020604062	0.210223708
ADAM19	4670246	-1.105838106	0.039543173	0.295650427
TNFAIP8	4040440	-1.107192621	0.006492955	0.113802594
GAB3	270431	-1.108438827	0.000755001	0.040642641
PLP2	6980021	-1.109052511	0.009302482	0.137971551
IK	2570019	-1.110380776	0.026870048	0.242314158
GEM	6840274	-1.113677629	0.024519905	0.230350634
5530400K22RIK	7050594	-1.115431702	0.020306415	0.208545079
ZFP715	3400600	-1.115737661	9.19E-05	0.019984008
RBBP6	7000373	-1.115817968	0.022412463	0.219743041
ZFP263	1440270	-1.115950065	0.000169034	0.023433298
2410003B16RIK	770465	-1.116009222	0.042607065	0.307188575
ADPRTL2	7400086	-1.116174439	0.019004858	0.201076917
SMPDL3A	6520128	-1.116605231	0.027101211	0.243550173
2210421G13RIK	540093	-1.11870306	0.03656611	0.28434408
NCAPH2	1570138	-1.119717084	0.030612969	0.257942916
CXCL1	3610082	-1.121108518	0.005016073	0.100835677
DDX20	6330615	-1.12204201	0.019400571	0.20273988
2010205O06RIK	4060377	-1.123624417	0.000404489	0.031714029
CHRNB1	670554	-1.125040892	0.048854216	0.332072215
TCFCP2L2	6270327	-1.125403367	0.009538529	0.139871403
VPS35	5550408	-1.125540467	0.011186222	0.151845147
PRDM4	1570139	-1.125622741	0.006444112	0.113458753
MAN2A1	3400050	-1.128678008	0.004337875	0.094478068
HPS3	620041	-1.129592354	0.004978307	0.100661637
RBM16	4280561	-1.130013086	0.028906779	0.251439434
9430067K09RIK	2100168	-1.130924463	0.03740651	0.288117642
2310010B21RIK	5560414	-1.131039434	0.037770148	0.288858751
CRLF3	1690017	-1.132807358	0.023440349	0.225390204
HNRPM	6840754	-1.134809707	0.000666733	0.039152778
EP400	430324	-1.136083136	0.009333957	0.138176372
A930026I22RIK	6130196	-1.138028007	0.005289059	0.103343835
C920005C14RIK	6060315	-1.138297005	9.92E-05	0.020529382
DAP3	1940577	-1.138325664	0.028802561	0.251439434
3110040M04RIK	1240707	-1.141706285	0.000227777	0.024499208
ARL6IP2	4880008	-1.142184093	0.014864129	0.176296479
CHCHD7	7570025	-1.142653193	0.028028234	0.248288901
CUL1	4640367	-1.145053049	0.001223636	0.051776126
HNRPM	6130692	-1.145242362	0.000111409	0.020844276

IFNGR1	1030152	-1.145712765	0.011062966	0.150635803
CDKN1C	4570451	-1.146060697	0.042580249	0.307188575
REL	2470392	-1.147800979	0.001918971	0.063720288
USP52	3370692	-1.148007893	0.016253628	0.184837803
RBM18	4120553	-1.148142434	0.001442901	0.05676642
5730405I09RIK	2750575	-1.14826042	0.00793475	0.126248697
PABPC4	4210369	-1.149283735	0.026823337	0.242033472
ETS2	7510154	-1.15185306	0.000497127	0.034931573
5930412E23RIK	4230377	-1.155072975	0.009237647	0.137274082
2410008A19RIK	5340037	-1.155298779	0.008030307	0.127121371
MPHOSPH1	2900138	-1.156462737	0.053585264	0.348116183
MLLT2H	3780047	-1.156531147	0.008484354	0.130786375
CD209A	4780739	-1.158964236	0.001832072	0.062804065
NEDD1	2060152	-1.162325245	0.011466501	0.153767963
4921514E18RIK	2600497	-1.162348779	0.013566085	0.1679966
FMNL2	5960020	-1.163312739	0.015687651	0.180990742
C530050O22RIK	830463	-1.163344992	0.03690511	0.286120543
ANTXR2	6510463	-1.163778065	0.007614299	0.123943865
2310038H17RIK	1850138	-1.164036831	0.026427735	0.239158681
2610033C09RIK	1980379	-1.164180818	0.040888896	0.301218702
A530060O05RIK	6280521	-1.165939576	0.024937168	0.231737317
MAK10	6840300	-1.167463973	0.005707169	0.107296156
GADD45G	6330377	-1.168518932	0.046240084	0.322821498
CALM2	5090176	-1.169286118	0.014299706	0.173078829
GTSE1	1500148	-1.170481845	0.010826483	0.148972468
BZW1	6900017	-1.173869546	0.020331106	0.208545079
BC008163	1400685	-1.173889004	3.29E-05	0.01504769
MAP3K6	5670240	-1.173931099	0.022428535	0.219743041
CRSP9	6280504	-1.181894417	0.009068919	0.136200424
5730601F06RIK	4760228	-1.185779606	0.004130409	0.092289391
CDS1	6270528	-1.185959215	0.046452072	0.323477229
ST7L	4640468	-1.186914125	0.015241891	0.178214133
DNAJC5	5670475	-1.187132755	0.0031198	0.081047846
COQ2	6650224	-1.18806682	0.023719191	0.226389256
CALU	4060154	-1.18845628	0.004587529	0.096661784
DCUN1D4	6960148	-1.189187206	0.000380355	0.031002632
6430540M20RIK	460242	-1.192998543	0.000935167	0.045381887
6330407G11RIK	2690541	-1.193291678	0.014970239	0.17665109
2500001K11RIK	4070097	-1.193770141	0.053857635	0.348116183
PTPN12	540288	-1.19551207	0.021960508	0.216798938
CUL3	510440	-1.195867045	0.002338313	0.06942955
DMWD	630053	-1.196098373	0.001132468	0.050065776
D12ERTD553E	610491	-1.198574753	0.002732994	0.074983506
9130011J15RIK	5080193	-1.200381497	0.02425528	0.228694746
3230401D17RIK	3370349	-1.200606682	0.002609814	0.07382112
IVNS1ABP	1450482	-1.202104934	8.09E-05	0.019038904

MTDNA_CYTB	6960022	-1.204366089	0.000573428	0.036799029
TNIP2	6620131	-1.204370362	0.022023369	0.217281387
RPS6KA5	2850110	-1.207004189	0.020943422	0.212291388
2810021J22RIK	5390326	-1.20761971	0.051852798	0.342889322
NIN	4640397	-1.208474379	0.033279104	0.271423953
FBXO25	830176	-1.208773134	0.000269344	0.026641074
CTNNA1	70753	-1.208813453	0.00052138	0.035435453
C79407	4640673	-1.209263206	0.021335019	0.21375304
MEF2A	6480543	-1.209278464	0.046865999	0.325047833
BC023823	2810044	-1.210182951	0.017366839	0.190709141
LOC328703	4890114	-1.210317213	0.000490959	0.034813245
4631422O05RIK	4730634	-1.210772547	0.004045592	0.09141617
VDAC3	5720278	-1.21119278	0.011986626	0.157213105
D5ERTD591E	2140114	-1.211229461	0.000754407	0.040642641
GCNT2	6270739	-1.211731089	0.000649512	0.038644731
ERCC4	130360	-1.21192927	0.04699298	0.325492412
EPS15	5900278	-1.212973838	0.028160476	0.248609453
PHCA	2370279	-1.212986208	0.017826289	0.193504163
RANBP10	5270441	-1.213489979	0.035277524	0.280504182
2810012G08RIK	6760521	-1.214445214	0.007491199	0.12323181
SS18	2680468	-1.216816314	0.03857064	0.292462632
ANP32E	5080093	-1.220148201	0.05366794	0.348116183
YWHAH	2190544	-1.220277138	7.65E-05	0.018959357
1810073G14RIK	3840072	-1.221023212	0.03644372	0.283961128
EG622976	5820730	-1.22207843	0.001866264	0.06300263
HAVCR2	870066	-1.222709513	0.000242027	0.025140291
RBM15	6590138	-1.223165572	0.014636305	0.175311552
AFF1	4490180	-1.224779905	0.005877079	0.109020353
GAS2L3	7160133	-1.224943648	0.001822068	0.062801038
E230022H04RIK	4880390	-1.225848922	0.042501147	0.307188575
1110054N06RIK	6130575	-1.226334444	0.000720952	0.040473342
DMTF1	6110187	-1.226351513	0.016699376	0.186722928
XLR4C	1850382	-1.22694486	0.026705476	0.241250344
NISCH	6370129	-1.227686184	0.041065118	0.301922819
ZCWCC1	2030162	-1.227712343	0.043425038	0.311620802
UBE2N	6480368	-1.229192994	0.000661917	0.039083301
CD53	6560301	-1.23090868	0.000186388	0.023433298
CRBN	110709	-1.233743047	0.004894465	0.100258975
ELL	2190445	-1.235025561	0.015683052	0.180990742
XPR1	1070184	-1.236964014	0.037671543	0.288858751
CTNNB1	3060497	-1.237854796	0.014729963	0.175955074
DNAJB6	3940608	-1.238092347	0.015599435	0.180644016
TRERF1	6290053	-1.238449076	0.039273859	0.29463053
ACVR1	1660397	-1.23849682	0.037974081	0.28947888
ATF2	5260553	-1.239030742	0.032889469	0.26895238
AP3M2	3180475	-1.24231544	0.00346496	0.084137144

FBXL10	2060646	-1.243134683	0.001285796	0.053127982
CATSPER2	7400204	-1.243792364	0.004100941	0.092028204
AI839920	7150315	-1.246116087	0.013902961	0.171076931
IL7R	1660504	-1.246118412	0.030685368	0.258412735
TUBB2B	1030133	-1.246890273	0.02586075	0.23599106
4930403C10RIK	4150259	-1.2471096	0.012073266	0.15781629
DFNA5H	6840435	-1.248382277	0.000173789	0.023433298
CLN3	5260386	-1.251374	0.004403091	0.095439327
9330180L10RIK	4780561	-1.253750739	0.005947594	0.109252907
ZFP367	2940632	-1.256299138	0.011683086	0.155053098
CREM	3130719	-1.256586003	0.027520821	0.246039628
WBP5	2690259	-1.257784153	0.014781858	0.176033342
PLEKHE1	110220	-1.258007166	0.001286375	0.053127982
ARMCX3	4570168	-1.26168498	0.000997392	0.046934862
FGFR1OP2	2490068	-1.263491491	0.006491885	0.113802594
PEX5	7000348	-1.263987809	0.019352202	0.202370604
ASE1	1190328	-1.265069117	0.003445178	0.083921484
8030462N17RIK	3180274	-1.267159233	0.00269309	0.07468034
EIF5	5720468	-1.267254994	0.00802652	0.127121371
SFRS7	5700541	-1.267635513	0.000347069	0.030109647
1810032O08RIK	6510382	-1.268699164	0.016299871	0.184837803
RECC1	3940577	-1.268738955	0.007755021	0.124925024
3930401E15RIK	7610139	-1.271494982	0.005538715	0.106110748
STARD7	3990201	-1.272080813	0.010763746	0.148710018
MUM1	6110242	-1.273105106	0.002953747	0.078665592
2700097O09RIK	3610435	-1.273598704	0.006729603	0.116503904
PDHB	6380280	-1.277282604	0.027498079	0.245977922
GPBP1	2230296	-1.279217333	0.01442591	0.174199037
STARD4	4210288	-1.283655212	0.022592883	0.22065716
A130010C12RIK	940274	-1.283676657	0.013051938	0.164649508
GTF2H1	5890605	-1.285917773	0.00294601	0.078665592
PCF11	1510523	-1.286836346	0.000202738	0.023671593
RBM18	5900017	-1.286887423	0.000242839	0.025140291
DEK	4730088	-1.288278987	0.005495831	0.106018332
MCM6	270379	-1.289401595	0.001590685	0.058396562
PRPF38A	1030427	-1.289592315	0.006505323	0.113890823
LT1	2850347	-1.291899635	0.022191031	0.21859171
EIF1A	2850487	-1.29199236	0.023752322	0.226427137
1300007B12RIK	7400475	-1.292383851	0.011640526	0.155053098
STAG2	5080192	-1.293603975	0.010488546	0.146208825
6430604K15RIK	5960450	-1.295791247	0.000133828	0.021459359
6330439P19RIK	5340446	-1.295957361	6.93E-05	0.018815129
LTA4H	2000112	-1.300217674	8.83E-05	0.019984008
PLAT	2760561	-1.300707809	0.035803436	0.281657323
GTF2E2	2320392	-1.302564977	0.051623218	0.342588439
ARHGAP25	5890768	-1.30527604	0.000944392	0.04540393

SQSTM1	4560619	-1.305541108	0.000296829	0.027936123
MOBK1B	3870273	-1.305772497	0.001049825	0.048250957
IVNS1ABP	2570008	-1.307426745	0.037394183	0.288117642
PABPC1	5290403	-1.308618663	0.000513642	0.035293587
CDC44	7160066	-1.31219639	0.001827939	0.062801038
KLHL6	6860040	-1.312439004	0.002279553	0.069139023
PPAP2A	4490309	-1.314009117	0.030344134	0.256697903
ZDHHC3	5360414	-1.318504845	0.024365767	0.229318782
DUSP16	7160397	-1.318594767	0.000724058	0.040473342
4732471D19RIK	3390608	-1.320452699	0.000202066	0.023671593
SCL0004020.1_31	580274	-1.320594001	0.020879438	0.21178105
MAP2K3	2100358	-1.322751296	0.00226985	0.068979451
MAPK1	2570669	-1.323771963	0.013551264	0.1679966
SCO1	7400095	-1.324215833	0.010453607	0.146017873
RHEB	1050541	-1.327351616	0.000488167	0.034774061
2700033B16RIK	4010670	-1.328349942	0.001300275	0.053417918
AI847670	1780615	-1.329368264	0.02051099	0.209825535
1810013L24RIK	5810551	-1.329696128	0.020079922	0.207603932
3110024A21RIK	6560725	-1.330496259	0.037689313	0.288858751
MYNN	6330170	-1.333483698	0.000421669	0.032416315
LTA4H	7160709	-1.333925372	0.003953994	0.090296426
BAG3	6660653	-1.334041554	0.007785432	0.125253124
DNAJB4	5560167	-1.334567307	0.014728633	0.175955074
TOE1	6220750	-1.335388601	0.013232346	0.165847544
2610507B11RIK	1190095	-1.339029478	0.027432115	0.245670884
G630041M05RIK	10609	-1.341273538	0.000749053	0.040642641
PANK1	6290411	-1.343978431	0.004162834	0.092746979
BRWD1	6350561	-1.344127671	0.010350688	0.145594046
4930562C03RIK	2450707	-1.349239599	0.000142858	0.022184415
5730527J01RIK	4060014	-1.349575716	0.001463572	0.056782442
IVNS1ABP	650168	-1.350201774	2.82E-05	0.013683035
1190002H23RIK	2900373	-1.350207422	0.004484577	0.095792281
CALU	3610192	-1.35347613	0.000891374	0.044508494
MAT2A	1580187	-1.354713541	0.00034286	0.030070731
SLC25A3	2340364	-1.357515092	0.009171669	0.136711918
GRASP	6510687	-1.358152683	0.032175928	0.264931061
2610021K21RIK	2350470	-1.359334273	0.000222883	0.024386593
ST7L	2060424	-1.359407859	0.017482712	0.191459123
1200015E14RIK	2650431	-1.362824524	0.046809431	0.32480056
DDX1	780097	-1.364930284	0.02814639	0.248609453
AIM1	1580008	-1.367362822	0.026587813	0.240327207
RASA1	6900563	-1.368007682	0.034902054	0.278946991
GOSR2	2100129	-1.369121364	0.007207393	0.120887153
SUV420H1	6290242	-1.372369017	0.004096496	0.092028204
PCCB	1230358	-1.374943524	0.036424756	0.283955841
KLF3	580465	-1.376774839	0.00154991	0.05730609

D130054N24RIK	3170364	-1.377377557	0.002208798	0.068174059
ZDHC3	3140735	-1.378496002	0.03841746	0.291728476
PELI1	2970592	-1.378522658	2.06E-05	0.011400357
D19ERTD703E	460113	-1.378806491	0.050872088	0.339343922
2700049A03RIK	4830341	-1.382504895	0.01988887	0.206314917
JAK2	2760431	-1.38434437	0.000134813	0.021459359
4632411B12RIK	1660520	-1.384952572	0.004972029	0.100661637
COX15	2120446	-1.385661823	0.010192127	0.144274765
SPTLC1	450048	-1.386013318	0.003137463	0.081047846
1300002F13RIK	4570368	-1.388399379	0.005840413	0.108878482
4122402O22RIK	3180678	-1.389644707	0.00047507	0.034774061
SLC20A1	4920138	-1.391391701	0.001270764	0.052874501
ORC4L	7210164	-1.391831963	0.032270685	0.265550655
NPN3	610463	-1.395887379	0.000234318	0.024753226
ZFP667	5260661	-1.396285482	0.013381316	0.166906388
BRD8	6660528	-1.396336749	0.001939472	0.063948958
RNF6	5130129	-1.402516752	0.030809284	0.258682421
ZC3H7A	520189	-1.403526664	0.017632555	0.192556923
TMEM43	7200259	-1.403644639	0.026892016	0.24237151
NOL10	7560093	-1.407384383	0.029604845	0.254841261
POLD3	4250138	-1.409756904	0.020678406	0.210705364
AI838661	540402	-1.410391979	0.04819542	0.330139693
USP16	1780563	-1.410870305	0.014507158	0.174772431
LOC277016	7100224	-1.411062132	0.000117547	0.021227165
WDR9	2230626	-1.411340541	0.006962854	0.119183911
TRF	7040044	-1.411515692	0.031775488	0.263168826
CDK5RAP1	1050711	-1.413046105	0.012690622	0.161402677
CASP4	4290180	-1.419098819	0.004780171	0.098902056
SH3BGRL	3170129	-1.421188136	0.000217615	0.024386593
5830435K17RIK	1430315	-1.424421524	0.015263365	0.178214133
IGK-C	630730	-1.424734979	0.000715059	0.040473342
KLHL6	5490358	-1.424846619	0.000942795	0.04540393
PPRC1	5550092	-1.42723192	0.000129126	0.021459359
BRD3	6290477	-1.428257899	0.039324661	0.29463053
TOP1	620482	-1.43013442	0.015349515	0.178682619
MDM2	3310243	-1.430981432	0.000538926	0.03580211
8430410K20RIK	2570494	-1.43233258	0.004708857	0.098220837
ANXA1	670240	-1.432698969	0.003494864	0.084272899
MTDNA_ND1	2360010	-1.435114276	0.00348352	0.084137144
SNAP23	5900494	-1.435910865	0.008753674	0.133009596
5830427D03RIK	1010280	-1.437718929	0.00763335	0.123945054
3300001P08RIK	5700343	-1.440316272	0.047782548	0.328457354
A130070G01RIK	7400092	-1.440543756	0.025316597	0.232891224
PPP6C	5560593	-1.442127948	0.024987253	0.231737317
IGK-C	3400100	-1.442251269	0.002144178	0.067130938
TRIT1	3170102	-1.442860639	0.004862129	0.100018945

MKI67	5360129	-1.444455661	0.02399443	0.228174835
PHR1	1470561	-1.445564186	0.016747257	0.18675393
TRPS1	6940181	-1.445634019	0.00068301	0.039873931
ADRB2	3450440	-1.445637884	0.001452478	0.056778907
LOC211660	3710368	-1.447930242	0.035443373	0.281103238
OAT	4560309	-1.448774662	0.035610621	0.281569209
5730453I16RIK	4260279	-1.449565953	0.000613652	0.037815085
2310016C08RIK	4290152	-1.451141272	0.002076648	0.065898881
BRD9	3370382	-1.451168449	0.000430646	0.032943334
KCTD12	520193	-1.451593065	0.007926089	0.126240244
LOC383942	2350327	-1.455488497	0.001895788	0.063212565
BC010304	3130142	-1.45595081	4.44E-05	0.01665805
SCL0003903.1_2	6100286	-1.458187409	0.006094147	0.110766324
PRKWNK1	4060543	-1.458725413	0.001477243	0.056782442
MBNL2	3450719	-1.463228402	0.009787822	0.140965839
ZMYM2	6560040	-1.467782545	0.005196047	0.102397724
D030028O16RIK	2630376	-1.468332224	0.002327571	0.069416952
LOC242051	1110131	-1.470232339	0.000173977	0.023433298
4833439L19RIK	7650639	-1.472732277	0.004906786	0.100259842
C230093N12RIK	7380241	-1.474120562	0.021479294	0.21433337
DNAJC5	580706	-1.475430255	0.01853356	0.198214635
ZFX	4670138	-1.479724326	8.00E-05	0.019038904
DUSP16	5550086	-1.480019439	0.000321769	0.029331763
ATP6AP2	5810521	-1.484226939	0.003093797	0.080881429
NR4A2	3180215	-1.485899708	0.013469242	0.167465056
CXCL2	4150750	-1.488342532	0.000854258	0.043275906
CLP1	380484	-1.489162273	0.046286652	0.322821498
HSPCA	1110241	-1.489215886	0.000789054	0.041963058
MAP3K7IP3	4390255	-1.490934922	0.000572628	0.036799029
BHLHB2	1230341	-1.491742909	0.000109991	0.020829821
SGK	4900519	-1.493551184	0.016788527	0.187002246
TRA2A	5490204	-1.494668176	0.004445621	0.095719285
MMP17	3440053	-1.49995637	0.012113263	0.157912437
TMED8	5310437	-1.505081927	0.014006916	0.171947345
SIAH1B	630170	-1.505203306	0.023134959	0.224254729
SCL000636.1_46	4040072	-1.506243051	0.000658276	0.039016684
AW549877	4010021	-1.510672594	0.003708795	0.087795542
ZDHH13	7200296	-1.511702742	0.010600992	0.147247584
WASF2	1240270	-1.512567496	0.001203157	0.051470583
DDX1	4120050	-1.51318108	0.027768681	0.247259085
NAP1L1	1110273	-1.513846572	0.016115403	0.184418634
HPS3	4540370	-1.521027086	0.001392232	0.055852426
ZFP236	4730086	-1.531679818	0.015653754	0.180990742
SPATA13	4220673	-1.538369701	0.023221282	0.224674947
MCM6	3290437	-1.54032689	0.041309011	0.302874233
LOC208768	2370437	-1.540405138	0.023406718	0.225206277

WDR20A	3360711	-1.545434054	0.015720661	0.181236926
TRAF3	5420441	-1.546993896	0.011784302	0.155610901
ANKRD10	3390450	-1.54857307	0.003368965	0.08357293
BXDC2	2100719	-1.550544315	0.001061892	0.048359262
1200008O12RIK	3710050	-1.55326906	0.000218925	0.024386593
WDR9	6550349	-1.556871136	0.003662518	0.086965207
PER2	5670424	-1.558703069	0.053366353	0.347976579
2310020H19RIK	1440747	-1.55894564	0.05131808	0.341292701
C230078J11RIK	6280064	-1.559971998	0.001582662	0.058239719
E2F5	1260093	-1.560928244	0.025208508	0.232566333
2810474O19RIK	4920647	-1.561668237	1.63E-05	0.011109395
TMEM23	3800228	-1.563195375	4.47E-05	0.01665805
8030448M07RIK	1470156	-1.563734614	0.000810461	0.042170813
KIF23	4850079	-1.565123864	0.012951649	0.163783517
NCAPH2	1170019	-1.568228635	0.012300168	0.158751122
OXR1	2940739	-1.571956489	0.017087431	0.188459317
DRR1	7040220	-1.57451857	0.017776977	0.193183116
A530024C08RIK	5220112	-1.576767703	0.023253083	0.224842547
BRD1	940706	-1.578121676	0.016272654	0.184837803
2810046L04RIK	2070736	-1.580482442	0.044524933	0.315713406
CKN1	4570209	-1.583327647	0.0053397	0.103779975
BC003251	7210497	-1.584125864	0.011378988	0.152860545
C030013C21RIK	7210689	-1.584575136	0.006645185	0.115428506
TOP2A	4250403	-1.584724339	0.000925595	0.045058191
SWAP70	3310132	-1.587427688	0.018489915	0.197884143
9430065L19RIK	6060681	-1.587465458	0.00014191	0.022184415
D3UCLA1	5220142	-1.588666431	0.001541176	0.05730609
2610529H08RIK	5260528	-1.594035009	0.000980139	0.046546091
DSCR1	3440615	-1.594281599	0.05015794	0.336604427
NFKBIZ	6650458	-1.5946906	0.000256152	0.02582973
PRDM2	6840170	-1.597346504	0.001535004	0.05730609
BXDC2	5960152	-1.597590553	0.001785528	0.062030105
DAAM1	6980309	-1.598431952	0.0061607	0.11124362
0610010F05RIK	3360209	-1.599645919	0.022575956	0.22063668
LOC381140	5900370	-1.599942906	1.64E-05	0.011109395
SMAD2	4050274	-1.600682061	0.018964971	0.201073089
A630056H20RIK	1050440	-1.600812474	0.002313052	0.069352881
IL18R1	7650242	-1.601997693	0.006411481	0.113157502
2610028H07RIK	4120685	-1.60307842	2.01E-05	0.011400357
ZFP473	2070079	-1.60385865	0.00051189	0.035293587
GPR126	3440524	-1.605263612	0.004530868	0.096060964
EGR1	6620079	-1.606008478	4.97E-05	0.017166579
ZFAND6	2650193	-1.608723591	0.028278871	0.248665109
A430106J12RIK	3400440	-1.609009599	0.007711889	0.124618033
2900036G02RIK	4780711	-1.611071651	4.03E-05	0.016458321
PLEC1	6960201	-1.612975331	0.001648941	0.059137206

ZFP236	4490025	-1.615887469	0.018910917	0.201073089
VIM	1690091	-1.615931252	0.001399098	0.055852426
TRAF3	270025	-1.616165616	0.011040624	0.150635803
SWAP70	4730392	-1.617985936	0.014189878	0.17231322
CHD9	6290731	-1.61945326	0.000988489	0.04674923
DDX26	5310288	-1.620359242	0.014872071	0.176296479
SET7	4480411	-1.621570686	0.01039249	0.145654311
2810407P21RIK	1030719	-1.622518513	0.035643081	0.281569209
PTGS2	2490537	-1.622874623	0.000355022	0.030291921
LIN54	5960594	-1.628790996	0.034897474	0.278946991
SC4MOL	6420253	-1.628839538	0.002039987	0.06538254
IGL-V1	5080091	-1.629597371	0.014472406	0.1746247
MKI67IP	6200603	-1.630889762	0.005397554	0.104642471
4932439K10RIK	2810091	-1.632251693	0.003612605	0.086043168
CRBN	5290754	-1.632635864	0.004973083	0.100661637
A530072M07RIK	1440162	-1.634322959	0.02185624	0.216412242
PTPN8	5900593	-1.639375156	0.039713532	0.296638496
FBXL10	1300347	-1.64261912	0.000406407	0.031714029
VPS35	2710632	-1.642851796	0.009759131	0.140965839
DUSP16	6220279	-1.647116331	0.001644002	0.059096544
ARIH1	1690243	-1.64854287	0.001079167	0.048728696
C030026E19RIK	6420021	-1.652979818	0.03217557	0.264931061
1110014J01RIK	7150386	-1.65758583	1.38E-05	0.011109395
XPOT	1230411	-1.658203907	0.022490314	0.220070624
FIGNL1	670500	-1.658848997	0.030876421	0.258842721
RPO2TC1	610278	-1.661454922	0.001241623	0.05218485
5830409B07RIK	7200180	-1.661549083	0.042609582	0.307188575
A430069M06RIK	4610315	-1.665992142	0.053731076	0.348116183
A430107N12RIK	2970270	-1.666779003	0.011677432	0.155053098
C130099A20RIK	7400328	-1.667205041	0.044681829	0.31582345
NRG4	5860500	-1.668514956	0.000177683	0.023433298
2700050L05RIK	160433	-1.66963113	0.021742901	0.215747932
CD44	2230538	-1.670484368	0.000831203	0.042634441
YTHDF3	7610121	-1.674847298	0.014172885	0.17231322
JAK2	5310050	-1.675675436	0.000573467	0.036799029
2810403A07RIK	730300	-1.678232176	0.005576391	0.106560917
5730403B10RIK	7650022	-1.678364021	0.012715875	0.161591502
ZFP326	1010427	-1.679125036	0.004789384	0.098902056
MBNL2	2710142	-1.681507677	0.008349067	0.129413977
YWHAQ	2190088	-1.686818076	0.00472521	0.098220837
BC016198	7200386	-1.688600878	0.001433187	0.056630926
D11BWG0414E	5870671	-1.69068759	0.010778223	0.148710018
GALNT11	4730255	-1.69843474	0.004638827	0.097361081
D12WSU95E	4570400	-1.701835099	1.10E-05	0.010629176
CD97	990280	-1.702597626	0.000534449	0.03580211
TFB2M	5050575	-1.706296059	0.033559667	0.273281634

CLK4	7050577	-1.70660132	0.015225237	0.178170836
MFAP1B	4390075	-1.708531014	0.005021013	0.100835677
B230114J08RIK	160717	-1.710302175	5.39E-05	0.017474573
CD44	110079	-1.716578711	0.002157301	0.067270533
ISCA1	5080156	-1.717889431	0.007700167	0.124558224
PVR	650458	-1.718422801	0.003483557	0.084137144
AL022779	1820360	-1.718952435	0.000228758	0.024499208
RPS13	1470671	-1.727229312	0.004574864	0.096525905
ATAD1	7150608	-1.727780409	0.00880035	0.133269392
DNAJA3	2000128	-1.727959617	0.015431465	0.179367682
TANK	4390474	-1.728740399	0.001458869	0.056778907
TOMM70A	1450112	-1.730203166	0.013757905	0.16956072
ZFP597	2120689	-1.731193993	0.000712097	0.040473342
ZC3H7A	2690114	-1.732235868	1.62E-05	0.011109395
SPAG9	3460669	-1.732965764	0.018626054	0.198929844
VPS54	990450	-1.733692795	0.027836442	0.247578523
TUFT1	3450370	-1.738471062	0.011760831	0.155565543
CD97	2810632	-1.738883314	0.000200684	0.023671593
CDC27	1190630	-1.740346997	0.000117557	0.021227165
2610039C10RIK	2680202	-1.740402375	0.008131124	0.127801854
MSN	1780474	-1.740486839	0.001091522	0.049085813
BC035295	1850082	-1.747340588	0.016044524	0.183742926
1300013B24RIK	1980470	-1.747527637	0.000307462	0.028447897
TFIP11	4540500	-1.752149038	0.005269157	0.103311247
FOS	510368	-1.758829024	0.00017676	0.023433298
COQ5	2850730	-1.760151896	0.006350125	0.112956585
LRRC57	2100333	-1.763445673	0.050490036	0.337956794
IMPACT	1780132	-1.763575953	0.000443815	0.033619514
CHD9	6900048	-1.765354746	0.00035282	0.030270438
PIGA	7160458	-1.768752708	0.001612921	0.058658189
1600010D10RIK	5080528	-1.768796389	0.00182506	0.062801038
5330401P04RIK	6480711	-1.771025908	0.000314022	0.028854706
2310001A20RIK	1430170	-1.771347221	0.004803538	0.099062612
4931406P16RIK	1440142	-1.778601848	0.000171695	0.023433298
CD81	2370364	-1.778981595	0.000468946	0.034774061
MTF2	630615	-1.781137711	0.024647617	0.230574003
2310009N05RIK	6270131	-1.787183051	0.014192067	0.17231322
ADAM17	5900653	-1.790868488	0.019126451	0.201502481
MORF4L2	2190239	-1.792206946	0.000344683	0.030070731
B230114J08RIK	1010669	-1.792594007	7.95E-05	0.019038904
4933426L22RIK	3610438	-1.795851534	0.004731096	0.098220837
LOC386192	4220386	-1.795979062	0.000807539	0.042170813
TRIO	4290497	-1.797964929	0.001632083	0.058994867
TNFAIP3	430523	-1.800526414	3.69E-06	0.007686803
2310032D16RIK	7100608	-1.800638256	0.003141915	0.081047846
CCNT1	430553	-1.802342575	0.014770289	0.176030557

C330001N2ORIK	6940592	-1.811078912	0.044603469	0.315713406
BCAS1	6560347	-1.816554456	0.000239598	0.025140004
STK17B	6270091	-1.81919123	0.00038697	0.031136069
ZMPSTE24	1850349	-1.821501037	0.042248059	0.306759801
4933421G18RIK	2260519	-1.822471913	0.007812716	0.125334369
SMCR8	6900288	-1.825128722	0.003141781	0.081047846
PHCA	5310768	-1.827325417	0.011917882	0.156708539
SFRS6	2630445	-1.832394564	6.86E-05	0.018815129
GP49A	4120356	-1.833675147	0.000637233	0.038605391
CLK1	2190220	-1.839660429	0.00023343	0.024753226
LPXN	7050433	-1.840984418	0.000724257	0.040473342
NUP160	1440440	-1.845561758	0.000900785	0.044632274
1810014F10RIK	2480022	-1.853790032	0.016528064	0.185727376
RCHY1	5260091	-1.859993063	0.003923307	0.090113246
FIN14	5690189	-1.860572473	0.011062722	0.150635803
HSPA1A	2350017	-1.869476869	0.000286627	0.027140437
JMJD1C	5130241	-1.873044314	0.00020479	0.023732746
E430012M05RIK	10376	-1.880976888	0.018694365	0.199248313
NPTN	3460468	-1.88191951	0.000973824	0.046388075
C78339	1260463	-1.883059114	0.04242173	0.307188575
IRF4	1010397	-1.886546162	0.000174493	0.023433298
HMGB2L1	5080523	-1.896201983	0.020752231	0.211179894
PRDM2	1440634	-1.897076224	0.001320159	0.053666896
AP1G1	7000133	-1.900071453	0.008068239	0.127588271
MMP12	6420687	-1.901217153	0.012532719	0.160355907
HSPA1B	4040670	-1.901347748	0.000106704	0.020712613
SERTAD2	4670577	-1.902403672	0.005733489	0.107660636
5330401P04RIK	7550669	-1.902612043	0.01071037	0.148214198
D15ERTD621E	6590612	-1.904102883	0.007865112	0.125655683
TRP53BP1	6520687	-1.908866885	0.010201152	0.144274765
SPAG9	1070632	-1.918384811	0.021055143	0.212969437
6430527G18RIK	5860725	-1.923478599	0.008730048	0.132910704
GM889	1050554	-1.932317662	0.051886304	0.342889322
HAVCR2	60603	-1.933156272	0.000149062	0.022885257
SMARCD1	1230379	-1.936335456	9.39E-05	0.019984008
MYST4	4200672	-1.937244682	0.002371312	0.070007803
4832412D13RIK	7510427	-1.943661699	0.00094244	0.04540393
B430214A04RIK	5360551	-1.945889225	0.023943742	0.227972026
PPFIA1	1990369	-1.946329171	0.038996463	0.293826335
SLC38A2	20066	-1.949311685	0.000221568	0.024386593
2610024E20RIK	6550577	-1.952013466	0.005682872	0.10709869
6430595O10RIK	3140241	-1.952961983	0.007372052	0.122570226
DHX15	4670768	-1.952969481	0.003208803	0.08140101
CENTD1	1510753	-1.956408011	0.008927277	0.134569395
SLC38A2	4640008	-1.961422831	0.010044644	0.142841829
DDEF1	1010528	-1.972490621	0.000645206	0.038605391

EPB4.1L2	1770424	-1.973918733	0.000108535	0.020807852
VPS4B	730685	-1.97802812	0.001168423	0.050824768
COQ10B	4220239	-1.99105968	0.00019981	0.023671593
DMTF1	5910598	-1.991097581	0.010718304	0.148214198
PRPF38A	2370685	-1.992134049	0.003211968	0.08140101
2410017118RIK	5340373	-1.992472827	0.006309359	0.11248914
PHF3	6900204	-2.006939336	0.005313163	0.103523356
SQLE	6450056	-2.013494813	0.002057268	0.065600229
2500004H21RIK	2850307	-2.026008276	0.021128167	0.213189928
EIF5	3830315	-2.026072709	0.025899074	0.23599106
RIOK3	5960348	-2.028186881	0.000873233	0.04402737
SSR1	7000497	-2.028456987	0.009631423	0.140349393
E430034L04RIK	4230681	-2.029433071	0.006391314	0.113157502
LASS5	2940593	-2.030946758	0.002379651	0.070120679
B930044G13RIK	2030241	-2.033239101	0.009593382	0.140333266
ARL6	870753	-2.033254884	7.69E-05	0.018959357
TLE1	610341	-2.034053435	0.000268423	0.026641074
KIF23	3840523	-2.039223047	0.005504721	0.106052453
YAF2	3170370	-2.042628841	0.003848778	0.089544365
DOCK10	2710128	-2.044014265	0.008934319	0.134569395
ATP10D	4900743	-2.045058806	0.000165033	0.023433298
9230110M18RIK	5820682	-2.048314822	0.008846233	0.133761583
FLRT3	4390470	-2.051791073	0.024900231	0.231737317
SNAPC3	6860082	-2.056913761	0.000133712	0.021459359
4933421G18RIK	2490180	-2.066885048	0.046951904	0.325492412
SFPQ	4200497	-2.073576905	1.65E-05	0.011109395
POLR3K	2230563	-2.074919859	0.046381105	0.32327297
A730098D12RIK	5360202	-2.081389839	0.000740733	0.040642641
AI115600	4590341	-2.093210231	0.004543741	0.096130463
ZFHX1A	4290403	-2.096412395	0.025910539	0.23599106
MORC3	990008	-2.101319304	0.000640027	0.038605391
5430405G24RIK	460681	-2.10422828	0.030349498	0.256697903
IGL-V1	4730180	-2.10906324	0.016295018	0.184837803
BCL2L11	5820168	-2.109895512	0.000595718	0.037206127
KRAS2	6370541	-2.110686736	0.004223575	0.093334587
SIAT10	4150670	-2.121729183	0.000155441	0.023209963
CSTF2	2000167	-2.127501993	0.023644444	0.226371495
LRRC5	3830021	-2.129236468	0.000214558	0.02432023
FLRT3	650021	-2.131351402	0.031408961	0.260782057
2610024E20RIK	3420086	-2.137375933	0.006389554	0.113157502
DNAJB9	6020768	-2.14118502	0.005152794	0.102187123
NOL8	1850441	-2.14164691	0.005999247	0.109731818
VCL	4120703	-2.160008329	6.64E-05	0.018815129
5830411G16RIK	6400468	-2.161124285	0.017260358	0.189961804
CCNL1	5700424	-2.177636313	6.16E-05	0.018592621
MDM2	670068	-2.181655578	3.56E-05	0.015339208

ILF3	460301	-2.190666505	0.000185635	0.023433298
5832424M12	270286	-2.201182595	0.009784769	0.140965839
KPNA1	5390239	-2.206864858	0.003133598	0.081047846
AA407930	1400170	-2.208405495	9.10E-05	0.019984008
YBX3	6510112	-2.209704796	0.006290147	0.112415789
NOL8	1510017	-2.2146928	0.005692437	0.10714891
CPEB2	2370707	-2.222155288	0.001856206	0.062876048
LMNA	4880360	-2.230384577	4.91E-05	0.017166579
FOSL2	7400044	-2.240875555	5.89E-05	0.018592621
MAP2K4	6940612	-2.247366876	0.021700344	0.215463328
ARHGAP21	770577	-2.259629336	0.031346407	0.260738559
LIN7C	630050	-2.261286245	0.021909008	0.216669672
PIP3AP	3990692	-2.26605311	0.037774843	0.288858751
0610010K06RIK	1500400	-2.270368844	0.012647236	0.161057582
KATNA1	5810079	-2.275537327	0.002026062	0.06538254
CTLA4	5560288	-2.279062933	0.001519937	0.05730609
PDLIM1	7560673	-2.289053336	0.045911212	0.321295722
TJP2	5360608	-2.292920064	0.002201203	0.068092598
EMR1	2710110	-2.29308895	0.010976958	0.149921889
2310075A12RIK	4810458	-2.294244524	0.002634424	0.073978245
1700034H14RIK	4670598	-2.297361766	0.007562475	0.123713534
RAB6IP1	520121	-2.29914226	2.58E-06	0.007686803
RAB6IP1	3180114	-2.300191059	5.62E-06	0.008149555
2610207I05RIK	2600079	-2.308379049	0.04136926	0.302931506
NFKB1	4180669	-2.314755083	5.40E-05	0.017474573
BCLAF1	1780253	-2.316356501	0.000341778	0.030070731
BC005537	4900725	-2.31810522	3.53E-05	0.015339208
GJA1	1710193	-2.327179039	0.007208546	0.120887153
SSFA2	7400468	-2.342984308	0.00235901	0.069777267
IL10	1260632	-2.356868856	0.001929586	0.063890287
SRGAP2	4200392	-2.361402628	0.001243377	0.05218485
HAK	7200242	-2.376026435	3.33E-06	0.007686803
4632413C10RIK	1300739	-2.384646094	0.006324999	0.112638664
TANK	7000209	-2.387563247	0.00016231	0.023433298
TEC	2350270	-2.389912326	0.000831878	0.042634441
HNRPDL	380196	-2.40249249	7.08E-05	0.018815129
FNTA	5960133	-2.405782694	0.008534983	0.131227476
2810405I11RIK	2900594	-2.406492191	0.009464143	0.139238533
TMEM32	6250523	-2.41003675	0.001061917	0.048359262
A630082K20RIK	7160132	-2.428201414	0.01395305	0.171421611
APRIN	1090669	-2.433842118	0.004494211	0.095866213
PDE4B	870195	-2.43895556	0.010380179	0.145654311
6720463L11RIK	2340278	-2.461040584	0.009173406	0.136711918
TPP2	730543	-2.469907333	0.001053324	0.048250957
SNORA65	360097	-2.470068667	0.000132031	0.021459359
B3GNT5	4490189	-2.495831842	0.000742446	0.040642641

NCK2	3120091	-2.497686555	0.001050244	0.048250957
HSPCA	5870142	-2.504450753	3.01E-05	0.014164215
USP1	1450079	-2.504527018	0.016718184	0.18675393
FNTA	7210564	-2.520753656	0.002724239	0.074983506
CRK	6550343	-2.532124893	0.027319318	0.244801896
EGR3	20612	-2.54737742	0.025548807	0.234345789
BLM	5960189	-2.55423699	0.001729196	0.060615525
3010031K01RIK	2490274	-2.56034996	0.002979555	0.078823693
1300013D05RIK	2510181	-2.573402298	0.004430632	0.095693024
LOC381621	1470692	-2.608159648	0.009404157	0.138555171
LMNA	1050072	-2.612793013	0.001873128	0.063016718
WSB1	1230722	-2.620570963	0.000555077	0.036370397
BLM	4850669	-2.62484815	0.001543605	0.05730609
C630029K18RIK	6350427	-2.638588833	0.020299188	0.208545079
STAG3	160753	-2.654596605	0.001093676	0.049085813
IL23A	5820670	-2.655011272	0.001697964	0.060242647
LMNA	6350682	-2.657281752	0.000646365	0.038605391
CUGBP2	6100523	-2.678934106	0.000468126	0.034774061
IGFBP7	5360685	-2.705840876	0.00653181	0.11409728
C330006P03RIK	2360343	-2.713214744	0.002874556	0.077491091
4930487N19RIK	4480494	-2.739806949	0.000441372	0.033598374
DUSP4	6270181	-2.806991583	0.001198781	0.051427939
ING1L	160176	-2.828284166	4.12E-07	0.004935031
PPP1R10	1430445	-2.92969407	0.000105147	0.020668669
GP49A	5820739	-2.989875482	2.38E-05	0.012327774
ANKRD17	6650564	-2.992248754	0.002844447	0.077062359
9630055N22RIK	4540603	-3.002545332	0.000249959	0.025536909
LMNA	4120753	-3.018627265	0.002230595	0.068334141
ST6GAL1	1430368	-3.021010429	0.002589474	0.073650644
RGS2	670440	-3.050616001	0.000712992	0.040473342
LMNA	2320079	-3.072662124	0.000825637	0.042595739
EMR1	1030411	-3.13214436	0.00506931	0.101575892
ZFP131	380240	-3.146927957	0.000150319	0.022885257
ADNP	2750168	-3.189159326	1.42E-05	0.011109395
SPAG9	7160433	-3.231765193	2.01E-05	0.011400357
ZFP131	7330435	-3.293357226	0.000198163	0.023671593
EMP1	7160167	-3.386292543	0.000127247	0.021459359
PPP1R10	5260600	-3.519532515	6.66E-05	0.018815129
HSPA1A	6270685	-3.599023014	2.55E-05	0.012766105
ADNP	4210487	-3.794700934	2.14E-05	0.011443169

Table 4 Microarray analysis of CX₃CR1^{int} CD64⁻ MNPs from inflamed and resting large intestine.

Full list of genes which were significantly differentially expressed (adjusted p value < 0.05) by CX₃CR1^{int} CD64⁻ MNPs isolated from inflamed colonic and caecal lamina propria 21 days after induction of *Hh* + anti-IL-10R colitis versus CX₃CR1^{int} CD64⁻ MNPs isolated from

resting lamina propria. Genes are arranged in order of descending \log_2 -transformed fold change. Positive \log_2 fold change indicates higher expression by CX₃CR1^{int} CD64⁻ MNPs from inflamed lamina propria, negative \log_2 fold change indicates higher expression by CX₃CR1^{int} CD64⁻ MNPs from resting lamina propria.