

Supplementary Table 1. Sample Information and Sequencing QC

Group	Age	Sex	PMI	Diagnosis	Braak (Tau)	Cerad	CAA	TDP-43 (hippo-campal)	Median Genes per Cell	Median UMIs per Cell
HCF1	81-85	F	23	No signif neuropathology	II/III	C0	Neg	Neg	1,600	3,174
HCF2	71-75	F	14	Multifocal demyelination, spinal cord	ND	C0	Neg	Neg	3,672	9,057
HCF3	56-60	F	12	No signif neuropathology	ND	C0	Neg	Neg	2,606	5,779
HCF4	61-65	F	26	Cerebrovascular Disease	0	C0	Neg	Neg	2,807	5,458
ADF1	56-60	F	11	AD, CAA	IV+	C2	CAA+	Pos	458	637
ADF2	51-55	F	3	AD, Lewy pathology (limbic, brainstem)	IV+	C2	Neg	Neg	2,142	4,230
ADF3	81-85	F	5	AD, CAA(mild), Cerebrovascular Disease	VI	C3	Focal	Pos	2,127	3,817
ADF4	86-90	F	9	AD, CAA, Cerebrovascular Disease, VBI (multiple)	V/VI	C3	CAA+	Pos	1,506	2,496
HCM1	41-45	M	12	Pituitary microadenomas (MEN1 syndrome)	ND	C0	Neg	Neg	1,969	3,764
HCM2	46-50	M	12	Cerebrovascular Disease	III	C0	Neg	Neg	2,883	6,682
HCM3	76-80	M	16	Cerebrovascular Disease	0	C0	Neg	Neg	2,368	4,932
HCM4	41-45	M	16	Cerebrovascular Disease, focal VBI	0	C0	Neg	Neg	1,670	2,971
HCM5	66-70	M	35	no signif neuropathology	0	C0	Neg	Neg	2,914	6,622
ADM1	61-65	M	6	AD, CAA(mild)	VI	C3	Focal	Neg	2,397	5,182
ADM2	81-85	M	7	AD, CAA(mild), Cerebrovascular Disease	IV	C3	Focal	Neg	3,121	7,139
ADM3	71-75	M	13	AD, CAA(mild)	V/VI	C3	Focal	Pos	1,187	1,907
ADM4	71-75	M	6	AD, CAA(mild), Cerebrovascular Disease	V/VI	C3	Focal	ND	1,661	3,074
ADM5	81-85	M	5	AD, CAA	V/VI	C3	CAA+	Pos	1,671	3,356

ND: not determined; block not available

Supplementary Table 2 Cellular DEGs**Astrocyte DEGS**

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
HSP90AA1	9.31E-93	1.71098858	0.621	0.567	3.56E-88
GFAP	0	1.47666913	0.872	0.607	0
NAMPT	1.44E-16	1.42901563	0.23	0.187	5.49E-12
PLCG2	8.24E-108	1.37662351	0.563	0.444	3.15E-103
NHS	7.30E-55	1.27708236	0.333	0.229	2.79E-50
ELL2	9.84E-12	1.22666151	0.366	0.351	3.76E-07
MIR4300HG	3.07E-119	1.19931354	0.57	0.415	1.17E-114
SLC39A11	4.72E-162	1.12457758	0.739	0.724	1.81E-157
CD44	4.11E-82	1.11240327	0.363	0.2	1.57E-77
HSPB1	3.55E-71	1.0998379	0.399	0.277	1.36E-66
CRYAB	9.96E-47	1.08628335	0.3	0.196	3.81E-42
NEAT1	0	1.07032545	0.971	0.962	0
EMP1	1.16E-11	1.05563019	0.199	0.161	4.42E-07
PLCE1	2.27E-113	1.05513419	0.447	0.265	8.66E-109
HSPH1	1.33E-49	1.05426823	0.244	0.141	5.08E-45
MAN1C1	2.00E-11	1.04892277	0.325	0.304	7.64E-07
HSPA1A	1.83E-54	1.02436623	0.356	0.248	7.00E-50
PFKP	3.10E-98	1.02289514	0.589	0.506	1.19E-93
DGKD	2.53E-26	1.02162342	0.309	0.247	9.66E-22
COLEC12	2.03E-91	1.01273602	0.567	0.434	7.76E-87
LINC00486	3.04E-28	1.00102073	0.47	0.46	1.16E-23
RGS6	2.30E-28	0.99899343	0.289	0.211	8.78E-24
COL21A1	1.51E-110	0.98838629	0.339	0.156	5.76E-106
ATF3	2.00E-77	0.98414175	0.108	0.017	7.63E-73
FBXO32	5.64E-22	0.97384717	0.167	0.108	2.16E-17
AC104574.2	1.37E-56	0.95665738	0.23	0.117	5.25E-52
TSHZ2	5.95E-70	0.94878744	0.207	0.085	2.27E-65
CCDC85A	2.95E-12	0.93576082	0.108	0.072	1.13E-07
DNAJB1	1.15E-18	0.93005456	0.248	0.2	4.41E-14
ITPKB	8.93E-167	0.92905204	0.823	0.787	3.41E-162
GLIS3	5.78E-145	0.90474514	0.892	0.896	2.21E-140
TTN	1.95E-29	0.89242748	0.138	0.072	7.44E-25
PFKFB3	1.07E-47	0.8814879	0.621	0.587	4.09E-43
HSPE1	1.50E-29	0.87451705	0.223	0.148	5.75E-25
ZBTB16	7.09E-81	0.87364485	0.676	0.654	2.71E-76
DCLK1	4.59E-15	0.86262257	0.277	0.231	1.75E-10
SORBS1	5.40E-238	0.84873927	0.961	0.962	2.06E-233
ANGPTL4	3.78E-19	0.82834661	0.451	0.423	1.45E-14
MRTFA	3.87E-37	0.82426404	0.436	0.366	1.48E-32
ARHGEF3	8.94E-52	0.81687723	0.449	0.326	3.42E-47
SAMD4A	9.19E-155	0.81067836	0.823	0.722	3.51E-150
SPP1	1.94E-49	0.80819829	0.144	0.055	7.42E-45

IRS2	1.56E-23	0.80325768	0.501	0.489	5.95E-19
RFTN1	9.39E-33	0.79935365	0.202	0.122	3.59E-28
TPST1	3.12E-49	0.79477198	0.577	0.475	1.19E-44
MAP1B	1.28E-14	0.78536633	0.383	0.355	4.88E-10
AL390755.1	1.10E-82	0.78190853	0.201	0.072	4.21E-78
CP	7.48E-76	0.77749996	0.112	0.02	2.86E-71
TESC	7.97E-37	0.77597554	0.102	0.037	3.05E-32
PLEKHA5	1.89E-46	0.76986248	0.592	0.535	7.23E-42
ST6GAL1	2.24E-45	0.76868705	0.262	0.157	8.58E-41
SLC5A3	1.09E-55	0.76662307	0.269	0.154	4.17E-51
UBC	4.45E-09	0.76439186	0.372	0.379	0.00017019
SPATA13	2.04E-39	0.7613306	0.482	0.405	7.78E-35
ANGPT1	4.69E-84	0.75340284	0.236	0.092	1.79E-79
ARID5B	6.46E-11	0.75296219	0.358	0.346	2.47E-06
AC119674.1	9.51E-62	0.75277628	0.214	0.098	3.63E-57
LINC01094	3.10E-25	0.75014548	0.251	0.178	1.18E-20
AL627171.2	1.17E-30	0.74323651	0.205	0.129	4.47E-26
VCAN	4.47E-56	0.74296431	0.344	0.214	1.71E-51
AEBP1	4.20E-21	0.74035762	0.257	0.196	1.61E-16
FKBP5	7.47E-47	0.73737156	0.525	0.46	2.85E-42
ADAMTS9-AS1	1.06E-19	0.73391688	0.319	0.264	4.04E-15
GEM	2.95E-17	0.7179914	0.188	0.136	1.13E-12
MIR29B2CHC	1.33E-07	0.71685884	0.413	0.439	0.00507004
RAMP1	4.88E-29	0.71418322	0.467	0.441	1.87E-24
CEBPD	5.56E-11	0.7121832	0.215	0.185	2.13E-06
GNA12	2.35E-20	0.70411549	0.477	0.468	8.96E-16
FOS	1.40E-15	0.7008907	0.293	0.256	5.35E-11
PLP1	8.20E-39	0.70015841	0.267	0.162	3.14E-34
FAM20C	3.40E-19	0.67414508	0.298	0.245	1.30E-14
TMTC1	8.01E-15	0.67162519	0.48	0.48	3.06E-10
SLC7A2	1.34E-27	0.66980165	0.467	0.413	5.13E-23
ADAMTSL3	1.37E-64	0.66931924	0.172	0.061	5.25E-60
CDH23	1.25E-29	0.66626572	0.281	0.202	4.78E-25
MYRIP	3.16E-23	0.66581751	0.21	0.144	1.21E-18
SLC38A1	7.71E-24	0.66222666	0.192	0.122	2.95E-19
LINC01088	7.76E-14	0.65538675	0.152	0.105	2.97E-09
NAV2	2.42E-75	0.65424698	0.89	0.921	9.26E-71
SLC20A2	7.75E-22	0.65153896	0.507	0.5	2.96E-17
FYN	4.54E-35	0.64980629	0.873	0.92	1.74E-30
PRKCA	6.06E-58	0.63921078	0.914	0.939	2.32E-53
HSPB8	1.01E-11	0.63592354	0.241	0.203	3.86E-07
AHNAK	2.83E-18	0.61894468	0.462	0.447	1.08E-13
GMPR	2.28E-23	0.60475736	0.258	0.189	8.70E-19
RNF19A	1.43E-11	0.60122587	0.539	0.58	5.47E-07
PDE4B	3.25E-19	0.59975445	0.777	0.859	1.24E-14

PTPRE	4.16E-22	0.59526452	0.261	0.195	1.59E-17
PRRX1	7.14E-38	0.59449084	0.171	0.086	2.73E-33
MOB3B	4.48E-30	0.59446031	0.21	0.131	1.71E-25
ARHGEF10	1.46E-24	0.59349438	0.512	0.476	5.60E-20
CNN3	1.28E-14	0.59248437	0.586	0.588	4.90E-10
DIP2B	1.47E-09	0.58411275	0.523	0.572	5.63E-05
ST8SIA1	4.50E-26	0.58379954	0.326	0.255	1.72E-21
COTL1	2.43E-07	0.57878495	0.218	0.195	0.00928192
FAM107A	3.39E-21	0.57799629	0.635	0.72	1.29E-16
COBL	2.95E-13	0.57689316	0.476	0.49	1.13E-08
HILPDA	1.93E-10	0.57387635	0.197	0.159	7.38E-06
HAP1	6.74E-25	0.57186192	0.209	0.142	2.57E-20
PARD3	3.53E-108	0.57138563	0.883	0.908	1.35E-103
LHFPL6	1.22E-16	0.56907302	0.617	0.666	4.68E-12
BAIAP2	1.16E-12	0.56065952	0.208	0.164	4.45E-08
MAOB	9.16E-12	0.55833123	0.448	0.435	3.50E-07
COL4A2	3.93E-09	0.55074853	0.215	0.18	0.00015013
SYNM	1.65E-30	0.54731009	0.203	0.125	6.31E-26
SRRM2	5.47E-23	0.54562197	0.555	0.592	2.09E-18
STAT3	5.54E-12	0.54423817	0.469	0.471	2.12E-07
TMEM14B	6.09E-18	0.53564201	0.416	0.385	2.33E-13
DGKG	3.08E-26	0.53172222	0.685	0.769	1.18E-21
KAZN	4.98E-09	0.53069094	0.409	0.404	0.00019048
AC005225.2	1.52E-21	0.53021795	0.296	0.231	5.82E-17
MT-ATP8	1.20E-07	0.5262893	0.259	0.236	0.00460317
NPNT	4.82E-89	0.52472265	0.14	0.028	1.84E-84
MIR100HG	2.46E-48	0.51825682	0.695	0.637	9.40E-44
SLC7A5	7.10E-11	0.51212145	0.115	0.08	2.71E-06
AL157886.1	4.50E-32	0.51049876	0.107	0.044	1.72E-27
DIP2C	4.75E-11	0.50978668	0.697	0.763	1.81E-06
TTLL7	2.17E-09	0.50882057	0.247	0.21	8.28E-05
PCBP1-AS1	2.49E-11	0.5068729	0.377	0.36	9.52E-07
SEPTIN9	2.52E-08	0.50326038	0.317	0.3	0.00096333
ARHGAP39	1.16E-11	0.50008872	0.267	0.234	4.42E-07
GALNT15	1.18E-15	0.49898401	0.145	0.095	4.50E-11
LRMDA	3.24E-20	0.49874009	0.397	0.347	1.24E-15
ERBIN	6.12E-66	0.49353189	0.77	0.796	2.34E-61
NR4A2	2.60E-08	0.48766097	0.142	0.11	0.00099281
TAF5	3.03E-18	0.48693015	0.452	0.42	1.16E-13
SLCO3A1	1.33E-10	0.48612535	0.194	0.153	5.10E-06
LINC00472	6.25E-12	0.4817606	0.521	0.537	2.39E-07
BAIAP3	2.78E-53	0.48054032	0.16	0.062	1.06E-48
BMERB1	1.40E-07	0.47861202	0.288	0.266	0.00536774
CFAP47	1.95E-07	0.4783964	0.195	0.165	0.0074348
MAML2	2.60E-16	0.47409169	0.85	0.913	9.95E-12

CCDC144A	5.73E-14	0.47336708	0.347	0.311	2.19E-09
MALAT1	2.21E-58	0.47008979	1	1	8.45E-54
HIF3A	8.93E-16	0.46345186	0.722	0.858	3.41E-11
PHACTR3	3.89E-22	0.4615584	0.719	0.796	1.49E-17
SLC38A2	1.30E-13	0.45986102	0.205	0.159	4.98E-09
MRPS6	2.03E-09	0.45985331	0.243	0.212	7.75E-05
AC093865.1	5.64E-13	0.45450838	0.319	0.274	2.15E-08
PLXDC2	5.36E-09	0.4520695	0.452	0.448	0.00020478
L3MBTL4	1.64E-17	0.45028575	0.202	0.141	6.26E-13
KANSL1	3.58E-20	0.44701373	0.643	0.716	1.37E-15
ZFY	9.44E-16	0.44611602	0.132	0.084	3.61E-11
AOPEP	9.46E-13	0.44430051	0.549	0.534	3.61E-08
TENM4	3.62E-14	0.44377133	0.607	0.616	1.38E-09
PNISR	1.51E-24	0.44062965	0.657	0.759	5.77E-20
LMNTD1	3.90E-19	0.43633952	0.171	0.111	1.49E-14
S100A6	2.22E-11	0.43478323	0.136	0.099	8.47E-07
TMEM91	2.12E-08	0.43424906	0.199	0.166	0.00081081
POLR2J3	2.57E-10	0.4294939	0.34	0.317	9.82E-06
TANC1	4.72E-09	0.42549614	0.377	0.353	0.00018058
MAPK4	1.15E-08	0.42361679	0.682	0.757	0.00044124
SLC9A9	3.90E-15	0.41647021	0.655	0.708	1.49E-10
FAM182A	2.46E-27	0.40023927	0.223	0.143	9.41E-23
DAAM1	1.41E-09	0.39314659	0.64	0.727	5.39E-05
STIP1	2.43E-09	0.39072034	0.128	0.094	9.28E-05
MAPT	1.53E-09	0.39031655	0.593	0.657	5.85E-05
AC092902.4	3.01E-11	0.38639492	0.224	0.182	1.15E-06
BCL6	3.38E-10	0.38598891	0.63	0.674	1.29E-05
ASB3	1.18E-17	0.38322474	0.662	0.688	4.50E-13
FLCN	1.47E-19	0.37907498	0.159	0.1	5.62E-15
ADCY2	1.51E-39	0.37901421	0.902	0.942	5.76E-35
PRRT2	1.13E-09	0.371958	0.264	0.23	4.33E-05
CREB5	3.51E-08	0.36874385	0.177	0.142	0.0013424
CHD2	4.66E-10	0.36609566	0.65	0.72	1.78E-05
SYNE2	5.71E-16	0.36480128	0.127	0.08	2.18E-11
ZNF544	1.60E-07	0.36332168	0.236	0.208	0.00609769
MAP4K4	6.92E-08	0.35352057	0.734	0.816	0.00264322
WDR49	4.92E-08	0.3504496	0.261	0.223	0.00188112
SEMA3D	3.64E-20	0.34992676	0.154	0.095	1.39E-15
TNRC6A	2.07E-35	0.33658515	0.853	0.922	7.91E-31
GALNT8	9.48E-12	0.33301914	0.105	0.068	3.63E-07
ACTN2	1.11E-07	0.3325379	0.106	0.077	0.0042297
TFRC	1.73E-26	0.33166365	0.232	0.371	6.62E-22
HVCN1	6.78E-09	0.32993656	0.112	0.08	0.00025901
NEBL	9.39E-36	0.3287913	0.895	0.935	3.59E-31
PTCHD1-AS	2.01E-08	0.324433	0.633	0.679	0.000768

ZFAND5	1.06E-09	0.3154637	0.347	0.462	4.05E-05
AC104389.5	3.91E-14	0.31425703	0.102	0.061	1.50E-09
DPYSL2	4.81E-12	0.3127042	0.751	0.817	1.84E-07
CHD1	1.78E-07	0.30467058	0.237	0.318	0.0067853
WWOX	4.24E-32	0.30457646	0.906	0.949	1.62E-27
AC109927.1	5.93E-14	0.30133578	0.106	0.064	2.27E-09
NDEL1	5.77E-09	0.29759662	0.176	0.247	0.00022061
H3F3B	3.61E-08	0.28902354	0.233	0.319	0.00138118
PITPNC1	1.66E-19	0.28691954	0.957	0.974	6.34E-15
SASH1	2.86E-08	0.28521124	0.8	0.879	0.00109135
AMD1	1.36E-07	0.28459342	0.161	0.222	0.00520576
STOM	3.68E-10	0.26690741	0.221	0.308	1.41E-05
C3	6.07E-24	0.26412778	0.101	0.047	2.32E-19
SAMHD1	2.20E-07	0.26228482	0.116	0.087	0.00840088
C7orf61	1.75E-09	0.25802022	0.1	0.068	6.67E-05
OSBPL9	6.50E-10	0.25658197	0.371	0.499	2.49E-05
ESYT2	1.59E-13	0.25644899	0.305	0.428	6.08E-09
MYO6	2.33E-67	-0.2500224	0.566	0.805	8.92E-63
NHSL1	4.28E-50	-0.2511541	0.625	0.837	1.63E-45
HHIPL1	1.77E-65	-0.2513637	0.138	0.297	6.77E-61
KCNQ5	2.37E-32	-0.2515719	0.136	0.244	9.07E-28
AC013287.1	1.44E-26	-0.2517186	0.043	0.103	5.51E-22
AKAP7	4.30E-71	-0.251969	0.251	0.455	1.65E-66
AC008957.2	5.83E-72	-0.2520294	0.149	0.325	2.23E-67
ARHGEF12	3.18E-47	-0.2522453	0.591	0.786	1.22E-42
LINC01266	9.84E-32	-0.2530456	0.154	0.261	3.76E-27
TTN-AS1	3.16E-49	-0.2535456	0.263	0.428	1.21E-44
SLC30A10	7.64E-50	-0.2536496	0.127	0.256	2.92E-45
HES4	7.11E-55	-0.2543173	0.074	0.188	2.72E-50
DISP3	4.92E-72	-0.2544765	0.066	0.203	1.88E-67
CA12	5.16E-44	-0.2546253	0.055	0.146	1.97E-39
SNCAIP	2.56E-54	-0.2551298	0.18	0.336	9.78E-50
LSM6	6.51E-76	-0.2551636	0.086	0.235	2.49E-71
CPNE8	6.31E-30	-0.2554629	0.345	0.481	2.41E-25
TENM3	1.19E-36	-0.2555321	0.118	0.225	4.55E-32
MYOM1	1.31E-55	-0.2557296	0.187	0.344	5.02E-51
ENTPD1-AS1	4.38E-62	-0.2561258	0.382	0.614	1.68E-57
NAALADL2	3.07E-60	-0.256808	0.474	0.713	1.17E-55
PPM1L	9.41E-56	-0.2571984	0.377	0.58	3.60E-51
LRRC8A	3.13E-80	-0.2574426	0.268	0.491	1.20E-75
RANBP17	2.15E-44	-0.2576628	0.06	0.155	8.23E-40
CACNB2	1.74E-48	-0.2581491	0.736	0.894	6.64E-44
SLITRK2	4.09E-68	-0.2583298	0.133	0.293	1.56E-63
LRRC37A3	2.29E-51	-0.2584962	0.155	0.293	8.75E-47
GLCCI1	6.25E-65	-0.2585906	0.217	0.403	2.39E-60

ARHGAP32	9.66E-70	-0.2589181	0.519	0.768	3.69E-65
NRXN3	1.79E-41	-0.2601376	0.323	0.507	6.83E-37
ANKAR	6.85E-66	-0.2601687	0.212	0.395	2.62E-61
ARFGEF3	4.21E-70	-0.2602721	0.19	0.375	1.61E-65
FKBP9	1.65E-73	-0.261098	0.091	0.238	6.31E-69
ARID1B	1.00E-57	-0.2613382	0.643	0.849	3.84E-53
R3HDM1	6.58E-71	-0.2617893	0.361	0.594	2.51E-66
AL590867.1	2.30E-67	-0.2626346	0.039	0.15	8.81E-63
SLC25A46	3.58E-72	-0.2628055	0.137	0.305	1.37E-67
LINC02427	1.34E-72	-0.2629724	0.075	0.214	5.13E-68
SLC6A11	4.36E-76	-0.2636417	0.346	0.576	1.67E-71
ZNF280D	2.79E-75	-0.2641783	0.401	0.656	1.07E-70
NR3C2	8.73E-69	-0.2643761	0.467	0.713	3.34E-64
ACOX1	7.81E-82	-0.2644997	0.121	0.295	2.99E-77
ENHO	1.04E-90	-0.2645799	0.158	0.361	3.96E-86
PPP2R2B	1.70E-40	-0.2648746	0.932	0.976	6.51E-36
MOXD1	6.96E-44	-0.2648766	0.115	0.233	2.66E-39
PDZD2	1.11E-53	-0.2651827	0.189	0.348	4.25E-49
GRM5	8.28E-28	-0.2654742	0.107	0.194	3.16E-23
SOX2	1.24E-73	-0.265885	0.354	0.593	4.75E-69
MAPK8	1.18E-68	-0.2659133	0.343	0.57	4.49E-64
AL513217.1	1.46E-68	-0.2662379	0.054	0.177	5.56E-64
POU2F1	2.72E-69	-0.266602	0.525	0.766	1.04E-64
GRIA4	3.93E-40	-0.2669037	0.147	0.269	1.50E-35
DLGAP2	7.64E-36	-0.26696	0.129	0.24	2.92E-31
ZC2HC1A	1.53E-68	-0.2673498	0.226	0.419	5.84E-64
MALRD1	2.28E-43	-0.2680444	0.108	0.219	8.73E-39
ASPH	2.36E-52	-0.2687583	0.635	0.853	9.00E-48
ARHGEF9	7.56E-73	-0.2688274	0.188	0.374	2.89E-68
EFR3B	1.61E-76	-0.2692834	0.384	0.628	6.17E-72
CYP4V2	3.61E-67	-0.2694369	0.21	0.397	1.38E-62
LHX2	2.05E-68	-0.2696088	0.279	0.484	7.85E-64
IL33	5.43E-72	-0.269804	0.106	0.261	2.07E-67
CASC2	7.05E-76	-0.2701186	0.201	0.4	2.70E-71
MAST4	1.18E-70	-0.271045	0.735	0.887	4.52E-66
RMST	1.03E-46	-0.2714243	0.163	0.299	3.95E-42
MRO	1.53E-60	-0.272035	0.092	0.221	5.85E-56
THSD7A	2.17E-70	-0.2720852	0.376	0.607	8.29E-66
EXT1	2.05E-71	-0.2723545	0.366	0.602	7.83E-67
MT1X	8.36E-51	-0.2731833	0.222	0.384	3.19E-46
AGBL4	3.84E-57	-0.2742682	0.462	0.687	1.47E-52
RBM26	1.38E-79	-0.2744144	0.429	0.686	5.28E-75
AL078602.1	6.32E-45	-0.2750275	0.154	0.288	2.42E-40
EPHA6	3.61E-48	-0.2755117	0.384	0.582	1.38E-43
NMD3	4.11E-84	-0.2755396	0.234	0.455	1.57E-79

AC013643.2	1.87E-68	-0.2755437	0.096	0.24	7.16E-64
FUT8	2.90E-68	-0.275721	0.487	0.744	1.11E-63
ETFDH	9.24E-78	-0.2759303	0.189	0.383	3.53E-73
LINC02060	1.35E-75	-0.2762838	0.104	0.262	5.16E-71
NEK7	5.92E-84	-0.2770409	0.257	0.482	2.26E-79
SLC26A3	8.09E-62	-0.277065	0.026	0.123	3.09E-57
NALCN	2.81E-80	-0.2771872	0.313	0.555	1.07E-75
PCCA	6.96E-78	-0.2773312	0.471	0.725	2.66E-73
CDH18	1.23E-33	-0.2774812	0.084	0.174	4.72E-29
POU6F2	1.62E-54	-0.2776364	0.156	0.308	6.21E-50
PIK3IP1	1.64E-78	-0.2794585	0.096	0.253	6.28E-74
MED12L	5.38E-56	-0.2795114	0.645	0.852	2.06E-51
C11orf65	3.12E-66	-0.2798472	0.074	0.205	1.19E-61
TBC1D4	1.21E-54	-0.2800465	0.077	0.194	4.62E-50
STK33	2.76E-80	-0.2800969	0.406	0.667	1.05E-75
PTPRM	1.03E-80	-0.2801642	0.461	0.724	3.96E-76
ATP2C1	1.62E-87	-0.280211	0.339	0.591	6.21E-83
TUBB2A	1.45E-70	-0.2803803	0.091	0.237	5.54E-66
CDK14	3.78E-89	-0.2806887	0.349	0.611	1.44E-84
SOBP	1.17E-79	-0.2809344	0.388	0.637	4.49E-75
GOPC	6.76E-64	-0.2817461	0.157	0.319	2.58E-59
AC079352.1	4.45E-37	-0.2817702	0.191	0.319	1.70E-32
ATL2	7.86E-89	-0.2818558	0.218	0.436	3.01E-84
LCNL1	2.90E-71	-0.2820887	0.293	0.507	1.11E-66
NNT	4.63E-76	-0.2823955	0.203	0.399	1.77E-71
ST6GALNAC5	9.27E-40	-0.2828913	0.137	0.255	3.54E-35
NUP58	3.63E-94	-0.2837807	0.153	0.357	1.39E-89
ROBO3	4.89E-65	-0.2838436	0.16	0.322	1.87E-60
UFL1	2.94E-75	-0.2838743	0.16	0.34	1.12E-70
FOXG1	1.06E-78	-0.2842394	0.19	0.39	4.06E-74
PPM1K	3.57E-70	-0.2850722	0.305	0.52	1.36E-65
PHKA1	1.65E-86	-0.28558	0.181	0.383	6.32E-82
AC107223.1	2.91E-50	-0.286024	0.087	0.202	1.11E-45
BIRC6	3.68E-81	-0.2862198	0.528	0.78	1.41E-76
AIG1	6.29E-87	-0.2862641	0.33	0.581	2.41E-82
CHRM3	9.72E-32	-0.2863941	0.083	0.169	3.71E-27
WRN	1.93E-87	-0.2864493	0.263	0.492	7.39E-83
KCTD16	5.53E-43	-0.287841	0.126	0.246	2.11E-38
CAMSAP2	1.42E-62	-0.2882167	0.396	0.601	5.43E-58
SLF2	2.67E-88	-0.2885643	0.209	0.424	1.02E-83
SLC25A36	1.22E-93	-0.2901004	0.225	0.454	4.67E-89
OLFM1	2.92E-79	-0.2902794	0.08	0.232	1.11E-74
MMP28	4.81E-80	-0.2903002	0.163	0.35	1.84E-75
MBD5	5.82E-71	-0.2903402	0.61	0.843	2.22E-66
PTPRZ1	1.06E-22	-0.2904596	0.769	0.897	4.06E-18

DACH1	1.13E-37	-0.2918154	0.077	0.168	4.32E-33
PDE3B	3.58E-58	-0.2922173	0.367	0.573	1.37E-53
VEGFA	1.44E-63	-0.2929138	0.178	0.348	5.52E-59
PIGN	1.81E-75	-0.292933	0.199	0.392	6.93E-71
SLC25A48	2.81E-73	-0.2930655	0.239	0.443	1.07E-68
AUTS2	1.18E-65	-0.2932812	0.77	0.925	4.51E-61
AC011287.1	1.52E-31	-0.2941271	0.045	0.113	5.82E-27
GRINA	7.67E-91	-0.2947875	0.162	0.366	2.93E-86
PIP5K1B	2.50E-66	-0.2953001	0.078	0.211	9.57E-62
MAP2K5	3.67E-87	-0.2960291	0.378	0.635	1.40E-82
EYA1	1.62E-74	-0.2961163	0.306	0.528	6.20E-70
SLC35C2	2.13E-92	-0.2964605	0.123	0.31	8.16E-88
RAP2C-AS1	7.50E-64	-0.2966873	0.083	0.215	2.87E-59
CCDC102B	6.15E-60	-0.2969242	0.096	0.227	2.35E-55
CCDC7	7.96E-72	-0.2974318	0.289	0.496	3.04E-67
SETBP1	6.55E-69	-0.2998961	0.197	0.38	2.50E-64
GABRG1	8.58E-76	-0.2999076	0.262	0.477	3.28E-71
CAPZA1	1.47E-89	-0.3008246	0.256	0.477	5.63E-85
SRGAP3	7.46E-76	-0.3016879	0.51	0.77	2.85E-71
FBXL7	3.17E-53	-0.3026315	0.821	0.924	1.21E-48
PDE7B	1.00E-74	-0.3026467	0.529	0.77	3.83E-70
HES1	1.66E-71	-0.3027627	0.132	0.299	6.33E-67
DMXL2	3.62E-93	-0.3031276	0.212	0.437	1.38E-88
PRDM5	1.90E-76	-0.3034007	0.171	0.355	7.27E-72
XKR6	5.69E-82	-0.3041773	0.293	0.524	2.17E-77
AP001528.1	8.64E-84	-0.3041965	0.067	0.216	3.30E-79
STON2	3.52E-69	-0.3044469	0.582	0.809	1.34E-64
DNM1L	3.24E-100	-0.3045863	0.24	0.481	1.24E-95
TRPM3	1.03E-56	-0.3046329	0.719	0.867	3.93E-52
ALDOC	8.30E-74	-0.305051	0.197	0.386	3.17E-69
DMD	2.36E-62	-0.3055792	0.403	0.621	9.01E-58
HDAC8	2.79E-72	-0.3057719	0.37	0.599	1.07E-67
TMEM164	4.12E-53	-0.3062365	0.349	0.538	1.57E-48
BAALC-AS1	1.08E-17	-0.3064479	0.199	0.283	4.14E-13
TEX9	2.63E-57	-0.3080472	0.134	0.277	1.01E-52
PLCB1	1.90E-68	-0.3085703	0.694	0.884	7.27E-64
GOLGA8A	2.82E-79	-0.3093172	0.173	0.364	1.08E-74
AC113414.1	6.60E-64	-0.309777	0.159	0.322	2.52E-59
BABAM2	3.82E-92	-0.3104389	0.404	0.671	1.46E-87
AL356599.1	1.33E-79	-0.3105678	0.149	0.33	5.10E-75
RBMS3	1.51E-35	-0.3108897	0.694	0.81	5.77E-31
SCML1	8.81E-99	-0.3109171	0.154	0.364	3.37E-94
CLYBL	1.29E-86	-0.3111161	0.257	0.484	4.92E-82
CECR2	4.51E-86	-0.3116077	0.317	0.558	1.72E-81
LINC00499	1.87E-88	-0.3119547	0.539	0.809	7.15E-84

CRY2	3.76E-115	-0.3120107	0.216	0.467	1.44E-110
AC021231.1	6.04E-81	-0.3123562	0.166	0.357	2.31E-76
MID1	5.20E-85	-0.3130373	0.261	0.486	1.99E-80
RAPGEF3	2.86E-79	-0.3134565	0.347	0.587	1.09E-74
AC016831.7	1.54E-55	-0.3140542	0.344	0.537	5.88E-51
FAM85B	1.45E-68	-0.3152505	0.054	0.174	5.54E-64
SOX9	1.53E-98	-0.3158355	0.322	0.575	5.84E-94
ASAP2	4.12E-82	-0.3159907	0.442	0.69	1.57E-77
SCFD2	3.51E-95	-0.3160743	0.198	0.422	1.34E-90
GNAQ	1.37E-70	-0.3165393	0.717	0.881	5.24E-66
PHACTR1	5.60E-76	-0.3168035	0.454	0.707	2.14E-71
NRP1	1.52E-77	-0.317015	0.304	0.529	5.80E-73
F11-AS1	2.36E-89	-0.3171563	0.357	0.619	9.02E-85
PMP22	1.04E-90	-0.3172951	0.287	0.522	3.97E-86
MLLT3	1.28E-78	-0.3174517	0.371	0.609	4.90E-74
SRPX2	1.52E-83	-0.3174791	0.034	0.16	5.82E-79
LINGO1	3.17E-57	-0.3179261	0.039	0.137	1.21E-52
CHL1	1.95E-81	-0.3189414	0.469	0.726	7.44E-77
SYT1	1.04E-36	-0.3190845	0.28	0.432	3.96E-32
ZRANB3	1.32E-82	-0.3194835	0.142	0.325	5.03E-78
SMARCA2	8.24E-83	-0.3195757	0.504	0.763	3.15E-78
LRRC49	4.14E-82	-0.3213284	0.162	0.351	1.58E-77
ZNF98	1.36E-42	-0.3214847	0.538	0.714	5.20E-38
RNF182	3.04E-86	-0.3224045	0.186	0.392	1.16E-81
LINC02062	5.85E-87	-0.3229673	0.261	0.488	2.23E-82
FGGY	7.74E-89	-0.3233841	0.332	0.577	2.96E-84
ATP1A2	1.79E-61	-0.3250825	0.668	0.895	6.86E-57
TTYH3	9.42E-86	-0.3257615	0.167	0.362	3.60E-81
CDC42BPA	7.47E-75	-0.3268244	0.585	0.824	2.85E-70
EIF3E	4.75E-81	-0.3274043	0.29	0.517	1.82E-76
SEMA4A	8.48E-73	-0.3282171	0.065	0.198	3.24E-68
BBS2	4.89E-91	-0.3286167	0.394	0.665	1.87E-86
LINC02328	2.04E-68	-0.3291839	0.137	0.297	7.78E-64
SFPQ	3.03E-89	-0.3293241	0.413	0.67	1.16E-84
RABGAP1	8.90E-92	-0.3295908	0.397	0.657	3.40E-87
MTF2	9.87E-97	-0.3312201	0.157	0.363	3.77E-92
CLASP2	1.34E-82	-0.3321018	0.551	0.811	5.10E-78
EFNA5	3.60E-87	-0.3324891	0.42	0.685	1.38E-82
HS3ST5	4.50E-62	-0.3326647	0.188	0.354	1.72E-57
USP24	7.55E-100	-0.332677	0.34	0.599	2.88E-95
BMP2K	2.28E-88	-0.3329654	0.491	0.747	8.71E-84
ABCD2	1.04E-73	-0.3330605	0.16	0.337	3.96E-69
AC007402.1	3.19E-49	-0.3351824	0.063	0.165	1.22E-44
RHBDL3	9.51E-67	-0.3355094	0.093	0.232	3.63E-62
DLG2	4.54E-66	-0.3361489	0.78	0.932	1.74E-61

TXNIP	5.82E-83	-0.3365379	0.153	0.343	2.23E-78
ANO5	1.58E-72	-0.3365858	0.26	0.458	6.03E-68
ID2	2.17E-84	-0.3367919	0.21	0.421	8.31E-80
RGS7	7.43E-64	-0.3374516	0.368	0.584	2.84E-59
PLEKHO1	2.06E-85	-0.3377906	0.14	0.325	7.87E-81
ABLIM3	4.13E-81	-0.3384062	0.081	0.233	1.58E-76
DDHD1	3.70E-90	-0.3387226	0.208	0.424	1.42E-85
LINC01184	2.35E-94	-0.3390399	0.225	0.458	9.00E-90
FAM198B-AS1	1.07E-78	-0.3403949	0.252	0.467	4.11E-74
SLC24A3	1.87E-69	-0.3414113	0.291	0.495	7.15E-65
ATRNL1	6.74E-43	-0.341874	0.149	0.278	2.57E-38
GTDC1	2.92E-89	-0.3419337	0.254	0.486	1.11E-84
MEF2C	2.86E-76	-0.3427878	0.315	0.539	1.09E-71
CADM2	2.75E-114	-0.3445182	0.858	0.97	1.05E-109
AC007389.1	3.66E-59	-0.3451199	0.337	0.523	1.40E-54
AGL	1.15E-83	-0.3451394	0.184	0.378	4.40E-79
CLDN10	1.11E-89	-0.3458523	0.28	0.512	4.23E-85
METTL15	2.36E-91	-0.3463386	0.372	0.626	9.01E-87
TMTC2	4.78E-32	-0.3471111	0.627	0.789	1.83E-27
GPD2	1.15E-89	-0.3484763	0.394	0.648	4.38E-85
TIMP3	3.28E-115	-0.3494693	0.285	0.559	1.25E-110
DDIT4	1.01E-54	-0.3495876	0.163	0.309	3.87E-50
RBFOX1	8.53E-23	-0.3498148	0.444	0.604	3.26E-18
WDPCP	1.55E-97	-0.3499294	0.323	0.58	5.93E-93
AFF3	3.80E-63	-0.3501931	0.1	0.239	1.45E-58
ADGRL3	6.27E-91	-0.3514446	0.813	0.942	2.40E-86
SLC35F1	1.68E-81	-0.3532969	0.531	0.782	6.43E-77
PLAGL1	1.36E-84	-0.3536426	0.061	0.205	5.20E-80
FBXL17	1.44E-89	-0.3542182	0.517	0.792	5.51E-85
ELOVL2	5.24E-106	-0.3543968	0.236	0.479	2.00E-101
DECR1	7.66E-98	-0.3560609	0.236	0.47	2.93E-93
AL359232.1	1.91E-68	-0.3560924	0.067	0.196	7.29E-64
PTCH1	2.96E-70	-0.3564589	0.215	0.398	1.13E-65
WARS	1.08E-53	-0.3572884	0.084	0.204	4.13E-49
CYP7B1	2.21E-88	-0.3579746	0.179	0.384	8.44E-84
MAGI2	2.01E-98	-0.3590534	0.869	0.963	7.69E-94
GJB6	1.52E-80	-0.3596883	0.137	0.312	5.80E-76
GPC1	1.60E-98	-0.3601507	0.182	0.399	6.13E-94
LSAMP	2.45E-177	-0.3602733	0.98	0.993	9.35E-173
CYP46A1	1.63E-105	-0.3612535	0.171	0.392	6.22E-101
CHRD1	2.19E-90	-0.3619007	0.112	0.29	8.36E-86
PHLPP1	2.03E-86	-0.3622632	0.604	0.846	7.75E-82
TRPC1	2.54E-110	-0.3623696	0.271	0.524	9.72E-106
AC105383.1	6.32E-85	-0.3643886	0.153	0.339	2.42E-80
PKN2-AS1	6.92E-65	-0.3645229	0.091	0.226	2.65E-60

NRBP2	3.65E-108	-0.3648652	0.301	0.568	1.39E-103
GFRA1	2.79E-38	-0.3666003	0.123	0.231	1.07E-33
AC025159.1	2.42E-62	-0.3668322	0.172	0.336	9.23E-58
TMEM108	8.89E-83	-0.3675455	0.379	0.628	3.40E-78
C4orf19	2.46E-91	-0.3677995	0.258	0.485	9.41E-87
AC087482.1	2.47E-97	-0.3680681	0.087	0.263	9.44E-93
AC073050.1	1.61E-73	-0.3694519	0.548	0.792	6.17E-69
MYO10	1.07E-98	-0.3704594	0.371	0.643	4.08E-94
LINGO2	4.08E-49	-0.3712269	0.067	0.173	1.56E-44
EPM2A	2.88E-81	-0.3714235	0.186	0.379	1.10E-76
AF123462.1	3.99E-109	-0.3721997	0.019	0.159	1.53E-104
ADGRG1	8.75E-97	-0.3729715	0.372	0.631	3.35E-92
CXCL14	2.77E-90	-0.3743697	0.149	0.342	1.06E-85
ITFG1	1.35E-106	-0.3746441	0.424	0.705	5.14E-102
AC073475.1	7.67E-59	-0.3749834	0.355	0.538	2.93E-54
AC115622.1	1.11E-69	-0.3756842	0.121	0.275	4.25E-65
LGI1	1.19E-90	-0.3769604	0.444	0.703	4.55E-86
SESN3	9.61E-112	-0.377566	0.282	0.551	3.67E-107
RAB11FIP2	3.65E-109	-0.3797962	0.284	0.543	1.39E-104
NAV3	1.06E-95	-0.3808947	0.785	0.951	4.04E-91
SLC13A5	1.75E-106	-0.3812037	0.077	0.256	6.70E-102
BDNF-AS	1.18E-94	-0.3813291	0.186	0.397	4.51E-90
CNTNAP3B	9.32E-104	-0.381716	0.291	0.548	3.56E-99
ATP13A4	6.86E-94	-0.3824677	0.558	0.834	2.62E-89
UBAC2	4.49E-75	-0.3824931	0.305	0.506	1.71E-70
FAT3	5.42E-96	-0.3831245	0.419	0.686	2.07E-91
FAM182B	2.16E-33	-0.3832719	0.169	0.272	8.25E-29
ZFP36L2	1.25E-85	-0.3833331	0.211	0.42	4.78E-81
KLF12	1.36E-93	-0.3839522	0.377	0.635	5.20E-89
GJA1	8.70E-96	-0.3840643	0.556	0.809	3.33E-91
ERC2	1.18E-61	-0.3846725	0.139	0.292	4.53E-57
APCDD1	2.94E-96	-0.3848668	0.292	0.537	1.12E-91
FGF14	2.44E-62	-0.3849236	0.242	0.433	9.34E-58
GRID2	7.71E-26	-0.3851912	0.133	0.226	2.95E-21
MCC	1.55E-95	-0.3858855	0.481	0.75	5.93E-91
CD38	9.64E-105	-0.3860103	0.096	0.286	3.69E-100
SGIP1	5.47E-96	-0.3864339	0.613	0.851	2.09E-91
NEGR1	9.31E-78	-0.3869044	0.291	0.511	3.56E-73
TMEM241	1.27E-99	-0.3871151	0.15	0.355	4.87E-95
DLC1	9.37E-97	-0.3873897	0.411	0.684	3.58E-92
CADM1	8.65E-96	-0.3891905	0.852	0.943	3.31E-91
HEPN1	6.16E-80	-0.3903766	0.199	0.395	2.35E-75
CDH12	2.45E-46	-0.3906968	0.069	0.171	9.38E-42
LGR4	4.93E-95	-0.3913406	0.449	0.696	1.88E-90
HEPACAM	5.26E-118	-0.3920849	0.454	0.749	2.01E-113

TSPOAP1	2.87E-97	-0.3928364	0.198	0.417	1.10E-92
LUC7L2	1.03E-91	-0.3940789	0.348	0.574	3.93E-87
NTRK2	7.93E-86	-0.3957492	0.835	0.95	3.03E-81
SHISA6	1.43E-53	-0.3976543	0.129	0.264	5.45E-49
CEP85L	5.89E-105	-0.3979466	0.441	0.714	2.25E-100
KLHL32	7.87E-105	-0.3986223	0.335	0.598	3.01E-100
AC138627.1	5.93E-98	-0.3992893	0.233	0.463	2.26E-93
CDHR3	1.35E-43	-0.4010631	0.526	0.705	5.16E-39
DZIP3	1.22E-106	-0.4014621	0.232	0.474	4.66E-102
BRINP3	2.25E-101	-0.4041008	0.353	0.616	8.58E-97
FAM66D	1.07E-120	-0.405346	0.092	0.295	4.10E-116
UNC5C	6.33E-72	-0.4055865	0.376	0.594	2.42E-67
AASS	1.38E-100	-0.4060727	0.324	0.565	5.27E-96
OSBPL6	1.38E-111	-0.4067202	0.421	0.698	5.29E-107
ZMAT1	3.09E-119	-0.4070294	0.352	0.643	1.18E-114
FAM189A2	1.74E-31	-0.4072884	0.576	0.741	6.66E-27
TMEM132B	1.02E-119	-0.4095625	0.352	0.646	3.91E-115
ITGAV	8.34E-84	-0.4118784	0.37	0.594	3.19E-79
GRIK2	2.71E-75	-0.4127455	0.212	0.414	1.04E-70
RAB34	8.25E-122	-0.4133348	0.121	0.339	3.15E-117
GMDS-DT	2.99E-107	-0.414079	0.435	0.717	1.14E-102
SUMF1	3.22E-108	-0.4142893	0.304	0.569	1.23E-103
ATP10B	1.21E-68	-0.4151169	0.185	0.359	4.63E-64
TPCN1	3.10E-87	-0.41542	0.403	0.654	1.19E-82
SLCO1C1	1.37E-110	-0.4171835	0.407	0.691	5.23E-106
STXBP6	7.79E-100	-0.4178917	0.264	0.507	2.98E-95
CCSER1	2.10E-58	-0.4190567	0.119	0.261	8.03E-54
AC053527.1	7.98E-102	-0.4209417	0	0.108	3.05E-97
PLPP3	4.57E-89	-0.4221844	0.574	0.803	1.75E-84
ROBO2	1.70E-49	-0.4231698	0.187	0.345	6.50E-45
DTNA	1.37E-67	-0.4293749	0.963	0.983	5.23E-63
AC079760.1	1.23E-104	-0.4329256	0.144	0.353	4.69E-100
TNS3	2.87E-116	-0.4338179	0.34	0.621	1.10E-111
PCNX2	3.20E-111	-0.4341975	0.203	0.441	1.23E-106
RHOJ	1.09E-118	-0.4359428	0.307	0.582	4.16E-114
FAM184A	2.35E-112	-0.4371815	0.479	0.757	8.98E-108
NLGN4X	4.14E-112	-0.4404584	0.303	0.568	1.58E-107
RFX3-AS1	3.15E-110	-0.4408096	0.328	0.599	1.20E-105
AC116366.3	2.11E-103	-0.4450484	0	0.109	8.08E-99
CSPG5	4.53E-93	-0.4450694	0.136	0.324	1.73E-88
NOL4	4.67E-92	-0.4457679	0.357	0.606	1.78E-87
NDRG2	7.50E-108	-0.4491169	0.529	0.797	2.87E-103
TENT2	1.37E-145	-0.4493061	0.324	0.62	5.25E-141
AIFM3	5.06E-110	-0.4498957	0.193	0.424	1.93E-105
ERBB4	1.55E-161	-0.4532846	0.858	0.968	5.93E-157

SEPT2	6.07E-109	-0.4560663	0	0.115	2.32E-104
NTM	1.51E-150	-0.4564284	0.93	0.982	5.78E-146
NPAS3	6.87E-194	-0.4567116	0.975	0.987	2.62E-189
EPB41L2	1.27E-136	-0.4593272	0.404	0.706	4.87E-132
CSMD1	3.84E-55	-0.459481	0.325	0.527	1.47E-50
GPAM	7.83E-147	-0.4606513	0.187	0.458	2.99E-142
ACSL6	2.47E-91	-0.4630271	0.369	0.594	9.43E-87
UNC79	2.93E-106	-0.4632806	0.247	0.487	1.12E-101
WDR17	1.04E-120	-0.4643336	0.288	0.555	3.96E-116
SHROOM3	3.50E-116	-0.4665145	0.483	0.766	1.34E-111
TMEM72-AS1	9.58E-131	-0.4680384	0.124	0.353	3.66E-126
LRRC4C	3.62E-117	-0.4698347	0.497	0.788	1.38E-112
SPATA6	2.15E-130	-0.4702162	0.331	0.619	8.22E-126
CAMK4	4.61E-101	-0.470624	0.101	0.284	1.76E-96
INTU	2.30E-119	-0.4706617	0.419	0.706	8.80E-115
FAM19A5	3.61E-106	-0.4713649	0	0.112	1.38E-101
ZFHX4	8.55E-128	-0.4713683	0.498	0.789	3.27E-123
CC2D2B	3.63E-103	-0.4714962	0.122	0.316	1.39E-98
MPPED2	5.29E-129	-0.473489	0.24	0.509	2.02E-124
CAMK2G	5.70E-86	-0.4737735	0.579	0.827	2.18E-81
PCDH7	1.32E-128	-0.4743959	0.44	0.74	5.03E-124
LINC02340	2.20E-146	-0.4745788	0.119	0.363	8.41E-142
ATP8A1	1.87E-126	-0.4752256	0.369	0.655	7.14E-122
HTRA1	1.11E-128	-0.4776909	0.325	0.617	4.23E-124
LINC01727	1.09E-101	-0.4790612	0.129	0.329	4.17E-97
STXBP5	4.53E-127	-0.4791695	0.519	0.805	1.73E-122
GARNL3	1.33E-121	-0.4794977	0.311	0.579	5.09E-117
AC068308.1	6.04E-66	-0.4813877	0.136	0.289	2.31E-61
ADAMTS17	2.24E-119	-0.4819178	0.347	0.627	8.58E-115
CDH10	1.07E-112	-0.4822942	0.262	0.512	4.09E-108
SEPT11	6.07E-109	-0.4824304	0	0.115	2.32E-104
AGT	2.50E-145	-0.4825412	0.313	0.61	9.55E-141
FAM213A	1.02E-114	-0.4826743	0	0.121	3.89E-110
UNC80	1.47E-123	-0.4855246	0.129	0.352	5.63E-119
GOLGA8B	1.13E-144	-0.4890656	0.165	0.424	4.30E-140
C2orf72	8.11E-130	-0.4905505	0.296	0.581	3.10E-125
RORB	1.16E-132	-0.4907803	0.448	0.747	4.42E-128
COL5A3	3.24E-90	-0.4913134	0.534	0.801	1.24E-85
BSG	2.65E-140	-0.492639	0.284	0.569	1.01E-135
CKB	1.07E-115	-0.4945095	0.533	0.83	4.11E-111
HPSE2	1.88E-116	-0.4962178	0.438	0.726	7.18E-112
LRRC3B	9.22E-89	-0.496692	0.414	0.648	3.53E-84
ADGRB3	7.74E-162	-0.4973693	0.835	0.969	2.96E-157
ME1	5.33E-131	-0.4993372	0.253	0.523	2.04E-126
SFXN5	9.55E-95	-0.5066445	0.693	0.887	3.65E-90

LINC00982	3.70E-107	-0.5080073	0	0.113	1.41E-102
GNA14	4.00E-98	-0.5103634	0.609	0.817	1.53E-93
ZNF518A	1.56E-149	-0.5129117	0.363	0.669	5.95E-145
LMO3	4.03E-130	-0.5173883	0.376	0.68	1.54E-125
LINC01376	4.25E-135	-0.5174322	0.161	0.408	1.63E-130
EDNRB	1.10E-143	-0.5182668	0.162	0.419	4.21E-139
HSD17B12	4.59E-134	-0.5192748	0.136	0.372	1.76E-129
ADGRB1	2.67E-129	-0.5212796	0.144	0.38	1.02E-124
CD47	4.70E-174	-0.5213099	0.258	0.575	1.80E-169
VAV3	1.20E-133	-0.522638	0.324	0.615	4.58E-129
NDRG4	1.56E-203	-0.5227654	0.125	0.431	5.96E-199
AC098829.1	1.84E-95	-0.5261741	0.197	0.411	7.05E-91
DHFR	1.21E-67	-0.5296256	0.046	0.16	4.62E-63
SMURF2	7.84E-121	-0.5320576	0.322	0.584	3.00E-116
TARBP1	2.76E-163	-0.5347868	0.187	0.474	1.06E-158
MCF2L2	4.68E-141	-0.5382386	0.143	0.391	1.79E-136
AC104596.1	4.13E-141	-0.5412223	0.318	0.609	1.58E-136
BCAN	3.80E-140	-0.5439869	0.22	0.49	1.45E-135
GLI3	2.94E-150	-0.546329	0.469	0.778	1.12E-145
TSPAN7	3.15E-132	-0.546932	0.362	0.639	1.20E-127
AC097103.2	1.60E-118	-0.5493931	0	0.125	6.10E-114
EPHB1	2.49E-155	-0.5497439	0.418	0.73	9.50E-151
DPH6	8.91E-152	-0.5512669	0.297	0.6	3.40E-147
PPP1R3C	2.35E-133	-0.553224	0.145	0.393	8.99E-129
TTYH1	1.14E-148	-0.5534218	0.489	0.801	4.35E-144
ITPR2	3.45E-122	-0.5549245	0.75	0.922	1.32E-117
PDE4D	4.85E-123	-0.5589224	0.674	0.877	1.85E-118
DCHS2	4.06E-130	-0.5620565	0.162	0.405	1.55E-125
PTN	3.36E-167	-0.563065	0.422	0.741	1.28E-162
GPHN	1.85E-161	-0.5635857	0.649	0.894	7.08E-157
RALGAPA2	2.70E-116	-0.5664895	0.501	0.752	1.03E-111
ADGRV1	3.31E-226	-0.5685505	0.912	0.979	1.26E-221
C9orf3	3.95E-120	-0.5718551	0	0.126	1.51E-115
GRIN2C	3.88E-167	-0.5741874	0.306	0.621	1.48E-162
SLC6A1	1.69E-178	-0.5751739	0.426	0.758	6.46E-174
FREM2	2.44E-148	-0.5753701	0.123	0.368	9.31E-144
FRMD4A	1.16E-135	-0.5803795	0.39	0.688	4.44E-131
KCNQ3	2.53E-113	-0.5825202	0.287	0.543	9.69E-109
SPARCL1	2.28E-163	-0.5831416	0.769	0.95	8.72E-159
SLC1A4	9.74E-190	-0.5843625	0.235	0.562	3.72E-185
OBI1-AS1	1.88E-77	-0.5851815	0.6	0.715	7.19E-73
BRINP2	2.10E-168	-0.5887169	0.24	0.542	8.02E-164
DIO2	8.13E-176	-0.5901209	0.104	0.367	3.11E-171
TUBB2B	1.48E-139	-0.590453	0.248	0.522	5.64E-135
TNIK	6.22E-189	-0.5935876	0.851	0.961	2.38E-184

GLUL	1.01E-159	-0.5947685	0.623	0.864	3.88E-155
SERPINE2	1.59E-166	-0.5953578	0.418	0.731	6.08E-162
SPON1	8.63E-161	-0.597063	0.459	0.782	3.30E-156
PTPRG	8.45E-177	-0.5972845	0.555	0.848	3.23E-172
LRRTM4	1.41E-85	-0.6031759	0.276	0.503	5.40E-81
SGCD	1.30E-168	-0.6040821	0.523	0.822	4.96E-164
SCG3	2.39E-165	-0.6081567	0.228	0.528	9.14E-161
GPM6A	5.79E-255	-0.6287943	0.924	0.986	2.21E-250
MFG8	3.16E-152	-0.6335236	0.196	0.462	1.21E-147
GPR37L1	3.21E-184	-0.6403964	0.288	0.614	1.23E-179
OAF	2.04E-180	-0.6489034	0.253	0.568	7.79E-176
GRIA2	5.83E-184	-0.6499275	0.435	0.775	2.23E-179
MGAT4C	7.49E-177	-0.6501826	0.503	0.83	2.86E-172
ENOX1	2.01E-173	-0.6516545	0.309	0.631	7.68E-169
LINC00854	9.97E-120	-0.6530798	0	0.126	3.81E-115
FAM155A	1.20E-199	-0.6543306	0.709	0.93	4.60E-195
LINC02649	3.12E-49	-0.6557658	0.35	0.484	1.19E-44
MMD2	1.13E-156	-0.6717202	0.344	0.656	4.34E-152
AC125613.1	2.03E-168	-0.6729254	0.162	0.439	7.75E-164
MUC20-OT1	2.13E-138	-0.680351	0	0.144	8.15E-134
ENTPD1	2.62E-193	-0.6816033	0.164	0.464	1.00E-188
RERG	2.35E-161	-0.6848069	0.145	0.417	8.97E-157
GABRB1	4.06E-199	-0.690133	0.694	0.915	1.55E-194
AL589740.1	5.46E-182	-0.6907625	0.618	0.883	2.09E-177
SPRED1	3.14E-188	-0.7055311	0.352	0.666	1.20E-183
ETNPPL	1.86E-172	-0.7090756	0.391	0.701	7.11E-168
NCAN	2.74E-194	-0.7145746	0.37	0.711	1.05E-189
AC091826.2	9.63E-212	-0.7162662	0.273	0.633	3.68E-207
LINC00461	1.68E-209	-0.7168836	0.511	0.838	6.42E-205
CIRBP	7.51E-245	-0.7233	0.333	0.714	2.87E-240
FGFR3	4.73E-225	-0.7304478	0.454	0.824	1.81E-220
NRXN1	6.92E-303	-0.7308196	0.833	0.979	2.64E-298
ARHGAP24	7.54E-198	-0.7368571	0.457	0.788	2.88E-193
SEPT7	5.17E-146	-0.7371885	0	0.152	1.98E-141
DNAH7	1.30E-141	-0.7403738	0.393	0.677	4.97E-137
GABRA2	5.73E-198	-0.7517073	0.436	0.755	2.19E-193
APOE	1.98E-168	-0.7610331	0.489	0.788	7.56E-164
POT1-AS1	4.99E-129	-0.7640878	0.251	0.506	1.91E-124
ESRRG	7.87E-212	-0.7651959	0.409	0.756	3.01E-207
FAM19A1	1.49E-123	-0.7975301	0	0.13	5.70E-119
PAMR1	1.89E-220	-0.8005839	0.477	0.812	7.23E-216
C1orf61	1.50E-254	-0.8030192	0.546	0.876	5.72E-250
KCNIP4	4.43E-125	-0.8059806	0.392	0.691	1.69E-120
GLUD1	3.68E-242	-0.8079904	0.486	0.815	1.41E-237
GPC5	0	-0.8084221	0.83	0.973	0

PREX2	8.81E-270	-0.8222854	0.676	0.905	3.37E-265
F3	7.08E-150	-0.8227284	0.407	0.696	2.71E-145
GPR75-ASB3	4.41E-148	-0.850783	0	0.154	1.69E-143
PIK3C2A	6.04E-275	-0.8638603	0.353	0.728	2.31E-270
ACSS1	1.82E-212	-0.876386	0.465	0.795	6.94E-208
HES5	5.83E-163	-0.8927146	0.032	0.232	2.23E-158
NKAIN3	1.10E-279	-0.8958941	0.614	0.91	4.21E-275
SLC1A2	0	-0.901881	0.899	0.979	0
SLC4A4	0	-0.9452928	0.632	0.923	0
CABLES1	5.39E-244	-0.9469279	0.479	0.811	2.06E-239
SLC1A3	0	-0.9528921	0.908	0.976	0
FTH1	3.41E-67	-0.987561	0.485	0.678	1.30E-62
ATP1B2	2.82E-291	-1.0236134	0.494	0.818	1.08E-286
MTSS1L	3.10E-169	-1.0619349	0	0.174	1.18E-164
AC002429.2	5.87E-266	-1.095861	0.284	0.668	2.24E-261
ALDH1A1	4.22E-274	-1.1983024	0.191	0.555	1.61E-269
FP236383.1	2.60E-180	-1.1985122	0	0.184	9.94E-176
WIF1	0	-1.3030214	0.113	0.503	0
GRM3	0	-1.3603965	0.329	0.747	0
FP671120.1	7.27E-191	-1.4022333	0	0.194	2.78E-186
AC105402.3	6.47E-157	-1.4619641	0.012	0.189	2.47E-152
RNF219-AS1	2.46E-194	-2.5272325	0	0.197	9.39E-190

Microglial DEGs

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
MT-ND3	1.30E-220	1.66190287	0.752	0.492	4.97E-216
DPYD	0	1.65876038	0.715	0.32	0
HSP90AA1	1.69E-114	1.62073811	0.537	0.298	6.46E-110
HSPH1	1.84E-86	1.61604756	0.315	0.126	7.05E-82
PTPRG	1.49E-76	1.60382729	0.304	0.136	5.70E-72
ACSL1	1.62E-252	1.5112087	0.66	0.292	6.19E-248
AC131944.1	9.39E-92	1.49914741	0.311	0.124	3.59E-87
SPP1	1.92E-108	1.37563653	0.735	0.588	7.34E-104
MT-ATP6	5.08E-139	1.2829792	0.704	0.487	1.94E-134
TPRG1	3.54E-110	1.28219344	0.245	0.052	1.35E-105
MT-CYB	5.68E-145	1.27531378	0.608	0.344	2.17E-140
MT-CO2	3.81E-142	1.21841283	0.717	0.485	1.46E-137
CD163	8.90E-91	1.20116402	0.319	0.123	3.40E-86
MT-ND4	3.68E-107	1.12754252	0.655	0.453	1.41E-102
MYO1E	8.15E-107	1.12542203	0.475	0.246	3.11E-102
P4HA1	3.52E-89	1.10261167	0.465	0.257	1.34E-84
NHSL1	1.37E-47	1.0948398	0.44	0.31	5.23E-43
HSPD1	4.30E-37	1.09305965	0.225	0.115	1.64E-32
FMN1	4.33E-135	1.07566844	0.694	0.493	1.66E-130
HSPA5	5.03E-73	1.06521723	0.273	0.109	1.92E-68
MT-CO3	1.99E-103	1.05603546	0.65	0.444	7.61E-99
PLCG2	3.29E-36	1.05032821	0.751	0.636	1.26E-31
ZBTB16	2.22E-122	1.04824669	0.523	0.271	8.50E-118
STARD13	4.48E-83	1.04506406	0.45	0.254	1.71E-78
DNAJB1	9.12E-32	1.02083062	0.126	0.047	3.49E-27
APOE	3.30E-96	1.01206214	0.59	0.391	1.26E-91
HSPB1	1.19E-46	0.98123575	0.161	0.055	4.54E-42
MT-ND1	1.10E-88	0.97597583	0.501	0.29	4.21E-84
HSPE1	2.94E-41	0.93903308	0.157	0.057	1.12E-36
MTRNR2L12	4.35E-99	0.9206277	0.613	0.394	1.66E-94
FOXP1	1.56E-97	0.86664558	0.611	0.4	5.95E-93
MAFB	3.02E-67	0.86549252	0.234	0.085	1.15E-62
HSPA1A	1.15E-44	0.84649402	0.476	0.338	4.39E-40
MT-ND2	8.58E-67	0.81869069	0.499	0.315	3.28E-62
PVT1	1.79E-68	0.79842	0.284	0.119	6.84E-64
HSP90AB1	7.88E-63	0.78287068	0.366	0.194	3.01E-58
AL035446.2	9.95E-67	0.78258414	0.128	0.017	3.80E-62
CPM	3.79E-33	0.75854473	0.365	0.25	1.45E-28
HSP90B1	3.05E-42	0.75658098	0.346	0.218	1.17E-37
SCIN	9.17E-74	0.7507026	0.549	0.358	3.50E-69
DOCK5	5.07E-73	0.73338358	0.45	0.256	1.94E-68
IL15	2.23E-72	0.72949629	0.158	0.029	8.52E-68
CHORDC1	1.64E-50	0.72381659	0.219	0.092	6.27E-46

MS4A6A	2.84E-84	0.7198203	0.502	0.287	1.08E-79
AC007262.2	3.26E-43	0.71432176	0.277	0.148	1.25E-38
KCNMA1	3.11E-46	0.71338887	0.683	0.587	1.19E-41
NEAT1	1.77E-192	0.71093897	0.977	0.939	6.76E-188
SHOC1	1.01E-50	0.70845177	0.173	0.059	3.87E-46
IQGAP2	2.00E-50	0.70549818	0.176	0.06	7.65E-46
AP001977.1	1.61E-22	0.70502312	0.114	0.052	6.15E-18
VSIG4	1.49E-60	0.69708994	0.433	0.258	5.70E-56
DDIT4	5.18E-39	0.67210772	0.2	0.091	1.98E-34
CTSD	7.93E-56	0.67086076	0.303	0.148	3.03E-51
FNIP2	5.57E-38	0.67052275	0.497	0.371	2.13E-33
GK	7.08E-30	0.67021296	0.244	0.141	2.71E-25
FLT1	7.89E-75	0.66690483	0.203	0.053	3.02E-70
ZNF804A	6.33E-35	0.65741245	0.175	0.078	2.42E-30
UGCG	9.94E-32	0.65397744	0.376	0.255	3.80E-27
HSPA1B	3.97E-35	0.65161277	0.308	0.188	1.52E-30
FCGBP	2.22E-27	0.64610781	0.263	0.163	8.49E-23
HSPA8	1.66E-31	0.64586385	0.201	0.103	6.36E-27
PRKCE	7.29E-43	0.63926985	0.423	0.279	2.79E-38
BCL2A1	5.64E-40	0.63598128	0.125	0.038	2.16E-35
BST2	4.17E-58	0.63407911	0.203	0.071	1.59E-53
ABHD3	9.23E-45	0.63077948	0.329	0.189	3.53E-40
PTGES3	5.61E-40	0.61309224	0.323	0.189	2.14E-35
APOC1	4.19E-39	0.61173665	0.239	0.121	1.60E-34
DNAJB6	1.04E-33	0.60714489	0.369	0.242	3.97E-29
DNAJC3	1.85E-39	0.60537044	0.333	0.203	7.08E-35
FKBP5	3.70E-116	0.59420147	0.844	0.682	1.41E-111
SLC7A5	1.87E-30	0.58681267	0.176	0.085	7.15E-26
FRMD4B	6.00E-66	0.58468502	0.645	0.483	2.29E-61
MT-ND4L	3.99E-39	0.58361747	0.305	0.174	1.52E-34
FNDC3B	4.50E-47	0.58208166	0.55	0.404	1.72E-42
ANKRD22	3.24E-52	0.57778869	0.222	0.089	1.24E-47
CD14	7.25E-16	0.56623165	0.336	0.262	2.77E-11
DNAJA1	4.44E-42	0.56568538	0.186	0.076	1.70E-37
AC106865.2	3.24E-42	0.56529634	0.198	0.086	1.24E-37
ALCAM	2.50E-45	0.56496896	0.458	0.302	9.57E-41
GAS7	3.42E-42	0.56250693	0.377	0.234	1.31E-37
TBC1D8	5.84E-42	0.55841066	0.358	0.212	2.23E-37
DIRC3	1.07E-11	0.55480309	0.118	0.073	4.09E-07
CD81	2.80E-33	0.54573249	0.412	0.291	1.07E-28
PLXNC1	3.86E-40	0.53959186	0.14	0.047	1.48E-35
LINC02397	1.49E-29	0.53476879	0.12	0.046	5.69E-25
LITAF	3.46E-29	0.53361836	0.213	0.116	1.32E-24
NEK10	3.84E-19	0.52809707	0.168	0.099	1.47E-14
PGK1	1.12E-22	0.5272825	0.266	0.174	4.26E-18

HERPUD1	2.43E-24	0.52440803	0.336	0.235	9.31E-20
AL034397.3	1.05E-18	0.51858861	0.35	0.266	4.00E-14
HLA-DRA	1.05E-23	0.51238419	0.437	0.338	4.02E-19
CEBPB	4.77E-27	0.5095957	0.312	0.206	1.82E-22
SNAP23	2.46E-25	0.5081394	0.275	0.176	9.41E-21
TRPS1	2.64E-32	0.50583423	0.455	0.331	1.01E-27
RBM47	8.61E-49	0.50202861	0.73	0.626	3.29E-44
LNCAROD	1.86E-40	0.50185692	0.743	0.66	7.12E-36
STIP1	3.10E-30	0.49461094	0.142	0.06	1.18E-25
MT-CO1	1.29E-50	0.49392858	0.607	0.447	4.94E-46
SH3PXD2B	7.53E-36	0.49302131	0.192	0.088	2.88E-31
PPARG	9.71E-30	0.49283919	0.247	0.142	3.71E-25
NAMPT	3.62E-22	0.48875497	0.212	0.128	1.39E-17
ARID5B	4.25E-25	0.48852503	0.342	0.237	1.63E-20
SERPINA1	1.63E-36	0.48572088	0.157	0.063	6.25E-32
ELL2	3.35E-53	0.48551387	0.653	0.492	1.28E-48
CLEC2B	2.96E-29	0.47694424	0.103	0.035	1.13E-24
ATP1B3	2.72E-22	0.47198821	0.224	0.136	1.04E-17
IQGAP1	7.08E-42	0.47047816	0.237	0.112	2.71E-37
TLR5	1.46E-27	0.46746246	0.337	0.228	5.58E-23
MITF	1.80E-22	0.46475273	0.339	0.24	6.87E-18
MAT2A	5.02E-23	0.46456728	0.312	0.213	1.92E-18
FMNL2	1.69E-61	0.46339153	0.821	0.717	6.47E-57
ANAPC16	1.06E-31	0.46149103	0.331	0.209	4.06E-27
CALR	8.05E-23	0.46140948	0.219	0.134	3.08E-18
MGAT1	8.65E-20	0.45952999	0.281	0.192	3.31E-15
SDCBP	3.22E-18	0.45903087	0.257	0.175	1.23E-13
TANC2	1.31E-21	0.45781984	0.543	0.463	5.02E-17
PADI2	1.71E-18	0.45764987	0.465	0.371	6.55E-14
PDIA4	2.12E-33	0.45602542	0.13	0.048	8.10E-29
CALCOCO2	9.39E-31	0.45364676	0.184	0.09	3.59E-26
GNA13	1.10E-14	0.44947357	0.332	0.252	4.19E-10
LRRK2	3.93E-16	0.44840139	0.321	0.242	1.50E-11
IL1B	4.29E-10	0.44391953	0.104	0.063	1.64E-05
FCGR2A	4.04E-22	0.44338406	0.322	0.222	1.54E-17
MT-ND5	1.21E-26	0.44333322	0.286	0.179	4.61E-22
C1QC	2.10E-22	0.44151754	0.419	0.323	8.02E-18
AC011933.4	1.05E-22	0.43887275	0.15	0.077	4.02E-18
NRP1	1.13E-25	0.43705973	0.265	0.165	4.32E-21
RBPJ	3.28E-24	0.43694783	0.471	0.368	1.25E-19
HLA-DRB1	9.71E-22	0.43468283	0.398	0.303	3.71E-17
CASP1	2.34E-27	0.43083905	0.17	0.084	8.96E-23
IGF2R	2.79E-29	0.42780198	0.332	0.217	1.07E-24
CDKN1A	1.73E-11	0.42499512	0.182	0.127	6.62E-07
SH2D4A	5.23E-28	0.42407943	0.106	0.038	2.00E-23

MS4A4A	6.11E-36	0.42339944	0.191	0.086	2.34E-31
PLP1	8.27E-24	0.42208166	0.279	0.177	3.16E-19
SLC38A2	5.22E-25	0.42193322	0.297	0.195	1.99E-20
DUSP10	3.87E-28	0.41973377	0.131	0.054	1.48E-23
THRB	7.99E-11	0.41754263	0.173	0.122	3.05E-06
IFI30	4.09E-25	0.41686101	0.123	0.053	1.57E-20
SDF2L1	2.20E-38	0.41618459	0.104	0.026	8.43E-34
BCL6	3.93E-22	0.41581024	0.314	0.218	1.50E-17
STEAP3	6.48E-31	0.41493861	0.179	0.085	2.48E-26
SLC5A3	1.64E-29	0.41468151	0.133	0.054	6.26E-25
RANBP2	5.53E-12	0.41253375	0.342	0.271	2.12E-07
SLC17A9	2.13E-37	0.4111868	0.121	0.037	8.15E-33
SOD2	2.08E-18	0.41063438	0.211	0.133	7.94E-14
DSE	4.72E-24	0.41030961	0.377	0.27	1.80E-19
HSPA6	1.21E-21	0.40999994	0.116	0.053	4.63E-17
ZFP36	5.59E-15	0.40909651	0.247	0.177	2.14E-10
LINC01684	1.31E-27	0.4086234	0.294	0.183	4.99E-23
ARHGAP18	4.18E-25	0.4083524	0.298	0.193	1.60E-20
KCTD12	1.89E-23	0.40542522	0.34	0.238	7.21E-19
HMOX1	1.44E-11	0.40440573	0.141	0.09	5.51E-07
SNHG15	6.90E-30	0.40361113	0.117	0.043	2.64E-25
ZC3HAV1	1.82E-25	0.40337502	0.335	0.225	6.95E-21
HLA-B	1.78E-19	0.40291879	0.338	0.246	6.79E-15
ADGRE2	1.39E-24	0.39959677	0.224	0.13	5.30E-20
FAM107B	2.62E-16	0.39773493	0.149	0.087	1.00E-11
TOM1	2.21E-24	0.39241571	0.151	0.074	8.46E-20
SND1	7.35E-25	0.39136624	0.57	0.47	2.81E-20
SEM1	4.44E-18	0.39009209	0.19	0.117	1.70E-13
DAB2	2.34E-25	0.38428451	0.173	0.089	8.95E-21
B2M	7.41E-16	0.38336267	0.476	0.403	2.83E-11
CERNA2	1.09E-08	0.38329683	0.108	0.07	0.00041654
FAM53B	1.32E-22	0.38191678	0.408	0.3	5.05E-18
AP003086.1	6.26E-19	0.38172817	0.225	0.145	2.39E-14
CLEC5A	1.55E-24	0.37827477	0.1	0.038	5.93E-20
PDIA6	1.10E-19	0.37622719	0.19	0.114	4.19E-15
SPATS2L	1.23E-23	0.37592823	0.261	0.163	4.70E-19
ELOVL5	1.96E-12	0.36962961	0.246	0.179	7.51E-08
QDPR	1.13E-13	0.36913888	0.145	0.09	4.32E-09
KANSL1	2.36E-32	0.36905525	0.682	0.598	9.01E-28
RBM14	3.56E-16	0.3674579	0.176	0.109	1.36E-11
ERGIC1	3.96E-24	0.36661186	0.267	0.166	1.51E-19
MT-ATP8	4.23E-18	0.36646112	0.344	0.252	1.62E-13
ESR1	9.87E-20	0.36545757	0.134	0.068	3.77E-15
GPATCH2L	5.86E-20	0.36500802	0.387	0.29	2.24E-15
FBXL5	9.32E-22	0.36334096	0.291	0.196	3.56E-17

PRKY	9.33E-20	0.36312257	0.107	0.048	3.57E-15
NUFIP2	6.97E-21	0.36305465	0.418	0.317	2.67E-16
C1orf162	8.55E-25	0.36275866	0.208	0.118	3.27E-20
LAMP2	1.36E-11	0.36273776	0.238	0.178	5.19E-07
SIPA1L1	5.09E-21	0.36206223	0.549	0.448	1.94E-16
GPR65	4.47E-23	0.36123027	0.156	0.08	1.71E-18
FNDC3A	1.51E-18	0.3608946	0.469	0.381	5.78E-14
KCNJ2	9.83E-29	0.36049058	0.113	0.042	3.76E-24
MSN	9.03E-15	0.35977867	0.382	0.298	3.45E-10
ACER3	8.09E-20	0.3585734	0.479	0.39	3.09E-15
EPSTI1	3.06E-20	0.35745917	0.335	0.234	1.17E-15
MRPS6	1.21E-24	0.35443209	0.136	0.062	4.62E-20
HCLS1	1.90E-16	0.35399033	0.49	0.417	7.25E-12
SLA	8.40E-21	0.35239983	0.462	0.362	3.21E-16
FXR1	5.75E-17	0.35170472	0.287	0.203	2.20E-12
IVNS1ABP	9.62E-15	0.35121101	0.23	0.159	3.68E-10
ASCC3	8.55E-20	0.3507927	0.467	0.373	3.27E-15
PDGFC	3.78E-09	0.35010949	0.301	0.245	0.00014432
HSD17B4	7.88E-19	0.34904612	0.256	0.171	3.01E-14
RGS16	1.04E-10	0.34860607	0.103	0.061	3.97E-06
UBE2J1	1.07E-17	0.34814152	0.186	0.114	4.09E-13
MS4A7	8.83E-18	0.34727531	0.321	0.233	3.37E-13
MTHFS	1.62E-23	0.34709118	0.163	0.084	6.20E-19
DNAJB11	5.64E-22	0.34575101	0.123	0.057	2.16E-17
RAB27A	1.43E-19	0.34542904	0.164	0.093	5.46E-15
CD63	3.47E-16	0.34505757	0.23	0.156	1.33E-11
UBXN2B	5.30E-19	0.34300413	0.305	0.215	2.03E-14
E2F3	2.43E-18	0.34283995	0.352	0.259	9.29E-14
MBNL2	6.22E-18	0.34020398	0.469	0.38	2.38E-13
SESN1	2.73E-17	0.33484112	0.337	0.249	1.04E-12
MTFR1	3.31E-21	0.33483554	0.153	0.081	1.27E-16
MIR34AHG	4.83E-14	0.33316759	0.251	0.179	1.85E-09
DOCK1	6.10E-18	0.33133541	0.131	0.069	2.33E-13
CADM1	2.61E-08	0.3301041	0.206	0.158	0.00099659
MCL1	4.10E-12	0.32880192	0.166	0.11	1.57E-07
UBE2D3	1.92E-19	0.32777223	0.469	0.374	7.32E-15
UTRN	1.60E-10	0.32695771	0.455	0.397	6.10E-06
TMEM51	1.77E-14	0.32693225	0.257	0.183	6.76E-10
TNFSF13B	1.71E-19	0.32668786	0.199	0.119	6.53E-15
SELENOS	1.67E-26	0.32553356	0.118	0.047	6.39E-22
PAPOLG	8.35E-09	0.32469987	0.187	0.139	0.00031926
GAB1	1.10E-08	0.32451567	0.355	0.302	0.00042035
HP1BP3	2.49E-17	0.3244263	0.465	0.376	9.51E-13
TYMP	4.51E-18	0.32440331	0.256	0.171	1.72E-13
CHSY3	3.47E-14	0.32417703	0.388	0.306	1.33E-09

ASAP1	2.85E-15	0.32097613	0.426	0.341	1.09E-10
JUN	3.18E-09	0.32025268	0.106	0.067	0.00012171
LDHA	1.73E-14	0.31959764	0.126	0.072	6.63E-10
CD164	1.03E-18	0.31754285	0.224	0.144	3.94E-14
IER5L	5.50E-20	0.31677932	0.104	0.046	2.10E-15
GNS	3.29E-18	0.31659999	0.182	0.109	1.26E-13
SARAF	4.79E-16	0.31652528	0.288	0.208	1.83E-11
MCTP1	4.79E-10	0.31627523	0.167	0.117	1.83E-05
C1QA	6.32E-14	0.31563118	0.347	0.27	2.42E-09
LINC00623	4.43E-17	0.31514129	0.163	0.096	1.69E-12
CDK6	6.58E-21	0.31234837	0.466	0.364	2.52E-16
AC008957.2	3.17E-19	0.31134813	0.118	0.057	1.21E-14
PER1	1.05E-13	0.31029293	0.163	0.104	4.02E-09
FOXN2	8.31E-18	0.31011783	0.241	0.159	3.18E-13
USP15	2.94E-18	0.30939749	0.637	0.568	1.13E-13
SEC24D	6.03E-13	0.30890853	0.248	0.18	2.31E-08
PDIA3	3.32E-20	0.30772501	0.236	0.15	1.27E-15
RASSF4	7.12E-18	0.3075371	0.427	0.334	2.72E-13
TUBA1A	1.21E-13	0.30626061	0.147	0.09	4.63E-09
PIK3IP1	8.47E-14	0.30603778	0.146	0.09	3.24E-09
MYOF	3.34E-15	0.30581849	0.386	0.301	1.28E-10
LCP2	1.90E-20	0.30547387	0.439	0.331	7.28E-16
GTDC1	4.53E-14	0.30510453	0.43	0.35	1.73E-09
IDH1	2.58E-19	0.30463214	0.178	0.103	9.86E-15
CAB39	1.01E-19	0.30231919	0.54	0.447	3.88E-15
LAT2	2.89E-14	0.30190254	0.39	0.309	1.11E-09
MAFG	1.10E-20	0.30159365	0.177	0.099	4.19E-16
SNHG5	1.34E-09	0.30069547	0.174	0.124	5.12E-05
CPNE8	6.54E-22	0.30040165	0.101	0.041	2.50E-17
ARL17B	2.46E-24	0.29977652	0.187	0.098	9.42E-20
BNIP3L	3.87E-10	0.29674788	0.284	0.222	1.48E-05
ATP6V1B2	9.66E-13	0.29658722	0.309	0.233	3.69E-08
FPR1	3.47E-14	0.29549802	0.171	0.109	1.33E-09
VPS9D1	1.09E-19	0.29263947	0.126	0.063	4.18E-15
HIF1A	2.14E-10	0.29223175	0.466	0.393	8.17E-06
TSPO	4.46E-19	0.29145658	0.121	0.059	1.70E-14
CYTH1	1.36E-12	0.29109851	0.421	0.341	5.19E-08
MTHFD2	8.99E-16	0.29081218	0.177	0.11	3.44E-11
MBNL1	3.18E-20	0.29044073	0.806	0.77	1.22E-15
TMED8	9.89E-14	0.29026871	0.199	0.134	3.78E-09
ATG7	1.16E-14	0.29015588	0.623	0.559	4.42E-10
MFSD1	2.90E-10	0.28854294	0.325	0.261	1.11E-05
FLOT2	2.10E-15	0.28840561	0.201	0.131	8.02E-11
HLA-DPA1	2.27E-09	0.28731638	0.257	0.2	8.66E-05
TRAM1	2.33E-15	0.2869391	0.185	0.119	8.91E-11

AC015871.1	2.87E-15	0.28631835	0.123	0.068	1.10E-10
RASA1	1.56E-11	0.28623248	0.462	0.395	5.95E-07
LCP1	3.66E-13	0.28583813	0.298	0.223	1.40E-08
LAP3	1.41E-14	0.2839758	0.31	0.229	5.39E-10
FAM20C	3.22E-16	0.2837138	0.18	0.111	1.23E-11
CHCHD7	8.92E-13	0.28356454	0.171	0.113	3.41E-08
SPCS3	8.13E-14	0.28352815	0.202	0.137	3.11E-09
SEC31A	2.13E-12	0.28287814	0.307	0.235	8.13E-08
AC012150.1	8.20E-09	0.28220429	0.333	0.273	0.00031349
FCER1G	4.85E-14	0.2818887	0.161	0.102	1.85E-09
SKAP2	5.65E-20	0.28176436	0.635	0.554	2.16E-15
GLRX	6.45E-16	0.2811983	0.166	0.1	2.47E-11
SLC1A3	3.97E-65	0.28050649	0.953	0.897	1.52E-60
ZNF106	2.10E-11	0.28042044	0.34	0.271	8.01E-07
BCL2	1.31E-11	0.27970099	0.509	0.448	5.02E-07
BBX	2.43E-10	0.27967638	0.417	0.351	9.29E-06
TBC1D5	1.75E-17	0.27834115	0.727	0.687	6.69E-13
TRIM14	3.10E-15	0.27780153	0.193	0.124	1.18E-10
CCNH	1.12E-12	0.27769362	0.499	0.422	4.27E-08
COPA	7.65E-11	0.27748807	0.337	0.27	2.92E-06
SNHG25	7.62E-11	0.27637356	0.255	0.192	2.91E-06
EAF2	1.35E-18	0.27605577	0.181	0.106	5.16E-14
CKLF	3.52E-12	0.27491712	0.235	0.169	1.34E-07
CAPG	3.75E-14	0.27463874	0.101	0.053	1.43E-09
C1QB	5.66E-12	0.27444041	0.498	0.437	2.16E-07
BANP	2.71E-12	0.27296474	0.241	0.173	1.03E-07
SCARB2	2.80E-14	0.27294798	0.271	0.195	1.07E-09
IRAK3	1.40E-11	0.27283266	0.471	0.403	5.36E-07
TMEM50B	2.31E-13	0.2726746	0.154	0.097	8.84E-09
YWHAG	1.61E-13	0.27261002	0.226	0.157	6.16E-09
H3F3B	2.71E-09	0.27226061	0.225	0.17	0.0001035
DDX21	3.03E-12	0.27219406	0.208	0.146	1.16E-07
PHACTR2	4.65E-13	0.27153054	0.305	0.23	1.78E-08
RUFY3	2.27E-14	0.27116888	0.388	0.307	8.69E-10
LAIR1	9.81E-14	0.2693669	0.302	0.224	3.75E-09
TMEM39A	1.39E-14	0.26865185	0.137	0.08	5.33E-10
FNIP1	1.06E-12	0.26850241	0.422	0.343	4.04E-08
NOP58	1.43E-09	0.26839443	0.179	0.128	5.48E-05
SAP30	2.35E-20	0.2682361	0.111	0.05	8.98E-16
ZHX2	1.34E-09	0.26753503	0.238	0.182	5.13E-05
DISP1	4.77E-12	0.2657758	0.455	0.376	1.82E-07
MS4A14	2.75E-11	0.26536238	0.144	0.094	1.05E-06
KDM4B	1.45E-09	0.26477546	0.327	0.264	5.54E-05
THUMPD3-A'	2.63E-14	0.26455103	0.214	0.145	1.00E-09
DTNA	1.26E-13	0.264076	0.553	0.474	4.83E-09

TRIM27	3.86E-10	0.26381496	0.198	0.143	1.48E-05
TTYH3	1.26E-10	0.2630389	0.147	0.097	4.83E-06
FARP1	7.84E-14	0.26198815	0.27	0.193	3.00E-09
HERC4	7.48E-12	0.26158128	0.518	0.453	2.86E-07
KLF6	1.67E-14	0.26129677	0.321	0.238	6.37E-10
ST18	1.43E-11	0.26121162	0.168	0.11	5.47E-07
ATP6V0B	3.35E-12	0.260706	0.237	0.169	1.28E-07
PNPLA6	3.02E-11	0.26015462	0.174	0.118	1.16E-06
ABHD15-AS1	1.26E-09	0.26009648	0.179	0.128	4.81E-05
CHST15	1.11E-10	0.26007346	0.413	0.342	4.24E-06
LTA4H	7.07E-15	0.25997929	0.115	0.063	2.70E-10
PSME4	4.76E-09	0.25995883	0.39	0.326	0.00018199
CCR1	4.40E-20	0.25843904	0.15	0.079	1.68E-15
BAX	5.31E-14	0.2578501	0.144	0.086	2.03E-09
JARID2	4.42E-09	0.25775294	0.389	0.326	0.00016883
TF	4.43E-08	0.25699582	0.119	0.08	0.00169212
SNHG29	6.31E-13	0.25478404	0.134	0.081	2.41E-08
PLEKHF2	1.20E-14	0.25472912	0.103	0.053	4.58E-10
ARFGAP3	4.65E-12	0.25444538	0.171	0.113	1.78E-07
HLA-DQB1	6.44E-14	0.2535002	0.161	0.1	2.46E-09
PRKCB	5.66E-12	0.25327896	0.539	0.472	2.16E-07
FRMD3	1.62E-07	0.25285596	0.113	0.077	0.00621132
SLFN11	7.05E-14	0.25259261	0.13	0.076	2.69E-09
RASGRP3	7.40E-11	0.25162369	0.152	0.101	2.83E-06
RAB11A	7.66E-08	0.25062925	0.223	0.174	0.00292977
AL353138.1	1.32E-07	0.25041924	0.128	0.09	0.00503073
TMED10	8.67E-12	0.2503964	0.209	0.147	3.31E-07
MLEC	2.26E-12	0.25003673	0.171	0.113	8.63E-08
TPT1-AS1	2.72E-08	-0.2500508	0.154	0.198	0.0010401
GPM6A	2.13E-11	-0.2513313	0.209	0.275	8.15E-07
SDK1	4.01E-21	-0.2535295	0.489	0.59	1.53E-16
CLSTN1	1.77E-07	-0.2541635	0.161	0.202	0.0067702
CPLANE1	1.36E-07	-0.2563817	0.147	0.188	0.00520929
FMN2	5.47E-12	-0.2575812	0.061	0.104	2.09E-07
AC046134.2	8.45E-08	-0.2587201	0.093	0.13	0.00322842
C1orf112	1.71E-13	-0.2593414	0.076	0.125	6.52E-09
TPM1	2.27E-12	-0.2598012	0.072	0.117	8.67E-08
CLEC2D	1.87E-08	-0.2598137	0.207	0.253	0.00071449
DTNB	1.08E-11	-0.2598936	0.458	0.524	4.14E-07
ZSWIM6	1.03E-19	-0.2616469	0.752	0.8	3.92E-15
SPIN1	4.57E-08	-0.2618361	0.304	0.352	0.00174675
SUGP2	9.65E-08	-0.2657557	0.234	0.278	0.00368822
IFNGR1	1.46E-09	-0.2668746	0.534	0.573	5.60E-05
OTULINL	2.37E-13	-0.2678098	0.287	0.357	9.06E-09
KHDRBS3	7.66E-10	-0.2678573	0.392	0.451	2.93E-05

UQCRB	4.40E-08	-0.2690657	0.074	0.108	0.00168048
TNFRSF25	2.91E-19	-0.2695426	0.054	0.108	1.11E-14
RASA3	2.85E-15	-0.2695774	0.292	0.368	1.09E-10
SLC8A1	6.95E-22	-0.2698618	0.789	0.86	2.66E-17
ZC3H6	2.25E-12	-0.2700863	0.13	0.185	8.62E-08
SNTG1	7.36E-08	-0.270272	0.128	0.171	0.00281367
SLC23A2	1.88E-13	-0.2724351	0.285	0.355	7.17E-09
DNAJC10	1.82E-09	-0.2732375	0.16	0.209	6.97E-05
PCLO	6.75E-11	-0.2743757	0.12	0.171	2.58E-06
QKI	2.28E-30	-0.2744089	0.88	0.909	8.71E-26
IQCJ-SCHIP1	2.99E-08	-0.2745272	0.177	0.227	0.00114142
ROCK2	1.90E-11	-0.2749271	0.257	0.319	7.24E-07
CCM2	5.28E-10	-0.2756438	0.281	0.338	2.02E-05
ITGB2-AS1	6.63E-15	-0.2756751	0.097	0.153	2.53E-10
GRM7	1.84E-12	-0.2762195	0.079	0.128	7.04E-08
TMIGD3	4.13E-12	-0.276501	0.234	0.299	1.58E-07
DENND11	1.29E-13	-0.2769305	0.211	0.278	4.92E-09
MICOS10	5.43E-11	-0.2771369	0.19	0.246	2.07E-06
UNC79	2.38E-11	-0.2773118	0.078	0.122	9.11E-07
SLC4A8	8.37E-13	-0.2774256	0.105	0.159	3.20E-08
NEK3	1.27E-15	-0.2774372	0.08	0.135	4.84E-11
ERMAP	1.74E-12	-0.2774832	0.093	0.142	6.67E-08
NCKAP1L	1.39E-15	-0.2776294	0.38	0.458	5.30E-11
STRBP	8.01E-09	-0.2787776	0.262	0.315	0.00030609
TBC1D4	2.69E-15	-0.2791693	0.338	0.416	1.03E-10
ALOX12-AS1	1.94E-08	-0.2795927	0.134	0.177	0.00073998
DENND3	1.08E-16	-0.2804026	0.708	0.761	4.13E-12
KIF3C	6.94E-09	-0.2804629	0.08	0.117	0.00026525
SNX29	9.65E-23	-0.28065	0.612	0.686	3.69E-18
TNIK	1.46E-07	-0.28112	0.129	0.168	0.00557005
VSIR	3.07E-16	-0.2817984	0.35	0.434	1.17E-11
B3GNT5	4.11E-13	-0.2831029	0.268	0.338	1.57E-08
CDKN2B-AS1	1.06E-10	-0.2839638	0.1	0.146	4.05E-06
SPTLC3	1.66E-10	-0.2849495	0.112	0.161	6.35E-06
NPC1	1.38E-12	-0.2852514	0.245	0.31	5.27E-08
CACNB2	3.83E-09	-0.2855009	0.082	0.121	0.00014623
BTBD9	4.12E-11	-0.2863701	0.393	0.453	1.58E-06
DOCK8	1.12E-38	-0.2867446	0.836	0.88	4.27E-34
PACS2	2.96E-12	-0.2871744	0.239	0.303	1.13E-07
CHRM3	1.90E-15	-0.2879302	0.073	0.127	7.26E-11
NRGN	5.90E-13	-0.2883012	0.057	0.1	2.26E-08
WVOX	2.22E-18	-0.2890415	0.564	0.65	8.50E-14
P2RY13	1.26E-10	-0.2890584	0.128	0.176	4.82E-06
RALYL	4.40E-10	-0.2894493	0.139	0.19	1.68E-05
ASIC2	1.12E-12	-0.2894692	0.065	0.111	4.27E-08

DNM1	4.66E-13	-0.2901041	0.091	0.143	1.78E-08
DOCK4	9.29E-40	-0.2902386	0.96	0.97	3.55E-35
CNTNAP2	2.38E-13	-0.2902551	0.329	0.414	9.09E-09
AC079142.1	1.01E-09	-0.2906853	0.104	0.149	3.86E-05
LDB2	5.81E-10	-0.2912016	0.071	0.111	2.22E-05
PIK3CD	6.85E-13	-0.2913615	0.255	0.32	2.62E-08
KIAA1328	1.29E-12	-0.2917336	0.23	0.297	4.93E-08
PTS	2.82E-11	-0.2918118	0.08	0.124	1.08E-06
ATP8B4	7.00E-25	-0.2924397	0.693	0.764	2.68E-20
IL6ST	1.86E-19	-0.2932231	0.502	0.587	7.12E-15
ADGRL2	5.24E-14	-0.2935686	0.056	0.101	2.00E-09
EMID1	7.60E-15	-0.293762	0.08	0.133	2.90E-10
CCDC92	4.24E-12	-0.2951868	0.113	0.164	1.62E-07
SYNE1	2.77E-14	-0.2953652	0.167	0.232	1.06E-09
NECAB1	5.13E-13	-0.2984861	0.059	0.102	1.96E-08
MARCH3	1.16E-12	-0.2985701	0.31	0.38	4.45E-08
TRIM9	1.44E-11	-0.2995173	0.085	0.131	5.49E-07
GRM5	3.56E-13	-0.299532	0.085	0.136	1.36E-08
CAPZB	1.61E-19	-0.2996908	0.578	0.645	6.15E-15
CADM2	1.01E-18	-0.3004235	0.366	0.47	3.85E-14
NUDT3	2.28E-13	-0.3009369	0.166	0.227	8.73E-09
ARHGAP12	4.59E-17	-0.3009734	0.514	0.589	1.76E-12
PCDH9	2.56E-25	-0.3014163	0.448	0.572	9.78E-21
ZNF609	1.61E-15	-0.3015959	0.465	0.539	6.17E-11
ATP9B	4.43E-14	-0.3031476	0.364	0.433	1.69E-09
UBAC2	2.10E-12	-0.3032674	0.4	0.463	8.04E-08
NTM	4.96E-11	-0.3033779	0.151	0.208	1.90E-06
FCHSD2	6.32E-29	-0.3034997	0.698	0.786	2.42E-24
S100Z	2.54E-11	-0.3044487	0.136	0.191	9.71E-07
LINC00882	1.25E-11	-0.3052072	0.071	0.114	4.78E-07
IGSF21	7.80E-18	-0.3065092	0.549	0.62	2.98E-13
DAGLB	1.45E-14	-0.3074282	0.208	0.276	5.53E-10
SLC29A3	5.37E-16	-0.3079981	0.115	0.177	2.05E-11
ALPK1	2.39E-12	-0.3082373	0.466	0.523	9.12E-08
KIRREL3	4.70E-09	-0.3094806	0.137	0.186	0.00017974
BCO2	4.99E-13	-0.3098481	0.124	0.179	1.91E-08
PLAGL1	4.53E-10	-0.3105565	0.224	0.28	1.73E-05
LINC01376	6.48E-18	-0.3108846	0.05	0.1	2.48E-13
PIP5K1B	8.81E-18	-0.3110478	0.158	0.232	3.37E-13
LST1	2.56E-10	-0.3110929	0.182	0.232	9.78E-06
AL160272.1	5.54E-13	-0.3111321	0.061	0.105	2.12E-08
TTC39C	4.15E-15	-0.3113767	0.066	0.115	1.59E-10
CNTN1	4.53E-15	-0.3116673	0.093	0.15	1.73E-10
TMEM72-AS1	4.69E-17	-0.3119571	0.076	0.132	1.79E-12
PTPRD	3.68E-16	-0.3132985	0.288	0.377	1.41E-11

OSBPL1A	1.57E-11	-0.3139246	0.307	0.37	6.02E-07
MAP2	1.71E-13	-0.3141877	0.102	0.157	6.54E-09
BIN2	2.69E-12	-0.3142787	0.217	0.279	1.03E-07
SEMA4D	3.33E-12	-0.3153492	0.312	0.375	1.27E-07
C2CD5	1.56E-13	-0.3154049	0.261	0.33	5.98E-09
ARHGAP17	1.43E-13	-0.315548	0.269	0.336	5.48E-09
MAGI2	2.54E-13	-0.3160124	0.268	0.35	9.70E-09
MYO15B	6.79E-17	-0.3162464	0.234	0.312	2.60E-12
ARPP21	7.96E-13	-0.317076	0.069	0.115	3.04E-08
C12orf75	1.46E-11	-0.3177851	0.154	0.208	5.58E-07
LRRC7	1.42E-12	-0.3178139	0.151	0.211	5.45E-08
EMB	6.36E-15	-0.3179842	0.157	0.224	2.43E-10
TMEM232	8.54E-18	-0.3182818	0.062	0.115	3.26E-13
NXN	2.95E-21	-0.3189521	0.126	0.205	1.13E-16
ZNF117	9.69E-17	-0.3217429	0.073	0.128	3.71E-12
BIN1	2.10E-10	-0.3230243	0.528	0.583	8.04E-06
RNF213	2.94E-16	-0.3242262	0.419	0.493	1.12E-11
LRMP	3.09E-15	-0.3249175	0.305	0.38	1.18E-10
MAP4K4	3.78E-22	-0.3249365	0.663	0.718	1.45E-17
FRMPD4	1.23E-12	-0.3258316	0.088	0.139	4.71E-08
ENOSF1	3.06E-16	-0.3265619	0.085	0.141	1.17E-11
PIGL	8.46E-16	-0.326714	0.094	0.152	3.23E-11
PALD1	3.99E-22	-0.327013	0.65	0.72	1.53E-17
CMKLR1	7.27E-17	-0.3277612	0.225	0.305	2.78E-12
AIF1	6.50E-14	-0.3283769	0.132	0.191	2.48E-09
VASH1	1.14E-16	-0.3284905	0.297	0.373	4.35E-12
SMYD3	4.52E-11	-0.3301208	0.502	0.557	1.73E-06
SLC4A10	3.59E-24	-0.3302733	0.058	0.123	1.37E-19
GRIA4	2.17E-11	-0.3320773	0.098	0.146	8.29E-07
PLXNA2	1.14E-20	-0.3322366	0.063	0.124	4.36E-16
AC005165.1	8.08E-19	-0.3324179	0.068	0.125	3.09E-14
APBA1	1.12E-12	-0.3325707	0.27	0.336	4.27E-08
FAM118A	4.65E-12	-0.3329382	0.147	0.201	1.78E-07
CACNA1D	8.83E-14	-0.3334545	0.327	0.398	3.38E-09
RIN2	2.33E-17	-0.3335612	0.412	0.491	8.92E-13
WDR70	7.03E-19	-0.3336902	0.478	0.559	2.69E-14
FGF12	1.68E-12	-0.3342734	0.116	0.172	6.43E-08
MAP2K6	6.09E-21	-0.3376408	0.066	0.127	2.33E-16
AC006230.1	4.07E-14	-0.3376886	0.148	0.211	1.55E-09
NLRP3	4.01E-17	-0.3404158	0.089	0.147	1.53E-12
ULK4	2.49E-14	-0.3406444	0.204	0.275	9.53E-10
TERF2IP	6.27E-10	-0.3407607	0.131	0.177	2.39E-05
PRKN	1.24E-23	-0.3420063	0.481	0.584	4.74E-19
ABCA5	1.50E-16	-0.3423763	0.054	0.103	5.72E-12
LPAR1	2.84E-13	-0.3427432	0.251	0.318	1.08E-08

PDE1A	9.01E-15	-0.344556	0.082	0.135	3.44E-10
NLGN1	1.70E-12	-0.3459467	0.201	0.268	6.52E-08
TLR10	1.00E-16	-0.3473793	0.107	0.17	3.84E-12
WLS	1.04E-19	-0.3483756	0.082	0.145	3.99E-15
MED12L	3.80E-19	-0.3490726	0.078	0.139	1.45E-14
DPH6	4.66E-16	-0.3509173	0.15	0.219	1.78E-11
FGF14	1.84E-21	-0.3510466	0.17	0.26	7.02E-17
CC2D2B	1.80E-12	-0.351518	0.092	0.141	6.90E-08
NRCAM	4.86E-15	-0.3515228	0.096	0.154	1.86E-10
ZNRF2	6.75E-16	-0.351794	0.373	0.446	2.58E-11
ADGRL3	3.99E-16	-0.3519598	0.183	0.259	1.53E-11
FAM149A	9.88E-30	-0.3520206	0.434	0.549	3.77E-25
MLXIPL	5.06E-18	-0.3529965	0.307	0.392	1.93E-13
CTNND2	3.34E-18	-0.3530592	0.18	0.263	1.28E-13
LTC4S	2.58E-19	-0.3541989	0.102	0.169	9.88E-15
TMEM178B	4.90E-22	-0.3548879	0.064	0.127	1.87E-17
MDGA2	1.85E-16	-0.3549837	0.108	0.172	7.07E-12
ITGA9	4.02E-23	-0.3555428	0.308	0.409	1.54E-18
RPS20	1.47E-12	-0.3559293	0.089	0.136	5.62E-08
CADPS	5.96E-12	-0.3565121	0.077	0.123	2.28E-07
CCDC171	9.72E-22	-0.3571948	0.069	0.132	3.71E-17
AC079015.1	6.33E-20	-0.3580357	0.179	0.26	2.42E-15
LINC02232	1.22E-24	-0.358173	0.403	0.518	4.67E-20
GOLGA8A	4.70E-30	-0.3596374	0.077	0.157	1.80E-25
SUMF1	3.70E-14	-0.3597758	0.415	0.481	1.41E-09
ARHGAP24	8.45E-47	-0.3600501	0.861	0.932	3.23E-42
LIPC	1.00E-19	-0.3600946	0.08	0.143	3.83E-15
DGKB	1.22E-14	-0.3602154	0.066	0.116	4.67E-10
DCLK1	3.25E-18	-0.3603117	0.064	0.12	1.24E-13
IGF1	3.29E-26	-0.3604185	0.047	0.109	1.26E-21
LILRB4	1.16E-18	-0.3611108	0.119	0.186	4.44E-14
PDE9A	6.99E-21	-0.3612282	0.118	0.192	2.67E-16
MIR31HG	2.06E-28	-0.3634089	0.054	0.124	7.87E-24
RPL23	5.00E-10	-0.3635824	0.12	0.165	1.91E-05
APBB1IP	5.14E-40	-0.363807	0.797	0.871	1.97E-35
CENPP	8.84E-15	-0.3651828	0.164	0.231	3.38E-10
INPP5D	9.19E-39	-0.3664338	0.679	0.772	3.51E-34
CKB	4.28E-17	-0.3670899	0.092	0.153	1.64E-12
SNHG14	1.44E-14	-0.3671697	0.447	0.516	5.50E-10
SPG7	1.92E-21	-0.3674923	0.181	0.265	7.33E-17
AIG1	1.17E-14	-0.37037	0.293	0.361	4.47E-10
AFF3	5.94E-18	-0.3713034	0.061	0.116	2.27E-13
ARID3A	6.32E-20	-0.3717107	0.177	0.258	2.42E-15
RAP1GAP2	5.61E-22	-0.3770951	0.218	0.308	2.14E-17
PCDH7	1.59E-20	-0.3774965	0.083	0.149	6.09E-16

SP140	5.99E-14	-0.3786173	0.126	0.183	2.29E-09
PTPN14	6.00E-27	-0.3791993	0.064	0.135	2.29E-22
CDH12	1.05E-21	-0.3796683	0.058	0.118	4.00E-17
GASK1B	2.36E-19	-0.3813028	0.099	0.165	9.02E-15
NELL2	6.39E-22	-0.3820634	0.056	0.115	2.44E-17
RGS7	4.15E-20	-0.3827666	0.097	0.166	1.59E-15
ENTPD1	1.76E-25	-0.3838146	0.469	0.569	6.73E-21
AZIN1-AS1	2.80E-19	-0.3839557	0.146	0.221	1.07E-14
PELI2	2.04E-20	-0.3849789	0.215	0.305	7.78E-16
TSPAN7	3.35E-31	-0.3861057	0.045	0.114	1.28E-26
TENM2	6.26E-17	-0.3865691	0.141	0.214	2.39E-12
RYR2	8.88E-16	-0.3871418	0.13	0.196	3.39E-11
SLC25A29	5.59E-18	-0.3872029	0.182	0.257	2.14E-13
CAMK1D	1.57E-31	-0.3873768	0.523	0.631	6.01E-27
SLC2A5	1.03E-10	-0.3876194	0.485	0.545	3.93E-06
PLCB2	9.24E-22	-0.3877168	0.204	0.291	3.53E-17
MKNK1	1.76E-24	-0.3883916	0.504	0.594	6.73E-20
GAREM1	1.44E-07	-0.388596	0.417	0.455	0.00549521
PLCL2	1.40E-23	-0.3895578	0.423	0.523	5.37E-19
CDH23	7.75E-26	-0.3904643	0.114	0.197	2.96E-21
AKT3	1.51E-30	-0.3916365	0.481	0.587	5.75E-26
CSF1R	3.34E-35	-0.3922451	0.668	0.748	1.28E-30
PMEPA1	1.62E-20	-0.3924899	0.111	0.182	6.18E-16
KCNQ5	2.64E-21	-0.3925445	0.119	0.197	1.01E-16
SFMBT2	6.56E-35	-0.3934384	0.83	0.863	2.51E-30
SRGAP3	6.37E-19	-0.3940554	0.335	0.418	2.44E-14
KLF12	1.56E-24	-0.3963713	0.077	0.148	5.97E-20
PARP14	3.78E-19	-0.3966409	0.385	0.468	1.44E-14
LRMDA	9.96E-87	-0.3977668	0.923	0.964	3.81E-82
C4orf19	6.20E-24	-0.3988368	0.071	0.138	2.37E-19
PDE3B	2.60E-25	-0.3990723	0.474	0.58	9.96E-21
NAALADL2	9.71E-19	-0.3996305	0.272	0.36	3.71E-14
GRIK2	5.01E-26	-0.3996713	0.124	0.213	1.92E-21
AC008014.1	7.24E-24	-0.4020785	0.104	0.183	2.77E-19
ARHGAP32	1.12E-22	-0.402147	0.257	0.354	4.27E-18
LRIG1	4.77E-19	-0.4068519	0.099	0.164	1.82E-14
PPFIA2	6.12E-22	-0.4068739	0.102	0.175	2.34E-17
TTC28	1.15E-29	-0.4070747	0.382	0.493	4.41E-25
TMSB4X	1.70E-16	-0.4084272	0.529	0.603	6.50E-12
GRIA2	5.11E-28	-0.4093002	0.119	0.209	1.95E-23
LINC01141	6.22E-30	-0.4110753	0.224	0.337	2.38E-25
ULK2	1.54E-23	-0.4111959	0.172	0.259	5.89E-19
ERC2	2.43E-14	-0.4114413	0.298	0.372	9.28E-10
NEGR1	6.25E-25	-0.4127884	0.145	0.236	2.39E-20
OLR1	1.84E-19	-0.4132948	0.312	0.404	7.02E-15

DLGAP2	6.03E-11	-0.4137251	0.113	0.163	2.30E-06
TMEM156	5.04E-28	-0.4138108	0.328	0.437	1.93E-23
MEF2A	1.66E-71	-0.41416	0.872	0.923	6.34E-67
PSD3	7.24E-23	-0.4142655	0.232	0.326	2.77E-18
HIST1H2AC	1.63E-08	-0.4158349	0.259	0.304	0.00062346
CACNA2D3	2.52E-15	-0.4189223	0.077	0.13	9.62E-11
DMD	5.94E-13	-0.4192613	0.159	0.222	2.27E-08
CTNNA3	1.54E-16	-0.4238092	0.175	0.251	5.90E-12
HS6ST3	7.80E-28	-0.4259732	0.071	0.147	2.98E-23
UNC5C	5.29E-10	-0.4267115	0.143	0.195	2.02E-05
ESRRG	4.31E-16	-0.4267554	0.08	0.135	1.65E-11
CTNNA2	1.45E-18	-0.4274054	0.176	0.256	5.55E-14
BCAR3	3.46E-22	-0.4276563	0.262	0.355	1.32E-17
RIMS2	3.67E-25	-0.4297543	0.103	0.185	1.40E-20
OSBPL6	1.61E-30	-0.4304635	0.135	0.234	6.15E-26
FMNL3	8.76E-37	-0.4308285	0.445	0.568	3.35E-32
KCNIP1	2.06E-24	-0.4314532	0.355	0.461	7.86E-20
TARBP1	5.73E-29	-0.4321433	0.105	0.19	2.19E-24
LRRK1	1.74E-26	-0.4339065	0.501	0.597	6.67E-22
PLEKHG5	3.57E-38	-0.4341054	0.035	0.107	1.36E-33
NCKAP5	5.40E-44	-0.4360132	0.396	0.553	2.06E-39
DSCAM	5.83E-25	-0.4361281	0.496	0.583	2.23E-20
LMCD1-AS1	2.89E-18	-0.4362837	0.083	0.143	1.11E-13
ANK2	2.88E-13	-0.4365774	0.359	0.428	1.10E-08
FOXP2	7.84E-66	-0.4377649	0.427	0.631	3.00E-61
ADAMTSL2	5.21E-25	-0.4380645	0.116	0.198	1.99E-20
UST	3.71E-17	-0.4381615	0.221	0.3	1.42E-12
KCNQ1	1.84E-22	-0.4390411	0.319	0.405	7.04E-18
APPL2	5.82E-32	-0.4390604	0.385	0.5	2.22E-27
CHN1	1.78E-27	-0.4394404	0.085	0.163	6.80E-23
CSMD3	1.00E-26	-0.4402808	0.103	0.186	3.84E-22
TBC1D22A	4.66E-53	-0.4434589	0.667	0.776	1.78E-48
MRC2	1.08E-30	-0.4441428	0.109	0.2	4.13E-26
A2M	1.16E-26	-0.4446336	0.477	0.57	4.44E-22
LGMN	3.78E-29	-0.4453153	0.119	0.209	1.44E-24
KCNMB2-AS1	6.72E-20	-0.4478864	0.148	0.227	2.57E-15
ICA1	9.53E-31	-0.4484632	0.089	0.175	3.64E-26
PLCB1	5.53E-26	-0.4489198	0.131	0.222	2.11E-21
ASTN1	1.76E-32	-0.4545033	0.053	0.127	6.75E-28
EEPD1	1.19E-25	-0.4554707	0.085	0.159	4.56E-21
NRG3	5.87E-29	-0.457927	0.248	0.363	2.24E-24
PID1	3.15E-21	-0.4584629	0.095	0.164	1.20E-16
ARHGAP25	1.01E-22	-0.4585897	0.478	0.562	3.87E-18
P3H2	1.45E-35	-0.463215	0.151	0.264	5.56E-31
SORL1	4.36E-55	-0.4634669	0.795	0.835	1.66E-50

KALRN	1.57E-19	-0.464726	0.107	0.176	6.01E-15
MEF2C	1.52E-79	-0.4675685	0.84	0.918	5.82E-75
CFAP74	6.66E-48	-0.4690489	0.041	0.129	2.55E-43
MEG3	8.68E-19	-0.4701117	0.25	0.33	3.32E-14
DLGAP1	1.86E-28	-0.4714293	0.187	0.293	7.10E-24
CIRBP	2.86E-32	-0.4744349	0.214	0.323	1.09E-27
ITGB5	3.12E-26	-0.4747347	0.233	0.329	1.19E-21
MAPK10	1.13E-20	-0.4779358	0.132	0.208	4.33E-16
MIR99AHG	4.96E-34	-0.478469	0.4	0.52	1.90E-29
ANKRD44	5.15E-68	-0.4791388	0.679	0.803	1.97E-63
PARD3B	2.58E-25	-0.4811267	0.123	0.208	9.86E-21
ARHGAP22	3.82E-58	-0.4833106	0.649	0.766	1.46E-53
MIS18BP1	1.20E-28	-0.4837429	0.284	0.391	4.58E-24
LINC01268	1.54E-31	-0.4840083	0.134	0.23	5.87E-27
FAM155A	2.41E-25	-0.485828	0.18	0.277	9.21E-21
ANKS1B	2.24E-23	-0.4886701	0.223	0.319	8.58E-19
AC087564.1	2.55E-22	-0.4901215	0.226	0.317	9.77E-18
AUTS2	1.61E-48	-0.4909438	0.578	0.704	6.14E-44
AL008633.1	4.00E-22	-0.4912672	0.266	0.359	1.53E-17
NKAIN2	6.13E-18	-0.4918902	0.177	0.257	2.34E-13
PPP6R2	3.11E-40	-0.49465	0.382	0.509	1.19E-35
LSAMP	1.67E-27	-0.4978325	0.263	0.375	6.37E-23
MAGI1	2.33E-35	-0.4990113	0.219	0.341	8.89E-31
NOS1AP	4.32E-42	-0.4996439	0.044	0.127	1.65E-37
C3	3.48E-48	-0.5010896	0.652	0.771	1.33E-43
SNAP25	3.11E-29	-0.5035605	0.104	0.191	1.19E-24
RGS10	8.85E-34	-0.5042548	0.281	0.396	3.38E-29
AC010378.2	6.42E-52	-0.5049947	0.048	0.147	2.45E-47
SLC22A23	5.53E-23	-0.5069876	0.158	0.244	2.11E-18
LINC01091	3.80E-30	-0.5071676	0.142	0.243	1.45E-25
CLU	2.02E-20	-0.5088578	0.134	0.208	7.73E-16
LRP1B	2.75E-28	-0.5088605	0.291	0.405	1.05E-23
GLIS3	5.20E-32	-0.5095851	0.102	0.195	1.99E-27
ITPR2	6.34E-102	-0.5109552	0.857	0.927	2.42E-97
SPARCL1	2.06E-25	-0.513394	0.096	0.173	7.89E-21
STXBP5L	8.10E-34	-0.5136744	0.085	0.174	3.09E-29
RPS25	7.25E-11	-0.5153578	0.167	0.216	2.77E-06
OPCML	5.46E-24	-0.5182974	0.203	0.298	2.09E-19
SETBP1	3.18E-34	-0.5224063	0.353	0.475	1.21E-29
RFX3-AS1	2.12E-36	-0.5233952	0.091	0.185	8.10E-32
AOAH	3.20E-58	-0.5240173	0.589	0.731	1.22E-53
NEXMIF	1.82E-40	-0.5252515	0.034	0.108	6.96E-36
DLG2	1.57E-42	-0.527448	0.399	0.55	6.00E-38
EML1	2.36E-38	-0.5347903	0.127	0.234	9.03E-34
RTTN	2.84E-18	-0.5430044	0.333	0.41	1.08E-13

ATRN1	7.38E-29	-0.5430267	0.126	0.22	2.82E-24
PLCXD3	6.86E-40	-0.5446021	0.04	0.117	2.62E-35
RPS11	4.49E-16	-0.5451109	0.157	0.221	1.72E-11
ST6GAL1	2.03E-81	-0.5528852	0.832	0.887	7.75E-77
APBA2	3.53E-37	-0.5574477	0.075	0.164	1.35E-32
AGBL4	1.12E-33	-0.5589916	0.084	0.173	4.27E-29
GMDS-DT	8.08E-40	-0.5593816	0.34	0.47	3.09E-35
DPP10	6.64E-24	-0.5596757	0.202	0.297	2.54E-19
TIAM1	3.41E-51	-0.563449	0.426	0.566	1.30E-46
MCF2L	1.94E-45	-0.5656096	0.422	0.552	7.41E-41
GAK	2.15E-39	-0.5679114	0.262	0.384	8.22E-35
LINC01374	2.22E-48	-0.5705138	0.437	0.581	8.49E-44
PCNX2	1.98E-68	-0.5840293	0.49	0.656	7.56E-64
RPL13A	2.99E-08	-0.5841964	0.246	0.285	0.00114337
NRXN3	7.98E-25	-0.5879987	0.306	0.417	3.05E-20
GRID2	2.69E-41	-0.5900885	0.427	0.57	1.03E-36
NLRP1	1.18E-48	-0.5984401	0.14	0.266	4.49E-44
SIPA1L2	1.43E-47	-0.6000207	0.42	0.554	5.47E-43
KCNQ3	5.80E-96	-0.6045213	0.788	0.898	2.22E-91
HIVEP3	1.26E-56	-0.61417	0.483	0.632	4.81E-52
CSMD1	9.56E-55	-0.6256334	0.288	0.457	3.65E-50
SLC1A2	1.56E-45	-0.6292591	0.053	0.145	5.97E-41
SYT1	5.48E-50	-0.6370217	0.258	0.409	2.09E-45
MRC1	1.60E-56	-0.6405451	0.126	0.267	6.11E-52
CYFIP1	4.59E-83	-0.6462654	0.64	0.773	1.76E-78
RBFOX1	4.88E-46	-0.646384	0.355	0.508	1.86E-41
AZIN2	7.31E-61	-0.6468291	0.081	0.205	2.79E-56
CCSER1	6.89E-37	-0.6488862	0.091	0.189	2.63E-32
PSMA1	1.81E-53	-0.6559328	0.321	0.471	6.92E-49
AC008591.1	6.44E-49	-0.6562611	0.041	0.129	2.46E-44
LINC02057	1.41E-60	-0.6580554	0.062	0.177	5.41E-56
PRKCA	5.51E-65	-0.6645909	0.56	0.712	2.10E-60
SYNDIG1	6.72E-86	-0.6685591	0.542	0.724	2.57E-81
CPA6	1.55E-46	-0.6736341	0.05	0.142	5.91E-42
ABCC4	6.81E-88	-0.6751575	0.56	0.719	2.60E-83
LINC01266	1.65E-44	-0.6774576	0.067	0.163	6.31E-40
KBTBD12	4.65E-56	-0.6781422	0.187	0.333	1.78E-51
CACNB4	2.56E-61	-0.6816477	0.257	0.421	9.79E-57
ROBO2	1.77E-42	-0.6845446	0.163	0.292	6.77E-38
CX3CR1	1.20E-57	-0.6917341	0.29	0.445	4.59E-53
PRDM11	6.52E-47	-0.6923044	0.093	0.203	2.49E-42
ADAM28	1.02E-118	-0.6969082	0.672	0.806	3.90E-114
DIP2A	6.57E-60	-0.7011809	0.29	0.443	2.51E-55
LRRTM4	5.89E-68	-0.706996	0.168	0.337	2.25E-63
NRXN1	1.08E-61	-0.7105825	0.233	0.402	4.13E-57

CSF2RA	6.05E-82	-0.7366921	0.384	0.569	2.31E-77
PPP2R2B	1.98E-19	-0.7395295	0.206	0.293	7.58E-15
NAV3	7.96E-158	-0.7400989	0.718	0.883	3.04E-153
CECR2	7.53E-81	-0.7440289	0.058	0.195	2.88E-76
LINC02642	1.39E-77	-0.7474154	0.051	0.18	5.31E-73
AL592429.2	2.62E-70	-0.7554417	0.027	0.129	1.00E-65
HTRA1	4.21E-59	-0.758974	0.266	0.418	1.61E-54
MIR646HG	2.06E-69	-0.7631959	0.396	0.568	7.86E-65
LINC02649	3.19E-73	-0.7900645	0.134	0.294	1.22E-68
AC025569.1	3.27E-89	-0.8044566	0.122	0.3	1.25E-84
FRMD4A	1.76E-251	-0.8337523	0.905	0.974	6.73E-247
XACT	1.23E-49	-0.839673	0.116	0.241	4.69E-45
GPR183	3.82E-72	-0.8538601	0.069	0.205	1.46E-67
TLN2	3.47E-119	-0.8652786	0.351	0.587	1.33E-114
PDE4D	1.24E-87	-0.8813514	0.24	0.443	4.73E-83
P2RY12	4.21E-119	-0.8835886	0.405	0.629	1.61E-114
KCNIP4	2.00E-107	-0.997626	0.392	0.611	7.64E-103
ST6GALNAC3	3.01E-221	-1.0683719	0.564	0.826	1.15E-216
NAV2	7.20E-106	-1.0721488	0.228	0.447	2.75E-101
ZFPM2-AS1	8.02E-123	-1.0775272	0.053	0.232	3.07E-118
SOX5	5.86E-123	-1.155299	0.1	0.303	2.24E-118
LINC02712	3.26E-150	-1.1639503	0.079	0.298	1.25E-145
PDK4	1.36E-23	-1.213868	0.129	0.201	5.19E-19
RASGEF1C	8.47E-285	-1.5310822	0.232	0.608	3.24E-280
AC008691.1	4.90E-221	-1.8136139	0.091	0.377	1.87E-216
AC008050.1	1.62E-236	-1.8448489	0.066	0.347	6.17E-232
AC011586.2	2.62E-174	-2.4346959	0.006	0.171	1.00E-169

Oligodendrocyte DEGs

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
FKBP5	0	1.55533455	0.61	0.195	0
AC008571.2	0	1.49093294	0.607	0.277	0
AC009063.2	0	1.34920838	0.554	0.176	0
QDPR	0	1.30871309	0.806	0.505	0
PLCG2	0	1.23763265	0.618	0.34	0
SELENOP	0	1.14797988	0.543	0.292	0
SPP1	0	1.10857798	0.58	0.329	0
KCNMB4	0	1.08922687	0.675	0.384	0
SLC38A2	0	1.07170249	0.518	0.236	0
ANLN	0	1.05855972	0.685	0.385	0
ZBTB16	0	1.04179058	0.727	0.401	0
ABCA6	0	1.02188706	0.232	0.049	0
NEAT1	0	1.0114375	0.835	0.659	0
PTPRM	0	0.99154104	0.348	0.15	0
EFHD1	0	0.98461916	0.569	0.317	0
SUN2	0	0.96671704	0.591	0.355	0
MT-ND3	0	0.93704898	0.863	0.702	0
ZNF652	0	0.90604048	0.567	0.338	0
AC119674.1	0	0.88359627	0.201	0.055	0
CDKL1	0	0.85475897	0.351	0.144	0
LRRC1	0	0.85223403	0.563	0.316	0
CPQ	0	0.83657313	0.639	0.403	0
BCL2	0	0.81955268	0.404	0.221	0
RGCC	0	0.79652062	0.479	0.271	0
TMPRSS5	0	0.79527039	0.25	0.097	0
CRYAB	2.50E-185	0.77268025	0.458	0.329	9.54E-181
NCAM2	0	0.76934903	0.926	0.819	0
MT3	0	0.75733026	0.276	0.115	0
EPCAM-DT	0	0.7503684	0.336	0.155	0
LAMP2	0	0.74366802	0.768	0.579	0
MTRNR2L12	0	0.73835672	0.69	0.498	0
NDRG1	0	0.72880531	0.594	0.374	0
ADAMTSL3	0	0.72373671	0.322	0.142	0
LRP4	0	0.71074448	0.356	0.166	0
AMER2	0	0.70619855	0.74	0.549	0
APOLD1	1.48E-296	0.70409911	0.284	0.128	5.66E-292
MID1IP1	0	0.69813353	0.256	0.104	0
SEPTIN8	0	0.69527908	0.471	0.273	0
GPRC5B	0	0.6914032	0.703	0.514	0
SLC39A11	0	0.6852675	0.664	0.479	0
AC116362.1	6.24E-234	0.68233532	0.195	0.076	2.39E-229
SGK1	0	0.67491716	0.824	0.643	0
KIF19	0	0.67485671	0.235	0.077	0

ST6GALNAC	0	0.67225955	0.662	0.479	0
WVOX	0	0.66867015	0.826	0.693	0
AC093865.1	2.28E-278	0.66673084	0.234	0.093	8.72E-274
CSRP1	1.36E-202	0.66274247	0.453	0.316	5.19E-198
PRKX	0	0.6579131	0.16	0.03	0
CCP110	0	0.65651077	0.63	0.43	0
ERBIN	0	0.64810698	0.891	0.759	0
ADIPOR2	0	0.6466296	0.66	0.466	0
SORT1	0	0.6455055	0.794	0.625	0
PRUNE2	0	0.63083747	0.889	0.761	0
FANCC	4.77E-275	0.62844116	0.237	0.096	1.82E-270
PIEZO2	1.53E-233	0.6236619	0.561	0.417	5.84E-229
MAN2A1	0	0.62235555	0.89	0.761	0
ADARB2	0	0.62191025	0.567	0.349	0
PAQR8	7.19E-226	0.62076388	0.306	0.167	2.75E-221
FAM53B	5.44E-278	0.62034103	0.497	0.325	2.08E-273
NDRG2	1.08E-199	0.61054995	0.476	0.336	4.14E-195
METTL7A	0	0.60649087	0.209	0.064	0
HP1BP3	0	0.6018607	0.59	0.409	0
BOK	8.25E-187	0.60141076	0.368	0.235	3.15E-182
ZDHHC20	8.90E-235	0.5951877	0.549	0.397	3.40E-230
B2M	6.42E-180	0.59365319	0.261	0.144	2.45E-175
CLMN	0	0.59115388	0.844	0.696	0
HSPA1A	3.41E-139	0.5867888	0.261	0.154	1.30E-134
PKD4	1.38E-270	0.58358769	0.263	0.119	5.27E-266
PEX5L	0	0.57971982	0.887	0.774	0
IKZF2	4.01E-222	0.57857954	0.401	0.249	1.53E-217
CA2	2.80E-231	0.57470476	0.392	0.239	1.07E-226
DCC	4.22E-131	0.57032397	0.233	0.133	1.61E-126
ITPKB	5.11E-128	0.56941564	0.367	0.256	1.95E-123
MT-ATP6	3.85E-160	0.56297416	0.81	0.695	1.47E-155
PLD5	7.09E-225	0.5604731	0.382	0.225	2.71E-220
SILC1	1.52E-285	0.55811025	0.555	0.38	5.81E-281
AC109927.1	3.67E-174	0.55731294	0.203	0.097	1.40E-169
GIT1	1.25E-197	0.55555132	0.265	0.139	4.77E-193
LRP2	3.97E-247	0.5468657	0.493	0.321	1.52E-242
TTYH2	2.86E-278	0.543028	0.585	0.423	1.09E-273
FRYL	0	0.53451685	0.881	0.753	0
MAPT	0	0.52753343	0.696	0.535	0
VAMP2	1.09E-187	0.52659337	0.443	0.305	4.18E-183
SEM1	1.11E-212	0.52613206	0.323	0.182	4.24E-208
DIP2C	0	0.52482963	0.843	0.718	0
SLC44A1	0	0.51017859	0.93	0.829	0
KANSL1L	1.60E-212	0.50758456	0.401	0.252	6.10E-208
FAM13B	7.67E-194	0.50701237	0.521	0.383	2.93E-189

BBS9	1.31E-193	0.50238607	0.576	0.435	5.00E-189
ZSWIM6	1.04E-252	0.49104498	0.777	0.655	3.96E-248
ANAPC16	5.74E-232	0.48552343	0.347	0.196	2.19E-227
NFASC	2.32E-298	0.4852097	0.812	0.685	8.89E-294
CHST3	7.61E-201	0.48493309	0.249	0.125	2.91E-196
PANTR1	2.14E-161	0.47761001	0.344	0.219	8.19E-157
SORCS2	8.40E-154	0.47758143	0.331	0.209	3.21E-149
NFKBIA	5.81E-264	0.47667521	0.162	0.048	2.22E-259
CHORDC1	2.12E-189	0.4764048	0.246	0.127	8.10E-185
DHCR24	7.19E-145	0.47585507	0.18	0.089	2.75E-140
NDUFAF6	9.27E-176	0.4750227	0.313	0.185	3.54E-171
ZCCHC24	1.51E-196	0.47469509	0.518	0.371	5.78E-192
PICK1	9.80E-195	0.46992601	0.205	0.092	3.75E-190
FDFT1	4.89E-194	0.46928696	0.328	0.191	1.87E-189
L3MBTL4	2.32E-173	0.46909281	0.569	0.435	8.89E-169
DBNDD2	1.10E-136	0.46898564	0.44	0.322	4.20E-132
CREBRF	6.58E-190	0.46638597	0.333	0.198	2.51E-185
ARRDC2	1.58E-183	0.46531922	0.159	0.063	6.06E-179
LHFPL3	5.47E-90	0.4650943	0.133	0.068	2.09E-85
SNHG25	1.79E-104	0.46401679	0.283	0.19	6.85E-100
RHOBTB3	4.44E-172	0.46376014	0.331	0.204	1.70E-167
OLMALINC	7.88E-211	0.46353224	0.345	0.198	3.01E-206
HTRA1	2.82E-202	0.46274594	0.489	0.341	1.08E-197
OTUD7A	8.01E-257	0.45444485	0.744	0.606	3.06E-252
CEP128	2.15E-144	0.45403636	0.251	0.144	8.22E-140
CDKN1C	1.02E-136	0.45254057	0.238	0.138	3.92E-132
BBS2	9.09E-196	0.44850655	0.433	0.288	3.48E-191
PCA3	2.61E-151	0.44825501	0.145	0.061	9.99E-147
PLCL1	3.94E-230	0.44658577	0.869	0.778	1.51E-225
EDA	7.46E-110	0.4460313	0.21	0.122	2.85E-105
CLIP4	6.08E-162	0.44366747	0.501	0.374	2.32E-157
AZGP1	4.11E-220	0.44359807	0.115	0.027	1.57E-215
SEMA5A	5.05E-175	0.44224457	0.222	0.108	1.93E-170
ELMO1	0	0.44100242	0.919	0.817	0
SLC22A23	7.02E-165	0.44094742	0.6	0.469	2.68E-160
SPOCK1	6.41E-284	0.4397111	0.876	0.775	2.45E-279
AC016821.1	4.44E-191	0.43961424	0.225	0.108	1.70E-186
GNAO1	3.53E-204	0.4367769	0.748	0.622	1.35E-199
ATXN1	7.17E-224	0.43404258	0.785	0.67	2.74E-219
SLC6A8	6.72E-129	0.43342044	0.281	0.177	2.57E-124
ZNF365	9.73E-123	0.43288037	0.383	0.272	3.72E-118
AMD1	8.01E-143	0.43242255	0.505	0.381	3.06E-138
USP31	4.04E-153	0.43241704	0.311	0.193	1.54E-148
FAM107B	5.58E-221	0.43137712	0.728	0.582	2.13E-216
DOCK1	1.13E-209	0.42723275	0.745	0.616	4.32E-205

AL034405.1	1.78E-120	0.42421109	0.198	0.109	6.82E-116
SLCO1A2	6.51E-205	0.42382079	0.682	0.548	2.49E-200
HDAC2-AS2	2.56E-128	0.42261675	0.645	0.537	9.80E-124
ARRB1	1.88E-138	0.4216007	0.214	0.115	7.17E-134
HSP90AA1	6.65E-275	0.4197603	0.72	0.568	2.54E-270
IGF1R	1.61E-119	0.41901897	0.469	0.355	6.17E-115
ATG4B	9.11E-142	0.41816477	0.246	0.141	3.48E-137
SPATA13	7.88E-131	0.41769935	0.495	0.375	3.01E-126
MT-ND4	2.61E-66	0.41699338	0.78	0.688	9.96E-62
DOCK5	2.00E-256	0.41657324	0.855	0.742	7.64E-252
DOCK9	2.75E-237	0.41580839	0.746	0.614	1.05E-232
PPM1B	1.30E-167	0.41558718	0.583	0.454	4.97E-163
TPPP	1.74E-127	0.41428822	0.461	0.346	6.66E-123
NKX6-2	1.37E-127	0.41317153	0.434	0.317	5.23E-123
NCAM1	0	0.41185124	0.892	0.795	0
IRS2	6.39E-142	0.40975194	0.214	0.115	2.44E-137
LINC00320	6.02E-142	0.40923052	0.592	0.473	2.30E-137
PDS5B	5.21E-159	0.40848815	0.451	0.318	1.99E-154
JADE2	3.81E-171	0.40653742	0.177	0.078	1.46E-166
GPM6B	3.33E-253	0.40592003	0.867	0.755	1.27E-248
PHYHIP1L	6.58E-146	0.40297525	0.555	0.428	2.52E-141
TACC1	7.39E-186	0.40173053	0.583	0.443	2.82E-181
SLC6A15	7.96E-117	0.40104366	0.18	0.097	3.04E-112
TAF15	3.79E-139	0.40079022	0.245	0.14	1.45E-134
ARHGAP21	6.04E-261	0.39918677	0.833	0.725	2.31E-256
AC006148.1	2.05E-88	0.39650951	0.349	0.255	7.84E-84
NCOA7	6.24E-153	0.39465353	0.624	0.505	2.38E-148
CDH20	4.09E-193	0.39339385	0.788	0.66	1.56E-188
NFKB1	4.02E-125	0.39213818	0.225	0.13	1.54E-120
KLF15	2.31E-196	0.39185681	0.15	0.053	8.83E-192
PLP1	1.32E-188	0.38679249	0.893	0.775	5.04E-184
CTSD	2.71E-101	0.38586103	0.242	0.155	1.04E-96
RFTN2	2.56E-169	0.38584312	0.625	0.491	9.80E-165
YPEL2	8.69E-140	0.38398344	0.539	0.413	3.32E-135
SOX10	2.43E-122	0.38388295	0.327	0.219	9.27E-118
MT-ND1	4.42E-163	0.38062805	0.593	0.441	1.69E-158
MVB12B	1.65E-162	0.38053832	0.658	0.516	6.30E-158
PIM3	4.30E-98	0.38052923	0.132	0.066	1.64E-93
NDUFS2	5.84E-128	0.38005013	0.279	0.175	2.23E-123
SLC5A3	4.35E-210	0.37940211	0.104	0.023	1.66E-205
RASSF4	5.14E-134	0.37736968	0.281	0.173	1.96E-129
CDK18	6.40E-161	0.37690826	0.648	0.517	2.45E-156
MAP4K5	9.83E-184	0.37645475	0.736	0.616	3.76E-179
PAPOLA	1.61E-147	0.3759558	0.374	0.252	6.15E-143
CADM2	4.61E-272	0.37478097	0.942	0.869	1.76E-267

MT-ND2	8.42E-101	0.37357326	0.668	0.553	3.22E-96
ARHGEF10	1.04E-154	0.37166869	0.436	0.302	3.97E-150
ALDH3A2	7.92E-129	0.37139953	0.195	0.104	3.03E-124
DNAJB6	2.98E-135	0.37129715	0.269	0.163	1.14E-130
PTGES3	1.87E-163	0.37014603	0.312	0.188	7.14E-159
KANSL1	1.97E-193	0.36927656	0.648	0.5	7.54E-189
MAT2A	3.93E-115	0.36886722	0.441	0.33	1.50E-110
DPYSL5	4.23E-92	0.36857218	0.324	0.229	1.62E-87
SEMA4B	2.02E-166	0.36833584	0.118	0.038	7.73E-162
RALGDS	1.26E-114	0.36445051	0.399	0.291	4.81E-110
CHDH	4.66E-213	0.36345834	0.105	0.023	1.78E-208
LCORL	3.01E-107	0.36340698	0.388	0.281	1.15E-102
KLF9	1.61E-121	0.36268993	0.181	0.095	6.16E-117
ITPK1	7.99E-111	0.36211264	0.35	0.244	3.05E-106
PRKD1	1.39E-91	0.36142294	0.261	0.173	5.32E-87
ADAM12	1.23E-88	0.3613983	0.237	0.154	4.70E-84
LAMP1	3.72E-92	0.36087519	0.312	0.222	1.42E-87
NACC2	1.54E-124	0.35990197	0.181	0.094	5.89E-120
FNIP2	6.91E-90	0.35961095	0.484	0.389	2.64E-85
CORO2B	1.96E-118	0.35944892	0.352	0.239	7.49E-114
FLCN	2.15E-140	0.35899933	0.187	0.094	8.21E-136
RELN	2.54E-127	0.35855982	0.136	0.06	9.71E-123
FXR1	2.19E-125	0.35700727	0.402	0.289	8.38E-121
PPA1	1.54E-116	0.35688619	0.256	0.159	5.88E-112
CCNH	6.01E-137	0.35676057	0.679	0.557	2.30E-132
CTSF	1.29E-117	0.35662194	0.19	0.104	4.93E-113
ARHGAP17	3.72E-120	0.35518222	0.32	0.213	1.42E-115
ELF2	6.18E-134	0.35408099	0.599	0.48	2.36E-129
SGK3	7.53E-128	0.35386138	0.625	0.515	2.88E-123
TMC6	7.51E-96	0.35360656	0.256	0.168	2.87E-91
KANK1	3.34E-122	0.35350946	0.597	0.476	1.28E-117
APOD	5.01E-74	0.35207825	0.376	0.29	1.91E-69
ZNF397	2.99E-111	0.35192473	0.328	0.224	1.14E-106
ITPR2	5.26E-131	0.35116733	0.242	0.138	2.01E-126
CAMKMT	4.18E-84	0.35085425	0.373	0.277	1.60E-79
KIZ	4.03E-121	0.35039352	0.442	0.325	1.54E-116
MT-CYB	5.24E-124	0.35026967	0.683	0.556	2.00E-119
P2RX7	1.78E-143	0.3495763	0.544	0.422	6.79E-139
LIFR	1.10E-109	0.34860375	0.517	0.407	4.19E-105
TLE4	6.73E-121	0.34802262	0.591	0.47	2.57E-116
RBM48	1.53E-156	0.34695274	0.165	0.073	5.86E-152
MAP7	1.41E-236	0.34367935	0.888	0.793	5.39E-232
DIPK2B	1.26E-116	0.34353027	0.15	0.073	4.81E-112
PDE7A	7.05E-105	0.34295997	0.395	0.289	2.69E-100
STAG1	6.12E-134	0.34292227	0.551	0.424	2.34E-129

CADM1	1.72E-141	0.34235618	0.752	0.644	6.57E-137
RELA	1.55E-116	0.34181174	0.106	0.042	5.93E-112
DIP2B	2.06E-200	0.3417597	0.848	0.737	7.88E-196
BCL2L1	3.54E-113	0.34090485	0.349	0.242	1.35E-108
TMCC2	6.88E-104	0.3405063	0.27	0.175	2.63E-99
CNOT2	8.67E-114	0.34019455	0.497	0.384	3.32E-109
DYNC1LI2	5.97E-124	0.34010991	0.415	0.299	2.28E-119
PPM1K	4.18E-119	0.33996703	0.278	0.176	1.60E-114
ELMO1-AS1	5.00E-131	0.33758924	0.125	0.051	1.91E-126
MBNL1	2.44E-105	0.33641059	0.605	0.504	9.33E-101
RANGAP1	1.84E-92	0.33633247	0.229	0.145	7.02E-88
PHGDH	1.43E-133	0.33545088	0.187	0.096	5.47E-129
CLCN4	3.77E-110	0.33530327	0.245	0.153	1.44E-105
AC016597.1	3.48E-106	0.3339743	0.429	0.321	1.33E-101
LANCL1	1.70E-125	0.33383152	0.614	0.493	6.49E-121
IRF2BP2	3.67E-89	0.3335659	0.232	0.151	1.40E-84
YPEL3	5.78E-94	0.33324176	0.252	0.165	2.21E-89
PLPP4	1.99E-122	0.33267318	0.112	0.044	7.62E-118
PHLDA3	2.91E-86	0.33226309	0.174	0.103	1.11E-81
PHACTR3	5.99E-117	0.33112055	0.687	0.582	2.29E-112
CELSR2	3.42E-120	0.32964935	0.202	0.113	1.31E-115
AC096677.1	3.83E-103	0.32958291	0.173	0.095	1.46E-98
PPP1R9A	1.32E-117	0.32854564	0.546	0.43	5.04E-113
RAPGEF3	1.68E-64	0.32736044	0.252	0.177	6.40E-60
DHCR7	6.73E-153	0.3272027	0.125	0.046	2.57E-148
ITGB8	9.48E-94	0.32664736	0.448	0.347	3.62E-89
RPS6KA5	1.42E-95	0.32559239	0.425	0.325	5.42E-91
SH3RF1	6.23E-76	0.32522535	0.345	0.256	2.38E-71
TECR	2.66E-112	0.32502083	0.258	0.162	1.02E-107
AGAP1	2.79E-229	0.32422452	0.907	0.824	1.07E-224
PER1	4.85E-118	0.32418267	0.154	0.075	1.86E-113
BCL6	1.34E-121	0.32346732	0.189	0.1	5.14E-117
CLCN7	1.30E-83	0.32273817	0.152	0.085	4.97E-79
C10orf90	2.62E-156	0.32109016	0.831	0.729	1.00E-151
MT-CO2	8.53E-65	0.32053776	0.848	0.77	3.26E-60
CDK19	5.27E-131	0.32022688	0.77	0.657	2.01E-126
STARD10	7.04E-110	0.32012303	0.102	0.041	2.69E-105
CTNNA1	6.84E-87	0.32000606	0.447	0.347	2.61E-82
MSI2	3.19E-118	0.31828465	0.407	0.288	1.22E-113
PTPRJ	9.98E-96	0.31769925	0.571	0.462	3.81E-91
ZNF488	5.60E-129	0.31724234	0.116	0.045	2.14E-124
SPOCK3	3.71E-165	0.31674255	0.855	0.763	1.42E-160
FMNL3	3.89E-113	0.315751	0.145	0.07	1.49E-108
ARAP2	6.86E-155	0.3151679	0.853	0.751	2.62E-150
SRRM2	5.08E-200	0.31491024	0.581	0.424	1.94E-195

HSPH1	2.28E-59	0.31419908	0.168	0.108	8.71E-55
RBM14	2.61E-85	0.31271784	0.149	0.083	9.99E-81
TSC22D4	4.94E-59	0.31237784	0.338	0.265	1.89E-54
PPP4R2	7.82E-101	0.31189085	0.373	0.27	2.99E-96
ZNF521	1.15E-99	0.31180653	0.21	0.125	4.40E-95
FAM221A	7.74E-153	0.31145251	0.164	0.073	2.96E-148
C4orf48	1.69E-71	0.31022325	0.233	0.16	6.45E-67
KIAA1958	1.22E-92	0.30985908	0.446	0.343	4.65E-88
BTD	1.72E-82	0.30917984	0.246	0.164	6.58E-78
NCKAP5	3.64E-117	0.30561895	0.848	0.767	1.39E-112
B3GAT1	1.47E-95	0.30468137	0.38	0.278	5.63E-91
RASSF2	6.64E-75	0.30397679	0.312	0.229	2.54E-70
PLOD3	1.45E-91	0.30325391	0.165	0.093	5.54E-87
PRRG1	1.67E-83	0.30297383	0.41	0.315	6.38E-79
MAGEC3	1.31E-77	0.30259844	0.11	0.055	5.00E-73
PAK2	3.68E-88	0.30237779	0.31	0.219	1.41E-83
EVI2A	3.57E-73	0.30070591	0.303	0.221	1.36E-68
LINC00862	4.51E-78	0.30065683	0.313	0.225	1.72E-73
TF	1.32E-169	0.30034865	0.818	0.698	5.05E-165
ATG13	1.18E-92	0.2998281	0.352	0.255	4.50E-88
LINC02199	5.93E-92	0.29824809	0.128	0.064	2.27E-87
TPD52	4.31E-84	0.29758488	0.431	0.333	1.65E-79
JAKMIP3	2.71E-81	0.29755156	0.305	0.219	1.04E-76
HDAC4	1.51E-94	0.29729992	0.441	0.338	5.77E-90
INSR	2.86E-96	0.29701419	0.486	0.383	1.09E-91
ZNF706	9.10E-94	0.29623785	0.403	0.301	3.48E-89
TMBIM6	4.71E-78	0.29471594	0.371	0.284	1.80E-73
TMED10	1.52E-86	0.29464663	0.311	0.22	5.81E-82
LSS	5.43E-62	0.29404454	0.397	0.318	2.08E-57
DNAJB1	1.97E-63	0.29360903	0.108	0.059	7.54E-59
XPO1	5.22E-104	0.29285156	0.359	0.255	2.00E-99
EDIL3	2.74E-172	0.29277704	0.902	0.803	1.05E-167
CPM	3.33E-74	0.29268894	0.388	0.296	1.27E-69
SLC22A17	6.82E-97	0.29248345	0.275	0.183	2.61E-92
PWWP3A	3.18E-89	0.29187528	0.306	0.214	1.22E-84
CNTN2	3.13E-104	0.29143255	0.709	0.592	1.20E-99
PACRG-AS3	3.39E-69	0.29106268	0.197	0.128	1.30E-64
PNISR	6.73E-155	0.29055103	0.566	0.431	2.57E-150
KLF13	1.24E-81	0.28881661	0.303	0.216	4.73E-77
ABTB2	3.20E-49	0.28844705	0.185	0.128	1.22E-44
AGO2	5.85E-81	0.28844656	0.412	0.315	2.24E-76
C15orf41	1.46E-72	0.28766806	0.244	0.167	5.59E-68
ITPRID2	4.76E-75	0.28761065	0.222	0.147	1.82E-70
CTDSP2	3.90E-85	0.2869182	0.209	0.131	1.49E-80
BANP	6.26E-94	0.28345737	0.171	0.096	2.39E-89

CXXC4	1.69E-82	0.28191979	0.155	0.088	6.48E-78
ERBB3	1.63E-67	0.28179093	0.473	0.388	6.21E-63
SYNGR2	1.24E-68	0.28098941	0.154	0.094	4.72E-64
TOB2	8.11E-91	0.27954705	0.279	0.188	3.10E-86
CREBBP	2.61E-88	0.27856784	0.399	0.301	9.99E-84
CLDND1	3.76E-81	0.27843619	0.687	0.589	1.44E-76
ERMN	1.05E-57	0.27802901	0.408	0.331	4.03E-53
TIAM2	1.04E-90	0.27780274	0.311	0.216	3.98E-86
SIRT2	2.89E-73	0.27741835	0.368	0.281	1.11E-68
STARD7	2.25E-79	0.27735195	0.206	0.132	8.60E-75
FOXO1	1.04E-56	0.27585473	0.344	0.267	3.96E-52
PIP4K2A	3.33E-193	0.27564439	0.927	0.823	1.27E-188
KDM6A	1.27E-97	0.27427362	0.581	0.475	4.84E-93
RALGAPA2	1.12E-71	0.27389643	0.331	0.247	4.30E-67
KLHL24	1.54E-78	0.27381548	0.441	0.349	5.88E-74
PMP22	3.41E-61	0.27381444	0.393	0.314	1.30E-56
TFEB	2.37E-64	0.2736576	0.392	0.309	9.04E-60
RNF144A	6.09E-95	0.27362712	0.599	0.493	2.33E-90
MAP2K4	1.03E-81	0.27194117	0.377	0.284	3.96E-77
IRAK2	2.10E-81	0.27165456	0.163	0.095	8.03E-77
ADAM10	6.85E-73	0.27050424	0.52	0.431	2.62E-68
ELF1	6.84E-61	0.27046627	0.321	0.243	2.61E-56
TANC1	1.42E-74	0.26992167	0.38	0.288	5.41E-70
GPC5	5.19E-29	0.26872725	0.145	0.107	1.98E-24
TSEN15	8.04E-69	0.26872081	0.259	0.183	3.07E-64
SOX8	6.58E-36	0.26738157	0.272	0.218	2.52E-31
IP6K3	4.71E-117	0.26721322	0.118	0.049	1.80E-112
UTP23	9.87E-72	0.26711251	0.164	0.099	3.77E-67
CYP51A1	3.10E-70	0.26689601	0.156	0.094	1.19E-65
AC012494.1	1.48E-65	0.26633031	0.522	0.427	5.66E-61
CNTNAP2	9.96E-83	0.26616119	0.676	0.61	3.81E-78
GINM1	6.89E-90	0.26614283	0.204	0.124	2.63E-85
AC106791.1	1.26E-60	0.26529222	0.364	0.284	4.81E-56
GLTP	4.38E-68	0.26500934	0.321	0.24	1.67E-63
MIR29B2CHC	1.87E-92	0.26479137	0.205	0.124	7.16E-88
CBR1	7.14E-46	0.26425347	0.264	0.204	2.73E-41
MICAL3	1.14E-83	0.26401683	0.613	0.52	4.38E-79
NDE1	7.10E-80	0.26366138	0.358	0.266	2.71E-75
VPS13C	3.90E-94	0.26324663	0.591	0.491	1.49E-89
ECE1	5.36E-73	0.26273388	0.192	0.122	2.05E-68
GRB10	8.51E-85	0.26160678	0.33	0.235	3.25E-80
DPYSL2	1.16E-91	0.26148501	0.701	0.599	4.45E-87
RDX	1.75E-69	0.26047507	0.534	0.448	6.67E-65
PPFIBP2	1.80E-55	0.26024519	0.299	0.228	6.88E-51
FUT9	7.12E-94	0.26005354	0.366	0.261	2.72E-89

HEPN1	1.08E-39	0.25991627	0.159	0.113	4.14E-35
NUTM2A-AS	1.90E-67	0.2597921	0.498	0.41	7.25E-63
LGR4	1.24E-81	0.25925586	0.157	0.09	4.76E-77
CLDN11	1.12E-90	0.25874721	0.673	0.548	4.30E-86
ZCCHC2	6.81E-64	0.25787039	0.194	0.128	2.60E-59
SELENOW	4.14E-62	0.25770705	0.368	0.289	1.58E-57
SON	1.97E-93	0.25709335	0.451	0.348	7.51E-89
HLA-A	1.09E-120	0.25680234	0.1	0.036	4.16E-116
LDLRAD3	1.38E-38	0.25612059	0.251	0.193	5.28E-34
MSMO1	5.53E-77	0.25571762	0.115	0.059	2.12E-72
ZMYND8	3.49E-74	0.25555044	0.442	0.351	1.33E-69
CAMK2N1	8.63E-70	0.25509319	0.397	0.311	3.30E-65
ARHGAP23	2.50E-72	0.25491097	0.475	0.384	9.55E-68
PACS2	2.63E-63	0.25483367	0.448	0.364	1.01E-58
FIGN	7.05E-50	0.25445199	0.429	0.353	2.70E-45
HIP1	8.95E-87	0.25403357	0.694	0.596	3.42E-82
ENOX2	2.42E-39	0.25342371	0.407	0.345	9.23E-35
ACSL1	5.19E-54	0.25287032	0.284	0.216	1.99E-49
PTP4A2	2.66E-63	0.25268011	0.399	0.317	1.02E-58
TTC1	3.00E-82	0.25240095	0.199	0.124	1.15E-77
LGALS3BP	3.69E-64	0.25217577	0.134	0.079	1.41E-59
SNHG5	1.76E-76	0.2520811	0.201	0.128	6.72E-72
TMEM14B	6.38E-80	0.25204655	0.305	0.216	2.44E-75
BNIP3L	9.05E-61	0.25174247	0.332	0.255	3.46E-56
STIP1	1.22E-93	0.25161036	0.136	0.069	4.67E-89
FSCN1	2.10E-59	0.25154077	0.271	0.2	8.01E-55
CHADL	6.30E-56	0.25003954	0.19	0.128	2.41E-51
SH3GL3	8.86E-36	-0.2510804	0.759	0.718	3.39E-31
SPTBN4	7.67E-08	-0.2512673	0.089	0.104	0.00293125
AC077690.1	4.65E-33	-0.2516095	0.115	0.157	1.78E-28
SPATA6	2.86E-23	-0.2518976	0.402	0.435	1.09E-18
FUT8	4.31E-45	-0.2531397	0.76	0.733	1.65E-40
GFOD1	7.43E-35	-0.2531606	0.108	0.15	2.84E-30
LINC00342	1.66E-22	-0.2532874	0.227	0.267	6.34E-18
LCNL1	1.27E-47	-0.2540923	0.082	0.128	4.84E-43
ZNF189	1.41E-36	-0.2541791	0.145	0.192	5.41E-32
FMN1	4.15E-09	-0.2545184	0.101	0.119	0.00015844
EPB41L3	2.93E-17	-0.2549188	0.197	0.23	1.12E-12
MOG	1.40E-44	-0.257218	0.594	0.613	5.34E-40
NTM	2.83E-51	-0.2573783	0.726	0.746	1.08E-46
LINC00461	4.63E-31	-0.2582423	0.204	0.251	1.77E-26
PTK2	4.56E-83	-0.2599082	0.821	0.799	1.74E-78
BDNF-AS	4.26E-46	-0.2606278	0.13	0.183	1.63E-41
PPM1L	1.84E-19	-0.2607953	0.14	0.172	7.02E-15
MYO5A	2.48E-30	-0.2617603	0.495	0.531	9.47E-26

CCDC102B	2.48E-47	-0.2622343	0.072	0.116	9.47E-43
PCBP4	6.89E-47	-0.2628541	0.195	0.252	2.63E-42
STMN4	9.76E-52	-0.2635852	0.23	0.297	3.73E-47
DAPK2	1.89E-28	-0.2636571	0.2	0.243	7.22E-24
TRPC1	8.01E-32	-0.2637048	0.265	0.314	3.06E-27
ANO4	1.86E-37	-0.2637093	0.687	0.681	7.12E-33
MEF2A	3.59E-34	-0.2639464	0.371	0.422	1.37E-29
ZNF518A	5.38E-35	-0.2648333	0.28	0.332	2.06E-30
GIPC1	1.26E-28	-0.2654106	0.129	0.169	4.82E-24
KIAA1324L	9.64E-29	-0.2654419	0.41	0.449	3.68E-24
CREB5	2.62E-60	-0.2660065	0.763	0.736	1.00E-55
TTY14	3.23E-46	-0.2666677	0.109	0.16	1.24E-41
LINC01184	5.76E-31	-0.2680978	0.287	0.334	2.20E-26
ANKS1B	1.14E-16	-0.2686665	0.811	0.792	4.37E-12
PKM	1.27E-07	-0.2695602	0.103	0.119	0.00485786
SATB2	4.69E-20	-0.2696482	0.085	0.113	1.79E-15
PPP2R3A	9.68E-37	-0.2703236	0.344	0.396	3.70E-32
EXOC6B	2.62E-74	-0.2706127	0.788	0.769	1.00E-69
AC022182.1	5.55E-65	-0.2710791	0.054	0.101	2.12E-60
SPANXA2-OT	2.32E-28	-0.2719639	0.091	0.126	8.86E-24
GRAMD2B	2.92E-57	-0.2722844	0.225	0.294	1.12E-52
HS3ST5	1.46E-27	-0.2726634	0.468	0.498	5.57E-23
BTBD9	5.39E-39	-0.2739535	0.307	0.367	2.06E-34
POGZ	2.10E-49	-0.2741785	0.504	0.547	8.01E-45
AC108721.2	5.84E-31	-0.2753232	0.301	0.35	2.23E-26
C5orf64	2.69E-29	-0.2775622	0.299	0.343	1.03E-24
PLEKHH1	2.51E-76	-0.2787638	0.754	0.732	9.61E-72
AC115622.1	4.11E-53	-0.2799403	0.067	0.113	1.57E-48
NSF	5.19E-15	-0.2826948	0.095	0.119	1.98E-10
TMEFF1	2.96E-31	-0.2827224	0.255	0.302	1.13E-26
GPATCH2	2.07E-40	-0.2828791	0.082	0.123	7.92E-36
CASTOR3	5.13E-39	-0.285238	0.345	0.396	1.96E-34
MAP1LC3A	2.03E-79	-0.2852761	0.068	0.127	7.75E-75
LINC01278	1.33E-22	-0.2873891	0.145	0.18	5.08E-18
PROX1-AS1	1.85E-58	-0.2885179	0.069	0.118	7.07E-54
AC138627.1	1.61E-44	-0.2892626	0.109	0.158	6.16E-40
ADAMTS18	5.32E-66	-0.2912697	0.122	0.187	2.03E-61
DMXL2	1.20E-34	-0.2924927	0.107	0.149	4.57E-30
FAR1	2.19E-35	-0.2930787	0.44	0.476	8.37E-31
RABGEF1	8.74E-37	-0.2936573	0.401	0.447	3.34E-32
SLC1A3	3.02E-33	-0.2973236	0.421	0.459	1.15E-28
SCMH1	8.93E-16	-0.2995864	0.142	0.169	3.41E-11
AC026341.1	2.05E-42	-0.3001242	0.091	0.135	7.84E-38
MIR181A1HG	8.88E-41	-0.3026454	0.613	0.618	3.39E-36
TNIK	1.85E-33	-0.3029473	0.354	0.403	7.06E-29

AIG1	8.13E-39	-0.303572	0.248	0.302	3.11E-34
MIPEP	4.17E-49	-0.3035811	0.124	0.177	1.60E-44
SCFD2	5.43E-54	-0.3061258	0.24	0.309	2.08E-49
TNNI3K	1.68E-61	-0.3075637	0.118	0.178	6.42E-57
RBFOX2	5.99E-21	-0.3113615	0.259	0.295	2.29E-16
CCDC88A	6.05E-99	-0.3143223	0.743	0.763	2.31E-94
XKR6	8.23E-23	-0.3156581	0.108	0.14	3.15E-18
AL050309.1	6.08E-43	-0.3162998	0.117	0.166	2.33E-38
GOLGA8A	6.27E-71	-0.317839	0.054	0.104	2.40E-66
CERCAM	3.71E-49	-0.3191666	0.661	0.655	1.42E-44
CACNB2	2.26E-12	-0.3226762	0.083	0.103	8.65E-08
LINC01376	1.77E-77	-0.3233646	0.061	0.116	6.77E-73
R3HDM1	2.75E-18	-0.3240054	0.326	0.361	1.05E-13
BCAT1	7.69E-100	-0.3249052	0.051	0.111	2.94E-95
CPB2-AS1	6.83E-60	-0.3265059	0.384	0.452	2.61E-55
PLS3	1.57E-53	-0.3279916	0.162	0.223	6.01E-49
AC006059.1	5.98E-29	-0.328123	0.274	0.316	2.29E-24
PTK2B	1.34E-37	-0.3302392	0.072	0.109	5.12E-33
LINC00609	5.69E-47	-0.3305383	0.457	0.504	2.17E-42
SNAP91	2.28E-28	-0.3325059	0.09	0.124	8.73E-24
PRKCB	3.71E-16	-0.332621	0.215	0.246	1.42E-11
FOLH1	2.15E-50	-0.3329095	0.451	0.493	8.22E-46
EXT1	5.43E-39	-0.3343327	0.212	0.268	2.07E-34
KCNH1	2.14E-21	-0.3347087	0.174	0.211	8.18E-17
SH3D19	1.93E-87	-0.3360343	0.599	0.646	7.38E-83
LINC01102	7.55E-89	-0.3361369	0.077	0.141	2.88E-84
BCAS1	2.90E-101	-0.3380317	0.647	0.674	1.11E-96
CCDC7	8.36E-54	-0.3383047	0.2	0.264	3.19E-49
CMTM5	1.03E-107	-0.3390222	0.107	0.186	3.95E-103
CAMK1D	1.25E-17	-0.3391003	0.082	0.107	4.77E-13
FAM13C	1.30E-61	-0.3410576	0.514	0.554	4.97E-57
ABCA5	3.18E-68	-0.3413137	0.136	0.203	1.21E-63
LINC01877	6.62E-68	-0.341591	0.085	0.141	2.53E-63
ATG10	2.15E-65	-0.3437534	0.159	0.227	8.23E-61
ITFG1	1.08E-59	-0.3443955	0.429	0.494	4.14E-55
SOX5	2.58E-15	-0.3459317	0.101	0.125	9.85E-11
AK5	2.12E-79	-0.3474681	0.661	0.691	8.10E-75
KCNAB1	1.26E-35	-0.3483766	0.104	0.145	4.80E-31
SH3TC2-DT	1.51E-62	-0.3489472	0.154	0.22	5.78E-58
FBXL17	3.09E-31	-0.3500612	0.31	0.358	1.18E-26
PPP1R12B	3.56E-69	-0.3503747	0.531	0.576	1.36E-64
AC092924.2	2.05E-61	-0.3503892	0.183	0.25	7.82E-57
AC021231.1	1.84E-85	-0.3509786	0.058	0.115	7.04E-81
EVI5	1.83E-70	-0.3518397	0.33	0.409	7.01E-66
ATP2B1	2.34E-08	-0.3519175	0.206	0.224	0.00089446

LINC01006	7.48E-65	-0.352495	0.106	0.164	2.86E-60
SAMD4B	2.52E-62	-0.3528827	0.343	0.411	9.65E-58
DNM1L	7.97E-69	-0.3530194	0.209	0.283	3.05E-64
SV2B	1.58E-12	-0.353079	0.116	0.138	6.04E-08
LUC7L2	4.48E-70	-0.3534821	0.375	0.446	1.71E-65
PHLDB1	2.89E-112	-0.3555952	0.575	0.632	1.11E-107
INPP4B	6.67E-49	-0.3557231	0.092	0.141	2.55E-44
ICA1L	5.58E-64	-0.3558878	0.081	0.134	2.13E-59
KCNQ3	9.02E-20	-0.3574537	0.089	0.116	3.45E-15
AC107223.1	2.31E-54	-0.3598436	0.063	0.108	8.83E-50
RBM25	4.25E-44	-0.3622996	0.312	0.369	1.62E-39
JAZF1	6.70E-74	-0.3634204	0.308	0.39	2.56E-69
TSPAN7	3.84E-29	-0.3639618	0.07	0.102	1.47E-24
COL16A1	1.27E-46	-0.3642488	0.227	0.283	4.87E-42
TPM4	2.41E-36	-0.3647244	0.143	0.189	9.20E-32
SIK3	2.04E-180	-0.3652966	0.907	0.849	7.81E-176
RASAL1	6.10E-84	-0.3657311	0.135	0.209	2.33E-79
AGPAT4	7.36E-78	-0.3680195	0.458	0.531	2.81E-73
MRTFB	1.00E-31	-0.3682805	0.077	0.112	3.83E-27
POLR2F	1.20E-88	-0.3687978	0.618	0.663	4.57E-84
KCTD1	5.63E-53	-0.3689521	0.116	0.17	2.15E-48
AL078590.2	3.14E-41	-0.3706651	0.268	0.32	1.20E-36
ANK2	1.49E-197	-0.3711662	0.86	0.858	5.69E-193
DOCK3	1.23E-94	-0.3712158	0.627	0.681	4.70E-90
CNTN1	1.54E-14	-0.3712227	0.137	0.164	5.88E-10
TMEFF2	4.09E-70	-0.3716875	0.7	0.702	1.56E-65
DMD	1.28E-56	-0.3717141	0.564	0.613	4.90E-52
MAP1B	3.89E-23	-0.3724658	0.384	0.417	1.49E-18
ENOSF1	8.53E-70	-0.372843	0.323	0.397	3.26E-65
SLC6A1	3.30E-46	-0.3773948	0.314	0.369	1.26E-41
SYT16	4.11E-52	-0.3800909	0.058	0.1	1.57E-47
SAMD12	8.74E-79	-0.3801915	0.588	0.638	3.34E-74
AATK	1.89E-116	-0.3817194	0.631	0.662	7.22E-112
LINC01630	1.96E-74	-0.3846299	0.387	0.462	7.50E-70
DANT2	3.58E-29	-0.3856258	0.215	0.259	1.37E-24
LDLRAD4	1.41E-70	-0.3907666	0.337	0.411	5.40E-66
GMDS-DT	6.39E-71	-0.3925164	0.221	0.297	2.44E-66
NCALD	6.73E-36	-0.3927182	0.081	0.119	2.57E-31
ROR1	9.03E-35	-0.3927853	0.169	0.216	3.45E-30
RNF217-AS1	2.25E-67	-0.3953625	0.071	0.124	8.59E-63
MARCKSL1	6.04E-33	-0.3955976	0.293	0.333	2.31E-28
KCND2	5.45E-22	-0.3960098	0.074	0.102	2.08E-17
FMN2	5.33E-33	-0.3969694	0.075	0.11	2.04E-28
GRIA2	1.16E-16	-0.3984321	0.395	0.41	4.44E-12
TESK2	1.96E-89	-0.4009459	0.234	0.321	7.50E-85

BABAM2	1.47E-82	-0.4045677	0.192	0.274	5.64E-78
HMGN1	9.18E-48	-0.4077656	0.113	0.164	3.51E-43
NRBP2	3.58E-126	-0.4078885	0.139	0.233	1.37E-121
FOCAD	2.84E-48	-0.4095971	0.111	0.162	1.09E-43
MACROD2	8.48E-31	-0.410084	0.185	0.23	3.24E-26
NKAIN2	9.03E-133	-0.4105516	0.8	0.81	3.45E-128
FBXO7	1.59E-100	-0.4108226	0.232	0.322	6.07E-96
PSD3	2.07E-67	-0.4110716	0.538	0.579	7.92E-63
UNC5C	2.08E-101	-0.4124916	0.845	0.807	7.93E-97
PAK1	9.05E-63	-0.4130302	0.155	0.219	3.46E-58
LSAMP	1.64E-167	-0.4130598	0.717	0.792	6.28E-163
RORA	3.09E-78	-0.4163446	0.267	0.345	1.18E-73
ASPA	1.50E-87	-0.4195529	0.43	0.496	5.75E-83
AZIN1-AS1	1.93E-106	-0.4239353	0.115	0.197	7.39E-102
SLC22A15	2.36E-81	-0.4256382	0.426	0.492	9.01E-77
ERC2	3.86E-21	-0.4259868	0.196	0.232	1.48E-16
PDE8A	5.56E-163	-0.4264215	0.758	0.748	2.12E-158
HMGN2	3.23E-28	-0.4266873	0.097	0.132	1.23E-23
AC104596.1	4.87E-66	-0.4282483	0.183	0.25	1.86E-61
SLC4A8	3.05E-80	-0.4288184	0.255	0.336	1.17E-75
DSCAM	8.99E-16	-0.4320714	0.143	0.17	3.44E-11
LURAP1L-AS	1.20E-75	-0.4322138	0.234	0.312	4.57E-71
GRIN1	6.26E-13	-0.4335734	0.106	0.127	2.39E-08
PCLO	6.79E-24	-0.4373468	0.086	0.116	2.59E-19
ARHGAP26	8.95E-19	-0.4399148	0.096	0.123	3.42E-14
PLPPR1	1.27E-40	-0.4405212	0.396	0.436	4.87E-36
PDE10A	3.43E-67	-0.4417431	0.082	0.137	1.31E-62
RASGRF2	1.06E-83	-0.4424728	0.292	0.375	4.03E-79
OPALIN	2.55E-97	-0.4432234	0.409	0.484	9.73E-93
RPS28	1.94E-14	-0.4468351	0.246	0.205	7.43E-10
ASTN2	5.44E-92	-0.446905	0.468	0.54	2.08E-87
MAST4	1.20E-72	-0.4478698	0.13	0.198	4.60E-68
TMEM132B	7.64E-14	-0.4495925	0.092	0.114	2.92E-09
AL359091.1	9.20E-101	-0.4512078	0.498	0.564	3.52E-96
RIN2	1.49E-96	-0.4522409	0.293	0.384	5.69E-92
TP53TG5	1.78E-112	-0.4534893	0.272	0.367	6.79E-108
DNM1	8.23E-27	-0.4571143	0.092	0.124	3.15E-22
RIMS1	6.47E-40	-0.4590931	0.079	0.119	2.47E-35
CACNA1C	1.33E-34	-0.4631846	0.11	0.152	5.09E-30
LINC00882	1.61E-121	-0.4643687	0.423	0.521	6.17E-117
LINC01170	2.24E-68	-0.4650515	0.403	0.47	8.56E-64
SEC14L5	1.02E-94	-0.4691685	0.343	0.427	3.91E-90
H3F3A	1.32E-08	-0.4715818	0.232	0.202	0.000503
EFCAB11	1.74E-100	-0.4740436	0.128	0.209	6.66E-96
AFF3	8.76E-36	-0.4770877	0.081	0.119	3.35E-31

LTBP1	1.37E-103	-0.4777799	0.177	0.267	5.23E-99
MAP2	5.89E-32	-0.4793982	0.112	0.151	2.25E-27
CNTNAP5	5.83E-20	-0.4833077	0.076	0.101	2.23E-15
FNBP1	4.84E-211	-0.4863753	0.65	0.702	1.85E-206
RPS25	1.26E-07	-0.4890297	0.134	0.15	0.00481357
ARPP21	9.38E-49	-0.4910835	0.227	0.283	3.59E-44
TMEM232	1.44E-116	-0.4999615	0.082	0.159	5.52E-112
TARBP1	1.63E-125	-0.5031441	0.117	0.205	6.22E-121
KCTD16	1.85E-24	-0.5032041	0.08	0.11	7.07E-20
KCNH8	1.02E-226	-0.5039539	0.721	0.735	3.91E-222
ZFYVE16	5.63E-168	-0.5063689	0.472	0.57	2.15E-163
SNTG1	4.69E-22	-0.5103569	0.119	0.151	1.79E-17
AC079352.1	7.73E-125	-0.5138368	0.31	0.42	2.96E-120
GRM7	1.55E-26	-0.5162678	0.099	0.133	5.92E-22
ATP8A2	5.12E-103	-0.5206263	0.112	0.191	1.96E-98
CHRM3	3.25E-41	-0.5207203	0.076	0.116	1.24E-36
CNTN5	1.53E-27	-0.5254273	0.105	0.14	5.87E-23
GALNT13	1.38E-163	-0.5272745	0.359	0.483	5.29E-159
CDH12	7.42E-59	-0.5293908	0.056	0.101	2.84E-54
SYT14	1.45E-153	-0.5318992	0.147	0.253	5.53E-149
SEMA3B	2.69E-156	-0.5361756	0.297	0.41	1.03E-151
GRIN2A	1.59E-80	-0.5362034	0.201	0.282	6.09E-76
CLSTN2	2.38E-25	-0.537884	0.075	0.105	9.12E-21
TMEM178B	2.72E-77	-0.5458823	0.1	0.164	1.04E-72
PHACTR1	8.60E-38	-0.5464901	0.287	0.338	3.29E-33
AC233296.1	6.03E-127	-0.54684	0.135	0.23	2.30E-122
NECAB1	5.41E-157	-0.5473652	0.405	0.513	2.07E-152
TAF4A2	2.37E-38	-0.5540964	0.088	0.128	9.06E-34
CIRBP	8.50E-169	-0.5580129	0.324	0.444	3.25E-164
GPM6A	6.33E-35	-0.5613014	0.21	0.255	2.42E-30
CDH11	7.78E-155	-0.5631377	0.165	0.275	2.97E-150
MYT1L	9.59E-22	-0.5679604	0.075	0.102	3.66E-17
DPH6	4.58E-151	-0.5690983	0.155	0.261	1.75E-146
AC007364.1	3.39E-170	-0.5727533	0.166	0.284	1.29E-165
MT-CO1	7.96E-110	-0.5728936	0.622	0.671	3.04E-105
DGKB	6.57E-56	-0.5731083	0.07	0.117	2.51E-51
ACTB	2.45E-33	-0.5785616	0.44	0.479	9.36E-29
CNTN4	2.59E-50	-0.5814353	0.067	0.11	9.90E-46
DCLK1	2.68E-63	-0.5870059	0.066	0.115	1.02E-58
CDH18	2.72E-55	-0.5929743	0.07	0.116	1.04E-50
CADPS	3.63E-64	-0.5938843	0.074	0.126	1.39E-59
GNAS	1.13E-54	-0.5942725	0.226	0.288	4.32E-50
ASIC2	5.14E-56	-0.5973707	0.06	0.105	1.96E-51
RFX3-AS1	2.15E-199	-0.5977756	0.192	0.322	8.23E-195
PTPRN2	8.34E-50	-0.599028	0.07	0.114	3.19E-45

DTNA	1.32E-113	-0.6008395	0.193	0.287	5.06E-109
KHDRBS2	7.26E-39	-0.6024536	0.125	0.169	2.78E-34
SLC4A10	7.31E-76	-0.6059046	0.057	0.109	2.80E-71
GRIA3	2.31E-108	-0.6072746	0.121	0.202	8.82E-104
PTPRG	6.20E-70	-0.6078151	0.082	0.138	2.37E-65
MOBP	2.89E-187	-0.612646	0.729	0.726	1.10E-182
IQCJ-SCHIP1	2.68E-138	-0.6183107	0.381	0.49	1.02E-133
LRRTM4	6.44E-43	-0.618401	0.296	0.355	2.46E-38
UNC79	2.64E-153	-0.6243658	0.211	0.323	1.01E-148
GRIK2	1.77E-86	-0.625824	0.138	0.214	6.77E-82
MEF2C	1.94E-55	-0.6283698	0.087	0.137	7.42E-51
OXR1	9.54E-52	-0.6320736	0.124	0.177	3.65E-47
CHN1	2.49E-63	-0.6326911	0.118	0.176	9.51E-59
NRCAM	1.41E-79	-0.6335955	0.081	0.141	5.37E-75
FGF12	1.71E-56	-0.6387039	0.121	0.176	6.52E-52
NAV3	1.97E-73	-0.638744	0.309	0.388	7.53E-69
LINGO2	1.03E-66	-0.6476981	0.063	0.113	3.94E-62
LDB3	6.32E-235	-0.6506265	0.303	0.446	2.42E-230
GRM5	4.62E-63	-0.655857	0.084	0.137	1.76E-58
ADGRL2	2.54E-58	-0.6577853	0.059	0.104	9.71E-54
CACNA2D3	5.82E-67	-0.6622607	0.071	0.123	2.23E-62
PRKG1	7.36E-44	-0.6639289	0.069	0.108	2.81E-39
CARNS1	9.23E-235	-0.6674672	0.377	0.504	3.53E-230
SLC1A2	1.50E-146	-0.6679506	0.052	0.127	5.74E-142
GLDN	3.21E-271	-0.6713998	0.44	0.572	1.23E-266
RPL13	3.58E-13	-0.6715938	0.306	0.264	1.37E-08
CLVS1	6.29E-223	-0.674614	0.062	0.166	2.40E-218
SLC8A1	5.16E-64	-0.6803955	0.085	0.138	1.97E-59
TENM2	5.24E-41	-0.6855769	0.129	0.175	2.00E-36
PWRN1	3.07E-149	-0.6942755	0.174	0.284	1.17E-144
UNC5D	4.15E-57	-0.696029	0.059	0.103	1.59E-52
PPFIA2	3.19E-261	-0.6970972	0.485	0.608	1.22E-256
PCDH7	1.11E-65	-0.7048998	0.108	0.167	4.26E-61
GREB1L	4.04E-265	-0.7073685	0.225	0.383	1.54E-260
NELL2	1.13E-72	-0.7088537	0.053	0.103	4.31E-68
HS6ST3	7.95E-80	-0.7089573	0.065	0.121	3.04E-75
MEG3	1.11E-41	-0.7112159	0.241	0.291	4.23E-37
AC090164.5	0	-0.728216	0.001	0.102	0
RIMS2	2.76E-66	-0.7290738	0.114	0.172	1.05E-61
NRXN3	0	-0.7317619	0.796	0.85	0
SVEP1	1.32E-147	-0.73448	0.195	0.3	5.03E-143
KALRN	3.04E-101	-0.7484511	0.152	0.233	1.16E-96
FRMPD4	1.94E-70	-0.7516087	0.075	0.129	7.43E-66
ATRNL1	4.51E-91	-0.7532616	0.118	0.191	1.72E-86
SNAP25	5.47E-95	-0.7541451	0.112	0.184	2.09E-90

KCNQ5	4.35E-79	-0.7593498	0.103	0.167	1.66E-74
LMCD1-AS1	0	-0.7650258	0.374	0.556	0
DLGAP2	1.01E-68	-0.7855617	0.082	0.138	3.86E-64
FGF14	1.65E-90	-0.7925671	0.156	0.233	6.29E-86
NRG1	3.27E-81	-0.7935932	0.059	0.114	1.25E-76
RPLP0	3.45E-13	-0.7961564	0.1	0.121	1.32E-08
SPARCL1	1.95E-114	-0.7979742	0.09	0.168	7.47E-110
PLCB1	1.86E-74	-0.8043587	0.136	0.205	7.09E-70
RPL10A	2.87E-11	-0.8107966	0.086	0.104	1.10E-06
RPL35A	5.13E-10	-0.8115055	0.113	0.13	1.96E-05
RPL9	1.34E-12	-0.818641	0.137	0.158	5.11E-08
NAALADL2	0	-0.8200254	0.342	0.544	0
CCSER1	9.38E-121	-0.8205446	0.09	0.17	3.58E-116
CELF2	2.06E-89	-0.8223086	0.139	0.216	7.88E-85
DLGAP1	8.72E-103	-0.8232015	0.175	0.26	3.33E-98
DPP10	3.29E-45	-0.8243297	0.257	0.316	1.26E-40
RGS7	1.31E-150	-0.8292434	0.113	0.211	5.00E-146
ACTG1	1.26E-89	-0.829838	0.177	0.258	4.81E-85
FAM155A	1.71E-120	-0.8640195	0.168	0.261	6.55E-116
KCNMA1	1.19E-69	-0.8667839	0.108	0.169	4.57E-65
PDE4D	2.10E-194	-0.8693276	0.362	0.489	8.04E-190
AGBL4	7.12E-92	-0.8760497	0.081	0.146	2.72E-87
RALYL	1.15E-89	-0.8770136	0.124	0.196	4.41E-85
RPL37	5.66E-14	-0.87716	0.156	0.179	2.16E-09
PPP2R2B	0	-0.906214	0.903	0.875	0
RPS15A	1.30E-13	-0.9073332	0.105	0.126	4.96E-09
STXBP5L	6.10E-114	-0.9366159	0.086	0.161	2.33E-109
CSMD1	9.83E-124	-0.9795685	0.336	0.432	3.76E-119
NRXN1	2.36E-164	-0.9864117	0.25	0.366	9.02E-160
NRG3	3.09E-134	-1.0060606	0.221	0.323	1.18E-129
RPL15	9.18E-14	-1.0150548	0.16	0.184	3.51E-09
RPL3	1.08E-08	-1.0187099	0.161	0.177	0.00041136
ROBO2	1.10E-152	-1.0220486	0.148	0.252	4.20E-148
OPCML	8.60E-86	-1.1094306	0.21	0.288	3.29E-81
PDE1A	0	-1.1286462	0.407	0.606	0
RBFOX1	9.85E-201	-1.148152	0.323	0.453	3.76E-196
SYT1	8.29E-178	-1.2052924	0.231	0.35	3.17E-173
RPS12	5.58E-29	-1.219283	0.126	0.162	2.13E-24
RPS18	6.09E-16	-1.2229936	0.143	0.168	2.33E-11
KCNIP4	1.67E-201	-1.2428105	0.427	0.561	6.37E-197
RPS4X	2.54E-16	-1.5753697	0.094	0.116	9.72E-12

Oligodendrocyte Precursor DEGs

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
PLCG2	9.37E-173	1.33225102	0.815	0.559	3.58E-168
MTRNR2L12	3.42E-137	1.17653339	0.735	0.538	1.31E-132
MT-ND3	1.70E-149	1.10854252	0.821	0.664	6.51E-145
HSP90AA1	1.40E-73	0.9061168	0.629	0.477	5.34E-69
MT-ATP6	5.96E-89	0.87389292	0.82	0.688	2.28E-84
MT-CYB	1.66E-89	0.85624198	0.712	0.536	6.36E-85
AC093865.1	1.01E-119	0.80390564	0.536	0.289	3.86E-115
EGFR	5.77E-116	0.7787067	0.722	0.536	2.20E-111
MT-CO2	5.09E-85	0.77312856	0.845	0.733	1.95E-80
MT-ND4	4.30E-62	0.77136971	0.791	0.669	1.64E-57
FKBP5	7.88E-98	0.70613458	0.695	0.511	3.01E-93
MT-ND1	2.56E-52	0.70504248	0.544	0.391	9.77E-48
MT-CO3	3.32E-41	0.6612224	0.727	0.627	1.27E-36
HSPH1	1.53E-27	0.63828082	0.268	0.168	5.86E-23
TAF1A	5.54E-77	0.63387064	0.723	0.559	2.12E-72
MT-ND2	7.47E-46	0.63162934	0.563	0.418	2.85E-41
HSPA1A	1.72E-28	0.62302655	0.226	0.13	6.56E-24
ZBTB16	6.83E-94	0.61849755	0.763	0.618	2.61E-89
PDZD2	2.41E-140	0.59955311	0.958	0.947	9.21E-136
SEM1	9.20E-70	0.59354889	0.527	0.35	3.52E-65
HIF3A	1.71E-102	0.59303119	0.825	0.726	6.54E-98
KCNMB2	2.67E-133	0.58850745	0.947	0.844	1.02E-128
PLD5	1.38E-88	0.58185261	0.758	0.634	5.28E-84
TLE1	9.39E-84	0.57963652	0.417	0.215	3.59E-79
AL627171.2	1.18E-45	0.56320312	0.249	0.125	4.50E-41
EEF2K	1.26E-75	0.55853573	0.633	0.456	4.82E-71
HP1BP3	8.76E-85	0.55578875	0.705	0.566	3.35E-80
KIAA1217	6.48E-74	0.55280787	0.839	0.771	2.48E-69
DPH6-DT	4.68E-58	0.5429954	0.468	0.297	1.79E-53
MT3	5.79E-30	0.54155383	0.626	0.543	2.22E-25
SORBS1	5.46E-27	0.52720624	0.784	0.711	2.09E-22
EEF1A1	1.16E-12	0.52508942	0.452	0.388	4.42E-08
MGLL	5.77E-69	0.52279401	0.63	0.463	2.20E-64
VCAN	8.43E-137	0.51251288	0.973	0.97	3.22E-132
DOCK5	3.85E-46	0.4993779	0.72	0.637	1.47E-41
APOLD1	8.88E-32	0.48569245	0.144	0.062	3.40E-27
DNAJB1	1.54E-16	0.48383472	0.163	0.099	5.89E-12
FBXO31	2.72E-54	0.48304488	0.359	0.204	1.04E-49
NEAT1	2.69E-19	0.46744047	0.39	0.299	1.03E-14
MT-ND4L	2.09E-24	0.46664736	0.394	0.297	7.99E-20
KIF19	8.31E-59	0.45528101	0.313	0.157	3.18E-54
DGKG	2.90E-127	0.45523772	0.947	0.93	1.11E-122
FAM13C	6.92E-36	0.45201068	0.509	0.389	2.65E-31

PARD3	1.83E-76	0.44998746	0.904	0.88	7.01E-72
AC119674.1	5.38E-38	0.44948268	0.301	0.177	2.06E-33
ITGA8	2.14E-48	0.4476982	0.708	0.593	8.18E-44
MT2A	1.13E-19	0.44704844	0.368	0.279	4.33E-15
LIFR	9.38E-50	0.44172538	0.73	0.647	3.59E-45
HIP1	1.06E-51	0.44159068	0.859	0.837	4.06E-47
HDAC4	1.72E-53	0.44064505	0.757	0.659	6.57E-49
DISP1	7.19E-47	0.43369665	0.557	0.406	2.75E-42
AC005906.2	2.17E-51	0.43180056	0.418	0.259	8.31E-47
SLAIN1	2.02E-49	0.43136423	0.799	0.744	7.72E-45
HSPB1	4.58E-38	0.42139963	0.171	0.074	1.75E-33
GFAP	1.41E-11	0.41595762	0.18	0.126	5.41E-07
SGO1-AS1	1.61E-34	0.41488228	0.225	0.117	6.16E-30
BMERB1	4.50E-38	0.41336417	0.704	0.584	1.72E-33
CCDC144A	3.20E-50	0.40605179	0.452	0.291	1.22E-45
HMGB1	1.48E-36	0.40406494	0.709	0.635	5.67E-32
SLC5A3	2.77E-55	0.40080333	0.341	0.185	1.06E-50
LINC01117	1.13E-35	0.40014132	0.304	0.18	4.32E-31
PANTR1	1.76E-45	0.39927028	0.633	0.484	6.73E-41
KCNQ3	1.19E-24	0.39632607	0.634	0.548	4.55E-20
ZMAT3	4.80E-40	0.39426208	0.632	0.523	1.83E-35
SAMHD1	3.13E-37	0.39285972	0.469	0.331	1.20E-32
SGK1	1.26E-51	0.39018395	0.861	0.844	4.81E-47
FLRT2	1.28E-31	0.3872237	0.744	0.683	4.88E-27
CHST3	5.02E-30	0.38549496	0.364	0.246	1.92E-25
ZFPM2	3.77E-50	0.37900498	0.918	0.928	1.44E-45
SPP1	5.64E-22	0.37741899	0.115	0.054	2.15E-17
CNTN3	4.03E-36	0.37646008	0.741	0.681	1.54E-31
AJAP1	3.04E-40	0.37532094	0.345	0.206	1.16E-35
CDH20	2.41E-42	0.37304231	0.893	0.905	9.20E-38
B2M	3.23E-23	0.36978375	0.485	0.39	1.24E-18
AC114971.1	8.20E-25	0.36620664	0.375	0.266	3.13E-20
RXRA	1.20E-30	0.36544789	0.493	0.377	4.60E-26
KANSL1L	1.58E-32	0.36311154	0.662	0.579	6.03E-28
CHL1-AS2	2.45E-38	0.3622246	0.271	0.149	9.38E-34
MT-ND5	3.98E-18	0.36202954	0.383	0.292	1.52E-13
MT-ATP8	3.48E-15	0.3604457	0.383	0.3	1.33E-10
RAMP1	3.64E-33	0.35698737	0.606	0.5	1.39E-28
BCR	3.78E-25	0.35386803	0.522	0.415	1.44E-20
AL110292.1	2.51E-34	0.35157377	0.415	0.283	9.60E-30
HSPA8	4.18E-27	0.35004155	0.312	0.205	1.60E-22
LINC00486	3.55E-09	0.34730385	0.566	0.506	0.00013555
MKLN1	2.20E-56	0.34585822	0.888	0.886	8.40E-52
ZHX3	6.41E-32	0.33966505	0.677	0.595	2.45E-27
GAB1	4.07E-35	0.33799644	0.777	0.728	1.55E-30

PTPRJ	5.70E-29	0.33739434	0.852	0.803	2.18E-24
HSP90AB1	2.89E-13	0.33692118	0.463	0.39	1.11E-08
PPM1B	8.11E-33	0.33652758	0.682	0.616	3.10E-28
METTL7A	2.60E-30	0.33582172	0.417	0.298	9.94E-26
SPECC1	3.54E-26	0.33539042	0.481	0.371	1.35E-21
TAF5	4.18E-38	0.33285179	0.586	0.446	1.60E-33
LINC00632	6.78E-24	0.33283424	0.632	0.547	2.59E-19
RPL28	3.31E-12	0.32799223	0.298	0.234	1.27E-07
MAPT-AS1	3.39E-29	0.3272136	0.212	0.115	1.29E-24
LINC01546	1.69E-65	0.32656049	0.188	0.058	6.45E-61
CDH19	1.00E-27	0.32468666	0.2	0.107	3.84E-23
PDE8B	4.40E-43	0.32422904	0.837	0.716	1.68E-38
MRPS6	9.74E-36	0.32144622	0.343	0.216	3.72E-31
ARL6IP1	1.34E-07	0.31980927	0.307	0.252	0.00510963
CRISPLD2	1.16E-26	0.31641492	0.537	0.418	4.44E-22
SATB1-AS1	3.62E-23	0.31632042	0.51	0.407	1.38E-18
GSG1L	1.42E-25	0.31447403	0.687	0.602	5.43E-21
CEBPD	2.38E-26	0.31374492	0.223	0.132	9.11E-22
INHBA	1.01E-41	0.31046907	0.175	0.072	3.87E-37
DST	1.30E-55	0.30571463	0.949	0.946	4.97E-51
HS3ST1	8.16E-40	0.30544382	0.245	0.125	3.12E-35
ZDHHC14	1.64E-39	0.30524519	0.906	0.884	6.28E-35
RFTN2	7.19E-32	0.30463699	0.69	0.588	2.75E-27
UBB	7.58E-24	0.30306607	0.296	0.197	2.90E-19
UTP23	3.56E-24	0.30187732	0.287	0.191	1.36E-19
PRKX	3.05E-32	0.30005312	0.273	0.161	1.16E-27
MEIKIN	6.14E-27	0.29966187	0.215	0.122	2.35E-22
CALN1	2.38E-20	0.29806707	0.366	0.269	9.09E-16
GRIA4	1.32E-29	0.29782639	0.87	0.865	5.06E-25
RAD18	4.63E-23	0.29688434	0.382	0.277	1.77E-18
KANSL1	2.35E-30	0.29581345	0.789	0.734	8.99E-26
APOD	5.22E-19	0.29182414	0.739	0.694	1.99E-14
NOVA1	6.44E-44	0.28754814	0.941	0.958	2.46E-39
GPNMB	2.01E-12	0.28590738	0.568	0.501	7.69E-08
MAPT	1.04E-23	0.28483617	0.744	0.693	3.98E-19
KLHL4	7.00E-20	0.28406043	0.3	0.211	2.68E-15
VAMP2	1.52E-25	0.28362093	0.48	0.367	5.80E-21
ZHX2	6.48E-25	0.28355403	0.835	0.792	2.48E-20
CST3	4.49E-08	0.28236489	0.62	0.592	0.00171569
CD82	1.35E-18	0.28217262	0.332	0.24	5.16E-14
SLC38A2	1.16E-19	0.27977371	0.371	0.279	4.43E-15
MBNL1	4.98E-20	0.27874811	0.732	0.683	1.90E-15
CHORDC1	5.49E-19	0.27864631	0.285	0.2	2.10E-14
PYGL	7.46E-24	0.27861941	0.384	0.273	2.85E-19
GPM6B	9.84E-28	0.276811	0.86	0.852	3.76E-23

UBA6-AS1	3.68E-16	0.2751365	0.577	0.5	1.41E-11
PEX5L	1.09E-14	0.27374089	0.588	0.512	4.17E-10
FOXO1	7.99E-17	0.2735931	0.465	0.375	3.05E-12
CALM2	3.55E-15	0.27353118	0.547	0.465	1.36E-10
KLF15	4.37E-30	0.27281228	0.294	0.182	1.67E-25
ETV1	2.43E-13	0.27226415	0.608	0.561	9.29E-09
PAPOLA	6.91E-16	0.26801979	0.544	0.479	2.64E-11
FXR1	1.73E-18	0.26765252	0.526	0.44	6.59E-14
PTGES3	4.95E-17	0.26756653	0.343	0.255	1.89E-12
IKZF2	2.05E-20	0.26521545	0.595	0.51	7.84E-16
CXXC4	3.11E-25	0.26519429	0.368	0.255	1.19E-20
SRSF6	3.54E-21	0.26462937	0.47	0.37	1.35E-16
ZCCHC14	5.80E-11	0.26375133	0.428	0.364	2.22E-06
MAP1LC3B	2.18E-26	0.26276603	0.232	0.138	8.33E-22
ZMIZ1	7.93E-12	0.26181529	0.653	0.595	3.03E-07
C16orf95	6.39E-29	0.26152342	0.155	0.073	2.44E-24
SUCLG2-AS1	1.42E-13	0.25961597	0.393	0.315	5.44E-09
P2RX7	2.15E-17	0.25864922	0.629	0.554	8.24E-13
AC093523.1	7.55E-16	0.2585803	0.259	0.183	2.89E-11
AC007106.2	9.86E-22	0.25835053	0.284	0.189	3.77E-17
ALK	5.67E-16	0.25778431	0.767	0.731	2.17E-11
HIST1H2AC	5.30E-40	0.25763225	0.162	0.064	2.03E-35
NFASC	3.91E-09	0.25611052	0.659	0.61	0.00014936
ANKRD55	2.41E-28	0.25546945	0.228	0.129	9.22E-24
ARHGAP18	6.08E-28	0.25348099	0.136	0.061	2.32E-23
ASCL1	9.04E-14	0.25184	0.378	0.3	3.46E-09
CHST9	5.15E-24	0.2517516	0.61	0.49	1.97E-19
FMO5	2.34E-26	0.25113058	0.146	0.069	8.94E-22
B3GAT1	1.30E-15	0.25078245	0.474	0.394	4.96E-11
DDHD1	2.22E-27	-0.2500168	0.401	0.507	8.47E-23
APOE	1.54E-33	-0.2504597	0.097	0.198	5.89E-29
CPNE8	1.32E-23	-0.2512487	0.125	0.211	5.05E-19
CACNB2	3.84E-15	-0.2515052	0.342	0.426	1.47E-10
DLG1	1.61E-18	-0.2523341	0.728	0.786	6.17E-14
ATP1B2	1.27E-21	-0.252825	0.442	0.533	4.84E-17
PCLO	1.13E-19	-0.253992	0.241	0.338	4.33E-15
SPRED1	1.30E-14	-0.2540791	0.718	0.765	4.98E-10
LINC00937	1.02E-11	-0.2545135	0.33	0.387	3.90E-07
AC092691.1	5.56E-25	-0.2575127	0.923	0.944	2.12E-20
AL133346.1	7.98E-18	-0.2589638	0.402	0.494	3.05E-13
MTMR1	1.42E-21	-0.2598635	0.344	0.431	5.42E-17
SEMA6D	4.19E-10	-0.2606224	0.243	0.297	1.60E-05
GALR1	1.42E-16	-0.2611518	0.382	0.456	5.44E-12
PDE10A	2.31E-14	-0.2637313	0.248	0.319	8.83E-10
CENPP	2.07E-19	-0.2638134	0.179	0.265	7.90E-15

ENOSF1	1.43E-20	-0.2641201	0.237	0.324	5.47E-16
GALNT10	1.03E-21	-0.2646015	0.505	0.587	3.95E-17
AC098829.1	4.12E-11	-0.2656251	0.151	0.206	1.58E-06
CACNA1E	1.48E-19	-0.2657847	0.284	0.368	5.67E-15
CMSS1	8.66E-26	-0.2664152	0.398	0.508	3.31E-21
PDE8A	1.26E-15	-0.2667955	0.476	0.544	4.82E-11
AL359232.1	1.56E-19	-0.2672585	0.203	0.294	5.97E-15
MIAT	8.79E-25	-0.2679082	0.454	0.548	3.36E-20
STK33	6.92E-17	-0.2679482	0.28	0.358	2.65E-12
SLC4A10	3.32E-16	-0.2688946	0.439	0.514	1.27E-11
PROM1	2.37E-31	-0.2694938	0.192	0.307	9.08E-27
KLRC2	3.29E-18	-0.2719761	0.232	0.308	1.26E-13
PAM	6.90E-25	-0.2722836	0.505	0.599	2.64E-20
PDE3A	7.14E-31	-0.272828	0.085	0.176	2.73E-26
ABCA5	2.17E-28	-0.2766285	0.32	0.432	8.28E-24
CNTN4	5.43E-20	-0.2782322	0.469	0.572	2.08E-15
PLPPR1	4.57E-30	-0.2786612	0.79	0.864	1.75E-25
TNK2	4.82E-30	-0.2827962	0.744	0.831	1.84E-25
PTK2	8.80E-41	-0.2846628	0.833	0.88	3.36E-36
GRID1	7.92E-42	-0.2867601	0.835	0.898	3.03E-37
SERINC5	3.51E-25	-0.2868144	0.662	0.746	1.34E-20
PPFIA2	6.33E-34	-0.2893395	0.812	0.894	2.42E-29
CSPG5	3.42E-26	-0.2909079	0.569	0.664	1.31E-21
PPP2R2B	3.57E-31	-0.2944836	0.907	0.947	1.37E-26
XYLT1	7.35E-43	-0.2956863	0.939	0.965	2.81E-38
NCALD	1.22E-21	-0.2967591	0.684	0.765	4.68E-17
BRINP1	1.45E-22	-0.2970293	0.59	0.674	5.54E-18
SHC3	1.88E-39	-0.2976031	0.697	0.79	7.19E-35
ERC2	5.20E-30	-0.2976876	0.713	0.808	1.99E-25
CABLES1	4.81E-16	-0.2980158	0.496	0.576	1.84E-11
AC023480.1	9.42E-17	-0.2981786	0.351	0.425	3.60E-12
PCDH15	6.98E-54	-0.2989128	0.961	0.981	2.67E-49
GMDS-DT	5.29E-20	-0.2993177	0.484	0.561	2.02E-15
GOLGA8A	5.03E-37	-0.3001061	0.486	0.622	1.92E-32
PTPRO	1.07E-18	-0.3016758	0.359	0.444	4.09E-14
SLC4A4	4.30E-24	-0.3020073	0.196	0.291	1.64E-19
RANBP17	7.53E-24	-0.3033379	0.226	0.327	2.88E-19
XKR4	5.66E-39	-0.3037655	0.814	0.893	2.17E-34
GPR17	2.84E-11	-0.3056241	0.36	0.417	1.09E-06
GALNTL6	8.85E-14	-0.3113876	0.145	0.208	3.38E-09
ADAMTS17	4.22E-35	-0.320719	0.727	0.814	1.61E-30
WSB1	9.85E-53	-0.3220145	0.688	0.817	3.76E-48
SPG7	2.76E-43	-0.3226634	0.433	0.569	1.05E-38
GABRB2	4.21E-28	-0.3278559	0.129	0.226	1.61E-23
SOX6	3.88E-57	-0.327971	0.926	0.963	1.48E-52

SUMF1	4.54E-25	-0.3282765	0.491	0.584	1.73E-20
SLC16A10	1.26E-18	-0.3299556	0.225	0.308	4.83E-14
LINC02649	1.45E-37	-0.3341872	0.078	0.176	5.55E-33
GLDC	5.36E-11	-0.3361299	0.309	0.369	2.05E-06
LINC01184	2.56E-25	-0.3368854	0.407	0.502	9.80E-21
NR6A1	2.44E-25	-0.336913	0.348	0.451	9.32E-21
CIRBP	2.62E-47	-0.3383062	0.463	0.616	1.00E-42
SGCZ	3.99E-39	-0.3414089	0.741	0.85	1.53E-34
PCDH11X	7.96E-22	-0.3417318	0.371	0.471	3.04E-17
AGAP1	1.41E-94	-0.3424448	0.959	0.978	5.37E-90
CFTR	2.39E-40	-0.3425038	0.115	0.228	9.13E-36
RAP1GAP	2.52E-56	-0.3433919	0.219	0.376	9.65E-52
PTPRT	2.54E-41	-0.3471018	0.744	0.834	9.71E-37
EPN2	6.15E-68	-0.3487348	0.925	0.964	2.35E-63
SGCD	6.06E-48	-0.3488404	0.841	0.913	2.32E-43
AHI1	1.01E-35	-0.3511326	0.561	0.662	3.84E-31
ASTN2	4.82E-74	-0.3536155	0.9	0.94	1.84E-69
SCFD2	2.07E-39	-0.3545373	0.552	0.668	7.93E-35
HSD17B12	9.06E-29	-0.3565164	0.258	0.361	3.46E-24
GPC5	4.55E-10	-0.3592795	0.341	0.408	1.74E-05
KLHL1	3.56E-27	-0.3609539	0.3	0.413	1.36E-22
TSHZ2	1.75E-31	-0.361652	0.164	0.276	6.68E-27
DOK6	5.23E-33	-0.362589	0.424	0.543	2.00E-28
SPATA6	4.74E-43	-0.3675175	0.727	0.814	1.81E-38
C1orf61	1.09E-52	-0.3702664	0.785	0.861	4.17E-48
DTNA	2.90E-39	-0.3794117	0.809	0.873	1.11E-34
LHFPL3	1.23E-101	-0.3810786	0.981	0.987	4.71E-97
ADGRV1	4.05E-12	-0.3848277	0.08	0.13	1.55E-07
ANKS1B	1.19E-66	-0.3942258	0.929	0.966	4.55E-62
U91319.1	8.05E-50	-0.3951804	0.374	0.54	3.08E-45
DPH6	1.31E-39	-0.3957014	0.382	0.524	5.01E-35
NRXN3	1.80E-37	-0.3973674	0.596	0.739	6.89E-33
LDLRAD4	1.06E-38	-0.400009	0.622	0.707	4.05E-34
AL359091.1	5.45E-28	-0.4003582	0.234	0.339	2.08E-23
TARBP1	1.71E-55	-0.4004045	0.412	0.567	6.54E-51
AGBL4	3.78E-34	-0.4024333	0.397	0.525	1.44E-29
ENOX1	1.03E-35	-0.4042345	0.467	0.585	3.95E-31
LINC02588	1.05E-13	-0.4123985	0.103	0.154	4.00E-09
RFX3-AS1	8.67E-48	-0.4168104	0.313	0.462	3.31E-43
SHISA9	1.38E-60	-0.423506	0.732	0.834	5.26E-56
HES5	4.31E-76	-0.4259654	0.024	0.145	1.65E-71
ABHD2	6.28E-72	-0.4294305	0.851	0.91	2.40E-67
ROBO2	1.49E-32	-0.4295223	0.186	0.306	5.68E-28
AC061958.1	1.08E-11	-0.430194	0.088	0.134	4.14E-07
GOLGA8B	1.48E-71	-0.4304524	0.339	0.524	5.67E-67

AL392023.2	1.40E-41	-0.4328873	0.616	0.717	5.34E-37
IL1RAP	2.50E-24	-0.4345632	0.646	0.706	9.57E-20
VEGFA	2.26E-31	-0.4363919	0.168	0.275	8.66E-27
LMCD1-AS1	9.96E-45	-0.4408806	0.651	0.751	3.81E-40
NAV2	6.41E-95	-0.4579999	0.926	0.943	2.45E-90
LRFN5	5.81E-42	-0.4785244	0.449	0.595	2.22E-37
KCNAB1	1.49E-15	-0.4808062	0.16	0.218	5.70E-11
XIST	1.17E-44	-0.5045737	0.318	0.477	4.47E-40
RBFOX1	1.14E-84	-0.5233386	0.722	0.882	4.36E-80
KCNQ1OT1	7.41E-72	-0.5371244	0.561	0.708	2.83E-67
FP236383.1	2.90E-87	-0.5578694	0	0.108	1.11E-82
PREX2	1.47E-98	-0.5597102	0.605	0.768	5.64E-94
RPL13	2.53E-82	-0.5615574	0.511	0.69	9.67E-78
CCSER1	2.03E-69	-0.5820749	0.54	0.707	7.75E-65
MTSS1L	2.53E-90	-0.584666	0	0.111	9.67E-86
FP671120.1	7.40E-92	-0.6140591	0	0.113	2.83E-87
GPR158	2.08E-93	-0.6588082	0.327	0.533	7.94E-89
AC079352.1	3.00E-59	-0.6614595	0.195	0.358	1.15E-54
AC124254.1	4.79E-82	-0.6810727	0	0.101	1.83E-77
FAM19A2	1.61E-85	-0.7411982	0	0.106	6.14E-81
AC105402.3	1.12E-55	-0.7749742	0.043	0.15	4.27E-51

Excitatory Neuron DEGs

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
MT-ND3	0	1.40834375	0.917	0.844	0
MTRNR2L12	0	1.31960236	0.82	0.695	0
MT-CYB	0	1.09565017	0.879	0.739	0
MT-ATP6	0	1.08150102	0.917	0.867	0
MT-ND4	0	0.99852582	0.907	0.83	0
PLCG2	9.25E-295	0.95324861	0.723	0.613	3.53E-290
HSPH1	8.03E-129	0.93958386	0.651	0.661	3.07E-124
MT-ND1	0	0.9316361	0.862	0.751	0
MT-ND2	0	0.92415049	0.829	0.703	0
MT-CO2	0	0.89834677	0.928	0.877	0
HSPA1A	6.79E-184	0.86569281	0.236	0.119	2.59E-179
MT-CO3	8.05E-260	0.79358458	0.89	0.847	3.08E-255
AL627171.2	0	0.76459889	0.555	0.384	0
AC016687.2	1.60E-92	0.7634629	0.299	0.203	6.13E-88
SLC5A4-AS1	0	0.72527532	0.58	0.454	0
SATB1-AS1	1.54E-271	0.69867396	0.592	0.453	5.90E-267
RORA	0	0.66453909	0.967	0.963	0
AP003066.1	6.51E-135	0.65606551	0.221	0.118	2.49E-130
MT-ND5	3.31E-255	0.64743513	0.64	0.511	1.27E-250
HSP90AA1	7.60E-215	0.62902571	0.732	0.713	2.90E-210
TSHZ2	1.43E-103	0.61039478	0.53	0.434	5.48E-99
NEAT1	1.69E-102	0.60402945	0.358	0.269	6.47E-98
MT-ND4L	1.68E-185	0.57656163	0.586	0.482	6.41E-181
CDH20	2.68E-133	0.57387798	0.459	0.353	1.03E-128
DNAJB1	1.34E-90	0.57360421	0.25	0.172	5.12E-86
RORB	1.99E-162	0.54882354	0.567	0.429	7.61E-158
LINC01322	6.47E-98	0.53641658	0.552	0.499	2.47E-93
PTPRT	8.12E-218	0.53191683	0.821	0.77	3.11E-213
MT-CO1	6.36E-298	0.53118121	0.919	0.847	2.43E-293
TAF2	9.31E-272	0.53019171	0.921	0.811	3.56E-267
EFNA5	0	0.51679473	0.955	0.927	0
CNTN5	4.51E-186	0.50940106	0.877	0.79	1.72E-181
CXXC4	8.68E-191	0.48787576	0.338	0.21	3.32E-186
SNTG1	2.54E-303	0.48030664	0.97	0.949	9.70E-299
KANSL1	0	0.47483201	0.886	0.866	0
PLP1	5.66E-153	0.47398168	0.308	0.182	2.16E-148
FSTL5	1.25E-97	0.45855052	0.469	0.37	4.77E-93
CALM1	2.05E-156	0.44414083	0.887	0.901	7.83E-152
AL356295.1	1.14E-27	0.44329658	0.273	0.231	4.34E-23
SLCO3A1	2.93E-176	0.4231648	0.765	0.768	1.12E-171
POU6F2	3.88E-124	0.4226534	0.622	0.493	1.48E-119
NPTX1	5.40E-131	0.41635589	0.712	0.729	2.06E-126
AP001977.1	2.41E-208	0.41384567	0.217	0.092	9.20E-204

GRM3	1.78E-69	0.40337251	0.597	0.527	6.80E-65
DNAJA1	1.32E-69	0.40286603	0.356	0.303	5.03E-65
VWC2L	4.26E-96	0.40136046	0.388	0.281	1.63E-91
BNIP3L	4.14E-161	0.39998739	0.649	0.633	1.58E-156
LHFPL6	9.76E-114	0.39872629	0.617	0.529	3.73E-109
ADAMTS2	4.47E-158	0.39591245	0.267	0.153	1.71E-153
ZBTB16	8.36E-260	0.39401027	0.924	0.915	3.19E-255
VAMP2	2.22E-148	0.39149948	0.688	0.637	8.50E-144
UBB	9.64E-104	0.39098712	0.4	0.327	3.68E-99
CLSTN2	1.26E-208	0.38914549	0.845	0.741	4.81E-204
GAB1	2.80E-82	0.38882963	0.714	0.721	1.07E-77
SERPINB9	1.24E-18	0.38466525	0.149	0.201	4.74E-14
EDIL3	6.90E-111	0.3840383	0.851	0.837	2.64E-106
AC103855.2	4.32E-113	0.3823441	0.432	0.349	1.65E-108
HIVEP3	1.07E-165	0.37995305	0.865	0.876	4.09E-161
AUXG01000C	7.44E-82	0.3770244	0.56	0.542	2.84E-77
YWHAH	2.02E-76	0.37698202	0.604	0.612	7.73E-72
SPOCK1	1.66E-134	0.37069922	0.791	0.75	6.35E-130
HSPA8	6.30E-77	0.36723441	0.329	0.26	2.41E-72
HSP90AB1	6.60E-95	0.36674439	0.731	0.756	2.52E-90
MLLT3	8.47E-135	0.3666991	0.858	0.859	3.24E-130
PLCXD3	2.59E-72	0.36574834	0.347	0.263	9.90E-68
ZNF365	9.61E-40	0.36461614	0.623	0.661	3.67E-35
SEM1	1.20E-78	0.36112014	0.491	0.465	4.57E-74
SCN1A-AS1	1.55E-22	0.35970684	0.277	0.248	5.94E-18
ARL17B	2.91E-270	0.35639292	0.469	0.28	1.11E-265
GNAS	1.60E-135	0.35637108	0.812	0.842	6.13E-131
DCC	5.54E-69	0.353364	0.598	0.512	2.12E-64
ZNF706	6.05E-104	0.35048035	0.669	0.68	2.31E-99
PLCH1	9.42E-09	0.34805434	0.159	0.14	0.00036001
SNX31	2.18E-163	0.34587641	0.264	0.147	8.35E-159
AC120193.1	4.48E-12	0.34060957	0.439	0.451	1.71E-07
SLC35F1	1.39E-113	0.34018045	0.704	0.598	5.30E-109
MIR29B2CHC	7.27E-116	0.33579889	0.756	0.775	2.78E-111
PELI2	1.73E-105	0.3357446	0.347	0.249	6.61E-101
CDHR3	1.50E-52	0.33509017	0.434	0.396	5.73E-48
ZMAT4	1.43E-88	0.33486565	0.801	0.816	5.48E-84
RARB	4.20E-37	0.33412199	0.481	0.457	1.61E-32
RBMS3	1.07E-57	0.33299264	0.539	0.508	4.11E-53
TMTC2	1.65E-44	0.32940154	0.537	0.501	6.31E-40
RPS6KA5	7.95E-112	0.32869933	0.701	0.698	3.04E-107
MIR31HG	3.62E-59	0.32764767	0.366	0.302	1.38E-54
HMGCS1	5.00E-35	0.32334003	0.346	0.327	1.91E-30
HSPA12A	2.89E-106	0.32298016	0.883	0.906	1.11E-101
TAF45	3.54E-81	0.32153538	0.634	0.602	1.35E-76

MYT1L	0	0.31989388	0.976	0.971	0
PTPRK	1.01E-89	0.31830552	0.857	0.839	3.85E-85
CHORDC1	1.45E-29	0.31642801	0.415	0.419	5.54E-25
PTMA	1.01E-40	0.3157373	0.498	0.494	3.86E-36
KCNJ6	1.11E-112	0.31540474	0.799	0.81	4.25E-108
ALCAM	2.12E-16	0.31217237	0.475	0.468	8.09E-12
PRICKLE2	5.71E-120	0.31149835	0.815	0.844	2.18E-115
CACNB4	1.52E-131	0.30966923	0.906	0.896	5.80E-127
ST18	3.62E-28	0.30953749	0.154	0.112	1.39E-23
SLC5A3	2.55E-88	0.30907742	0.313	0.237	9.73E-84
INPP4B	1.16E-50	0.30830692	0.74	0.739	4.43E-46
CALM2	7.18E-75	0.3070727	0.782	0.774	2.74E-70
HIBCH	1.37E-49	0.3070182	0.621	0.662	5.25E-45
CASC15	2.57E-30	0.30606164	0.616	0.632	9.81E-26
HMGB1	4.45E-88	0.30506071	0.812	0.843	1.70E-83
TRHDE	3.51E-47	0.30463559	0.645	0.636	1.34E-42
AC092422.1	1.90E-32	0.30391647	0.303	0.255	7.26E-28
HP1BP3	1.34E-105	0.30357576	0.697	0.717	5.12E-101
CNTNAP2	8.42E-159	0.30205624	0.992	0.991	3.22E-154
ZMYND8	1.20E-103	0.29981737	0.798	0.839	4.58E-99
AC084816.1	9.96E-20	0.29941802	0.307	0.277	3.81E-15
NFIC	1.71E-48	0.29933435	0.542	0.555	6.52E-44
ANKH	8.60E-102	0.29910088	0.78	0.815	3.29E-97
CCDC144A	1.47E-73	0.29900107	0.717	0.687	5.61E-69
ELOVL5	1.48E-15	0.29848539	0.284	0.271	5.66E-11
CFAP161	1.59E-70	0.29691288	0.295	0.223	6.08E-66
QKI	7.04E-08	0.29660849	0.538	0.582	0.00268991
SSBP3	1.56E-108	0.29611547	0.78	0.815	5.97E-104
TMEM14B	2.05E-108	0.29569509	0.736	0.708	7.84E-104
PRKAG2	1.26E-127	0.29534641	0.858	0.882	4.83E-123
RALYL	9.45E-211	0.29529145	0.993	0.99	3.61E-206
TMEM161B-	9.18E-129	0.29463598	0.896	0.908	3.51E-124
UBC	1.21E-31	0.29439231	0.4	0.386	4.63E-27
FXVD6	4.56E-77	0.29417795	0.641	0.626	1.74E-72
FKBP5	3.73E-20	0.29322772	0.372	0.362	1.42E-15
AC093865.1	3.38E-54	0.29296033	0.264	0.204	1.29E-49
HSPB1	1.78E-81	0.29124317	0.156	0.087	6.79E-77
PRNP	9.40E-69	0.29055809	0.686	0.703	3.59E-64
TSHZ3	4.06E-42	0.2902427	0.504	0.49	1.55E-37
LINC00486	5.12E-22	0.28998974	0.62	0.665	1.96E-17
KHDRBS2-OT	3.31E-55	0.28928417	0.588	0.565	1.26E-50
KCND3	1.12E-75	0.28909327	0.881	0.906	4.28E-71
PPP2R2C	9.71E-143	0.28761249	0.899	0.917	3.71E-138
SPP1	5.76E-171	0.28565284	0.139	0.044	2.20E-166
TMSB10	4.94E-10	0.2851715	0.442	0.472	1.89E-05

MAPRE2	2.99E-75	0.28487102	0.783	0.825	1.14E-70
OIP5-AS1	2.43E-58	0.28478202	0.58	0.561	9.30E-54
MARCKS	3.38E-51	0.28332058	0.395	0.353	1.29E-46
MSH4	2.66E-108	0.28223474	0.248	0.158	1.02E-103
ARMCX5-GPI	1.37E-67	0.28199532	0.535	0.502	5.23E-63
LRRC4C	1.21E-23	0.27912831	0.888	0.916	4.63E-19
UTP23	1.24E-46	0.27860505	0.541	0.549	4.73E-42
GRIP1	2.34E-35	0.27814817	0.71	0.718	8.93E-31
CXXC5	3.36E-42	0.27758468	0.436	0.419	1.29E-37
PDZRN3	1.92E-66	0.27646446	0.808	0.805	7.33E-62
AC109466.1	1.96E-45	0.27603187	0.425	0.354	7.51E-41
WVOX	1.28E-42	0.27590757	0.791	0.81	4.90E-38
RUNX1	5.06E-47	0.27554492	0.213	0.155	1.94E-42
HSPA1B	2.79E-110	0.27321822	0.125	0.053	1.07E-105
BANP	3.91E-53	0.27318617	0.395	0.362	1.50E-48
ALDH1A1	2.79E-36	0.27221588	0.156	0.109	1.06E-31
CCND3	1.94E-24	0.27219416	0.477	0.491	7.41E-20
UPP2	2.59E-48	0.27149889	0.629	0.635	9.91E-44
MTRNR2L8	3.04E-71	0.27133841	0.181	0.114	1.16E-66
CELF4	5.62E-139	0.27106215	0.913	0.933	2.15E-134
BASP1	7.88E-108	0.27087251	0.856	0.88	3.01E-103
IGF1R	2.12E-93	0.27025525	0.861	0.887	8.11E-89
PAG1	1.52E-25	0.26960569	0.418	0.414	5.80E-21
YWHAB	1.04E-42	0.26954833	0.641	0.678	3.99E-38
AC092691.1	1.74E-63	0.26883006	0.857	0.879	6.63E-59
ELK1	5.37E-31	0.26665071	0.298	0.266	2.05E-26
KCNQ3	1.29E-108	0.2664292	0.912	0.912	4.92E-104
ZSCAN31	3.37E-58	0.26521265	0.356	0.301	1.29E-53
MSMO1	6.72E-43	0.2651319	0.272	0.229	2.57E-38
DPH6-DT	3.99E-27	0.2644346	0.419	0.407	1.52E-22
DNAJB6	1.20E-23	0.26402947	0.463	0.481	4.60E-19
YWHAG	6.73E-31	0.26312924	0.653	0.704	2.57E-26
SMARCD3	1.61E-47	0.2625505	0.354	0.315	6.15E-43
RHBDL3	2.54E-37	0.26196778	0.554	0.559	9.72E-33
PANTR1	1.37E-30	0.26063956	0.549	0.547	5.25E-26
GAPDH	4.66E-30	0.26034843	0.541	0.553	1.78E-25
SOX5	2.37E-28	0.25892022	0.716	0.723	9.06E-24
CEMIP	6.11E-23	0.2581093	0.528	0.538	2.34E-18
CRYAB	9.51E-143	0.25798842	0.152	0.061	3.64E-138
PTGES3	8.01E-29	0.25751113	0.456	0.464	3.06E-24
SAMD5	1.51E-27	0.25676032	0.354	0.315	5.76E-23
PEG10	5.77E-44	0.25501671	0.287	0.24	2.21E-39
PTGDS	1.85E-23	0.25370209	0.304	0.27	7.05E-19
AJAP1	8.96E-45	0.25340082	0.649	0.686	3.42E-40
DNAJC1	7.77E-33	0.25179114	0.633	0.672	2.97E-28

KCNH7	1.50E-19	0.25147255	0.742	0.774	5.72E-15
NCAM2	3.43E-64	0.25123859	0.953	0.946	1.31E-59
PAPOLA	4.10E-48	0.25109887	0.606	0.638	1.57E-43
SYN1	1.88E-40	0.25106034	0.574	0.589	7.18E-36
MAP1A	9.81E-43	0.2507198	0.5	0.498	3.75E-38
SRCIN1	3.23E-51	0.25061689	0.676	0.727	1.24E-46
CLIP2	7.04E-32	0.25013246	0.616	0.66	2.69E-27
SIDT1	3.59E-176	-0.250064	0.491	0.694	1.37E-171
MICU3	3.33E-181	-0.2507075	0.644	0.828	1.27E-176
RSRP1	1.87E-186	-0.2514949	0.608	0.804	7.17E-182
INVS	1.67E-187	-0.2524559	0.549	0.763	6.37E-183
TENT2	2.53E-234	-0.25277	0.501	0.733	9.66E-230
CBLN2	4.02E-140	-0.2529955	0.518	0.685	1.54E-135
ANO4	2.54E-202	-0.2533065	0.363	0.584	9.70E-198
AC110023.1	3.79E-111	-0.2548511	0.368	0.518	1.45E-106
HTR4	1.58E-237	-0.2549664	0.203	0.405	6.03E-233
ZBBX	3.02E-239	-0.2556369	0.227	0.437	1.16E-234
MIR100HG	3.32E-114	-0.2563514	0.702	0.787	1.27E-109
GOLT1B	0	-0.2564384	0.252	0.514	0
MTR	2.71E-210	-0.2564566	0.498	0.727	1.03E-205
CXXC4-AS1	1.54E-204	-0.2596148	0.356	0.576	5.87E-200
PRKN	2.14E-136	-0.2598956	0.811	0.922	8.18E-132
SCPEP1	1.57E-294	-0.2601831	0.243	0.477	5.99E-290
AC117453.1	1.08E-228	-0.2608532	0.063	0.201	4.14E-224
LRRTM4	3.30E-125	-0.2613697	0.976	0.975	1.26E-120
AC025887.2	1.53E-260	-0.2623283	0.104	0.279	5.85E-256
AC245060.5	9.01E-267	-0.2623535	0.144	0.34	3.44E-262
AC107223.1	2.16E-41	-0.2629696	0.636	0.707	8.26E-37
ITGA9	2.69E-186	-0.2647975	0.384	0.585	1.03E-181
PWRN1	3.03E-102	-0.2653268	0.254	0.388	1.16E-97
CCDC91	1.13E-171	-0.2662982	0.609	0.796	4.31E-167
CDH11	2.98E-200	-0.2680075	0.394	0.614	1.14E-195
TBC1D32	3.28E-201	-0.2683989	0.588	0.793	1.25E-196
VLDLR-AS1	2.60E-239	-0.2702956	0.279	0.498	9.93E-235
CCPG1	6.59E-215	-0.2704997	0.703	0.89	2.52E-210
AL365295.1	3.90E-162	-0.2708257	0.247	0.412	1.49E-157
SVOP	5.85E-248	-0.2714094	0.407	0.657	2.24E-243
LINC00299	1.97E-148	-0.2720639	0.267	0.432	7.52E-144
GNAL	3.55E-159	-0.2722686	0.324	0.501	1.36E-154
AL445433.2	1.07E-239	-0.2723664	0.242	0.454	4.07E-235
NOXA1	0	-0.2726983	0.26	0.511	0
RCAN2	4.86E-137	-0.2727436	0.733	0.861	1.86E-132
NIPAL2	9.33E-169	-0.273774	0.595	0.781	3.57E-164
ANKRD30BL	2.24E-186	-0.2738985	0.615	0.809	8.57E-182
CAMK2D	1.70E-104	-0.2749232	0.65	0.777	6.48E-100

SORCS3	1.53E-129	-0.2764468	0.543	0.712	5.86E-125
GAREM1	3.56E-205	-0.278397	0.389	0.61	1.36E-200
SNRNP70	3.18E-220	-0.2788707	0.637	0.836	1.22E-215
ANKRD28	2.47E-222	-0.2793923	0.579	0.783	9.42E-218
GRIA4	8.93E-109	-0.2798784	0.873	0.917	3.41E-104
TLK1	1.15E-210	-0.2803651	0.547	0.76	4.40E-206
COL12A1	5.81E-167	-0.2804494	0.097	0.224	2.22E-162
DCLK1	1.09E-252	-0.2810132	0.962	0.979	4.18E-248
NECTIN3-AS1	0	-0.2819035	0.087	0.288	0
ZRANB3	8.82E-240	-0.2824466	0.464	0.696	3.37E-235
LINC02552	8.36E-284	-0.2833591	0.036	0.177	3.19E-279
MPPED2	2.97E-229	-0.283989	0.513	0.734	1.13E-224
AP000829.1	8.91E-141	-0.2847519	0.248	0.402	3.40E-136
MEIS3	0	-0.2870321	0.253	0.505	0
NPAS3	3.68E-141	-0.2878248	0.701	0.837	1.41E-136
CAMK2A	1.30E-195	-0.289574	0.883	0.956	4.99E-191
GIPC1	6.70E-301	-0.2899823	0.221	0.452	2.56E-296
MAPK4	8.38E-232	-0.2902496	0.404	0.633	3.20E-227
STAT4	7.82E-228	-0.290797	0.408	0.635	2.99E-223
BDH1	3.09E-264	-0.290809	0.435	0.69	1.18E-259
ST6GAL2	1.27E-237	-0.2919828	0.377	0.61	4.84E-233
MCHR2	4.36E-235	-0.292138	0.311	0.533	1.67E-230
ATRNL1	1.78E-228	-0.2932719	0.96	0.983	6.78E-224
LINC01250	5.10E-128	-0.2949198	0.761	0.858	1.95E-123
AC024901.1	1.24E-174	-0.2959928	0.405	0.597	4.73E-170
HDAC9	2.11E-169	-0.2960371	0.708	0.849	8.06E-165
AC087280.2	0	-0.296158	0.161	0.414	0
TANC2	2.78E-200	-0.2984536	0.864	0.936	1.06E-195
LINC01500	2.00E-125	-0.2984873	0.117	0.23	7.63E-121
CDH12	1.23E-104	-0.3005212	0.84	0.873	4.69E-100
GPC1	0	-0.3012997	0.374	0.638	0
GLIS3	9.44E-126	-0.3021487	0.222	0.362	3.61E-121
TMEM179	1.00E-263	-0.3021513	0.213	0.426	3.83E-259
GRIA3	1.79E-214	-0.3028734	0.839	0.931	6.85E-210
RAPGEF5	1.72E-240	-0.3030821	0.897	0.952	6.58E-236
AC005753.2	5.52E-225	-0.3036784	0.179	0.359	2.11E-220
HGSNAT	0	-0.3039036	0.385	0.657	0
CADPS	4.18E-178	-0.3055641	0.915	0.964	1.60E-173
CPNE4	5.32E-66	-0.3065774	0.579	0.719	2.03E-61
AL391807.1	0	-0.3069011	0.327	0.595	0
AC006504.5	7.40E-224	-0.307239	0.443	0.666	2.83E-219
PDE4B	9.29E-218	-0.3073408	0.485	0.695	3.55E-213
SYTL2	1.11E-264	-0.3074287	0.521	0.748	4.24E-260
DPH6	1.66E-262	-0.3075039	0.293	0.525	6.33E-258
GULP1	7.85E-174	-0.3079809	0.308	0.487	3.00E-169

SPRED1	0	-0.3119505	0.35	0.624	0
PAK1	2.42E-281	-0.3149305	0.694	0.867	9.26E-277
WSB1	6.74E-270	-0.3169949	0.51	0.75	2.58E-265
CORO6	0	-0.3171952	0.301	0.564	0
SORBS1	4.13E-241	-0.3180745	0.882	0.951	1.58E-236
FBXW7	6.35E-272	-0.3196926	0.82	0.929	2.43E-267
NECTIN3	5.50E-209	-0.3202612	0.487	0.687	2.10E-204
PCED1B	0	-0.3204962	0.09	0.285	0
LINC02822	3.51E-174	-0.3215477	0.132	0.277	1.34E-169
DTNA	4.31E-232	-0.3218052	0.824	0.931	1.65E-227
RFX3-AS1	0	-0.3230029	0.138	0.379	0
AC108519.1	3.16E-230	-0.3235728	0.48	0.685	1.21E-225
AC092683.1	1.08E-270	-0.3236814	0.331	0.569	4.14E-266
NEK10	3.93E-273	-0.3248542	0.548	0.775	1.50E-268
PRKCA	1.25E-190	-0.3255524	0.617	0.781	4.77E-186
GPATCH2	2.07E-266	-0.3263045	0.412	0.657	7.92E-262
GLCE	0	-0.3266058	0.283	0.551	0
AC092902.4	5.16E-265	-0.3266637	0.212	0.42	1.97E-260
LMCD1-AS1	6.07E-250	-0.3274936	0.171	0.365	2.32E-245
TMEM241	7.05E-284	-0.3275795	0.527	0.769	2.70E-279
BABAM2	1.32E-253	-0.3286913	0.697	0.872	5.04E-249
LAMB1	0	-0.3287465	0.258	0.504	0
MEG8	6.18E-197	-0.3302223	0.792	0.913	2.36E-192
LINC00326	7.58E-147	-0.3306427	0.109	0.233	2.90E-142
PDE4D	0	-0.3351693	0.991	0.992	0
MEG3	5.54E-292	-0.3354952	0.979	0.968	2.12E-287
SLC4A4	7.12E-285	-0.3361745	0.248	0.474	2.72E-280
DCLK2	3.49E-264	-0.336798	0.714	0.877	1.33E-259
ZFPM2	2.99E-157	-0.3370018	0.829	0.89	1.14E-152
TASP1	0	-0.3371266	0.481	0.732	0
DIAPH2	2.97E-218	-0.3372887	0.606	0.784	1.13E-213
TRIM9	0	-0.3379434	0.912	0.97	0
GARNL3	5.70E-230	-0.3381064	0.587	0.783	2.18E-225
LINC01378	1.26E-172	-0.3384542	0.426	0.615	4.80E-168
PID1	3.76E-192	-0.3402655	0.403	0.598	1.44E-187
RFLNA	0	-0.3406719	0.333	0.594	0
RGS7	0	-0.345035	0.965	0.972	0
LY86-AS1	1.21E-198	-0.3469466	0.658	0.826	4.64E-194
AC110296.1	1.76E-214	-0.3482658	0.173	0.347	6.74E-210
AC007389.1	0	-0.3513165	0.155	0.383	0
STXBP5L	0	-0.3520885	0.966	0.982	0
PAM	4.06E-227	-0.3523532	0.665	0.826	1.55E-222
ITFG1	1.40E-277	-0.3531587	0.759	0.902	5.34E-273
ST6GALNAC5	1.38E-167	-0.3532192	0.804	0.882	5.29E-163
GOLGA8A	0	-0.3540635	0.463	0.727	0

LINC02296	5.55E-282	-0.3579632	0.139	0.339	2.12E-277
LUC7L2	2.50E-283	-0.3583076	0.583	0.79	9.55E-279
CCSER1	0	-0.3597481	0.953	0.976	0
CYP1B1-AS1	1.83E-234	-0.3599058	0.308	0.52	7.00E-230
UNC80	0	-0.3620267	0.814	0.937	0
ERC2	5.24E-277	-0.3649039	0.958	0.976	2.00E-272
TTC8	0	-0.366577	0.338	0.627	0
GALNT13	2.91E-185	-0.3669079	0.587	0.76	1.11E-180
SCHLAP1	4.01E-169	-0.3707879	0.243	0.412	1.53E-164
EML6	8.06E-305	-0.37189	0.799	0.916	3.08E-300
RASGRF2	3.03E-161	-0.3746321	0.56	0.713	1.16E-156
CIRBP	0	-0.3770708	0.351	0.648	0
MEIS2	2.58E-205	-0.3776076	0.366	0.564	9.86E-201
FRMD6	0	-0.3793501	0.157	0.401	0
LINC01184	0	-0.3835837	0.558	0.805	0
AC002460.2	6.89E-197	-0.3856267	0.351	0.544	2.64E-192
AQP4-AS1	1.69E-251	-0.387233	0.59	0.798	6.46E-247
GMDS-DT	0	-0.3903596	0.47	0.733	0
ENC1	0	-0.3921997	0.592	0.813	0
LINC01090	4.62E-158	-0.3952199	0.053	0.157	1.77E-153
HS6ST3	4.26E-200	-0.3984604	0.761	0.89	1.63E-195
SHC3	0	-0.3990632	0.571	0.825	0
KCNN2	0	-0.401673	0.386	0.654	0
DGKB	4.93E-231	-0.4096876	0.79	0.912	1.89E-226
LINC00276	6.80E-250	-0.410066	0.212	0.415	2.60E-245
PEX5L	1.83E-294	-0.4196692	0.839	0.93	6.99E-290
ZNF804B	2.32E-141	-0.4214185	0.286	0.454	8.89E-137
PLCB1	0	-0.4228632	0.975	0.986	0
NDST3	0	-0.4238617	0.547	0.789	0
NELL1	0	-0.4316273	0.76	0.902	0
PTCHD1-AS	1.06E-300	-0.4317762	0.475	0.729	4.06E-296
KIAA1217	1.21E-220	-0.4318066	0.542	0.742	4.61E-216
SPRY4-AS1	0	-0.433002	0.06	0.32	0
AC097512.1	0	-0.4333869	0.089	0.274	0
XIST	6.87E-103	-0.4436912	0.475	0.559	2.63E-98
AC007368.1	2.66E-114	-0.444801	0.392	0.507	1.02E-109
PDE7B	1.13E-228	-0.448358	0.414	0.605	4.34E-224
ICA1	0	-0.4571644	0.599	0.854	0
CA10	3.64E-264	-0.4591861	0.51	0.729	1.39E-259
SGCD	2.10E-293	-0.4617056	0.574	0.798	8.04E-289
TESPA1	0	-0.4664151	0.416	0.645	0
ADAMTS3	0	-0.4675975	0.279	0.528	0
ASIC2	4.49E-237	-0.4687936	0.864	0.953	1.72E-232
AGBL1	1.43E-221	-0.4737134	0.081	0.225	5.47E-217
AC073365.1	5.08E-288	-0.4763928	0.481	0.69	1.94E-283

AC009041.2	0	-0.4926706	0.312	0.534	0
GRID2	2.65E-287	-0.4934601	0.63	0.808	1.01E-282
DOK6	0	-0.4939097	0.576	0.794	0
AC013287.1	1.22E-177	-0.4944727	0.597	0.721	4.68E-173
ROBO1	5.32E-270	-0.497647	0.471	0.682	2.03E-265
NRXN3	0	-0.5130145	0.98	0.992	0
LINC00507	0	-0.5292408	0.194	0.45	0
AJ009632.2	3.64E-138	-0.5342487	0.187	0.321	1.39E-133
ROBO2	2.47E-247	-0.5381262	0.721	0.887	9.45E-243
ADAMTSL1	4.54E-24	-0.5384884	0.215	0.266	1.74E-19
PDZD2	1.19E-250	-0.5414037	0.666	0.827	4.56E-246
LINC01331	4.21E-289	-0.5446337	0.246	0.457	1.61E-284
RPH3A	0	-0.5682806	0.283	0.648	0
GOLGA8B	0	-0.5688665	0.379	0.73	0
CDH9	4.35E-294	-0.572013	0.555	0.741	1.66E-289
COL24A1	0	-0.5889388	0.203	0.484	0
AC011246.1	1.57E-151	-0.6177613	0.285	0.435	5.99E-147
GPC6	1.39E-235	-0.6347158	0.448	0.632	5.32E-231
TARBP1	0	-0.6470169	0.676	0.918	0
AC011287.1	0	-0.6488429	0.587	0.801	0
AC105402.3	1.10E-168	-0.6811886	0.06	0.168	4.21E-164
MLIP	0	-0.7188152	0.66	0.899	0
AC034268.2	0	-0.7277934	0.292	0.535	0
AL157944.1	7.37E-285	-0.7433861	0.289	0.48	2.82E-280
PDE10A	0	-0.8816856	0.451	0.832	0
AC093607.1	0	-0.9100365	0.159	0.405	0
LINC02306	0	-1.0056016	0.258	0.531	0

Inhibitory Neuron DEGs

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj
HSPH1	7.96E-58	1.45948368	0.454	0.433	3.04E-53
HSPA1A	1.33E-85	1.34626734	0.218	0.121	5.10E-81
AL627171.2	0	1.19457821	0.559	0.332	0
PLCG2	3.52E-152	1.0890464	0.681	0.592	1.35E-147
MT-ND3	9.03E-240	0.94130324	0.898	0.824	3.45E-235
DNAJB1	1.69E-39	0.862522	0.189	0.13	6.46E-35
MT-CYB	1.14E-193	0.81985091	0.811	0.719	4.37E-189
NEAT1	9.29E-16	0.69677222	0.504	0.524	3.55E-11
MT-ND2	2.99E-135	0.6587271	0.769	0.7	1.14E-130
MT-ND1	2.06E-117	0.62645629	0.786	0.72	7.86E-113
HSP90AA1	1.44E-33	0.62314027	0.684	0.711	5.51E-29
MT-ATP6	2.88E-95	0.61414512	0.884	0.844	1.10E-90
AC132803.1	1.58E-23	0.6071302	0.297	0.242	6.06E-19
MT-ND4L	8.76E-82	0.59092578	0.606	0.55	3.35E-77
CCDC144A	4.24E-112	0.58919	0.627	0.558	1.62E-107
PLP1	6.86E-92	0.56654474	0.292	0.169	2.62E-87
HMGB1	1.48E-111	0.56519682	0.738	0.765	5.66E-107
MT-ND5	3.07E-58	0.54443262	0.593	0.555	1.17E-53
MTRNR2L12	1.04E-94	0.53861418	0.766	0.725	3.99E-90
MT-ND4	1.27E-87	0.53767912	0.871	0.817	4.84E-83
SYN3	7.63E-151	0.52233726	0.826	0.793	2.92E-146
MT-CO2	3.02E-104	0.51711505	0.919	0.876	1.16E-99
SPP1	9.87E-67	0.50095888	0.158	0.075	3.77E-62
SLC5A4-AS1	2.60E-46	0.47900383	0.298	0.229	9.95E-42
EEF1A1	1.56E-26	0.45364804	0.558	0.591	5.95E-22
SEM1	4.14E-37	0.44320211	0.495	0.499	1.58E-32
HSPB1	1.88E-51	0.44049378	0.107	0.047	7.17E-47
ELOVL5	2.35E-07	0.43907354	0.278	0.282	0.008966
FLRT2	1.10E-30	0.43359691	0.687	0.72	4.20E-26
CHORDC1	1.73E-17	0.43041972	0.319	0.309	6.59E-13
SEZ6L	5.35E-23	0.40645224	0.575	0.572	2.04E-18
KANSL1	3.62E-98	0.40600077	0.761	0.801	1.38E-93
HMGCS1	1.02E-13	0.4022477	0.293	0.283	3.89E-09
CRYAB	3.75E-31	0.39923461	0.171	0.117	1.43E-26
MT-CO3	4.76E-45	0.39758383	0.832	0.815	1.82E-40
ST18	1.10E-07	0.3933631	0.162	0.138	0.00419026
ARL17B	1.75E-63	0.37761877	0.347	0.242	6.69E-59
MSI2	4.08E-47	0.36851297	0.741	0.791	1.56E-42
OIP5-AS1	5.00E-30	0.36829488	0.576	0.579	1.91E-25
SPECC1	1.03E-36	0.36303084	0.66	0.705	3.96E-32
PTGDS	3.84E-18	0.36175239	0.314	0.272	1.47E-13
RBFOX3	1.80E-59	0.35612818	0.773	0.806	6.88E-55
HIBCH	6.99E-15	0.3496029	0.548	0.609	2.67E-10

AC008571.2	1.04E-20	0.34597728	0.137	0.095	3.98E-16
TENM4	1.28E-47	0.34218034	0.764	0.78	4.89E-43
SLC5A3	3.97E-20	0.34192387	0.356	0.335	1.52E-15
EGFR	2.20E-14	0.33816594	0.558	0.565	8.41E-10
LHFPL2	6.61E-21	0.33214906	0.251	0.211	2.52E-16
MICAL3	3.45E-68	0.33033005	0.822	0.872	1.32E-63
AC073050.1	5.34E-09	0.32609704	0.688	0.752	0.0002043
DSCAML1	1.94E-53	0.32370822	0.803	0.827	7.40E-49
HSPD1	4.86E-12	0.32368318	0.295	0.4	1.86E-07
DPH6-DT	1.76E-14	0.31844841	0.298	0.275	6.74E-10
TAF4	2.48E-17	0.31382882	0.583	0.604	9.47E-13
CFAP161	1.65E-09	0.31287778	0.417	0.44	6.30E-05
ZBTB16	7.97E-38	0.3101973	0.788	0.832	3.05E-33
KCNJ6	2.70E-13	0.30475515	0.608	0.668	1.03E-08
ZMYND8	6.06E-28	0.30349908	0.674	0.742	2.32E-23
MT-ATP8	4.66E-28	0.30341634	0.611	0.602	1.78E-23
BNIP3L	4.94E-09	0.30222817	0.42	0.451	0.00018891
CELF4	7.59E-64	0.30168702	0.864	0.898	2.90E-59
SLCO3A1	7.09E-16	0.29049888	0.656	0.721	2.71E-11
PWRN4	1.10E-12	0.28968014	0.423	0.422	4.21E-08
ZDHHC14	7.75E-15	0.28355243	0.612	0.664	2.96E-10
CXXC4	2.20E-09	0.28324708	0.294	0.289	8.42E-05
LINC00632	2.85E-73	0.28185029	0.902	0.936	1.09E-68
SNX31	3.85E-54	0.28060554	0.115	0.05	1.47E-49
KCND3	7.35E-13	0.27642021	0.686	0.751	2.81E-08
DPYSL2	1.41E-20	0.27482041	0.698	0.778	5.40E-16
PARD6G-AS1	1.04E-20	0.27465105	0.123	0.084	3.99E-16
CMIP	6.71E-14	0.27256601	0.671	0.765	2.56E-09
PAPOLA	7.33E-09	0.26779198	0.507	0.572	0.0002803
HSPA12A	7.74E-20	0.26747427	0.709	0.79	2.96E-15
FOXO1	2.02E-07	0.26722396	0.201	0.181	0.00773064
INSYN2B	3.12E-09	0.2661538	0.213	0.189	0.00011912
ANLN	4.25E-21	0.26417526	0.126	0.086	1.62E-16
MIR29B2CHC	1.66E-10	0.26377008	0.587	0.672	6.33E-06
SH3RF3	2.91E-12	0.26344052	0.65	0.699	1.11E-07
RBM14	1.15E-11	0.26299289	0.261	0.242	4.41E-07
SHANK2	1.22E-18	0.26062248	0.705	0.77	4.64E-14
IGF1R	6.41E-22	0.26049938	0.705	0.777	2.45E-17
SPECC1L	2.36E-11	0.25670942	0.505	0.536	9.04E-07
PKNOX2	4.57E-12	0.25442771	0.672	0.733	1.75E-07
DOCK5	1.21E-09	0.25421085	0.105	0.08	4.62E-05
BMERB1	3.24E-20	0.25208785	0.68	0.699	1.24E-15
ZNF536	1.86E-27	0.25167794	0.814	0.843	7.09E-23
MT-CO1	1.58E-44	0.25014124	0.874	0.829	6.04E-40
KCNMB2-AS1	1.71E-107	-0.2509175	0.187	0.354	6.54E-103

CNR1	2.20E-25	-0.2519937	0.379	0.487	8.42E-21
CMTM8	2.35E-111	-0.2522894	0.116	0.26	9.00E-107
GALNTL6	2.89E-33	-0.2528344	0.714	0.789	1.10E-28
PCDH8	1.70E-154	-0.2532719	0.056	0.196	6.51E-150
LUC7L2	6.45E-95	-0.2547511	0.481	0.684	2.47E-90
AL359232.1	3.37E-129	-0.255421	0.156	0.331	1.29E-124
AC016766.1	8.89E-45	-0.2565348	0.095	0.171	3.40E-40
DTNA	2.20E-69	-0.2577715	0.716	0.873	8.41E-65
AC002460.2	1.25E-57	-0.2592032	0.306	0.442	4.77E-53
XKR4	2.55E-46	-0.2593496	0.831	0.93	9.75E-42
KLF12	2.28E-69	-0.2597043	0.544	0.709	8.71E-65
SORCS3	1.68E-71	-0.2630907	0.38	0.547	6.42E-67
KCNQ1OT1	2.45E-109	-0.2653459	0.438	0.663	9.38E-105
SUMF1	1.26E-125	-0.2668174	0.383	0.617	4.81E-121
ANKRD55	2.03E-151	-0.2675923	0.133	0.317	7.77E-147
OXR1	1.37E-73	-0.2694345	0.827	0.926	5.25E-69
TMEM59L	2.43E-139	-0.270269	0.313	0.546	9.29E-135
UNC80	8.32E-108	-0.2706429	0.662	0.854	3.18E-103
IL1RAPL2	1.08E-42	-0.2708152	0.186	0.284	4.13E-38
LINC00461	1.50E-74	-0.2726943	0.661	0.827	5.74E-70
SLC44A5	6.68E-75	-0.2727629	0.714	0.848	2.55E-70
SEZ6L2	2.06E-137	-0.2729806	0.353	0.589	7.89E-133
GAD1	2.53E-106	-0.2752443	0.622	0.816	9.67E-102
CCPG1	1.77E-149	-0.2756481	0.454	0.721	6.77E-145
COL19A1	5.32E-69	-0.2761769	0.19	0.321	2.03E-64
UGGT2	1.41E-143	-0.2773615	0.46	0.714	5.40E-139
COL21A1	2.11E-68	-0.279717	0.27	0.411	8.07E-64
LINC01619	1.83E-116	-0.2812896	0.112	0.255	7.00E-112
ATP1B2	1.21E-149	-0.2826481	0.289	0.524	4.62E-145
ST6GALNAC5	1.30E-32	-0.2837106	0.446	0.544	4.98E-28
TERF2IP	1.43E-144	-0.2851345	0.395	0.648	5.45E-140
INVS	2.00E-150	-0.287884	0.399	0.651	7.64E-146
KCNT2	1.36E-26	-0.2897813	0.496	0.569	5.22E-22
TTC8	7.90E-195	-0.2902792	0.199	0.437	3.02E-190
SPARCL1	1.56E-48	-0.2926284	0.402	0.541	5.96E-44
SLC22A17	1.31E-125	-0.292907	0.421	0.647	5.01E-121
NELL1	1.12E-51	-0.2932347	0.288	0.415	4.26E-47
AC233296.1	2.55E-96	-0.2937997	0.43	0.625	9.74E-92
AL133346.1	1.11E-91	-0.2954175	0.195	0.348	4.23E-87
HGSNAT	4.94E-189	-0.2964484	0.29	0.56	1.89E-184
BACH2	7.27E-127	-0.2965666	0.476	0.711	2.78E-122
ROBO1	3.70E-48	-0.2983328	0.736	0.84	1.42E-43
PDE4B	9.15E-67	-0.2989854	0.567	0.707	3.50E-62
PCSK1N	2.04E-109	-0.2990668	0.363	0.572	7.79E-105
ANO4	7.22E-90	-0.2994499	0.732	0.858	2.76E-85

GRIK1	3.92E-16	-0.3010542	0.745	0.805	1.50E-11
RFLNA	3.06E-158	-0.3013591	0.233	0.456	1.17E-153
RELN	1.94E-38	-0.3026716	0.239	0.344	7.40E-34
NETO2	1.48E-99	-0.3037059	0.358	0.555	5.65E-95
AC008591.1	7.08E-97	-0.3067546	0.109	0.237	2.71E-92
EYS	1.35E-68	-0.3070108	0.104	0.206	5.17E-64
BDH1	1.32E-190	-0.3079382	0.286	0.553	5.05E-186
AC098829.1	6.21E-94	-0.3095866	0.19	0.343	2.37E-89
WDPCP	1.09E-135	-0.3120192	0.532	0.77	4.17E-131
C8orf34	8.73E-64	-0.3182643	0.499	0.648	3.34E-59
CALY	6.04E-145	-0.3190077	0.399	0.643	2.31E-140
GRM7	7.60E-68	-0.3192833	0.705	0.839	2.91E-63
MEF2C-AS2	4.56E-140	-0.3206297	0.087	0.236	1.74E-135
WSB1	1.17E-161	-0.3216574	0.468	0.729	4.48E-157
GMDS-DT	5.30E-157	-0.3256092	0.369	0.62	2.03E-152
VGF	2.92E-202	-0.3262655	0.008	0.125	1.11E-197
AC092683.1	9.44E-142	-0.3341117	0.262	0.476	3.61E-137
AC025159.1	6.13E-120	-0.3452273	0.439	0.663	2.34E-115
SHC3	6.66E-229	-0.3585415	0.3	0.59	2.55E-224
AL513166.1	3.52E-107	-0.3588856	0.317	0.499	1.34E-102
CDH9	1.46E-53	-0.3602357	0.497	0.63	5.59E-49
DLX6-AS1	1.51E-78	-0.3616744	0.536	0.7	5.76E-74
THSD7A	1.47E-71	-0.366171	0.629	0.757	5.62E-67
LINC01184	4.90E-196	-0.3685767	0.402	0.679	1.87E-191
GOLGA8A	1.59E-264	-0.3697256	0.246	0.542	6.09E-260
CCDC91	5.83E-159	-0.3711552	0.554	0.787	2.23E-154
COL25A1	9.71E-83	-0.3715144	0.242	0.392	3.71E-78
AC005753.2	3.92E-196	-0.3857436	0.076	0.25	1.50E-191
SST	8.33E-122	-0.3928162	0.03	0.129	3.18E-117
LINC02398	3.62E-200	-0.3930109	0.153	0.37	1.38E-195
AC024901.1	4.57E-173	-0.3985374	0.251	0.481	1.75E-168
ATP1B1	7.14E-118	-0.4021278	0.708	0.851	2.73E-113
ICA1	3.10E-218	-0.4067611	0.419	0.705	1.19E-213
RASGRF2	3.76E-79	-0.4079273	0.478	0.624	1.44E-74
TAC3	3.31E-69	-0.4091031	0.083	0.176	1.27E-64
RFX3-AS1	1.10E-284	-0.4181521	0.109	0.355	4.20E-280
PAM	1.11E-156	-0.4203141	0.676	0.862	4.24E-152
CIRBP	1.96E-283	-0.4204892	0.287	0.6	7.48E-279
DPH6	1.91E-251	-0.435716	0.267	0.558	7.29E-247
ITFG1	1.08E-223	-0.4395679	0.6	0.849	4.12E-219
AL445433.2	4.30E-250	-0.4596088	0.19	0.453	1.64E-245
HTR2C	7.48E-59	-0.4598541	0.078	0.161	2.86E-54
MIR4300HG	8.12E-86	-0.4746245	0.106	0.221	3.10E-81
VIP	7.92E-112	-0.4789948	0.079	0.201	3.03E-107
CNTNAP3B	2.06E-148	-0.4818708	0.171	0.349	7.88E-144

DHFR	6.96E-90	-0.5102934	0.077	0.18	2.66E-85
SCG2	1.96E-171	-0.5203695	0.258	0.48	7.49E-167
KCNAB1	6.77E-97	-0.5301896	0.166	0.309	2.59E-92
ROBO2	1.34E-119	-0.5348742	0.891	0.946	5.13E-115
GOLGA8B	0	-0.5589941	0.212	0.583	0
CDH12	1.41E-87	-0.561821	0.343	0.511	5.39E-83
TARBP1	0	-0.5786948	0.475	0.799	0
SPRY4-AS1	0	-0.5800834	0.065	0.325	0
PDE10A	0	-0.7318049	0.567	0.845	0
AC105402.3	4.32E-160	-1.2270705	0.042	0.168	1.65E-155

Supplementary Table 3. Pathway Analysis by Ingenuity

Excitatory neurons

Ingenuity Canonical Pathways	-log(p-value)	Ratio	z-score	Molecules
Oxidative Phosphorylation	4.83	0.055	2.449	MT-ATP6,MT-CO3,MT-CYB,MT-ND2,MT-ND3,MT-ND4
Synaptogenesis Signaling Pathway	4.69	0.0288	-1	CDH12,CDH20,CDH9,EFNA5,EPHA5,GRIA4,NECTIN3,NRXN3,PLCG2
Mitochondrial Dysfunction	3.74	0.0351	#NUM!	MT-ATP6,MT-CO3,MT-CYB,MT-ND2,MT-ND3,MT-ND4
Melatonin Signaling	3.39	0.0556	1	PLCB1,PLCG2,RORA,RORB
tRNA Splicing	2.9	0.0682	#NUM!	PDE10A,PDE4D,PDE7B
Axonal Guidance Signaling	2.57	0.0162	#NUM!	ADAMTS3,EFNA5,EPHA5,LINGO1,PLCB1,PLCG2,ROBO1,ROBO2
Sirtuin Signaling Pathway	2.54	0.0206	-2	ATG10,MT-ATP6,MT-CYB,MT-ND2,MT-ND3,MT-ND4
D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis	2.19	0.08	#NUM!	PLCB1,PLCG2
G Protein Signaling Mediated by Tubby	2.01	0.0645	#NUM!	PLCB1,PLCG2
Cardiac Hypertrophy Signaling (Enhanced)	1.98	0.0141	-0.378	HDAC9,PDE10A,PDE4D,PDE7B,PLCB1,PLCG2,RPS6KA5
G-Protein Coupled Receptor Signaling	1.97	0.0182	#NUM!	PDE10A,PDE4D,PDE7B,PLCB1,RGS7
UVA-Induced MAPK Signaling	1.92	0.0306	#NUM!	PLCB1,PLCG2,RPS6KA5
Neuropathic Pain Signaling In Dorsal Horn Neurons	1.89	0.0297	#NUM!	GRIA4,PLCB1,PLCG2
Protein Kinase A Signaling	1.89	0.015	-1.633	PDE10A,PDE4D,PDE7B,PLCB1,PLCG2,PTPR
Synaptic Long Term Depression	1.88	0.0212	-1	GRIA4,GRID2,PLCB1,PLCG2
Dermatan Sulfate Biosynthesis (Late Stages)	1.68	0.0435	#NUM!	HS6ST3,NDST3
Ephrin A Signaling	1.67	0.0426	#NUM!	EFNA5,EPHA5
Chondroitin Sulfate Biosynthesis (Late Stages)	1.65	0.0417	#NUM!	HS6ST3,NDST3
Sperm Motility	1.64	0.0179	#NUM!	EPHA5,PDE4D,PLCB1,PLCG2
dTMP De Novo Biosynthesis	1.62	0.2	#NUM!	DHFR
Endocannabinoid Neuronal Synapse Pathway	1.62	0.0234	#NUM!	GRIA4,PLCB1,PLCG2
Synaptic Long Term Potentiation	1.61	0.0233	#NUM!	GRIA4,PLCB1,PLCG2
cAMP-mediated signaling	1.6	0.0175	-1	PDE10A,PDE4D,PDE7B,RGS7
Cellular Effects of Sildenafil (Viagra)	1.59	0.0229	#NUM!	PDE4D,PLCB1,PLCG2
Gα12/13 Signaling	1.59	0.0229	#NUM!	CDH12,CDH20,CDH9
Chondroitin Sulfate Biosynthesis	1.52	0.0357	#NUM!	HS6ST3,NDST3
Glutamate Receptor Signaling	1.51	0.0351	#NUM!	GRIA4,GRID2
Cardiac β-adrenergic Signaling	1.5	0.0211	#NUM!	PDE10A,PDE4D,PDE7B
Opioid Signaling Pathway	1.5	0.0162	1	PLCB1,RGS21,RGS7,RPS6KA5
Dermatan Sulfate Biosynthesis	1.48	0.0339	#NUM!	HS6ST3,NDST3
Wnt/Ca+ pathway	1.44	0.0323	#NUM!	PLCB1,PLCG2
Relaxin Signaling	1.44	0.0199	#NUM!	PDE10A,PDE4D,PDE7B
Gustation Pathway	1.41	0.0194	#NUM!	PDE10A,PDE4D,PDE7B
Phospholipases	1.41	0.0308	#NUM!	PLCB1,PLCG2
Gαq Signaling	1.39	0.0191	#NUM!	PLCB1,PLCG2,RGS7
Growth Hormone Signaling	1.34	0.0282	#NUM!	PLCG2,RPS6KA5
Heparan Sulfate Biosynthesis (Late Stages)	1.33	0.0278	#NUM!	HS6ST3,NDST3
GPCR-Mediated Integration of Enteroendocrine Signaling	1.31	0.0274	#NUM!	PLCB1,PLCG2
Leptin Signaling in Obesity	1.3	0.027	#NUM!	PLCB1,PLCG2
GNF Family Ligand-Receptor Interactions	1.28	0.0263	#NUM!	DOK6,PLCG2
Heparan Sulfate Biosynthesis	1.25	0.0253	#NUM!	HS6ST3,NDST3
Chemokine Signaling	1.24	0.025	#NUM!	PLCB1,PLCG2
Oleate Biosynthesis II (Animals)	1.22	0.0769	#NUM!	PTPR
RhoGDI Signaling	1.2	0.0159	#NUM!	CDH12,CDH20,CDH9
Xenobiotic Metabolism CAR Signaling Pathway	1.2	0.0159	#NUM!	HS6ST3,MGST2,NDST3
Ephrin Receptor Signaling	1.2	0.0159	#NUM!	EFNA5,EPHA5,SORBS1
Leukotriene Biosynthesis	1.18	0.0714	#NUM!	MGST2
Xenobiotic Metabolism PXR Signaling Pathway	1.18	0.0156	#NUM!	HS6ST3,MGST2,NDST3
Gap Junction Signaling	1.15	0.0152	#NUM!	GRIA4,PLCB1,PLCG2

Mismatch Repair in Eukaryotes	1.13	0.0625	#NUM!	MLH1
Estrogen Receptor Signaling	1.13	0.0122	1	MT-ATP6,MT-CYB,PLCB1,PLCG2
Melanocyte Development and Pigmentation Signaling	1.12	0.0213	#NUM!	PLCG2,RPS6KA5
Amyotrophic Lateral Sclerosis Signaling	1.1	0.0206	#NUM!	GRIA4,GRID2
Apelin Cardiomyocyte Signaling Pathway	1.08	0.0202	#NUM!	PLCB1,PLCG2
Role of NFAT in Cardiac Hypertrophy	1.07	0.014	#NUM!	HDAC9,PLCB1,PLCG2
LPS/IL-1 Mediated Inhibition of RXR Function	1.02	0.0133	#NUM!	HS6ST3,MGST2,NDST3
Endoplasmic Reticulum Stress Pathway	1.02	0.0476	#NUM!	TAOK3
Antioxidant Action of Vitamin C	1.01	0.0183	#NUM!	PLCB1,PLCG2
GPCR-Mediated Nutrient Sensing in Enteroendocrine C	0.991	0.0179	#NUM!	PLCB1,PLCG2
NGF Signaling	0.979	0.0175	#NUM!	PLCG2,RPS6KA5
Role of Tissue Factor in Cancer	0.967	0.0172	#NUM!	PLCB1,RPS6KA5
Huntington's Disease Signaling	0.963	0.0126	#NUM!	HDAC9,PLCB1,RPH3A
Sphingosine-1-phosphate Signaling	0.959	0.0171	#NUM!	PLCB1,PLCG2
Glutathione Redox Reactions I	0.959	0.0417	#NUM!	MGST2
Insulin Secretion Signaling Pathway	0.943	0.0123	#NUM!	PLCB1,PLCG2,RPS6KA5
GP6 Signaling Pathway	0.914	0.016	#NUM!	COL24A1,PLCG2
Signaling by Rho Family GTPases	0.91	0.0119	#NUM!	CDH12,CDH20,CDH9
14-3-3-mediated Signaling	0.903	0.0157	#NUM!	PLCB1,PLCG2
P2Y Purigenic Receptor Signaling Pathway	0.903	0.0157	#NUM!	PLCB1,PLCG2
p70S6K Signaling	0.893	0.0155	#NUM!	PLCB1,PLCG2
Phagosome Formation	0.87	0.015	#NUM!	PLCB1,PLCG2
Phospholipase C Signaling	0.863	0.0113	#NUM!	HDAC9,PLCB1,PLCG2
PI3K Signaling in B Lymphocytes	0.845	0.0145	#NUM!	PLCB1,PLCG2
Glutathione-mediated Detoxification	0.845	0.0312	#NUM!	MGST2
Semaphorin Neuronal Repulsive Signaling Pathway	0.839	0.0144	#NUM!	PDE4D,PLCG2
Hereditary Breast Cancer Signaling	0.833	0.0143	#NUM!	HDAC9,MLH1
Aryl Hydrocarbon Receptor Signaling	0.818	0.014	#NUM!	DHFR,MGST2
Xenobiotic Metabolism Signaling	0.793	0.0105	#NUM!	HS6ST3,MGST2,NDST3
Factors Promoting Cardiogenesis in Vertebrates	0.788	0.0133	#NUM!	PLCB1,PLCG2
Epithelial Adherens Junction Signaling	0.777	0.0132	#NUM!	NECTIN3,SORBS1
D-myo-inositol-5-phosphate Metabolism	0.757	0.0127	#NUM!	PLCB1,PLCG2
Aldosterone Signaling in Epithelial Cells	0.752	0.0127	#NUM!	PLCB1,PLCG2
Glucocorticoid Receptor Signaling	0.735	0.00866	#NUM!	FKBP5,MT-ATP6,MT-CYB,RPS6KA5
Dopamine-DARPP32 Feedback in cAMP Signaling	0.73	0.0123	#NUM!	PLCB1,PLCG2
Role of IL-17F in Allergic Inflammatory Airway Diseases	0.726	0.0233	#NUM!	RPS6KA5
Glioblastoma Multiforme Signaling	0.724	0.0121	#NUM!	PLCB1,PLCG2
IL-23 Signaling Pathway	0.717	0.0227	#NUM!	RORA
Role of Oct4 in Mammalian Embryonic Stem Cell Pluripo	0.699	0.0217	#NUM!	SPP1
Germ Cell-Sertoli Cell Junction Signaling	0.699	0.0117	#NUM!	NECTIN3,SORBS1
PFKFB4 Signaling Pathway	0.699	0.0217	#NUM!	RPS6KA5
Triacylglycerol Degradation	0.668	0.02	#NUM!	NDST3
Role of NFAT in Regulation of the Immune Response	0.664	0.011	#NUM!	PLCB1,PLCG2
UVB-Induced MAPK Signaling	0.654	0.0192	#NUM!	RPS6KA5
Dendritic Cell Maturation	0.652	0.0109	#NUM!	PLCB1,PLCG2
Endothelin-1 Signaling	0.638	0.0106	#NUM!	PLCB1,PLCG2
NRF2-mediated Oxidative Stress Response	0.636	0.0106	#NUM!	FKBP5,MGST2
PPARα/RXRα Activation	0.629	0.0105	#NUM!	PLCB1,PLCG2
Sertoli Cell-Sertoli Cell Junction Signaling	0.62	0.0103	#NUM!	NECTIN3,SORBS1
CNTF Signaling	0.618	0.0175	#NUM!	RPS6KA5
Role of CHK Proteins in Cell Cycle Checkpoint Control	0.618	0.0175	#NUM!	TLK2
Adrenomedullin signaling pathway	0.609	0.0102	#NUM!	PLCB1,PLCG2

Superpathway of Inositol Phosphate Compounds	0.604	0.0101	#NUM!	PLCB1,PLCG2
Endometrial Cancer Signaling	0.599	0.0167	#NUM!	MLH1
ERK/MAPK Signaling	0.593	0.0099	#NUM!	PLCG2,RPS6KA5
Autophagy	0.592	0.0164	#NUM!	ATG10
Calcium Signaling	0.582	0.00971	#NUM!	GRIA4,HDAC9
Thrombopoietin Signaling	0.58	0.0159	#NUM!	PLCG2
Thrombin Signaling	0.577	0.00962	#NUM!	PLCB1,PLCG2
Role of PI3K/AKT Signaling in the Pathogenesis of Infl	0.575	0.0156	#NUM!	MLH1
ErbB4 Signaling	0.558	0.0149	#NUM!	PLCG2
Cell Cycle: G1/S Checkpoint Regulation	0.558	0.0149	#NUM!	HDAC9
Nur77 Signaling in T Lymphocytes	0.553	0.0147	#NUM!	HDAC9
ERK5 Signaling	0.532	0.0139	#NUM!	RPS6KA5
TREM1 Signaling	0.517	0.0133	#NUM!	PLCG2
FcγRIIB Signaling in B Lymphocytes	0.517	0.0133	#NUM!	PLCG2
Macropinocytosis Signaling	0.511	0.0132	#NUM!	PLCG2
VDR/RXR Activation	0.503	0.0128	#NUM!	SPP1
BEX2 Signaling Pathway	0.498	0.0127	#NUM!	SPP1
Role of BRCA1 in DNA Damage Response	0.493	0.0125	#NUM!	MLH1
FLT3 Signaling in Hematopoietic Progenitor Cells	0.493	0.0125	#NUM!	RPS6KA5
Cardiac Hypertrophy Signaling	0.492	0.00833	#NUM!	PLCB1,PLCG2
Prolactin Signaling	0.489	0.0123	#NUM!	PLCG2
CREB Signaling in Neurons	0.489	0.00671	-1	GRIA4,GRID2,PLCB1,PLCG2
Cyclins and Cell Cycle Regulation	0.489	0.0123	#NUM!	HDAC9
Apelin Adipocyte Signaling Pathway	0.484	0.0122	#NUM!	MGST2
VEGF Family Ligand-Receptor Interactions	0.476	0.0119	#NUM!	PLCG2
FGF Signaling	0.476	0.0119	#NUM!	RPS6KA5
HIPPO signaling	0.472	0.0118	#NUM!	FRMD6
Xenobiotic Metabolism AHR Signaling Pathway	0.472	0.0118	#NUM!	MGST2
PDGF Signaling	0.467	0.0116	#NUM!	PLCG2
Altered T Cell and B Cell Signaling in Rheumatoid Arthri	0.452	0.0111	#NUM!	SPP1
Regulation of IL-2 Expression in Activated and Anergic	0.452	0.0111	#NUM!	PLCG2
Th17 Activation Pathway	0.449	0.011	#NUM!	RORA
Fcγ Receptor-mediated Phagocytosis in Macrophages a	0.437	0.0106	#NUM!	DGKB
CCR5 Signaling in Macrophages	0.437	0.0106	#NUM!	PLCG2
ErbB Signaling	0.437	0.0106	#NUM!	PLCG2
α-Adrenergic Signaling	0.433	0.0105	#NUM!	PLCG2
ATM Signaling	0.426	0.0103	#NUM!	TLK2
Bladder Cancer Signaling	0.426	0.0103	#NUM!	RPS6KA5
p53 Signaling	0.423	0.0102	#NUM!	HDAC9
VEGF Signaling	0.419	0.0101	#NUM!	PLCG2
Apoptosis Signaling	0.416	0.01	#NUM!	PLCG2
Virus Entry via Endocytic Pathways	0.409	0.0098	#NUM!	PLCG2
Chronic Myeloid Leukemia Signaling	0.406	0.00971	#NUM!	HDAC9
FAK Signaling	0.402	0.00962	#NUM!	PLCG2
Neuregulin Signaling	0.399	0.00952	#NUM!	PLCG2
Telomerase Signaling	0.394	0.00935	#NUM!	HDAC9
Glioma Signaling	0.384	0.00909	#NUM!	PLCG2
Apelin Endothelial Signaling Pathway	0.37	0.0087	#NUM!	PLCB1
fMLP Signaling in Neutrophils	0.367	0.00862	#NUM!	PLCB1
Fc Epsilon RI Signaling	0.364	0.00855	#NUM!	PLCG2
Renin-Angiotensin Signaling	0.362	0.00847	#NUM!	PLCG2
p38 MAPK Signaling	0.362	0.00847	#NUM!	RPS6KA5

Cholecystokinin/Gastrin-mediated Signaling	0.359	0.0084	#NUM!	PLCB1
HGF Signaling	0.356	0.00833	#NUM!	PLCG2
IL-15 Production	0.353	0.00826	#NUM!	EPHA5
Reelin Signaling in Neurons	0.351	0.0082	#NUM!	NECTIN3
G Beta Gamma Signaling	0.351	0.0082	#NUM!	PLCG2
Role of Macrophages, Fibroblasts and Endothelial Cells	0.349	0.00637	#NUM!	PLCB1,PLCG2
CCR3 Signaling in Eosinophils	0.345	0.00806	#NUM!	PLCB1
Gai Signaling	0.343	0.008	#NUM!	RGS7
White Adipose Tissue Browning Pathway	0.333	0.00775	#NUM!	VGF
Adipogenesis pathway	0.321	0.00746	#NUM!	HDAC9
Ovarian Cancer Signaling	0.31	0.00719	#NUM!	MLH1
Xenobiotic Metabolism General Signaling Pathway	0.301	0.00699	#NUM!	MGST2
Corticotropin Releasing Hormone Signaling	0.297	0.0069	#NUM!	PLCG2
Role of Pattern Recognition Receptors in Recognition o	0.279	0.00649	#NUM!	PLCG2
PKCθ Signaling in T Lymphocytes	0.277	0.00645	#NUM!	PLCG2
eNOS Signaling	0.27	0.00629	#NUM!	PLCG2
HOTAIR Regulatory Pathway	0.268	0.00625	#NUM!	SPP1
Hepatic Fibrosis Signaling Pathway	0.263	0.00529	#NUM!	PLCG2,SPP1
CXCR4 Signaling	0.256	0.00599	#NUM!	PLCB1
Tight Junction Signaling	0.254	0.00595	#NUM!	NECTIN3
GNRH Signaling	0.246	0.00578	#NUM!	PLCB1
Tec Kinase Signaling	0.246	0.00578	#NUM!	PLCG2
Wnt/β-catenin Signaling	0.246	0.00578	#NUM!	CDH12
T Cell Exhaustion Signaling Pathway	0.243	0.00571	#NUM!	PLCG2
Tumor Microenvironment Pathway	0.241	0.00568	#NUM!	SPP1
Molecular Mechanisms of Cancer	0.239	0.005	#NUM!	PLCB1,RASGRF2
NF-κB Signaling	0.237	0.00559	#NUM!	PLCG2
Hepatic Cholestasis	0.226	0.00538	#NUM!	SLCO3A1
Hepatic Fibrosis / Hepatic Stellate Cell Activation	0.226	0.00538	#NUM!	COL24A1
B Cell Receptor Signaling	0.226	0.00538	#NUM!	PLCG2
Regulation Of The Epithelial Mesenchymal Transition B	0.223	0.00532	#NUM!	CDH12
Production of Nitric Oxide and Reactive Oxygen Specie	0.222	0.00529	#NUM!	PLCG2
ILK Signaling	0.22	0.00526	#NUM!	RPS6KA5
Regulation of the Epithelial-Mesenchymal Transition Pai	0.218	0.00521	#NUM!	CDH12
Leukocyte Extravasation Signaling	0.216	0.00518	#NUM!	PLCG2
RAR Activation	0.215	0.00515	#NUM!	ZBTB16
HER-2 Signaling in Breast Cancer	0.215	0.00515	#NUM!	MT-CO3
Natural Killer Cell Signaling	0.21	0.00508	#NUM!	PLCG2
HIF1α Signaling	0.201	0.00488	#NUM!	PLCG2
Colorectal Cancer Metastasis Signaling	0	0.00395	#NUM!	MLH1
mTOR Signaling	0	0.00476	#NUM!	RPS6KA5
Systemic Lupus Erythematosus Signaling	0	0.00437	#NUM!	PLCG2
EIF2 Signaling	0	0.00446	#NUM!	RPL15
Role of Osteoblasts, Osteoclasts and Chondrocytes in F	0	0.00459	#NUM!	SPP1
Breast Cancer Regulation by Stathmin1	0	0.00169	#NUM!	PLCB1
Integrin Signaling	0	0.00469	#NUM!	PLCG2
Osteoarthritis Pathway	0	0.00455	#NUM!	SPP1
Neuroinflammation Signaling Pathway	0	0.00333	#NUM!	PLCG2
Systemic Lupus Erythematosus In B Cell Signaling Path	0	0.00364	#NUM!	PLCG2
Senescence Pathway	0	0.00364	#NUM!	RPS6KA5

Inhibitory Neurons

	-log(p-value) Ratio		z-score	Molecules
Ingenuity Canonical Pathways	4.03	0.0192	-0.816	CDH12,GRM7,PLCG2,RELN,SHC3,SYN3
Synaptogenesis Signaling Pathway	3.47	0.0526	#NUM!	GRM7,SLC1A2,SLC1A3
Glutamate Receptor Signaling	2.4	0.0146	#NUM!	GRM7,HTR2C,PDE10A,PDE4B
G-Protein Coupled Receptor Signaling	2.31	0.0455	#NUM!	PDE10A,PDE4B
tRNA Splicing	2.26	0.0133	#NUM!	HMGB1,PLCG2,SLC1A2,SLC1A3
Neuroinflammation Signaling Pathway	2.03	0.25	#NUM!	SAT1
Spermine and Spermidine Degradation I	2.01	0.0161	#NUM!	COL21A1,IGFBP5,IL1RAPL2
Hepatic Fibrosis / Hepatic Stellate Cell Activation	1.99	0.0159	#NUM!	GRM7,PLCG2,RYR3
Synaptic Long Term Depression	1.89	0.0274	#NUM!	PLCG2,VIP
GPCR-Mediated Integration of Enteroendocrine Signaling I	1.83	0.0256	#NUM!	IGFBP5,SPP1
VDR/RXR Activation	1.83	0.01	-1	PDE10A,PDE4B,PLCG2,RYR3
Protein Kinase A Signaling	1.82	0.0136	#NUM!	HMGB1,IL1RAPL2,SPP1
Osteoarthritis Pathway	1.77	0.0131	#NUM!	GRM7,PDE10A,PDE4B
cAMP-mediated signaling	1.62	0.0198	#NUM!	GRM7,PLCG2
Neuropathic Pain Signaling In Dorsal Horn Neurons	1.56	0.0183	#NUM!	MT-CYB,MT-ND3
Oxidative Phosphorylation	1.52	0.00805	-1	PDE10A,PDE4B,PLCG2,RYR3
Cardiac Hypertrophy Signaling (Enhanced)	1.5	0.0169	#NUM!	PLCG2,SHC3
Renin-Angiotensin Signaling	1.46	0.0667	#NUM!	TERF2IP
Telomere Extension by Telomerase	1.45	0.016	#NUM!	COL21A1,PLCG2
GP6 Signaling Pathway	1.43	0.0155	#NUM!	GRM7,PLCG2
Synaptic Long Term Potentiation	1.41	0.0153	#NUM!	PDE4B,PLCG2
Cellular Effects of Sildenafil (Viagra)	1.37	0.00915	#NUM!	MT-CYB,PLCG2,SHC3
Estrogen Receptor Signaling	1.37	0.0144	#NUM!	PDE4B,PLCG2
Semaphorin Neuronal Repulsive Signaling Pathway	1.35	0.0141	#NUM!	PDE10A,PDE4B
Cardiac β -adrenergic Signaling	1.31	0.0476	#NUM!	SAT1
Putrescine Degradation III	1.3	0.0132	#NUM!	PDE10A,PDE4B
Relaxin Signaling	1.28	0.0129	#NUM!	PDE10A,PDE4B
Gustation Pathway	1.27	0.0435	#NUM!	SAT1
Polyamine Regulation in Colon Cancer	1.27	0.0127	#NUM!	HTR2C,PLCG2
Gq α Signaling	1.27	0.0127	#NUM!	CRYAB,PLCG2
Aldosterone Signaling in Epithelial Cells	1.24	0.04	#NUM!	PLCG2
D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis	1.22	0.00794	#NUM!	IL1RAPL2,PLCG2,SPP1
Hepatic Fibrosis Signaling Pathway	1.21	0.0117	#NUM!	MT-CYB,MT-ND3
Mitochondrial Dysfunction	1.15	0.0323	#NUM!	PLCG2
G Protein Signaling Mediated by Tubby	1.14	0.0106	#NUM!	PLCG2,SHC3
Endothelin-1 Signaling	1.12	0.0105	#NUM!	IL1RAPL2,PLCG2
PPAR α /RXR α Activation	1.12	0.0303	#NUM!	VIP
Circadian Rhythm Signaling	1.1	0.0102	#NUM!	PLCG2,SHC3
Adrenomedullin signaling pathway	1.1	0.0101	#NUM!	HTR2C,PLCG2
Gap Junction Signaling	1.07	0.00976	#NUM!	PLCG2,SAT1
HIF1 α Signaling	1.03	0.0244	#NUM!	RYR3
nNOS Signaling in Skeletal Muscle Cells	1.03	0.00917	#NUM!	IL1RAPL2,SPP1
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rhe				

Serotonin Receptor Signaling	1.01	0.0233	#NUM!	HTR2C
Sperm Motility	1.01	0.00897	#NUM!	PDE4B,PLCG2
Role of Oct4 in Mammalian Embryonic Stem Cell Pluripoten	0.987	0.0217	#NUM!	SPP1
Axonal Guidance Signaling	0.951	0.00607	#NUM!	NTNG1,PLCG2,ROBO2
Insulin Secretion Signaling Pathway	0.943	0.0082	#NUM!	PLCG2,RYR3
Wnt/Ca+ pathway	0.863	0.0161	#NUM!	PLCG2
Systemic Lupus Erythematosus In B Cell Signaling Pathwa	0.86	0.00727	#NUM!	PLCG2,SHC3
Thrombopoietin Signaling	0.857	0.0159	#NUM!	PLCG2
Netrin Signaling	0.845	0.0154	#NUM!	RYR3
Phospholipases	0.845	0.0154	#NUM!	PLCG2
ErbB4 Signaling	0.833	0.0149	#NUM!	PLCG2
Sirtuin Signaling Pathway	0.821	0.00687	#NUM!	MT-CYB,MT-ND3
IL-10 Signaling	0.815	0.0143	#NUM!	IL1RAPL2
Growth Hormone Signaling	0.81	0.0141	#NUM!	PLCG2
Melatonin Signaling	0.804	0.0139	#NUM!	PLCG2
Leptin Signaling in Obesity	0.793	0.0135	#NUM!	PLCG2
TREM1 Signaling	0.788	0.0133	#NUM!	PLCG2
FcγRIIB Signaling in B Lymphocytes	0.788	0.0133	#NUM!	PLCG2
GDNF Family Ligand-Receptor Interactions	0.783	0.0132	#NUM!	PLCG2
Macropinocytosis Signaling	0.783	0.0132	#NUM!	PLCG2
CREB Signaling in Neurons	0.777	0.00503	#NUM!	GRM7,HTR2C,PLCG2
Role of Macrophages, Fibroblasts and Endothelial Cells in I	0.77	0.00637	#NUM!	IL1RAPL2,PLCG2
BEX2 Signaling Pathway	0.767	0.0127	#NUM!	SPP1
Chemokine Signaling	0.762	0.0125	#NUM!	PLCG2
Prolactin Signaling	0.757	0.0123	#NUM!	PLCG2
VEGF Family Ligand-Receptor Interactions	0.742	0.0119	#NUM!	PLCG2
PDGF Signaling	0.733	0.0116	#NUM!	PLCG2
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	0.717	0.0111	#NUM!	SPP1
Regulation of IL-2 Expression in Activated and Anergic T L	0.717	0.0111	#NUM!	PLCG2
CCR5 Signaling in Macrophages	0.699	0.0106	#NUM!	PLCG2
Melanocyte Development and Pigmentation Signaling	0.699	0.0106	#NUM!	PLCG2
ErbB Signaling	0.699	0.0106	#NUM!	PLCG2
α-Adrenergic Signaling	0.695	0.0105	#NUM!	PLCG2
Amyotrophic Lateral Sclerosis Signaling	0.686	0.0103	#NUM!	SLC1A2
UVA-Induced MAPK Signaling	0.682	0.0102	#NUM!	PLCG2
VEGF Signaling	0.68	0.0101	#NUM!	PLCG2
Apelin Cardiomyocyte Signaling Pathway	0.68	0.0101	#NUM!	PLCG2
Apoptosis Signaling	0.676	0.01	#NUM!	PLCG2
Virus Entry via Endocytic Pathways	0.668	0.0098	#NUM!	PLCG2
FAK Signaling	0.66	0.00962	#NUM!	PLCG2
IGF-1 Signaling	0.66	0.00962	#NUM!	IGFBP5
Neuregulin Signaling	0.656	0.00952	#NUM!	PLCG2
PPAR Signaling	0.656	0.00952	#NUM!	IL1RAPL2
Telomerase Signaling	0.65	0.00935	#NUM!	TERF2IP

Gas Signaling	0.65	0.00935	#NUM!	RYR3
Antioxidant Action of Vitamin C	0.642	0.00917	#NUM!	PLCG2
Glioma Signaling	0.638	0.00909	#NUM!	PLCG2
GPCR-Mediated Nutrient Sensing in Enteroendocrine Cells	0.631	0.00893	#NUM!	PLCG2
NGF Signaling	0.625	0.00877	#NUM!	PLCG2
Fc Epsilon RI Signaling	0.614	0.00855	#NUM!	PLCG2
Sphingosine-1-phosphate Signaling	0.614	0.00855	#NUM!	PLCG2
Role of PKR in Interferon Induction and Antiviral Response	0.613	0.00847	#NUM!	HMGB1
p38 MAPK Signaling	0.613	0.00847	#NUM!	IL1RAPL2
HGF Signaling	0.606	0.00833	#NUM!	PLCG2
LXR/RXR Activation	0.602	0.00826	#NUM!	IL1RAPL2
Reelin Signaling in Neurons	0.599	0.0082	#NUM!	RELN
G Beta Gamma Signaling	0.599	0.0082	#NUM!	PLCG2
Gai Signaling	0.59	0.008	#NUM!	GRM7
IL-6 Signaling	0.587	0.00794	#NUM!	IL1RAPL2
Ferroptosis Signaling Pathway	0.587	0.00794	#NUM!	SAT1
14-3-3-mediated Signaling	0.585	0.00787	#NUM!	PLCG2
P2Y Purigenic Receptor Signaling Pathway	0.585	0.00787	#NUM!	PLCG2
Endocannabinoid Neuronal Synapse Pathway	0.582	0.00781	#NUM!	PLCG2
p70S6K Signaling	0.578	0.00775	#NUM!	PLCG2
White Adipose Tissue Browning Pathway	0.578	0.00775	#NUM!	VGF
Gα12/13 Signaling	0.573	0.00763	#NUM!	CDH12
Phagosome Formation	0.567	0.00752	#NUM!	PLCG2
PI3K Signaling in B Lymphocytes	0.553	0.00725	#NUM!	PLCG2
Corticotropin Releasing Hormone Signaling	0.535	0.0069	#NUM!	PLCG2
Glucocorticoid Receptor Signaling	0.524	0.00433	#NUM!	HMGB1,MT-CYB
Factors Promoting Cardiogenesis in Vertebrates	0.523	0.00667	#NUM!	PLCG2
Role of Pattern Recognition Receptors in Recognition of B α	0.513	0.00649	#NUM!	PLCG2
PKC θ Signaling in T Lymphocytes	0.511	0.00645	#NUM!	PLCG2
D-myo-inositol-5-phosphate Metabolism	0.506	0.00637	#NUM!	PLCG2
eNOS Signaling	0.502	0.00629	#NUM!	PLCG2
HOTAIR Regulatory Pathway	0.5	0.00625	#NUM!	SPP1
Dopamine-DARPP32 Feedback in cAMP Signaling	0.493	0.00613	#NUM!	PLCG2
HMGB1 Signaling	0.488	0.00606	#NUM!	HMGB1
Glioblastoma Multiforme Signaling	0.488	0.00606	#NUM!	PLCG2
Granulocyte Adhesion and Diapedesis	0.472	0.00578	#NUM!	IL1RAPL2
Tec Kinase Signaling	0.472	0.00578	#NUM!	PLCG2
Wnt/ β -catenin Signaling	0.472	0.00578	#NUM!	CDH12
T Cell Exhaustion Signaling Pathway	0.469	0.00571	#NUM!	PLCG2
Tumor Microenvironment Pathway	0.466	0.00568	#NUM!	SPP1
NF- κ B Signaling	0.46	0.00559	#NUM!	PLCG2
Role of NFAT in Regulation of the Immune Response	0.456	0.00552	#NUM!	PLCG2
Dendritic Cell Maturation	0.45	0.00543	#NUM!	PLCG2
Hepatic Cholestasis	0.446	0.00538	#NUM!	IL1RAPL2

B Cell Receptor Signaling	0.446	0.00538	#NUM!	PLCG2
Regulation Of The Epithelial Mesenchymal Transition By Gr	0.442	0.00532	#NUM!	CDH12
Production of Nitric Oxide and Reactive Oxygen Species in	0.441	0.00529	#NUM!	PLCG2
RhoGDI Signaling	0.441	0.00529	#NUM!	CDH12
Regulation of the Epithelial-Mesenchymal Transition Pathw	0.435	0.00521	#NUM!	CDH12
Leukocyte Extravasation Signaling	0.434	0.00518	#NUM!	PLCG2
Natural Killer Cell Signaling	0.427	0.00508	#NUM!	PLCG2
Superpathway of Inositol Phosphate Compounds	0.424	0.00503	#NUM!	PLCG2
ERK/MAPK Signaling	0.418	0.00495	#NUM!	PLCG2
Calcium Signaling	0.411	0.00485	#NUM!	RYR3
Thrombin Signaling	0.409	0.00481	#NUM!	PLCG2
Integrin Signaling	0.4	0.00469	#NUM!	PLCG2
Role of NFAT in Cardiac Hypertrophy	0.399	0.00467	#NUM!	PLCG2
Breast Cancer Regulation by Stathmin1	0.388	0.00339	#NUM!	GRM7,HTR2C
LPS/IL-1 Mediated Inhibition of RXR Function	0.382	0.00444	#NUM!	IL1RAPL2
Systemic Lupus Erythematosus Signaling	0.377	0.00437	#NUM!	PLCG2
Cardiac Hypertrophy Signaling	0.362	0.00417	#NUM!	PLCG2
Opioid Signaling Pathway	0.352	0.00405	#NUM!	RYR3
Signaling by Rho Family GTPases	0.344	0.00395	#NUM!	CDH12
Phospholipase C Signaling	0.328	0.00376	#NUM!	PLCG2
Protein Ubiquitination Pathway	0.321	0.00366	#NUM!	CRYAB
Molecular Mechanisms of Cancer	0.21	0.0025	#NUM!	RASGRF2

Astrocytes

Ingenuity Canonical Pathways	-log(p-value)	Ratio	z-score	Molecules
Amyotrophic Lateral Sclerosis Signaling	5.79	0.103	-0.333	CAPN2, GLUL, GRIA2, GRID2, GRIN2C, NAIP, PIK3C2A, PPP3CA, RNF19A, SLC1A2
Glutamate Receptor Signaling	5.76	0.14	-1	GLUL, GRIA2, GRID2, GRIN2C, GRM3, SLC1A2, SLC1A3, SLC1A4
Neuropathic Pain Signaling In Dorsal Horn Neurons	5.63	0.099	-1.265	FOS, GRIA2, GRIN2C, GRM3, ITPR2, KCNQ3, PIK3C2A, PLCB1, PLCE1, PLCG2
Synaptic Long Term Potentiation	5.49	0.0853	-1.897	GNA14, GNAQ, GRIA2, GRIN2C, GRM3, ITPR2, PLCB1, PLCE1, PLCG2, PPP3CA, RASD1 ADCY2, APOE, CADM1, CDH10, CDH23, EFNA5, EPHB1, GRIA2, GRIN2C, GRM3, KALRN, NL
Synaptogenesis Signaling Pathway	5.4	0.0545	-2	GN4X, NRXN1, PIK3C2A, PLCG2, RASD1, SYNGAP1 ADCY2, EDNRB, FOS, GNA12, GNA14, GNAQ, ITPR2, JUN, PIK3C2A, PLCB1, PLCE1, PLCG
Endothelin-1 Signaling	5.36	0.0691	-0.577	2, RASD1
Cardiac Hypertrophy Signaling (Enhanced)	5.32	0.0443	-0.943	ADCY2, EDNRB, FGFR2, FGFR3, GNA12, GNA14, GNAQ, HSPB1, ITGAV, ITGB4, ITPR2, JUN ,MPPED2, NFATC4, PDE4D, PDE7B, PIK3C2A, PLCB1, PLCE1, PLCG2, PPP3CA, RASD1 ADCY2, ADGRB1, ADGRB3, ADGRV1, BMPR1B, EDNRB, FGFR2, FGFR3, GNA12, GNA14, G
CREB Signaling in Neurons	5.06	0.0403	-1.964	NAQ, GPR37L1, GRIA2, GRID2, GRIN2C, GRM3, HRH1, ITPR2, LGR4, PIK3C2A, PLCB1, PLC E1, PLCG2, RASD1
Neuroinflammation Signaling Pathway	5	0.0533	0.333	B2M, FOS, GABRA2, GABRB1, GLUL, GRIN2C, JUN, MFGE8, NAIP, NFATC4, PIK3C2A, PLC G2, PPP3CA, SLC1A2, SLC1A3, SLC6A1
Cardiac Hypertrophy Signaling	4.88	0.0583	0	ADCY2, GNA12, GNA14, GNAQ, HSPB1, JUN, NFATC4, PIK3C2A, PLCB1, PLCE1, PLCG2, P PP3CA, RASD1, RHOJ
Axonal Guidance Signaling	4.84	0.0425	#NUM!	ADAM33, ADAMTS17, EFNA5, EPHB1, GNA12, GNA14, GNAQ, ITGAV, ITGB4, KALRN, LING O1, LRRC4C, NFATC4, PIK3C2A, PLCB1, PLCE1, PLCG2, PPP3CA, RASD1, SEMA3D, UNC5 C
Role of NFAT in Regulation of the Immune Response	4.81	0.0663	0	FOS, GNA12, GNA14, GNAQ, ITPR2, JUN, NFATC4, PIK3C2A, PLCB1, PLCG2, PPP3CA, RAS D1
Endocannabinoid Neuronal Synapse Pathway	4.71	0.0781	-1.897	ADCY2, GNA14, GNAQ, GRIA2, GRIN2C, PLCB1, PLCE1, PLCG2, PPP3CA, RIMS1 GNA12, GNA14, GNAQ, GRIA2, GRID2, GRM3, ITPR2, PLCB1, PLCE1, PLCG2, PPP2R2B, R
Synaptic Long Term Depression	4.62	0.0635	-0.905	ASD1 CDH10, CDH23, FOS, GFAP, GNA12, GNA14, GNAQ, ITGAV, ITGB4, JUN, PARD3, PIK3C2A,
Signaling by Rho Family GTPases	4.62	0.0553	0	PIP5K1B, RHOJ
Ephrin Receptor Signaling	4.62	0.0635	-1.633	ABI1, ANGPT1, EFNA5, EPHB1, GNA12, GNA14, GNAQ, GRIN2C, ITGAV, ITGB4, KALRN, RA SD1
Adrenomedullin signaling pathway	4.44	0.0609	-0.905	ADCY2, FOS, GNA14, GNAQ, HIF1A, ITPR2, KCNQ3, PIK3C2A, PLCB1, PLCE1, PLCG2, RAS D1
CXCR4 Signaling	4.43	0.0659	-1.633	ADCY2, FOS, GNA12, GNA14, GNAQ, ITPR2, JUN, PIK3C2A, PLCB1, RASD1, RHOJ
PI3K Signaling in B Lymphocytes	4.43	0.0725	0.333	FOS, ITPR2, JUN, NFATC4, PLCB1, PLCE1, PLCG2, PPP3CA, RASD1, VAV3

Relaxin Signaling	4.1	0.0662	1	ADCY2,FOS,GNA12,GNA14,GNAQ,JUN,MPPED2,PDE4D,PDE7B,PIK3C2A
Ephrin B Signaling	4.06	0.0972	-1.89	ABI1,EPHB1,GNA12,GNA14,GNAQ,KALRN,VAV3
				ADCY2,APC,BMPR1B,FOS,GNA12,GNA14,GNAQ,HIF1A,ITGAV,ITGB4,JUN,NAIP,PIK3
Molecular Mechanisms of Cancer	4.02	0.0425	#NUM!	C2A,PLCB1,RASD1,RHOJ,SYNGAP1
GPCR-Mediated Integration of Enteroendocrine Sign	4.02	0.0959	0.378	ADCY2,GNA14,GNAQ,ITPR2,PLCB1,PLCE1,PLCG2
UVA-Induced MAPK Signaling	4.01	0.0816	0	FOS,JUN,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1,TIPARP
P2Y Purigenic Receptor Signaling Pathway	3.97	0.0709	0.707	ADCY2,FOS,GNAQ,JUN,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1
Gαq Signaling	3.95	0.0637	-1.265	GNA14,GNAQ,HRH1,ITPR2,NFATC4,PIK3C2A,PLCB1,PLCG2,PPP3CA,RHOJ
				DUSP1,HSPA1A/HSPA1B,HSPB1,ITPR2,PIK3C2A,PIP5K1B,PLCB1,PLCE1,PLCG2,SA
Aldosterone Signaling in Epithelial Cells	3.93	0.0633	-0.816	CS
GDNF Family Ligand-Receptor Interactions	3.91	0.0921	0.447	FOS,GFRA1,ITPR2,JUN,PIK3C2A,PLCG2,RASD1
				ADCY2,AHNAK,GNAQ,ITGAV,ITGB4,ITPR2,NFATC4,PLCB1,PLCE1,PLCG2,PPP3CA,R
Phospholipase C Signaling	3.79	0.0489	0	ASD1,RHOJ
				ADCY2,DUSP1,GNA14,GNAQ,GRM3,HRH1,MPPED2,PDE4D,PDE7B,PIK3C2A,PLCB1,
G-Protein Coupled Receptor Signaling	3.66	0.0474	#NUM!	RASD1,SYNGAP1
				APC,APC2,CEBPD,FOS,GNAQ,JUN,NFATC4,PIK3C2A,PLCB1,PLCE1,PLCG2,PPP3CA
Role of Macrophages, Fibroblasts and Endothelial C	3.62	0.0446	#NUM!	,RASD1,WIF1
Tec Kinase Signaling	3.61	0.0578	-0.447	FOS,GNA12,GNA14,GNAQ,ITGAV,ITGB4,PIK3C2A,PLCG2,RHOJ,VAV3
Thrombin Signaling	3.58	0.0529	-1	ADCY2,GNA12,GNA14,GNAQ,ITPR2,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1,RHOJ
Wnt/Ca ⁺ pathway	3.54	0.0968	0	NFATC4,PLCB1,PLCE1,PLCG2,PPP3CA,ROR1
Apelin Endothelial Signaling Pathway	3.53	0.0696	-0.378	ADCY2,ANGPT1,FOS,HIF1A,JUN,PIK3C2A,PLCB1,RASD1
				ADCY2,DUSP1,GNAQ,H3-3A/H3-
				3B,ITPR2,MPPED2,NFATC4,PDE4D,PDE7B,PLCB1,PLCE1,PLCG2,PPP3CA,PTPRE,P
Protein Kinase A Signaling	3.53	0.04	-0.775	TPRG,PTPRJ
Role of Tissue Factor in Cancer	3.5	0.069	#NUM!	F3,GNA12,GNA14,GNAQ,ITGAV,PIK3C2A,PLCB1,RASD1
Sphingosine-1-phosphate Signaling	3.48	0.0684	-0.707	ADCY2,GNA12,GNAQ,PIK3C2A,PLCB1,PLCE1,PLCG2,RHOJ
Renin-Angiotensin Signaling	3.45	0.0678	0	ADCY2,FOS,GNAQ,ITPR2,JUN,PIK3C2A,PLCG2,RASD1
Regulation of IL-2 Expression in Activated and Aner	3.45	0.0778	#NUM!	FOS,JUN,NFATC4,PLCG2,PPP3CA,RASD1,VAV3
Cholecystokinin/Gastrin-mediated Signaling	3.43	0.0672	-0.378	FOS,GNA12,GNAQ,ITPR2,JUN,PLCB1,RASD1,RHOJ
D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis	3.35	0.16	0	PIP5K1B,PLCB1,PLCE1,PLCG2
GABA Receptor Signaling	3.3	0.0737	#NUM!	ADCY2,GABRA2,GABRB1,GPHN,KCNQ3,SLC6A1,UBC
Actin Cytoskeleton Signaling	3.26	0.0485	-1.134	APC,APC2,ARHGAP24,GNA12,ITGAV,ITGB4,PIK3C2A,PIP5K1B,RASD1,VAV3,VCL
14-3-3-mediated Signaling	3.24	0.063	0.816	FOS,GFAP,JUN,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1
p70S6K Signaling	3.2	0.062	-0.378	EEF2K,GNAQ,PIK3C2A,PLCB1,PLCE1,PLCG2,PPP2R2B,RASD1
Dopamine-DARPP32 Feedback in cAMP Signaling	3.16	0.0552	-1	ADCY2,GNAQ,GRIN2C,ITPR2,PLCB1,PLCE1,PLCG2,PPP2R2B,PPP3CA
Gap Junction Signaling	3.15	0.0505	#NUM!	ADCY2,GNAQ,GRIA2,ITPR2,PIK3C2A,PLCB1,PLCE1,PLCG2,PPP3CA,RASD1

ERK/MAPK Signaling	3.08	0.0495	1.134	DUSP1,FOS,H3-3A/H3-3B,HSPB1,ITGAV,ITGB4,PIK3C2A,PLCG2,PPP2R2B,RASD1
FAK Signaling	3.07	0.0673	#NUM!	CAPN2,ITGAV,ITGB4,PIK3C2A,PLCG2,RASD1,VCL
Macropinocytosis Signaling	3.06	0.0789	#NUM!	ABI1,ITGB4,ITGB8,PIK3C2A,PLCG2,RASD1
T Cell Receptor Signaling	3.02	0.066	#NUM!	FOS,JUN,NFATC4,PIK3C2A,PPP3CA,RASD1,VAV3
Semaphorin Neuronal Repulsive Signaling Pathway	2.98	0.0576	0	CSPG5,ITGAV,ITGB4,NCAN,PDE4D,PIK3C2A,PLCG2,VCAN
Renal Cell Carcinoma Signaling	2.94	0.075	#NUM!	FOS,HIF1A,JUN,PIK3C2A,RASD1,UBC
Chemokine Signaling	2.94	0.075	0.447	FOS,GNAQ,JUN,PLCB1,PLCG2,RASD1
Role of NFAT in Cardiac Hypertrophy	2.89	0.0467	-0.333	ADCY2,GNAQ,ITPR2,NFATC4,PIK3C2A,PLCB1,PLCE1,PLCG2,PPP3CA,RASD1
GPCR-Mediated Nutrient Sensing in Enteroendocrine Cells	2.88	0.0625	-0.378	ADCY2,GNA14,GNAQ,ITPR2,PLCB1,PLCE1,PLCG2
Role of Osteoblasts, Osteoclasts and Chondrocytes	2.83	0.0459	#NUM!	APC,APC2,FOS,JUN,NAIP,NFATC4,PIK3C2A,PPP3CA,SPP1,WIF1
Sperm Motility	2.76	0.0448	-0.447	EPHB1,ERBB4,FGFR2,FGFR3,ITPR2,PDE4D,PLCB1,PLCE1,PLCG2,ROR1
RhoGDI Signaling	2.71	0.0476	1	CDH10,CDH23,GNA12,GNA14,GNAQ,ITGAV,ITGB4,PIP5K1B,RHOJ
HGF Signaling	2.71	0.0583	1	FOS,ITGAV,ITGB4,JUN,PIK3C2A,PLCG2,RASD1
ILK Signaling	2.7	0.0474	1	FOS,HIF1A,ITGB4,ITGB8,JUN,PIK3C2A,PPP2R2B,RHOJ,VCL
Rac Signaling	2.69	0.0579	#NUM!	ITGAV,ITGB4,JUN,PARD3,PIK3C2A,PIP5K1B,RASD1
PKCθ Signaling in T Lymphocytes	2.68	0.0516	0.378	FOS,JUN,NFATC4,PIK3C2A,PLCG2,PPP3CA,RASD1,VAV3
Thrombopoietin Signaling	2.64	0.0794	1	FOS,JUN,PIK3C2A,PLCG2,RASD1
IL-1 Signaling	2.63	0.0652	#NUM!	ADCY2,FOS,GNA12,GNA14,GNAQ,JUN
ErbB Signaling	2.59	0.0638	0.447	ERBB4,FOS,JUN,PIK3C2A,PLCG2,RASD1
Superpathway of Inositol Phosphate Compounds	2.56	0.0452	0.333	DUSP1,ITPKB,PIK3C2A,PIP5K1B,PLCB1,PLCE1,PLCG2,PPP3CA,PTPRJ
IL-8 Signaling	2.55	0.045	0.378	ANGPT1,FOS,GNA12,ITGAV,JUN,PIK3C2A,RAB11FIP2,RASD1,RHOJ
Glioblastoma Multiforme Signaling	2.51	0.0485	-0.378	APC,ITPR2,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1,RHOJ
p53 Signaling	2.49	0.0612	-0.816	ADGRB1,HIF1A,JUN,PIK3C2A,PLAGL1,SERPINE2
Cellular Effects of Sildenafil (Viagra)	2.49	0.0534	#NUM!	ADCY2,ITPR2,KCNQ3,PDE4D,PLCB1,PLCE1,PLCG2
Gα12/13 Signaling	2.49	0.0534	0	CDH10,CDH23,GNA12,JUN,PIK3C2A,RASD1,VAV3
Estrogen Receptor Signaling	2.46	0.0366	0.577	ADCY2,FOS,GNA12,GNA14,GNAQ,HIF1A,JUN,PIK3C2A,PLCB1,PLCE1,PLCG2,RASD1
Phagosome Formation	2.46	0.0526	#NUM!	ITGAV,ITGB4,PIK3C2A,PLCB1,PLCE1,PLCG2,RHOJ
Virus Entry via Endocytic Pathways	2.41	0.0588	#NUM!	B2M,ITGB4,ITGB8,PIK3C2A,PLCG2,RASD1
PTEN Signaling	2.4	0.0515	2	BMPR1B,FGFR2,FGFR3,ITGAV,ITGB4,PREX2,RASD1
GNRH Signaling	2.39	0.0462	-0.378	ADCY2,FOS,GNA14,GNAQ,ITPR2,JUN,PLCB1,RASD1
Melatonin Signaling	2.39	0.0694	-0.447	GNAQ,PLCB1,PLCE1,PLCG2,RORB
Integrin Signaling	2.37	0.0423	0	CAPN2,ITGAV,ITGB4,ITGB8,PIK3C2A,PLCG2,RASD1,RHOJ,VCL
T Cell Exhaustion Signaling Pathway	2.36	0.0457	-0.816	FOS,JUN,MGAT5,NFATC4,PIK3C2A,PLCG2,PPP2R2B,RASD1
Neuregulin Signaling	2.35	0.0571	#NUM!	ERBB4,ERBIN,ITGAV,ITGB4,PLCG2,RASD1
Cdc42 Signaling	2.35	0.0455	1	APC,APC2,B2M,FOS,ITGAV,ITGB4,JUN,PARD3
Leptin Signaling in Obesity	2.34	0.0676	#NUM!	ADCY2,PIK3C2A,PLCB1,PLCE1,PLCG2
Regulation of Cellular Mechanics by Calpain Proteases	2.34	0.0676	#NUM!	CAPN2,ITGAV,ITGB4,RASD1,VCL
Estrogen-Dependent Breast Cancer Signaling	2.31	0.0667	#NUM!	FOS,HSD17B12,JUN,PIK3C2A,RASD1

nNOS Signaling in Neurons	2.31	0.0851	#NUM!	CAPN2,GRIN2C,PPP3CA,RASD1
Paxillin Signaling	2.29	0.0556	#NUM!	ITGAV,ITGB4,ITGB8,PIK3C2A,RASD1,VCL
IL-3 Signaling	2.22	0.0633	0	FOS,JUN,PIK3C2A,PPP3CA,RASD1
JAK/Stat Signaling	2.19	0.0625	0	FOS,GNAQ,JUN,PIK3C2A,RASD1
Prolactin Signaling	2.17	0.0617	1	FOS,JUN,PIK3C2A,PLCG2,RASD1
Actin Nucleation by ARP-WASP Complex	2.17	0.0617	#NUM!	GNA12,ITGAV,ITGB4,RASD1,RHOJ
UVB-Induced MAPK Signaling	2.15	0.0769	#NUM!	FOS,H3-3A/H3-3B,JUN,PIK3C2A
fMLP Signaling in Neutrophils	2.14	0.0517	-1.342	ITPR2,NFATC4,PIK3C2A,PLCB1,PPP3CA,RASD1
PPAR α /RXR α Activation	2.14	0.0419	#NUM!	ADCY2,GNA14,GNAQ,JUN,PLCB1,PLCE1,PLCG2,RASD1
EGF Signaling	2.07	0.0727	0	FOS,ITPR2,JUN,PIK3C2A
PDGF Signaling	2.06	0.0581	1	FOS,JUN,PIK3C2A,PLCG2,RASD1
CD28 Signaling in T Helper Cells	2.05	0.0496	0	FOS,ITPR2,JUN,NFATC4,PIK3C2A,PPP3CA
Huntington's Disease Signaling	2.05	0.0377	0	CAPN2,GNA14,GNAQ,HAP1,HSPA1A/HSPA1B,JUN,PIK3C2A,PLCB1,UBC
G Beta Gamma Signaling	2.04	0.0492	0.447	ADCY2,GNA12,GNA14,GNAQ,PLCG2,RASD1
TNFR2 Signaling	2.03	0.1	#NUM!	FOS,JUN,NAIP
Ceramide Signaling	2.02	0.0568	1	FOS,JUN,PIK3C2A,PPP2R2B,RASD1
G Protein Signaling Mediated by Tubby	1.99	0.0968	#NUM!	GNAQ,PLCB1,PLCG2
IL-2 Signaling	1.91	0.0656	#NUM!	FOS,JUN,PIK3C2A,RASD1
α -Adrenergic Signaling	1.89	0.0526	#NUM!	ADCY2,GNAQ,ITPR2,PLCG2,RASD1
TGF- β Signaling	1.87	0.0521	1	BMPR1B,FOS,JUN,RASD1,SMURF2
Wnt/ β -catenin Signaling	1.85	0.0405	0.816	APC,APC2,GNAQ,JUN,PPP2R2B,UBC,WIF1
MSP-RON Signaling In Cancer Cells Pathway	1.85	0.0448	0	FOS,HIF1A,ITGB4,JUN,PIK3C2A,RASD1
Glutamine Biosynthesis I	1.84	1	#NUM!	GLUL
VEGF Signaling	1.82	0.0505	0	HIF1A,PIK3C2A,PLCG2,RASD1,VCL
Apelin Cardiomyocyte Signaling Pathway	1.82	0.0505	-0.447	HIF1A,PIK3C2A,PLCB1,PLCE1,PLCG2
Tumor Microenvironment Pathway	1.82	0.0398	0.378	FOS,HIF1A,JUN,PIK3C2A,RASD1,SLC1A4,SPP1
IL-17A Signaling in Fibroblasts	1.81	0.0833	#NUM!	CEBPD,FOS,JUN
ErbB4 Signaling	1.77	0.0597	#NUM!	ERBB4,PIK3C2A,PLCG2,RASD1
B Cell Receptor Signaling	1.7	0.0376	0	JUN,NFATC4,PIK3C2A,PLCG2,PPP3CA,RASD1,VAV3
Corticotropin Releasing Hormone Signaling	1.7	0.0414	1	ADCY2,FOS,GNAQ,ITPR2,JUN,PLCG2
April Mediated Signaling	1.69	0.075	#NUM!	FOS,JUN,NFATC4
Regulation Of The Epithelial Mesenchymal Transition	1.68	0.0372	-0.378	FGFR2,FGFR3,FOS,JUN,PIK3C2A,RASD1,WWTR1
ERK5 Signaling	1.67	0.0556	#NUM!	FOS,GNA12,GNAQ,RASD1
CDK5 Signaling	1.67	0.0463	0	ADCY2,CABLES1,LAMA5,PPP2R2B,RASD1
NRF2-mediated Oxidative Stress Response	1.67	0.037	0	FKBP5,FOS,FTH1,JUN,JUNB,PIK3C2A,RASD1
Production of Nitric Oxide and Reactive Oxygen Spe	1.67	0.037	0.378	APOE,FOS,JUN,PIK3C2A,PLCG2,PPP2R2B,RHOJ
B Cell Activating Factor Signaling	1.66	0.0732	#NUM!	FOS,JUN,NFATC4
Caveolar-mediated Endocytosis Signaling	1.65	0.0548	#NUM!	B2M,ITGAV,ITGB4,ITGB8
Glioma Invasiveness Signaling	1.65	0.0548	#NUM!	ITGAV,PIK3C2A,RASD1,RHOJ
Hepatic Fibrosis Signaling Pathway	1.62	0.0291	0.333	FOS,FTH1,HIF1A,ITGAV,ITGB4,JUN,PIK3C2A,PLCG2,RASD1,RHOJ,SPP1

HER-2 Signaling in Breast Cancer	1.61	0.0361	1.89	FOS,ITGB4,ITGB8,JUN,PARD3,PIK3C2A,RASD1
Oncostatin M Signaling	1.6	0.0698	#NUM!	CHI3L1,EPAS1,RASD1
Neurotrophin/TRK Signaling	1.6	0.0526	#NUM!	FOS,JUN,PIK3C2A,RASD1
Natural Killer Cell Signaling	1.58	0.0355	0.378	B2M,HSPA1A/HSPA1B,NFATC4,PIK3C2A,PLCG2,RASD1,VAV3
tRNA Splicing	1.58	0.0682	#NUM!	MPPED2,PDE4D,PDE7B
Insulin Secretion Signaling Pathway	1.56	0.0328	-0.707	ADCY2,GNA14,GNAQ,ITPR2,PIK3C2A,PLCB1,PLCE1,PLCG2 ADGRB1,ADGRB3,ADGRV1,EDNRB,GNAQ,GPR37L1,GRM3,HIF1A,HRH1,JUN,LGR4,PI
Breast Cancer Regulation by Stathmin1	1.55	0.0254	-2.324	K3C2A,PLCB1,PPP2R2B,RASD1
D-myo-inositol-5-phosphate Metabolism	1.55	0.0382	0.816	DUSP1,PLCB1,PLCE1,PLCG2,PPP3CA,PTPRJ
Thyroid Cancer Signaling	1.54	0.0506	1	FOS,JUN,PIK3C2A,RASD1
BEX2 Signaling Pathway	1.54	0.0506	1	HIF1A,JUN,PPP2R2B,SPP1
Asparagine Degradation I	1.54	0.5	#NUM!	ASRGL1
Glutamate Biosynthesis II	1.54	0.5	#NUM!	GLUD1
Glutamate Degradation X	1.54	0.5	#NUM!	GLUD1
Opioid Signaling Pathway	1.53	0.0324	-1.134	ADCY2,FOS,GRIN2C,ITPR2,PLCB1,PPP3CA,RASD1,RGS6
eNOS Signaling	1.52	0.0377	-0.447	ADCY2,GNAQ,HSPA1A/HSPA1B,ITPR2,PIK3C2A,PLCG2
Oxidative Ethanol Degradation III	1.51	0.105	#NUM!	ACSS1,ALDH1A1
Ephrin A Signaling	1.5	0.0638	#NUM!	EFNA5,PIK3C2A,VAV3
HIF1 α Signaling	1.5	0.0341	-0.378	HIF1A,HSPA1A/HSPA1B,JUN,PIK3C2A,PLCG2,PPP3CA,RASD1
IL-15 Production	1.48	0.0413	-2.236	EPHB1,ERBB4,FGFR2,FGFR3,ROR1
LPS-stimulated MAPK Signaling	1.47	0.0482	#NUM!	FOS,JUN,PIK3C2A,RASD1
TR/RXR Activation	1.46	0.0476	#NUM!	DIO2,HIF1A,ME1,PIK3C2A
VEGF Family Ligand-Receptor Interactions	1.46	0.0476	#NUM!	FOS,PIK3C2A,PLCG2,RASD1
TNFR1 Signaling	1.43	0.06	#NUM!	FOS,JUN,NAIP
GP6 Signaling Pathway	1.43	0.04	1.342	COL21A1,COL27A1,LAMA5,PIK3C2A,PLCG2
IL-6 Signaling	1.42	0.0397	1	FOS,HSPB1,JUN,PIK3C2A,RASD1
Ferroptosis Signaling Pathway	1.42	0.0397	-0.447	ANGPTL4,FTH1,HSPB1,RASD1,WWTR1
UVC-Induced MAPK Signaling	1.41	0.0588	#NUM!	FOS,JUN,RASD1
RANK Signaling in Osteoclasts	1.38	0.0449	0	FOS,JUN,PIK3C2A,PPP3CA
Erythropoietin Signaling Pathway	1.37	0.0347	0	FOS,HIF1A,ITPR2,JUN,PIK3C2A,RASD1
L-carnitine Biosynthesis	1.36	0.333	#NUM!	BBOX1
Thyronamine and Iodothyronamine Metabolism	1.36	0.333	#NUM!	DIO2
Thyroid Hormone Metabolism I (via Deiodination)	1.36	0.333	#NUM!	DIO2
Ethanol Degradation IV	1.35	0.087	#NUM!	ACSS1,ALDH1A1
Adipogenesis pathway	1.32	0.0373	#NUM!	CEBPD,FGFR2,FGFR3,HIF1A,NFATC4
NF- κ B Signaling	1.31	0.0335	-1.342	BMPR1B,FGFR2,FGFR3,PIK3C2A,PLCG2,RASD1
Melanocyte Development and Pigmentation Signalin	1.31	0.0426	#NUM!	ADCY2,PIK3C2A,PLCG2,RASD1
Senescence Pathway	1.3	0.0291	0	CAPN2,ITPR2,JUN,NFATC4,PIK3C2A,PPP2R2B,PPP3CA,RASD1
Iron homeostasis signaling pathway	1.29	0.0365	#NUM!	BMPR1B,EPAS1,FTH1,HIF1A,HIF3A
cAMP-mediated signaling	1.28	0.0306	-1.633	ADCY2,DUSP1,GRM3,MPPED2,PDE4D,PDE7B,PPP3CA
ATM Signaling	1.27	0.0412	#NUM!	HP1BP3,JUN,PPP2R2B,RAD9A
IL-17A Signaling in Gastric Cells	1.26	0.0769	#NUM!	FOS,JUN

Phenylalanine Degradation I (Aerobic)	1.24	0.25	#NUM!	QDPR
Molybdenum Cofactor Biosynthesis	1.24	0.25	#NUM!	GPHN
Acetate Conversion to Acetyl-CoA	1.24	0.25	#NUM!	ACSS1
Endometrial Cancer Signaling	1.24	0.05	#NUM!	APC2,PIK3C2A,RASD1
PCP pathway	1.24	0.05	#NUM!	JUN,JUNB,LGR4
Cardiac β -adrenergic Signaling	1.24	0.0352	0	ADCY2,MPPED2,PDE4D,PDE7B,PPP2R2B
Systemic Lupus Erythematosus In T Cell Signaling P	1.23	0.0269	-1.667	B2M,FOS,GNA12,JUN,PIK3C2A,PPP2R2B,PPP3CA,RASD1,RHOJ
Apoptosis Signaling	1.23	0.04	#NUM!	CAPN2,NAIP,PLCG2,RASD1
Aryl Hydrocarbon Receptor Signaling	1.23	0.035	#NUM!	ALDH1A1,DHFR,FOS,HSPB1,JUN
SAPK/JNK Signaling	1.2	0.0392	#NUM!	GNA12,JUN,PIK3C2A,RASD1
Regulation of the Epithelial-Mesenchymal Transition	1.2	0.0312	#NUM!	APC,FGFR2,FGFR3,HIF1A,PIK3C2A,RASD1
Regulation of Actin-based Motility by Rho	1.19	0.0388	#NUM!	ITGAV,ITGB4,PIP5K1B,RHOJ
Clathrin-mediated Endocytosis Signaling	1.19	0.0311	#NUM!	APOE,ITGB4,ITGB8,PIK3C2A,PPP3CA,UBC
RAR Activation	1.18	0.0309	#NUM!	ADCY2,ALDH1A1,DUSP1,FOS,JUN,ZBTB16
IGF-1 Signaling	1.18	0.0385	#NUM!	FOS,JUN,PIK3C2A,RASD1
CD40 Signaling	1.15	0.0462	#NUM!	FOS,JUN,PIK3C2A
Factors Promoting Cardiogenesis in Vertebrates	1.15	0.0333	0.447	APC,BMPR1B,PLCB1,PLCE1,PLCG2
ErbB2-ErbB3 Signaling	1.15	0.0462	#NUM!	JUN,PIK3C2A,RASD1
Netrin Signaling	1.15	0.0462	#NUM!	NFATC4,PPP3CA,UNC5C
Phospholipases	1.15	0.0462	#NUM!	PLCB1,PLCE1,PLCG2
PAK Signaling	1.15	0.0377	#NUM!	ITGAV,ITGB4,PIK3C2A,RASD1
Serine Biosynthesis	1.15	0.2	#NUM!	UBAC2
dTMP De Novo Biosynthesis	1.15	0.2	#NUM!	DHFR
Calcium-induced T Lymphocyte Apoptosis	1.14	0.0455	#NUM!	CAPN2,ITPR2,PPP3CA
Gustation Pathway	1.11	0.0323	#NUM!	ADCY2,ITPR2,MPPED2,PDE4D,PDE7B
Colorectal Cancer Metastasis Signaling	1.1	0.0277	0.816	ADCY2,APC,FOS,JUN,PIK3C2A,RASD1,RHOJ
Ethanol Degradation II	1.1	0.0625	#NUM!	ACSS1,ALDH1A1
iCOS-iCOSL Signaling in T Helper Cells	1.09	0.036	#NUM!	ITPR2,NFATC4,PIK3C2A,PPP3CA
Necroptosis Signaling Pathway	1.09	0.0318	-0.447	CAPN2,GLUD1,GLUL,PPP3CA,UBC
Agrin Interactions at Neuromuscular Junction	1.08	0.0429	#NUM!	ERBB4,JUN,RASD1
GM-CSF Signaling	1.08	0.0429	#NUM!	PIK3C2A,PPP3CA,RASD1
Circadian Rhythm Signaling	1.08	0.0606	#NUM!	CRY2,GRIN2C
MSP-RON Signaling In Macrophages Pathway	1.07	0.0354	1	FOS,JUN,PIK3C2A,RASD1
Arginine Biosynthesis IV	1.07	0.167	#NUM!	GLUD1
Growth Hormone Signaling	1.07	0.0423	#NUM!	FOS,PIK3C2A,PLCG2
Inhibition of Angiogenesis by TSP1	1.05	0.0588	#NUM!	CD47,JUN
Non-Small Cell Lung Cancer Signaling	1.04	0.0411	#NUM!	ITPR2,PIK3C2A,RASD1
Fc Epsilon RI Signaling	1.03	0.0342	#NUM!	PIK3C2A,PLCG2,RASD1,VAV3
Role of PKR in Interferon Induction and Antiviral Res	1.02	0.0339	#NUM!	COLEC12,FOS,HSPA1A/HSPA1B,JUN
p38 MAPK Signaling	1.02	0.0339	0	DUSP1,EEF2K,H3-3A/H3-3B,HSPB1
HMGB1 Signaling	1.02	0.0303	0	FOS,JUN,PIK3C2A,RASD1,RHOJ
Regulation of eIF4 and p70S6K Signaling	1.01	0.0301	#NUM!	ITGAV,ITGB4,PIK3C2A,PPP2R2B,RASD1

3-phosphoinositide Biosynthesis	1.01	0.0301	-0.447	DUSP1,PIK3C2A,PIP5K1B,PPP3CA,PTPRJ
FcγRIIB Signaling in B Lymphocytes	1.01	0.04	#NUM!	PIK3C2A,PLCG2,RASD1
Angiopoietin Signaling	1.01	0.04	#NUM!	ANGPT1,PIK3C2A,RASD1
Role of NANOG in Mammalian Embryonic Stem Cell I	1.01	0.0336	#NUM!	APC,BMPR1B,PIK3C2A,RASD1
Superpathway of Serine and Glycine Biosynthesis I	1.01	0.143	#NUM!	UBAC2
NF-κB Activation by Viruses	1	0.0395	#NUM!	ITGAV,PIK3C2A,RASD1
Toll-like Receptor Signaling	1	0.0395	#NUM!	FOS,JUN,UBC
Dopamine Receptor Signaling	0.987	0.039	#NUM!	ADCY2,PPP2R2B,QDPR
Osteoarthritis Pathway	0.979	0.0273	1	EPAS1,FGFR3,HIF1A,ITGAV,ITGB4,SPP1
Protein Ubiquitination Pathway	0.971	0.0256	#NUM!	B2M,HSPA1A/HSPA1B,HSPB1,SACS,SMURF2,UBC,USP24
CCR3 Signaling in Eosinophils	0.963	0.0323	#NUM!	ITPR2,PIK3C2A,PLCB1,RASD1
Systemic Lupus Erythematosus In B Cell Signaling P	0.955	0.0255	1.134	FOS,JUN,NFATC4,PIK3C2A,PLCG2,PPP3CA,RASD1
Systemic Lupus Erythematosus Signaling	0.917	0.0262	#NUM!	FOS,JUN,NFATC4,PIK3C2A,PLCG2,RASD1
White Adipose Tissue Browning Pathway	0.917	0.031	-1	ADCY2,DIO2,FGFR2,FGFR3
FGF Signaling	0.903	0.0357	#NUM!	FGFR2,FGFR3,PIK3C2A
MIF Regulation of Innate Immunity	0.9	0.0476	#NUM!	FOS,JUN
HIPPO signaling	0.889	0.0353	#NUM!	PARD3,PPP2R2B,WWTR1
IL-4 Signaling	0.889	0.0353	#NUM!	NFATC4,PIK3C2A,RASD1
BMP signaling pathway	0.889	0.0353	#NUM!	BMPR1B,JUN,RASD1
Serotonin Receptor Signaling	0.883	0.0465	#NUM!	ADCY2,QDPR
IL-12 Signaling and Production in Macrophages	0.879	0.0301	#NUM!	APOE,FOS,JUN,PIK3C2A
Dendritic Cell Maturation	0.873	0.0272	0.447	B2M,PIK3C2A,PLCB1,PLCE1,PLCG2
IL-23 Signaling Pathway	0.866	0.0455	#NUM!	HIF1A,PIK3C2A
Human Embryonic Stem Cell Pluripotency	0.863	0.0296	#NUM!	APC,FGFR2,FGFR3,PIK3C2A
STAT3 Pathway	0.863	0.0296	#NUM!	BMPR1B,FGFR2,FGFR3,RASD1
Sirtuin Signaling Pathway	0.863	0.0241	-0.816	EPAS1,GLUD1,H3-3A/H3-3B,HIF1A,JUN,MT-ND3,NDRG1
Hepatic Fibrosis / Hepatic Stellate Cell Activation	0.86	0.0269	#NUM!	COL21A1,COL27A1,EDNRB,FGFR2,LHX2
Androgen Signaling	0.857	0.0294	#NUM!	GNA12,GNA14,GNAQ,JUN
iNOS Signaling	0.851	0.0444	#NUM!	FOS,JUN
CTLA4 Signaling in Cytotoxic T Lymphocytes	0.848	0.0337	#NUM!	B2M,PIK3C2A,PPP2R2B
Dermatan Sulfate Biosynthesis (Late Stages)	0.836	0.0435	#NUM!	HS3ST5,UST
Death Receptor Signaling	0.818	0.0326	#NUM!	HSPB1,NAIP,TIPARP
Sertoli Cell-Sertoli Cell Junction Signaling	0.807	0.0258	#NUM!	ITGAV,ITGB4,JUN,RASD1,VCL
Chondroitin Sulfate Biosynthesis (Late Stages)	0.807	0.0417	#NUM!	HS3ST5,UST
Endocannabinoid Cancer Inhibition Pathway	0.801	0.028	0	ADCY2,GNAQ,HIF1A,PIK3C2A
CCR5 Signaling in Macrophages	0.799	0.0319	#NUM!	FOS,JUN,PLCG2
Melanoma Signaling	0.78	0.04	#NUM!	PIK3C2A,RASD1
CD27 Signaling in Lymphocytes	0.74	0.0377	#NUM!	FOS,JUN
Epithelial Adherens Junction Signaling	0.735	0.0263	#NUM!	APC,PARD3,RASD1,VCL
Calcium Signaling	0.733	0.0243	-1.342	GRIA2,GRIN2C,ITPR2,NFATC4,PPP3CA
Mouse Embryonic Stem Cell Pluripotency	0.717	0.0291	#NUM!	APC,PIK3C2A,RASD1
Sumoylation Pathway	0.717	0.0291	#NUM!	FOS,JUN,RHOJ

mTOR Signaling	0.71	0.0238	-1	HIF1A,PIK3C2A,PPP2R2B,RASD1,RHOJ
Chondroitin Sulfate Biosynthesis	0.703	0.0357	#NUM!	HS3ST5,UST
Unfolded protein response	0.703	0.0357	#NUM!	CEBPD,HSPA1A/HSPA1B
PPAR Signaling	0.701	0.0286	#NUM!	FOS,JUN,RASD1
CNTF Signaling	0.693	0.0351	#NUM!	PIK3C2A,RASD1
Role of CHK Proteins in Cell Cycle Checkpoint Contr	0.693	0.0351	#NUM!	PPP2R2B,RAD9A
Telomerase Signaling	0.684	0.028	#NUM!	PIK3C2A,PPP2R2B,RASD1
HOTAIR Regulatory Pathway	0.682	0.025	#NUM!	H3-3A/H3-3B,PIK3C2A,SPP1,WIF1
Extrinsic Prothrombin Activation Pathway	0.678	0.0625	#NUM!	F3
Dermatan Sulfate Biosynthesis	0.67	0.0339	#NUM!	HS3ST5,UST
Antioxidant Action of Vitamin C	0.67	0.0275	#NUM!	PLCB1,PLCE1,PLCG2
Glioma Signaling	0.662	0.0273	#NUM!	PIK3C2A,PLCG2,RASD1
Histamine Degradation	0.654	0.0588	#NUM!	ALDH1A1
Tight Junction Signaling	0.635	0.0238	#NUM!	FOS,JUN,PPP2R2B,VCL
1D-myo-inositol Hexakisphosphate Biosynthesis II (M	0.633	0.0556	#NUM!	ITPKB
D-myo-inositol (1,3,4)-trisphosphate Biosynthesis	0.633	0.0556	#NUM!	ITPKB
NGF Signaling	0.631	0.0263	#NUM!	PIK3C2A,PLCG2,RASD1
LPS/IL-1 Mediated Inhibition of RXR Function	0.629	0.0222	#NUM!	ALDH1A1,APOE,HS3ST5,JUN,UST
Glucocorticoid Receptor Signaling	0.623	0.0195	#NUM!	DUSP1,FKBP5,FOS,HSPA1A/HSPA1B,JUN,NFATC4,PIK3C2A,PPP3CA,RASD1
Endocannabinoid Developing Neuron Pathway	0.623	0.0261	#NUM!	ADCY2,PIK3C2A,RASD1
Germ Cell-Sertoli Cell Junction Signaling	0.616	0.0234	#NUM!	PIK3C2A,RASD1,RHOJ,VCL
DNA damage-induced 14-3-3 σ Signaling	0.613	0.0526	#NUM!	RAD9A
Xenobiotic Metabolism Signaling	0.611	0.0209	#NUM!	ALDH1A1,HS3ST5,PIK3C2A,PPP2R2B,RASD1,UST
Cardiomyocyte Differentiation via BMP Receptors	0.592	0.05	#NUM!	BMPR1B
Fatty Acid α -oxidation	0.592	0.05	#NUM!	ALDH1A1
Inflammasome pathway	0.592	0.05	#NUM!	NAIP
Remodeling of Epithelial Adherens Junctions	0.58	0.0294	#NUM!	APC,VCL
Reelin Signaling in Neurons	0.577	0.0246	#NUM!	APOE,GRIN2C,PIK3C2A
Inhibition of ARE-Mediated mRNA Degradation Path	0.577	0.0246	#NUM!	PPP2R2B,ZFP36,ZFP36L2
Putrescine Degradation III	0.575	0.0476	#NUM!	ALDH1A1
Role of JAK1 and JAK3 in γ c Cytokine Signaling	0.572	0.029	#NUM!	PIK3C2A,RASD1
SPINK1 General Cancer Pathway	0.572	0.029	#NUM!	PIK3C2A,RASD1
RhoA Signaling	0.57	0.0244	#NUM!	GNA12,PIP5K1B,RHPN1
IL-10 Signaling	0.564	0.0286	#NUM!	FOS,JUN
CDP-diacylglycerol Biosynthesis I	0.558	0.0455	#NUM!	GPAM
Methionine Degradation I (to Homocysteine)	0.558	0.0455	#NUM!	AHCYL1
Gai Signaling	0.558	0.024	#NUM!	ADCY2,GRM3,RASD1
Basal Cell Carcinoma Signaling	0.547	0.0278	#NUM!	APC,APC2
Heparan Sulfate Biosynthesis (Late Stages)	0.547	0.0278	#NUM!	HS3ST5,UST
PI3K/AKT Signaling	0.547	0.0217	#NUM!	ITGAV,ITGB4,PPP2R2B,RASD1
Polyamine Regulation in Colon Cancer	0.541	0.0435	#NUM!	APC

Superpathway of D-myo-inositol (1,4,5)-trisphosphate	0.541	0.0435	#NUM!	ITPKB
IL-17 Signaling	0.533	0.0214	1	FOS,JUN,PIK3C2A,RASD1
Hypoxia Signaling in the Cardiovascular System	0.53	0.027	#NUM!	HIF1A,JUN
Phosphatidylglycerol Biosynthesis II (Non-plastidic)	0.526	0.0417	#NUM!	GPAM
Cysteine Biosynthesis III (mammalia)	0.526	0.0417	#NUM!	AHCYL1
IL-15 Signaling	0.523	0.0267	#NUM!	PIK3C2A,RASD1
Xenobiotic Metabolism CAR Signaling Pathway	0.523	0.0212	-2	ALDH1A1,HS3ST5,PPP2R2B,UST
Tryptophan Degradation X (Mammalian, via Tryptami	0.511	0.04	#NUM!	ALDH1A1
Antiproliferative Role of Somatostatin Receptor 2	0.507	0.026	#NUM!	PIK3C2A,RASD1
Leukocyte Extravasation Signaling	0.504	0.0207	#NUM!	PIK3C2A,PLCG2,VAV3,VCL
Role of Wnt/GSK-3 β Signaling in the Pathogenesis c	0.499	0.0256	#NUM!	APC,APC2
IL-7 Signaling Pathway	0.499	0.0256	#NUM!	JUN,PIK3C2A
Lipid Antigen Presentation by CD1	0.496	0.0385	#NUM!	B2M
Gluconeogenesis I	0.496	0.0385	#NUM!	ME1
Heparan Sulfate Biosynthesis	0.492	0.0253	#NUM!	HS3ST5,UST
FLT3 Signaling in Hematopoietic Progenitor Cells	0.485	0.025	#NUM!	PIK3C2A,RASD1
Ovarian Cancer Signaling	0.478	0.0216	#NUM!	APC,PIK3C2A,RASD1
Hereditary Breast Cancer Signaling	0.472	0.0214	#NUM!	PIK3C2A,RASD1,UBC
PEDF Signaling	0.471	0.0244	#NUM!	PIK3C2A,RASD1
Apelin Adipocyte Signaling Pathway	0.471	0.0244	#NUM!	ADCY2,HIF1A
D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthe	0.462	0.0211	#NUM!	DUSP1,PPP3CA,PTPRJ
D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthe	0.462	0.0211	#NUM!	DUSP1,PPP3CA,PTPRJ
Role of p14/p19ARF in Tumor Suppression	0.458	0.0345	#NUM!	PIK3C2A
Regulation Of The Epithelial Mesenchymal Transition	0.457	0.0238	#NUM!	APC,HIF1A
Dopamine Degradation	0.446	0.0333	#NUM!	ALDH1A1
Acute Myeloid Leukemia Signaling	0.426	0.0225	#NUM!	PIK3C2A,RASD1
4-1BB Signaling in T Lymphocytes	0.425	0.0312	#NUM!	JUN
AMPK Signaling	0.421	0.0188	#NUM!	EEF2K,PHLPP1,PIK3C2A,PPP2R2B
OX40 Signaling Pathway	0.42	0.0222	#NUM!	B2M,JUN
IL-9 Signaling	0.413	0.0303	#NUM!	PIK3C2A
Prostate Cancer Signaling	0.413	0.022	#NUM!	PIK3C2A,RASD1
Pyrimidine Ribonucleotides Interconversion	0.413	0.0303	#NUM!	ENTPD1
Th17 Activation Pathway	0.413	0.022	#NUM!	HIF1A,NFATC4
Cytotoxic T Lymphocyte-mediated Apoptosis of Targ	0.403	0.0294	#NUM!	B2M
Retinoate Biosynthesis I	0.403	0.0294	#NUM!	ALDH1A1
3-phosphoinositide Degradation	0.398	0.0192	#NUM!	DUSP1,PPP3CA,PTPRJ
Coagulation System	0.395	0.0286	#NUM!	F3
DNA Methylation and Transcriptional Repression Sig	0.395	0.0286	#NUM!	H3-3A/H3-3B
TWEAK Signaling	0.395	0.0286	#NUM!	NAIP
Pyrimidine Ribonucleotides De Novo Biosynthesis	0.395	0.0286	#NUM!	ENTPD1
Noradrenaline and Adrenaline Degradation	0.395	0.0286	#NUM!	ALDH1A1
Bladder Cancer Signaling	0.381	0.0206	#NUM!	FGFR3,RASD1

Cell Cycle Regulation by BTG Family Proteins	0.376	0.027	#NUM!	PPP2R2B
Salvage Pathways of Pyrimidine Ribonucleotides	0.376	0.0204	#NUM!	PRKX,UPP2
Superpathway of Methionine Degradation	0.376	0.027	#NUM!	AHCYL1
Notch Signaling	0.376	0.027	#NUM!	HES5
Nitric Oxide Signaling in the Cardiovascular System	0.371	0.0202	#NUM!	ITPR2,PIK3C2A
Docosahexaenoic Acid (DHA) Signaling	0.368	0.0263	#NUM!	PIK3C2A
Thyroid Hormone Metabolism II (via Conjugation and tRNA Charging	0.368	0.0263	#NUM!	DIO2
Antigen Presentation Pathway	0.359	0.0256	#NUM!	WARS1
Chronic Myeloid Leukemia Signaling	0.351	0.0256	#NUM!	B2M
Th1 and Th2 Activation Pathway	0.339	0.0194	#NUM!	PIK3C2A,RASD1
PD-1, PD-L1 cancer immunotherapy pathway	0.336	0.0175	#NUM!	JUN,NFATC4,PIK3C2A
Estrogen Biosynthesis	0.336	0.0189	#NUM!	B2M,PIK3C2A
BAG2 Signaling Pathway	0.335	0.0238	#NUM!	HSD17B12
Triacylglycerol Biosynthesis	0.328	0.0233	#NUM!	HSPA1A/HSPA1B
Apelin Pancreas Signaling Pathway	0.321	0.0227	#NUM!	GPAM
Role of MAPK Signaling in Promoting the Pathogene	0.321	0.0227	#NUM!	PIK3C2A
Acute Phase Response Signaling	0.319	0.0182	#NUM!	JUN,RASD1
Role of Oct4 in Mammalian Embryonic Stem Cell Plur	0.308	0.0167	#NUM!	FOS,JUN,RASD1
Spliceosomal Cycle	0.307	0.0217	#NUM!	SPP1
Hepatic Cholestasis	0.294	0.0208	#NUM!	DDX46
Amyloid Processing	0.289	0.0161	#NUM!	ADCY2,JUN,SLCO3A1
Th1 Pathway	0.282	0.02	#NUM!	CAPN2
Xenobiotic Metabolism PXR Signaling Pathway	0.275	0.0165	#NUM!	NFATC4,PIK3C2A
Lymphotoxin β Receptor Signaling	0.272	0.0156	#NUM!	ALDH1A1,HS3ST5,UST
Transcriptional Regulatory Network in Embryonic Ste	0.265	0.0189	#NUM!	PIK3C2A
Role of IL-17A in Arthritis	0.26	0.0185	#NUM!	H3-3A/H3-3B
Atherosclerosis Signaling	0.255	0.0182	#NUM!	PIK3C2A
MSP-RON Signaling Pathway	0.254	0.0157	#NUM!	APOE,F3
Cancer Drug Resistance By Drug Efflux	0.24	0.0172	#NUM!	PIK3C2A
Semaphorin Signaling in Neurons	0.24	0.0172	#NUM!	RASD1
Maturity Onset Diabetes of Young (MODY) Signaling	0.231	0.0167	#NUM!	RHOJ
Retinoic acid Mediated Apoptosis Signaling	0.231	0.0167	#NUM!	APOE
Induction of Apoptosis by HIV1	0.231	0.0167	#NUM!	TIPARP
Th2 Pathway	0.226	0.0164	#NUM!	NAIP
Activation of IRF by Cytosolic Pattern Recognition Re	0.226	0.0147	#NUM!	JUN,PIK3C2A
Role of PI3K/AKT Signaling in the Pathogenesis of I	0.218	0.0159	#NUM!	JUN
PXR/RXR Activation	0.214	0.0156	#NUM!	PIK3C2A
IL-17A Signaling in Airway Cells	0.21	0.0154	#NUM!	ALDH1A1
Mitotic Roles of Polo-Like Kinase	0.21	0.0154	#NUM!	PIK3C2A
Pyridoxal 5'-phosphate Salvage Pathway	0.206	0.0152	#NUM!	PPP2R2B
Serotonin Degradation	0.206	0.0152	#NUM!	PRKX
	0.202	0.0149	#NUM!	ALDH1A1

Nur77 Signaling in T Lymphocytes	0.198	0.0147	#NUM!	PPP3CA
LXR/RXR Activation	0	0.00826	#NUM!	APOE
Mitochondrial Dysfunction	0	0.00585	#NUM!	MT-ND3
VDR/RXR Activation	0	0.0128	#NUM!	SPP1
FXR/RXR Activation	0	0.00794	#NUM!	APOE
Fcy Receptor-mediated Phagocytosis in Macrophage	0	0.0106	#NUM!	VAV3
Role of Pattern Recognition Receptors in Recognition	0	0.013	#NUM!	PIK3C2A,PLCG2
TREM1 Signaling	0	0.0133	#NUM!	PLCG2
Small Cell Lung Cancer Signaling	0	0.0141	#NUM!	PIK3C2A
Allograft Rejection Signaling	0	0.0116	#NUM!	B2M
Type II Diabetes Mellitus Signaling	0	0.00704	#NUM!	PIK3C2A
Pancreatic Adenocarcinoma Signaling	0	0.00917	#NUM!	PIK3C2A
Communication between Innate and Adaptive Immunity	0	0.0104	#NUM!	B2M
EIF2 Signaling	0	0.0134	#NUM!	PIK3C2A,RASD1,WARS1
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	0	0.0111	#NUM!	SPP1
Role of MAPK Signaling in the Pathogenesis of Influenza	0	0.0125	#NUM!	RASD1
Cyclins and Cell Cycle Regulation	0	0.0123	#NUM!	PPP2R2B
Gas Signaling	0	0.00935	#NUM!	ADCY2
Agranulocyte Adhesion and Diapedesis	0	0.0104	#NUM!	CXCL14,HRH1
Granulocyte Adhesion and Diapedesis	0	0.0116	#NUM!	CXCL14,HRH1
Oxidative Phosphorylation	0	0.00917	#NUM!	MT-ND3
Insulin Receptor Signaling	0	0.0144	#NUM!	PIK3C2A,RASD1
Phagosome Maturation	0	0.00662	#NUM!	B2M
NER Pathway	0	0.00971	#NUM!	H3-3A/H3-3B
Xenobiotic Metabolism General Signaling Pathway	0	0.014	#NUM!	PIK3C2A,RASD1
Xenobiotic Metabolism AHR Signaling Pathway	0	0.0118	#NUM!	ALDH1A1
Coronavirus Pathogenesis Pathway	0	0.0133	#NUM!	FOS,JUN
Role of MAPK Signaling in Inhibiting the Pathogenesis of COVID-19	0	0.0133	#NUM!	JUN

Microglia

Ingenuity Canonical Pathways	-log(p-value)	Ratio	z-score	Molecules
Synaptogenesis Signaling Pathway	10.8	0.0994	-3.9	ADCY2,AKT3,APOE,CACNB4,CDH12,CDH18,CDH23,CHN1,CNTNAP2,DAB1,EPHA6,FGR,FYN,GRIA2,GRIA3,GRIA4,GRIN2A,GRM5,GRM7,HSPA8,KALRN,NLGN1,NLGN4Y,NRXN1,NRXN3,NTRK2,PRKCE,RAPGEF1,SNAP25,SYT1,TIAM1
Synaptic Long Term Depression	9.9	0.122	-2.711	GRM7,IGF1,ITPR2,PDIA3,PLCB1,PLCB2,PPP2R2B,PRKCA,PRKCB,PRKCE,PRKG1,RYR2,RYR3
Opioid Signaling Pathway	9.7	0.105	-1.961	ADCY2,AKT3,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CAMK1D,FGR,FOS,FYN,GRIN2A,ITPR2,KCNJ5,MAP2K6,PDE1A,PLCB1,PRKCA,PRKCB,PRKCE,RGS16,RGS6,RGS7,RPS6KA5,RYR2,RYR3
Neuropathic Pain Signaling In Dorsal Horn Neurons	9.69	0.168	-2.183	CAMK1D,FOS,GRIA2,GRIA3,GRIA4,GRIN2A,GRM5,GRM7,ITPR2,KCNQ3,NTRK2,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Unfolded protein response	9.37	0.232	2.887	CALR,CEBPB,CEBPD,DNAJC3,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,HSPH1,PDIA6,PPARG,XBP1
Fcy Receptor-mediated Phagocytosis in Macrophages and Monocytes	9.23	0.17	1.5	AKT3,DGKB,FCGR1A,FCGR2A,FCGR3A/FCGR3B,FGR,FYN,HMOX1,INPP5D,LCP2,NCK2,PRKCA,PRKCB,PRKCE,RAB11A,TLN2
Aldosterone Signaling in Epithelial Cells	9	0.127	-0.707	ASIC2,DNAJA1,DNAJC3,HSP90AA1,HSP90AB1,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,HSPB1,HSPD1,HSPH1,ITPR2,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
CREB Signaling in Neurons	8.5	0.0671	-2.53	ADCY2,ADGRB3,ADGRE2,ADGRG1,ADGRL3,ADGRV1,AKT3,C3AR1,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CCR1,CHRM3,CMKLR1,CX3CR1,FPR1,GPR183,GPR34,GRIA2,GRIA3,GRIA4,GRID2,GRIK2,GRIN2A,GRM5,GRM7,IGF1,IGF2R,ITPR2,NTRK2,NTRK3,P2RY12,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Phagosome Formation	7.8	0.128	#NUM!	C3AR1,FCER1G,FCGR1A,FCGR2A,FCGR3A/FCGR3B,ITGAX,ITGB5,MRC2,MSR1,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,TLR2,TLR5
Role of PKR in Interferon Induction and Antiviral Response	7.75	0.136	-1.291	DNAJC3,FCGR1A,FOS,HSP90AA1,HSP90AB1,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,IL1B,JUN,MAP2K6,MAPK10,MSR1,TNFRSF1A
Cardiac Hypertrophy Signaling (Enhanced)	7.51	0.0684	-2.121	ADCY2,AKT3,CACNA1A,CACNA1C,FGF12,FGF14,HDAC4,HSPB1,IGF1,IL15,IL17RA,IL1B,ITGB5,ITPR2,JUN,MAP2K6,MAPK10,MEF2C,PDE1A,PDE3B,PDE4D,PDE9A,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,PRKG1,ROCK1,RPS6KA5,RYR2,RYR3,TNFRSF1A
Netrin Signaling	7.49	0.185	-1.732	ABLIM1,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,NCK2,PRKG1,RYR2,RYR3,UNC5C,UNC5D
Role of NFAT in Cardiac Hypertrophy	7.41	0.0981	-2.683	ADCY2,AKT3,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CAMK1D,HDAC4,IGF1,ITPR2,MAP2K6,MAPK10,MEF2C,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,SLC8A1
Endocannabinoid Neuronal Synapse Pathway	7.24	0.125	-2	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,GRIA2,GRIA3,GRIA4,GRIN2A,GRM5,KCNJ5,MAPK10,PDIA3,PLCB1,PLCB2
Dendritic Cell Maturation	7.12	0.103	2.183	AKT3,B2M,FCER1G,FCGR1A,FCGR2A,FCGR3A/FCGR3B,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,IL15,IL1B,IRF8,MAPK10,PDIA3,PLCB1,PLCB2,TLR2,TNFRSF1A
Nitric Oxide Signaling in the Cardiovascular System	7.1	0.141	-0.277	AKT3,CACNA1A,CACNA1C,HSP90AA1,HSP90AB1,HSP90B1,ITPR2,PDE1A,PDE3B,PRKCA,PRKCB,PRKCE,PRKG1,RYR2
HIF1α Signaling	7.05	0.0976	-0.447	AKT3,CAMK1D,CDKN1A,HK2,HMOX1,HSP90AA1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,IGF1,JUN,LDHA,MAP2K6,MMP16,PRKCA,PRKCB,PRKCE,SAT1,SLC2A3
Role of Macrophages, Fibroblasts and Endothelial Cells	6.32	0.0764	#NUM!	AKT3,CEBPB,CEBPD,DAAM1,FCGR1A,FCGR3A/FCGR3B,FOS,IL15,IL17RA,IL1B,IL1RAP,L1,IRAK3,JUN,MAP2K6,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,ROCK1,TLR2,TLR5,TNFRSF1A

IL-12 Signaling and Production in Macrophages	6.24	0.113	#NUM!	AKT3,APOC1,APOE,CEBPB,CLU,FOS,IRF8,JUN,MAPK10,PPARG,PRKCA,PRKCB,PRKCE,SERPINA1,TLR2
GNRH Signaling	6.13	0.0983	-1.155	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,FOS,ITPR2,JUN,MAP2K6,MA
Glutamate Receptor Signaling	6.12	0.175	-2.646	PK10,PAK3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Cholecystokinin/Gastrin-mediated Signaling	6.09	0.118	-0.535	GRIA2,GRIA3,GRIA4,GRID2,GRIK2,GRIN2A,GRIP1,GRM5,GRM7,SLC1A2
Role of NFAT in Regulation of the Immune Response	5.85	0.0939	1.5	CREM,FOS,IL1B,ITPR2,JUN,MAP2K6,MAPK10,MEF2C,PLCB1,PLCB2,PRKCA,PRKCB,PR
Insulin Secretion Signaling Pathway	5.84	0.082	-1.342	KCE,ROCK1
CCR5 Signaling in Macrophages	5.68	0.128	0.816	AKT3,FCER1G,FCGR1A,FCGR2A,FCGR3A/FCGR3B,FOS,FYN,HLA-B,HLA-DRA,HLA-
Synaptic Long Term Potentiation	5.66	0.109	-1.941	DRB1,HLA-DRB5,ITPR2,JUN,LCP2,MEF2C,PLCB1,PLCB2
GPCR-Mediated Nutrient Sensing in Enteroendocrine C	5.63	0.116	-1.387	ADCY2,CACNA1A,CACNA1C,CHRM3,CPE,EIF1,FGR,FYN,ITPR2,PDIA3,PLCB1,PLCB2,P
Antigen Presentation Pathway	5.55	0.205	#NUM!	RKCA,PRKCB,PRKCE,RPS6KA5,RYR2,RYR3,SLC2A3,SNAP25
nNOS Signaling in Skeletal Muscle Cells	5.37	0.195	#NUM!	CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,FCER1G,FOS,JUN,MAPK10,PRKCA,
Cdc42 Signaling	5.36	0.0909	0.707	PRKCB,PRKCE
eNOS Signaling	5.26	0.0943	-2.111	CACNA1C,GRIA2,GRIA3,GRIA4,GRIN2A,GRM5,GRM7,ITPR2,PDIA3,PLCB1,PLCB2,PRK
Sperm Motility	5.22	0.0807	-1.265	CA,PRKCB,PRKCE
Type II Diabetes Mellitus Signaling	5.17	0.0986	-0.707	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,ITPR2,PDIA3,PLCB1,PLCB2,
Axonal Guidance Signaling	5.16	0.0587	#NUM!	PRKCA,PRKCB,PRKCE
Dopamine-DARPP32 Feedback in cAMP Signaling	5.13	0.092	-1.387	B2M,CALR,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,PDIA3
Calcium Signaling	5.09	0.0825	-3.357	CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,DMD,RYR2,RYR3
14-3-3-mediated Signaling	5.02	0.102	0.302	B2M,CDC42BPA,FCER1G,FOS,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-
Neuroinflammation Signaling Pathway	5.02	0.07	2.357	DRB5,IQGAP1,IQGAP2,ITGB5,JUN,MAPK10,PAK3,PARD3
Estrogen Receptor Signaling	4.93	0.0671	-0.229	ADCY2,AKT3,CHRM3,HSP90AA1,HSP90AB1,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA
Type I Diabetes Mellitus Signaling	4.92	0.108	0.447	6,HSPA8,ITPR2,PRKCA,PRKCB,PRKCE,PRKG1
ErbB Signaling	4.89	0.117	-0.302	CSF2RA,EPHA6,ERBB4,FGR,FYN,ITPR2,MAP2K6,NTRK2,NTRK3,PDE1A,PDE4D,PDIA3,
				PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,PRKG1
				ACSL1,AKT3,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CEBPB,MAPK10,PPAR
				G,PRKCA,PRKCB,PRKCE,TNFRSF1A
				ABLIM1,ADAM28,AKT3,EPHA6,FYN,IGF1,ITGB5,KALRN,LRRRC4C,MMP16,NCK2,NRP1,N
				TRK2,NTRK3,PAK3,PDIA3,PLCB1,PLCB2,PLXNA2,PLXNC1,PRKCA,PRKCB,PRKCE,ROB
				O2,ROCK1,TUBA1A,TUBA1B,UNC5C,UNC5D
				ADCY2,CACNA1A,CACNA1C,CREM,GRIN2A,ITPR2,KCNJ5,PDIA3,PLCB1,PLCB2,PPP2R
				2B,PRKCA,PRKCB,PRKCE,PRKG1
				CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CALR,CAMK1D,GRIA2,GRIA3,GRIA4
				,GRIN2A,HDAC4,ITPR2,MEF2C,RYR2,RYR3,SLC8A1
				AKT3,FOS,JUN,MAPK10,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,TNFRSF1A,TUBA
				1A,TUBA1B
				AKT3,B2M,CX3CR1,FOS,GABRB1,GABRB3,GRIN2A,HLA-B,HLA-DRA,HLA-DRB1,HLA-
				DRB5,HMOX1,IL1B,IRAK3,JUN,KCNJ5,MAPK10,SLC1A2,TLR2,TLR5,TNFRSF1A
				,IGF2R,JUN,MMP16,MT-ATP6,MT-
				CYB,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,ROCK1
				CPE,FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-
				DRB5,HSPD1,ICA1,IL1B,MAP2K6,MAPK10,TNFRSF1A
				ERBB4,FOS,JUN,MAP2K6,MAPK10,NCK2,NRG3,PAK3,PRKCA,PRKCB,PRKCE

Cellular Effects of Sildenafil (Viagra)	4.88	0.0992	#NUM!	ADCY2,CACNA1A,CACNA1C,ITPR2,KCNQ3,PDE1A,PDE3B,PDE4D,PDIA3,PLCB1,PLCB2,PRKG1,SLC4A10
GABA Receptor Signaling	4.84	0.116	#NUM!	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,DNM1,GABRB1,GABRB3,KCNQ3,UBC
Apelin Endothelial Signaling Pathway	4.76	0.104	-0.577	ADCY2,AKT3,FOS,HDAC4,JUN,MAPK10,MEF2C,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Amyotrophic Lateral Sclerosis Signaling	4.76	0.113	-1.414	AKT3,CACNA1A,CACNA1C,GRIA2,GRIA3,GRIA4,GRID2,GRIK2,GRIN2A,IGF1,SLC1A2
Natural Killer Cell Signaling	4.74	0.0812	1	AKT3,B2M,FCER1G,FCGR2A,FCGR3A/FCGR3B,FYN,HLA-B,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,IL15,LAIR1,LCP2,PAK3,ROCK1
PKCθ Signaling in T Lymphocytes	4.74	0.0903	2.333	CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,FCER1G,FOS,FYN,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN,LCP2
Gustation Pathway	4.74	0.0903	#NUM!	ADCY2,ASIC2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,ITPR2,P2RY12,PDE1A,PDE3B,PDE4D,PDE9A,PLCB2
Gap Junction Signaling	4.71	0.0808	#NUM!	ADCY2,AKT3,GRIA2,GRIA3,GRIA4,GRIK2,ITPR2,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,PRKG1,TUBA1A,TUBA1B
Calcium-induced T Lymphocyte Apoptosis	4.64	0.136	1.414	FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,ITPR2,PRKCA,PRKCB,PRKCE
UVB-Induced MAPK Signaling	4.57	0.154	0.378	FOS,H3-3A/H3-3B,JUN,MAPK10,PRKCA,PRKCB,PRKCE,RPS6KA5
CD28 Signaling in T Helper Cells	4.54	0.0992	-0.378	DRB5,ITPR2,JUN,LCP2,MAPK10
G-Protein Coupled Receptor Signaling	4.54	0.0693	#NUM!	ADCY2,AKT3,CHRM3,FPR1,FYN,GRM5,GRM7,P2RY12,PDE1A,PDE3B,PDE4D,PDE9A,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,RGS16,RGS7
Aryl Hydrocarbon Receptor Signaling	4.47	0.0909	-0.302	CDK6,CDKN1A,DHFR,FOS,GSTK1,HSP90AA1,HSP90AB1,HSP90B1,HSPB1,IL1B,JUN,NFIB,PTGES3
IL-10 Signaling	4.43	0.129	#NUM!	CCR1,CD14,FCGR2A,FOS,HMOX1,IL1B,IL1RAPL1,JUN,MAP2K6
Corticotropin Releasing Hormone Signaling	4.4	0.0897	0.905	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,FOS,ITPR2,JUN,MEF2C,PRKCA,PRKCB,PRKCE
NRF2-mediated Oxidative Stress Response	4.37	0.0794	0.905	ABCC4,DNAJA1,DNAJC3,FKBP5,FOS,GSTK1,HERPUD1,HMOX1,JUN,JUNB,MAFG,MAP2K6,PRKCA,PRKCB,PRKCE
Production of Nitric Oxide and Reactive Oxygen Species	4.37	0.0794	1.807	AKT3,APOC1,APOE,CLU,FOS,IRF8,JUN,MAPK10,PPP2R2B,PRKCA,PRKCB,PRKCE,SERPINA1,TLR2,TNFRSF1A
PPARα/RXRα Activation	4.31	0.0785	-1.732	ADCY2,HSP90AA1,HSP90AB1,HSP90B1,IL1B,IL1RAPL1,ITGB5,JUN,MAP2K6,MEF2C,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	4.3	0.111	#NUM!	FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,IL15,IL1B,SPP1,TLR2,TLR5
Huntington's Disease Signaling	4.26	0.0711	-0.632	AKT3,DNM1,GRM5,HDAC4,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,IGF1,JUN,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,SNAP25,UBC
Toll-like Receptor Signaling	4.14	0.118	1.89	CD14,FOS,IL1B,IRAK3,JUN,MAP2K6,TLR2,TLR5,UBC
Protein Kinase A Signaling	4.08	0.0575	-1.279	ADCY2,AKAP6,CREM,EYA2,H3-3A/H3-3B,ITPR2,PDE1A,PDE3B,PDE4D,PDE9A,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,TPRD,PTPRG,PTPRZ1,PYGL,ROCK1,RYR2,RYR3
Communication between Innate and Adaptive Immune Cells	4.06	0.104	#NUM!	B2M,FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,IL15,IL1B,TLR2,TLR5
Protein Ubiquitination Pathway	4.05	0.0659	#NUM!	B2M,DNAJA1,DNAJC3,HLA-B,HSP90AA1,HSP90AB1,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,HSPB1,HSPD1,HSPH1,PSMA1,UBC,UBE2J1,USP15
Gαq Signaling	4.05	0.0828	-0.832	AKT3,CHRM3,GRM5,HMOX1,ITPR2,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,RGS16,RGS7,ROCK1
Endoplasmic Reticulum Stress Pathway	3.98	0.238	1.342	CALR,DNAJC3,HSP90B1,HSPA5,XBP1

Glucocorticoid Receptor Signaling	3.97	0.0541	#NUM!	AKT3,CD163,CDKN1A,FCGR1A,FKBP5,FOS,HSP90AA1,HSP90AB1,HSP90B1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8,IGF1,IL17RA,IL1B,JUN,MAPK10,MT-ATP6,MT-CYB,PDK4,PPARG,PTGES3,RPS6KA5,TLR2
G Beta Gamma Signaling	3.84	0.0902	-0.905	ADCY2,AKT3,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,KCNJ5,PRKCA,PRKCB,PRKCE
CXCR4 Signaling	3.78	0.0778	-0.577	CK1
Breast Cancer Regulation by Stathmin1	3.78	0.0492	-0.928	ADGRB3,ADGRE2,ADGRG1,ADGRL3,ADGRV1,C3AR1,CAMK1D,CCR1,CDK6,CHRM3,CMKLR1,CX3CR1,E2F3,FPR1,GPR183,GPR34,GRM5,GRM7,IGF1,JUN,P2RY12,PLCB1,PLCB2,PPP2R2B,PRKCA,PRKCB,PRKCE,TUBA1A,TUBA1B
Xenobiotic Metabolism Signaling	3.78	0.0627	#NUM!	CAMK1D,CHST15,GRIP1,GSTK1,HDAC4,HMOX1,HS6ST3,HSP90AA1,HSP90AB1,HSP90B1,IL1B,MAP2K6,PPP2R2B,PRKCA,PRKCB,PRKCE,PTGES3,UST
Neuregulin Signaling	3.74	0.0952	-0.816	AKT3,ERBB4,HSP90AA1,HSP90AB1,HSP90B1,ITGB5,NRG3,PRKCA,PRKCB,PRKCE
IL-6 Signaling	3.71	0.0873	0.632	AKT3,CD14,CEBPB,FOS,HSPB1,IL1B,IL1RAPL1,JUN,MAP2K6,MAPK10,TNFRSF1A,APOC1,APOE,CLU,DNM1,FGF12,FGF14,GAK,HSPA8,IGF1,ITGB5,MYO1E,RAB11A,SER
Clathrin-mediated Endocytosis Signaling	3.7	0.0725	#NUM!	PINA1,UBC
P2Y Purigenic Receptor Signaling Pathway	3.68	0.0866	0.302	ADCY2,AKT3,FOS,JUN,P2RY12,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
HER-2 Signaling in Breast Cancer	3.68	0.0722	0	AKT3,CDKN1A,FCER1G,FGR,FOS,FYN,ITGB5,JUN,MT-CO2,MT-CO3,PARD3,PRKCA,PRKCB,PRKCE
White Adipose Tissue Browning Pathway	3.62	0.0853	-0.302	ADCY2,CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CEBPB,FCER1G,LDHA,PPARG,PRKG1
Adrenomedullin signaling pathway	3.61	0.0711	-1.069	ADCY2,AKT3,CEBPB,FOS,IL1B,ITPR2,KCNQ3,MAP2K6,MAPK10,PDIA3,PLCB1,PLCB2,PPARG,PRKG1
T Cell Exhaustion Signaling Pathway	3.58	0.0743	0	AKT3,BCL6,FCER1G,FOS,FOXP1,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN,MAPK10,PPP2R2B
OX40 Signaling Pathway	3.58	0.1	#NUM!	B2M,FCER1G,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN,MAPK10
Glioma Signaling	3.57	0.0909	-0.378	AKT3,CAMK1D,CDK6,CDKN1A,E2F3,IGF1,IGF2R,PRKCA,PRKCB,PRKCE
Tumor Microenvironment Pathway	3.55	0.0739	-0.277	B,IGF1,IL1B,JUN,MMP16,SLC2A3,SPP1,TIAM1,TNFRSF1A
Melatonin Signaling	3.55	0.111	-0.707	MAP2K6,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,RORA
Role of Pattern Recognition Receptors in Recognition of	3.53	0.0779	1.897	C1QA,C1QB,C1QC,C3AR1,IL15,IL1B,MAPK10,PRKCA,PRKCB,PRKCE,TLR2,TLR5
ERK/MAPK Signaling	3.5	0.0693	0	3B,HSPB1,ITGB5,PAK3,PPARG,PPP2R2B,PRKCA,PRKCB,PRKCE,RAPGEF1,RPS6KA5,TLN2
Androgen Signaling	3.42	0.0809	-0.632	CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,CALR,HSP90AA1,JUN,PRKCA,PRKCB,PRKCE
PI3K Signaling in B Lymphocytes	3.37	0.0797	0	AKT3,CD81,FOS,FYN,INPP5D,ITPR2,JUN,PDIA3,PLCB1,PLCB2,PRKCB
Fc Epsilon RI Signaling	3.35	0.0855	0	AKT3,FCER1G,FYN,INPP5D,LCP2,MAP2K6,MAPK10,PRKCA,PRKCB,PRKCE
BAG2 Signaling Pathway	3.32	0.14	2.449	CDKN1A,HSP90AA1,HSPA1A/HSPA1B,HSPA5,HSPA6,HSPA8
IL-17 Signaling	3.3	0.0695	1.941	AKT3,CEBPB,FOS,HSP90AA1,HSP90AB1,HSP90B1,IL15,IL17RA,IL1B,JUN,MAP2K6,MAPK10,RGS16
IL-3 Signaling	3.27	0.101	0.707	AKT3,FOS,INPP5D,JUN,PRKCA,PRKCB,PRKCE,RAPGEF1
BEX2 Signaling Pathway	3.27	0.101	0	AKT3,CDKN1A,JUN,MAP2,MAPK10,PLXNC1,PPP2R2B,SPP1
Apelin Cardiomyocyte Signaling Pathway	3.27	0.0909	-1	AKT3,MAPK10,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,SLC8A1
HGF Signaling	3.27	0.0833	-0.333	AKT3,CDKN1A,FOS,ITGB5,JUN,MAPK10,PRKCA,PRKCB,PRKCE,RAPGEF1
Cardiac β -adrenergic Signaling	3.27	0.0775	-1.414	C8A1

			CHST15,GRIP1,GSTK1,HS6ST3,HSP90AA1,HSP90AB1,HSP90B1,MAP2K6,PPP2R2B,P
Xenobiotic Metabolism CAR Signaling Pathway	3.26	0.0688	0.277 RKCA,PRKCB,PRKCE,UST
LXR/RXR Activation	3.24	0.0826	-0.333 APOC1,APOE,CD14,CLU,IL1B,IL1RAPL1,MSR1,PLTP,SERPINA1,TNFRSF1A
Reelin Signaling in Neurons	3.21	0.082	-1.667 AKT3,APOE,DAB1,FGR,FYN,GRIN2A,MAP2K6,MAPK10,PKD4,RAPGEF1
Virus Entry via Endocytic Pathways	3.17	0.0882	#NUM! B2M,CXADR,DNM1,FYN,HLA-B,ITGB5,PRKCA,PRKCB,PRKCE
			AKT3,CACNA1A,CACNA1C,CEBPB,FOS,IL17RA,IL1B,IL1RAPL1,IRAK3,ITGB5,JUN,MAP
Hepatic Fibrosis Signaling Pathway	3.17	0.0529	1.147 2K6,MAPK10,PPARG,PRKCA,PRKCB,PRKCE,ROCK1,SPP1,TNFRSF1A
LPS-stimulated MAPK Signaling	3.13	0.0964	0.707 CD14,FOS,JUN,MAP2K6,MAPK10,PRKCA,PRKCB,PRKCE
			CEBPB,CTNNA2,DDIT4,HDAC4,HTRA1,IL1B,IL1RAPL1,ITGB5,MEF2C,PPARG,RBPJ,SPP
Osteoarthritis Pathway	3.13	0.0636	0 1,TLR2,TNFRSF1A
nNOS Signaling in Neurons	3.11	0.128	#NUM! DLG2,GRIN2A,NOS1AP,PRKCA,PRKCB,PRKCE
PPAR Signaling	3.08	0.0857	-1.667 FOS,HSP90AA1,HSP90AB1,HSP90B1,IL1B,IL1RAPL1,JUN,PPARG,TNFRSF1A
Graft-versus-Host Disease Signaling	3.06	0.125	#NUM! FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,IL1B
PD-1, PD-L1 cancer immunotherapy pathway	3.05	0.0849	-1.414 AKT3,B2M,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,LCP2,TNFRSF1A
			ABCC4,ACSL1,APOC1,APOE,CD14,CHST15,GSTK1,HS6ST3,IL1B,IL1RAPL1,JUN,PLTP,
LPS/IL-1 Mediated Inhibition of RXR Function	3.03	0.0622	1.414 TNFRSF1A,UST
			AKT3,FOS,HMOX1,IQGAP1,IRAK3,ITGAX,JUN,MAPK10,PLCB2,PRKCA,PRKCB,PRKCE,
IL-8 Signaling	3.03	0.065	0.832 ROCK1
NF-κB Signaling	2.95	0.067	0.577 A
UVC-Induced MAPK Signaling	2.92	0.118	0.816 FOS,JUN,MAPK10,PRKCA,PRKCB,PRKCE
iCOS-iCOSL Signaling in T Helper Cells	2.91	0.0811	1.89 AKT3,FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,INPP5D,ITPR2,LCP2
			ADCY2,AKT3,CDK6,CDKN1A,CTNNA2,E2F3,FOS,FYN,ITGB5,JUN,MAP2K6,MAPK10,PAK
Molecular Mechanisms of Cancer	2.87	0.05	#NUM! 3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,RAPGEF1,RBPJ
PTEN Signaling	2.84	0.0735	1.667 AKT3,CDKN1A,IGF2R,INPP5D,ITGB5,MAGI1,MAGI2,NTRK2,NTRK3,PREX2
IL-17A Signaling in Fibroblasts	2.84	0.139	#NUM! CEBPB,CEBPD,FOS,IL17RA,JUN
Hepatic Cholestasis	2.81	0.0645	#NUM! 1A
T Helper Cell Differentiation	2.79	0.0959	#NUM! BCL6,FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,TNFRSF1A
Complement System	2.79	0.135	#NUM! C1QA,C1QB,C1QC,C3AR1,ITGAX
			ADCY2,FCER1G,FCGR2A,FYN,HDAC4,HMOX1,ITGB5,ITPR2,LCP2,MEF2C,PLCB1,PLCB
Phospholipase C Signaling	2.78	0.0564	0 2,PRKCA,PRKCB,PRKCE
Semaphorin Neuronal Repulsive Signaling Pathway	2.77	0.0719	0 AKT3,FYN,ITGB5,MAP2K6,NRP1,PAK3,PDE4D,PLXNA2,PRKG1,ROCK1
Endothelin-1 Signaling	2.77	0.0638	0.577 ADCY2,FOS,HMOX1,ITPR2,JUN,MAPK10,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Renin-Angiotensin Signaling	2.72	0.0763	0 ADCY2,FOS,ITPR2,JUN,MAPK10,PAK3,PRKCA,PRKCB,PRKCE
p38 MAPK Signaling	2.72	0.0763	0.333 H3-3A/H3-3B,HSPB1,IL1B,IL1RAPL1,IRAK3,MAP2K6,MEF2C,RPS6KA5,TNFRSF1A
FcγRIIB Signaling in B Lymphocytes	2.72	0.0933	#NUM! CACNA1A,CACNA1C,CACNA2D3,CACNB2,CACNB4,INPP5D,MAPK10
UVA-Induced MAPK Signaling	2.66	0.0816	-1.342 FOS,JUN,MAPK10,PDIA3,PLCB1,PLCB2,PRKCA,RPS6KA5
IL-15 Production	2.65	0.0744	-1.667 CSF2RA,EPA6,ERBB4,FGR,FYN,IL15,MAP2K6,NTRK2,NTRK3
VDR/RXR Activation	2.62	0.0897	0 CD14,CDKN1A,CEBPB,PRKCA,PRKCB,PRKCE,SPP1
Chemokine Signaling	2.56	0.0875	-0.378 CAMK1D,FOS,JUN,PLCB1,PLCB2,PRKCA,PRKCB
			ARHGAP24,CD14,CYFIP1,FGF12,FGF14,GSN,IQGAP1,IQGAP2,ITGB5,PAK3,ROCK1,TIA
Actin Cytoskeleton Signaling	2.54	0.0573	-1.89 M1,TLN2
Prolactin Signaling	2.53	0.0864	0.816 CEBPB,FOS,FYN,JUN,PRKCA,PRKCB,PRKCE
FXR/RXR Activation	2.53	0.0714	#NUM! AKT3,APOC1,APOE,CLU,IL1B,MAPK10,PLTP,PPARG,SERPINA1
Lipid Antigen Presentation by CD1	2.52	0.154	#NUM! B2M,CALR,FCER1G,PDIA3

IL-17A Signaling in Gastric Cells	2.52	0.154	1	FOS,IL17RA,JUN,MAPK10
Phagosome Maturation	2.51	0.0662	#NUM!	B2M,CALR,CTSC,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,SNAP25,TUBA1A,TUBA1B ADCY2,AKAP6,CAMK1D,CHRM3,CREM,FPR1,GRM7,P2RY12,PDE1A,PDE3B,PDE4D,PD
cAMP-mediated signaling	2.51	0.0568	-1.732	E9A,RGS7
Epithelial Adherens Junction Signaling	2.49	0.0658	#NUM!	AKT3,CTNNA2,IQGAP1,MAGI1,MAGI2,PARD3,RAPGEF1,SORBS1,TUBA1A,TUBA1B
Telomerase Signaling	2.42	0.0748	1.342	AKT3,CDKN1A,HDAC4,HSP90AA1,HSP90AB1,HSP90B1,PPP2R2B,PTGES3
Xenobiotic Metabolism AHR Signaling Pathway	2.41	0.0824	-1.134	GSTK1,HDAC4,HSP90AA1,HSP90AB1,HSP90B1,IL1B,PTGES3
Allograft Rejection Signaling	2.38	0.0814	#NUM!	B2M,FCER1G,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5
Antioxidant Action of Vitamin C	2.38	0.0734	0.816	CSF2RA,HMOX1,MAPK10,NXN,PDIA3,PLCB1,PLCB2,SLC2A3
Oxidative Phosphorylation	2.38	0.0734	2.828	MT-ATP6,MT-CO2,MT-CO3,MT-CYB,MT-ND1,MT-ND3,MT-ND4,VPS9D1 ADCY2,CACNA1A,CACNA1C,HSPB1,IGF1,JUN,MAP2K6,MAPK10,MEF2C,PDIA3,PLCB1,
Cardiac Hypertrophy Signaling	2.33	0.0542	-0.832	PLCB2,ROCK1
CTLA4 Signaling in Cytotoxic T Lymphocytes	2.3	0.0787	#NUM!	AKT3,B2M,FCER1G,FYN,HLA-B,LCP2,PPP2R2B
RANK Signaling in Osteoclasts	2.3	0.0787	0.378	AKT3,FOS,GSN,JUN,MAP2K6,MAPK10,MITF
Chondroitin Sulfate Biosynthesis (Late Stages)	2.28	0.104	0.447	CHST15,CHSY3,CSGALNACT1,HS6ST3,UST
Ephrin Receptor Signaling	2.28	0.0582	-1.667	AKT3,EPHA6,FYN,GRIN2A,ITGB5,KALRN,NCK2,PAK3,RAPGEF1,ROCK1,SORBS1
Th17 Activation Pathway	2.25	0.0769	-0.378	FCER1G,HSP90AA1,HSP90AB1,HSP90B1,IL1B,IRAK3,RORA
Autoimmune Thyroid Disease Signaling	2.24	0.102	#NUM!	FCER1G,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5 AKT3,CACNA1A,CACNA1C,CDK6,CDKN1A,CEBPB,E2F3,ITPR2,JUN,MAP2K6,PKD4,PPP
Senescence Pathway	2.24	0.0509	-0.535	2R2B,RPS6KA5,TLR2 CHST15,GRIP1,GSTK1,HS6ST3,HSP90AA1,HSP90AB1,HSP90B1,PRKCA,PRKCB,PRKC
Xenobiotic Metabolism PXR Signaling Pathway	2.23	0.0573	-1.508	E,UST
Role of Tissue Factor in Cancer	2.21	0.069	#NUM!	AKT3,FGR,FYN,IL1B,PDIA6,PLCB1,PRKCA,RPS6KA5
Sertoli Cell-Sertoli Cell Junction Signaling	2.2	0.0567	#NUM!	B
Growth Hormone Signaling	2.19	0.0845	0.447	FOS,IGF1,PRKCA,PRKCB,PRKCE,RPS6KA5
α -Adrenergic Signaling	2.15	0.0737	0	ADCY2,ITPR2,PRKCA,PRKCB,PRKCE,PYGL,SLC8A1
Mitochondrial Dysfunction	2.13	0.0585	#NUM!	LRRK2,MAPK10,MT-ATP6,MT-CO2,MT-CO3,MT-CYB,MT-ND1,MT-ND3,MT-ND4,VPS9D1
Germ Cell-Sertoli Cell Junction Signaling	2.13	0.0585	#NUM!	CTNNA2,GSN,IQGAP1,MAP2K6,MAPK10,PAK3,SORBS1,TNFRSF1A,TUBA1A,TUBA1B
Caveolar-mediated Endocytosis Signaling	2.13	0.0822	#NUM!	B2M,FYN,HLA-B,ITGAX,ITGB5,PRKCA
Chondroitin and Dermatan Biosynthesis	2.11	0.333	#NUM!	CHSY3,CSGALNACT1
Ceramide Biosynthesis	2.11	0.333	#NUM!	SPTLC2,SPTLC3
Rac Signaling	2.11	0.0661	0	CYFIP1,IQGAP1,IQGAP2,ITGB5,JUN,PAK3,PARD3,TIAM1
Leptin Signaling in Obesity	2.1	0.0811	#NUM!	ADCY2,AKT3,PDE3B,PDIA3,PLCB1,PLCB2
Hypoxia Signaling in the Cardiovascular System	2.1	0.0811	#NUM!	HSP90AA1,HSP90AB1,HSP90B1,JUN,LDHA,UBE2J1
Tec Kinase Signaling	2.1	0.0578	0.333	FCER1G,FGR,FOS,FYN,ITGB5,MAPK10,PAK3,PRKCA,PRKCB,PRKCE
Inhibition of Angiogenesis by TSP1	2.1	0.118	-1	AKT3,FYN,JUN,MAPK10
TREM1 Signaling	2.08	0.08	0.816	AKT3,IL1B,ITGAX,LAT2,TLR2,TLR5
CCR3 Signaling in Eosinophils	2.04	0.0645	-0.816	ITPR2,PAK3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,ROCK1
Factors Promoting Cardiogenesis in Vertebrates	2.04	0.06	-0.333	MAPK10,MEF2C,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,ROCK1
EGF Signaling	2.03	0.0909	-0.447	AKT3,FOS,ITPR2,JUN,PRKCA
B Cell Development	2.01	0.111	#NUM!	HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5
Chondroitin Sulfate Biosynthesis	2	0.0893	0.447	CHST15,CHSY3,CSGALNACT1,HS6ST3,UST
Thrombin Signaling	1.98	0.0529	-0.302	ADCY2,AKT3,CAMK1D,ITPR2,PDIA3,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE,ROCK1
Thyroid Cancer Signaling	1.97	0.0759	-0.816	AKT3,FOS,IGF1,JUN,NTRK2,NTRK3

Cell Cycle Regulation by BTG Family Proteins	1.97	0.108	#NUM!	BTG1,BTG2,E2F3,PPP2R2B
p70S6K Signaling	1.95	0.062	0	AKT3,PDIA3,PLCB1,PLCB2,PPP2R2B,PRKCA,PRKCB,PRKCE
Renal Cell Carcinoma Signaling	1.94	0.075	-0.447	AKT3,FOS,JUN,PAK3,RAPGEF1,UBC
Gα12/13 Signaling	1.91	0.0611	0.707	AKT3,CDH12,CDH18,CDH23,JUN,MAPK10,MEF2C,ROCK1
Integrin Signaling	1.91	0.0516	-1.897	AKT3,BCAR3,FYN,GSN,ITGAX,ITGB5,NCK2,PAK3,RAPGEF1,ROCK1,TLN2
Dermatan Sulfate Biosynthesis	1.91	0.0847	0.447	CHST15,CHSY3,CSGALNACT1,HS6ST3,UST
				AKT3,B2M,BCL6,CREM,FCER1G,FOS,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-
Systemic Lupus Erythematosus In T Cell Signaling Path	1.88	0.0449	1.291	DRB5,JUN,MAP2K6,PPP2R2B,ROCK1
PCP pathway	1.88	0.0833	0.447	DAAM1,JUN,JUNB,MAPK10,ROCK1
Regulation Of The Epithelial Mesenchymal Transition By	1.86	0.0532	-0.707	AKT3,CDH12,FGF12,FGF14,FOS,ID2,JUN,MAP2K6,MAPK10,TNFRSF1A
VEGF Family Ligand-Receptor Interactions	1.85	0.0714	0.447	AKT3,FOS,NRP1,PRKCA,PRKCB,PRKCE
FGF Signaling	1.85	0.0714	-2.449	AKT3,FGF12,FGF14,MAP2K6,PRKCA,RPS6KA5
Role of Osteoblasts, Osteoclasts and Chondrocytes in F	1.84	0.0505	#NUM!	AKT3,FOS,GSN,IGF1,IL1B,IL1RAPL1,JUN,MAP2K6,MAPK10,SPP1,TNFRSF1A
STAT3 Pathway	1.84	0.0593	-0.816	CDKN1A,IGF1,IGF2R,IL17RA,IL1B,MAPK10,NTRK2,NTRK3
ILK Signaling	1.83	0.0526	0	AKT3,FOS,ITGB5,JUN,MAP2K6,MAPK10,NCK2,PPP2R2B,RPS6KA5,TNFRSF1A
IL-4 Signaling	1.82	0.0706	#NUM!	AKT3,HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,INPP5D
Th2 Pathway	1.82	0.0588	#NUM!	BHLHE41,CCR1,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN
Thrombopoietin Signaling	1.79	0.0794	1.342	FOS,JUN,PRKCA,PRKCB,PRKCE
Glioblastoma Multiforme Signaling	1.79	0.0545	-1.89	AKT3,CDK6,CDKN1A,E2F3,IGF1,ITPR2,PDIA3,PLCB1,PLCB2
MIF Regulation of Innate Immunity	1.78	0.0952	1	CD14,FOS,JUN,MAPK10
Signaling by Rho Family GTPases	1.77	0.0474	-0.632	CDH12,CDH18,CDH23,CYFIP1,FOS,IQGAP1,ITGB5,JUN,MAPK10,PAK3,PARD3,ROCK1
Role of IL-17F in Allergic Inflammatory Airway Diseases	1.74	0.093	#NUM!	IGF1,IL17RA,IL1B,RPS6KA5
Crosstalk between Dendritic Cells and Natural Killer Cells	1.74	0.0674	2	HLA-B,HLA-DRA,HLA-DRB1,HLA-DRB5,IL15,TLN2
tRNA Splicing	1.71	0.0909	-2	PDE1A,PDE3B,PDE4D,PDE9A
fMLP Signaling in Neutrophils	1.7	0.0603	-0.816	FPR1,ITPR2,PLCB1,PLCB2,PRKCA,PRKCB,PRKCE
Systemic Lupus Erythematosus Signaling	1.7	0.048	#NUM!	AKT3,CREM,FCER1G,FCGR1A,FCGR2A,FCGR3A/FCGR3B,FOS,HLA-B,IL1B,INPP5D,JUN
Th1 and Th2 Activation Pathway	1.7	0.0526	#NUM!	BHLHE41,CCR1,HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN,MAP2K6
ErbB4 Signaling	1.69	0.0746	-0.447	ERBB4,NRG3,PRKCA,PRKCB,PRKCE
				H3-3A/H3-3B,JUN,LDHA,MT-ATP6,MT-CYB,MT-ND1,MT-ND3,MT-
Sirtuin Signaling Pathway	1.68	0.0447	-0.707	ND4,PGK1,PPARG,TSPO,TUBA1A,TUBA1B
iNOS Signaling	1.68	0.0889	2	CD14,FOS,IRAK3,JUN
IL-1 Signaling	1.67	0.0652	0.447	ADCY2,FOS,IRAK3,JUN,MAP2K6,MAPK10
Erythropoietin Signaling Pathway	1.67	0.052	-0.333	AKT3,FOS,IL15,IL1B,ITPR2,JUN,PRKCA,PRKCB,PRKCE
Remodeling of Epithelial Adherens Junctions	1.66	0.0735	#NUM!	CTNNA2,DNM1,IQGAP1,TUBA1A,TUBA1B
Agrin Interactions at Neuromuscular Junction	1.61	0.0714	-1.342	ERBB4,JUN,MAPK10,NRG3,PAK3
Relaxin Signaling	1.58	0.053	0	ADCY2,AKT3,FOS,JUN,PDE1A,PDE3B,PDE4D,PDE9A
Acute Phase Response Signaling	1.57	0.05	1.414	AKT3,CEBPB,FOS,HMOX1,IL1B,JUN,MAP2K6,SERPINA1,TNFRSF1A
GP6 Signaling Pathway	1.55	0.056	0.378	AKT3,FCER1G,FYN,LCP2,PRKCA,PRKCB,PRKCE
GPCR-Mediated Integration of Enteroendocrine Signalir	1.54	0.0685	-0.447	ADCY2,ITPR2,PDIA3,PLCB1,PLCB2
TNFR1 Signaling	1.53	0.08	1	FOS,JUN,PAK3,TNFRSF1A
Systemic Lupus Erythematosus In B Cell Signaling Path	1.52	0.0436	1.155	AKT3,FCGR2A,FGR,FOS,FYN,IL15,IL1B,INPP5D,JUN,PRKCA,PRKCB,PRKCE
PI3K/AKT Signaling	1.52	0.0489	1.134	AKT3,CDKN1A,HSP90AA1,HSP90AB1,HSP90B1,IL17RA,INPP5D,ITGB5,PPP2R2B
Atherosclerosis Signaling	1.52	0.0551	#NUM!	ALOX15B,APOC1,APOE,CLU,IL1B,MSR1,SERPINA1
Glycogen Degradation II	1.51	0.167	#NUM!	PYGL,TYMP

B Cell Receptor Signaling	1.49	0.0484	0.707	AKT3,BCL2A1,BCL6,FCGR2A,INPP5D,JUN,MAP2K6,MEF2C,PRKCB
Neurotrophin/TRK Signaling	1.48	0.0658	#NUM!	FOS,JUN,MAP2K6,NTRK2,NTRK3
Macropinocytosis Signaling	1.48	0.0658	#NUM!	CD14,ITGB5,PRKCA,PRKCB,PRKCE
CD27 Signaling in Lymphocytes	1.45	0.0755	#NUM!	FOS,JUN,MAP2K6,MAPK10
JAK/Stat Signaling	1.4	0.0625	0.447	AKT3,CDKN1A,CEBPB,FOS,JUN
RAR Activation	1.39	0.0464	#NUM!	ADCY2,AKT3,FOS,JUN,MAPK10,PRKCA,PRKCB,PRKCE,ZBTB16
HMGB1 Signaling	1.38	0.0485	0.378	AKT3,FOS,IL15,IL1B,JUN,MAP2K6,MAPK10,TNFRSF1A
Glycogen Degradation III	1.38	0.143	#NUM!	PYGL,TYMP
Cyclins and Cell Cycle Regulation	1.38	0.0617	1	CDK6,CDKN1A,E2F3,HDAC4,PPP2R2B
CDK5 Signaling	1.38	0.0556	-0.816	ADCY2,CABLES1,CACNA1A,MAPK10,NTRK2,PPP2R2B
Paxillin Signaling	1.38	0.0556	-1	ITGAX,ITGB5,MAPK10,NCK2,PAK3,TLN2
Cytotoxic T Lymphocyte-mediated Apoptosis of Target C	1.35	0.0882	#NUM!	B2M,FCER1G,HLA-B
Tight Junction Signaling	1.34	0.0476	#NUM!	AKT3,FOS,JUN,MAGI2,PPP2R2B,SNAP25,TIAM1,TNFRSF1A
Putrescine Biosynthesis III	1.33	0.5	#NUM!	AZIN2
MSP-RON Signaling In Macrophages Pathway	1.3	0.0531	-0.816	FOS,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,JUN
PDGF Signaling	1.28	0.0581	0.447	FOS,INPP5D,JUN,PRKCA,PRKCB
Xenobiotic Metabolism General Signaling Pathway	1.28	0.049	0.378	AKT3,GSTK1,HMOX1,MAP2K6,PRKCA,PRKCB,PRKCE
Semaphorin Signaling in Neurons	1.28	0.0667	#NUM!	FYN,NRP1,PAK3,ROCK1
Maturity Onset Diabetes of Young (MODY) Signaling	1.28	0.0667	#NUM!	APOC1,APOE,CACNA1A,CACNA1C
Ceramide Signaling	1.25	0.0568	1.342	AKT3,FOS,JUN,PPP2R2B,TNFRSF1A
Wnt/Ca+ pathway	1.24	0.0645	-1	PDIA3,PLCB1,PLCB2,PRKCA
Sphingosine-1-phosphate Signaling	1.24	0.0513	-0.447	ACER3,ADCY2,AKT3,PDIA3,PLCB1,PLCB2
Docosahexaenoic Acid (DHA) Signaling	1.23	0.0789	#NUM!	AKT3,BCL2A1,IL1B
Prostate Cancer Signaling	1.2	0.0549	#NUM!	AKT3,CDKN1A,HSP90AA1,HSP90AB1,HSP90B1
Th1 Pathway	1.18	0.0496	1.342	HLA-B,HLA-DPA1,HLA-DRA,HLA-DRB1,HLA-DRB5,MAP2K6
CD40 Signaling	1.18	0.0615	0	FOS,JUN,MAP2K6,MAPK10
Phospholipases	1.18	0.0615	0	HMOX1,PDIA3,PLCB1,PLCB2
April Mediated Signaling	1.17	0.075	#NUM!	FOS,JUN,MAPK10
Uracil Degradation II (Reductive)	1.16	0.333	#NUM!	DPYD
Diphthamide Biosynthesis	1.16	0.333	#NUM!	DPH6
Thymine Degradation	1.16	0.333	#NUM!	DPYD
Mitotic Roles of Polo-Like Kinase	1.16	0.0606	#NUM!	HSP90AA1,HSP90AB1,HSP90B1,PPP2R2B
Pyridoxal 5'-phosphate Salvage Pathway	1.16	0.0606	0	CDK6,MAP2K6,PAK3,PRKCE
B Cell Activating Factor Signaling	1.15	0.0732	#NUM!	FOS,JUN,MAPK10
Mechanisms of Viral Exit from Host Cells	1.15	0.0732	#NUM!	PRKCA,PRKCB,PRKCE
Cell Cycle: G1/S Checkpoint Regulation	1.14	0.0597	-1	CDK6,CDKN1A,E2F3,HDAC4
Nur77 Signaling in T Lymphocytes	1.12	0.0588	1	FCER1G,PRKCA,PRKCB,PRKCE
Ferroptosis Signaling Pathway	1.11	0.0476	0.816	ALOX15B,CDKN1A,HMOX1,HSPB1,SAT1,STEAP3
RhoGDI Signaling	1.11	0.0423	1.633	CDH12,CDH18,CDH23,GRIPI,ITGB5,PAK3,PRKCA,ROCK1
Bladder Cancer Signaling	1.11	0.0515	#NUM!	CDKN1A,FGF12,FGF14,MMP16,RPS6KA5
Inflammasome pathway	1.1	0.1	#NUM!	IL1B,NLRP1
GM-CSF Signaling	1.08	0.0571	#NUM!	AKT3,BCL2A1,CSF2RA,PRKCB
VEGF Signaling	1.08	0.0505	0	AKT3,EIF1,PRKCA,PRKCB,ROCK1
IL-23 Signaling Pathway	1.07	0.0682	#NUM!	AKT3,IL1B,RORA

Leukocyte Extravasation Signaling	1.06	0.0415	-0.707	CTNNA2,CTNNA3,MAPK10,MMP16,PRKCA,PRKCB,PRKCE,ROCK1
Apoptosis Signaling	1.06	0.05	0.447	BCL2A1,PRKCA,PRKCE,ROCK1,TNFRSF1A
Heme Degradation	1.04	0.25	#NUM!	HMOX1
Spermine and Spermidine Degradation I	1.04	0.25	#NUM!	SAT1
Glutathione Redox Reactions II	1.04	0.25	#NUM!	PDIA3
Acetate Conversion to Acetyl-CoA	1.04	0.25	#NUM!	ACSL1
Non-Small Cell Lung Cancer Signaling	1.03	0.0548	#NUM!	AKT3,CDK6,ITPR2,PRKCA
Dermatan Sulfate Biosynthesis (Late Stages)	1.03	0.0652	#NUM!	CHST15,HS6ST3,UST
PFKFB4 Signaling Pathway	1.03	0.0652	#NUM!	HK2,MAP2K6,RPS6KA5
Chronic Myeloid Leukemia Signaling	1.02	0.0485	#NUM!	AKT3,CDK6,CDKN1A,E2F3,HDAC4
Adipogenesis pathway	1.02	0.0448	#NUM!	CEBPB,CEBPD,HDAC4,PPARG,TNFRSF1A,XBP1
Ephrin A Signaling	1.01	0.0638	#NUM!	EPHA6,FYN,ROCK1
FAK Signaling	1.01	0.0481	#NUM!	AKT3,FYN,ITGB5,PAK3,TLN2
Estrogen-Dependent Breast Cancer Signaling	1	0.0533	0	AKT3,FOS,IGF1,JUN
Role of MAPK Signaling in Inhibiting the Pathogenesis of	1	0.0533	0	IL1B,JUN,MAP2K6,MAPK10
Polyamine Regulation in Colon Cancer	0.996	0.087	#NUM!	PPARG,SAT1
NF-κB Activation by Viruses	0.983	0.0526	0	AKT3,PRKCA,PRKCB,PRKCE
GDNF Family Ligand-Receptor Interactions	0.983	0.0526	#NUM!	FOS,ITPR2,JUN,MAPK10
PAK Signaling	0.979	0.0472	-1	DSCAM,ITGB5,MAPK10,NCK2,PAK3
IL-22 Signaling	0.967	0.0833	#NUM!	AKT3,MAPK10
Vitamin-C Transport	0.967	0.0833	#NUM!	NXN,SLC2A3
Insulin Receptor Signaling	0.959	0.0432	-1.633	AKT3,ASIC2,FYN,INPP5D,PDE3B,RAPGEF1
IL-7 Signaling Pathway	0.955	0.0513	#NUM!	AKT3,BCL6,FYN,JUN
Creatine-phosphate Biosynthesis	0.951	0.2	#NUM!	CKB
Tetrahydrofolate Salvage from 5,10-methylenetetrahydrof	0.951	0.2	#NUM!	MTHFD2
dTMP De Novo Biosynthesis	0.951	0.2	#NUM!	DHFR
Melanoma Signaling	0.947	0.06	#NUM!	AKT3,CDKN1A,MITF
Pancreatic Adenocarcinoma Signaling	0.943	0.0459	0	AKT3,CDKN1A,E2F3,HMOX1,MAPK10
D-myo-inositol (1,4,5)-Trisphosphate Biosynthesis	0.936	0.08	#NUM!	PLCB1,PLCB2
Role of MAPK Signaling in the Pathogenesis of Influenz	0.924	0.05	#NUM!	AKT3,MAP2K6,MAPK10,PRKCA
Endocannabinoid Cancer Inhibition Pathway	0.917	0.042	0.816	ADCY2,AKT3,CDKN1A,MAP2K6,ROCK1,SPTLC2
mTOR Signaling	0.91	0.0381	0.378	AKT3,DDIT4,HMOX1,PPP2R2B,PRKCA,PRKCB,PRKCE,RPS6KA5
Estrogen-mediated S-phase Entry	0.907	0.0769	#NUM!	CDKN1A,E2F3
Pyruvate Fermentation to Lactate	0.876	0.167	#NUM!	LDHA
Ceramide Degradation	0.876	0.167	#NUM!	ACER3
Role of IL-17A in Arthritis	0.857	0.0545	#NUM!	IL17RA,MAP2K6,MAPK10
Colorectal Cancer Metastasis Signaling	0.845	0.0356	0.333	ADCY2,AKT3,FOS,JUN,MAPK10,MMP16,TLR2,TLR5,TNFRSF1A
Role of CHK Proteins in Cell Cycle Checkpoint Control	0.824	0.0526	#NUM!	CDKN1A,E2F3,PPP2R2B
Trehalose Degradation II (Trehalase)	0.815	0.143	#NUM!	HK2
Thioredoxin Pathway	0.815	0.143	#NUM!	NXN
TNFR2 Signaling	0.807	0.0667	#NUM!	FOS,JUN
Inhibition of ARE-Mediated mRNA Degradation Pathway	0.796	0.041	-0.447	AKT3,PABPN1,PPP2R2B,TNFRSF1A,ZFP36
Regulation of IL-2 Expression in Activated and Anergic	0.79	0.0444	#NUM!	FOS,FYN,JUN,MAPK10
G Protein Signaling Mediated by Tubby	0.785	0.0645	#NUM!	PLCB1,PLCB2

Regulation of the Epithelial-Mesenchymal Transition Pathway	0.777	0.0365	#NUM!	AKT3,CDH12,FGF12,FGF14,ID2,MAP2K6,RBPJ
SPINK1 Pancreatic Cancer Pathway	0.777	0.05	#NUM!	CPA6,CPE,CPM
Gai Signaling	0.764	0.04	0.447	ADCY2,FPR1,GRM7,P2RY12,RGS7
4-1BB Signaling in T Lymphocytes	0.762	0.0625	#NUM!	JUN,MAPK10
Sphingosine and Sphingosine-1-phosphate Metabolism	0.762	0.125	#NUM!	ACER3
Histidine Degradation III	0.762	0.125	#NUM!	MTHFD2
Salvage Pathways of Pyrimidine Deoxyribonucleotides	0.762	0.125	#NUM!	TYMP
IL-2 Signaling	0.762	0.0492	#NUM!	AKT3,FOS,JUN
HOTAIR Regulatory Pathway	0.754	0.0375	-0.447	AKT3,CDKN1A,H3-3A/H3-3B,MMP16,ROCK1,SPP1
Circadian Rhythm Signaling	0.742	0.0606	#NUM!	BHLHE41,GRIN2A
Pathogenesis of Multiple Sclerosis	0.714	0.111	#NUM!	CCR1
Folate Transformations I	0.714	0.111	#NUM!	MTHFD2
ATM Signaling	0.712	0.0412	1	CDKN1A,JUN,MAPK10,PPP2R2B
IL-17A Signaling in Airway Cells	0.708	0.0462	#NUM!	AKT3,IL17RA,MAPK10
Salvage Pathways of Pyrimidine Ribonucleotides	0.701	0.0408	0	CDK6,MAP2K6,PAK3,PRKCE
Prostanoid Biosynthesis	0.674	0.1	#NUM!	PTGES3
Notch Signaling	0.666	0.0541	#NUM!	CNTN1,RBPJ
Iron homeostasis signaling pathway	0.656	0.0365	#NUM!	CD163,HMOX1,SLC11A1,SLC25A37,STEAP3
Wnt/ β -catenin Signaling	0.652	0.0347	1	AKT3,CDH12,JUN,PPP2R2B,SOX5,UBC
Regulation of Actin-based Motility by Rho	0.65	0.0388	#NUM!	GSN,ITGB5,PAK3,ROCK1
IGF-1 Signaling	0.64	0.0385	0	AKT3,FOS,IGF1,JUN
GDP-glucose Biosynthesis	0.638	0.0909	#NUM!	HK2
Hereditary Breast Cancer Signaling	0.633	0.0357	#NUM!	AKT3,CDK6,CDKN1A,HDAC4,UBC
AMPK Signaling	0.627	0.0329	0.816	AKT3,CAB39,CDKN1A,CHRM3,PPP2R2B,RAB11A,RAB27A
ERK5 Signaling	0.622	0.0417	#NUM!	FOS,MEF2C,RPS6KA5
Ephrin B Signaling	0.622	0.0417	#NUM!	KALRN,NCK2,ROCK1
Heparan Sulfate Biosynthesis (Late Stages)	0.622	0.0417	#NUM!	CHST15,HS6ST3,UST
T Cell Receptor Signaling	0.622	0.0377	#NUM!	FOS,FYN,JUN,LCP2
Gas Signaling	0.613	0.0374	-2	ADCY2,CHRM3,RYR2,RYR3
Cleavage and Polyadenylation of Pre-mRNA	0.606	0.0833	#NUM!	PABPN1
Hematopoiesis from Multipotent Stem Cells	0.606	0.0833	#NUM!	IL15
Glucose and Glucose-1-phosphate Degradation	0.606	0.0833	#NUM!	HK2
Regulation of Cellular Mechanics by Calpain Protease	0.599	0.0405	#NUM!	CDK6,ITGB5,TLN2
Role of MAPK Signaling in Promoting the Pathogenesis	0.587	0.0364	-1	JUN,MAP2K6,MAPK10,PRKCA
Fatty Acid Activation	0.575	0.0769	#NUM!	ACSL1
UDP-N-acetyl-D-galactosamine Biosynthesis II	0.575	0.0769	#NUM!	HK2
Hepatic Fibrosis / Hepatic Stellate Cell Activation	0.564	0.0323	#NUM!	CD14,IGF1,IL1B,IL1RAPL1,KLF6,TNFRSF1A
Apelin Pancreas Signaling Pathway	0.558	0.0455	#NUM!	MAPK10,PDE3B
Coronavirus Pathogenesis Pathway	0.556	0.0333	0.447	E2F3,FOS,IL1B,JUN,MAPK10
NGF Signaling	0.553	0.0351	#NUM!	AKT3,MAPK10,ROCK1,RPS6KA5
Role of IL-17A in Psoriasis	0.548	0.0714	#NUM!	IL17RA
Heparan Sulfate Biosynthesis	0.547	0.038	#NUM!	CHST15,HS6ST3,UST
Endocannabinoid Developing Neuron Pathway	0.545	0.0348	-1	ADCY2,AKT3,MAP2K6,MAPK10
Coronavirus Replication Pathway	0.545	0.0444	#NUM!	TUBA1A,TUBA1B

FLT3 Signaling in Hematopoietic Progenitor Cells	0.538	0.0375	#NUM!	AKT3,INPP5D,RPS6KA5
FAT10 Cancer Signaling Pathway	0.532	0.0435	#NUM!	AKT3,TNFRSF1A
Actin Nucleation by ARP-WASP Complex	0.527	0.037	#NUM!	ITGB5,NCK2,ROCK1
Choline Biosynthesis III	0.523	0.0667	#NUM!	HMOX1
Airway Pathology in Chronic Obstructive Pulmonary Dise	0.521	0.0339	#NUM!	FGF12,FGF14,IL15,IL1B
PEDF Signaling	0.519	0.0366	#NUM!	AKT3,PPARG,ROCK1
Apelin Adipocyte Signaling Pathway	0.519	0.0366	#NUM!	ADCY2,GSTK1,MAPK10
TR/RXR Activation	0.5	0.0357	#NUM!	AKT3,PDE3B,STRBP
HIPPO signaling	0.492	0.0353	#NUM!	DLG2,PARD3,PPP2R2B
Amyloid Processing	0.483	0.04	#NUM!	AKT3,PRKCE
γ -linolenate Biosynthesis II (Animals)	0.478	0.0588	#NUM!	ACSL1
Mitochondrial L-carnitine Shuttle Pathway	0.478	0.0588	#NUM!	ACSL1
D-myo-inositol (1,4,5)-trisphosphate Degradation	0.478	0.0588	#NUM!	INPP5D
Acute Myeloid Leukemia Signaling	0.458	0.0337	#NUM!	AKT3,CSF2RA,MAP2K6
Differential Regulation of Cytokine Production in Macrop	0.458	0.0556	#NUM!	IL1B
1D-myo-inositol Hexakisphosphate Biosynthesis II (Mam	0.458	0.0556	#NUM!	INPP5D
D-myo-inositol (1,3,4)-trisphosphate Biosynthesis	0.458	0.0556	#NUM!	INPP5D
Role of Cytokines in Mediating Communication between	0.44	0.037	#NUM!	IL15,IL1B
GADD45 Signaling	0.439	0.0526	#NUM!	CDKN1A
Oxidative Ethanol Degradation III	0.439	0.0526	#NUM!	ACSL1
DNA damage-induced 14-3-3 σ Signaling	0.439	0.0526	#NUM!	AKT3
Apelin Muscle Signaling Pathway	0.439	0.0526	#NUM!	AKT3
Death Receptor Signaling	0.435	0.0326	#NUM!	HSPB1,ROCK1,TNFRSF1A
Cardiomyocyte Differentiation via BMP Receptors	0.421	0.05	#NUM!	MEF2C
Melanocyte Development and Pigmentation Signaling	0.42	0.0319	#NUM!	ADCY2,MITF,RPS6KA5
Granulocyte Adhesion and Diapedesis	0.416	0.0289	#NUM!	FPR1,IL1B,IL1RAPL1,MMP16,TNFRSF1A
Putrescine Degradation III	0.406	0.0476	#NUM!	SAT1
TGF- β Signaling	0.406	0.0312	#NUM!	FOS,JUN,MAP2K6
p53 Signaling	0.391	0.0306	#NUM!	AKT3,CDKN1A,JUN
Endometrial Cancer Signaling	0.384	0.0333	#NUM!	AKT3,CTNNA2
Induction of Apoptosis by HIV1	0.376	0.0328	#NUM!	MAPK10,TNFRSF1A
Differential Regulation of Cytokine Production in Intestin	0.376	0.0435	#NUM!	IL1B
Superpathway of D-myo-inositol (1,4,5)-trisphosphate M	0.376	0.0435	#NUM!	INPP5D
Ethanol Degradation IV	0.376	0.0435	#NUM!	ACSL1
Apelin Cardiac Fibroblast Signaling Pathway	0.376	0.0435	#NUM!	AKT3
SAPK/JNK Signaling	0.366	0.0294	#NUM!	FCER1G,JUN,MAPK10
Tumoricidal Function of Hepatic Natural Killer Cells	0.362	0.0417	#NUM!	SERPINB9
Glutathione Redox Reactions I	0.362	0.0417	#NUM!	GSTK1
Sumoylation Pathway	0.36	0.0291	#NUM!	FOS,JUN,MAPK10
Activation of IRF by Cytosolic Pattern Recognition Recei	0.359	0.0317	#NUM!	JUN,MAPK10
Role of JAK family kinases in IL-6-type Cytokine Signali	0.349	0.04	#NUM!	MAPK10
ErbB2-ErbB3 Signaling	0.344	0.0308	#NUM!	JUN,NRG3
Glycolysis I	0.336	0.0385	#NUM!	PGK1
Gluconeogenesis I	0.336	0.0385	#NUM!	PGK1

Apelin Liver Signaling Pathway	0.336	0.0385	#NUM!	MAPK10
Eicosanoid Signaling	0.336	0.0303	#NUM!	ALOX15B,ALOX5AP
Small Cell Lung Cancer Signaling	0.301	0.0282	#NUM!	AKT3,CDK6
Necroptosis Signaling Pathway	0.296	0.0255	2	PYGL,TNFRSF1A,TSPO,UBC
IL-15 Signaling	0.277	0.0267	#NUM!	AKT3,IL15
Angiopoietin Signaling	0.277	0.0267	#NUM!	AKT3,PAK3
Glutathione-mediated Detoxification	0.273	0.0312	#NUM!	GSTK1
Ethanol Degradation II	0.273	0.0312	#NUM!	ACSL1
Dopamine Receptor Signaling	0.265	0.026	#NUM!	ADCY2,PPP2R2B
Fatty Acid β -oxidation I	0.264	0.0303	#NUM!	ACSL1
Regulation of eIF4 and p70S6K Signaling	0.26	0.0241	#NUM!	AKT3,EIF1,ITGB5,PPP2R2B
RhoA Signaling	0.256	0.0244	#NUM!	IGF1,PLEKHG5,ROCK1
MIF-mediated Glucocorticoid Regulation	0.256	0.0294	#NUM!	CD14
Role of BRCA1 in DNA Damage Response	0.249	0.025	#NUM!	CDKN1A,E2F3
Coagulation System	0.248	0.0286	#NUM!	SERPINA1
DNA Methylation and Transcriptional Repression Signali	0.248	0.0286	#NUM!	H3-3A/H3-3B
Thyroid Hormone Metabolism II (via Conjugation and/or	0.225	0.0263	#NUM!	CSGALNACT1
BMP signaling pathway	0.224	0.0235	#NUM!	JUN,MAPK10
Antiproliferative Role of TOB in T Cell Signaling	0.218	0.0256	#NUM!	FCER1G
Inhibition of Matrix Metalloproteases	0.218	0.0256	#NUM!	MMP16
PXR/RXR Activation	0	0.0154	#NUM!	AKT3
Lymphotoxin β Receptor Signaling	0	0.0189	#NUM!	AKT3
CNTF Signaling	0	0.0175	#NUM!	RPS6KA5
Human Embryonic Stem Cell Pluripotency	0	0.0222	#NUM!	AKT3,NTRK2,NTRK3
Antiproliferative Role of Somatostatin Receptor 2	0	0.013	#NUM!	CDKN1A
Role of Oct4 in Mammalian Embryonic Stem Cell Pluripo	0	0.0217	#NUM!	SPP1
Role of NANOG in Mammalian Embryonic Stem Cell Plur	0	0.0084	#NUM!	AKT3
Myc Mediated Apoptosis Signaling	0	0.02	#NUM!	TNFRSF1A
EIF2 Signaling	0	0.0179	#NUM!	AKT3,EIF1,HSPA5,RPL13A
Ovarian Cancer Signaling	0	0.00719	#NUM!	AKT3
Neuroprotective Role of THOP1 in Alzheimer's Disease	0	0.0172	#NUM!	HLA-B,HTRA1
Role of PI3K/AKT Signaling in the Pathogenesis of Infl	0	0.0156	#NUM!	AKT3
Role of Hypercytokinemia/hyperchemokineemia in the Pa	0	0.0116	#NUM!	IL1B
MSP-RON Signaling Pathway	0	0.0172	#NUM!	TLR2
Cell Cycle Control of Chromosomal Replication	0	0.0179	#NUM!	CDK6
Spliceosomal Cycle	0	0.0208	#NUM!	HSPA8
Role of JAK1 and JAK3 in γ c Cytokine Signaling	0	0.0145	#NUM!	IL15
Mouse Embryonic Stem Cell Pluripotency	0	0.0194	#NUM!	AKT3,ID2
Hematopoiesis from Pluripotent Stem Cells	0	0.0204	#NUM!	FCER1G
Transcriptional Regulatory Network in Embryonic Stem C	0	0.0185	#NUM!	H3-3A/H3-3B
Nicotine Degradation III	0	0.0175	#NUM!	CSGALNACT1
D-myo-inositol-5-phosphate Metabolism	0	0.0191	#NUM!	PLCB1,PLCB2,PPFIA2
Melatonin Degradation I	0	0.0167	#NUM!	CSGALNACT1
D-myo-inositol (1,4,5,6)-Tetrakisphosphate Biosynthesis	0	0.00704	#NUM!	PPFIA2

Nicotine Degradation II	0	0.0154	#NUM!	CSGALNACT1
Superpathway of Inositol Phosphate Compounds	0	0.0201	-2	INPP5D,PLCB1,PLCB2,PPFIA2
Serotonin Degradation	0	0.0149	#NUM!	CSGALNACT1
D-myo-inositol (3,4,5,6)-tetrakisphosphate Biosynthesis	0	0.00704	#NUM!	PPFIA2
3-phosphoinositide Degradation	0	0.0128	#NUM!	INPP5D,PPFIA2
3-phosphoinositide Biosynthesis	0	0.00602	#NUM!	PPFIA2
Superpathway of Melatonin Degradation	0	0.0154	#NUM!	CSGALNACT1
Stearate Biosynthesis I (Animals)	0	0.0204	#NUM!	ACSL1
Agranulocyte Adhesion and Diapedesis	0	0.0155	#NUM!	IL1B,MMP16,TNFRSF1A
Cell Cycle: G2/M DNA Damage Checkpoint Regulation	0	0.0204	#NUM!	CDKN1A
Serotonin Receptor Signaling	0	0.0233	#NUM!	ADCY2
Autophagy	0	0.0164	#NUM!	CTSC
Cancer Drug Resistance By Drug Efflux	0	0.0172	#NUM!	AKT3
NER Pathway	0	0.00971	#NUM!	H3-3A/H3-3B
SPINK1 General Cancer Pathway	0	0.0145	#NUM!	AKT3
Regulation Of The Epithelial Mesenchymal Transition In	0	0.0119	#NUM!	RBPJ
MSP-ROn Signaling In Cancer Cells Pathway	0	0.0224	#NUM!	AKT3,FOS,JUN

Supplementary Table 4 Neuronal Marker Genes

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster	gene
CBLN2	0	2.51986753	0.973	0.286	0	ExN1	CBLN2
LINC02306	0	2.17302819	0.733	0.14	0	ExN1	LINC02306
PDZD2	0	2.13617429	0.985	0.571	0	ExN1	PDZD2
AC011287.1	0	1.99463208	0.923	0.353	0	ExN1	AC011287.1
LINC01378	0	1.77777407	0.848	0.216	0	ExN1	LINC01378
MEIS2	0	1.63419183	0.878	0.173	0	ExN1	MEIS2
HS6ST3	0	1.57325141	0.992	0.683	0	ExN1	HS6ST3
DGKB	0	1.56556774	0.988	0.76	0	ExN1	DGKB
ENC1	0	1.53050935	0.903	0.433	0	ExN1	ENC1
AC093607.1	0	1.51922348	0.552	0.095	0	ExN1	AC093607.1
CUX2	0	1.44612041	0.926	0.254	0	ExN1	CUX2
AC021613.1	0	1.41360309	0.726	0.165	0	ExN1	AC021613.1
LINC00507	0	1.39040191	0.717	0.079	0	ExN1	LINC00507
TESPA1	0	1.34883201	0.832	0.218	0	ExN1	TESPA1
LINC00276	0	1.31446264	0.59	0.138	0	ExN1	LINC00276
AC013287.1	0	1.31168905	0.759	0.369	0	ExN1	AC013287.1
CYP1B1-AS1	0	1.30671021	0.765	0.171	0	ExN1	CYP1B1-AS1
AC008574.1	0	1.28731536	0.655	0.111	0	ExN1	AC008574.1
LINC01331	0	1.28072256	0.625	0.131	0	ExN1	LINC01331
AC110023.1	0	1.26394459	0.695	0.208	0	ExN1	AC110023.1
LINC01250	0	1.26026179	0.932	0.569	0	ExN1	LINC01250
CDH12	0	1.23121924	0.981	0.617	0	ExN1	CDH12
LINC02263	0	1.23088714	0.531	0.121	0	ExN1	LINC02263
GREB1L	0	1.22562763	0.709	0.21	0	ExN1	GREB1L
SLIT3	0	1.21583256	0.926	0.347	0	ExN1	SLIT3
PTK2B	0	1.18684735	0.893	0.423	0	ExN1	PTK2B
GRIA4	0	1.17370891	0.988	0.807	0	ExN1	GRIA4
SERPINE2	0	1.16264312	0.679	0.111	0	ExN1	SERPINE2
AC091078.1	0	1.15208492	0.677	0.209	0	ExN1	AC091078.1
TAFA1	0	1.14834989	0.875	0.424	0	ExN1	TAFA1
LRRTM4	0	1.12958864	0.997	0.901	0	ExN1	LRRTM4
CHN1	0	1.11870975	0.969	0.694	0	ExN1	CHN1
RASGRF2	0	1.11723727	0.933	0.521	0	ExN1	RASGRF2
NDST3	0	1.11698217	0.892	0.471	0	ExN1	NDST3
LINC01122	0	1.11324571	0.954	0.622	0	ExN1	LINC01122
ZFPM2	0	1.11093231	0.958	0.631	0	ExN1	ZFPM2
DIAPH2	0	1.10029621	0.9	0.535	0	ExN1	DIAPH2
KIAA1211L	0	1.0997974	0.922	0.472	0	ExN1	KIAA1211L
AC011246.1	0	1.08277571	0.575	0.156	0	ExN1	AC011246.1
MLIP	0	1.06363943	0.868	0.422	0	ExN1	MLIP
LY86-AS1	0	1.05499662	0.825	0.397	0	ExN1	LY86-AS1
MAN1A1	0	1.05111258	0.818	0.402	0	ExN1	MAN1A1
HHAT	0	1.05104621	0.555	0.197	0	ExN1	HHAT
ADAMTS3	0	1.03576293	0.657	0.165	0	ExN1	ADAMTS3
CDH9	0	1.03267836	0.927	0.539	0	ExN1	CDH9
TTC6	0	1.02675255	0.536	0.083	0	ExN1	TTC6
AL117329.1	0	1.00776942	0.829	0.379	0	ExN1	AL117329.1
CDH22	0	1.00432014	0.79	0.303	0	ExN1	CDH22
CDH18	0	0.99948255	0.986	0.841	0	ExN1	CDH18
NLK	0	0.99179569	0.932	0.637	0	ExN1	NLK
SYN3	0	0.98841468	0.99	0.833	0	ExN1	SYN3
PDGFD	0	0.98689411	0.587	0.089	0	ExN1	PDGFD
EPHA6	0	0.97569398	0.923	0.592	0	ExN1	EPHA6
KIF13A	0	0.96894235	0.844	0.499	0	ExN1	KIF13A
DGKG	0	0.96747579	0.895	0.44	0	ExN1	DGKG
RCAN2	0	0.96383564	0.934	0.729	0	ExN1	RCAN2
CA10	0	0.95268272	0.831	0.337	0	ExN1	CA10
PPFIA2	0	0.95203125	0.988	0.908	0	ExN1	PPFIA2
KCTD1	0	0.94345781	0.926	0.606	0	ExN1	KCTD1
RAPGEF5	0	0.94103071	0.967	0.695	0	ExN1	RAPGEF5
DPYD	0	0.93990284	0.924	0.599	0	ExN1	DPYD

SORBS2	0	0.93660304	0.976	0.809	0	ExN1	SORBS2
HOPX	0	0.92595956	0.67	0.203	0	ExN1	HOPX
AL591501.1	0	0.92571221	0.854	0.498	0	ExN1	AL591501.1
LINC01500	0	0.91981307	0.385	0.065	0	ExN1	LINC01500
AP000829.1	0	0.91828184	0.554	0.122	0	ExN1	AP000829.1
PDE8B	0	0.90949312	0.917	0.596	0	ExN1	PDE8B
KCNIP4	0	0.90881705	1	0.922	0	ExN1	KCNIP4
SMAD3	0	0.90696342	0.753	0.282	0	ExN1	SMAD3
ATP2B1	0	0.90511641	0.973	0.816	0	ExN1	ATP2B1
RFX3	0	0.89204879	0.937	0.765	0	ExN1	RFX3
SIPA1L1	0	0.89146629	0.988	0.898	0	ExN1	SIPA1L1
HPCAL1	0	0.88622551	0.675	0.194	0	ExN1	HPCAL1
BTBD9	0	0.88320668	0.964	0.803	0	ExN1	BTBD9
ST6GALNAC5	0	0.87761674	0.96	0.648	0	ExN1	ST6GALNAC5
PDE7B	0	0.87701088	0.817	0.394	0	ExN1	PDE7B
CAMK2A	0	0.87397713	0.959	0.753	0	ExN1	CAMK2A
PVT1	0	0.86623547	0.792	0.35	0	ExN1	PVT1
EPB41L2	0	0.8624195	0.927	0.656	0	ExN1	EPB41L2
ITPR1	0	0.85375267	0.955	0.685	0	ExN1	ITPR1
R3HDM1	0	0.85370325	0.987	0.869	0	ExN1	R3HDM1
AL049828.1	0	0.85076962	0.81	0.602	0	ExN1	AL049828.1
PTPRR	0	0.84026171	0.901	0.641	0	ExN1	PTPRR
AC005162.3	0	0.83908192	0.592	0.143	0	ExN1	AC005162.3
NGEF	0	0.83733852	0.79	0.384	0	ExN1	NGEF
CAMK2N1	0	0.83522366	0.873	0.598	0	ExN1	CAMK2N1
AL353604.1	0	0.83113283	0.507	0.074	0	ExN1	AL353604.1
NTRK3	0	0.82862951	0.983	0.835	0	ExN1	NTRK3
P2RX7	0	0.82049798	0.76	0.372	0	ExN1	P2RX7
PSD3	0	0.81925035	0.935	0.685	0	ExN1	PSD3
SLC24A4	0	0.81685297	0.755	0.243	0	ExN1	SLC24A4
TANC2	0	0.8112738	0.966	0.835	0	ExN1	TANC2
LAMP5	0	0.81066044	0.535	0.08	0	ExN1	LAMP5
LINC00326	0	0.80708251	0.323	0.06	0	ExN1	LINC00326
NECTIN3	0	0.80583915	0.76	0.408	0	ExN1	NECTIN3
SV2B	0	0.80537747	0.942	0.521	0	ExN1	SV2B
LDB2	0	0.80308763	0.985	0.707	0	ExN1	LDB2
KCNK1	0	0.80259618	0.811	0.447	0	ExN1	KCNK1
PTCHD1-AS	0	0.79955386	0.734	0.378	0	ExN1	PTCHD1-AS
GNAL	0	0.79096695	0.818	0.388	0	ExN1	GNAL
AL391840.1	0	0.78518211	0.755	0.45	0	ExN1	AL391840.1
RGS6	0	0.78490583	0.981	0.63	0	ExN1	RGS6
AQP4-AS1	0	0.78484825	0.796	0.426	0	ExN1	AQP4-AS1
KCND2	0	0.78472454	0.981	0.844	0	ExN1	KCND2
AC110614.1	0	0.78056598	0.372	0.137	0	ExN1	AC110614.1
SATB2	0	0.77854021	0.923	0.487	0	ExN1	SATB2
AC097512.1	0	0.77838174	0.382	0.052	0	ExN1	AC097512.1
RFTN1	0	0.77756402	0.788	0.4	0	ExN1	RFTN1
MAP3K5	0	0.77386422	0.911	0.57	0	ExN1	MAP3K5
ARPP19	0	0.76845887	0.771	0.461	0	ExN1	ARPP19
NRGN	0	0.76665686	0.882	0.494	0	ExN1	NRGN
NECAB1	0	0.76358498	0.93	0.57	0	ExN1	NECAB1
USP25	0	0.75854318	0.868	0.614	0	ExN1	USP25
FLRT2	0	0.75596696	0.969	0.801	0	ExN1	FLRT2
KCTD16	0	0.75539749	0.985	0.836	0	ExN1	KCTD16
AC009041.2	0	0.75107568	0.595	0.251	0	ExN1	AC009041.2
ADGRL3	0	0.74916788	0.994	0.955	0	ExN1	ADGRL3
ART3	0	0.7440811	0.551	0.143	0	ExN1	ART3
AL157944.1	0	0.74354389	0.446	0.235	0	ExN1	AL157944.1
LMO3	0	0.74013328	0.862	0.526	0	ExN1	LMO3
IQCJ-SCHIP1	0	0.73457779	0.99	0.794	0	ExN1	IQCJ-SCHIP1
LAMB1	0	0.73224181	0.606	0.198	0	ExN1	LAMB1
DLEU2	0	0.72272712	0.796	0.497	0	ExN1	DLEU2
VSNL1	0	0.72146141	0.938	0.737	0	ExN1	VSNL1

LNK1	0	0.72106965	0.843	0.539	0	ExN1	LNK1
NIPAL2	0	0.71941448	0.789	0.463	0	ExN1	NIPAL2
CACNA2D1	0	0.71912339	0.972	0.722	0	ExN1	CACNA2D1
CELF2	0	0.71706961	0.996	0.961	0	ExN1	CELF2
FBXW7	0	0.71569901	0.925	0.713	0	ExN1	FBXW7
COL24A1	0	0.71552871	0.553	0.16	0	ExN1	COL24A1
MPPED2	0	0.7038848	0.791	0.411	0	ExN1	MPPED2
AL008633.1	0	0.70357475	0.84	0.684	0	ExN1	AL008633.1
LIN7A	0	0.70060795	0.802	0.476	0	ExN1	LIN7A
STXBP6	0	0.69533235	0.747	0.291	0	ExN1	STXBP6
GRM1	0	0.68928811	0.907	0.57	0	ExN1	GRM1
PHYHIP	0	0.68878656	0.734	0.418	0	ExN1	PHYHIP
AL136441.1	0	0.68664115	0.365	0.094	0	ExN1	AL136441.1
KLHL2	0	0.67975235	0.756	0.434	0	ExN1	KLHL2
CAMKK1	0	0.67926837	0.725	0.382	0	ExN1	CAMKK1
PHACTR1	0	0.67859916	0.993	0.942	0	ExN1	PHACTR1
AC007563.2	0	0.67802006	0.862	0.544	0	ExN1	AC007563.2
RPS6KC1	0	0.67755182	0.925	0.73	0	ExN1	RPS6KC1
SYNJ2	0	0.67508498	0.697	0.313	0	ExN1	SYNJ2
PTPRO	0	0.67264921	0.899	0.623	0	ExN1	PTPRO
BAIAP2	0	0.67133454	0.776	0.435	0	ExN1	BAIAP2
MBNL2	0	0.66606786	0.952	0.717	0	ExN1	MBNL2
ATP2B4	0	0.66457912	0.806	0.442	0	ExN1	ATP2B4
PTH2R	0	0.66270045	0.53	0.193	0	ExN1	PTH2R
AC069133.1	0	0.65830824	0.461	0.119	0	ExN1	AC069133.1
WASF1	0	0.65322229	0.851	0.588	0	ExN1	WASF1
TYRO3	0	0.65257192	0.651	0.277	0	ExN1	TYRO3
NELL1	0	0.65160946	0.892	0.591	0	ExN1	NELL1
PTK2	0	0.65010437	0.975	0.879	0	ExN1	PTK2
TMEM108	0	0.64668388	0.958	0.784	0	ExN1	TMEM108
CEMIP2	0	0.64638831	0.654	0.273	0	ExN1	CEMIP2
ACVR1C	0	0.64458754	0.396	0.06	0	ExN1	ACVR1C
SORBS1	0	0.64126295	0.968	0.87	0	ExN1	SORBS1
SNTB2	0	0.63999886	0.709	0.378	0	ExN1	SNTB2
ACTN1	0	0.6395763	0.818	0.529	0	ExN1	ACTN1
GRIA2	0	0.6395196	0.988	0.941	0	ExN1	GRIA2
DGCR9	0	0.63854099	0.796	0.578	0	ExN1	DGCR9
FBXO32	0	0.6378041	0.703	0.381	0	ExN1	FBXO32
UPP2	0	0.63246796	0.759	0.479	0	ExN1	UPP2
ITGA9	0	0.63029127	0.746	0.351	0	ExN1	ITGA9
FAM153CP	0	0.62857572	0.785	0.594	0	ExN1	FAM153CP
NHSL2	0	0.62670073	0.581	0.215	0	ExN1	NHSL2
KLHL4	0	0.62284041	0.56	0.22	0	ExN1	KLHL4
CHRM3	0	0.62085901	0.985	0.849	0	ExN1	CHRM3
MED12L	0	0.61863788	0.893	0.663	0	ExN1	MED12L
PRAG1	0	0.6181854	0.52	0.141	0	ExN1	PRAG1
ITPKA	0	0.61627021	0.502	0.117	0	ExN1	ITPKA
FSTL4	0	0.61540493	0.934	0.575	0	ExN1	FSTL4
PTPN13	0	0.61494906	0.606	0.343	0	ExN1	PTPN13
GLRA3	0	0.61231366	0.59	0.229	0	ExN1	GLRA3
PPP4R4	0	0.60983372	0.676	0.332	0	ExN1	PPP4R4
MIR137HG	0	0.60837961	0.888	0.603	0	ExN1	MIR137HG
BRINP2	0	0.60731634	0.845	0.595	0	ExN1	BRINP2
ZNF365	0	0.60727707	0.71	0.405	0	ExN1	ZNF365
ARHGAP10	0	0.60501768	0.578	0.233	0	ExN1	ARHGAP10
MAST3	0	0.60225458	0.684	0.353	0	ExN1	MAST3
GABRA2	0	0.59668981	0.833	0.587	0	ExN1	GABRA2
ANKRD33B	0	0.59502539	0.712	0.364	0	ExN1	ANKRD33B
NWD2	0	0.59461399	0.732	0.399	0	ExN1	NWD2
TMOD1	0	0.59407694	0.745	0.416	0	ExN1	TMOD1
ELL2	0	0.58761972	0.78	0.486	0	ExN1	ELL2
ATRNL1	0	0.58704685	0.99	0.915	0	ExN1	ATRNL1
EML1	0	0.58661868	0.629	0.303	0	ExN1	EML1

TMEM59L	0	0.58601762	0.771	0.522	0 ExN1	TMEM59L
PLEKHA5	0	0.58555816	0.97	0.906	0 ExN1	PLEKHA5
NIN	0	0.58294256	0.904	0.661	0 ExN1	NIN
AK5	0	0.58100119	0.949	0.738	0 ExN1	AK5
ZBTB7C	0	0.58070342	0.551	0.217	0 ExN1	ZBTB7C
LZTS1	0	0.57730787	0.516	0.149	0 ExN1	LZTS1
KCNIP2	0	0.57614005	0.638	0.28	0 ExN1	KCNIP2
CNTNAP5	0	0.57576075	0.976	0.881	0 ExN1	CNTNAP5
PCDH7	0	0.57193258	0.984	0.785	0 ExN1	PCDH7
MCHR2	0	0.57099766	0.533	0.208	0 ExN1	MCHR2
AC007091.1	0	0.56968828	0.283	0.061	0 ExN1	AC007091.1
ARNT2	0	0.567433	0.942	0.811	0 ExN1	ARNT2
COL27A1	0	0.56463763	0.441	0.088	0 ExN1	COL27A1
ARFGEF3	0	0.56250382	0.91	0.744	0 ExN1	ARFGEF3
CKB	0	0.56173981	0.778	0.576	0 ExN1	CKB
AC013652.1	0	0.5541641	0.53	0.287	0 ExN1	AC013652.1
SH3RF2	0	0.55070372	0.396	0.059	0 ExN1	SH3RF2
PPP3CA	0	0.54993102	0.984	0.898	0 ExN1	PPP3CA
RTN4	0	0.54907006	0.914	0.795	0 ExN1	RTN4
TLN2	0	0.54790128	0.902	0.693	0 ExN1	TLN2
ADGRL2	0	0.54789533	0.974	0.825	0 ExN1	ADGRL2
CDC40	0	0.54744674	0.699	0.418	0 ExN1	CDC40
MYOM2	0	0.54638926	0.459	0.142	0 ExN1	MYOM2
CAMKK2	0	0.54282125	0.706	0.397	0 ExN1	CAMKK2
MFSD4A	0	0.54180268	0.592	0.279	0 ExN1	MFSD4A
DDAH1	0	0.54022806	0.674	0.359	0 ExN1	DDAH1
CTDSPL	0	0.5398142	0.869	0.666	0 ExN1	CTDSPL
OLFM1	0	0.53952159	0.827	0.563	0 ExN1	OLFM1
MIR222HG	0	0.53510755	0.566	0.25	0 ExN1	MIR222HG
KIAA2012	0	0.53440601	0.451	0.111	0 ExN1	KIAA2012
TMEM132D	0	0.53372254	0.963	0.735	0 ExN1	TMEM132D
ARL4A	0	0.53313836	0.418	0.1	0 ExN1	ARL4A
PKIG	0	0.53118291	0.732	0.457	0 ExN1	PKIG
MEG3	0	0.5311511	0.971	0.957	0 ExN1	MEG3
VWA3A	0	0.52827634	0.498	0.182	0 ExN1	VWA3A
FAM163A	0	0.52800624	0.32	0.03	0 ExN1	FAM163A
SEMA5B	0	0.52790128	0.576	0.223	0 ExN1	SEMA5B
STXBP5L	0	0.52737891	0.986	0.938	0 ExN1	STXBP5L
SLC12A8	0	0.52731396	0.548	0.228	0 ExN1	SLC12A8
NPTX1	0	0.52436363	0.738	0.42	0 ExN1	NPTX1
ATP6V1H	0	0.52326961	0.813	0.617	0 ExN1	ATP6V1H
AC106795.3	0	0.52110009	0.491	0.149	0 ExN1	AC106795.3
SGK3	0	0.51947022	0.8	0.563	0 ExN1	SGK3
ICAM5	0	0.51927072	0.516	0.203	0 ExN1	ICAM5
ADAMTS16	0	0.518396	0.437	0.141	0 ExN1	ADAMTS16
SNED1	0	0.51810481	0.688	0.381	0 ExN1	SNED1
SGCD	0	0.51803107	0.779	0.543	0 ExN1	SGCD
CCDC88C	0	0.51783783	0.361	0.034	0 ExN1	CCDC88C
PRKAR2B	0	0.51537138	0.821	0.57	0 ExN1	PRKAR2B
SYBU	0	0.51413769	0.878	0.672	0 ExN1	SYBU
HRH2	0	0.51367314	0.627	0.33	0 ExN1	HRH2
BRINP1	0	0.5125206	0.904	0.703	0 ExN1	BRINP1
ARHGAP32	0	0.51211392	0.951	0.821	0 ExN1	ARHGAP32
KALRN	0	0.51131357	0.994	0.948	0 ExN1	KALRN
EDIL3	0	0.51091206	0.91	0.684	0 ExN1	EDIL3
FAT3	0	0.51089845	0.924	0.659	0 ExN1	FAT3
MBNL1	0	0.51027816	0.905	0.746	0 ExN1	MBNL1
TBC1D1	0	0.51001233	0.787	0.519	0 ExN1	TBC1D1
CNKSR2	0	0.50883541	0.958	0.785	0 ExN1	CNKSR2
PDE1A	0	0.50695515	0.95	0.611	0 ExN1	PDE1A
GALNT13	0	0.50673576	0.892	0.63	0 ExN1	GALNT13
CDK19	0	0.50631153	0.776	0.506	0 ExN1	CDK19
ZDHHC14	0	0.50587381	0.917	0.74	0 ExN1	ZDHHC14

ST8SIA3	0	0.50507752	0.751	0.503	0	ExN1	ST8SIA3
EML6	0	0.50039637	0.92	0.745	0	ExN1	EML6
CTNNAL1	0	0.4993283	0.674	0.381	0	ExN1	CTNNAL1
LINC01484	0	0.49929853	0.326	0.02	0	ExN1	LINC01484
GSG1L	0	0.49919501	0.584	0.235	0	ExN1	GSG1L
AC068286.2	0	0.49818344	0.319	0.082	0	ExN1	AC068286.2
DLGAP2	0	0.49691093	0.992	0.915	0	ExN1	DLGAP2
LONRF2	0	0.49645949	0.816	0.61	0	ExN1	LONRF2
SESN1	0	0.49624136	0.82	0.603	0	ExN1	SESN1
CIT	0	0.49592616	0.909	0.711	0	ExN1	CIT
NOVA1	0	0.49524331	0.924	0.783	0	ExN1	NOVA1
SNAP25	0	0.49378759	0.977	0.907	0	ExN1	SNAP25
GALNT18	0	0.49354819	0.909	0.702	0	ExN1	GALNT18
ARMC9	0	0.49331542	0.805	0.565	0	ExN1	ARMC9
HSPA12A	0	0.4933154	0.924	0.818	0	ExN1	HSPA12A
LRATD1	0	0.49145218	0.433	0.138	0	ExN1	LRATD1
MAL2	0	0.49134837	0.532	0.235	0	ExN1	MAL2
FGFR1OP2	0	0.49092301	0.655	0.365	0	ExN1	FGFR1OP2
MYH9	0	0.48959291	0.546	0.239	0	ExN1	MYH9
CACNA1E	0	0.48955765	0.942	0.774	0	ExN1	CACNA1E
AC011995.2	0	0.48865482	0.619	0.357	0	ExN1	AC011995.2
SLC4A4	0	0.48776636	0.594	0.265	0	ExN1	SLC4A4
TMEM178B	0	0.48548491	0.978	0.905	0	ExN1	TMEM178B
PRKCB	0	0.48477218	0.977	0.84	0	ExN1	PRKCB
FAM153B	0	0.48426631	0.609	0.37	0	ExN1	FAM153B
ACTB	0	0.48355351	0.78	0.603	0	ExN1	ACTB
FAM160A1	0	0.48133286	0.321	0.072	0	ExN1	FAM160A1
SEMA3C	0	0.48010495	0.378	0.077	0	ExN1	SEMA3C
FBXO34	0	0.4800424	0.792	0.578	0	ExN1	FBXO34
MOXD1	0	0.47799405	0.349	0.094	0	ExN1	MOXD1
CACNG3	0	0.47504716	0.847	0.604	0	ExN1	CACNG3
ADAM23	0	0.4742423	0.914	0.732	0	ExN1	ADAM23
AC034268.2	0	0.47330032	0.471	0.244	0	ExN1	AC034268.2
AC092902.4	0	0.47205522	0.447	0.17	0	ExN1	AC092902.4
COL26A1	0	0.47122884	0.701	0.423	0	ExN1	COL26A1
EPB41L3	0	0.4700297	0.908	0.749	0	ExN1	EPB41L3
LRFN5	0	0.46729374	0.978	0.87	0	ExN1	LRFN5
DCAF6	0	0.46719528	0.789	0.582	0	ExN1	DCAF6
KCNH3	0	0.46716504	0.613	0.345	0	ExN1	KCNH3
PLEKHA2	0	0.46640593	0.487	0.186	0	ExN1	PLEKHA2
BMPR1B	0	0.46581647	0.284	0.055	0	ExN1	BMPR1B
SEC14L5	0	0.46579203	0.682	0.391	0	ExN1	SEC14L5
KCNIP4-IT1	0	0.46573854	0.702	0.451	0	ExN1	KCNIP4-IT1
NFAT5	0	0.46503084	0.887	0.743	0	ExN1	NFAT5
COX7A2L	0	0.46454324	0.61	0.344	0	ExN1	COX7A2L
ITGB8	0	0.46431888	0.565	0.215	0	ExN1	ITGB8
CAMK4	0	0.46229256	0.883	0.678	0	ExN1	CAMK4
SH3BGRL2	0	0.46217509	0.732	0.486	0	ExN1	SH3BGRL2
DLGAP1-AS4	0	0.46172764	0.571	0.299	0	ExN1	DLGAP1-AS4
CALN1	0	0.46145455	0.902	0.597	0	ExN1	CALN1
CABP1	0	0.45972447	0.903	0.653	0	ExN1	CABP1
PRXL2A	0	0.45951984	0.505	0.291	0	ExN1	PRXL2A
IPO5	0	0.45889982	0.633	0.372	0	ExN1	IPO5
ARHGAP26	0	0.45883926	0.966	0.847	0	ExN1	ARHGAP26
RNF115	0	0.45813077	0.767	0.546	0	ExN1	RNF115
EPHX4	0	0.45727832	0.516	0.237	0	ExN1	EPHX4
CNGB1	0	0.45691411	0.343	0.069	0	ExN1	CNGB1
CYP46A1	0	0.45668107	0.612	0.373	0	ExN1	CYP46A1
ANXA11	0	0.45654273	0.605	0.321	0	ExN1	ANXA11
ACAP3	0	0.45491577	0.769	0.563	0	ExN1	ACAP3
ROS1	0	0.45062117	0.293	0.083	0	ExN1	ROS1
SLC17A7	0	0.44989944	0.683	0.375	0	ExN1	SLC17A7
SLF1	0	0.44972883	0.679	0.437	0	ExN1	SLF1

ACTN4	0	0.447277	0.743	0.48	0 ExN1	ACTN4
GUCY1A2	0	0.44679846	0.904	0.686	0 ExN1	GUCY1A2
GNG2	0	0.44282748	0.7	0.378	0 ExN1	GNG2
NCDN	0	0.44062306	0.685	0.481	0 ExN1	NCDN
CDK6	0	0.44034919	0.654	0.349	0 ExN1	CDK6
RAPGEF2	0	0.43939222	0.954	0.832	0 ExN1	RAPGEF2
SRPK1	0	0.43870659	0.667	0.433	0 ExN1	SRPK1
GFOD1	0	0.43863985	0.895	0.719	0 ExN1	GFOD1
AC002377.1	0	0.43838916	0.423	0.189	0 ExN1	AC002377.1
UNC5A	0	0.43528965	0.659	0.405	0 ExN1	UNC5A
AC025887.2	0	0.43274102	0.328	0.104	0 ExN1	AC025887.2
PTPRB	0	0.4313738	0.63	0.365	0 ExN1	PTPRB
FAM106A	0	0.43133509	0.549	0.341	0 ExN1	FAM106A
PLXNA2	0	0.43046977	0.86	0.624	0 ExN1	PLXNA2
SEZ6L	0	0.42972911	0.903	0.681	0 ExN1	SEZ6L
PI4KA	0	0.4293844	0.92	0.79	0 ExN1	PI4KA
DENND3	0	0.42773021	0.571	0.288	0 ExN1	DENND3
GABRB3	0	0.42632249	0.971	0.883	0 ExN1	GABRB3
ZNF831	0	0.4251076	0.447	0.172	0 ExN1	ZNF831
NDFIP2	0	0.42493541	0.715	0.461	0 ExN1	NDFIP2
MAPK4	0	0.42319783	0.717	0.416	0 ExN1	MAPK4
MAN1C1	0	0.42241983	0.8	0.57	0 ExN1	MAN1C1
DTNB	0	0.42213993	0.906	0.778	0 ExN1	DTNB
TJP1	0	0.42054871	0.936	0.807	0 ExN1	TJP1
CSMD1	0	0.41993087	0.999	0.977	0 ExN1	CSMD1
TENM2	0	0.41872163	0.992	0.919	0 ExN1	TENM2
NPTX2	0	0.41805609	0.32	0.059	0 ExN1	NPTX2
IL12A-AS1	0	0.41777376	0.379	0.133	0 ExN1	IL12A-AS1
CAMK1D	0	0.41616686	0.977	0.83	0 ExN1	CAMK1D
FKBP5	0	0.41305779	0.472	0.208	0 ExN1	FKBP5
STXBP5	0	0.41264837	0.922	0.804	0 ExN1	STXBP5
GOLGA8B	0	0.4123546	0.664	0.464	0 ExN1	GOLGA8B
HTR4	0	0.41161645	0.498	0.19	0 ExN1	HTR4
KCNQ5	0	0.41156196	0.994	0.881	0 ExN1	KCNQ5
WWC1	0	0.41130985	0.572	0.3	0 ExN1	WWC1
DCLK2	0	0.40865183	0.862	0.721	0 ExN1	DCLK2
FANCL	0	0.40798233	0.65	0.425	0 ExN1	FANCL
ADGRB2	0	0.40727777	0.548	0.301	0 ExN1	ADGRB2
TNFRSF25	0	0.40636466	0.6	0.364	0 ExN1	TNFRSF25
MIR4435-2H	0	0.40612342	0.538	0.328	0 ExN1	MIR4435-2H
TLE1	0	0.40606445	0.522	0.257	0 ExN1	TLE1
BICC1	0	0.4032403	0.671	0.368	0 ExN1	BICC1
HYDIN	0	0.40253656	0.61	0.373	0 ExN1	HYDIN
WDR17	0	0.40175756	0.823	0.659	0 ExN1	WDR17
CAMK2B	0	0.40003429	0.91	0.783	0 ExN1	CAMK2B
ERC2	0	0.39935306	0.967	0.922	0 ExN1	ERC2
PRKCI	0	0.39784291	0.673	0.454	0 ExN1	PRKCI
VGLL4	0	0.39747971	0.823	0.642	0 ExN1	VGLL4
GPM6B	0	0.39704317	0.931	0.77	0 ExN1	GPM6B
ABLM2	0	0.39647219	0.834	0.663	0 ExN1	ABLM2
PEAK1	0	0.39575809	0.791	0.581	0 ExN1	PEAK1
STYK1	0	0.39538413	0.386	0.121	0 ExN1	STYK1
RASA3	0	0.39532099	0.541	0.301	0 ExN1	RASA3
JAG1	0	0.39281684	0.334	0.064	0 ExN1	JAG1
ARAP2	0	0.39267997	0.841	0.542	0 ExN1	ARAP2
UNC13A	0	0.39145786	0.757	0.553	0 ExN1	UNC13A
AC073365.1	0	0.38952273	0.625	0.32	0 ExN1	AC073365.1
CSGALNACT1	0	0.38910955	0.842	0.552	0 ExN1	CSGALNACT1
ECHDC2	0	0.38866966	0.515	0.284	0 ExN1	ECHDC2
KCNH1	0	0.38821612	0.949	0.801	0 ExN1	KCNH1
LRRK2	0	0.38812077	0.624	0.389	0 ExN1	LRRK2
RAPH1	0	0.38802931	0.688	0.453	0 ExN1	RAPH1
FAM153A	0	0.38800249	0.541	0.313	0 ExN1	FAM153A

PRICKLE1	0	0.38790729	0.856	0.65	0 ExN1	PRICKLE1
AP001993.1	0	0.38677006	0.305	0.067	0 ExN1	AP001993.1
EPB41L4B	0	0.38603072	0.759	0.552	0 ExN1	EPB41L4B
SLITRK5	0	0.38533218	0.718	0.498	0 ExN1	SLITRK5
KITLG	0	0.38508488	0.498	0.239	0 ExN1	KITLG
MEF2A	0	0.38274968	0.873	0.718	0 ExN1	MEF2A
AKAP5	0	0.38191055	0.374	0.124	0 ExN1	AKAP5
GULP1	0	0.38171307	0.624	0.282	0 ExN1	GULP1
CACNB2	0	0.38169156	0.955	0.854	0 ExN1	CACNB2
GAREM1	0	0.37949786	0.669	0.418	0 ExN1	GAREM1
ZNRF3	0	0.37935826	0.615	0.361	0 ExN1	ZNRF3
SLC37A1	0	0.3791551	0.488	0.253	0 ExN1	SLC37A1
PPM1L	0	0.37769358	0.92	0.781	0 ExN1	PPM1L
MYO5C	0	0.37503802	0.483	0.227	0 ExN1	MYO5C
SLC39A10	0	0.3748806	0.79	0.608	0 ExN1	SLC39A10
E2F3	0	0.37348653	0.526	0.29	0 ExN1	E2F3
KIRREL3	0	0.37203931	0.98	0.743	0 ExN1	KIRREL3
SLC38A11	0	0.37189441	0.429	0.209	0 ExN1	SLC38A11
PDE4D	0	0.37097576	0.994	0.953	0 ExN1	PDE4D
EPHA4	0	0.37000059	0.881	0.625	0 ExN1	EPHA4
MIS18BP1	0	0.36916977	0.402	0.166	0 ExN1	MIS18BP1
PALMD	0	0.36884214	0.262	0.038	0 ExN1	PALMD
DKK3	0	0.36876868	0.789	0.594	0 ExN1	DKK3
AMPH	0	0.36739189	0.918	0.785	0 ExN1	AMPH
MPP7	0	0.36718371	0.603	0.352	0 ExN1	MPP7
MIAT	0	0.36678813	0.966	0.86	0 ExN1	MIAT
CNST	0	0.36639536	0.645	0.443	0 ExN1	CNST
TYW1B	0	0.36582186	0.561	0.317	0 ExN1	TYW1B
JPH1	0	0.36568234	0.636	0.403	0 ExN1	JPH1
LZTS3	0	0.36499948	0.607	0.388	0 ExN1	LZTS3
ADCY9	0	0.36424373	0.809	0.613	0 ExN1	ADCY9
BCL2	0	0.36266732	0.711	0.478	0 ExN1	BCL2
KCNMA1	0	0.36208524	0.991	0.951	0 ExN1	KCNMA1
NAGPA	0	0.36144609	0.478	0.254	0 ExN1	NAGPA
MAPK1	0	0.36074341	0.794	0.64	0 ExN1	MAPK1
ATP11B	0	0.36073951	0.67	0.469	0 ExN1	ATP11B
PDE2A	0	0.36031587	0.734	0.541	0 ExN1	PDE2A
TMEM241	0	0.36025122	0.677	0.454	0 ExN1	TMEM241
MAP2K1	0	0.3599525	0.663	0.447	0 ExN1	MAP2K1
SLC4A10	0	0.3596675	0.974	0.909	0 ExN1	SLC4A10
ANKRD62	0	0.35948284	0.284	0.051	0 ExN1	ANKRD62
NETO1	0	0.35742321	0.9	0.686	0 ExN1	NETO1
NPTN	0	0.35736256	0.831	0.678	0 ExN1	NPTN
CACNA1C	0	0.35698567	0.99	0.955	0 ExN1	CACNA1C
ATP9B	0	0.35682619	0.845	0.707	0 ExN1	ATP9B
DAB1	0	0.35603941	0.982	0.852	0 ExN1	DAB1
RTN4RL1	0	0.35582176	0.614	0.375	0 ExN1	RTN4RL1
GOLGA8A	0	0.35443636	0.679	0.487	0 ExN1	GOLGA8A
AC093817.2	0	0.3541874	0.261	0.072	0 ExN1	AC093817.2
NBAS	0	0.35416569	0.879	0.753	0 ExN1	NBAS
CPLX2	0	0.35397858	0.744	0.528	0 ExN1	CPLX2
HS6ST1	0	0.35258205	0.551	0.324	0 ExN1	HS6ST1
CRLF1	0	0.35246206	0.311	0.063	0 ExN1	CRLF1
ETV5	0	0.35223128	0.335	0.14	0 ExN1	ETV5
TNPO1	0	0.35215613	0.786	0.607	0 ExN1	TNPO1
KCNN3	0	0.35211978	0.532	0.265	0 ExN1	KCNN3
TEK	0	0.35171142	0.342	0.079	0 ExN1	TEK
PCSK2	0	0.35144	0.933	0.769	0 ExN1	PCSK2
RAB40B	0	0.35058014	0.53	0.295	0 ExN1	RAB40B
MYO1D	0	0.35028844	0.737	0.462	0 ExN1	MYO1D
COP1	0	0.34841956	0.859	0.728	0 ExN1	COP1
LRFN2	0	0.34793448	0.855	0.644	0 ExN1	LRFN2
C11orf87	0	0.34759217	0.523	0.283	0 ExN1	C11orf87

ADCY1	0	0.34712834	0.771	0.556	0 ExN1	ADCY1
OPN3	0	0.34696567	0.424	0.196	0 ExN1	OPN3
STEAP2	0	0.34627831	0.563	0.342	0 ExN1	STEAP2
TMTC1	0	0.34600429	0.752	0.513	0 ExN1	TMTC1
ROCK2	0	0.34563231	0.879	0.746	0 ExN1	ROCK2
CREG2	0	0.34561502	0.684	0.471	0 ExN1	CREG2
CHL1	0	0.3453969	0.937	0.771	0 ExN1	CHL1
PAK1	0	0.34487878	0.82	0.659	0 ExN1	PAK1
KCNMB2	0	0.34428191	0.812	0.514	0 ExN1	KCNMB2
SLC22A10	0	0.34405512	0.722	0.398	0 ExN1	SLC22A10
ANKRD24	0	0.34345977	0.585	0.357	0 ExN1	ANKRD24
AL583827.1	0	0.34288903	0.266	0.067	0 ExN1	AL583827.1
CDKL1	0	0.34277983	0.631	0.422	0 ExN1	CDKL1
CCDC144NL	0	0.34198258	0.335	0.095	0 ExN1	CCDC144NL
SLC44A1	0	0.3381798	0.871	0.68	0 ExN1	SLC44A1
AC004158.1	0	0.3380912	0.375	0.175	0 ExN1	AC004158.1
DGKA	0	0.33743807	0.414	0.171	0 ExN1	DGKA
ATP11A	0	0.33626596	0.618	0.401	0 ExN1	ATP11A
BSN	0	0.3360333	0.759	0.566	0 ExN1	BSN
HTR3B	0	0.33597495	0.3	0.079	0 ExN1	HTR3B
DTWD2	0	0.33566155	0.559	0.346	0 ExN1	DTWD2
UBE2E2	0	0.33534207	0.963	0.855	0 ExN1	UBE2E2
DOCK4	0	0.33236578	0.938	0.798	0 ExN1	DOCK4
NAV3	0	0.33193957	0.993	0.939	0 ExN1	NAV3
KCNAB2	0	0.3319342	0.693	0.489	0 ExN1	KCNAB2
GPM6A	0	0.33180661	0.985	0.933	0 ExN1	GPM6A
KCNN2	0	0.33157476	0.672	0.448	0 ExN1	KCNN2
SYNPO	0	0.33145754	0.478	0.255	0 ExN1	SYNPO
HOMER1	0	0.33074753	0.768	0.585	0 ExN1	HOMER1
MIR4500HG	0	0.33073258	0.469	0.261	0 ExN1	MIR4500HG
KCNG3	0	0.33033141	0.311	0.083	0 ExN1	KCNG3
LINC01476	0	0.33032372	0.316	0.103	0 ExN1	LINC01476
MTA3	0	0.32981716	0.798	0.619	0 ExN1	MTA3
ABLIM1	0	0.3290512	0.938	0.806	0 ExN1	ABLIM1
KBTBD11	0	0.32879783	0.397	0.189	0 ExN1	KBTBD11
CACNA2D3	0	0.32861777	0.982	0.838	0 ExN1	CACNA2D3
DOC2A	0	0.32744629	0.486	0.279	0 ExN1	DOC2A
RAPGEFL1	0	0.32665883	0.596	0.4	0 ExN1	RAPGEFL1
ABI2	0	0.32657491	0.879	0.742	0 ExN1	ABI2
TMEM196	0	0.32586292	0.403	0.166	0 ExN1	TMEM196
GLS	0	0.32539426	0.919	0.803	0 ExN1	GLS
DNM1	0	0.32475567	0.929	0.815	0 ExN1	DNM1
INKA2	0	0.32299275	0.397	0.194	0 ExN1	INKA2
FHL2	0	0.32192141	0.449	0.222	0 ExN1	FHL2
SYTL2	0	0.32070463	0.665	0.437	0 ExN1	SYTL2
POU2F2	0	0.31981408	0.517	0.294	0 ExN1	POU2F2
MOB1B	0	0.31800625	0.534	0.322	0 ExN1	MOB1B
CA4	0	0.31567348	0.276	0.07	0 ExN1	CA4
PITPNM2	0	0.31547528	0.718	0.516	0 ExN1	PITPNM2
PTPRQ	0	0.31464804	0.275	0.078	0 ExN1	PTPRQ
CA11	0	0.31408683	0.595	0.38	0 ExN1	CA11
FSIP1	0	0.31270658	0.431	0.222	0 ExN1	FSIP1
IQSEC2	0	0.31266866	0.646	0.448	0 ExN1	IQSEC2
KIAA1257	0	0.3101321	0.32	0.103	0 ExN1	KIAA1257
INSYN2B	0	0.30914611	0.419	0.179	0 ExN1	INSYN2B
PTCHD1	0	0.30764038	0.414	0.208	0 ExN1	PTCHD1
LRRIQ1	0	0.30577529	0.32	0.129	0 ExN1	LRRIQ1
WIPF3	0	0.30546598	0.586	0.363	0 ExN1	WIPF3
ST3GAL1	0	0.30470021	0.498	0.251	0 ExN1	ST3GAL1
CUX1	0	0.30412228	0.87	0.693	0 ExN1	CUX1
CRIP2	0	0.30372026	0.356	0.149	0 ExN1	CRIP2
CTXN1	0	0.30340138	0.382	0.182	0 ExN1	CTXN1
MSRA	0	0.30257635	0.975	0.891	0 ExN1	MSRA

RFX2	0	0.30173112	0.431	0.199	0	ExN1	RFX2
RASAL1	0	0.30049145	0.348	0.148	0	ExN1	RASAL1
CYTOR	0	0.29937248	0.39	0.187	0	ExN1	CYTOR
MTHFD1	0	0.2993171	0.428	0.218	0	ExN1	MTHFD1
TTC3	0	0.29914398	0.956	0.898	0	ExN1	TTC3
SLC17A6	0	0.29765633	0.304	0.102	0	ExN1	SLC17A6
FXVD7	0	0.29710517	0.573	0.358	0	ExN1	FXVD7
LINC01793	0	0.29431576	0.269	0.09	0	ExN1	LINC01793
HTR2A	0	0.29415297	0.51	0.291	0	ExN1	HTR2A
KCNH4	0	0.29331917	0.295	0.096	0	ExN1	KCNH4
MGAT5B	0	0.29296656	0.666	0.43	0	ExN1	MGAT5B
LINC00937	0	0.29230811	0.449	0.246	0	ExN1	LINC00937
LG14	0	0.28936018	0.47	0.267	0	ExN1	LG14
NRN1	0	0.2892669	0.375	0.185	0	ExN1	NRN1
AP1S1	0	0.28895437	0.321	0.132	0	ExN1	AP1S1
CFAP54	0	0.288029	0.382	0.187	0	ExN1	CFAP54
BEGAIN	0	0.28778288	0.425	0.214	0	ExN1	BEGAIN
PRSS3	0	0.28665376	0.352	0.159	0	ExN1	PRSS3
CAT	0	0.2860226	0.262	0.046	0	ExN1	CAT
MAP7	0	0.28393879	0.946	0.863	0	ExN1	MAP7
AL078600.1	0	0.28247598	0.337	0.161	0	ExN1	AL078600.1
LHX2	0	0.28188269	0.356	0.155	0	ExN1	LHX2
NPEPL1	0	0.27918833	0.404	0.211	0	ExN1	NPEPL1
PCSK6	0	0.27897296	0.391	0.173	0	ExN1	PCSK6
PRKCA	0	0.27665533	0.917	0.688	0	ExN1	PRKCA
SLC2A12	0	0.27654043	0.32	0.123	0	ExN1	SLC2A12
RBFOX1	0	0.27635661	1	0.98	0	ExN1	RBFOX1
KCNV1	0	0.2735909	0.301	0.116	0	ExN1	KCNV1
SLC6A7	0	0.2734704	0.491	0.28	0	ExN1	SLC6A7
DCBLD1	0	0.27295861	0.275	0.089	0	ExN1	DCBLD1
CRHR1	0	0.27271507	0.352	0.17	0	ExN1	CRHR1
RHPN1	0	0.27249584	0.396	0.211	0	ExN1	RHPN1
DLG2	0	0.26438073	0.997	0.993	0	ExN1	DLG2
GRIN2B	0	0.26020903	0.98	0.938	0	ExN1	GRIN2B
NBPF11	0	0.25982771	0.322	0.128	0	ExN1	NBPF11
PLEKHG5	0	0.25954596	0.426	0.227	0	ExN1	PLEKHG5
ZNF184	0	0.25807046	0.279	0.094	0	ExN1	ZNF184
VGF	0	0.25334069	0.259	0.092	0	ExN1	VGF
PNCK	2.22E-305	0.31970144	0.524	0.325	8.47E-301	ExN1	PNCK
TTLL11	7.54E-302	0.32845257	0.771	0.589	2.88E-297	ExN1	TTLL11
SYT7	9.52E-302	0.30933976	0.714	0.488	3.64E-297	ExN1	SYT7
DNAH7	1.33E-301	0.30932356	0.559	0.351	5.07E-297	ExN1	DNAH7
RMDN2	4.32E-301	0.27593122	0.44	0.248	1.65E-296	ExN1	RMDN2
PPFIA4	2.88E-300	0.31171984	0.708	0.512	1.10E-295	ExN1	PPFIA4
PAM	1.53E-299	0.25225368	0.893	0.723	5.83E-295	ExN1	PAM
CDYL2	3.20E-298	0.30496531	0.572	0.363	1.22E-293	ExN1	CDYL2
CLASP1	9.30E-298	0.29537363	0.939	0.85	3.56E-293	ExN1	CLASP1
TRERF1	5.03E-296	0.28880535	0.808	0.617	1.92E-291	ExN1	TRERF1
SSX2IP	6.22E-296	0.32063555	0.723	0.527	2.38E-291	ExN1	SSX2IP
ACVR1	1.50E-294	0.2510475	0.391	0.208	5.74E-290	ExN1	ACVR1
EXOC6	1.12E-293	0.33136129	0.78	0.606	4.29E-289	ExN1	EXOC6
CCPG1	1.65E-293	0.33024261	0.842	0.691	6.32E-289	ExN1	CCPG1
SLC8A2	3.73E-293	0.29859954	0.626	0.424	1.43E-288	ExN1	SLC8A2
AGAP1	1.68E-291	0.2781426	0.973	0.893	6.41E-287	ExN1	AGAP1
SHC3	6.29E-291	0.33562827	0.767	0.569	2.40E-286	ExN1	SHC3
NEBL	7.22E-291	0.27913046	0.952	0.856	2.76E-286	ExN1	NEBL
SH3GL2	1.28E-289	0.2963545	0.921	0.701	4.87E-285	ExN1	SH3GL2
LRRC8B	2.99E-289	0.30581458	0.812	0.642	1.14E-284	ExN1	LRRC8B
SORT1	3.99E-289	0.30475029	0.824	0.644	1.52E-284	ExN1	SORT1
TLK1	2.69E-288	0.30189069	0.772	0.59	1.03E-283	ExN1	TLK1
MEIS3	6.37E-288	0.2959864	0.452	0.265	2.43E-283	ExN1	MEIS3
ZFR	1.13E-287	0.32310894	0.773	0.612	4.31E-283	ExN1	ZFR
GRIA3	3.64E-287	0.28059519	0.933	0.778	1.39E-282	ExN1	GRIA3

TTL	1.54E-284	0.26502358	0.489	0.299	5.89E-280	ExN1	TTL
AC006504.5	2.20E-284	0.33684916	0.587	0.392	8.41E-280	ExN1	AC006504.5
PTPDC1	2.48E-283	0.28020534	0.465	0.279	9.48E-279	ExN1	PTPDC1
DMD	5.13E-283	0.27228214	0.981	0.906	1.96E-278	ExN1	DMD
FKBP1A	1.97E-282	0.3145155	0.44	0.263	7.52E-278	ExN1	FKBP1A
TARBP1	6.92E-282	0.34117873	0.841	0.718	2.64E-277	ExN1	TARBP1
CELF5	7.80E-282	0.32991559	0.827	0.687	2.98E-277	ExN1	CELF5
MAPK6	7.98E-281	0.28101009	0.493	0.302	3.05E-276	ExN1	MAPK6
EML5	1.85E-279	0.29256601	0.715	0.524	7.09E-275	ExN1	EML5
PTPRF	1.27E-277	0.27845962	0.503	0.313	4.85E-273	ExN1	PTPRF
PPFIBP1	5.82E-277	0.29447619	0.835	0.617	2.23E-272	ExN1	PPFIBP1
KIAA1549L	2.89E-276	0.30748307	0.925	0.813	1.11E-271	ExN1	KIAA1549L
YWHAZ	6.00E-276	0.31291238	0.814	0.658	2.29E-271	ExN1	YWHAZ
PEA15	1.52E-275	0.30007726	0.489	0.306	5.79E-271	ExN1	PEA15
CNTN1	3.13E-275	0.27869277	0.982	0.941	1.20E-270	ExN1	CNTN1
KCNB1	3.43E-275	0.31115064	0.911	0.787	1.31E-270	ExN1	KCNB1
CPEB4	7.19E-275	0.29944919	0.861	0.729	2.75E-270	ExN1	CPEB4
MRTFB	1.14E-274	0.34086348	0.849	0.739	4.38E-270	ExN1	MRTFB
ARNTL2	2.00E-274	0.26425829	0.539	0.338	7.65E-270	ExN1	ARNTL2
ATF7IP2	9.81E-272	0.30934268	0.602	0.41	3.75E-267	ExN1	ATF7IP2
ACAP2	1.45E-271	0.31488449	0.778	0.631	5.54E-267	ExN1	ACAP2
DAPK1	9.94E-271	0.26044519	0.878	0.722	3.80E-266	ExN1	DAPK1
AC239809.3	1.23E-267	0.29882157	0.518	0.335	4.70E-263	ExN1	AC239809.3
PPP1R16B	1.92E-267	0.28111567	0.811	0.605	7.33E-263	ExN1	PPP1R16B
ASXL3	8.49E-266	0.3141994	0.767	0.587	3.25E-261	ExN1	ASXL3
DDX10	1.12E-265	0.29605177	0.678	0.497	4.29E-261	ExN1	DDX10
APLP1	3.92E-265	0.31991547	0.582	0.399	1.50E-260	ExN1	APLP1
C14orf132	6.14E-265	0.25413052	0.5	0.3	2.35E-260	ExN1	C14orf132
NCKAP1	7.23E-264	0.30974078	0.852	0.712	2.76E-259	ExN1	NCKAP1
PTPN5	9.73E-264	0.2979663	0.674	0.488	3.72E-259	ExN1	PTPN5
MTURN	2.11E-263	0.30308931	0.682	0.495	8.08E-259	ExN1	MTURN
NUP93	2.11E-261	0.25216668	0.635	0.437	8.06E-257	ExN1	NUP93
TMEM181	8.25E-260	0.27603384	0.662	0.476	3.15E-255	ExN1	TMEM181
TUT7	1.48E-259	0.26138647	0.498	0.311	5.64E-255	ExN1	TUT7
ZFAND3	3.59E-259	0.28771181	0.925	0.83	1.37E-254	ExN1	ZFAND3
AMD1	3.73E-258	0.30151447	0.626	0.437	1.42E-253	ExN1	AMD1
AC010210.1	2.85E-256	0.2803628	0.464	0.285	1.09E-251	ExN1	AC010210.1
PCNT	4.44E-256	0.29350754	0.652	0.471	1.70E-251	ExN1	PCNT
OGA	1.46E-254	0.29318417	0.82	0.683	5.60E-250	ExN1	OGA
ZNF609	2.09E-253	0.30166048	0.836	0.693	8.01E-249	ExN1	ZNF609
CAMKV	7.74E-252	0.28795172	0.557	0.371	2.96E-247	ExN1	CAMKV
LINC01197	3.32E-251	0.25090913	0.512	0.311	1.27E-246	ExN1	LINC01197
DTNA	3.70E-251	0.27420086	0.948	0.823	1.41E-246	ExN1	DTNA
TRIM9	9.57E-251	0.26846987	0.959	0.871	3.66E-246	ExN1	TRIM9
ZC3H14	4.69E-250	0.28372389	0.704	0.529	1.79E-245	ExN1	ZC3H14
PRKDC	2.47E-248	0.29087057	0.756	0.607	9.44E-244	ExN1	PRKDC
TSPAN3	2.49E-248	0.2798028	0.623	0.441	9.52E-244	ExN1	TSPAN3
TYW1	2.70E-248	0.27672392	0.612	0.431	1.03E-243	ExN1	TYW1
MTMR12	2.25E-246	0.27179794	0.634	0.452	8.59E-242	ExN1	MTMR12
DLG1	6.41E-246	0.27123983	0.904	0.742	2.45E-241	ExN1	DLG1
MPP6	1.02E-245	0.25396571	0.73	0.546	3.88E-241	ExN1	MPP6
FLCN	1.48E-245	0.30856164	0.476	0.31	5.64E-241	ExN1	FLCN
RBFOX3	3.09E-245	0.28243141	0.959	0.865	1.18E-240	ExN1	RBFOX3
CELF1	1.76E-244	0.28001299	0.876	0.753	6.73E-240	ExN1	CELF1
BZW2	3.49E-243	0.26475351	0.528	0.347	1.33E-238	ExN1	BZW2
RAB40C	3.04E-241	0.25415949	0.601	0.414	1.16E-236	ExN1	RAB40C
GPC5	3.86E-241	0.38181294	0.576	0.383	1.48E-236	ExN1	GPC5
YWHAH	6.12E-241	0.33162527	0.651	0.463	2.34E-236	ExN1	YWHAH
PPP2R2C	4.02E-239	0.28997053	0.915	0.771	1.54E-234	ExN1	PPP2R2C
DLGAP3	1.31E-238	0.26501633	0.617	0.434	5.01E-234	ExN1	DLGAP3
GLIS3	1.08E-237	0.41902807	0.41	0.241	4.12E-233	ExN1	GLIS3
ERICH3	2.35E-237	0.28909509	0.585	0.407	8.97E-233	ExN1	ERICH3
ARMC2	5.30E-237	0.2600493	0.68	0.504	2.03E-232	ExN1	ARMC2

SPECC1	1.70E-236	0.25316944	0.861	0.703	6.51E-232 ExN1	SPECC1
RSRP1	1.43E-235	0.30190226	0.754	0.61	5.48E-231 ExN1	RSRP1
STAT4	1.85E-235	0.27197959	0.592	0.401	7.07E-231 ExN1	STAT4
TTC8	1.45E-233	0.2768669	0.565	0.394	5.55E-229 ExN1	TTC8
PHYHIPL	1.74E-233	0.302239	0.727	0.558	6.64E-229 ExN1	PHYHIPL
ARHGEF7	2.17E-233	0.26696106	0.904	0.792	8.29E-229 ExN1	ARHGEF7
TCERG1L	2.35E-231	0.35750137	0.48	0.312	8.97E-227 ExN1	TCERG1L
LRRC28	6.09E-230	0.28626841	0.758	0.602	2.33E-225 ExN1	LRRC28
AC124852.1	1.18E-229	0.3022095	0.633	0.44	4.49E-225 ExN1	AC124852.1
NELL2	5.85E-227	0.26589933	0.96	0.746	2.24E-222 ExN1	NELL2
FBXO33	9.48E-225	0.26040405	0.548	0.375	3.62E-220 ExN1	FBXO33
BEX1	1.74E-224	0.34827207	0.517	0.341	6.65E-220 ExN1	BEX1
MALAT1	3.75E-224	0.38433855	1	1	1.43E-219 ExN1	MALAT1
PUM3	1.40E-219	0.28499149	0.73	0.575	5.34E-215 ExN1	PUM3
AFF3	5.10E-219	0.26169847	0.961	0.887	1.95E-214 ExN1	AFF3
GPC6	2.88E-218	0.36019573	0.622	0.459	1.10E-213 ExN1	GPC6
GRM5	3.07E-218	0.26053317	0.985	0.877	1.17E-213 ExN1	GRM5
SPRED1	1.81E-216	0.26089655	0.56	0.385	6.91E-212 ExN1	SPRED1
OPA1	1.86E-216	0.2796291	0.731	0.59	7.12E-212 ExN1	OPA1
SIRPA	1.58E-214	0.28060036	0.734	0.559	6.03E-210 ExN1	SIRPA
LYST	2.24E-214	0.26705744	0.834	0.695	8.55E-210 ExN1	LYST
NEDD4L	7.98E-214	0.25565092	0.908	0.79	3.05E-209 ExN1	NEDD4L
CCDC30	2.04E-212	0.27211262	0.71	0.537	7.78E-208 ExN1	CCDC30
KCNJ6	2.93E-212	0.27707676	0.858	0.71	1.12E-207 ExN1	KCNJ6
THY1	3.46E-211	0.34684132	0.632	0.472	1.32E-206 ExN1	THY1
INTS10	9.27E-211	0.2577183	0.611	0.449	3.54E-206 ExN1	INTS10
DNMT3A	4.62E-210	0.26249974	0.759	0.595	1.77E-205 ExN1	DNMT3A
NPTXR	7.05E-210	0.26583002	0.678	0.496	2.69E-205 ExN1	NPTXR
DZIP3	1.50E-208	0.26514954	0.744	0.597	5.74E-204 ExN1	DZIP3
UGGT2	7.86E-208	0.26816086	0.824	0.682	3.00E-203 ExN1	UGGT2
PPP1R12A	7.44E-206	0.26102923	0.841	0.703	2.84E-201 ExN1	PPP1R12A
RBM26	1.23E-204	0.25778446	0.868	0.75	4.71E-200 ExN1	RBM26
CALM2	1.49E-203	0.40774411	0.786	0.68	5.69E-199 ExN1	CALM2
TIAM2	5.18E-203	0.26048936	0.852	0.706	1.98E-198 ExN1	TIAM2
HTT	1.77E-201	0.25306187	0.79	0.651	6.77E-197 ExN1	HTT
AC069228.1	9.88E-200	0.28944639	0.31	0.175	3.78E-195 ExN1	AC069228.1
DIRC3	1.47E-198	0.26740117	0.703	0.505	5.62E-194 ExN1	DIRC3
BSG	2.56E-198	0.25925434	0.565	0.4	9.78E-194 ExN1	BSG
LINC02693	7.51E-197	0.28527174	0.602	0.45	2.87E-192 ExN1	LINC02693
SCN3B	4.54E-194	0.25487739	0.651	0.481	1.73E-189 ExN1	SCN3B
AC107223.1	5.87E-190	0.53068009	0.659	0.539	2.24E-185 ExN1	AC107223.1
GDAP1	8.03E-184	0.27162518	0.881	0.764	3.07E-179 ExN1	GDAP1
DYNLL1	9.46E-178	0.25754913	0.56	0.399	3.62E-173 ExN1	DYNLL1
AC110296.1	8.57E-176	0.32242235	0.291	0.167	3.28E-171 ExN1	AC110296.1
CCDC144A	6.95E-173	0.29373966	0.74	0.639	2.66E-168 ExN1	CCDC144A
TOMM20	1.01E-172	0.28706055	0.59	0.44	3.86E-168 ExN1	TOMM20
MKLN1	6.70E-172	0.25008151	0.911	0.81	2.56E-167 ExN1	MKLN1
CALM1	4.54E-170	0.32396577	0.925	0.841	1.73E-165 ExN1	CALM1
XIST	3.05E-164	0.4824146	0.593	0.532	1.17E-159 ExN1	XIST
SERINC3	8.39E-164	0.26403797	0.604	0.458	3.21E-159 ExN1	SERINC3
AC002460.2	9.02E-148	0.25189846	0.548	0.393	3.45E-143 ExN1	AC002460.2
PDE4DIP	2.73E-82	0.25134421	0.771	0.679	1.04E-77 ExN1	PDE4DIP
TSHZ2	0	2.554354	0.908	0.347	0 ExN2	TSHZ2
AL356295.1	0	2.28635537	0.754	0.109	0 ExN2	AL356295.1
DCC	0	2.18932517	0.937	0.504	0 ExN2	DCC
AC016687.2	0	2.05799048	0.697	0.098	0 ExN2	AC016687.2
RORB	0	1.95749013	0.894	0.273	0 ExN2	RORB
IL1RAPL2	0	1.95699415	0.863	0.266	0 ExN2	IL1RAPL2
LINC01725	0	1.79720721	0.796	0.311	0 ExN2	LINC01725
TOX	0	1.66931006	0.89	0.396	0 ExN2	TOX
SLC22A101	0	1.58092292	0.856	0.424	0 ExN2	SLC22A10
COBLL1	0	1.54058277	0.736	0.108	0 ExN2	COBLL1
POU6F2	0	1.49489783	0.869	0.355	0 ExN2	POU6F2

FOXP2	0	1.49163199	0.837	0.26	0 ExN2	FOXP2
LINC02232	0	1.4701298	0.678	0.139	0 ExN2	LINC02232
SCHLAP1	0	1.46888737	0.603	0.174	0 ExN2	SCHLAP1
FSHR	0	1.44584744	0.327	0.016	0 ExN2	FSHR
AC073091.3	0	1.43265423	0.754	0.27	0 ExN2	AC073091.3
VWC2L	0	1.41083053	0.804	0.296	0 ExN2	VWC2L
AC060765.2	0	1.39294298	0.401	0.174	0 ExN2	AC060765.2
ALDH1A1	0	1.3914538	0.57	0.03	0 ExN2	ALDH1A1
AC084816.1	0	1.32409221	0.607	0.153	0 ExN2	AC084816.1
KCNH5	0	1.28995833	0.832	0.375	0 ExN2	KCNH5
AL450352.1	0	1.22718362	0.54	0.029	0 ExN2	AL450352.1
RARB	0	1.20485405	0.803	0.391	0 ExN2	RARB
TAF42	0	1.19704994	0.938	0.776	0 ExN2	TAF42
ALCAM	0	1.17643606	0.883	0.427	0 ExN2	ALCAM
GRM3	0	1.14715652	0.861	0.351	0 ExN2	GRM3
KHDRBS2	0	1.13401443	0.985	0.891	0 ExN2	KHDRBS2
SLC38A11	0	1.1321294	0.688	0.208	0 ExN2	SLC38A11
PTPRK	0	1.12016363	0.964	0.57	0 ExN2	PTPRK
AL117329.11	0	1.11155679	0.903	0.428	0 ExN2	AL117329.1
FSTL4	0	1.10319577	0.954	0.619	0 ExN2	FSTL4
CASC15	0	1.10061401	0.782	0.496	0 ExN2	CASC15
LINC01414	0	1.09958274	0.735	0.43	0 ExN2	LINC01414
PLCXD3	0	1.07603705	0.744	0.266	0 ExN2	PLCXD3
AC073365.11	0	1.06182229	0.75	0.345	0 ExN2	AC073365.1
AC019211.1	0	1.0585814	0.764	0.31	0 ExN2	AC019211.1
GABRG1	0	1.04388121	0.565	0.089	0 ExN2	GABRG1
RORA	0	1.04265156	0.987	0.961	0 ExN2	RORA
MIR31HG	0	1.02757174	0.605	0.168	0 ExN2	MIR31HG
AP003066.1	0	1.02259223	0.369	0.077	0 ExN2	AP003066.1
AC092422.1	0	1.01584067	0.695	0.243	0 ExN2	AC092422.1
SLC35F3	0	0.98550934	0.94	0.752	0 ExN2	SLC35F3
GAB1	0	0.98258849	0.866	0.516	0 ExN2	GAB1
TRHDE	0	0.98032836	0.869	0.484	0 ExN2	TRHDE
LHFPL6	0	0.97741479	0.819	0.382	0 ExN2	LHFPL6
AC067956.1	0	0.95731461	0.709	0.286	0 ExN2	AC067956.1
EDIL3	0	0.93404473	0.944	0.709	0 ExN2	EDIL3
SCN1A-AS1	0	0.93240226	0.591	0.234	0 ExN2	SCN1A-AS1
MTHFD2L	0	0.88776587	0.65	0.334	0 ExN2	MTHFD2L
AC246817.1	0	0.88741848	0.447	0.109	0 ExN2	AC246817.1
LINC01202	0	0.88357461	0.516	0.123	0 ExN2	LINC01202
EFNA5	0	0.88168875	0.965	0.781	0 ExN2	EFNA5
SATB1-AS1	0	0.87401156	0.741	0.407	0 ExN2	SATB1-AS1
KHDRBS3	0	0.87227686	0.963	0.78	0 ExN2	KHDRBS3
CTNNA2	0	0.87153507	0.994	0.954	0 ExN2	CTNNA2
FAM13A	0	0.86043827	0.847	0.578	0 ExN2	FAM13A
SLC5A4-AS1	0	0.85718309	0.742	0.381	0 ExN2	SLC5A4-AS1
OLFM3	0	0.85374043	0.94	0.692	0 ExN2	OLFM3
KCND3	0	0.84871285	0.941	0.816	0 ExN2	KCND3
AC109466.1	0	0.81891336	0.56	0.263	0 ExN2	AC109466.1
IQCJ-SCHIP1	0	0.81643386	0.993	0.819	0 ExN2	IQCJ-SCHIP1
NRGN1	0	0.81376253	0.83	0.549	0 ExN2	NRGN
LINC01721	0	0.8090192	0.351	0.029	0 ExN2	LINC01721
RALYL	0	0.78174177	0.991	0.801	0 ExN2	RALYL
KIF16B	0	0.77940769	0.776	0.516	0 ExN2	KIF16B
FOXP1	0	0.7757103	0.956	0.806	0 ExN2	FOXP1
CARMIL1	0	0.76217466	0.862	0.597	0 ExN2	CARMIL1
CAMK1D	0	0.75991851	0.974	0.849	0 ExN2	CAMK1D
BMPER	0	0.74949283	0.845	0.594	0 ExN2	BMPER
AL445250.1	0	0.74723971	0.615	0.315	0 ExN2	AL445250.1
LMO4	0	0.74544844	0.787	0.504	0 ExN2	LMO4
AC073578.2	0	0.74363007	0.4	0.046	0 ExN2	AC073578.2
LINC01821	0	0.7419755	0.496	0.186	0 ExN2	LINC01821
SATB2	0	0.74117999	0.904	0.544	0 ExN2	SATB2

EPHA41	0	0.7362049	0.889	0.657	0	ExN2	EPHA4
PTPRD	0	0.72436151	0.997	0.961	0	ExN2	PTPRD
UBE2E3	0	0.72168424	0.761	0.53	0	ExN2	UBE2E3
LINC02389	0	0.71982724	0.72	0.449	0	ExN2	LINC02389
SPATS2L	0	0.71955785	0.861	0.636	0	ExN2	SPATS2L
SOX5	0	0.7074669	0.921	0.645	0	ExN2	SOX5
AC107223.11	0	0.69992701	0.762	0.542	0	ExN2	AC107223.1
SEMA3A	0	0.69446307	0.543	0.177	0	ExN2	SEMA3A
DPY19L1	0	0.69291996	0.655	0.323	0	ExN2	DPY19L1
HECW1	0	0.68964915	0.959	0.82	0	ExN2	HECW1
SPOCK1	0	0.68530542	0.962	0.728	0	ExN2	SPOCK1
LDB21	0	0.68110735	0.98	0.743	0	ExN2	LDB2
TSHZ3	0	0.68099509	0.715	0.419	0	ExN2	TSHZ3
AC113383.1	0	0.68029845	0.583	0.295	0	ExN2	AC113383.1
CCDC3	0	0.67295995	0.841	0.629	0	ExN2	CCDC3
EPHA3	0	0.67211762	0.694	0.395	0	ExN2	EPHA3
PTK7	0	0.67069333	0.467	0.102	0	ExN2	PTK7
AC087883.2	0	0.6702455	0.341	0.049	0	ExN2	AC087883.2
MSC-AS1	0	0.66992206	0.504	0.202	0	ExN2	MSC-AS1
SLIT1	0	0.66741703	0.819	0.571	0	ExN2	SLIT1
CFAP221	0	0.66087307	0.652	0.39	0	ExN2	CFAP221
CNTN5	0	0.65265615	0.964	0.801	0	ExN2	CNTN5
VAV3	0	0.64441204	0.376	0.125	0	ExN2	VAV3
PPP3CA1	0	0.64435988	0.982	0.909	0	ExN2	PPP3CA
TDO2	0	0.63849702	0.436	0.104	0	ExN2	TDO2
BRINP3	0	0.63683018	0.793	0.465	0	ExN2	BRINP3
PAPSS2	0	0.63104984	0.443	0.112	0	ExN2	PAPSS2
ARAP21	0	0.62329682	0.822	0.582	0	ExN2	ARAP2
CHSY3	0	0.61753047	0.953	0.824	0	ExN2	CHSY3
RFTN11	0	0.61708552	0.756	0.453	0	ExN2	RFTN1
DPF3	0	0.6148935	0.609	0.251	0	ExN2	DPF3
LY86-AS11	0	0.61214998	0.791	0.455	0	ExN2	LY86-AS1
PPP2R2B	0	0.60838809	0.989	0.953	0	ExN2	PPP2R2B
NEO1	0	0.6032236	0.777	0.576	0	ExN2	NEO1
LAMA4	0	0.59884282	0.418	0.094	0	ExN2	LAMA4
NUAK1	0	0.59571966	0.778	0.578	0	ExN2	NUAK1
SLC24A2	0	0.59561236	0.968	0.821	0	ExN2	SLC24A2
FAP	0	0.59549141	0.401	0.096	0	ExN2	FAP
MLLT3	0	0.59408338	0.914	0.81	0	ExN2	MLLT3
MARCH1	0	0.59328673	0.955	0.739	0	ExN2	1-Mar
SND1	0	0.59218058	0.835	0.684	0	ExN2	SND1
MROH7	0	0.5912464	0.481	0.187	0	ExN2	MROH7
NELL2	0	0.57763334	0.952	0.774	0	ExN2	NELL2
AC093843.1	0	0.57577038	0.475	0.194	0	ExN2	AC093843.1
OPCML	0	0.57478616	0.997	0.987	0	ExN2	OPCML
MEGF10	0	0.5741023	0.366	0.071	0	ExN2	MEGF10
MBNL2	0	0.57408127	0.924	0.75	0	ExN2	MBNL2
NKAIN2	0	0.57216929	0.987	0.824	0	ExN2	NKAIN2
SCN1B	0	0.57014797	0.503	0.242	0	ExN2	SCN1B
CEMIP	0	0.56799263	0.665	0.384	0	ExN2	CEMIP
LINC02296	0	0.5582652	0.371	0.145	0	ExN2	LINC02296
RHOBTB2	0	0.55701765	0.536	0.295	0	ExN2	RHOBTB2
TLE4	0	0.55609678	0.708	0.391	0	ExN2	TLE4
COL6A1	0	0.55246256	0.496	0.221	0	ExN2	COL6A1
ANO3	0	0.55241478	0.685	0.37	0	ExN2	ANO3
DLG1	0	0.54480181	0.9	0.763	0	ExN2	DLG1
ACOT11	0	0.54368152	0.491	0.198	0	ExN2	ACOT11
LINGO2	0	0.54063308	0.972	0.81	0	ExN2	LINGO2
ITPK1	0	0.54055623	0.685	0.444	0	ExN2	ITPK1
GRM7	0	0.53777563	0.974	0.852	0	ExN2	GRM7
MIR181A1HC	0	0.53678715	0.687	0.421	0	ExN2	MIR181A1HC
ATP8B1	0	0.52616439	0.512	0.238	0	ExN2	ATP8B1
CXXC4	0	0.52556102	0.515	0.249	0	ExN2	CXXC4

MARCKS	0	0.52522736	0.504	0.265	0	ExN2	MARCKS
CACNB4	0	0.52232534	0.942	0.845	0	ExN2	CACNB4
DOCK41	0	0.51588455	0.936	0.816	0	ExN2	DOCK4
SNTG1	0	0.51317009	0.982	0.938	0	ExN2	SNTG1
VIPR2	0	0.50896995	0.361	0.057	0	ExN2	VIPR2
INPP4B	0	0.50762056	0.923	0.737	0	ExN2	INPP4B
PTPN14	0	0.50517266	0.475	0.211	0	ExN2	PTPN14
MET	0	0.50344176	0.345	0.075	0	ExN2	MET
LRRK1	0	0.50322472	0.639	0.3	0	ExN2	LRRK1
HS3ST2	0	0.49316342	0.562	0.235	0	ExN2	HS3ST2
CDH121	0	0.48932417	0.962	0.666	0	ExN2	CDH12
BCAR3	0	0.48739607	0.476	0.22	0	ExN2	BCAR3
PLEKHG1	0	0.48663558	0.397	0.132	0	ExN2	PLEKHG1
GSG1L1	0	0.48501023	0.555	0.282	0	ExN2	GSG1L
AC007614.1	0	0.4822139	0.299	0.052	0	ExN2	AC007614.1
TNNT2	0	0.47725534	0.377	0.102	0	ExN2	TNNT2
ESR1	0	0.47675561	0.304	0.085	0	ExN2	ESR1
TANC1	0	0.46462017	0.298	0.099	0	ExN2	TANC1
SGCG	0	0.4623363	0.285	0.044	0	ExN2	SGCG
ATRN11	0	0.45744485	0.984	0.925	0	ExN2	ATRN11
AL109930.1	0	0.43851793	0.327	0.068	0	ExN2	AL109930.1
NRXN1	0	0.43174134	0.996	0.986	0	ExN2	NRXN1
UNC5D	0	0.42820049	0.964	0.817	0	ExN2	UNC5D
LOXHD1	0	0.42583454	0.258	0.05	0	ExN2	LOXHD1
GOLIM4	0	0.42108186	0.427	0.138	0	ExN2	GOLIM4
AC104689.2	0	0.41011993	0.258	0.045	0	ExN2	AC104689.2
TPBG	0	0.40899451	0.263	0.02	0	ExN2	TPBG
LRMP	0	0.40633982	0.375	0.129	0	ExN2	LRMP
CNTNAP4	0	0.3969783	0.844	0.557	0	ExN2	CNTNAP4
PTGFRN	0	0.3933647	0.37	0.147	0	ExN2	PTGFRN
MAGI2	0	0.39006581	0.994	0.986	0	ExN2	MAGI2
CCDC39	0	0.38389431	0.293	0.098	0	ExN2	CCDC39
SLC22A9	0	0.35087983	0.305	0.107	0	ExN2	SLC22A9
RORB-AS1	0	0.34731631	0.27	0.056	0	ExN2	RORB-AS1
BARD1	0	0.34233336	0.275	0.066	0	ExN2	BARD1
SLCO2A1	0	0.32388773	0.255	0.071	0	ExN2	SLCO2A1
AC068051.1	0	0.32115207	0.253	0.077	0	ExN2	AC068051.1
POU3F2	0	0.31448289	0.274	0.069	0	ExN2	POU3F2
MERTK	0	0.2991418	0.279	0.092	0	ExN2	MERTK
COL5A1	0	0.28179446	0.278	0.091	0	ExN2	COL5A1
SCARA3	1.86E-307	0.29122543	0.261	0.082	7.11E-303	ExN2	SCARA3
COL5A2	4.26E-307	0.31504088	0.335	0.121	1.63E-302	ExN2	COL5A2
STXBP1	5.76E-303	0.50856659	0.899	0.843	2.20E-298	ExN2	STXBP1
PPFIBP1	1.09E-300	0.51949566	0.843	0.644	4.16E-296	ExN2	PPFIBP1
NOVA11	1.45E-298	0.48456258	0.897	0.804	5.54E-294	ExN2	NOVA1
NPTX11	3.96E-298	0.54101922	0.721	0.462	1.51E-293	ExN2	NPTX1
LINGO1	4.57E-298	0.5600666	0.709	0.484	1.75E-293	ExN2	LINGO1
IPCEF1	1.66E-296	0.49545209	0.636	0.379	6.36E-292	ExN2	IPCEF1
NAPEPLD	1.41E-295	0.51792974	0.691	0.475	5.40E-291	ExN2	NAPEPLD
KHDRBS2-OT	3.17E-295	0.6507375	0.657	0.433	1.21E-290	ExN2	KHDRBS2-OT
EPB41L4A	2.12E-286	0.34673174	0.357	0.144	8.11E-282	ExN2	EPB41L4A
RNF144A	3.38E-285	0.4965418	0.875	0.728	1.29E-280	ExN2	RNF144A
RFPL2	6.91E-284	0.36075557	0.34	0.138	2.64E-279	ExN2	RFPL2
MIAT1	1.09E-282	0.46280823	0.957	0.875	4.16E-278	ExN2	MIAT
STXBP5-AS1	3.65E-282	0.55109187	0.803	0.567	1.40E-277	ExN2	STXBP5-AS1
KCNH11	6.89E-282	0.52778776	0.943	0.821	2.63E-277	ExN2	KCNH1
IL1RAP	1.50E-281	0.44458929	0.554	0.303	5.74E-277	ExN2	IL1RAP
LINC023061	1.06E-277	0.42876454	0.509	0.241	4.05E-273	ExN2	LINC02306
IGDCC3	2.96E-277	0.29441901	0.296	0.108	1.13E-272	ExN2	IGDCC3
KLHL32	6.99E-276	0.52342174	0.837	0.672	2.67E-271	ExN2	KLHL32
UBE2E21	6.76E-275	0.43785591	0.953	0.87	2.59E-270	ExN2	UBE2E2
RASSF4	1.78E-273	0.36044015	0.436	0.209	6.79E-269	ExN2	RASSF4
AGBL4	1.02E-272	0.39930561	0.978	0.929	3.91E-268	ExN2	AGBL4

TESK2	4.46E-270	0.37551212	0.346	0.144	1.70E-265 ExN2	TESK2
LRFN51	7.13E-269	0.44036287	0.963	0.885	2.72E-264 ExN2	LRFN5
FRMD5	2.19E-268	0.45421743	0.96	0.855	8.37E-264 ExN2	FRMD5
CNKSR21	3.57E-268	0.46108789	0.941	0.809	1.36E-263 ExN2	CNKSR2
OLFM11	2.93E-266	0.52068951	0.777	0.602	1.12E-261 ExN2	OLFM1
SPAG16	2.10E-265	0.61394414	0.815	0.673	8.04E-261 ExN2	SPAG16
PAG1	2.77E-264	0.48642346	0.589	0.352	1.06E-259 ExN2	PAG1
TGFBR1	1.63E-262	0.25370584	0.262	0.092	6.25E-258 ExN2	TGFBR1
GLIS1	3.74E-261	0.53371504	0.672	0.459	1.43E-256 ExN2	GLIS1
AC008415.1	6.00E-261	0.66939736	0.408	0.182	2.29E-256 ExN2	AC008415.1
TRPC5	4.11E-260	0.41410998	0.564	0.306	1.57E-255 ExN2	TRPC5
ST3GAL6	1.60E-259	0.49375776	0.637	0.414	6.11E-255 ExN2	ST3GAL6
PLXDC2	9.54E-259	0.48584476	0.843	0.588	3.65E-254 ExN2	PLXDC2
KCNIP41	5.14E-258	0.46811982	0.999	0.932	1.96E-253 ExN2	KCNIP4
NWD21	4.85E-257	0.46373266	0.714	0.444	1.85E-252 ExN2	NWD2
TBL1X	9.50E-257	0.31460096	0.33	0.133	3.63E-252 ExN2	TBL1X
ENOX1	2.18E-255	0.37699081	0.95	0.841	8.34E-251 ExN2	ENOX1
SNED11	1.36E-254	0.45295617	0.676	0.421	5.18E-250 ExN2	SNED1
SLC17A71	3.93E-253	0.48552848	0.658	0.417	1.50E-248 ExN2	SLC17A7
FAM171A1	3.55E-252	0.50153396	0.822	0.664	1.36E-247 ExN2	FAM171A1
CPNE9	4.80E-252	0.3599444	0.381	0.178	1.84E-247 ExN2	CPNE9
AC025809.1	1.08E-251	0.44014211	0.527	0.3	4.13E-247 ExN2	AC025809.1
PDE1A1	1.26E-251	0.42552063	0.956	0.654	4.80E-247 ExN2	PDE1A
AC005906.2	1.53E-251	0.53877421	0.495	0.276	5.85E-247 ExN2	AC005906.2
EPB41	1.92E-250	0.4825655	0.671	0.435	7.33E-246 ExN2	EPB41
SCN1A	1.21E-249	0.45395904	0.906	0.837	4.62E-245 ExN2	SCN1A
R3HDM11	4.23E-249	0.39655622	0.968	0.886	1.62E-244 ExN2	R3HDM1
CDK18	1.53E-248	0.39463536	0.377	0.171	5.85E-244 ExN2	CDK18
MLIP1	1.97E-248	0.52562711	0.758	0.492	7.51E-244 ExN2	MLIP
PTPRT	2.78E-246	0.30929482	0.922	0.661	1.06E-241 ExN2	PTPRT
CTNNA3	7.62E-246	0.91866787	0.64	0.437	2.91E-241 ExN2	CTNNA3
ZBTB7C1	2.67E-243	0.50110124	0.494	0.266	1.02E-238 ExN2	ZBTB7C
LRRN3	5.66E-242	0.45041603	0.539	0.317	2.16E-237 ExN2	LRRN3
RAPGEF21	1.52E-241	0.40156833	0.929	0.851	5.81E-237 ExN2	RAPGEF2
CPNE5	7.90E-241	0.47552836	0.63	0.41	3.02E-236 ExN2	CPNE5
TMEM72-AS:	1.93E-239	0.48162471	0.542	0.33	7.37E-235 ExN2	TMEM72-AS:
PDZRN4	7.67E-239	0.28149039	0.66	0.372	2.93E-234 ExN2	PDZRN4
CDHR3	1.15E-238	0.41286043	0.606	0.357	4.41E-234 ExN2	CDHR3
MAN2A1	1.76E-236	0.58771076	0.769	0.573	6.72E-232 ExN2	MAN2A1
RPS6KA5	6.68E-235	0.48108902	0.771	0.582	2.55E-230 ExN2	RPS6KA5
PELI2	1.19E-234	0.39880428	0.499	0.264	4.57E-230 ExN2	PELI2
MGAT5B1	2.69E-233	0.45086049	0.681	0.458	1.03E-228 ExN2	MGAT5B
KCNQ3	1.18E-232	0.41784237	0.959	0.896	4.50E-228 ExN2	KCNQ3
MRPS30-DT	2.60E-232	0.50234848	0.648	0.444	9.96E-228 ExN2	MRPS30-DT
ADGRB3	2.57E-231	0.30929379	0.997	0.992	9.82E-227 ExN2	ADGRB3
PLXND1	5.05E-230	0.2983768	0.305	0.13	1.93E-225 ExN2	PLXND1
ATG7	2.21E-229	0.4535417	0.871	0.768	8.45E-225 ExN2	ATG7
DNAJC1	2.68E-228	0.48112662	0.729	0.544	1.02E-223 ExN2	DNAJC1
EPB41L21	6.38E-228	0.42095443	0.874	0.697	2.44E-223 ExN2	EPB41L2
KIAA0319	3.17E-226	0.48943908	0.72	0.546	1.21E-221 ExN2	KIAA0319
SLC8A1	8.24E-226	0.4077896	0.978	0.85	3.15E-221 ExN2	SLC8A1
AL133166.1	6.65E-225	0.4700962	0.4	0.205	2.54E-220 ExN2	AL133166.1
GUCY1A21	2.46E-224	0.44224159	0.862	0.719	9.40E-220 ExN2	GUCY1A2
DGKH	1.38E-223	0.48668607	0.572	0.364	5.26E-219 ExN2	DGKH
MYO5C1	2.34E-223	0.38752986	0.473	0.261	8.95E-219 ExN2	MYO5C
PTPN3	7.20E-223	0.38815974	0.426	0.224	2.75E-218 ExN2	PTPN3
TRHDE-AS1	5.29E-222	0.32390225	0.375	0.179	2.02E-217 ExN2	TRHDE-AS1
CTNNB1	6.82E-222	0.48883838	0.657	0.483	2.61E-217 ExN2	CTNNB1
MICAL2	6.97E-221	0.45009968	0.854	0.722	2.67E-216 ExN2	MICAL2
UBE3D	7.62E-221	0.50453506	0.719	0.55	2.91E-216 ExN2	UBE3D
GREM2	1.73E-217	0.34703712	0.342	0.154	6.60E-213 ExN2	GREM2
SH3GL21	2.85E-217	0.44949022	0.912	0.73	1.09E-212 ExN2	SH3GL2
ZMYND8	4.97E-217	0.43414242	0.863	0.769	1.90E-212 ExN2	ZMYND8

DUXAP8	3.55E-216	0.26762361	0.259	0.101	1.36E-211	ExN2	DUXAP8
USP43	4.18E-215	0.39235142	0.444	0.242	1.60E-210	ExN2	USP43
ALS2	2.73E-214	0.47357357	0.671	0.508	1.04E-209	ExN2	ALS2
ADGRL21	2.39E-213	0.39248373	0.953	0.847	9.14E-209	ExN2	ADGRL2
AC090578.1	1.98E-211	0.5744964	0.741	0.545	7.58E-207	ExN2	AC090578.1
AC103855.2	3.79E-211	0.43296109	0.47	0.266	1.45E-206	ExN2	AC103855.2
RSPO2	6.88E-206	0.36663461	0.623	0.383	2.63E-201	ExN2	RSPO2
NEK11	2.58E-204	0.46938081	0.611	0.421	9.88E-200	ExN2	NEK11
LYPD6B	4.69E-204	0.29098648	0.358	0.163	1.79E-199	ExN2	LYPD6B
GLDN	1.28E-201	0.35249265	0.419	0.218	4.89E-197	ExN2	GLDN
SORCS1	1.87E-201	0.34087146	0.907	0.654	7.16E-197	ExN2	SORCS1
CXXC5	7.38E-200	0.39055931	0.541	0.337	2.82E-195	ExN2	CXXC5
COBL	1.01E-199	0.38949113	0.899	0.735	3.86E-195	ExN2	COBL
GPATCH8	1.18E-198	0.38663099	0.896	0.83	4.52E-194	ExN2	GPATCH8
RAP1GAP2	1.28E-196	0.45509382	0.804	0.622	4.88E-192	ExN2	RAP1GAP2
THRB	1.90E-196	0.36633536	0.962	0.912	7.27E-192	ExN2	THRB
OSTF1	6.48E-196	0.34563729	0.421	0.229	2.48E-191	ExN2	OSTF1
PCLO	2.60E-195	0.3444284	0.96	0.92	9.95E-191	ExN2	PCLO
KIAA1958	3.07E-195	0.40835692	0.628	0.412	1.17E-190	ExN2	KIAA1958
ST8SIA4	6.37E-195	0.28706837	0.352	0.167	2.43E-190	ExN2	ST8SIA4
RHBDL3	2.76E-192	0.44155512	0.594	0.378	1.05E-187	ExN2	RHBDL3
TSC22D3	7.18E-188	0.31347873	0.35	0.175	2.74E-183	ExN2	TSC22D3
STAMBPL1	8.11E-188	0.44581721	0.673	0.5	3.10E-183	ExN2	STAMBPL1
VPS41	1.05E-187	0.43228007	0.723	0.579	4.00E-183	ExN2	VPS41
DGKI	3.10E-186	0.33276566	0.952	0.887	1.18E-181	ExN2	DGKI
TSBP1-AS1	1.42E-185	0.40552206	0.476	0.275	5.42E-181	ExN2	TSBP1-AS1
GABRB31	7.48E-185	0.33913812	0.953	0.896	2.86E-180	ExN2	GABRB3
FOCAD	1.84E-183	0.39599772	0.883	0.795	7.02E-179	ExN2	FOCAD
LINC00923	8.59E-183	0.50507399	0.433	0.238	3.29E-178	ExN2	LINC00923
PTH2R1	4.27E-182	0.32785922	0.451	0.244	1.63E-177	ExN2	PTH2R
CACNA1G	1.11E-180	0.30301801	0.388	0.205	4.26E-176	ExN2	CACNA1G
SATB1	1.38E-180	0.37623266	0.513	0.323	5.29E-176	ExN2	SATB1
MEF2C	3.42E-179	0.31429794	0.971	0.935	1.31E-174	ExN2	MEF2C
SPIDR	2.36E-178	0.35420583	0.917	0.857	9.04E-174	ExN2	SPIDR
CREG21	2.29E-177	0.42299877	0.665	0.5	8.77E-173	ExN2	CREG2
AFF1	3.68E-174	0.37297244	0.599	0.396	1.41E-169	ExN2	AFF1
BACH2	6.14E-174	0.38597355	0.764	0.597	2.35E-169	ExN2	BACH2
SGPL1	8.24E-174	0.33703264	0.47	0.288	3.15E-169	ExN2	SGPL1
ANKS1B	1.04E-172	0.2610173	0.995	0.986	3.98E-168	ExN2	ANKS1B
AC093523.1	1.23E-171	0.45102916	0.598	0.402	4.70E-167	ExN2	AC093523.1
CAMK2A1	2.62E-171	0.33473022	0.907	0.785	1.00E-166	ExN2	CAMK2A
LINC02609	1.28E-169	0.29672607	0.3	0.143	4.88E-165	ExN2	LINC02609
RTN1	1.71E-169	0.33044894	0.93	0.884	6.53E-165	ExN2	RTN1
ZNF3651	2.76E-169	0.45722364	0.645	0.452	1.05E-164	ExN2	ZNF365
EPHA5	6.02E-167	0.43515275	0.751	0.585	2.30E-162	ExN2	EPHA5
CABP11	1.24E-165	0.36154683	0.868	0.689	4.72E-161	ExN2	CABP1
AL355472.2	2.49E-165	0.39344797	0.435	0.26	9.52E-161	ExN2	AL355472.2
SYTL21	2.58E-165	0.38551334	0.653	0.467	9.86E-161	ExN2	SYTL2
ZNF385B	2.99E-164	0.34304168	0.937	0.809	1.14E-159	ExN2	ZNF385B
PPP1R16B1	3.42E-164	0.38776247	0.794	0.633	1.31E-159	ExN2	PPP1R16B
SLC44A5	6.53E-164	0.35268154	0.835	0.681	2.49E-159	ExN2	SLC44A5
CSMD2	7.64E-164	0.38859689	0.875	0.761	2.92E-159	ExN2	CSMD2
PHYHIP1	3.15E-163	0.41747196	0.645	0.468	1.21E-158	ExN2	PHYHIP
SERPINI1	3.69E-163	0.36876794	0.799	0.667	1.41E-158	ExN2	SERPINI1
CPNE8	3.68E-162	0.33707925	0.684	0.458	1.41E-157	ExN2	CPNE8
CA111	3.92E-162	0.38728471	0.58	0.409	1.50E-157	ExN2	CA11
FXYD71	9.88E-160	0.38284106	0.562	0.386	3.78E-155	ExN2	FXYD7
SSBP3	5.81E-158	0.39605043	0.791	0.667	2.22E-153	ExN2	SSBP3
TSPAN5	6.55E-157	0.3613739	0.927	0.835	2.50E-152	ExN2	TSPAN5
LINC00882	1.21E-156	0.42974125	0.929	0.871	4.64E-152	ExN2	LINC00882
RYR2	1.64E-155	0.27896205	0.984	0.923	6.26E-151	ExN2	RYR2
SPARCL1	1.91E-155	0.35755955	0.803	0.653	7.30E-151	ExN2	SPARCL1
LPGAT1	2.38E-155	0.40913464	0.675	0.533	9.10E-151	ExN2	LPGAT1

CCDC175	2.82E-154	0.27310459	0.303	0.152	1.08E-149	ExN2	CCDC175
CAMK2N11	8.05E-154	0.38489731	0.782	0.644	3.08E-149	ExN2	CAMK2N1
SLC35F1	5.05E-153	0.37351945	0.865	0.694	1.93E-148	ExN2	SLC35F1
RETREG1	6.45E-152	0.37449822	0.725	0.565	2.46E-147	ExN2	RETREG1
ADORA1	1.98E-151	0.30277153	0.351	0.192	7.58E-147	ExN2	ADORA1
ATP8A1	1.99E-150	0.32714729	0.909	0.846	7.62E-146	ExN2	ATP8A1
JCAD	4.54E-148	0.2633339	0.361	0.2	1.74E-143	ExN2	JCAD
MPPED21	8.74E-148	0.33456143	0.682	0.472	3.34E-143	ExN2	MPPED2
DPY19L3	9.14E-146	0.29562913	0.434	0.263	3.49E-141	ExN2	DPY19L3
TPK1	4.77E-145	0.42401302	0.592	0.429	1.82E-140	ExN2	TPK1
FARP1	2.39E-144	0.35096178	0.785	0.646	9.14E-140	ExN2	FARP1
KBTBD12	1.02E-143	0.31524164	0.417	0.248	3.90E-139	ExN2	KBTBD12
PPFIA41	1.12E-143	0.39514518	0.686	0.539	4.27E-139	ExN2	PPFIA4
HRH1	1.69E-143	0.29278537	0.38	0.217	6.44E-139	ExN2	HRH1
SUN2	2.79E-143	0.27152518	0.345	0.189	1.07E-138	ExN2	SUN2
KIAA0930	4.55E-142	0.4090914	0.73	0.603	1.74E-137	ExN2	KIAA0930
PDZRN3	1.19E-139	0.3294356	0.895	0.75	4.54E-135	ExN2	PDZRN3
C1orf115	5.43E-139	0.25777712	0.335	0.184	2.08E-134	ExN2	C1orf115
DLG5	2.47E-138	0.30014651	0.469	0.298	9.43E-134	ExN2	DLG5
MB21D2	1.10E-137	0.36399188	0.55	0.381	4.20E-133	ExN2	MB21D2
TTYH1	1.55E-137	0.27878301	0.364	0.207	5.91E-133	ExN2	TTYH1
CCNG2	1.15E-136	0.3589276	0.418	0.252	4.38E-132	ExN2	CCNG2
DIRC31	1.61E-136	0.36651532	0.71	0.529	6.14E-132	ExN2	DIRC3
TBR1	2.22E-136	0.29127753	0.384	0.225	8.50E-132	ExN2	TBR1
AHR	2.24E-136	0.29878852	0.406	0.247	8.56E-132	ExN2	AHR
SLC6A71	2.26E-136	0.31220873	0.481	0.309	8.62E-132	ExN2	SLC6A7
AC103855.3	3.77E-135	0.28265518	0.293	0.151	1.44E-130	ExN2	AC103855.3
BASP1-AS1	7.45E-135	0.34509911	0.816	0.644	2.85E-130	ExN2	BASP1-AS1
PFN2	6.79E-134	0.33951338	0.437	0.282	2.60E-129	ExN2	PFN2
MMP16	7.82E-133	0.30960668	0.919	0.788	2.99E-128	ExN2	MMP16
PCDH9	8.26E-130	0.29268803	0.997	0.964	3.16E-125	ExN2	PCDH9
CCDC102B	1.04E-129	0.37249983	0.518	0.357	3.99E-125	ExN2	CCDC102B
KCNIP4-IT11	1.42E-129	0.3463654	0.684	0.485	5.44E-125	ExN2	KCNIP4-IT1
CREB5	8.91E-129	0.43263136	0.415	0.258	3.40E-124	ExN2	CREB5
C5orf30	1.79E-128	0.31478392	0.45	0.294	6.83E-124	ExN2	C5orf30
MAP4K4	1.30E-127	0.36566426	0.807	0.715	4.97E-123	ExN2	MAP4K4
MAGI3	1.31E-127	0.30165375	0.802	0.677	5.00E-123	ExN2	MAGI3
KCTD8	4.07E-127	0.30812713	0.816	0.644	1.55E-122	ExN2	KCTD8
NMT2	1.04E-126	0.34693645	0.633	0.482	3.97E-122	ExN2	NMT2
AC110614.11	3.68E-126	0.30907245	0.321	0.173	1.41E-121	ExN2	AC110614.1
TCF7L2	7.75E-126	0.34031124	0.422	0.265	2.96E-121	ExN2	TCF7L2
STOX2	2.72E-124	0.31980155	0.859	0.791	1.04E-119	ExN2	STOX2
MCHR21	2.26E-123	0.25231005	0.431	0.261	8.62E-119	ExN2	MCHR2
TLCD4	5.16E-123	0.30417267	0.418	0.269	1.97E-118	ExN2	TLCD4
SPEF2	1.35E-121	0.32989912	0.565	0.41	5.16E-117	ExN2	SPEF2
MINDY4	2.63E-121	0.33369283	0.44	0.286	1.00E-116	ExN2	MINDY4
ADAMTS19	5.90E-121	0.27822843	0.536	0.352	2.25E-116	ExN2	ADAMTS19
AQP4-AS11	5.95E-121	0.32525554	0.687	0.485	2.27E-116	ExN2	AQP4-AS1
MSRB3	1.01E-120	0.32099159	0.481	0.32	3.86E-116	ExN2	MSRB3
RCL1	1.59E-119	0.30471586	0.46	0.304	6.08E-115	ExN2	RCL1
SORL1	2.29E-119	0.31753993	0.785	0.669	8.76E-115	ExN2	SORL1
STX1A	4.36E-119	0.30890677	0.517	0.363	1.67E-114	ExN2	STX1A
CEP112	1.80E-118	0.34439027	0.723	0.581	6.89E-114	ExN2	CEP112
JAKMIP2	2.94E-118	0.30896665	0.892	0.83	1.13E-113	ExN2	JAKMIP2
NME9	3.39E-118	0.34667536	0.478	0.323	1.30E-113	ExN2	NME9
LRRN1	4.20E-118	0.30456607	0.506	0.344	1.60E-113	ExN2	LRRN1
CHGA	2.17E-117	0.32521083	0.507	0.358	8.28E-113	ExN2	CHGA
FHL21	2.39E-117	0.26501961	0.407	0.255	9.13E-113	ExN2	FHL2
SEC14L51	5.27E-117	0.29632761	0.611	0.436	2.02E-112	ExN2	SEC14L5
AC124852.11	5.51E-117	0.34820932	0.628	0.465	2.11E-112	ExN2	AC124852.1
ELMO1	6.28E-117	0.46728639	0.791	0.643	2.40E-112	ExN2	ELMO1
AC010280.1	8.29E-117	0.33559627	0.403	0.253	3.17E-112	ExN2	AC010280.1
PALM2-AKAF	4.12E-116	0.36278818	0.795	0.694	1.57E-111	ExN2	PALM2-AKAP

AC013652.11	1.13E-114	0.37695631	0.479	0.324	4.32E-110 ExN2	AC013652.1
VPS13D	1.16E-114	0.30208851	0.833	0.744	4.44E-110 ExN2	VPS13D
KCNA2	7.90E-114	0.3017485	0.479	0.329	3.02E-109 ExN2	KCNA2
SEC16B	1.17E-112	0.2677638	0.327	0.195	4.48E-108 ExN2	SEC16B
PRKCB1	1.18E-112	0.25871277	0.958	0.86	4.50E-108 ExN2	PRKCB
DIPK2A	3.60E-112	0.30797603	0.505	0.347	1.37E-107 ExN2	DIPK2A
GTDC1	4.48E-112	0.32151458	0.866	0.785	1.71E-107 ExN2	GTDC1
KIAA1549	1.08E-111	0.32610264	0.646	0.514	4.13E-107 ExN2	KIAA1549
MT-ND1	1.65E-111	0.53456759	0.864	0.773	6.31E-107 ExN2	MT-ND1
CARNMT1	3.28E-111	0.28594512	0.466	0.321	1.26E-106 ExN2	CARNMT1
NPTXR1	5.41E-111	0.31056721	0.663	0.521	2.07E-106 ExN2	NPTXR
UNC13B	6.37E-111	0.26531113	0.53	0.369	2.43E-106 ExN2	UNC13B
SIK3	9.09E-110	0.35908933	0.903	0.856	3.47E-105 ExN2	SIK3
GAP43	1.55E-109	0.289157	0.687	0.525	5.92E-105 ExN2	GAP43
TACC1	1.76E-109	0.31445255	0.735	0.629	6.73E-105 ExN2	TACC1
MAMLD1	2.56E-109	0.28704037	0.447	0.295	9.80E-105 ExN2	MAMLD1
CCND3	2.63E-109	0.34649135	0.528	0.376	1.00E-104 ExN2	CCND3
AC124854.1	6.34E-109	0.37140452	0.482	0.333	2.42E-104 ExN2	AC124854.1
TM7SF3	1.67E-108	0.31191919	0.537	0.408	6.40E-104 ExN2	TM7SF3
SYT13	1.86E-108	0.28828966	0.494	0.35	7.13E-104 ExN2	SYT13
RIMS3	5.84E-108	0.30514521	0.54	0.396	2.23E-103 ExN2	RIMS3
BRINP11	3.60E-107	0.28346381	0.836	0.736	1.38E-102 ExN2	BRINP1
PREP	4.44E-107	0.30342323	0.574	0.425	1.70E-102 ExN2	PREP
AC007038.1	5.23E-107	0.2545324	0.318	0.187	2.00E-102 ExN2	AC007038.1
FLRT21	8.57E-107	0.27135373	0.94	0.825	3.28E-102 ExN2	FLRT2
MAGI2-AS3	1.28E-106	0.29729835	0.498	0.356	4.89E-102 ExN2	MAGI2-AS3
MRTFB1	6.64E-106	0.28688605	0.863	0.752	2.54E-101 ExN2	MRTFB
JAK2	1.98E-103	0.32297629	0.712	0.601	7.56E-99 ExN2	JAK2
B4GALNT3	3.78E-103	0.30474773	0.447	0.303	1.45E-98 ExN2	B4GALNT3
ARPP21	1.22E-102	0.27709624	0.959	0.748	4.68E-98 ExN2	ARPP21
PPP2R2C1	7.72E-102	0.28871192	0.889	0.793	2.95E-97 ExN2	PPP2R2C
SLC16A7	9.09E-102	0.33232654	0.711	0.596	3.47E-97 ExN2	SLC16A7
AMPH1	7.21E-101	0.26119792	0.873	0.807	2.75E-96 ExN2	AMPH
MSRA1	9.84E-101	0.25508793	0.961	0.903	3.76E-96 ExN2	MSRA
LNx11	1.49E-100	0.27798682	0.736	0.59	5.70E-96 ExN2	LNx1
IFT122	4.20E-100	0.28994718	0.535	0.399	1.60E-95 ExN2	IFT122
OPRD1	4.29E-100	0.25001803	0.408	0.262	1.64E-95 ExN2	OPRD1
FUT9	1.16E-99	0.27465769	0.885	0.81	4.45E-95 ExN2	FUT9
SH3GL3	3.04E-99	0.27936817	0.878	0.816	1.16E-94 ExN2	SH3GL3
SASH1	3.68E-99	0.28808002	0.5	0.342	1.41E-94 ExN2	SASH1
HTR2A1	4.64E-99	0.26610924	0.477	0.322	1.77E-94 ExN2	HTR2A
KIAA1549L1	7.59E-99	0.2657306	0.902	0.83	2.90E-94 ExN2	KIAA1549L
SNX30	8.13E-99	0.29018484	0.509	0.37	3.11E-94 ExN2	SNX30
SHROOM3	1.15E-98	0.25796031	0.441	0.285	4.38E-94 ExN2	SHROOM3
SMARCC1	1.02E-97	0.27519441	0.614	0.488	3.89E-93 ExN2	SMARCC1
STX8	1.37E-97	0.32052489	0.673	0.546	5.24E-93 ExN2	STX8
AL513166.1	1.85E-97	0.37661757	0.741	0.613	7.08E-93 ExN2	AL513166.1
SEPTIN9	8.91E-97	0.30956588	0.483	0.351	3.41E-92 ExN2	SEPTIN9
IQCA1	1.04E-96	0.26526663	0.489	0.344	3.99E-92 ExN2	IQCA1
NDFIP21	2.04E-96	0.28066753	0.651	0.501	7.80E-92 ExN2	NDFIP2
ZEB1	4.26E-96	0.29129865	0.855	0.755	1.63E-91 ExN2	ZEB1
SESN3	4.89E-96	0.31792597	0.721	0.623	1.87E-91 ExN2	SESN3
AC104806.2	4.90E-96	0.30768592	0.603	0.472	1.87E-91 ExN2	AC104806.2
LRRTM3	2.05E-95	0.28580083	0.916	0.824	7.85E-91 ExN2	LRRTM3
MT-CO1	1.46E-94	0.47684313	0.919	0.863	5.58E-90 ExN2	MT-CO1
CTNND1	3.29E-94	0.29513778	0.591	0.463	1.26E-89 ExN2	CTNND1
FHIT	5.86E-94	0.37195595	0.828	0.736	2.24E-89 ExN2	FHIT
ST8SIA1	6.41E-94	0.28047073	0.691	0.547	2.45E-89 ExN2	ST8SIA1
DLGAP1-AS4	1.15E-93	0.25687614	0.492	0.342	4.41E-89 ExN2	DLGAP1-AS4
ASPH	3.18E-93	0.30668645	0.697	0.591	1.22E-88 ExN2	ASPH
STMN1	2.07E-92	0.36169991	0.587	0.466	7.90E-88 ExN2	STMN1
LZTS31	1.79E-91	0.28106809	0.554	0.422	6.85E-87 ExN2	LZTS3
ST6GAL2	3.91E-91	0.25727438	0.527	0.379	1.49E-86 ExN2	ST6GAL2

LINC01252	2.76E-90	0.2844337	0.434	0.304	1.05E-85	ExN2	LINC01252
FANCC	1.48E-89	0.28677275	0.336	0.213	5.68E-85	ExN2	FANCC
ST7	2.97E-89	0.30480823	0.718	0.619	1.13E-84	ExN2	ST7
PDGFC	2.36E-88	0.25477966	0.41	0.27	9.03E-84	ExN2	PDGFC
NCDN1	2.17E-87	0.3153677	0.625	0.514	8.30E-83	ExN2	NCDN
MT-CO3	4.21E-87	0.39568383	0.905	0.844	1.61E-82	ExN2	MT-CO3
TNR	4.93E-87	0.25633944	0.893	0.793	1.89E-82	ExN2	TNR
COL26A11	6.84E-87	0.25318405	0.622	0.467	2.61E-82	ExN2	COL26A1
NFIC	7.30E-86	0.27581308	0.627	0.501	2.79E-81	ExN2	NFIC
LYST1	9.25E-86	0.25458441	0.793	0.718	3.54E-81	ExN2	LYST
MMP17	6.00E-85	0.26781897	0.547	0.417	2.29E-80	ExN2	MMP17
FNIP2	7.61E-85	0.25665875	0.721	0.605	2.91E-80	ExN2	FNIP2
CENPC	1.15E-84	0.28413905	0.672	0.564	4.38E-80	ExN2	CENPC
NCEH1	2.62E-84	0.27711718	0.62	0.501	1.00E-79	ExN2	NCEH1
AGAP3	7.99E-84	0.27706885	0.67	0.556	3.06E-79	ExN2	AGAP3
PRB2	9.66E-84	0.26955247	0.362	0.241	3.69E-79	ExN2	PRB2
PDP1	5.23E-83	0.25825498	0.441	0.316	2.00E-78	ExN2	PDP1
PDE10A	6.73E-83	0.37293091	0.743	0.671	2.57E-78	ExN2	PDE10A
CDYL21	6.91E-83	0.25168257	0.533	0.394	2.64E-78	ExN2	CDYL2
SMAP1	9.08E-83	0.30233569	0.72	0.619	3.47E-78	ExN2	SMAP1
RNF220	1.10E-82	0.69441071	0.358	0.242	4.19E-78	ExN2	RNF220
BASP1	1.19E-81	0.25660407	0.841	0.765	4.56E-77	ExN2	BASP1
AKT2	2.55E-80	0.25917765	0.552	0.432	9.74E-76	ExN2	AKT2
LINC00970	2.89E-80	0.2689854	0.531	0.394	1.11E-75	ExN2	LINC00970
IGSF9B	3.53E-79	0.26744059	0.626	0.507	1.35E-74	ExN2	IGSF9B
MT-ATP6	8.85E-79	0.44745842	0.925	0.874	3.38E-74	ExN2	MT-ATP6
PLCL1	1.15E-77	0.31653756	0.786	0.636	4.39E-73	ExN2	PLCL1
MT-CYB	1.97E-77	0.35976447	0.869	0.778	7.53E-73	ExN2	MT-CYB
ARMC9	1.22E-76	0.26843626	0.731	0.604	4.67E-72	ExN2	ARMC9
RNLS	1.93E-76	0.30772452	0.584	0.461	7.38E-72	ExN2	RNLS
TMEM161B- ELK1	2.52E-76	0.25881739	0.916	0.861	9.64E-72	ExN2	TMEM161B- ELK1
SDCCAG8	4.71E-76	0.2572928	0.328	0.214	1.80E-71	ExN2	SDCCAG8
PTMA	4.86E-75	0.25594546	0.792	0.707	1.86E-70	ExN2	PTMA
APBB2	7.73E-75	0.25051045	0.578	0.456	2.95E-70	ExN2	APBB2
TSPYL1	8.51E-75	0.27133859	0.769	0.683	3.25E-70	ExN2	TSPYL1
SLCO3A1	1.27E-73	0.27962134	0.604	0.497	4.87E-69	ExN2	TSPYL1
PPP3R1	1.87E-73	0.26650613	0.816	0.728	7.14E-69	ExN2	SLCO3A1
VWA8	2.05E-73	0.28234864	0.717	0.617	7.84E-69	ExN2	PPP3R1
BSN1	5.59E-73	0.25015565	0.8	0.735	2.14E-68	ExN2	VWA8
TPD52	7.42E-73	0.25901875	0.698	0.597	2.84E-68	ExN2	BSN
CATSPER2	1.69E-72	0.26130539	0.639	0.529	6.44E-68	ExN2	TPD52
SYBU1	2.46E-72	0.26537484	0.712	0.62	9.39E-68	ExN2	CATSPER2
MTA3	2.49E-72	0.25044744	0.801	0.707	9.51E-68	ExN2	SYBU
LYRM4	3.34E-72	0.25517875	0.745	0.648	1.28E-67	ExN2	MTA3
CMSS1	3.77E-72	0.27146564	0.59	0.476	1.44E-67	ExN2	LYRM4
CLU	1.07E-71	0.25687012	0.805	0.72	4.09E-67	ExN2	CMSS1
PKN2-AS1	3.22E-71	0.26969663	0.781	0.711	1.23E-66	ExN2	CLU
PLP1	4.14E-71	0.33431721	0.428	0.305	1.58E-66	ExN2	PKN2-AS1
AC079382.2	4.98E-70	0.98014496	0.327	0.225	1.90E-65	ExN2	PLP1
LINC01811	1.01E-69	0.30377766	0.33	0.223	3.87E-65	ExN2	AC079382.2
CLIP2	1.17E-69	0.30541464	0.421	0.299	4.47E-65	ExN2	LINC01811
GPM6B	3.37E-69	0.29745266	0.68	0.567	1.29E-64	ExN2	CLIP2
KCNQ2	1.12E-68	0.27943059	0.875	0.797	4.26E-64	ExN2	GPM6B
TUBA1B	1.11E-66	0.26394553	0.733	0.649	4.23E-62	ExN2	KCNQ2
SEPTIN7	7.19E-65	0.30287937	0.64	0.561	2.75E-60	ExN2	TUBA1B
AC008591.1	1.06E-63	0.30140328	0.741	0.689	4.04E-59	ExN2	SEPTIN7
MT-ND2	4.18E-63	0.305098	0.373	0.264	1.60E-58	ExN2	AC008591.1
TF	3.46E-61	0.3675975	0.825	0.741	1.32E-56	ExN2	MT-ND2
DUBR	1.03E-60	0.37423058	0.278	0.186	3.92E-56	ExN2	TF
TNNI3K	1.70E-60	0.26039986	0.665	0.567	6.52E-56	ExN2	DUBR
CXXC4-AS1	6.65E-60	0.26870355	0.472	0.366	2.54E-55	ExN2	TNNI3K
TTLL7	1.51E-57	0.29838006	0.485	0.379	5.79E-53	ExN2	CXXC4-AS1
	2.35E-55	0.26726271	0.861	0.821	8.98E-51	ExN2	TTLL7

MTRNR2L12	2.03E-50	0.34759477	0.823	0.74	7.78E-46	ExN2	MTRNR2L12
MT-ND3	3.17E-50	0.35457921	0.914	0.866	1.21E-45	ExN2	MT-ND3
ABCA2	6.53E-40	0.29837199	0.451	0.373	2.49E-35	ExN2	ABCA2
PIP4K2A	4.20E-36	0.58560783	0.485	0.422	1.60E-31	ExN2	PIP4K2A
AC106793.1	4.78E-33	0.27026914	0.446	0.37	1.83E-28	ExN2	AC106793.1
PTGDS	1.30E-29	0.33231599	0.351	0.281	4.95E-25	ExN2	PTGDS
QDPR	1.92E-28	0.26190776	0.461	0.395	7.34E-24	ExN2	QDPR
PLEKHH1	6.14E-23	0.26559283	0.297	0.242	2.35E-18	ExN2	PLEKHH1
SLC44A11	2.62E-19	0.38803511	0.77	0.715	1.00E-14	ExN2	SLC44A11
TMEM165	5.10E-17	0.25056104	0.457	0.417	1.95E-12	ExN2	TMEM165
PHLPP1	4.85E-05	0.34134804	0.564	0.556	1	ExN2	PHLPP1
AJ009632.2	0	2.06134853	0.72	0.118	0	ExN3	AJ009632.2
RMST	0	1.76456582	0.642	0.126	0	ExN3	RMST
TAFA11	0	1.44300908	0.935	0.48	0	ExN3	TAFA11
GLIS31	0	1.38957926	0.641	0.241	0	ExN3	GLIS31
CA101	0	1.34448392	0.905	0.398	0	ExN3	CA101
COL5A21	0	1.34432391	0.603	0.096	0	ExN3	COL5A21
AC034268.21	0	1.21063307	0.629	0.259	0	ExN3	AC034268.21
CUX21	0	1.13906037	0.788	0.36	0	ExN3	CUX21
RIT2	0	1.09626605	0.713	0.288	0	ExN3	RIT2
ANO31	0	1.04665225	0.825	0.36	0	ExN3	ANO31
AL157944.11	0	1.02130539	0.583	0.25	0	ExN3	AL157944.11
NTNG1	0	1.0202859	0.776	0.241	0	ExN3	NTNG1
PTPRD1	0	0.9952657	0.995	0.962	0	ExN3	PTPRD1
LAMA2	0	0.98972486	0.39	0.131	0	ExN3	LAMA2
PTPRK1	0	0.96962975	0.945	0.576	0	ExN3	PTPRK1
RORB1	0	0.95641103	0.804	0.289	0	ExN3	RORB1
AC073365.12	0	0.92719417	0.78	0.346	0	ExN3	AC073365.12
IQCJ-SCHIP12	0	0.90940207	0.984	0.821	0	ExN3	IQCJ-SCHIP12
ST6GALNAC5	0	0.88508832	0.953	0.691	0	ExN3	ST6GALNAC5
LINC022961	0	0.88431155	0.481	0.136	0	ExN3	LINC022961
LHFPL61	0	0.87549998	0.84	0.385	0	ExN3	LHFPL61
OTOGL	0	0.86221371	0.454	0.171	0	ExN3	OTOGL
POU6F21	0	0.85471076	0.735	0.374	0	ExN3	POU6F21
CPNE4	0	0.84168948	0.837	0.437	0	ExN3	CPNE4
LRRC4C	0	0.84076835	0.966	0.883	0	ExN3	LRRC4C
NECAB11	0	0.83855519	0.95	0.617	0	ExN3	NECAB11
AP000829.11	0	0.83570939	0.604	0.176	0	ExN3	AP000829.11
TCERG1L1	0	0.82366663	0.746	0.308	0	ExN3	TCERG1L1
AC019211.11	0	0.80753632	0.782	0.314	0	ExN3	AC019211.11
AC067956.11	0	0.80507883	0.746	0.287	0	ExN3	AC067956.11
AC120193.1	0	0.77936426	0.641	0.299	0	ExN3	AC120193.1
LINC018211	0	0.76995993	0.508	0.189	0	ExN3	LINC018211
RFX31	0	0.75800742	0.923	0.79	0	ExN3	RFX31
SGCD1	0	0.75522546	0.8	0.573	0	ExN3	SGCD1
MSC-AS11	0	0.7538599	0.586	0.197	0	ExN3	MSC-AS11
DCC1	0	0.74827084	0.815	0.521	0	ExN3	DCC1
SCHLAP11	0	0.74761687	0.517	0.188	0	ExN3	SCHLAP11
PKN2-AS11	0	0.70833598	0.618	0.287	0	ExN3	PKN2-AS11
MARCH11	0	0.70295997	0.959	0.741	0	ExN3	1-Mar
GRM71	0	0.69352136	0.975	0.853	0	ExN3	GRM71
PTPRT1	0	0.68967298	0.933	0.662	0	ExN3	PTPRT1
SHROOM31	0	0.689038	0.632	0.267	0	ExN3	SHROOM31
OLFM31	0	0.6799534	0.952	0.694	0	ExN3	OLFM31
LDB22	0	0.67648803	0.979	0.746	0	ExN3	LDB22
FAT31	0	0.65738853	0.939	0.694	0	ExN3	FAT31
HS6ST31	0	0.6569427	0.965	0.729	0	ExN3	HS6ST31
R3HDM12	0	0.65461753	0.983	0.885	0	ExN3	R3HDM12
KCNB2	0	0.6490232	0.91	0.667	0	ExN3	KCNB2
KCNIP42	0	0.64781645	1	0.932	0	ExN3	KCNIP42
MED12L1	0	0.64428238	0.897	0.694	0	ExN3	MED12L1
AC007368.1	0	0.63516968	0.718	0.417	0	ExN3	AC007368.1
CNGB11	0	0.62565386	0.443	0.097	0	ExN3	CNGB11

CARMIL11	0	0.62443193	0.896	0.597	0 ExN3	CARMIL1
TRHDE1	0	0.61105304	0.833	0.492	0 ExN3	TRHDE
GAP431	0	0.60700656	0.823	0.513	0 ExN3	GAP43
AC246817.11	0	0.60045724	0.403	0.117	0 ExN3	AC246817.1
EPHA42	0	0.59739822	0.912	0.657	0 ExN3	EPHA4
RAPGEF51	0	0.5973864	0.947	0.735	0 ExN3	RAPGEF5
FMN1	0	0.59530899	0.938	0.744	0 ExN3	FMN1
COL26A12	0	0.58974762	0.757	0.455	0 ExN3	COL26A1
PCDH91	0	0.58203353	0.996	0.965	0 ExN3	PCDH9
LMO41	0	0.58112759	0.834	0.503	0 ExN3	LMO4
DLGAP21	0	0.57822261	0.984	0.926	0 ExN3	DLGAP2
NRGN2	0	0.57583849	0.888	0.547	0 ExN3	NRGN
SNED12	0	0.57412975	0.749	0.417	0 ExN3	SNED1
DPYD1	0	0.57318576	0.913	0.645	0 ExN3	DPYD
KHDRBS31	0	0.57102215	0.957	0.783	0 ExN3	KHDRBS3
AC008574.11	0	0.5658492	0.587	0.192	0 ExN3	AC008574.1
AC018697.1	0	0.5633169	0.394	0.105	0 ExN3	AC018697.1
UNC5D1	0	0.56315161	0.965	0.819	0 ExN3	UNC5D
FAM13A1	0	0.56274309	0.834	0.582	0 ExN3	FAM13A
RHOBTB1	0	0.56129162	0.592	0.263	0 ExN3	RHOBTB1
ADAMTS31	0	0.55486729	0.558	0.242	0 ExN3	ADAMTS3
SATB22	0	0.55131599	0.91	0.548	0 ExN3	SATB2
PLCL11	0	0.54664311	0.899	0.626	0 ExN3	PLCL1
MRTFB2	0	0.544506	0.914	0.748	0 ExN3	MRTFB
KHDRBS21	0	0.54381517	0.978	0.893	0 ExN3	KHDRBS2
KCNH12	0	0.5425387	0.96	0.82	0 ExN3	KCNH1
GRM31	0	0.53832798	0.764	0.366	0 ExN3	GRM3
USP431	0	0.53781655	0.588	0.23	0 ExN3	USP43
PTK2B1	0	0.53713972	0.836	0.493	0 ExN3	PTK2B
AL162493.1	0	0.5370742	0.312	0.087	0 ExN3	AL162493.1
AL392023.2	0	0.53688522	0.409	0.131	0 ExN3	AL392023.2
HECW11	0	0.53396918	0.961	0.822	0 ExN3	HECW1
CDH221	0	0.53171633	0.728	0.376	0 ExN3	CDH22
KIAA1211L1	0	0.53132619	0.867	0.539	0 ExN3	KIAA1211L
AC124290.1	0	0.5302809	0.3	0.102	0 ExN3	AC124290.1
CFAP299	0	0.52804378	0.471	0.178	0 ExN3	CFAP299
KCNH51	0	0.5230223	0.758	0.388	0 ExN3	KCNH5
NKAIN21	0	0.51849237	0.983	0.827	0 ExN3	NKAIN2
MYO1D1	0	0.5109928	0.796	0.494	0 ExN3	MYO1D
GAB11	0	0.51079177	0.829	0.524	0 ExN3	GAB1
AC093843.11	0	0.50640196	0.536	0.191	0 ExN3	AC093843.1
TNNT21	0	0.49824765	0.43	0.1	0 ExN3	TNNT2
ROS11	0	0.49819429	0.379	0.104	0 ExN3	ROS1
MIR99AHG	0	0.4969544	0.97	0.888	0 ExN3	MIR99AHG
MYLK	0	0.4961564	0.281	0.061	0 ExN3	MYLK
OPRM1	0	0.49501508	0.538	0.204	0 ExN3	OPRM1
ZBTB7C2	0	0.49338547	0.571	0.26	0 ExN3	ZBTB7C
ZBBX	0	0.4869581	0.487	0.209	0 ExN3	ZBBX
AC117453.1	0	0.4854996	0.288	0.076	0 ExN3	AC117453.1
COL6A11	0	0.48512009	0.533	0.22	0 ExN3	COL6A1
MIAT2	0	0.48279853	0.977	0.874	0 ExN3	MIAT
LRRK11	0	0.47910526	0.694	0.298	0 ExN3	LRRK1
CELF21	0	0.47458774	0.989	0.966	0 ExN3	CELF2
PCED1B	0	0.46937333	0.365	0.112	0 ExN3	PCED1B
BAIAP3	0	0.46324367	0.56	0.25	0 ExN3	BAIAP3
HTR2A2	0	0.45481604	0.612	0.31	0 ExN3	HTR2A
MET1	0	0.45355468	0.367	0.076	0 ExN3	MET
LINC02217	0	0.45310584	0.514	0.203	0 ExN3	LINC02217
ADGRB31	0	0.42996673	0.996	0.992	0 ExN3	ADGRB3
ANTXR2	0	0.42365702	0.328	0.069	0 ExN3	ANTXR2
SLC38A112	0	0.4040737	0.528	0.229	0 ExN3	SLC38A11
PRDM8	0	0.38273114	0.386	0.121	0 ExN3	PRDM8
NRP1	0	0.36768568	0.466	0.182	0 ExN3	NRP1

LINC012021	0	0.3620188	0.382	0.141	0	ExN3	LINC01202
GRB14	0	0.33381291	0.319	0.086	0	ExN3	GRB14
PRSS31	0	0.32933957	0.434	0.177	0	ExN3	PRSS3
MIR3976HG	0	0.26232543	0.252	0.054	0	ExN3	MIR3976HG
MLIP2	2.37E-306	0.51431882	0.836	0.487	9.05E-302	ExN3	MLIP
ARHGEF28	4.17E-306	0.37822679	0.591	0.286	1.59E-301	ExN3	ARHGEF28
SLC30A3	6.92E-303	0.32584703	0.426	0.178	2.65E-298	ExN3	SLC30A3
MAGI21	1.46E-301	0.40759607	0.995	0.986	5.56E-297	ExN3	MAGI2
GULP11	5.63E-296	0.50129688	0.621	0.329	2.15E-291	ExN3	GULP1
IL12A-AS11	3.67E-295	0.36100514	0.403	0.165	1.40E-290	ExN3	IL12A-AS1
HDAC9	1.00E-294	0.51599557	0.919	0.766	3.84E-290	ExN3	HDAC9
TRIM54	6.75E-294	0.27422462	0.316	0.111	2.58E-289	ExN3	TRIM54
FLRT22	2.23E-293	0.52023257	0.958	0.825	8.52E-289	ExN3	FLRT2
CDH8	2.51E-293	0.5299765	0.904	0.639	9.60E-289	ExN3	CDH8
MGAT5B2	1.18E-291	0.45331737	0.751	0.454	4.49E-287	ExN3	MGAT5B
AC011995.21	1.43E-290	0.4365252	0.69	0.386	5.48E-286	ExN3	AC011995.2
AL133166.11	8.26E-290	0.42293797	0.453	0.202	3.16E-285	ExN3	AL133166.1
TMEM132D1	1.62E-285	0.51726192	0.948	0.768	6.20E-281	ExN3	TMEM132D
FOXP11	5.64E-285	0.51557388	0.948	0.809	2.15E-280	ExN3	FOXP1
CRYM	2.15E-284	0.32972242	0.52	0.247	8.21E-280	ExN3	CRYM
AC013287.11	5.31E-284	0.81813336	0.692	0.429	2.03E-279	ExN3	AC013287.1
RGS7	7.19E-279	0.43660741	0.981	0.955	2.75E-274	ExN3	RGS7
SH3GL22	2.94E-277	0.50627637	0.938	0.729	1.12E-272	ExN3	SH3GL2
LINC012501	4.71E-276	0.47683845	0.883	0.624	1.80E-271	ExN3	LINC01250
AC016598.1	6.82E-275	0.30049819	0.319	0.116	2.61E-270	ExN3	AC016598.1
SOX51	9.18E-275	0.45815104	0.951	0.645	3.51E-270	ExN3	SOX5
CTNND11	3.21E-273	0.42974042	0.716	0.452	1.23E-268	ExN3	CTNND1
CACNA2D31	1.67E-269	0.49460133	0.966	0.859	6.37E-265	ExN3	CACNA2D3
STXBP5L1	5.37E-269	0.52800616	0.972	0.946	2.05E-264	ExN3	STXBP5L
XYLT1	3.55E-268	0.45956275	0.815	0.537	1.36E-263	ExN3	XYLT1
PCBP3	1.31E-267	0.52310254	0.388	0.165	5.00E-263	ExN3	PCBP3
CNKSR22	8.01E-265	0.4968963	0.948	0.81	3.06E-260	ExN3	CNKSR2
CADPS2	3.25E-263	0.50991245	0.838	0.567	1.24E-258	ExN3	CADPS2
AKAP13	3.67E-263	0.38614541	0.624	0.344	1.40E-258	ExN3	AKAP13
KCNH7	1.64E-262	0.50404156	0.936	0.712	6.28E-258	ExN3	KCNH7
NEGR1	1.06E-260	0.45125872	0.99	0.953	4.06E-256	ExN3	NEGR1
IQCA11	2.27E-258	0.38730589	0.612	0.333	8.67E-254	ExN3	IQCA1
UBE2E22	1.04E-257	0.41855662	0.953	0.871	3.99E-253	ExN3	UBE2E2
SEMA6D	1.53E-257	0.37149629	0.852	0.559	5.86E-253	ExN3	SEMA6D
FAM155A	1.90E-257	0.38133605	0.995	0.985	7.28E-253	ExN3	FAM155A
KIAA20121	2.80E-257	0.33603606	0.386	0.164	1.07E-252	ExN3	KIAA2012
ZBTB46	6.35E-257	0.35567042	0.535	0.272	2.43E-252	ExN3	ZBTB46
PLCH1	1.15E-256	1.12209766	0.403	0.195	4.40E-252	ExN3	PLCH1
CABP12	1.97E-247	0.48777923	0.894	0.688	7.55E-243	ExN3	CABP1
PART1	1.31E-246	0.37261403	0.534	0.274	5.02E-242	ExN3	PART1
FRMD6	5.21E-246	0.30877597	0.445	0.207	1.99E-241	ExN3	FRMD6
LRFN52	1.11E-245	0.42978147	0.971	0.885	4.26E-241	ExN3	LRFN5
DENND31	1.47E-244	0.31367598	0.601	0.324	5.63E-240	ExN3	DENND3
AL807742.1	2.45E-241	0.31479368	0.317	0.123	9.38E-237	ExN3	AL807742.1
UBE2E31	1.81E-238	0.52202166	0.765	0.532	6.94E-234	ExN3	UBE2E3
CCDC31	1.53E-236	0.47113968	0.861	0.629	5.84E-232	ExN3	CCDC3
PAG11	2.95E-236	0.33365327	0.625	0.352	1.13E-231	ExN3	PAG1
LY86-AS12	1.30E-235	0.47126213	0.766	0.461	4.96E-231	ExN3	LY86-AS1
LINC003261	1.46E-234	0.47609155	0.276	0.101	5.59E-230	ExN3	LINC00326
AGBL41	2.16E-231	0.43304142	0.982	0.929	8.27E-227	ExN3	AGBL4
DLGAP1-AS4	4.96E-231	0.38933157	0.598	0.333	1.90E-226	ExN3	DLGAP1-AS4
STYK11	1.80E-230	0.27673944	0.367	0.159	6.89E-226	ExN3	STYK1
EFNA51	4.90E-229	0.50148377	0.958	0.784	1.87E-224	ExN3	EFNA5
MAPK10	2.08E-228	0.33377985	0.979	0.95	7.95E-224	ExN3	MAPK10
NELL22	5.48E-226	0.44856206	0.957	0.776	2.09E-221	ExN3	NELL2
MIR137HG1	2.15E-224	0.45007105	0.899	0.641	8.23E-220	ExN3	MIR137HG
GUCY1A22	4.40E-224	0.49618986	0.91	0.716	1.68E-219	ExN3	GUCY1A2
MPPED22	1.98E-223	0.39968903	0.753	0.467	7.56E-219	ExN3	MPPED2

ST6GAL21	3.16E-223	0.45764381	0.629	0.37	1.21E-218	ExN3	ST6GAL2
AC002460.21	4.59E-223	0.59659099	0.639	0.405	1.75E-218	ExN3	AC002460.2
AC124852.12	1.16E-221	0.41120622	0.728	0.457	4.42E-217	ExN3	AC124852.1
LINC013311	4.59E-220	0.45937668	0.446	0.217	1.76E-215	ExN3	LINC01331
SLC17A72	7.43E-220	0.35463615	0.706	0.415	2.84E-215	ExN3	SLC17A7
SYNPO2	1.53E-219	0.32753018	0.691	0.405	5.85E-215	ExN3	SYNPO2
FNDC3B	1.58E-219	0.33231349	0.581	0.324	6.04E-215	ExN3	FNDC3B
PRAG11	4.44E-219	0.29409629	0.426	0.202	1.70E-214	ExN3	PRAG1
ATRNL12	1.44E-218	0.44982484	0.983	0.926	5.50E-214	ExN3	ATRNL1
AC107223.12	2.74E-217	0.70708647	0.73	0.548	1.05E-212	ExN3	AC107223.1
DNAH71	3.22E-217	0.36200041	0.631	0.373	1.23E-212	ExN3	DNAH7
AL024495.1	9.88E-217	0.3543702	0.535	0.283	3.77E-212	ExN3	AL024495.1
ILDR2	7.25E-215	0.30351545	0.585	0.322	2.77E-210	ExN3	ILDR2
RYR21	8.26E-214	0.38813382	0.986	0.923	3.16E-209	ExN3	RYR2
LINC02254	8.57E-213	0.29638226	0.347	0.15	3.27E-208	ExN3	LINC02254
LINC02613	2.08E-212	0.25803202	0.332	0.141	7.95E-208	ExN3	LINC02613
GABRB32	3.22E-211	0.35648385	0.968	0.895	1.23E-206	ExN3	GABRB3
BASP1-AS11	3.47E-210	0.40730604	0.883	0.639	1.33E-205	ExN3	BASP1-AS1
SV2B1	4.45E-210	0.41153399	0.9	0.583	1.70E-205	ExN3	SV2B
ST6GAL1	1.15E-208	0.26489562	0.494	0.255	4.39E-204	ExN3	ST6GAL1
LGI41	1.15E-208	0.29942855	0.532	0.289	4.40E-204	ExN3	LGI4
AL391840.11	9.05E-208	0.4400513	0.762	0.491	3.46E-203	ExN3	AL391840.1
CSMD11	9.57E-208	0.33232597	0.997	0.98	3.66E-203	ExN3	CSMD1
TESPA11	1.17E-205	0.34849534	0.596	0.326	4.46E-201	ExN3	TESPA1
MAOB	3.94E-205	0.30581221	0.525	0.283	1.51E-200	ExN3	MAOB
ZNF827	4.62E-205	0.37315441	0.713	0.464	1.76E-200	ExN3	ZNF827
ANKRD18B	9.25E-205	0.26371244	0.445	0.223	3.54E-200	ExN3	ANKRD18B
AC011287.11	1.02E-204	0.45532139	0.736	0.45	3.92E-200	ExN3	AC011287.1
KCNIP4-IT12	6.98E-204	0.36854542	0.76	0.479	2.67E-199	ExN3	KCNIP4-IT1
AC006504.51	7.21E-204	0.42518134	0.644	0.413	2.76E-199	ExN3	AC006504.5
LRRTM41	1.29E-201	0.42084327	0.995	0.914	4.93E-197	ExN3	LRRTM4
ARHGAP22	2.32E-199	0.27351262	0.531	0.288	8.88E-195	ExN3	ARHGAP22
ZNF521	1.16E-197	0.27219118	0.352	0.158	4.43E-193	ExN3	ZNF521
TSBP1-AS11	1.20E-197	0.36980827	0.509	0.274	4.58E-193	ExN3	TSBP1-AS1
NWD22	7.67E-197	0.31051112	0.739	0.444	2.93E-192	ExN3	NWD2
SMAD31	4.39E-196	0.331917	0.622	0.36	1.68E-191	ExN3	SMAD3
KALRN1	1.67E-195	0.33129852	0.987	0.955	6.38E-191	ExN3	KALRN
SYT71	7.09E-195	0.34914066	0.763	0.514	2.71E-190	ExN3	SYT7
LDLRAD3	5.37E-194	0.28082711	0.436	0.216	2.05E-189	ExN3	LDLRAD3
PTPRF1	1.36E-193	0.29665544	0.574	0.332	5.22E-189	ExN3	PTPRF
PRKG1	3.03E-193	0.51489137	0.87	0.584	1.16E-188	ExN3	PRKG1
NIN1	3.03E-191	0.38083668	0.89	0.696	1.16E-186	ExN3	NIN
SNTG11	4.11E-191	0.36962405	0.983	0.938	1.57E-186	ExN3	SNTG1
RASAL2	2.36E-190	0.36152108	0.952	0.871	9.03E-186	ExN3	RASAL2
GLRA31	2.99E-188	0.30371454	0.519	0.286	1.14E-183	ExN3	GLRA3
LINC02224	1.18E-187	0.28691599	0.318	0.14	4.49E-183	ExN3	LINC02224
PRKCB2	1.52E-187	0.37053186	0.968	0.86	5.81E-183	ExN3	PRKCB
LAMB11	9.29E-187	0.27524202	0.496	0.266	3.55E-182	ExN3	LAMB1
ADAMTS191	1.42E-186	0.35267029	0.6	0.347	5.42E-182	ExN3	ADAMTS19
C11orf871	7.27E-185	0.29473319	0.548	0.314	2.78E-180	ExN3	C11orf87
MIR2052HG	2.09E-184	0.44395746	0.529	0.301	7.99E-180	ExN3	MIR2052HG
TMEM150C	1.22E-183	0.27522569	0.511	0.286	4.65E-179	ExN3	TMEM150C
PPP4R41	1.28E-183	0.31281043	0.636	0.383	4.90E-179	ExN3	PPP4R4
NOL4	2.70E-183	0.39733502	0.874	0.726	1.03E-178	ExN3	NOL4
CLSTN2	5.94E-183	0.30254391	0.881	0.602	2.27E-178	ExN3	CLSTN2
NDFIP22	2.39E-182	0.36417023	0.737	0.494	9.12E-178	ExN3	NDFIP2
MRPS30-DT1	6.35E-182	0.34894843	0.68	0.443	2.43E-177	ExN3	MRPS30-DT
SLC6A72	2.05E-181	0.25765383	0.541	0.304	7.84E-177	ExN3	SLC6A7
HOPX1	2.66E-181	0.27482794	0.518	0.282	1.02E-176	ExN3	HOPX
PRUNE2	2.88E-181	0.33751893	0.79	0.583	1.10E-176	ExN3	PRUNE2
FOCAD1	9.32E-181	0.38509378	0.909	0.793	3.56E-176	ExN3	FOCAD
JAZF1-AS1	1.84E-180	0.26449387	0.409	0.209	7.01E-176	ExN3	JAZF1-AS1
TMEM163	6.24E-178	0.25149469	0.5	0.272	2.39E-173	ExN3	TMEM163

LDLRAD4	1.20E-177	0.37732963	0.926	0.768	4.59E-173	ExN3	LDLRAD4
CACNA1A	6.17E-177	0.3260078	0.972	0.904	2.36E-172	ExN3	CACNA1A
TOM1L1	1.32E-176	0.2512688	0.444	0.238	5.06E-172	ExN3	TOM1L1
AC007389.1	2.54E-175	0.35243413	0.404	0.207	9.70E-171	ExN3	AC007389.1
PTK21	3.82E-175	0.31122625	0.967	0.893	1.46E-170	ExN3	PTK2
ARHGAP321	7.46E-174	0.3554438	0.951	0.839	2.85E-169	ExN3	ARHGAP32
ACTN11	4.22E-173	0.34903744	0.797	0.57	1.61E-168	ExN3	ACTN1
DNAH14	5.10E-173	0.29098148	0.51	0.28	1.95E-168	ExN3	DNAH14
CAMK2A2	9.30E-173	0.36152688	0.938	0.784	3.56E-168	ExN3	CAMK2A
CNTN3	1.15E-172	0.34050066	0.886	0.644	4.40E-168	ExN3	CNTN3
KIAA15491	5.65E-170	0.34190634	0.728	0.507	2.16E-165	ExN3	KIAA1549
AL096794.1	6.12E-170	0.30259105	0.464	0.255	2.34E-165	ExN3	AL096794.1
TSPAN51	3.56E-169	0.36431867	0.938	0.835	1.36E-164	ExN3	TSPAN5
LINC02822	6.16E-168	0.45875943	0.3	0.136	2.36E-163	ExN3	LINC02822
STX1A1	1.72E-166	0.32053208	0.581	0.359	6.56E-162	ExN3	STX1A
PIK3R1	2.04E-166	0.35202899	0.864	0.676	7.79E-162	ExN3	PIK3R1
OXR1	6.16E-166	0.30633529	0.974	0.917	2.36E-161	ExN3	OXR1
PRKAG2	4.76E-165	0.3411789	0.905	0.713	1.82E-160	ExN3	PRKAG2
TTN	2.03E-164	0.30046782	0.299	0.139	7.75E-160	ExN3	TTN
PPP2R2C2	1.34E-163	0.33598759	0.926	0.79	5.12E-159	ExN3	PPP2R2C
SORL11	8.06E-162	0.32847424	0.856	0.663	3.08E-157	ExN3	SORL1
AC090578.11	1.46E-160	0.66095376	0.77	0.544	5.58E-156	ExN3	AC090578.1
AC009041.21	2.37E-160	0.34981278	0.52	0.306	9.06E-156	ExN3	AC009041.2
CFAP2211	2.41E-160	0.30631139	0.619	0.397	9.23E-156	ExN3	CFAP221
LINGO21	6.96E-160	0.38910302	0.953	0.814	2.66E-155	ExN3	LINGO2
MPP71	8.26E-160	0.25250967	0.624	0.384	3.16E-155	ExN3	MPP7
PPP1R21	7.99E-157	0.30923891	0.676	0.464	3.05E-152	ExN3	PPP1R21
AL117329.12	1.16E-156	0.566057	0.671	0.456	4.43E-152	ExN3	AL117329.1
GRM8	2.89E-156	0.26996273	0.58	0.334	1.10E-151	ExN3	GRM8
NRCAM	3.59E-156	0.29931668	0.975	0.916	1.37E-151	ExN3	NRCAM
DCLK1	4.47E-156	0.29530431	0.978	0.938	1.71E-151	ExN3	DCLK1
RNF144A1	1.93E-155	0.35479862	0.895	0.728	7.38E-151	ExN3	RNF144A
TPD521	3.32E-154	0.30877532	0.738	0.52	1.27E-149	ExN3	TPD52
ZEB11	6.91E-154	0.36004325	0.901	0.752	2.64E-149	ExN3	ZEB1
KHDRBS2-OT	5.06E-153	0.31563478	0.664	0.435	1.94E-148	ExN3	KHDRBS2-OT
ARL15	6.78E-151	0.40642383	0.905	0.8	2.59E-146	ExN3	ARL15
AQP4-AS12	7.94E-151	0.4385005	0.696	0.486	3.04E-146	ExN3	AQP4-AS1
AL513166.11	3.52E-150	0.38807679	0.821	0.606	1.34E-145	ExN3	AL513166.1
DCAF61	1.39E-149	0.32472631	0.807	0.609	5.30E-145	ExN3	DCAF6
CDYL22	1.66E-149	0.28496304	0.607	0.388	6.33E-145	ExN3	CDYL2
AC068587.4	2.46E-149	0.26730465	0.696	0.498	9.40E-145	ExN3	AC068587.4
AL049828.11	2.38E-148	0.36940862	0.829	0.629	9.09E-144	ExN3	AL049828.1
MAST31	6.91E-148	0.25550729	0.641	0.403	2.64E-143	ExN3	MAST3
ARHGAP261	1.27E-147	0.41624469	0.936	0.867	4.86E-143	ExN3	ARHGAP26
RALYL1	5.96E-147	0.35400668	0.991	0.803	2.28E-142	ExN3	RALYL
SLC2A13	1.48E-146	0.2924457	0.933	0.849	5.67E-142	ExN3	SLC2A13
FAM81A	8.49E-145	0.28813133	0.689	0.472	3.25E-140	ExN3	FAM81A
KIF13A1	1.01E-144	0.26413322	0.786	0.552	3.88E-140	ExN3	KIF13A
PARM1	2.24E-143	0.25718007	0.612	0.379	8.55E-139	ExN3	PARM1
ADAMTS161	5.89E-141	0.41650853	0.35	0.19	2.25E-136	ExN3	ADAMTS16
AKT3	7.43E-141	0.29656796	0.97	0.923	2.84E-136	ExN3	AKT3
DYNC111	4.42E-139	0.28987166	0.943	0.866	1.69E-134	ExN3	DYNC111
MLLT31	1.23E-138	0.34009428	0.921	0.811	4.70E-134	ExN3	MLLT3
AC109466.11	1.92E-138	0.60271787	0.468	0.276	7.36E-134	ExN3	AC109466.1
CHN11	3.60E-137	0.29160499	0.94	0.735	1.38E-132	ExN3	CHN1
CEP126	2.11E-136	0.31745634	0.727	0.54	8.08E-132	ExN3	CEP126
ARPP211	6.77E-136	0.30453149	0.966	0.75	2.59E-131	ExN3	ARPP21
HOMER11	1.40E-134	0.31674204	0.791	0.607	5.35E-130	ExN3	HOMER1
SYNDIG1	5.19E-134	0.27363756	0.801	0.58	1.98E-129	ExN3	SYNDIG1
RAP1GAP21	1.39E-133	0.28401906	0.842	0.62	5.31E-129	ExN3	RAP1GAP2
SYTL22	5.12E-133	0.25714321	0.699	0.465	1.96E-128	ExN3	SYTL2
STMN2	4.96E-132	0.30111487	0.675	0.47	1.90E-127	ExN3	STMN2
CAMK1D2	6.96E-132	0.29370371	0.97	0.851	2.66E-127	ExN3	CAMK1D

RHBDL31	7.60E-132	0.26128978	0.599	0.38	2.90E-127	ExN3	RHBDL3
CUX11	2.00E-131	0.27525321	0.881	0.716	7.64E-127	ExN3	CUX1
KIAA09301	3.42E-131	0.29986013	0.788	0.598	1.31E-126	ExN3	KIAA0930
NLK1	5.51E-131	0.34047916	0.86	0.685	2.11E-126	ExN3	NLK
GRM51	5.67E-131	0.29743634	0.981	0.892	2.17E-126	ExN3	GRM5
ALS21	2.86E-130	0.26950841	0.704	0.506	1.09E-125	ExN3	ALS2
MAST4	3.12E-130	0.33388359	0.902	0.811	1.19E-125	ExN3	MAST4
RGS61	1.65E-129	0.33655591	0.894	0.687	6.29E-125	ExN3	RGS6
TMEM1081	8.00E-129	0.35202784	0.919	0.811	3.06E-124	ExN3	TMEM108
MYH10	3.08E-128	0.29694902	0.871	0.714	1.18E-123	ExN3	MYH10
FBXO341	9.15E-128	0.32782052	0.797	0.607	3.50E-123	ExN3	FBXO34
AACS	3.03E-125	0.25847965	0.653	0.451	1.16E-120	ExN3	AACS
FSTL42	1.28E-124	0.3063402	0.887	0.629	4.91E-120	ExN3	FSTL4
AC073091.31	3.52E-123	0.31858707	0.502	0.301	1.35E-118	ExN3	AC073091.3
TMEM2411	6.54E-123	0.28583428	0.687	0.484	2.50E-118	ExN3	TMEM241
MSRA2	7.27E-123	0.27814163	0.966	0.903	2.78E-118	ExN3	MSRA
DUBR1	1.56E-122	0.26654404	0.758	0.558	5.95E-118	ExN3	DUBR
HCN1	2.08E-122	0.29637976	0.933	0.853	7.96E-118	ExN3	HCN1
FBXW71	4.64E-122	0.28183256	0.897	0.745	1.78E-117	ExN3	FBXW7
SPATS2	7.38E-122	0.26971871	0.76	0.566	2.82E-117	ExN3	SPATS2
ZRANB3	1.28E-121	0.28683138	0.676	0.482	4.89E-117	ExN3	ZRANB3
MEG31	6.97E-121	0.48253972	0.977	0.959	2.66E-116	ExN3	MEG3
LINGO11	1.66E-120	0.25456558	0.709	0.487	6.35E-116	ExN3	LINGO1
AC008415.11	5.83E-117	0.48689264	0.348	0.191	2.23E-112	ExN3	AC008415.1
PKD3	6.68E-117	0.26832259	0.649	0.459	2.56E-112	ExN3	PKD3
PDE4D1	9.53E-116	0.29812057	0.986	0.959	3.64E-111	ExN3	PDE4D
PPP1R12A1	1.28E-115	0.27756313	0.859	0.72	4.90E-111	ExN3	PPP1R12A
SNCA	4.32E-115	0.27633119	0.817	0.594	1.65E-110	ExN3	SNCA
SEMA3A1	1.45E-113	0.32915377	0.358	0.2	5.55E-109	ExN3	SEMA3A
AL591501.11	2.01E-113	0.27385502	0.778	0.554	7.69E-109	ExN3	AL591501.1
CDKL5	2.81E-112	0.29572794	0.865	0.72	1.07E-107	ExN3	CDKL5
KCTD161	4.91E-112	0.27429319	0.962	0.859	1.88E-107	ExN3	KCTD16
PPFIA21	9.49E-112	0.2655889	0.973	0.92	3.63E-107	ExN3	PPFIA2
ABHD2	7.84E-110	0.25376591	0.809	0.638	3.00E-105	ExN3	ABHD2
CDKL11	2.10E-109	0.26803738	0.643	0.45	8.04E-105	ExN3	CDKL1
AC007563.21	1.40E-106	0.26960473	0.806	0.593	5.36E-102	ExN3	AC007563.2
PUM31	3.33E-106	0.270766	0.768	0.593	1.27E-101	ExN3	PUM3
TTC39C	2.34E-105	0.26651499	0.768	0.587	8.93E-101	ExN3	TTC39C
MAN1C11	1.58E-104	0.25027574	0.783	0.603	6.03E-100	ExN3	MAN1C1
KIFC2	1.83E-104	0.25648983	0.677	0.496	6.98E-100	ExN3	KIFC2
AK51	8.57E-103	0.25482604	0.911	0.77	3.28E-98	ExN3	AK5
SLC39A101	6.62E-101	0.2836132	0.8	0.632	2.53E-96	ExN3	SLC39A10
MBNL22	3.91E-100	0.27112185	0.925	0.752	1.49E-95	ExN3	MBNL2
AL008633.11	1.16E-98	0.32727573	0.866	0.703	4.44E-94	ExN3	AL008633.1
AC024901.1	2.33E-98	0.33637081	0.604	0.442	8.91E-94	ExN3	AC024901.1
LRRC281	3.29E-98	0.27737149	0.789	0.62	1.26E-93	ExN3	LRRC28
EVI5	1.03E-97	0.28397646	0.786	0.651	3.95E-93	ExN3	EVI5
TJP11	4.35E-95	0.250081	0.928	0.825	1.66E-90	ExN3	TJP1
AC084816.11	3.68E-93	0.29651462	0.325	0.187	1.41E-88	ExN3	AC084816.1
AC016831.7	3.74E-93	0.27461308	0.825	0.673	1.43E-88	ExN3	AC016831.7
PI4KA1	3.30E-91	0.2528588	0.917	0.808	1.26E-86	ExN3	PI4KA
CAMK41	3.98E-88	0.27727347	0.861	0.709	1.52E-83	ExN3	CAMK4
DMD1	2.33E-86	0.26046954	0.97	0.917	8.92E-82	ExN3	DMD
KCTD11	6.24E-85	0.28834833	0.803	0.663	2.38E-80	ExN3	KCTD1
PDZRN41	9.88E-85	0.45974904	0.554	0.386	3.78E-80	ExN3	PDZRN4
SLC35F31	1.49E-80	0.29141738	0.89	0.759	5.70E-76	ExN3	SLC35F3
ZNF804B	5.47E-78	0.27652488	0.512	0.346	2.09E-73	ExN3	ZNF804B
PCSK21	7.35E-77	0.27281668	0.912	0.793	2.81E-72	ExN3	PCSK2
GRIA31	3.87E-73	0.26226554	0.885	0.804	1.48E-68	ExN3	GRIA3
ASXL31	3.44E-71	0.25626487	0.769	0.612	1.32E-66	ExN3	ASXL3
DGKB1	2.75E-52	0.25968104	0.794	0.811	1.05E-47	ExN3	DGKB
SYN31	5.15E-25	0.2507052	0.885	0.865	1.97E-20	ExN3	SYN3
AC109466.12	0	2.50130631	0.859	0.237	0	ExN4	AC109466.1

AC008415.12	0	2.12060151	0.769	0.149	0 ExN4	AC008415.1
AC060765.21	0	2.11312693	0.738	0.143	0 ExN4	AC060765.2
CASC151	0	2.06169783	0.94	0.484	0 ExN4	CASC15
AC073091.32	0	1.92794411	0.839	0.267	0 ExN4	AC073091.3
AC016687.21	0	1.71582503	0.558	0.119	0 ExN4	AC016687.2
LRRK12	0	1.69632209	0.88	0.28	0 ExN4	LRRK1
RORB2	0	1.64309999	0.958	0.274	0 ExN4	RORB
CADPS21	0	1.6293176	0.978	0.553	0 ExN4	CADPS2
NRG1	0	1.59140114	0.95	0.511	0 ExN4	NRG1
CLSTN21	0	1.58660915	0.975	0.592	0 ExN4	CLSTN2
AP003066.11	0	1.50832498	0.571	0.06	0 ExN4	AP003066.1
CPNE41	0	1.46966563	0.908	0.43	0 ExN4	CPNE4
TLL1	0	1.44560839	0.734	0.076	0 ExN4	TLL1
HS3ST21	0	1.30095468	0.806	0.215	0 ExN4	HS3ST2
DPP10	0	1.25509111	0.995	0.835	0 ExN4	DPP10
NKAIN22	0	1.2513576	0.993	0.826	0 ExN4	NKAIN2
PRKG11	0	1.23598745	0.921	0.579	0 ExN4	PRKG1
KCNH71	0	1.22986937	0.967	0.709	0 ExN4	KCNH7
LHFPL62	0	1.21210171	0.873	0.382	0 ExN4	LHFPL6
PDE1C	0	1.17992891	0.917	0.457	0 ExN4	PDE1C
IL1RAPL21	0	1.17262727	0.771	0.283	0 ExN4	IL1RAPL2
DACH1	0	1.15910428	0.671	0.162	0 ExN4	DACH1
FOXP21	0	1.12015655	0.894	0.261	0 ExN4	FOXP2
RXFP1	0	1.09912955	0.703	0.184	0 ExN4	RXFP1
CDH20	0	1.09117053	0.797	0.345	0 ExN4	CDH20
BRINP31	0	1.08909512	0.89	0.459	0 ExN4	BRINP3
LINC018212	0	1.08175801	0.637	0.176	0 ExN4	LINC01821
PTPRT2	0	1.07984985	0.977	0.658	0 ExN4	PTPRT
GRM32	0	1.06830654	0.858	0.357	0 ExN4	GRM3
CAMK2D	0	1.06281855	0.918	0.647	0 ExN4	CAMK2D
LRP1B	0	1.0396715	0.995	0.946	0 ExN4	LRP1B
FSTL43	0	1.03499808	0.954	0.623	0 ExN4	FSTL4
LINC018111	0	1.0282382	0.701	0.273	0 ExN4	LINC01811
PDE1A2	0	1.02330993	0.975	0.656	0 ExN4	PDE1A
FRMPD4	0	1.02229228	0.986	0.934	0 ExN4	FRMPD4
AC099517.1	0	0.98361511	0.318	0.041	0 ExN4	AC099517.1
PRUNE21	0	0.97610179	0.831	0.579	0 ExN4	PRUNE2
LDLRAD31	0	0.95426556	0.663	0.194	0 ExN4	LDLRAD3
DNAH6	0	0.95426492	0.848	0.505	0 ExN4	DNAH6
TAFA12	0	0.94409047	0.828	0.491	0 ExN4	TAFA1
PHACTR11	0	0.94389512	0.994	0.949	0 ExN4	PHACTR1
GRM81	0	0.94048537	0.765	0.316	0 ExN4	GRM8
CCDC85A	0	0.90634993	0.918	0.633	0 ExN4	CCDC85A
DPY19L11	0	0.90486747	0.768	0.316	0 ExN4	DPY19L1
EPHA31	0	0.8988112	0.806	0.387	0 ExN4	EPHA3
PCDH71	0	0.89398955	0.983	0.813	0 ExN4	PCDH7
IPCEF11	0	0.89193215	0.781	0.368	0 ExN4	IPCEF1
ST6GALNAC3	0	0.89089248	0.804	0.479	0 ExN4	ST6GALNAC3
TENM4	0	0.88822064	0.967	0.849	0 ExN4	TENM4
CTNNA21	0	0.8751756	0.993	0.955	0 ExN4	CTNNA2
RAB27B	0	0.87431239	0.783	0.427	0 ExN4	RAB27B
CNTN31	0	0.87334162	0.935	0.639	0 ExN4	CNTN3
HS3ST4	0	0.86623035	0.876	0.386	0 ExN4	HS3ST4
CDH10	0	0.8657117	0.92	0.679	0 ExN4	CDH10
ARPP212	0	0.84822213	0.98	0.749	0 ExN4	ARPP21
PTPRD2	0	0.84784928	0.997	0.961	0 ExN4	PTPRD
STXBP5-AS1	0	0.8442337	0.879	0.562	0 ExN4	STXBP5-AS1
SORCS11	0	0.84404612	0.923	0.655	0 ExN4	SORCS1
GHR	0	0.84201392	0.749	0.35	0 ExN4	GHR
POU6F22	0	0.81786442	0.89	0.359	0 ExN4	POU6F2
FMN11	0	0.81145513	0.948	0.743	0 ExN4	FMN1
RALYL2	0	0.81099383	0.995	0.803	0 ExN4	RALYL
ARSJ	0	0.80336138	0.491	0.054	0 ExN4	ARSJ

FAT32	0	0.80313642	0.95	0.693	0	ExN4	FAT3
RHBDL32	0	0.80264612	0.76	0.364	0	ExN4	RHBDL3
AC013287.12	0	0.79508074	0.795	0.419	0	ExN4	AC013287.1
MDGA2	0	0.79468107	0.988	0.934	0	ExN4	MDGA2
HECW12	0	0.79061771	0.97	0.821	0	ExN4	HECW1
COL11A1	0	0.78689098	0.676	0.221	0	ExN4	COL11A1
RYR22	0	0.77028082	0.992	0.923	0	ExN4	RYR2
RORA1	0	0.76138218	0.988	0.961	0	ExN4	RORA
MIR3681HG	0	0.75650325	0.439	0.058	0	ExN4	MIR3681HG
MIR99AHG1	0	0.75252608	0.969	0.888	0	ExN4	MIR99AHG
TMEM117	0	0.74772747	0.843	0.629	0	ExN4	TMEM117
TOX1	0	0.73836882	0.864	0.405	0	ExN4	TOX
OPCML1	0	0.73206471	0.996	0.987	0	ExN4	OPCML
SLC22A102	0	0.73178887	0.824	0.433	0	ExN4	SLC22A10
KHDRBS32	0	0.72343088	0.964	0.782	0	ExN4	KHDRBS3
ELAVL4	0	0.72325131	0.838	0.59	0	ExN4	ELAVL4
PDGFC1	0	0.72088842	0.637	0.249	0	ExN4	PDGFC
AC008127.1	0	0.71878327	0.43	0.047	0	ExN4	AC008127.1
KCNB21	0	0.71664296	0.88	0.67	0	ExN4	KCNB2
STMN21	0	0.69949824	0.753	0.462	0	ExN4	STMN2
BMPER1	0	0.69121475	0.873	0.594	0	ExN4	BMPER
MKX	0	0.68634091	0.511	0.125	0	ExN4	MKX
AL138927.1	0	0.68556312	0.29	0.015	0	ExN4	AL138927.1
AGBL42	0	0.68146063	0.984	0.929	0	ExN4	AGBL4
LINC022321	0	0.66836264	0.484	0.165	0	ExN4	LINC02232
KCNQ51	0	0.66711137	0.99	0.897	0	ExN4	KCNQ5
SLC24A21	0	0.66641303	0.977	0.821	0	ExN4	SLC24A2
PRKAG21	0	0.66497341	0.927	0.711	0	ExN4	PRKAG2
AC009899.1	0	0.66486476	0.753	0.474	0	ExN4	AC009899.1
SYNDIG11	0	0.66374716	0.845	0.576	0	ExN4	SYNDIG1
KLHL321	0	0.65934179	0.888	0.669	0	ExN4	KLHL32
NAV31	0	0.65880995	0.993	0.946	0	ExN4	NAV3
ZNF385B1	0	0.65355097	0.966	0.808	0	ExN4	ZNF385B
AC021134.1	0	0.64611844	0.273	0.025	0	ExN4	AC021134.1
GALNT17	0	0.644239	0.978	0.894	0	ExN4	GALNT17
OCA2	0	0.63714235	0.601	0.246	0	ExN4	OCA2
AP000943.2	0	0.6367862	0.535	0.182	0	ExN4	AP000943.2
CADM2	0	0.63274956	0.997	0.992	0	ExN4	CADM2
NEGR11	0	0.63026532	0.995	0.952	0	ExN4	NEGR1
DNAJC11	0	0.62814349	0.803	0.539	0	ExN4	DNAJC1
CRIM1	0	0.62569214	0.774	0.463	0	ExN4	CRIM1
PCLO1	0	0.6239856	0.978	0.918	0	ExN4	PCLO
CDH7	0	0.62280089	0.635	0.242	0	ExN4	CDH7
EPHA51	0	0.61737368	0.841	0.578	0	ExN4	EPHA5
NMNAT3	0	0.6139717	0.579	0.221	0	ExN4	NMNAT3
AL033539.2	0	0.6125907	0.423	0.043	0	ExN4	AL033539.2
KCNK10	0	0.61118955	0.642	0.3	0	ExN4	KCNK10
SH3GL23	0	0.60944656	0.943	0.729	0	ExN4	SH3GL2
MRTFB3	0	0.60793966	0.921	0.747	0	ExN4	MRTFB
PFKP	0	0.60468461	0.681	0.381	0	ExN4	PFKP
RMST1	0	0.6007016	0.425	0.148	0	ExN4	RMST
PDE3B	0	0.60054348	0.758	0.497	0	ExN4	PDE3B
SNCA1	0	0.59793801	0.848	0.591	0	ExN4	SNCA
LINC022171	0	0.59789038	0.557	0.199	0	ExN4	LINC02217
CEMIP1	0	0.58548236	0.682	0.385	0	ExN4	CEMIP
PDE4B	0	0.58321399	0.899	0.586	0	ExN4	PDE4B
TRPM3	0	0.57645158	0.762	0.378	0	ExN4	TRPM3
ST8SIA11	0	0.57618543	0.799	0.538	0	ExN4	ST8SIA1
AL391117.1	0	0.56976023	0.307	0.046	0	ExN4	AL391117.1
TRABD2A	0	0.5688858	0.396	0.033	0	ExN4	TRABD2A
CELF4	0	0.56314596	0.968	0.902	0	ExN4	CELF4
PTPRG-AS1	0	0.5626439	0.433	0.133	0	ExN4	PTPRG-AS1
NCALD	0	0.56253962	0.922	0.757	0	ExN4	NCALD

TMEFF2	0	0.55966121	0.918	0.75	0	ExN4	TMEFF2
KIAA03191	0	0.55931498	0.798	0.54	0	ExN4	KIAA0319
PPP3CA2	0	0.55494335	0.983	0.91	0	ExN4	PPP3CA
LINC01902	0	0.55402227	0.476	0.133	0	ExN4	LINC01902
RSPO3	0	0.55186095	0.376	0.049	0	ExN4	RSPO3
NYAP2	0	0.55073505	0.805	0.482	0	ExN4	NYAP2
CDK14	0	0.55060196	0.951	0.856	0	ExN4	CDK14
KCNQ31	0	0.54746044	0.976	0.895	0	ExN4	KCNQ3
SMYD2	0	0.54447275	0.556	0.247	0	ExN4	SMYD2
NOS1AP	0	0.54420761	0.87	0.645	0	ExN4	NOS1AP
NCK2	0	0.53867727	0.706	0.421	0	ExN4	NCK2
ALDH1A2	0	0.53789697	0.478	0.174	0	ExN4	ALDH1A2
LRMP1	0	0.53772209	0.493	0.12	0	ExN4	LRMP
SYT1	0	0.53724829	0.997	0.984	0	ExN4	SYT1
OPRM11	0	0.52273896	0.499	0.208	0	ExN4	OPRM1
PDE4D2	0	0.51965008	0.992	0.959	0	ExN4	PDE4D
SORCS2	0	0.51421062	0.608	0.298	0	ExN4	SORCS2
CALD1	0	0.51188585	0.599	0.296	0	ExN4	CALD1
SATB1-AS11	0	0.51154687	0.757	0.409	0	ExN4	SATB1-AS1
PID1	0	0.49559698	0.749	0.476	0	ExN4	PID1
HTR2A3	0	0.48371928	0.608	0.311	0	ExN4	HTR2A
LINC022631	0	0.48284273	0.509	0.18	0	ExN4	LINC02263
ATP8B11	0	0.4790211	0.551	0.237	0	ExN4	ATP8B1
FER1L6-AS2	0	0.46474797	0.293	0.063	0	ExN4	FER1L6-AS2
PLD1	0	0.46071545	0.405	0.104	0	ExN4	PLD1
RNF182	0	0.44461194	0.325	0.022	0	ExN4	RNF182
WHRN	0	0.44015114	0.329	0.059	0	ExN4	WHRN
LNK2	0	0.43804361	0.402	0.13	0	ExN4	LNK2
SYT9	0	0.43493128	0.404	0.122	0	ExN4	SYT9
SEMA3E	0	0.42769303	0.329	0.11	0	ExN4	SEMA3E
KCNK2	0	0.42228835	0.461	0.145	0	ExN4	KCNK2
ARHGAP29	0	0.41689489	0.454	0.17	0	ExN4	ARHGAP29
AL589693.1	0	0.41001578	0.337	0.116	0	ExN4	AL589693.1
MDFIC	0	0.40499355	0.333	0.058	0	ExN4	MDFIC
AL138701.2	0	0.40058861	0.295	0.092	0	ExN4	AL138701.2
RBM20	0	0.39467138	0.28	0.049	0	ExN4	RBM20
PLOD2	0	0.39171367	0.463	0.198	0	ExN4	PLOD2
ANK2	0	0.38807283	0.991	0.976	0	ExN4	ANK2
CMTM8	0	0.38201144	0.341	0.087	0	ExN4	CMTM8
THEMIS	0	0.36756279	0.315	0.068	0	ExN4	THEMIS
TDO21	0	0.34927228	0.354	0.116	0	ExN4	TDO2
TMTC4	0	0.34479637	0.384	0.149	0	ExN4	TMTC4
DAPK2	0	0.31767963	0.299	0.075	0	ExN4	DAPK2
Z68323.1	0	0.30512141	0.254	0.033	0	ExN4	Z68323.1
AC017050.1	0	0.28859899	0.268	0.069	0	ExN4	AC017050.1
AC015712.2	0	0.26328388	0.262	0.061	0	ExN4	AC015712.2
FRMD3	4.24E-304	0.40351742	0.619	0.319	1.62E-299	ExN4	FRMD3
GPC51	6.50E-302	0.59005014	0.688	0.399	2.48E-297	ExN4	GPC5
FAM13A2	1.03E-300	0.54019846	0.836	0.582	3.92E-296	ExN4	FAM13A
FOXP12	4.92E-300	0.48731632	0.955	0.808	1.88E-295	ExN4	FOXP1
FNBP1L	9.97E-300	0.42773994	0.675	0.364	3.81E-295	ExN4	FNBP1L
RIMS1	1.58E-298	0.47130599	0.95	0.888	6.03E-294	ExN4	RIMS1
AL512662.2	5.17E-298	0.31951232	0.387	0.154	1.98E-293	ExN4	AL512662.2
PTPRK2	1.49E-297	0.51556011	0.886	0.583	5.69E-293	ExN4	PTPRK
FAM189A1	2.50E-297	0.50205384	0.856	0.614	9.55E-293	ExN4	FAM189A1
ANKRD33B1	2.61E-295	0.47155682	0.707	0.413	9.99E-291	ExN4	ANKRD33B
CNIH3	4.27E-295	0.54029715	0.663	0.394	1.63E-290	ExN4	CNIH3
BAALC	3.14E-294	0.5580662	0.712	0.456	1.20E-289	ExN4	BAALC
TAF2A1	8.42E-293	0.59796997	0.948	0.777	3.22E-288	ExN4	TAF2A
ADD2	6.05E-292	0.51970529	0.847	0.663	2.31E-287	ExN4	ADD2
VPS13A	4.44E-291	0.49383861	0.877	0.722	1.70E-286	ExN4	VPS13A
NTN4	2.73E-288	0.35351947	0.473	0.208	1.04E-283	ExN4	NTN4
GCNT1	1.82E-284	0.28793805	0.309	0.109	6.97E-280	ExN4	GCNT1

CDH81	2.38E-284	0.51368297	0.886	0.641	9.10E-280	ExN4	CDH8
PART11	1.14E-283	0.42551539	0.542	0.274	4.37E-279	ExN4	PART1
EPB411	2.49E-282	0.50091974	0.715	0.433	9.51E-278	ExN4	EPB41
FMNL2	8.39E-282	0.46825501	0.96	0.866	3.21E-277	ExN4	FMNL2
PARVA	1.86E-280	0.37885586	0.477	0.225	7.12E-276	ExN4	PARVA
COL12A1	1.05E-277	0.37706057	0.423	0.179	4.01E-273	ExN4	COL12A1
DIRAS2	1.44E-277	0.429951	0.563	0.296	5.51E-273	ExN4	DIRAS2
CPNE81	4.88E-277	0.53797865	0.731	0.456	1.86E-272	ExN4	CPNE8
CHGA1	9.46E-277	0.52346672	0.601	0.35	3.62E-272	ExN4	CHGA
BCL11A	6.02E-276	0.457731	0.833	0.579	2.30E-271	ExN4	BCL11A
ADAMTS2	2.48E-274	0.48209298	0.333	0.13	9.48E-270	ExN4	ADAMTS2
SSTR2	2.19E-273	0.3420136	0.397	0.168	8.39E-269	ExN4	SSTR2
CCDC144NL-/-	4.48E-271	0.33030898	0.342	0.134	1.71E-266	ExN4	CCDC144NL-/-
GALNT7	6.60E-271	0.49951363	0.736	0.494	2.52E-266	ExN4	GALNT7
SORCS3	4.03E-270	0.54592487	0.81	0.548	1.54E-265	ExN4	SORCS3
IQCJ-SCHIP1	2.38E-269	0.49746349	0.99	0.821	9.10E-265	ExN4	IQCJ-SCHIP1
CRYM1	3.08E-269	0.36142371	0.51	0.248	1.18E-264	ExN4	CRYM
KCNT2	8.23E-269	0.36658543	0.816	0.522	3.15E-264	ExN4	KCNT2
LINC00299	2.15E-268	0.47975331	0.516	0.262	8.23E-264	ExN4	LINC00299
STAMBPL11	3.92E-268	0.48494286	0.747	0.495	1.50E-263	ExN4	STAMBPL1
SYT72	6.96E-268	0.46708941	0.772	0.513	2.66E-263	ExN4	SYT7
LINC026091	7.23E-268	0.29737857	0.356	0.139	2.76E-263	ExN4	LINC02609
TMSB10	6.58E-267	0.74474077	0.561	0.315	2.51E-262	ExN4	TMSB10
RIT21	1.59E-265	0.43331839	0.596	0.301	6.07E-261	ExN4	RIT2
STXBP5L2	1.90E-265	0.43024882	0.981	0.945	7.26E-261	ExN4	STXBP5L
ANO32	1.21E-263	0.51033524	0.662	0.376	4.63E-259	ExN4	ANO3
NRCAM1	1.49E-263	0.39727242	0.97	0.916	5.70E-259	ExN4	NRCAM
SSBP31	6.63E-263	0.47835698	0.866	0.661	2.53E-258	ExN4	SSBP3
MROH71	3.38E-262	0.33834441	0.439	0.195	1.29E-257	ExN4	MROH7
SEC24D	6.59E-262	0.35843918	0.517	0.256	2.52E-257	ExN4	SEC24D
GRM72	2.88E-261	0.5384855	0.973	0.854	1.10E-256	ExN4	GRM7
ARL151	4.86E-259	0.6275104	0.903	0.801	1.86E-254	ExN4	ARL15
ITPK11	4.38E-256	0.44811268	0.699	0.446	1.67E-251	ExN4	ITPK1
FGD6	4.63E-256	0.31464519	0.347	0.141	1.77E-251	ExN4	FGD6
MAN2A11	4.73E-256	0.43080963	0.806	0.571	1.81E-251	ExN4	MAN2A1
ST3GAL61	6.78E-255	0.46783043	0.673	0.414	2.59E-250	ExN4	ST3GAL6
SLC35F11	1.86E-252	0.46732861	0.937	0.689	7.10E-248	ExN4	SLC35F1
ANKRD34C-A	4.74E-252	0.46995786	0.736	0.475	1.81E-247	ExN4	ANKRD34C-A
NR2F1-AS1	7.06E-252	0.47544503	0.917	0.776	2.70E-247	ExN4	NR2F1-AS1
SLC39A11	7.58E-251	0.54016101	0.647	0.4	2.90E-246	ExN4	SLC39A11
CTBP2	2.46E-250	0.40201667	0.591	0.332	9.39E-246	ExN4	CTBP2
MID1	5.18E-250	0.2725548	0.326	0.123	1.98E-245	ExN4	MID1
ATXN1	6.86E-250	0.39846304	0.966	0.924	2.62E-245	ExN4	ATXN1
RBFOX31	1.75E-249	0.46323087	0.956	0.878	6.68E-245	ExN4	RBFOX3
AC103855.21	8.61E-249	0.41474883	0.511	0.264	3.29E-244	ExN4	AC103855.2
SLIT31	7.75E-244	0.65248649	0.707	0.449	2.96E-239	ExN4	SLIT3
EFHD2	4.58E-243	0.36810475	0.489	0.251	1.75E-238	ExN4	EFHD2
AL731769.2	6.66E-242	0.37365994	0.356	0.152	2.55E-237	ExN4	AL731769.2
CABP13	5.90E-241	0.45999617	0.893	0.688	2.25E-236	ExN4	CABP1
LINC01435	1.86E-238	0.32120902	0.3	0.115	7.11E-234	ExN4	LINC01435
MAPK101	2.28E-238	0.35018982	0.981	0.95	8.70E-234	ExN4	MAPK10
MEF2C1	1.01E-236	0.38508352	0.978	0.935	3.88E-232	ExN4	MEF2C
RETREG11	2.26E-235	0.43763219	0.797	0.56	8.66E-231	ExN4	RETREG1
NAPEPLD1	8.12E-235	0.42199049	0.713	0.475	3.10E-230	ExN4	NAPEPLD
TTC39C1	8.43E-235	0.45319647	0.795	0.585	3.22E-230	ExN4	TTC39C
ST6GAL11	1.96E-234	0.32206422	0.497	0.255	7.49E-230	ExN4	ST6GAL1
NEK111	1.37E-233	0.46234454	0.652	0.419	5.24E-229	ExN4	NEK11
SYNPO21	1.70E-233	0.42685086	0.664	0.408	6.49E-229	ExN4	SYNPO2
IL12RB2	4.10E-233	0.27705517	0.419	0.19	1.57E-228	ExN4	IL12RB2
NAALAD2	2.36E-232	0.40622329	0.686	0.456	9.02E-228	ExN4	NAALAD2
DYNC1I11	3.81E-232	0.41693966	0.942	0.866	1.46E-227	ExN4	DYNC1I1
BASP1-AS12	5.43E-231	0.4755679	0.872	0.64	2.08E-226	ExN4	BASP1-AS1
CCSER1	4.26E-230	0.37647775	0.983	0.963	1.63E-225	ExN4	CCSER1

STX1A2	1.16E-229	0.41275374	0.594	0.358	4.42E-225	ExN4	STX1A
XYLT11	2.02E-228	0.5532138	0.764	0.542	7.71E-224	ExN4	XYLT1
COL23A1	6.72E-228	0.33396315	0.405	0.189	2.57E-223	ExN4	COL23A1
LHX21	4.10E-227	0.30613314	0.391	0.179	1.57E-222	ExN4	LHX2
MIR31HG1	8.43E-227	0.35830216	0.418	0.192	3.22E-222	ExN4	MIR31HG
ATP2B41	1.23E-226	0.41705923	0.776	0.495	4.68E-222	ExN4	ATP2B4
SV2B2	2.02E-225	0.45811821	0.883	0.585	7.72E-221	ExN4	SV2B
NUDT4	9.56E-225	0.37789041	0.502	0.274	3.65E-220	ExN4	NUDT4
KBTBD121	2.53E-224	0.35373939	0.477	0.244	9.68E-220	ExN4	KBTBD12
FAM3C	7.03E-222	0.46550152	0.621	0.396	2.69E-217	ExN4	FAM3C
MAP1B	7.33E-222	0.42542459	0.961	0.893	2.80E-217	ExN4	MAP1B
AC120193.11	3.36E-220	0.56448767	0.542	0.309	1.28E-215	ExN4	AC120193.1
PEX5L	4.28E-220	0.41908884	0.951	0.818	1.64E-215	ExN4	PEX5L
AC092691.1	1.10E-219	0.37185231	0.97	0.86	4.22E-215	ExN4	AC092691.1
PAK11	2.61E-219	0.4575672	0.837	0.679	9.97E-215	ExN4	PAK1
PPP2R2B1	2.75E-219	0.35527	0.985	0.954	1.05E-214	ExN4	PPP2R2B
ACOT111	2.51E-218	0.28146946	0.437	0.207	9.61E-214	ExN4	ACOT11
SYTL23	4.93E-215	0.43062816	0.7	0.465	1.89E-210	ExN4	SYTL2
CNKSR23	3.48E-214	0.44880503	0.943	0.81	1.33E-209	ExN4	CNKSR2
EFNB2	4.76E-212	0.33368465	0.49	0.265	1.82E-207	ExN4	EFNB2
RHOBTB11	2.62E-208	0.32312821	0.505	0.272	1.00E-203	ExN4	RHOBTB1
SASH11	8.74E-208	0.40307241	0.575	0.336	3.34E-203	ExN4	SASH1
NPTX12	1.62E-207	0.3671582	0.732	0.464	6.21E-203	ExN4	NPTX1
NUAK11	4.85E-207	0.42266115	0.789	0.58	1.85E-202	ExN4	NUAK1
PLAGL1	5.03E-207	0.35497348	0.436	0.219	1.92E-202	ExN4	PLAGL1
NELL23	2.75E-206	0.40719423	0.966	0.775	1.05E-201	ExN4	NELL2
PDZRN31	2.97E-206	0.4354424	0.921	0.749	1.13E-201	ExN4	PDZRN3
CDHR31	1.81E-202	0.34946207	0.612	0.359	6.93E-198	ExN4	CDHR3
CNTN51	1.46E-201	0.3065942	0.98	0.801	5.57E-197	ExN4	CNTN5
ANKS1B1	2.30E-201	0.29480574	0.994	0.986	8.81E-197	ExN4	ANKS1B
THRB1	6.67E-199	0.37986088	0.963	0.913	2.55E-194	ExN4	THRB
AL158077.2	9.69E-198	0.33834947	0.484	0.259	3.70E-193	ExN4	AL158077.2
LIN7A1	1.32E-197	0.4102797	0.763	0.525	5.03E-193	ExN4	LIN7A
SRRM4	2.90E-197	0.38841679	0.938	0.847	1.11E-192	ExN4	SRRM4
KLHL41	3.41E-195	0.3384199	0.502	0.273	1.30E-190	ExN4	KLHL4
UNC13B1	3.86E-195	0.33913466	0.602	0.363	1.47E-190	ExN4	UNC13B
SAMD5	3.16E-194	0.28543741	0.552	0.296	1.21E-189	ExN4	SAMD5
R3HDM13	7.89E-194	0.35241893	0.977	0.886	3.01E-189	ExN4	R3HDM1
CAPS2	1.81E-193	0.43036058	0.62	0.415	6.93E-189	ExN4	CAPS2
CELF22	4.38E-191	0.3314661	0.995	0.966	1.68E-186	ExN4	CELF2
PPP1R16B2	3.28E-188	0.39875844	0.833	0.632	1.25E-183	ExN4	PPP1R16B
SNAP251	3.40E-188	0.34277678	0.968	0.917	1.30E-183	ExN4	SNAP25
DNAH141	4.76E-187	0.3239826	0.51	0.28	1.82E-182	ExN4	DNAH14
TEAD1	6.01E-187	0.42511193	0.753	0.547	2.30E-182	ExN4	TEAD1
BASP11	6.96E-187	0.4075757	0.897	0.76	2.66E-182	ExN4	BASP1
AC019211.12	8.17E-186	0.34469023	0.601	0.332	3.12E-181	ExN4	AC019211.1
AL513166.12	6.35E-182	0.46264851	0.815	0.607	2.43E-177	ExN4	AL513166.1
AC093523.11	4.65E-181	0.42033248	0.626	0.401	1.78E-176	ExN4	AC093523.1
CACNB41	6.74E-180	0.35436428	0.954	0.845	2.58E-175	ExN4	CACNB4
ST6GALNAC5	3.92E-179	0.47384437	0.895	0.697	1.50E-174	ExN4	ST6GALNAC5
DCAF62	2.32E-178	0.39924411	0.798	0.61	8.86E-174	ExN4	DCAF6
PCDH15	1.88E-177	0.28709544	0.54	0.308	7.18E-173	ExN4	PCDH15
PHACTR2	2.60E-177	0.45917561	0.617	0.391	9.93E-173	ExN4	PHACTR2
PLCL2	1.39E-176	0.37944792	0.83	0.685	5.31E-172	ExN4	PLCL2
AC124854.11	1.59E-174	0.37881128	0.549	0.328	6.08E-170	ExN4	AC124854.1
GABRG3	6.34E-174	0.32686419	0.938	0.789	2.42E-169	ExN4	GABRG3
AFF11	2.70E-173	0.34640771	0.63	0.395	1.03E-168	ExN4	AFF1
COBL1	2.19E-171	0.34230764	0.901	0.737	8.39E-167	ExN4	COBL
LARGE1	4.68E-171	0.3548879	0.959	0.907	1.79E-166	ExN4	LARGE1
MMP161	1.34E-170	0.37338507	0.936	0.788	5.12E-166	ExN4	MMP16
STARD13	2.23E-170	0.32517399	0.755	0.521	8.53E-166	ExN4	STARD13
ARHGAP12	3.76E-170	0.26901982	0.55	0.318	1.44E-165	ExN4	ARHGAP12
LINC013781	1.95E-168	0.31435949	0.586	0.329	7.46E-164	ExN4	LINC01378

HIVEP1	9.69E-167	0.33714287	0.65	0.446	3.70E-162	ExN4	HIVEP1
DLG12	4.67E-164	0.36249949	0.909	0.764	1.78E-159	ExN4	DLG1
ACVR2A	1.96E-163	0.36334735	0.635	0.444	7.48E-159	ExN4	ACVR2A
MBP	3.32E-162	0.26142801	0.744	0.513	1.27E-157	ExN4	MBP
TLN21	7.60E-162	0.34545889	0.89	0.723	2.90E-157	ExN4	TLN2
GLRB	7.28E-161	0.36250847	0.742	0.559	2.78E-156	ExN4	GLRB
HIVEP3	1.06E-159	0.38132448	0.937	0.855	4.06E-155	ExN4	HIVEP3
SLC6A73	1.39E-159	0.28665842	0.516	0.307	5.31E-155	ExN4	SLC6A7
LINC00632	3.95E-159	0.31043245	0.97	0.944	1.51E-154	ExN4	LINC00632
IQSEC1	1.24E-158	0.32838882	0.893	0.772	4.74E-154	ExN4	IQSEC1
AC091078.11	1.08E-156	0.26832281	0.516	0.29	4.14E-152	ExN4	AC091078.1
SNTG2	3.64E-155	0.3274512	0.303	0.141	1.39E-150	ExN4	SNTG2
EPHA43	6.63E-155	0.35120762	0.884	0.66	2.53E-150	ExN4	EPHA4
SLC17A73	8.09E-155	0.32362311	0.652	0.421	3.09E-150	ExN4	SLC17A7
GPR158	3.05E-154	0.31613886	0.874	0.74	1.17E-149	ExN4	GPR158
AC067956.12	1.31E-153	0.28132725	0.551	0.307	4.99E-149	ExN4	AC067956.1
LINC01322	1.86E-153	0.37090717	0.744	0.526	7.09E-149	ExN4	LINC01322
CXXC41	2.37E-152	0.29033225	0.461	0.257	9.06E-148	ExN4	CXXC4
MGLL	2.85E-151	0.26652323	0.644	0.421	1.09E-146	ExN4	MGLL
RAPGEF22	3.39E-151	0.35004081	0.943	0.85	1.29E-146	ExN4	RAPGEF2
DMD2	1.98E-149	0.38731121	0.971	0.917	7.57E-145	ExN4	DMD
MCTP1	3.89E-149	0.34662022	0.9	0.757	1.49E-144	ExN4	MCTP1
KLF12	3.98E-149	0.30541845	0.812	0.594	1.52E-144	ExN4	KLF12
SYN2	9.60E-149	0.28389549	0.953	0.895	3.67E-144	ExN4	SYN2
TCF7L21	3.53E-148	0.35738854	0.451	0.264	1.35E-143	ExN4	TCF7L2
LINC011221	1.49E-147	0.27226116	0.903	0.673	5.70E-143	ExN4	LINC01122
LINC014141	1.72E-147	0.3383051	0.662	0.441	6.58E-143	ExN4	LINC01414
RAP1GAP22	5.99E-147	0.3523796	0.804	0.624	2.29E-142	ExN4	RAP1GAP2
PCED1B1	6.85E-147	0.26838619	0.268	0.122	2.62E-142	ExN4	PCED1B
PLXDC21	1.41E-146	0.33726208	0.816	0.594	5.39E-142	ExN4	PLXDC2
AC073365.13	7.25E-146	0.38029856	0.586	0.366	2.77E-141	ExN4	AC073365.1
CACNA1A1	6.87E-145	0.29419477	0.97	0.904	2.62E-140	ExN4	CACNA1A
AGAP11	1.17E-142	0.28634775	0.969	0.905	4.45E-138	ExN4	AGAP1
PRKCB3	1.48E-142	0.31258808	0.974	0.859	5.67E-138	ExN4	PRKCB
NREP	1.87E-142	0.27620897	0.546	0.344	7.14E-138	ExN4	NREP
CHN12	1.30E-141	0.29785021	0.935	0.736	4.95E-137	ExN4	CHN1
KCNIP3	1.15E-140	0.25952573	0.463	0.276	4.39E-136	ExN4	KCNIP3
FAM13C	3.55E-140	0.29536462	0.691	0.496	1.36E-135	ExN4	FAM13C
AC010280.11	1.42E-139	0.28110339	0.441	0.251	5.43E-135	ExN4	AC010280.1
TUBA1B1	3.18E-139	0.4446082	0.715	0.554	1.22E-134	ExN4	TUBA1B
LINGO12	7.65E-139	0.31690328	0.698	0.488	2.93E-134	ExN4	LINGO1
PCDH10	1.44E-138	0.33700358	0.64	0.435	5.50E-134	ExN4	PCDH10
TMEM72-AS:	1.71E-138	0.26828513	0.533	0.333	6.54E-134	ExN4	TMEM72-AS:
RGS62	1.97E-138	0.49185851	0.8	0.696	7.52E-134	ExN4	RGS6
VPS411	4.98E-138	0.32796718	0.748	0.579	1.90E-133	ExN4	VPS41
SLIT11	8.78E-138	0.28207509	0.792	0.577	3.35E-133	ExN4	SLIT1
HERC1	1.56E-137	0.28611316	0.927	0.875	5.96E-133	ExN4	HERC1
MIR137HG2	2.25E-137	0.33963873	0.868	0.644	8.61E-133	ExN4	MIR137HG
SNTG12	1.54E-136	0.26718416	0.986	0.938	5.89E-132	ExN4	SNTG1
ZBTB16	2.63E-134	0.32037826	0.947	0.871	1.00E-129	ExN4	ZBTB16
KCNMB4	2.91E-134	0.31712603	0.647	0.453	1.11E-129	ExN4	KCNMB4
EPS15	3.29E-134	0.29597104	0.658	0.472	1.26E-129	ExN4	EPS15
AL807742.11	3.35E-134	0.43004161	0.266	0.128	1.28E-129	ExN4	AL807742.1
OXR11	1.18E-131	0.27105125	0.972	0.917	4.51E-127	ExN4	OXR1
MYRIP	1.15E-129	0.25378673	0.911	0.797	4.38E-125	ExN4	MYRIP
MSC-AS12	1.35E-129	0.38871623	0.385	0.217	5.15E-125	ExN4	MSC-AS1
FAM155A1	3.66E-129	0.25119528	0.995	0.985	1.40E-124	ExN4	FAM155A
MYO5A	5.28E-129	0.31310226	0.929	0.843	2.02E-124	ExN4	MYO5A
DIRC32	9.28E-129	0.34598328	0.728	0.529	3.55E-124	ExN4	DIRC3
KALRN2	1.00E-128	0.27698488	0.992	0.954	3.84E-124	ExN4	KALRN
CHSY31	6.35E-127	0.31445006	0.94	0.827	2.43E-122	ExN4	CHSY3
CAMK2G	2.55E-126	0.30744044	0.741	0.573	9.74E-122	ExN4	CAMK2G
ARHGAP221	2.20E-125	0.25135089	0.476	0.294	8.42E-121	ExN4	ARHGAP22

HDAC4	2.46E-124	0.30709266	0.811	0.653	9.39E-120	ExN4	HDAC4
KCNIP4-IT13	6.80E-123	0.25115531	0.724	0.483	2.60E-118	ExN4	KCNIP4-IT1
HLF	1.93E-122	0.36331607	0.68	0.499	7.38E-118	ExN4	HLF
NUMB	2.15E-121	0.29183545	0.709	0.543	8.21E-117	ExN4	NUMB
PIK3R11	7.71E-120	0.3030656	0.834	0.679	2.95E-115	ExN4	PIK3R1
FAM135B	1.00E-119	0.32099843	0.778	0.62	3.84E-115	ExN4	FAM135B
HPCA	2.76E-119	0.25537684	0.406	0.239	1.06E-114	ExN4	HPCA
KCNIP43	8.34E-118	0.31448659	0.999	0.933	3.19E-113	ExN4	KCNIP4
DSCAM	2.56E-117	0.27519224	0.984	0.898	9.80E-113	ExN4	DSCAM
LRFN53	4.23E-117	0.28753232	0.969	0.886	1.62E-112	ExN4	LRFN5
SIDT1	1.05E-116	0.2821791	0.692	0.504	4.01E-112	ExN4	SIDT1
RALGPS2	8.37E-116	0.29467705	0.698	0.526	3.20E-111	ExN4	RALGPS2
STRBP	3.06E-115	0.30286791	0.865	0.751	1.17E-110	ExN4	STRBP
EFNA52	3.82E-115	0.30525179	0.945	0.785	1.46E-110	ExN4	EFNA5
RALGAPA2	2.04E-114	0.32299478	0.748	0.577	7.79E-110	ExN4	RALGAPA2
EPHB6	4.53E-113	0.27382017	0.592	0.411	1.73E-108	ExN4	EPHB6
RAPGEF52	1.10E-112	0.29579465	0.932	0.736	4.20E-108	ExN4	RAPGEF5
RAPGEF4	7.93E-112	0.27066646	0.932	0.87	3.03E-107	ExN4	RAPGEF4
LDB23	8.26E-110	0.31222737	0.971	0.747	3.16E-105	ExN4	LDB2
AL391840.12	1.58E-109	0.26388358	0.723	0.495	6.06E-105	ExN4	AL391840.1
TRIM44	1.27E-108	0.29964706	0.824	0.699	4.86E-104	ExN4	TRIM44
FUT8	1.80E-108	0.30278946	0.799	0.688	6.87E-104	ExN4	FUT8
MRPS30-DT2	4.01E-108	0.27371846	0.632	0.448	1.53E-103	ExN4	MRPS30-DT
STK39	1.20E-107	0.28835353	0.743	0.589	4.60E-103	ExN4	STK39
CXXC4-AS11	1.64E-106	0.32569497	0.545	0.374	6.26E-102	ExN4	CXXC4-AS1
TMEM232	1.82E-106	0.32686862	0.894	0.763	6.94E-102	ExN4	TMEM232
DDAH11	5.96E-105	0.27066107	0.597	0.41	2.28E-100	ExN4	DDAH1
LINC022541	8.52E-105	0.25296855	0.291	0.155	3.26E-100	ExN4	LINC02254
AL008633.12	8.60E-100	0.30391062	0.872	0.703	3.29E-95	ExN4	AL008633.1
SHISA9	1.69E-99	0.3027652	0.956	0.811	6.44E-95	ExN4	SHISA9
SLCO3A11	3.22E-98	0.27805415	0.858	0.725	1.23E-93	ExN4	SLCO3A1
ZFYVE28	1.72E-97	0.27052675	0.81	0.683	6.58E-93	ExN4	ZFYVE28
GCC2	2.05E-97	0.26529184	0.693	0.539	7.85E-93	ExN4	GCC2
ASAP2	5.79E-96	0.2533335	0.558	0.389	2.21E-91	ExN4	ASAP2
ZEB12	2.77E-94	0.28533668	0.878	0.754	1.06E-89	ExN4	ZEB1
SLC1A2	2.04E-91	0.30670456	0.62	0.448	7.80E-87	ExN4	SLC1A2
AJ009632.21	4.55E-91	0.3293026	0.292	0.161	1.74E-86	ExN4	AJ009632.2
PPM1L1	3.10E-90	0.27233401	0.909	0.802	1.19E-85	ExN4	PPM1L
NEFL	4.34E-90	0.25905696	0.449	0.3	1.66E-85	ExN4	NEFL
PPP2R2C3	5.20E-89	0.25204048	0.906	0.792	1.99E-84	ExN4	PPP2R2C
ARNTL	2.22E-85	0.25897508	0.612	0.453	8.49E-81	ExN4	ARNTL
HCN11	6.71E-85	0.2581633	0.926	0.854	2.57E-80	ExN4	HCN1
PRICKLE11	1.30E-83	0.25453416	0.831	0.681	4.95E-79	ExN4	PRICKLE1
SNAP91	1.52E-82	0.25058924	0.912	0.842	5.83E-78	ExN4	SNAP91
ELL21	4.00E-81	0.25128376	0.722	0.533	1.53E-76	ExN4	ELL2
FARS2	3.31E-79	0.25014377	0.872	0.754	1.27E-74	ExN4	FARS2
RNLS1	4.65E-77	0.25725387	0.609	0.46	1.78E-72	ExN4	RNLS
STMN11	1.56E-73	0.28492951	0.605	0.466	5.97E-69	ExN4	STMN1
SLC5A4-AS11	6.71E-72	0.30535471	0.552	0.404	2.57E-67	ExN4	SLC5A4-AS1
SLC23A2	1.85E-70	0.25345078	0.794	0.672	7.09E-66	ExN4	SLC23A2
PTPRK3	0	1.66614173	0.98	0.593	0	ExN5	PTPRK
CTNNA22	0	1.66363768	0.995	0.957	0	ExN5	CTNNA2
LINC02196	0	1.61719232	0.384	0.059	0	ExN5	LINC02196
PDZRN42	0	1.56404321	0.919	0.378	0	ExN5	PDZRN4
AC019211.13	0	1.46605487	0.914	0.331	0	ExN5	AC019211.1
AC067956.13	0	1.31519747	0.864	0.305	0	ExN5	AC067956.1
LRP1B1	0	1.28955093	0.995	0.948	0	ExN5	LRP1B
CLSTN22	0	1.25633696	0.965	0.612	0	ExN5	CLSTN2
ADGRL4	0	1.18662446	0.294	0.048	0	ExN5	ADGRL4
AC099517.11	0	1.11265249	0.435	0.049	0	ExN5	AC099517.1
DACH11	0	1.10433449	0.678	0.187	0	ExN5	DACH1
HS3ST22	0	1.07630289	0.741	0.247	0	ExN5	HS3ST2
POU6F23	0	1.06294003	0.901	0.384	0	ExN5	POU6F2

PLXDC22	0	1.03768791	0.936	0.599	0	ExN5	PLXDC2
RXFP11	0	1.02934873	0.757	0.207	0	ExN5	RXFP1
THEMIS1	0	1.02697998	0.583	0.067	0	ExN5	THEMIS
RIT22	0	0.94667233	0.792	0.306	0	ExN5	RIT2
KHDRBS33	0	0.92924074	0.975	0.791	0	ExN5	KHDRBS3
SLC39A111	0	0.88057009	0.793	0.405	0	ExN5	SLC39A11
SEMA3A2	0	0.86819418	0.587	0.197	0	ExN5	SEMA3A
AL138701.21	0	0.86474259	0.563	0.09	0	ExN5	AL138701.2
AC093843.12	0	0.85252628	0.715	0.2	0	ExN5	AC093843.1
NELL24	0	0.84526669	0.973	0.784	0	ExN5	NELL2
ARHGEF281	0	0.82387653	0.71	0.295	0	ExN5	ARHGEF28
PDE4D3	0	0.80975555	0.995	0.96	0	ExN5	PDE4D
MMP162	0	0.80483016	0.959	0.794	0	ExN5	MMP16
RALYL3	0	0.79239589	0.995	0.812	0	ExN5	RALYL
LINC00343	0	0.77777941	0.429	0.047	0	ExN5	LINC00343
LINC022542	0	0.74111046	0.566	0.149	0	ExN5	LINC02254
DCHS2	0	0.72169564	0.523	0.11	0	ExN5	DCHS2
HS3ST5	0	0.71820392	0.746	0.299	0	ExN5	HS3ST5
PDGFC2	0	0.64332758	0.661	0.267	0	ExN5	PDGFC
AL136456.1	0	0.61407971	0.523	0.132	0	ExN5	AL136456.1
AC084816.12	0	0.60593374	0.587	0.182	0	ExN5	AC084816.1
OPCML2	0	0.60155946	0.993	0.987	0	ExN5	OPCML
MGST1	0	0.572157	0.432	0.103	0	ExN5	MGST1
TEX41	0	0.45007752	0.363	0.078	0	ExN5	TEX41
AC020704.1	0	0.4447778	0.361	0.062	0	ExN5	AC020704.1
BACE2	0	0.41144053	0.466	0.133	0	ExN5	BACE2
AC010931.3	0	0.39226213	0.287	0.045	0	ExN5	AC010931.3
AC008127.11	0	0.31501104	0.332	0.07	0	ExN5	AC008127.1
SEC24D1	1.41E-293	0.54579315	0.641	0.263	5.38E-289	ExN5	SEC24D
FOXP22	8.19E-288	0.9943897	0.695	0.301	3.13E-283	ExN5	FOXP2
SV2B3	5.24E-287	0.76949877	0.937	0.597	2.00E-282	ExN5	SV2B
GAP432	1.68E-283	0.74039485	0.859	0.527	6.43E-279	ExN5	GAP43
AC090578.12	9.86E-281	0.8653287	0.879	0.55	3.77E-276	ExN5	AC090578.1
NAV32	2.14E-279	0.62194429	0.991	0.949	8.18E-275	ExN5	NAV3
SLC35F32	2.51E-279	0.92877519	0.947	0.763	9.58E-275	ExN5	SLC35F3
FMNL21	1.15E-278	0.67058179	0.967	0.87	4.39E-274	ExN5	FMNL2
NECAB12	7.11E-276	0.74180135	0.932	0.635	2.72E-271	ExN5	NECAB1
TNNT22	1.66E-274	0.50729823	0.392	0.118	6.35E-270	ExN5	TNNT2
OPRM12	1.13E-272	0.60659462	0.568	0.219	4.31E-268	ExN5	OPRM1
LINC00320	6.95E-272	0.34948428	0.381	0.109	2.66E-267	ExN5	LINC00320
EFNA53	5.35E-270	0.76473034	0.966	0.792	2.04E-265	ExN5	EFNA5
CACHD1	6.35E-261	0.45549011	0.603	0.244	2.43E-256	ExN5	CACHD1
LINC014351	1.05E-259	0.45163372	0.393	0.119	4.03E-255	ExN5	LINC01435
DNAH142	1.42E-259	0.51331492	0.667	0.284	5.44E-255	ExN5	DNAH14
SORCS12	9.47E-258	0.78670714	0.954	0.667	3.62E-253	ExN5	SORCS1
NRCAM2	1.20E-257	0.52870122	0.98	0.918	4.60E-253	ExN5	NRCAM
LINC028221	4.38E-257	0.7180101	0.422	0.139	1.67E-252	ExN5	LINC02822
CSGALNACT1	6.75E-253	0.71894493	0.886	0.602	2.58E-248	ExN5	CSGALNACT1
CCDC32	3.45E-251	0.7796011	0.914	0.638	1.32E-246	ExN5	CCDC3
AC007614.11	3.16E-249	0.4397131	0.277	0.068	1.21E-244	ExN5	AC007614.1
MCTP11	4.44E-249	1.0292601	0.924	0.763	1.70E-244	ExN5	MCTP1
FOXP13	2.14E-246	0.62434885	0.963	0.815	8.19E-242	ExN5	FOXP1
MYO1D2	2.87E-246	0.78098733	0.811	0.508	1.10E-241	ExN5	MYO1D
SOX52	6.79E-246	0.77117659	0.942	0.661	2.60E-241	ExN5	SOX5
IL12RB21	4.47E-244	0.3835985	0.528	0.196	1.71E-239	ExN5	IL12RB2
FRMD61	1.08E-240	0.58307007	0.529	0.215	4.13E-236	ExN5	FRMD6
GRM11	3.03E-239	0.65166205	0.936	0.63	1.16E-234	ExN5	GRM1
TENM41	3.69E-238	0.61729698	0.967	0.855	1.41E-233	ExN5	TENM4
CPNE42	2.44E-237	0.90491118	0.802	0.458	9.31E-233	ExN5	CPNE4
RYR23	3.69E-234	0.57159727	0.986	0.926	1.41E-229	ExN5	RYR2
PEX5L1	1.36E-232	0.67359288	0.961	0.824	5.19E-228	ExN5	PEX5L
PKN2-AS12	3.56E-232	0.63671797	0.65	0.302	1.36E-227	ExN5	PKN2-AS1
LINC022322	4.58E-231	0.82257717	0.472	0.181	1.75E-226	ExN5	LINC02232

MSC-AS13	1.99E-230	0.57728032	0.546	0.218	7.61E-226 ExN5	MSC-AS1
ADAMTS32	3.24E-225	0.55462241	0.601	0.256	1.24E-220 ExN5	ADAMTS3
AC117834.1	8.99E-223	0.27558518	0.255	0.062	3.44E-218 ExN5	AC117834.1
SAMD51	7.18E-222	0.42619503	0.683	0.303	2.74E-217 ExN5	SAMD5
NKAIN23	5.76E-218	0.59740996	0.987	0.834	2.20E-213 ExN5	NKAIN2
IL1RAPL22	1.22E-214	0.94594404	0.654	0.312	4.66E-210 ExN5	IL1RAPL2
LINC01748	3.11E-213	0.28588944	0.365	0.116	1.19E-208 ExN5	LINC01748
SYT11	3.20E-211	0.43111504	0.997	0.985	1.22E-206 ExN5	SYT1
CRIM11	3.54E-211	0.57234679	0.809	0.477	1.35E-206 ExN5	CRIM1
LMO42	1.44E-209	0.55284015	0.856	0.518	5.51E-205 ExN5	LMO4
PART12	1.18E-206	0.45337254	0.616	0.283	4.53E-202 ExN5	PART1
PTK22	2.78E-206	0.56975839	0.971	0.897	1.06E-201 ExN5	PTK2
CABP14	1.62E-203	0.61600985	0.932	0.696	6.19E-199 ExN5	CABP1
SSTR21	7.75E-203	0.30254528	0.467	0.176	2.96E-198 ExN5	SSTR2
ZNF804B1	1.47E-201	0.70783165	0.667	0.347	5.61E-197 ExN5	ZNF804B
SLIT12	3.79E-201	0.56664368	0.893	0.583	1.45E-196 ExN5	SLIT1
SPOCK11	4.77E-200	0.6007625	0.95	0.743	1.82E-195 ExN5	SPOCK1
ANO33	1.69E-198	0.49556964	0.766	0.386	6.47E-194 ExN5	ANO3
TBR11	3.65E-196	0.35534262	0.536	0.228	1.40E-191 ExN5	TBR1
KCNQ52	7.06E-196	0.53073833	0.988	0.902	2.70E-191 ExN5	KCNQ5
AL033504.1	3.25E-195	0.40669251	0.583	0.251	1.24E-190 ExN5	AL033504.1
SNTG21	1.09E-194	0.5176695	0.398	0.145	4.16E-190 ExN5	SNTG2
FAP1	2.96E-193	0.33418047	0.352	0.116	1.13E-188 ExN5	FAP
AL356295.11	7.38E-190	0.90042038	0.418	0.164	2.82E-185 ExN5	AL356295.1
NRG11	1.70E-189	0.75981214	0.84	0.537	6.52E-185 ExN5	NRG1
ATP8B12	2.52E-186	0.39868779	0.565	0.252	9.64E-182 ExN5	ATP8B1
ADGRL22	4.88E-186	0.53677195	0.969	0.852	1.87E-181 ExN5	ADGRL2
RASGRP1	1.05E-184	0.29448183	0.468	0.182	4.02E-180 ExN5	RASGRP1
SNCA2	2.50E-184	0.55447202	0.888	0.602	9.57E-180 ExN5	SNCA
SH3GL24	1.34E-182	0.56840125	0.945	0.739	5.14E-178 ExN5	SH3GL2
LY86-AS13	2.62E-181	0.5181888	0.856	0.473	1.00E-176 ExN5	LY86-AS1
DPP101	2.49E-177	0.34791918	0.989	0.843	9.53E-173 ExN5	DPP10
MRTFB4	5.96E-177	0.53473733	0.924	0.756	2.28E-172 ExN5	MRTFB
CDH6	3.58E-175	0.39273932	0.444	0.18	1.37E-170 ExN5	CDH6
RPS6KA51	6.03E-175	0.55288378	0.85	0.59	2.31E-170 ExN5	RPS6KA5
PTPRD3	1.41E-172	0.48326469	0.995	0.963	5.37E-168 ExN5	PTPRD
CDYL23	2.06E-172	0.49680303	0.703	0.394	7.89E-168 ExN5	CDYL2
AC011995.22	5.27E-172	0.43422081	0.744	0.398	2.01E-167 ExN5	AC011995.2
PPP3CA3	6.01E-172	0.48322989	0.983	0.914	2.30E-167 ExN5	PPP3CA
COL19A1	2.82E-171	0.32465782	0.648	0.317	1.08E-166 ExN5	COL19A1
MAN2A12	1.44E-169	0.46889004	0.863	0.58	5.51E-165 ExN5	MAN2A1
CPNE91	1.66E-167	0.29299021	0.451	0.187	6.33E-163 ExN5	CPNE9
DENND32	9.06E-167	0.38022829	0.648	0.335	3.46E-162 ExN5	DENND3
CAMK1D3	6.44E-166	0.52007814	0.978	0.857	2.46E-161 ExN5	CAMK1D
B3GLCT	1.55E-164	0.31736759	0.602	0.287	5.93E-160 ExN5	B3GLCT
DPYD2	1.94E-164	0.54048592	0.932	0.657	7.42E-160 ExN5	DPYD
RAB27B1	7.21E-164	0.46782221	0.768	0.445	2.76E-159 ExN5	RAB27B
BMPER2	9.85E-163	0.55803303	0.879	0.608	3.77E-158 ExN5	BMPER
KALRN3	9.98E-162	0.41445135	0.989	0.956	3.82E-157 ExN5	KALRN
KIAA1211L2	2.17E-160	0.49979595	0.886	0.555	8.31E-156 ExN5	KIAA1211L
SNED13	2.90E-160	0.47152877	0.756	0.433	1.11E-155 ExN5	SNED1
RETREG12	5.97E-160	0.48470059	0.836	0.569	2.28E-155 ExN5	RETREG1
USP432	6.73E-160	0.30038923	0.552	0.249	2.57E-155 ExN5	USP43
SHC31	2.54E-159	0.51263733	0.849	0.601	9.70E-155 ExN5	SHC3
PCDH92	2.62E-159	0.47853477	0.998	0.966	1.00E-154 ExN5	PCDH9
SATB23	1.23E-157	0.4900836	0.914	0.566	4.69E-153 ExN5	SATB2
LINC012022	9.78E-157	0.36034026	0.389	0.153	3.74E-152 ExN5	LINC01202
TSHZ1	5.35E-156	0.38883384	0.681	0.371	2.05E-151 ExN5	TSHZ1
ADAMTS162	1.30E-155	0.34743548	0.457	0.193	4.95E-151 ExN5	ADAMTS16
MYOM21	2.97E-155	0.33995589	0.457	0.2	1.14E-150 ExN5	MYOM2
VPS412	1.69E-154	0.4586399	0.839	0.583	6.45E-150 ExN5	VPS41
FMN12	8.86E-154	0.53654184	0.927	0.754	3.39E-149 ExN5	FMN1
CCDC144NL-/	3.09E-152	0.28756984	0.37	0.143	1.18E-147 ExN5	CCDC144NL-/

AC060765.22	3.34E-152	0.69434086	0.437	0.186	1.27E-147	ExN5	AC060765.2
B4GALNT31	3.58E-152	0.3421463	0.606	0.305	1.37E-147	ExN5	B4GALNT3
AC015943.1	6.13E-152	0.32500746	0.311	0.11	2.34E-147	ExN5	AC015943.1
PPFIBP12	3.04E-151	0.49778517	0.906	0.653	1.16E-146	ExN5	PPFIBP1
NAB1	4.40E-151	0.3284311	0.602	0.305	1.68E-146	ExN5	NAB1
LRRC7	7.12E-151	0.38292526	0.989	0.965	2.72E-146	ExN5	LRRC7
SYNPO22	1.71E-150	0.43527207	0.716	0.418	6.54E-146	ExN5	SYNPO2
PTPN141	5.08E-150	0.32409415	0.494	0.226	1.94E-145	ExN5	PTPN14
GPM6A1	5.66E-150	0.40055937	0.977	0.943	2.17E-145	ExN5	GPM6A
CADM21	5.80E-149	0.34943921	0.996	0.993	2.22E-144	ExN5	CADM2
GABRB33	1.07E-148	0.43082552	0.969	0.899	4.09E-144	ExN5	GABRB3
ACTN2	1.44E-148	0.27591288	0.533	0.252	5.50E-144	ExN5	ACTN2
NCAM2	1.45E-148	0.49748968	0.969	0.874	5.52E-144	ExN5	NCAM2
ITGB81	2.35E-148	0.30128321	0.575	0.277	8.98E-144	ExN5	ITGB8
ATRNL13	5.07E-148	0.5142883	0.986	0.929	1.94E-143	ExN5	ATRNL1
AKAP131	9.16E-148	0.37566326	0.662	0.356	3.50E-143	ExN5	AKAP13
MIR137HG3	1.07E-147	0.49403738	0.906	0.653	4.10E-143	ExN5	MIR137HG
PPP1R14C	8.60E-147	0.29856737	0.493	0.229	3.29E-142	ExN5	PPP1R14C
SLC17A74	1.20E-146	0.42447437	0.751	0.428	4.58E-142	ExN5	SLC17A7
GPATCH2	1.53E-146	0.47598618	0.721	0.443	5.86E-142	ExN5	GPATCH2
TOX2	4.80E-146	1.11574999	0.691	0.435	1.83E-141	ExN5	TOX
PAPSS1	6.23E-144	0.44352664	0.775	0.513	2.38E-139	ExN5	PAPSS1
AC120193.12	2.03E-143	0.51803076	0.6	0.318	7.77E-139	ExN5	AC120193.1
NPTX13	2.06E-143	0.40279795	0.802	0.474	7.87E-139	ExN5	NPTX1
NFIA	5.33E-143	0.94647704	0.619	0.415	2.04E-138	ExN5	NFIA
AL024495.11	6.85E-143	0.36033364	0.589	0.293	2.62E-138	ExN5	AL024495.1
DIPK2A1	2.89E-142	0.40926928	0.645	0.35	1.10E-137	ExN5	DIPK2A
EPB41L4A1	8.16E-142	0.27704338	0.385	0.156	3.12E-137	ExN5	EPB41L4A
PCSK22	1.29E-141	0.46237108	0.937	0.798	4.94E-137	ExN5	PCSK2
KHDRBS22	6.74E-141	0.45664354	0.983	0.897	2.57E-136	ExN5	KHDRBS2
FIGN	8.77E-141	0.26079262	0.67	0.345	3.35E-136	ExN5	FIGN
CADPS22	9.78E-140	0.44816291	0.914	0.577	3.74E-135	ExN5	CADPS2
GALNT14	2.76E-138	0.28706909	0.626	0.321	1.06E-133	ExN5	GALNT14
LINC022172	1.70E-136	0.26336448	0.489	0.219	6.52E-132	ExN5	LINC02217
KCNMB41	1.73E-136	0.43514946	0.737	0.458	6.60E-132	ExN5	KCNMB4
AL391840.13	9.18E-136	0.46167972	0.82	0.502	3.51E-131	ExN5	AL391840.1
SEC16B1	1.02E-135	0.37011501	0.43	0.198	3.88E-131	ExN5	SEC16B
VAV31	2.80E-135	0.44514453	0.349	0.141	1.07E-130	ExN5	VAV3
OTOGL1	1.84E-134	0.34359862	0.422	0.187	7.02E-130	ExN5	OTOGL
ANKS1B2	3.08E-134	0.33722413	0.992	0.986	1.18E-129	ExN5	ANKS1B
GABRA5	3.80E-134	0.27718329	0.492	0.231	1.45E-129	ExN5	GABRA5
IPCEF12	5.33E-134	0.39874653	0.692	0.392	2.04E-129	ExN5	IPCEF1
ITPK12	7.13E-134	0.36838361	0.752	0.456	2.72E-129	ExN5	ITPK1
IGSF21	8.31E-133	0.49402645	0.783	0.524	3.18E-128	ExN5	IGSF21
PRKD1	1.01E-131	0.44415862	0.773	0.502	3.84E-127	ExN5	PRKD1
RASA2	1.51E-130	0.43178287	0.849	0.65	5.76E-126	ExN5	RASA2
RUNX1T1	1.70E-130	0.41724192	0.907	0.74	6.51E-126	ExN5	RUNX1T1
KCNQ32	2.44E-130	0.48352789	0.974	0.899	9.32E-126	ExN5	KCNQ3
LINC02223	2.94E-129	0.38485744	0.558	0.287	1.13E-124	ExN5	LINC02223
MLIP3	4.13E-129	0.50900947	0.815	0.505	1.58E-124	ExN5	MLIP
MCHR22	3.41E-128	0.30697164	0.543	0.266	1.30E-123	ExN5	MCHR2
AC034268.22	2.34E-127	0.63836355	0.544	0.281	8.96E-123	ExN5	AC034268.2
NMNAT31	1.53E-126	0.27938332	0.504	0.242	5.84E-122	ExN5	NMNAT3
CDH122	3.76E-126	0.4593967	0.961	0.684	1.44E-121	ExN5	CDH12
AC124852.13	9.51E-126	0.42318822	0.767	0.468	3.64E-121	ExN5	AC124852.1
CDH101	9.96E-126	0.49096286	0.899	0.692	3.81E-121	ExN5	CDH10
CREG22	1.42E-124	0.43148561	0.77	0.505	5.42E-120	ExN5	CREG2
FSTL44	1.74E-124	0.46652171	0.932	0.64	6.65E-120	ExN5	FSTL4
ESRRG	1.48E-123	0.5009925	0.88	0.677	5.66E-119	ExN5	ESRRG
MAP1B1	4.34E-122	0.4103013	0.959	0.896	1.66E-117	ExN5	MAP1B
DCC2	1.81E-121	0.79004624	0.742	0.539	6.91E-117	ExN5	DCC
LRRN31	4.62E-121	0.30572158	0.608	0.327	1.76E-116	ExN5	LRRN3
AQP4-AS13	5.56E-121	0.46575251	0.786	0.493	2.13E-116	ExN5	AQP4-AS1

AC005906.21	1.68E-120	0.26904108	0.568	0.286	6.42E-116	ExN5	AC005906.2
ARNTL21	1.83E-119	0.30970817	0.657	0.369	6.98E-115	ExN5	ARNTL2
ARPP213	2.68E-119	0.44485551	0.979	0.76	1.02E-114	ExN5	ARPP21
GRIK4	3.54E-119	0.39784581	0.716	0.435	1.35E-114	ExN5	GRIK4
AL133166.12	4.58E-118	0.28748447	0.452	0.214	1.75E-113	ExN5	AL133166.1
AL355472.21	5.02E-118	0.28396201	0.522	0.266	1.92E-113	ExN5	AL355472.2
SLC35F12	5.24E-118	0.42574269	0.933	0.701	2.00E-113	ExN5	SLC35F1
GPM6B2	2.99E-117	0.39287468	0.935	0.799	1.14E-112	ExN5	GPM6B
SLC24A22	1.93E-116	0.39272987	0.952	0.83	7.37E-112	ExN5	SLC24A2
RGS4	4.64E-116	0.2919619	0.527	0.275	1.77E-111	ExN5	RGS4
DKK2	1.12E-115	0.25202815	0.284	0.107	4.28E-111	ExN5	DKK2
WDPCP	1.52E-115	0.42154828	0.912	0.758	5.79E-111	ExN5	WDPCP
SNTB21	2.16E-115	0.43485315	0.7	0.438	8.27E-111	ExN5	SNTB2
MAGI31	4.64E-115	0.38843266	0.883	0.681	1.77E-110	ExN5	MAGI3
AL158077.21	1.11E-114	0.29872651	0.527	0.268	4.25E-110	ExN5	AL158077.2
ATP2B11	2.42E-114	0.36921743	0.955	0.845	9.27E-110	ExN5	ATP2B1
FAM81A1	5.22E-114	0.39039335	0.748	0.48	2.00E-109	ExN5	FAM81A
AC007368.11	5.29E-114	0.70163547	0.652	0.435	2.02E-109	ExN5	AC007368.1
KCNK101	6.49E-114	0.31451164	0.586	0.319	2.48E-109	ExN5	KCNK10
COBL2	1.28E-113	0.39702759	0.923	0.744	4.88E-109	ExN5	COBL
UGP2	3.88E-112	0.330361	0.662	0.4	1.48E-107	ExN5	UGP2
DNAJC12	6.99E-112	0.42157212	0.797	0.552	2.67E-107	ExN5	DNAJC1
TM7SF31	3.84E-110	0.3478626	0.666	0.41	1.47E-105	ExN5	TM7SF3
SYNJ21	1.01E-109	0.29349431	0.671	0.384	3.85E-105	ExN5	SYNJ2
PRKAG22	2.21E-109	0.40993412	0.91	0.722	8.45E-105	ExN5	PRKAG2
KCNIP44	1.26E-108	0.43299687	0.999	0.936	4.81E-104	ExN5	KCNIP4
PLOD21	2.91E-108	0.33314164	0.434	0.212	1.11E-103	ExN5	PLOD2
LMO31	2.19E-107	0.38675862	0.847	0.587	8.39E-103	ExN5	LMO3
ADD21	3.21E-107	0.39955446	0.866	0.671	1.23E-102	ExN5	ADD2
NWD23	3.65E-107	0.34359122	0.757	0.458	1.39E-102	ExN5	NWD2
NRGN3	4.44E-107	0.35640329	0.874	0.564	1.70E-102	ExN5	NRGN
DIRAS21	6.44E-107	0.25767663	0.572	0.308	2.46E-102	ExN5	DIRAS2
SLC39A102	6.63E-107	0.41158185	0.842	0.638	2.53E-102	ExN5	SLC39A10
MIR4500HG1	1.03E-106	0.34689176	0.541	0.295	3.93E-102	ExN5	MIR4500HG
NEO11	5.61E-106	0.40476839	0.824	0.586	2.14E-101	ExN5	NEO1
ANKRD33B2	6.53E-106	0.29826026	0.715	0.427	2.50E-101	ExN5	ANKRD33B
TMEFF21	7.86E-106	0.43741344	0.893	0.76	3.00E-101	ExN5	TMEFF2
DGK1	9.49E-106	0.3745895	0.957	0.891	3.63E-101	ExN5	DGK1
NLK2	1.71E-105	0.40343242	0.906	0.691	6.54E-101	ExN5	NLK
DMD3	1.77E-105	0.52539379	0.971	0.92	6.76E-101	ExN5	DMD
AC006504.52	3.85E-105	0.39864985	0.678	0.423	1.47E-100	ExN5	AC006504.5
AC011474.1	1.90E-103	0.27081473	0.54	0.285	7.26E-99	ExN5	AC011474.1
DNAH61	2.29E-103	0.33873357	0.809	0.524	8.74E-99	ExN5	DNAH6
AK52	6.24E-103	0.53938327	0.892	0.778	2.39E-98	ExN5	AK5
DLGAP1-AS4	2.43E-102	0.25278527	0.62	0.346	9.28E-98	ExN5	DLGAP1-AS4
RASAL21	4.56E-102	0.35618882	0.949	0.875	1.74E-97	ExN5	RASAL2
ST6GAL22	5.60E-102	0.26732251	0.656	0.382	2.14E-97	ExN5	ST6GAL2
GAB12	1.46E-101	0.3156048	0.821	0.539	5.58E-97	ExN5	GAB1
FOCAD2	4.45E-101	0.37507385	0.925	0.798	1.70E-96	ExN5	FOCAD
SMAP11	7.43E-101	0.3930082	0.826	0.62	2.84E-96	ExN5	SMAP1
CCDC85A1	1.93E-100	0.41540515	0.88	0.649	7.38E-96	ExN5	CCDC85A
NELL11	4.12E-100	0.44218965	0.86	0.647	1.57E-95	ExN5	NELL1
RAP1GAP23	4.52E-100	0.35700936	0.865	0.63	1.73E-95	ExN5	RAP1GAP2
LINC00894	1.29E-99	0.3492459	0.647	0.394	4.95E-95	ExN5	LINC00894
VPS13A1	2.69E-99	0.35541784	0.893	0.729	1.03E-94	ExN5	VPS13A
ATP2B42	4.47E-99	0.32173644	0.796	0.508	1.71E-94	ExN5	ATP2B4
MEIS31	3.83E-98	0.28825915	0.537	0.295	1.46E-93	ExN5	MEIS3
SH3BGRL21	7.78E-98	0.35267456	0.779	0.528	2.97E-93	ExN5	SH3BGRL2
AL157944.12	1.31E-97	0.42693226	0.513	0.27	5.02E-93	ExN5	AL157944.1
MAPK102	2.17E-97	0.28840757	0.977	0.952	8.28E-93	ExN5	MAPK10
SEC14L52	2.33E-97	0.2777424	0.722	0.442	8.90E-93	ExN5	SEC14L5
CARMIL12	3.43E-97	0.36287363	0.861	0.613	1.31E-92	ExN5	CARMIL1
DCLK11	1.39E-96	0.30697857	0.976	0.94	5.33E-92	ExN5	DCLK1

THRB2	2.21E-96	0.36003755	0.968	0.915	8.45E-92 ExN5	THRB
BASP1-AS13	2.96E-96	0.38043124	0.884	0.651	1.13E-91 ExN5	BASP1-AS1
ZBBX1	5.78E-96	0.36522018	0.431	0.225	2.21E-91 ExN5	ZBBX
DDAH12	3.46E-95	0.3527303	0.668	0.416	1.32E-90 ExN5	DDAH1
OXR12	3.66E-95	0.38664936	0.974	0.92	1.40E-90 ExN5	OXR1
KCNIP4-IT14	3.96E-95	0.29965662	0.788	0.492	1.52E-90 ExN5	KCNIP4-IT1
PGBD5	4.33E-95	0.36418482	0.867	0.681	1.66E-90 ExN5	PGBD5
CNTN11	4.69E-95	0.32328746	0.973	0.949	1.79E-90 ExN5	CNTN1
SYN32	6.78E-95	0.45190661	0.965	0.862	2.59E-90 ExN5	SYN3
CHN13	1.51E-94	0.35533212	0.943	0.745	5.78E-90 ExN5	CHN1
LDB24	4.07E-94	0.40048259	0.974	0.758	1.55E-89 ExN5	LDB2
SORL12	6.02E-94	0.34178503	0.879	0.672	2.30E-89 ExN5	SORL1
CCND31	6.07E-93	0.27258941	0.637	0.38	2.32E-88 ExN5	CCND3
CACNA2D32	7.85E-93	0.38692178	0.972	0.864	3.00E-88 ExN5	CACNA2D3
ANKMY2	8.71E-93	0.28528994	0.628	0.385	3.33E-88 ExN5	ANKMY2
SULF2	1.20E-92	0.27475815	0.292	0.128	4.57E-88 ExN5	SULF2
HOMER12	4.93E-92	0.36343885	0.831	0.615	1.89E-87 ExN5	HOMER1
CASC152	9.84E-92	0.73810381	0.736	0.515	3.76E-87 ExN5	CASC15
LGI42	6.77E-91	0.25361948	0.545	0.3	2.59E-86 ExN5	LGI4
GTDC11	6.87E-91	0.37892331	0.924	0.788	2.63E-86 ExN5	GTDC1
GFOD11	2.26E-90	0.34083503	0.908	0.75	8.65E-86 ExN5	GFOD1
PDP11	6.20E-90	0.2589509	0.556	0.318	2.37E-85 ExN5	PDP1
RAPGEF23	1.02E-89	0.34379723	0.942	0.855	3.91E-85 ExN5	RAPGEF2
NUAK12	1.23E-89	0.33778512	0.823	0.588	4.71E-85 ExN5	NUAK1
GPATCH81	1.70E-88	0.33331299	0.942	0.832	6.49E-84 ExN5	GPATCH8
UBE2E23	2.04E-88	0.33872249	0.955	0.875	7.81E-84 ExN5	UBE2E2
CNIH31	2.93E-88	0.27692311	0.661	0.407	1.12E-83 ExN5	CNIH3
GBE1	3.73E-88	0.28729202	0.443	0.236	1.42E-83 ExN5	GBE1
FBXW72	6.84E-88	0.36103006	0.911	0.752	2.61E-83 ExN5	FBXW7
CPE	1.35E-87	0.33296134	0.862	0.673	5.17E-83 ExN5	CPE
ME1	2.61E-87	0.3185287	0.751	0.516	9.97E-83 ExN5	ME1
C4orf50	7.94E-86	0.25995157	0.593	0.357	3.04E-81 ExN5	C4orf50
AC016687.22	8.90E-86	0.64150789	0.322	0.151	3.40E-81 ExN5	AC016687.2
CEMIP21	7.23E-85	0.27312096	0.582	0.345	2.77E-80 ExN5	CEMIP2
TLL11	5.04E-84	0.28557988	0.291	0.128	1.93E-79 ExN5	TLL1
TMEM2412	6.35E-84	0.29220361	0.756	0.491	2.43E-79 ExN5	TMEM241
KHDRBS2-OT	2.29E-83	0.30787706	0.7	0.444	8.76E-79 ExN5	KHDRBS2-OT
SYN21	3.33E-83	0.28117916	0.965	0.897	1.27E-78 ExN5	SYN2
SLC4A101	1.02E-82	0.29412524	0.966	0.921	3.89E-78 ExN5	SLC4A10
NOS1AP1	2.57E-82	0.3461282	0.844	0.657	9.81E-78 ExN5	NOS1AP
PCDH101	2.73E-82	0.32720869	0.687	0.443	1.04E-77 ExN5	PCDH10
RORB3	3.40E-82	0.36502381	0.575	0.326	1.30E-77 ExN5	RORB
AC093523.12	9.54E-82	0.32027257	0.653	0.411	3.65E-77 ExN5	AC093523.1
HTR1E	3.39E-81	0.32666487	0.809	0.57	1.30E-76 ExN5	HTR1E
GLS1	3.52E-81	0.31841789	0.92	0.824	1.35E-76 ExN5	GLS
AMPH2	2.12E-80	0.35183788	0.921	0.809	8.09E-76 ExN5	AMPH
MBNL23	3.21E-80	0.31059511	0.939	0.76	1.23E-75 ExN5	MBNL2
NETO11	1.31E-79	0.32326965	0.896	0.725	5.01E-75 ExN5	NETO1
LINC017251	2.51E-79	0.42262717	0.575	0.35	9.59E-75 ExN5	LINC01725
TMSB101	1.85E-78	0.31826249	0.549	0.327	7.08E-74 ExN5	TMSB10
RFTN12	1.67E-77	0.25754298	0.749	0.472	6.40E-73 ExN5	RFTN1
KCNK11	1.91E-77	0.27170572	0.769	0.515	7.28E-73 ExN5	KCNK1
AL591501.12	3.05E-77	0.32945714	0.813	0.564	1.16E-72 ExN5	AL591501.1
SLC38A6	1.01E-76	0.30442177	0.754	0.528	3.87E-72 ExN5	SLC38A6
LINGO13	2.06E-76	0.25197002	0.755	0.496	7.87E-72 ExN5	LINGO1
CAMK2A3	2.17E-76	0.29180523	0.955	0.791	8.31E-72 ExN5	CAMK2A
ZNF385B2	2.96E-76	0.33053796	0.943	0.817	1.13E-71 ExN5	ZNF385B
HECW13	5.76E-76	0.31811399	0.949	0.829	2.20E-71 ExN5	HECW1
AL008633.13	1.81E-75	0.40858592	0.894	0.71	6.91E-71 ExN5	AL008633.1
DSCAM1	4.29E-75	0.29246473	0.984	0.902	1.64E-70 ExN5	DSCAM
COBLL11	2.49E-74	0.35636832	0.328	0.165	9.51E-70 ExN5	COBLL1
SYT73	1.74E-73	0.26621554	0.786	0.525	6.64E-69 ExN5	SYT7
MICAL21	5.29E-73	0.3023043	0.9	0.728	2.02E-68 ExN5	MICAL2

MSRA3	6.25E-73	0.28625932	0.968	0.906	2.39E-68	ExN5	MSRA
STX1A3	1.05E-72	0.25871489	0.595	0.369	3.99E-68	ExN5	STX1A
PACRG	1.14E-72	0.33404967	0.882	0.702	4.35E-68	ExN5	PACRG
KCNH13	1.79E-72	0.36472519	0.951	0.828	6.84E-68	ExN5	KCNH1
PPP1R12A2	7.16E-72	0.32894361	0.88	0.726	2.74E-67	ExN5	PPP1R12A
AC092691.11	1.75E-71	0.35488073	0.945	0.866	6.69E-67	ExN5	AC092691.1
NIN2	2.71E-71	0.3102323	0.886	0.705	1.04E-66	ExN5	NIN
DLGAP22	1.02E-70	0.2830854	0.984	0.929	3.92E-66	ExN5	DLGAP2
ARHGAP262	1.12E-70	0.34301029	0.951	0.87	4.27E-66	ExN5	ARHGAP26
SEPTIN11	2.56E-70	0.31057866	0.856	0.673	9.80E-66	ExN5	SEPTIN11
AL117329.13	1.23E-69	0.4228739	0.691	0.466	4.69E-65	ExN5	AL117329.1
KIAA09302	3.56E-69	0.29039444	0.82	0.606	1.36E-64	ExN5	KIAA0930
CXXC4-AS12	3.95E-69	0.31981956	0.597	0.38	1.51E-64	ExN5	CXXC4-AS1
KCNMA11	4.57E-69	0.27540954	0.984	0.958	1.75E-64	ExN5	KCNMA1
ANKRD10	1.21E-68	0.25753678	0.722	0.506	4.61E-64	ExN5	ANKRD10
MNAT1	2.91E-68	0.29834084	0.904	0.786	1.11E-63	ExN5	MNAT1
PTK2B2	5.29E-68	0.33545932	0.731	0.515	2.02E-63	ExN5	PTK2B
AC007563.22	5.69E-68	0.32932891	0.829	0.603	2.17E-63	ExN5	AC007563.2
STXBP5L3	1.32E-67	0.28006508	0.976	0.947	5.05E-63	ExN5	STXBP5L
APBA2	2.26E-67	0.29952825	0.887	0.739	8.63E-63	ExN5	APBA2
CCDC6	2.68E-67	0.27997831	0.771	0.559	1.02E-62	ExN5	CCDC6
FNIP21	4.26E-67	0.28362498	0.808	0.608	1.63E-62	ExN5	FNIP2
KCTD12	8.79E-67	0.29932151	0.883	0.666	3.36E-62	ExN5	KCTD1
LINC002991	9.51E-67	0.26066501	0.467	0.277	3.64E-62	ExN5	LINC00299
DNAH72	2.48E-66	0.25094669	0.609	0.387	9.47E-62	ExN5	DNAH7
AC021613.11	6.25E-66	0.29662696	0.471	0.278	2.39E-61	ExN5	AC021613.1
LINC023891	2.16E-65	0.2775574	0.691	0.467	8.28E-61	ExN5	LINC02389
AGBL43	3.95E-65	0.28816821	0.98	0.932	1.51E-60	ExN5	AGBL4
FMN2	9.05E-65	0.27020113	0.957	0.899	3.46E-60	ExN5	FMN2
PRKCB4	3.04E-64	0.2956248	0.97	0.865	1.16E-59	ExN5	PRKCB
WASF11	5.10E-64	0.27474679	0.834	0.636	1.95E-59	ExN5	WASF1
PI4KA2	5.43E-64	0.29191744	0.924	0.813	2.08E-59	ExN5	PI4KA
EXOC61	8.44E-64	0.28840559	0.824	0.635	3.22E-59	ExN5	EXOC6
ADAM231	3.24E-63	0.27250992	0.909	0.765	1.24E-58	ExN5	ADAM23
MYH101	5.65E-63	0.28357076	0.88	0.721	2.16E-58	ExN5	MYH10
AC073091.33	6.93E-63	0.39638759	0.503	0.311	2.65E-58	ExN5	AC073091.3
KCNB22	7.62E-63	0.29362032	0.879	0.681	2.91E-58	ExN5	KCNB2
LINC014142	7.73E-63	0.2646944	0.681	0.451	2.96E-58	ExN5	LINC01414
TBC1D11	1.81E-62	0.25620701	0.784	0.567	6.92E-58	ExN5	TBC1D1
MEG32	2.54E-62	0.3459454	0.984	0.959	9.71E-58	ExN5	MEG3
PARP8	4.30E-62	0.30649557	0.823	0.647	1.64E-57	ExN5	PARP8
AC106793.11	1.69E-61	0.2871987	0.575	0.369	6.47E-57	ExN5	AC106793.1
ATP8A11	1.70E-61	0.26368467	0.931	0.849	6.48E-57	ExN5	ATP8A1
AL513166.13	3.88E-60	0.25848686	0.843	0.616	1.48E-55	ExN5	AL513166.1
DIRC33	1.17E-59	0.29778241	0.744	0.538	4.48E-55	ExN5	DIRC3
VPS13D1	5.38E-59	0.3000402	0.875	0.748	2.06E-54	ExN5	VPS13D
LRFN54	1.09E-58	0.27630436	0.966	0.89	4.18E-54	ExN5	LRFN5
CNKSR24	1.10E-58	0.29631788	0.94	0.817	4.21E-54	ExN5	CNKSR2
ARHGEF3	1.10E-58	0.26149332	0.8	0.601	4.21E-54	ExN5	ARHGEF3
LINC012502	2.57E-58	0.27797922	0.84	0.639	9.82E-54	ExN5	LINC01250
PRKN	4.91E-58	0.28392747	0.933	0.86	1.88E-53	ExN5	PRKN
SSBP32	1.08E-57	0.25435644	0.86	0.671	4.12E-53	ExN5	SSBP3
CDH2	3.01E-57	0.31270998	0.879	0.752	1.15E-52	ExN5	CDH2
PTCHD1-AS1	3.81E-57	0.2604818	0.668	0.445	1.46E-52	ExN5	PTCHD1-AS
ZEB13	2.43E-56	0.272895	0.891	0.76	9.30E-52	ExN5	ZEB1
SLIT32	9.32E-55	0.56330426	0.582	0.468	3.56E-50	ExN5	SLIT3
MIR646HG	3.92E-54	0.26930392	0.448	0.272	1.50E-49	ExN5	MIR646HG
TMEM132D2	4.28E-54	0.31377862	0.902	0.779	1.63E-49	ExN5	TMEM132D
GLDN1	5.45E-54	0.29502215	0.382	0.232	2.08E-49	ExN5	GLDN
PDE1A3	2.33E-53	0.25763306	0.924	0.674	8.90E-49	ExN5	PDE1A
FARS21	2.40E-53	0.26582635	0.894	0.758	9.17E-49	ExN5	FARS2
DYNC1I12	5.13E-53	0.25224507	0.943	0.87	1.96E-48	ExN5	DYNC1I1
CELF23	7.38E-53	0.25569449	0.991	0.967	2.82E-48	ExN5	CELF2

KCNH72	7.42E-53	0.25249114	0.894	0.725	2.84E-48 ExN5	KCNH7
CNTN4	1.58E-52	0.26701275	0.939	0.848	6.06E-48 ExN5	CNTN4
CA102	1.92E-51	0.30545595	0.625	0.436	7.35E-47 ExN5	CA10
RAPGEF53	6.37E-49	0.28537159	0.921	0.746	2.43E-44 ExN5	RAPGEF5
AC024901.11	1.07E-46	0.26258577	0.645	0.448	4.11E-42 ExN5	AC024901.1
AFF31	6.60E-45	0.25087655	0.956	0.9	2.52E-40 ExN5	AFF3
ERC21	3.85E-44	0.30763957	0.967	0.93	1.47E-39 ExN5	ERC2
AC011287.12	2.27E-43	0.34918873	0.639	0.469	8.69E-39 ExN5	AC011287.1
DGKG1	1.26E-36	0.35499449	0.64	0.534	4.81E-32 ExN5	DGKG
USP9Y	2.10E-31	0.2873771	0.476	0.349	8.02E-27 ExN5	USP9Y
NLGN4Y	5.75E-25	0.25936928	0.481	0.367	2.20E-20 ExN5	NLGN4Y
KCNH52	3.09E-20	0.4422419	0.476	0.419	1.18E-15 ExN5	KCNH5
EPHA32	6.62E-12	0.33434724	0.484	0.423	2.53E-07 ExN5	EPHA3
ADAMTSL1	0	2.50894094	0.621	0.151	0 ExN6	ADAMTSL1
HS3ST41	0	2.24365312	0.951	0.388	0 ExN6	HS3ST4
HTR2C	0	2.13102373	0.315	0.062	0 ExN6	HTR2C
DLC1	0	2.0437488	0.783	0.33	0 ExN6	DLC1
SEMA3E1	0	1.87163067	0.633	0.089	0 ExN6	SEMA3E
PDZRN43	0	1.71293367	0.866	0.363	0 ExN6	PDZRN4
TLE41	0	1.6225348	0.86	0.387	0 ExN6	TLE4
CLSTN23	0	1.59677914	0.975	0.599	0 ExN6	CLSTN2
AC068587.41	0	1.45366748	0.793	0.493	0 ExN6	AC068587.4
KIAA1217	0	1.34655966	0.885	0.642	0 ExN6	KIAA1217
ASIC2	0	1.33443	0.953	0.84	0 ExN6	ASIC2
NRG12	0	1.28219648	0.833	0.527	0 ExN6	NRG1
FOXP23	0	1.27241218	0.705	0.287	0 ExN6	FOXP2
CADPS23	0	1.20698005	0.798	0.575	0 ExN6	CADPS2
FRAS1	0	1.20106263	0.846	0.436	0 ExN6	FRAS1
DPP102	0	1.14940951	0.995	0.838	0 ExN6	DPP10
CDH61	0	1.13334407	0.664	0.153	0 ExN6	CDH6
GHR1	0	1.13056637	0.637	0.366	0 ExN6	GHR
AC090578.13	0	1.11655655	0.855	0.541	0 ExN6	AC090578.1
LRP1B2	0	1.09485363	0.991	0.947	0 ExN6	LRP1B
GRM33	0	1.07824636	0.642	0.383	0 ExN6	GRM3
ZFHX3	0	1.07786368	0.567	0.273	0 ExN6	ZFHX3
ERC22	0	1.07285689	0.982	0.927	0 ExN6	ERC2
MDGA21	0	1.05683616	0.965	0.937	0 ExN6	MDGA2
AK53	0	1.02600264	0.952	0.769	0 ExN6	AK5
MEIS21	0	0.99011644	0.64	0.3	0 ExN6	MEIS2
SORBS21	0	0.94721594	0.957	0.836	0 ExN6	SORBS2
TLL12	0	0.9196802	0.367	0.116	0 ExN6	TLL1
CDH11	0	0.91712496	0.721	0.434	0 ExN6	CDH11
CADPS	0	0.9074388	0.985	0.935	0 ExN6	CADPS
PDE1A4	0	0.90468254	0.839	0.672	0 ExN6	PDE1A
SGCD2	0	0.89382075	0.874	0.571	0 ExN6	SGCD
BMPER3	0	0.88088106	0.875	0.599	0 ExN6	BMPER
ZNF385B3	0	0.87362046	0.926	0.814	0 ExN6	ZNF385B
DOCK42	0	0.86307454	0.951	0.818	0 ExN6	DOCK4
SOX53	0	0.84544181	0.927	0.652	0 ExN6	SOX5
MMP163	0	0.82472288	0.935	0.79	0 ExN6	MMP16
DIRAS22	0	0.8066156	0.601	0.297	0 ExN6	DIRAS2
DPY19L12	0	0.80363871	0.648	0.333	0 ExN6	DPY19L1
MCTP2	0	0.8000109	0.311	0.036	0 ExN6	MCTP2
DACH12	0	0.79061127	0.519	0.183	0 ExN6	DACH1
CHRM2	0	0.7848932	0.468	0.199	0 ExN6	CHRM2
STARD131	0	0.78364398	0.82	0.52	0 ExN6	STARD13
SV2B4	0	0.75922589	0.91	0.587	0 ExN6	SV2B
KLHL1	0	0.75844496	0.373	0.084	0 ExN6	KLHL1
SEMA3A3	0	0.74998695	0.507	0.19	0 ExN6	SEMA3A
RASGRP11	0	0.74645959	0.564	0.164	0 ExN6	RASGRP1
NAV33	0	0.74149633	0.991	0.947	0 ExN6	NAV3
AC092902.41	0	0.71605792	0.574	0.201	0 ExN6	AC092902.4
B3GLCT1	0	0.71517125	0.621	0.274	0 ExN6	B3GLCT

TMEM1631	0	0.69019243	0.587	0.268	0	ExN6	TMEM163
LINC022173	0	0.68534031	0.51	0.208	0	ExN6	LINC02217
ARPP214	0	0.68263041	0.97	0.753	0	ExN6	ARPP21
LUZP2	0	0.67818687	0.658	0.285	0	ExN6	LUZP2
SLC8A11	0	0.66176891	0.981	0.854	0	ExN6	SLC8A1
RXFP12	0	0.65743719	0.529	0.207	0	ExN6	RXFP1
SH3GL25	0	0.6567466	0.927	0.734	0	ExN6	SH3GL2
RAPGEF6	0	0.63541748	0.875	0.681	0	ExN6	RAPGEF6
PCDH93	0	0.63433798	0.998	0.965	0	ExN6	PCDH9
HS3ST23	0	0.63430457	0.565	0.244	0	ExN6	HS3ST2
DSCAML1	0	0.63361456	0.931	0.746	0	ExN6	DSCAML1
DGKI2	0	0.61787427	0.945	0.889	0	ExN6	DGKI
SAMD3	0	0.61422795	0.279	0.063	0	ExN6	SAMD3
ATP2C2	0	0.60877662	0.346	0.032	0	ExN6	ATP2C2
GFRA1	0	0.59929397	0.313	0.063	0	ExN6	GFRA1
NELL25	0	0.59876955	0.963	0.778	0	ExN6	NELL2
PCDH17	0	0.59502184	0.615	0.31	0	ExN6	PCDH17
ATP8B13	0	0.59205855	0.546	0.242	0	ExN6	ATP8B1
TEX2	0	0.57988463	0.651	0.331	0	ExN6	TEX2
AL138701.22	0	0.56441989	0.379	0.089	0	ExN6	AL138701.2
CALCRL	0	0.56161807	0.323	0.084	0	ExN6	CALCRL
DYSF	0	0.56152231	0.539	0.195	0	ExN6	DYSF
PTPRG-AS11	0	0.54382114	0.414	0.14	0	ExN6	PTPRG-AS1
DCLK12	0	0.54155342	0.976	0.938	0	ExN6	DCLK1
BCL11B	0	0.5229842	0.58	0.234	0	ExN6	BCL11B
DCHS21	0	0.52171368	0.385	0.107	0	ExN6	DCHS2
CNTNAP3	0	0.51174992	0.486	0.125	0	ExN6	CNTNAP3
NMNAT32	0	0.5018075	0.555	0.228	0	ExN6	NMNAT3
GNB4	0	0.49912551	0.358	0.099	0	ExN6	GNB4
ETV1	0	0.49863015	0.345	0.094	0	ExN6	ETV1
MIR31HG2	0	0.49500074	0.481	0.191	0	ExN6	MIR31HG
CNTNAP3B	0	0.48519736	0.508	0.219	0	ExN6	CNTNAP3B
B3GAT2	0	0.45431813	0.366	0.109	0	ExN6	B3GAT2
LRMP2	0	0.42369135	0.398	0.134	0	ExN6	LRMP
LINC017481	0	0.4218816	0.365	0.108	0	ExN6	LINC01748
STUM	0	0.41420076	0.445	0.172	0	ExN6	STUM
SULF1	0	0.41166171	0.311	0.061	0	ExN6	SULF1
RNF152	0	0.40304042	0.293	0.052	0	ExN6	RNF152
ABCC9	0	0.3982821	0.286	0.054	0	ExN6	ABCC9
TRIM22	0	0.38504243	0.282	0.041	0	ExN6	TRIM22
AC107072.2	0	0.3647488	0.279	0.037	0	ExN6	AC107072.2
SHB	0	0.33086127	0.306	0.069	0	ExN6	SHB
ADTRP	0	0.32971913	0.263	0.042	0	ExN6	ADTRP
UNC13B2	8.46E-307	0.55551392	0.666	0.362	3.23E-302	ExN6	UNC13B
RYR24	4.25E-303	0.61068896	0.983	0.924	1.62E-298	ExN6	RYR2
AFDN	1.59E-302	0.60266765	0.85	0.636	6.07E-298	ExN6	AFDN
ADAM232	4.44E-301	0.6640075	0.91	0.76	1.70E-296	ExN6	ADAM23
ANKRD18A	5.07E-301	0.33633051	0.348	0.118	1.94E-296	ExN6	ANKRD18A
RIT23	1.07E-299	0.85377113	0.601	0.305	4.09E-295	ExN6	RIT2
RALYL4	1.54E-298	0.69337296	0.988	0.806	5.87E-294	ExN6	RALYL
MCTP12	1.84E-297	0.94516684	0.872	0.762	7.03E-293	ExN6	MCTP1
AFF12	9.14E-297	0.53973727	0.699	0.393	3.49E-292	ExN6	AFF1
TMEFF22	6.35E-293	0.95382403	0.89	0.755	2.43E-288	ExN6	TMEFF2
ZNF804B2	1.72E-286	1.37681616	0.592	0.342	6.57E-282	ExN6	ZNF804B
HDAC41	2.99E-282	0.56374146	0.856	0.652	1.14E-277	ExN6	HDAC4
LRMDA	8.31E-282	1.62250146	0.393	0.176	3.17E-277	ExN6	LRMDA
SLC24A23	4.07E-281	0.5754458	0.957	0.826	1.56E-276	ExN6	SLC24A2
RYR3	8.04E-281	1.09578729	0.603	0.375	3.07E-276	ExN6	RYR3
DGKG2	2.48E-280	0.88186404	0.778	0.519	9.49E-276	ExN6	DGKG
AC024610.2	4.43E-280	0.44719008	0.423	0.173	1.69E-275	ExN6	AC024610.2
RMST2	2.25E-277	0.42069746	0.408	0.154	8.58E-273	ExN6	RMST
PCSK5	3.78E-277	0.77763504	0.436	0.184	1.45E-272	ExN6	PCSK5
SGCZ	4.52E-277	0.40733256	0.814	0.492	1.73E-272	ExN6	SGCZ

RASGEF1C	7.95E-273	0.38670711	0.369	0.141	3.04E-268	ExN6	RASGEF1C
UST	2.65E-272	0.58181108	0.35	0.131	1.01E-267	ExN6	UST
CARMIL13	9.87E-267	0.59026669	0.845	0.606	3.77E-262	ExN6	CARMIL1
LINC018112	4.82E-265	0.79670768	0.569	0.291	1.84E-260	ExN6	LINC01811
MAMDC2	8.48E-264	0.8204334	0.376	0.157	3.24E-259	ExN6	MAMDC2
VWA3A1	2.23E-263	0.49026475	0.492	0.23	8.54E-259	ExN6	VWA3A
KHDRBS34	3.91E-262	0.60866994	0.946	0.786	1.49E-257	ExN6	KHDRBS3
SLIT13	1.10E-260	0.59298484	0.816	0.579	4.20E-256	ExN6	SLIT1
ILDR21	2.59E-259	0.54797825	0.584	0.326	9.90E-255	ExN6	ILDR2
TBR12	7.91E-257	0.3579792	0.486	0.221	3.02E-252	ExN6	TBR1
GRM4	8.25E-256	0.45868849	0.407	0.169	3.15E-251	ExN6	GRM4
FILIP1	6.72E-255	0.29624357	0.278	0.09	2.57E-250	ExN6	FILIP1
DIP2A	1.63E-254	0.50379341	0.703	0.444	6.24E-250	ExN6	DIP2A
OLFM32	3.76E-254	0.67906132	0.91	0.702	1.44E-249	ExN6	OLFM3
PTPRU	6.74E-254	0.38037429	0.428	0.184	2.57E-249	ExN6	PTPRU
SEC24D2	9.52E-254	0.65407358	0.496	0.262	3.64E-249	ExN6	SEC24D
CELF24	4.57E-253	0.46552702	0.991	0.967	1.75E-248	ExN6	CELF2
GPM6A2	3.12E-252	0.46085654	0.975	0.942	1.19E-247	ExN6	GPM6A
LINC02646	5.88E-251	0.33633111	0.341	0.126	2.25E-246	ExN6	LINC02646
GRIK3	3.06E-243	0.40326474	0.57	0.282	1.17E-238	ExN6	GRIK3
GALNT141	1.97E-240	0.60212442	0.574	0.315	7.52E-236	ExN6	GALNT14
SEMA5A	2.67E-238	0.55094765	0.389	0.16	1.02E-233	ExN6	SEMA5A
NKAIN24	1.48E-237	0.6741233	0.96	0.831	5.65E-233	ExN6	NKAIN2
TRMT9B	6.46E-237	0.72134818	0.625	0.404	2.47E-232	ExN6	TRMT9B
KALRN4	1.00E-234	0.43282905	0.983	0.956	3.82E-230	ExN6	KALRN
CPNE43	1.06E-231	0.89279527	0.692	0.456	4.04E-227	ExN6	CPNE4
SDK2	1.16E-228	0.36083393	0.47	0.217	4.42E-224	ExN6	SDK2
NPTX14	1.08E-225	0.50329267	0.742	0.467	4.12E-221	ExN6	NPTX1
SEPTIN111	4.86E-225	0.51417074	0.856	0.667	1.86E-220	ExN6	SEPTIN11
NOS1AP2	9.31E-225	0.64614771	0.809	0.654	3.56E-220	ExN6	NOS1AP
LMCD1-AS1	2.32E-224	0.48642775	0.535	0.273	8.87E-220	ExN6	LMCD1-AS1
CPE1	2.18E-223	0.54715952	0.841	0.668	8.35E-219	ExN6	CPE
KCNMB42	3.06E-223	0.4826354	0.706	0.451	1.17E-218	ExN6	KCNMB4
FRMPD41	4.95E-223	0.79028756	0.956	0.937	1.89E-218	ExN6	FRMPD4
SDK1	6.39E-223	0.58108678	0.724	0.463	2.44E-218	ExN6	SDK1
ASAP21	1.11E-222	0.53561016	0.627	0.386	4.26E-218	ExN6	ASAP2
FAM102B	3.61E-222	0.4263898	0.59	0.33	1.38E-217	ExN6	FAM102B
CACHD11	1.68E-221	0.73613027	0.466	0.243	6.44E-217	ExN6	CACHD1
SRGAP1	1.69E-221	0.43886565	0.487	0.237	6.45E-217	ExN6	SRGAP1
MIR137HG4	1.69E-221	0.54019274	0.867	0.648	6.46E-217	ExN6	MIR137HG
DENND11	1.73E-219	0.39132679	0.562	0.301	6.62E-215	ExN6	DENND11
AFF32	5.62E-219	0.54288565	0.95	0.899	2.15E-214	ExN6	AFF3
AL158077.22	7.13E-219	0.46218583	0.514	0.26	2.73E-214	ExN6	AL158077.2
SSTR22	5.79E-218	0.28877981	0.397	0.172	2.21E-213	ExN6	SSTR2
SYNPO23	4.71E-217	0.73961071	0.623	0.415	1.80E-212	ExN6	SYNPO2
LMO32	7.03E-217	0.59040886	0.803	0.582	2.69E-212	ExN6	LMO3
KLHL21	8.95E-217	0.46996715	0.743	0.484	3.42E-212	ExN6	KLHL2
RAB3B	1.86E-216	0.26705981	0.325	0.122	7.13E-212	ExN6	RAB3B
TANC21	5.09E-216	0.41447621	0.938	0.857	1.94E-211	ExN6	TANC2
RAP1GAP24	1.56E-215	0.50877607	0.849	0.623	5.97E-211	ExN6	RAP1GAP2
SLC35F13	2.17E-215	0.57336506	0.907	0.695	8.29E-211	ExN6	SLC35F1
DPYS	2.45E-213	0.28170416	0.265	0.092	9.37E-209	ExN6	DPYS
GRM82	4.79E-213	0.9977319	0.544	0.341	1.83E-208	ExN6	GRM8
CEMIP22	5.05E-213	0.50782409	0.581	0.337	1.93E-208	ExN6	CEMIP2
RETREG13	6.84E-212	0.49198516	0.787	0.564	2.61E-207	ExN6	RETREG1
SPHKAP	2.85E-209	0.3353713	0.368	0.151	1.09E-204	ExN6	SPHKAP
NRCAM3	3.47E-209	0.38483227	0.962	0.918	1.33E-204	ExN6	NRCAM
LMO7	6.90E-208	0.50316009	0.796	0.6	2.64E-203	ExN6	LMO7
SSBP2	5.44E-207	0.50983084	0.903	0.818	2.08E-202	ExN6	SSBP2
PTPRN2	1.01E-206	0.39390702	0.976	0.948	3.86E-202	ExN6	PTPRN2
AL133346.1	1.52E-204	0.36897407	0.344	0.137	5.80E-200	ExN6	AL133346.1
CA103	7.54E-204	0.6017426	0.715	0.422	2.88E-199	ExN6	CA10
SH3GL31	1.18E-203	0.41026536	0.915	0.814	4.51E-199	ExN6	SH3GL3

NDFIP23	1.02E-202	0.44694493	0.739	0.498	3.91E-198	ExN6	NDFIP2
MMD	8.57E-202	0.25420102	0.362	0.156	3.27E-197	ExN6	MMD
CRTAC1	6.48E-201	0.38759034	0.464	0.223	2.48E-196	ExN6	CRTAC1
FAM171B	1.04E-200	0.48160652	0.805	0.64	3.99E-196	ExN6	FAM171B
MAP2K11	1.23E-199	0.50469642	0.702	0.477	4.72E-195	ExN6	MAP2K1
NLGN4Y1	4.07E-199	0.77205863	0.576	0.355	1.56E-194	ExN6	NLGN4Y
SORCS31	3.31E-197	0.65166865	0.731	0.559	1.27E-192	ExN6	SORCS3
ZNF704	6.21E-196	0.55774552	0.824	0.661	2.37E-191	ExN6	ZNF704
OCA21	8.23E-196	0.44270274	0.497	0.26	3.15E-191	ExN6	OCA2
AC011246.11	1.78E-195	1.32383867	0.427	0.232	6.80E-191	ExN6	AC011246.1
FILIP1L	3.20E-195	0.36689989	0.419	0.203	1.22E-190	ExN6	FILIP1L
PRKAG23	1.19E-194	0.58762893	0.87	0.719	4.56E-190	ExN6	PRKAG2
AKAP132	2.70E-194	0.46082141	0.595	0.351	1.03E-189	ExN6	AKAP13
PLXDC23	1.39E-193	0.63713229	0.781	0.6	5.29E-189	ExN6	PLXDC2
MEGF11	5.33E-192	0.34608063	0.324	0.133	2.04E-187	ExN6	MEGF11
MBOAT2	5.15E-191	0.49590321	0.782	0.575	1.97E-186	ExN6	MBOAT2
TESC	7.46E-188	0.37639342	0.354	0.163	2.85E-183	ExN6	TESC
PAK5	6.49E-187	0.48124396	0.879	0.751	2.48E-182	ExN6	PAK5
AC092969.1	1.94E-184	0.49705098	0.34	0.151	7.42E-180	ExN6	AC092969.1
HMGCLL1	3.12E-183	0.4596016	0.72	0.503	1.19E-178	ExN6	HMGCLL1
NIN3	5.46E-180	0.48164323	0.868	0.701	2.09E-175	ExN6	NIN
PDE4D4	1.10E-177	0.51197753	0.991	0.959	4.22E-173	ExN6	PDE4D
SNTG22	3.78E-176	0.46594753	0.323	0.142	1.45E-171	ExN6	SNTG2
SYT12	1.75E-175	0.31981302	0.995	0.985	6.70E-171	ExN6	SYT1
EDA	5.42E-175	0.28790192	0.31	0.129	2.07E-170	ExN6	EDA
IGSF211	3.89E-174	0.54319812	0.713	0.521	1.49E-169	ExN6	IGSF21
HLF1	3.14E-173	0.44070771	0.718	0.499	1.20E-168	ExN6	HLF
BASP1-AS14	3.60E-171	0.4672862	0.858	0.645	1.37E-166	ExN6	BASP1-AS1
NRP11	8.96E-171	0.47780409	0.384	0.193	3.42E-166	ExN6	NRP1
ST6GAL23	4.55E-170	0.49925649	0.596	0.377	1.74E-165	ExN6	ST6GAL2
EPHA52	5.47E-170	0.54922492	0.767	0.588	2.09E-165	ExN6	EPHA5
PWRN1	6.31E-170	0.55910347	0.673	0.457	2.41E-165	ExN6	PWRN1
DENND33	1.34E-169	0.34778059	0.576	0.33	5.14E-165	ExN6	DENND3
RIMS2	4.09E-169	0.3319019	0.98	0.968	1.56E-164	ExN6	RIMS2
GAS7	1.36E-168	0.46978171	0.897	0.772	5.21E-164	ExN6	GAS7
TRPM31	3.62E-168	1.36030121	0.542	0.402	1.38E-163	ExN6	TRPM3
ATP2B12	1.29E-167	0.39185634	0.943	0.842	4.95E-163	ExN6	ATP2B1
GLCE	5.14E-167	0.40149341	0.578	0.349	1.97E-162	ExN6	GLCE
CEP70	4.42E-166	0.39305079	0.646	0.421	1.69E-161	ExN6	CEP70
GCNT4	6.61E-166	0.39314585	0.364	0.177	2.53E-161	ExN6	GCNT4
AC090709.1	2.08E-165	0.30469209	0.341	0.155	7.94E-161	ExN6	AC090709.1
CRYBG3	5.86E-165	0.27351133	0.271	0.108	2.24E-160	ExN6	CRYBG3
MAPK103	2.53E-164	0.35009566	0.977	0.951	9.67E-160	ExN6	MAPK10
GNAO1	3.66E-164	0.58390272	0.889	0.805	1.40E-159	ExN6	GNAO1
MEG33	1.11E-163	0.3576771	0.988	0.958	4.24E-159	ExN6	MEG3
EFHD21	3.82E-163	0.32062197	0.47	0.256	1.46E-158	ExN6	EFHD2
LINC022231	1.48E-162	0.41101618	0.503	0.282	5.67E-158	ExN6	LINC02223
AL589843.1	3.88E-162	0.35104773	0.621	0.387	1.48E-157	ExN6	AL589843.1
CHN14	8.93E-162	0.35894016	0.928	0.739	3.41E-157	ExN6	CHN1
SLC36A1	3.23E-161	0.31373236	0.52	0.295	1.23E-156	ExN6	SLC36A1
KIAA1671	8.01E-161	0.49050511	0.626	0.419	3.06E-156	ExN6	KIAA1671
ST8SIA5	2.06E-160	0.45876306	0.794	0.611	7.87E-156	ExN6	ST8SIA5
NFIA1	2.15E-160	0.68954949	0.602	0.409	8.20E-156	ExN6	NFIA
HIVEP11	2.78E-160	0.44472749	0.656	0.449	1.06E-155	ExN6	HIVEP1
SYT74	4.61E-160	0.37903898	0.763	0.518	1.76E-155	ExN6	SYT7
HIVEP2	6.10E-160	0.42181737	0.886	0.794	2.33E-155	ExN6	HIVEP2
CACNA1E1	9.89E-159	0.47244326	0.881	0.804	3.78E-154	ExN6	CACNA1E
AL591519.1	2.14E-157	0.42269313	0.508	0.286	8.17E-153	ExN6	AL591519.1
CTNNA31	1.30E-155	0.85364242	0.645	0.443	4.96E-151	ExN6	CTNNA3
AL136456.11	1.75E-155	0.31961761	0.31	0.135	6.71E-151	ExN6	AL136456.1
ARHGAP44	2.78E-155	0.37663258	0.874	0.755	1.06E-150	ExN6	ARHGAP44
SETBP1	3.62E-155	0.42526082	0.941	0.885	1.39E-150	ExN6	SETBP1
DSCAM2	3.77E-155	0.35947653	0.98	0.9	1.44E-150	ExN6	DSCAM

RAP1GAP	2.45E-154	0.41368166	0.716	0.527	9.37E-150	ExN6	RAP1GAP
PCLO2	4.67E-154	0.3719567	0.957	0.921	1.79E-149	ExN6	PCLO
PTPRD4	1.09E-153	0.43525516	0.993	0.962	4.17E-149	ExN6	PTPRD
BAIAP21	3.10E-152	0.3683815	0.73	0.49	1.18E-147	ExN6	BAIAP2
MCC	3.99E-150	0.40086818	0.459	0.252	1.53E-145	ExN6	MCC
AC040168.1	1.20E-149	0.36342366	0.532	0.312	4.58E-145	ExN6	AC040168.1
DMD4	3.33E-149	0.43321889	0.969	0.918	1.27E-144	ExN6	DMD
GUCY1A23	8.37E-149	0.4175577	0.869	0.722	3.20E-144	ExN6	GUCY1A2
RPE	3.56E-148	0.35994246	0.589	0.369	1.36E-143	ExN6	RPE
SH3RF3	3.71E-148	0.46210009	0.842	0.67	1.42E-143	ExN6	SH3RF3
CAMK2D1	1.98E-147	0.52828589	0.831	0.659	7.56E-143	ExN6	CAMK2D
ANKS1B3	1.25E-146	0.337925	0.992	0.986	4.76E-142	ExN6	ANKS1B
SPOCK12	1.45E-146	0.71271209	0.845	0.744	5.56E-142	ExN6	SPOCK1
PTPRR1	3.10E-146	0.44647068	0.841	0.685	1.19E-141	ExN6	PTPRR
SGIP1	1.45E-145	0.3627264	0.928	0.871	5.56E-141	ExN6	SGIP1
GRID1	2.74E-143	0.38412499	0.929	0.847	1.05E-138	ExN6	GRID1
MAOB1	2.57E-140	0.35385786	0.492	0.29	9.84E-136	ExN6	MAOB
MNAT11	3.62E-140	0.3739493	0.884	0.784	1.38E-135	ExN6	MNAT1
GABRG31	1.15E-137	0.34066501	0.926	0.792	4.41E-133	ExN6	GABRG3
ANTXR1	2.16E-137	0.40168037	0.604	0.398	8.25E-133	ExN6	ANTXR1
USP9Y1	1.00E-136	0.4855064	0.544	0.339	3.83E-132	ExN6	USP9Y
NTNG2	1.74E-136	0.66721292	0.265	0.128	6.66E-132	ExN6	NTNG2
FUT91	2.22E-136	0.45489356	0.891	0.811	8.48E-132	ExN6	FUT9
ITGA8	9.84E-136	0.59572786	0.267	0.118	3.76E-131	ExN6	ITGA8
ST3GAL62	4.00E-135	0.36158592	0.638	0.421	1.53E-130	ExN6	ST3GAL6
AL513166.14	7.43E-135	0.45480182	0.795	0.612	2.84E-130	ExN6	AL513166.1
SPARCL11	4.04E-134	0.29437961	0.855	0.652	1.54E-129	ExN6	SPARCL1
ZNF8271	6.11E-134	0.35079341	0.684	0.47	2.33E-129	ExN6	ZNF827
AC120193.13	7.63E-134	0.38156276	0.529	0.314	2.92E-129	ExN6	AC120193.1
ADAMTS192	1.85E-133	0.41835718	0.564	0.355	7.06E-129	ExN6	ADAMTS19
FMN21	5.47E-133	0.31620635	0.948	0.898	2.09E-128	ExN6	FMN2
AL133166.13	7.50E-133	0.26302775	0.401	0.21	2.87E-128	ExN6	AL133166.1
UTY	2.67E-132	0.43068945	0.507	0.306	1.02E-127	ExN6	UTY
AC005906.22	8.69E-132	0.30597519	0.488	0.282	3.32E-127	ExN6	AC005906.2
STK391	1.40E-131	0.36956013	0.778	0.589	5.35E-127	ExN6	STK39
AC007038.11	1.51E-130	0.2628414	0.365	0.187	5.77E-126	ExN6	AC007038.1
CRYM2	5.88E-130	0.57874423	0.432	0.259	2.25E-125	ExN6	CRYM
TNFRSF21	1.28E-129	0.2758691	0.466	0.271	4.89E-125	ExN6	TNFRSF21
GLIS11	5.01E-129	0.31375882	0.682	0.465	1.92E-124	ExN6	GLIS1
DPYD3	6.15E-129	0.37095125	0.873	0.653	2.35E-124	ExN6	DPYD
GAREM11	7.71E-128	0.44895274	0.643	0.459	2.95E-123	ExN6	GAREM1
ADCY11	1.70E-127	0.41741519	0.757	0.59	6.50E-123	ExN6	ADCY1
FGFR1	1.51E-126	0.38542414	0.319	0.163	5.77E-122	ExN6	FGFR1
CACNA2D33	3.14E-126	0.4447435	0.95	0.862	1.20E-121	ExN6	CACNA2D3
EFR3A	1.92E-125	0.37807603	0.762	0.605	7.34E-121	ExN6	EFR3A
KLF7	2.80E-125	0.30998901	0.53	0.329	1.07E-120	ExN6	KLF7
SVOP	8.39E-125	0.37732032	0.691	0.494	3.21E-120	ExN6	SVOP
KLHL5	1.88E-124	0.27560824	0.515	0.306	7.18E-120	ExN6	KLHL5
VIPR1	1.03E-123	0.26276955	0.425	0.233	3.94E-119	ExN6	VIPR1
GABRA3	1.18E-123	0.34270182	0.526	0.331	4.50E-119	ExN6	GABRA3
TNIK	1.35E-123	0.2977513	0.905	0.797	5.16E-119	ExN6	TNIK
PCDH11Y	7.25E-123	0.44703202	0.393	0.215	2.77E-118	ExN6	PCDH11Y
CDH21	7.40E-123	0.44630746	0.836	0.751	2.83E-118	ExN6	CDH2
KCNQ33	8.44E-123	0.38737919	0.959	0.898	3.23E-118	ExN6	KCNQ3
DYNC1I13	8.98E-123	0.31846623	0.93	0.869	3.43E-118	ExN6	DYNC1I1
ARHGAP222	1.03E-122	0.32742346	0.492	0.296	3.93E-118	ExN6	ARHGAP22
PHKB	2.19E-122	0.33935587	0.746	0.562	8.38E-118	ExN6	PHKB
MAGI32	9.11E-121	0.50049504	0.822	0.679	3.48E-116	ExN6	MAGI3
GNPTAB	1.63E-120	0.34271556	0.712	0.525	6.23E-116	ExN6	GNPTAB
JPH11	1.44E-119	0.31541845	0.642	0.438	5.52E-115	ExN6	JPH1
ARHGEF282	1.99E-119	0.32814722	0.495	0.299	7.59E-115	ExN6	ARHGEF28
AC069437.1	6.83E-119	0.28495549	0.349	0.183	2.61E-114	ExN6	AC069437.1
ABLIM3	9.43E-119	0.29679961	0.578	0.37	3.61E-114	ExN6	ABLIM3

FARS22	1.67E-118	0.35292744	0.874	0.755	6.40E-114	ExN6	FARS2
SCPEP1	8.37E-118	0.30009026	0.471	0.288	3.20E-113	ExN6	SCPEP1
SIDT11	9.23E-118	0.37236885	0.699	0.506	3.53E-113	ExN6	SIDT1
AC091078.12	2.07E-117	0.7551941	0.471	0.297	7.93E-113	ExN6	AC091078.1
ZC2HC1A	2.94E-116	0.29806159	0.624	0.426	1.13E-111	ExN6	ZC2HC1A
EPHA7	6.05E-116	0.30166064	0.737	0.531	2.31E-111	ExN6	EPHA7
VPS13A2	1.68E-115	0.3179474	0.853	0.727	6.42E-111	ExN6	VPS13A
CDH181	6.06E-115	0.53596111	0.906	0.869	2.32E-110	ExN6	CDH18
KHDRBS23	3.77E-114	0.31410074	0.976	0.895	1.44E-109	ExN6	KHDRBS2
SMAP12	6.96E-114	0.41527227	0.776	0.617	2.66E-109	ExN6	SMAP1
SATB24	4.07E-113	0.57952345	0.792	0.564	1.56E-108	ExN6	SATB2
GFPT2	8.55E-113	0.25749417	0.449	0.264	3.27E-108	ExN6	GFPT2
SFXN5	1.77E-112	0.32733984	0.715	0.517	6.78E-108	ExN6	SFXN5
LRRN2	2.74E-112	0.2684445	0.711	0.505	1.05E-107	ExN6	LRRN2
ANO6	5.08E-112	0.35993938	0.459	0.285	1.94E-107	ExN6	ANO6
TRPM2	1.38E-111	0.30940242	0.599	0.402	5.29E-107	ExN6	TRPM2
CTNNAL11	3.35E-111	0.33395323	0.622	0.43	1.28E-106	ExN6	CTNNAL1
KATNAL1	6.55E-111	0.26983141	0.609	0.402	2.50E-106	ExN6	KATNAL1
TTY14	1.06E-110	0.43281429	0.553	0.355	4.04E-106	ExN6	TTY14
DGKH1	1.17E-110	0.34871098	0.556	0.371	4.45E-106	ExN6	DGKH
LSAMP	1.79E-109	0.48533587	0.99	0.973	6.85E-105	ExN6	LSAMP
FARP11	4.63E-109	0.42118342	0.759	0.652	1.77E-104	ExN6	FARP1
PRICKLE2	1.45E-108	0.31708467	0.882	0.788	5.54E-104	ExN6	PRICKLE2
PPP1R12B	1.94E-108	0.32668057	0.855	0.752	7.40E-104	ExN6	PPP1R12B
UNC5C	1.50E-106	0.8644066	0.846	0.781	5.75E-102	ExN6	UNC5C
C4orf501	2.14E-106	0.28226632	0.548	0.353	8.17E-102	ExN6	C4orf50
ASAP1	7.68E-106	0.33049907	0.889	0.796	2.93E-101	ExN6	ASAP1
POU6F24	2.50E-105	0.36153326	0.611	0.39	9.54E-101	ExN6	POU6F2
ELL22	8.69E-105	0.32516924	0.736	0.534	3.32E-100	ExN6	ELL2
GPD2	1.13E-103	0.32047438	0.493	0.318	4.31E-99	ExN6	GPD2
GPR63	1.25E-103	0.3443493	0.402	0.243	4.77E-99	ExN6	GPR63
IQSEC11	1.71E-103	0.33811302	0.887	0.774	6.54E-99	ExN6	IQSEC1
DONSON	2.20E-103	0.32825215	0.308	0.16	8.42E-99	ExN6	DONSON
B4GALNT32	5.10E-103	0.26522884	0.49	0.304	1.95E-98	ExN6	B4GALNT3
EPS151	5.46E-103	0.27467417	0.667	0.474	2.09E-98	ExN6	EPS15
FMNL22	1.36E-102	0.34722975	0.923	0.87	5.21E-98	ExN6	FMNL2
JAZF1	2.20E-102	0.27376159	0.905	0.815	8.41E-98	ExN6	JAZF1
AFF2	4.41E-102	0.52835107	0.553	0.38	1.69E-97	ExN6	AFF2
NEGR12	5.98E-102	0.33397955	0.983	0.954	2.29E-97	ExN6	NEGR1
PTCHD1-AS2	2.62E-101	0.37647884	0.642	0.439	1.00E-96	ExN6	PTCHD1-AS
LHFPL5	1.03E-100	0.25748667	0.445	0.268	3.95E-96	ExN6	LHFPL5
SEMA5B1	1.30E-100	0.39873919	0.448	0.287	4.98E-96	ExN6	SEMA5B
ATP8B4	1.57E-100	0.40744912	0.378	0.223	5.99E-96	ExN6	ATP8B4
CAP2	3.07E-100	0.34104578	0.792	0.648	1.17E-95	ExN6	CAP2
SGMS1	3.92E-99	0.35310372	0.786	0.66	1.50E-94	ExN6	SGMS1
SCD5	6.89E-99	0.2791286	0.773	0.596	2.64E-94	ExN6	SCD5
STK38L	7.78E-99	0.31200405	0.525	0.35	2.97E-94	ExN6	STK38L
C1GALT1	8.00E-99	0.36097638	0.479	0.312	3.06E-94	ExN6	C1GALT1
AACS1	8.74E-99	0.29178506	0.645	0.455	3.34E-94	ExN6	AACS
VPS413	3.79E-98	0.30305515	0.754	0.581	1.45E-93	ExN6	VPS41
SLC16A1-AS1	8.46E-98	0.33398087	0.773	0.597	3.23E-93	ExN6	SLC16A1-AS1
TMEM178A	1.92E-97	0.33140041	0.741	0.581	7.32E-93	ExN6	TMEM178A
NPY1R	2.11E-97	0.29521927	0.523	0.347	8.08E-93	ExN6	NPY1R
ARNTL22	4.14E-97	0.4558598	0.515	0.37	1.58E-92	ExN6	ARNTL2
EFNA54	4.92E-97	0.25537267	0.928	0.789	1.88E-92	ExN6	EFNA5
AC092691.12	7.23E-97	0.66200806	0.836	0.872	2.77E-92	ExN6	AC092691.1
SNCA3	4.12E-96	0.28571006	0.797	0.599	1.57E-91	ExN6	SNCA
KSR2	5.86E-96	0.32290231	0.933	0.889	2.24E-91	ExN6	KSR2
TMEM131	1.29E-95	0.29004388	0.779	0.638	4.94E-91	ExN6	TMEM131
GNG7	3.81E-95	0.33953866	0.575	0.397	1.46E-90	ExN6	GNG7
FRMD31	5.09E-95	0.3875342	0.504	0.333	1.95E-90	ExN6	FRMD3
CDKL51	1.29E-94	0.35808376	0.846	0.724	4.94E-90	ExN6	CDKL5
PAPSS11	2.61E-94	0.28378832	0.682	0.511	9.98E-90	ExN6	PAPSS1

INPP4B1	4.14E-94	0.35927804	0.89	0.745	1.58E-89	ExN6	INPP4B
NFASC	4.48E-94	0.27565266	0.894	0.805	1.71E-89	ExN6	NFASC
GDA	1.35E-92	0.38352875	0.537	0.389	5.17E-88	ExN6	GDA
COL11A11	1.71E-92	0.37796998	0.41	0.251	6.52E-88	ExN6	COL11A1
RAPGEF41	2.51E-92	0.39467037	0.922	0.872	9.60E-88	ExN6	RAPGEF4
ZNF385D	2.52E-92	0.84070389	0.735	0.5	9.65E-88	ExN6	ZNF385D
ADCY2	3.15E-91	0.36250708	0.915	0.85	1.20E-86	ExN6	ADCY2
AC006504.53	1.57E-90	0.26171295	0.616	0.419	6.00E-86	ExN6	AC006504.5
SLC38A61	2.94E-90	0.28326685	0.699	0.525	1.13E-85	ExN6	SLC38A6
RPTOR	1.68E-89	0.30382924	0.77	0.619	6.43E-85	ExN6	RPTOR
ST3GAL11	4.34E-89	0.28890047	0.463	0.291	1.66E-84	ExN6	ST3GAL1
SSBP33	5.15E-89	0.30592765	0.812	0.668	1.97E-84	ExN6	SSBP3
GRIK41	6.19E-89	0.53088534	0.566	0.438	2.37E-84	ExN6	GRIK4
SIK2	8.66E-89	0.30542015	0.76	0.615	3.31E-84	ExN6	SIK2
STXBP5-AS1	1.21E-87	0.3235508	0.746	0.578	4.64E-83	ExN6	STXBP5-AS1
MPP72	2.14E-87	0.48556288	0.529	0.396	8.16E-83	ExN6	MPP7
WDPCP1	5.59E-87	0.30989816	0.865	0.756	2.14E-82	ExN6	WDPCP
MIR100HG	6.67E-86	0.29311224	0.821	0.696	2.55E-81	ExN6	MIR100HG
PRR16	7.66E-86	0.45801682	0.685	0.542	2.93E-81	ExN6	PRR16
ITGB82	1.14E-85	0.66437507	0.405	0.281	4.37E-81	ExN6	ITGB8
STRBP1	1.39E-85	0.30255039	0.86	0.754	5.31E-81	ExN6	STRBP
PPP2R2C4	1.24E-84	0.27860673	0.899	0.794	4.73E-80	ExN6	PPP2R2C
SGPP2	1.25E-84	0.29052179	0.472	0.315	4.80E-80	ExN6	SGPP2
AL008633.14	4.74E-84	0.3114864	0.872	0.705	1.81E-79	ExN6	AL008633.1
MAP4K3-DT	1.12E-83	0.30365747	0.81	0.651	4.28E-79	ExN6	MAP4K3-DT
TOX3	1.51E-83	0.41043196	0.588	0.435	5.78E-79	ExN6	TOX
TUSC3	2.72E-83	0.27234591	0.777	0.65	1.04E-78	ExN6	TUSC3
AC110023.11	1.16E-82	0.72620964	0.443	0.303	4.42E-78	ExN6	AC110023.1
SHC32	1.43E-82	0.33284105	0.753	0.6	5.45E-78	ExN6	SHC3
RALGPS21	1.87E-82	0.30930021	0.688	0.53	7.16E-78	ExN6	RALGPS2
FKBP51	4.00E-82	0.27720111	0.412	0.253	1.53E-77	ExN6	FKBP5
BBS9	5.35E-82	0.27298808	0.829	0.717	2.05E-77	ExN6	BBS9
BASP12	3.78E-81	0.27120641	0.869	0.765	1.45E-76	ExN6	BASP1
CPNE51	4.14E-81	0.34411104	0.579	0.421	1.58E-76	ExN6	CPNE5
HOMER13	5.24E-81	0.34086796	0.756	0.613	2.00E-76	ExN6	HOMER1
ADK	1.42E-80	0.33361232	0.864	0.779	5.42E-76	ExN6	ADK
KCNH53	3.11E-80	0.42569456	0.56	0.41	1.19E-75	ExN6	KCNH5
DDAH13	1.57E-79	0.32668756	0.575	0.415	6.02E-75	ExN6	DDAH1
LINC018213	1.68E-79	0.31529441	0.349	0.207	6.43E-75	ExN6	LINC01821
PRICKLE12	1.69E-79	0.33436108	0.808	0.685	6.44E-75	ExN6	PRICKLE1
PEX5L2	9.40E-79	0.47982863	0.85	0.828	3.59E-74	ExN6	PEX5L
AC008269.1	1.30E-78	0.27276364	0.761	0.583	4.97E-74	ExN6	AC008269.1
SKAP2	1.93E-78	0.25538656	0.544	0.37	7.37E-74	ExN6	SKAP2
CCNY	1.91E-76	0.27315603	0.814	0.688	7.31E-72	ExN6	CCNY
FOXP14	2.20E-76	0.25388221	0.907	0.815	8.40E-72	ExN6	FOXP1
BCL11A1	1.18E-75	0.32678469	0.728	0.591	4.53E-71	ExN6	BCL11A
CHSY32	2.13E-75	0.28728635	0.925	0.83	8.16E-71	ExN6	CHSY3
WIPF31	1.52E-74	0.32375148	0.557	0.399	5.80E-70	ExN6	WIPF3
OSBPL10	3.64E-74	0.28610463	0.632	0.475	1.39E-69	ExN6	OSBPL10
AGAP12	7.03E-74	0.28944049	0.949	0.907	2.69E-69	ExN6	AGAP1
ARGLU1	2.01E-73	0.29130845	0.815	0.7	7.68E-69	ExN6	ARGLU1
DOP1B	6.65E-73	0.25447919	0.552	0.382	2.54E-68	ExN6	DOP1B
STPG2	8.07E-73	0.28919033	0.301	0.174	3.08E-68	ExN6	STPG2
LINC011222	1.23E-72	0.29019395	0.845	0.681	4.72E-68	ExN6	LINC01122
GSG1L2	1.28E-72	0.33400194	0.441	0.299	4.91E-68	ExN6	GSG1L
NR3C1	2.41E-72	0.25686855	0.811	0.696	9.21E-68	ExN6	NR3C1
AC245060.5	3.04E-72	0.30811152	0.344	0.21	1.16E-67	ExN6	AC245060.5
MICAL22	9.81E-72	0.26959133	0.858	0.725	3.75E-67	ExN6	MICAL2
PPP1R9A	1.31E-71	0.26387189	0.862	0.786	5.02E-67	ExN6	PPP1R9A
C11orf80	1.57E-71	0.26752382	0.756	0.608	5.99E-67	ExN6	C11orf80
TRIM2	2.37E-71	0.25213478	0.882	0.786	9.07E-67	ExN6	TRIM2
CALN11	1.52E-70	0.27076716	0.794	0.653	5.83E-66	ExN6	CALN1
CABP15	1.69E-70	0.28809106	0.851	0.695	6.44E-66	ExN6	CABP1

CCDC61	3.32E-70	0.26527932	0.712	0.556	1.27E-65	ExN6	CCDC6
RAP1GDS1	3.09E-69	0.25835651	0.757	0.611	1.18E-64	ExN6	RAP1GDS1
SEL1L3	5.82E-68	0.27620648	0.425	0.282	2.22E-63	ExN6	SEL1L3
TNPO11	3.71E-67	0.25185575	0.776	0.635	1.42E-62	ExN6	TNPO1
COL24A11	5.85E-67	0.52947133	0.352	0.236	2.23E-62	ExN6	COL24A1
LRRTM31	1.08E-66	0.27949402	0.901	0.828	4.13E-62	ExN6	LRRTM3
HIVEP31	6.56E-66	0.28988266	0.899	0.86	2.51E-61	ExN6	HIVEP3
AC019211.14	6.83E-66	0.41763662	0.499	0.345	2.61E-61	ExN6	AC019211.1
SLIT3	9.62E-65	0.349489	0.622	0.46	3.68E-60	ExN6	SLIT3
PDE7A	3.36E-63	0.30726946	0.62	0.481	1.28E-58	ExN6	PDE7A
KIAA09303	1.14E-62	0.27432441	0.74	0.605	4.36E-58	ExN6	KIAA0930
HULC	1.41E-62	0.25711427	0.688	0.525	5.40E-58	ExN6	HULC
KCNH73	1.89E-62	0.3146579	0.842	0.723	7.24E-58	ExN6	KCNH7
LHFPL3	9.95E-62	0.4820094	0.389	0.269	3.80E-57	ExN6	LHFPL3
NEK112	4.28E-58	0.28103023	0.578	0.429	1.64E-53	ExN6	NEK11
ADD3	4.89E-58	0.3077402	0.691	0.574	1.87E-53	ExN6	ADD3
MARCH12	7.34E-58	0.3374025	0.883	0.751	2.81E-53	ExN6	1-Mar
GMDS-DT	1.92E-56	0.26358783	0.7	0.56	7.34E-52	ExN6	GMDS-DT
WASF12	4.34E-56	0.27109929	0.784	0.634	1.66E-51	ExN6	WASF1
GARNL3	5.26E-56	0.2878291	0.817	0.719	2.01E-51	ExN6	GARNL3
BACH21	1.39E-55	0.26522815	0.733	0.604	5.30E-51	ExN6	BACH2
ARHGAP263	9.80E-55	0.25530937	0.929	0.869	3.75E-50	ExN6	ARHGAP26
ROBO2	1.16E-53	0.74152703	0.836	0.855	4.43E-49	ExN6	ROBO2
AC110296.11	1.75E-53	0.29109712	0.292	0.186	6.70E-49	ExN6	AC110296.1
STXBP51	7.40E-53	0.27785126	0.877	0.825	2.83E-48	ExN6	STXBP5
GPATCH21	7.66E-51	0.27561413	0.573	0.445	2.93E-46	ExN6	GPATCH2
USP33	1.63E-50	0.28244989	0.789	0.693	6.23E-46	ExN6	USP33
MARK1	8.85E-49	0.25674332	0.776	0.674	3.38E-44	ExN6	MARK1
WSB1	3.07E-48	0.25397936	0.727	0.618	1.17E-43	ExN6	WSB1
TMEM2321	2.31E-47	0.27622961	0.851	0.769	8.84E-43	ExN6	TMEM232
DLGAP1-AS4	8.70E-46	0.27701896	0.466	0.349	3.32E-41	ExN6	DLGAP1-AS4
STXBP5L4	3.85E-45	0.26993385	0.97	0.946	1.47E-40	ExN6	STXBP5L
COL12A11	8.32E-45	0.31060591	0.293	0.194	3.18E-40	ExN6	COL12A1
COL19A11	1.38E-44	0.26332631	0.434	0.323	5.26E-40	ExN6	COL19A1
MGAT5	3.53E-43	0.38941939	0.744	0.656	1.35E-38	ExN6	MGAT5
CLVS2	1.15E-42	0.34720763	0.682	0.593	4.41E-38	ExN6	CLVS2
AC067956.14	1.09E-41	0.28198012	0.439	0.32	4.16E-37	ExN6	AC067956.1
FMN13	1.90E-40	0.28708993	0.868	0.753	7.27E-36	ExN6	FMN1
ITPR2	8.19E-38	0.41415542	0.456	0.358	3.13E-33	ExN6	ITPR2
LRRC4C1	2.69E-35	0.27952212	0.929	0.887	1.03E-30	ExN6	LRRC4C
RNF144A2	1.04E-33	0.29838605	0.797	0.739	3.96E-29	ExN6	RNF144A
DYNLL11	1.62E-33	0.30628124	0.543	0.425	6.18E-29	ExN6	DYNLL1
AQP4-AS14	3.39E-32	0.29361825	0.597	0.498	1.30E-27	ExN6	AQP4-AS1
TENM42	1.45E-31	0.40346928	0.914	0.856	5.55E-27	ExN6	TENM4
TSHZ21	1.37E-26	0.49664426	0.496	0.396	5.24E-22	ExN6	TSHZ2
CNTN6	3.58E-26	0.28977552	0.301	0.23	1.37E-21	ExN6	CNTN6
VPS13D2	7.30E-25	0.32986601	0.806	0.749	2.79E-20	ExN6	VPS13D
GPC52	1.45E-24	0.39864632	0.496	0.419	5.52E-20	ExN6	GPC5
CSGALNACT1	1.82E-24	0.30539951	0.666	0.61	6.96E-20	ExN6	CSGALNACT1
TRHDE2	3.70E-22	0.45702795	0.518	0.523	1.42E-17	ExN6	TRHDE
SORCS21	2.47E-19	0.59457095	0.367	0.323	9.44E-15	ExN6	SORCS2
NWD24	8.28E-17	0.32533157	0.337	0.482	3.17E-12	ExN6	NWD2
CDH82	6.62E-12	0.25467186	0.67	0.663	2.53E-07	ExN6	CDH8
CUX12	1.44E-11	0.31739571	0.655	0.738	5.50E-07	ExN6	CUX1
CPNE82	0.00027899	0.25127977	0.462	0.483	1	ExN6	CPNE8
SLC1A3	0	2.66912104	0.896	0.137	0	ExN7	SLC1A3
LRMDA1	0	2.65754986	0.925	0.186	0	ExN7	LRMDA
ARHGAP24	0	2.43769254	0.863	0.147	0	ExN7	ARHGAP24
DOCK8	0	2.19425947	0.839	0.022	0	ExN7	DOCK8
APBB1IP	0	2.06101785	0.834	0.023	0	ExN7	APBB1IP
RUNX1	0	2.00686112	0.821	0.138	0	ExN7	RUNX1
TBXAS1	0	1.82297165	0.798	0.028	0	ExN7	TBXAS1
FYB1	0	1.82251326	0.736	0.013	0	ExN7	FYB1

LNCAROD	0	1.80756707	0.679	0.012	0 ExN7	LNCAROD
ARHGAP15	0	1.66997236	0.705	0.066	0 ExN7	ARHGAP15
DISC1	0	1.62408202	0.764	0.135	0 ExN7	DISC1
DOCK2	0	1.58366265	0.756	0.049	0 ExN7	DOCK2
ADAM28	0	1.56609731	0.699	0.018	0 ExN7	ADAM28
SLCO2B1	0	1.56292404	0.723	0.027	0 ExN7	SLCO2B1
INPP5D	0	1.51375754	0.687	0.043	0 ExN7	INPP5D
ZFP36L1	0	1.46829301	0.63	0.039	0 ExN7	ZFP36L1
PTPRC	0	1.38773222	0.697	0.011	0 ExN7	PTPRC
C3	0	1.37924047	0.648	0.019	0 ExN7	C3
CD74	0	1.33224289	0.609	0.025	0 ExN7	CD74
RBM47	0	1.33111837	0.642	0.027	0 ExN7	RBM47
PALD1	0	1.30859883	0.648	0.065	0 ExN7	PALD1
CSF1R	0	1.28543125	0.65	0.01	0 ExN7	CSF1R
SYK	0	1.25369167	0.632	0.008	0 ExN7	SYK
FLI1	0	1.21664221	0.63	0.009	0 ExN7	FLI1
IKZF1	0	1.21421848	0.609	0.007	0 ExN7	IKZF1
RHBDF2	0	1.16937262	0.614	0.015	0 ExN7	RHBDF2
LYN	0	1.14068188	0.567	0.019	0 ExN7	LYN
LINC01374	0	1.07311139	0.492	0.029	0 ExN7	LINC01374
LPCAT2	0	1.06240961	0.554	0.058	0 ExN7	LPCAT2
BNC2	0	1.04251809	0.5	0.02	0 ExN7	BNC2
P2RY12	0	1.02063418	0.523	0.021	0 ExN7	P2RY12
BLNK	0	1.01647357	0.508	0.009	0 ExN7	BLNK
TLR2	0	1.01092058	0.521	0.007	0 ExN7	TLR2
A2M	0	0.96492205	0.544	0.033	0 ExN7	A2M
ZFP36L2	0	0.95201849	0.417	0.02	0 ExN7	ZFP36L2
TGFBFR2	0	0.94958379	0.5	0.01	0 ExN7	TGFBFR2
SP100	0	0.9479557	0.526	0.016	0 ExN7	SP100
SCIN	0	0.93687723	0.422	0.006	0 ExN7	SCIN
CPED1	0	0.93392284	0.487	0.029	0 ExN7	CPED1
LPAR6	0	0.92917209	0.5	0.018	0 ExN7	LPAR6
SAMSN1	0	0.92915596	0.49	0.016	0 ExN7	SAMSN1
LY86	0	0.92759159	0.557	0.033	0 ExN7	LY86
NFATC2	0	0.90280369	0.497	0.015	0 ExN7	NFATC2
ARHGAP25	0	0.89358696	0.541	0.062	0 ExN7	ARHGAP25
SLC2A5	0	0.88611614	0.477	0.012	0 ExN7	SLC2A5
MSR1	0	0.88347081	0.409	0.021	0 ExN7	MSR1
IFI16	0	0.87470993	0.534	0.059	0 ExN7	IFI16
PIK3AP1	0	0.87368426	0.482	0.013	0 ExN7	PIK3AP1
AL357522.1	0	0.86891451	0.448	0.016	0 ExN7	AL357522.1
ENTPD1	0	0.86123218	0.495	0.025	0 ExN7	ENTPD1
RREB1	0	0.85605908	0.484	0.014	0 ExN7	RREB1
C1QB	0	0.85085361	0.43	0.009	0 ExN7	C1QB
WDFY4	0	0.84774736	0.497	0.01	0 ExN7	WDFY4
MYO1F	0	0.80298981	0.508	0.023	0 ExN7	MYO1F
LAPTM5	0	0.78070717	0.469	0.011	0 ExN7	LAPTM5
ALPK1	0	0.76068781	0.443	0.042	0 ExN7	ALPK1
CSF2RA	0	0.75711479	0.446	0.015	0 ExN7	CSF2RA
CIITA	0	0.75702589	0.415	0.015	0 ExN7	CIITA
CD53	0	0.75650941	0.5	0.052	0 ExN7	CD53
MS4A6A	0	0.74717731	0.368	0.003	0 ExN7	MS4A6A
IRAK3	0	0.74008249	0.427	0.038	0 ExN7	IRAK3
SLC11A1	0	0.73760044	0.391	0.017	0 ExN7	SLC11A1
PIK3R5	0	0.73361251	0.409	0.005	0 ExN7	PIK3R5
VSIG4	0	0.71308174	0.326	0.003	0 ExN7	VSIG4
AL392172.2	0	0.7112662	0.35	0.003	0 ExN7	AL392172.2
C1QC	0	0.7053793	0.347	0.005	0 ExN7	C1QC
ALOX5	0	0.70452323	0.422	0.018	0 ExN7	ALOX5
CX3CR1	0	0.69917188	0.378	0.004	0 ExN7	CX3CR1
HCLS1	0	0.69911772	0.415	0.016	0 ExN7	HCLS1
PARP14	0	0.6985809	0.412	0.016	0 ExN7	PARP14
CD86	0	0.69818889	0.381	0.003	0 ExN7	CD86

OLR1	0	0.69750217	0.381	0.021	0	ExN7	OLR1
IL18	0	0.69693337	0.404	0.014	0	ExN7	IL18
FGD2	0	0.68266452	0.404	0.005	0	ExN7	FGD2
CYBB	0	0.68113246	0.399	0.025	0	ExN7	CYBB
TNFRSF1B	0	0.68045668	0.396	0.006	0	ExN7	TNFRSF1B
HLA-DRA	0	0.67346048	0.347	0.011	0	ExN7	HLA-DRA
NIBAN1	0	0.67338814	0.324	0.013	0	ExN7	NIBAN1
ITGAX	0	0.65318694	0.399	0.004	0	ExN7	ITGAX
CSF3R	0	0.64432321	0.358	0.004	0	ExN7	CSF3R
IRF8	0	0.62759117	0.319	0.004	0	ExN7	IRF8
IL13RA1	0	0.62476447	0.394	0.009	0	ExN7	IL13RA1
NCKAP1L	0	0.62084268	0.381	0.012	0	ExN7	NCKAP1L
VSIR	0	0.61058911	0.386	0.009	0	ExN7	VSIR
SH3TC1	0	0.60243402	0.378	0.004	0	ExN7	SH3TC1
TMEM156	0	0.60236762	0.355	0.009	0	ExN7	TMEM156
STAB1	0	0.59858114	0.337	0.009	0	ExN7	STAB1
RGS10	0	0.59683493	0.347	0.007	0	ExN7	RGS10
MYOF	0	0.59457933	0.337	0.01	0	ExN7	MYOF
SRGN	0	0.57672786	0.316	0.007	0	ExN7	SRGN
KCNQ1	0	0.57308484	0.36	0.023	0	ExN7	KCNQ1
HLA-DRB1	0	0.5596246	0.311	0.013	0	ExN7	HLA-DRB1
HLA-E	0	0.55784632	0.342	0.009	0	ExN7	HLA-E
TLR1	0	0.55362741	0.35	0.013	0	ExN7	TLR1
CYBA	0	0.54037583	0.329	0.008	0	ExN7	CYBA
AL034397.3	0	0.50303087	0.259	0.002	0	ExN7	AL034397.3
ITGAM	0	0.50291247	0.337	0.005	0	ExN7	ITGAM
C1QA	0	0.49359914	0.28	0.006	0	ExN7	C1QA
TFEC	0	0.49066409	0.339	0.016	0	ExN7	TFEC
IL4R	0	0.48920878	0.313	0.012	0	ExN7	IL4R
PARVG	0	0.46819922	0.303	0.015	0	ExN7	PARVG
VAV1	0	0.46765365	0.308	0.011	0	ExN7	VAV1
LCP1	0	0.46690885	0.264	0.012	0	ExN7	LCP1
CMTM7	0	0.466034	0.324	0.019	0	ExN7	CMTM7
GAB3	0	0.45851647	0.285	0.005	0	ExN7	GAB3
AC012150.1	0	0.45719451	0.264	0.011	0	ExN7	AC012150.1
CYTH4	0	0.45090116	0.254	0.005	0	ExN7	CYTH4
PGM5	0	0.45046452	0.264	0.015	0	ExN7	PGM5
CD84	0	0.43532947	0.269	0.004	0	ExN7	CD84
LINC01094	0	0.42481365	0.269	0.007	0	ExN7	LINC01094
BIN2	0	0.38666582	0.256	0.005	0	ExN7	BIN2
ITGB2	0	0.37936986	0.254	0.009	0	ExN7	ITGB2
HCK	2.08E-304	0.57962687	0.347	0.026	7.96E-300	ExN7	HCK
TLR5	1.16E-296	0.39353462	0.259	0.015	4.42E-292	ExN7	TLR5
RCSD1	1.02E-284	0.85286871	0.484	0.056	3.88E-280	ExN7	RCSD1
SPP1	1.99E-277	2.49630685	0.604	0.093	7.59E-273	ExN7	SPP1
AL163541.1	7.26E-275	1.66407285	0.472	0.056	2.77E-270	ExN7	AL163541.1
SLA	5.62E-272	0.6955482	0.386	0.037	2.15E-267	ExN7	SLA
AOAH	6.45E-272	1.19510293	0.65	0.11	2.47E-267	ExN7	AOAH
TGFBR11	1.47E-260	1.15701871	0.624	0.104	5.62E-256	ExN7	TGFBR1
PADI2	4.28E-258	0.94113273	0.427	0.048	1.64E-253	ExN7	PADI2
HLA-DPB1	5.39E-258	0.41794524	0.272	0.019	2.06E-253	ExN7	HLA-DPB1
CARD11	7.66E-241	0.45489091	0.272	0.02	2.93E-236	ExN7	CARD11
MSN	6.78E-240	0.53104421	0.36	0.036	2.59E-235	ExN7	MSN
ST6GAL12	3.13E-238	2.05165963	0.863	0.272	1.20E-233	ExN7	ST6GAL1
RIN3	1.40E-236	0.8817012	0.552	0.086	5.34E-232	ExN7	RIN3
SUCLG2	3.26E-235	0.72924289	0.474	0.064	1.25E-230	ExN7	SUCLG2
ABCC4	8.69E-229	1.21156425	0.637	0.125	3.32E-224	ExN7	ABCC4
SP110	5.64E-227	0.42216954	0.262	0.02	2.16E-222	ExN7	SP110
MERTK1	1.35E-225	1.09400962	0.596	0.106	5.16E-221	ExN7	MERTK
CCDC26	2.98E-225	1.10517439	0.376	0.043	1.14E-220	ExN7	CCDC26
LAT2	1.63E-219	0.50611664	0.355	0.038	6.25E-215	ExN7	LAT2
MAML2	2.65E-219	1.75011183	0.837	0.231	1.01E-214	ExN7	MAML2
LCP2	1.26E-212	0.51791321	0.347	0.037	4.82E-208	ExN7	LCP2

TNS3	2.84E-211	0.93797045	0.596	0.108	1.09E-206 ExN7	TNS3
DLEU1	2.98E-204	1.60195026	0.65	0.147	1.14E-199 ExN7	DLEU1
CTSC	6.03E-194	0.51289059	0.332	0.038	2.31E-189 ExN7	CTSC
MYO15B	7.10E-194	0.38291327	0.301	0.03	2.71E-189 ExN7	MYO15B
PARP4	4.83E-193	0.42104492	0.29	0.029	1.85E-188 ExN7	PARP4
NEAT1	8.10E-192	1.95880602	0.943	0.38	3.10E-187 ExN7	NEAT1
WIPF1	6.21E-187	0.65828739	0.443	0.067	2.37E-182 ExN7	WIPF1
PLXDC24	1.08E-184	2.14231352	0.977	0.611	4.12E-180 ExN7	PLXDC2
PRKCH	7.19E-180	0.58975865	0.391	0.055	2.75E-175 ExN7	PRKCH
CPVL	1.13E-177	0.57943618	0.332	0.041	4.33E-173 ExN7	CPVL
APOE	9.39E-174	0.91333313	0.456	0.077	3.59E-169 ExN7	APOE
NHSL1	2.75E-171	0.91045989	0.352	0.048	1.05E-166 ExN7	NHSL1
SFMBT2	1.41E-166	1.74544582	0.904	0.382	5.39E-162 ExN7	SFMBT2
RNASET2	1.48E-165	1.29210694	0.775	0.264	5.66E-161 ExN7	RNASET2
PRAM1	9.32E-164	0.38026653	0.264	0.028	3.56E-159 ExN7	PRAM1
TMCC3	4.59E-162	0.46974409	0.313	0.039	1.75E-157 ExN7	TMCC3
PREX1	6.32E-162	1.12911234	0.699	0.2	2.42E-157 ExN7	PREX1
ITPR21	3.46E-161	1.64621723	0.896	0.361	1.32E-156 ExN7	ITPR2
CPM	1.30E-160	0.56947524	0.301	0.036	4.97E-156 ExN7	CPM
LHFPL2	9.99E-157	1.45343676	0.749	0.244	3.82E-152 ExN7	LHFPL2
NPL	3.41E-156	0.79985377	0.51	0.106	1.30E-151 ExN7	NPL
ATP8B41	1.70E-155	1.2100217	0.731	0.23	6.48E-151 ExN7	ATP8B4
SRGAP2	1.77E-150	1.48716981	0.902	0.483	6.77E-146 ExN7	SRGAP2
FKBP52	9.64E-148	1.3761184	0.78	0.261	3.68E-143 ExN7	FKBP5
BMP2K	5.62E-146	1.4284699	0.788	0.31	2.15E-141 ExN7	BMP2K
CHST11	3.20E-141	1.457001	0.953	0.513	1.22E-136 ExN7	CHST11
ARHGAP31	7.80E-140	0.46268935	0.332	0.048	2.98E-135 ExN7	ARHGAP31
CHD7	1.17E-137	0.73334635	0.526	0.113	4.48E-133 ExN7	CHD7
ELF1	2.79E-136	0.63694996	0.479	0.1	1.07E-131 ExN7	ELF1
HLA-B	5.62E-136	0.53215961	0.345	0.054	2.15E-131 ExN7	HLA-B
ADAP2	1.29E-133	0.41168209	0.316	0.047	4.95E-129 ExN7	ADAP2
HLA-DMA	2.85E-132	0.39380721	0.277	0.037	1.09E-127 ExN7	HLA-DMA
RAB31	1.34E-128	0.791968	0.539	0.131	5.12E-124 ExN7	RAB31
ADCY7	1.82E-128	0.48005806	0.342	0.057	6.97E-124 ExN7	ADCY7
SPATA13	4.45E-126	0.77164462	0.56	0.143	1.70E-121 ExN7	SPATA13
SLC9A9	8.70E-126	1.25224668	0.837	0.351	3.32E-121 ExN7	SLC9A9
B3GNT5	3.62E-125	0.39653124	0.256	0.034	1.38E-120 ExN7	B3GNT5
FGD4	1.22E-124	1.14295722	0.811	0.332	4.66E-120 ExN7	FGD4
ARHGAP4	6.22E-120	0.32700841	0.251	0.033	2.38E-115 ExN7	ARHGAP4
B2M	8.35E-120	0.72014091	0.518	0.125	3.19E-115 ExN7	B2M
PRKD3	6.93E-117	0.43947659	0.324	0.055	2.65E-112 ExN7	PRKD3
KCNK13	7.09E-117	0.60295799	0.368	0.069	2.71E-112 ExN7	KCNK13
ZFHX31	3.02E-116	1.01422883	0.769	0.291	1.15E-111 ExN7	ZFHX3
SRGAP2B	1.16E-115	0.93495005	0.684	0.249	4.43E-111 ExN7	SRGAP2B
IL17RA	2.27E-115	0.64113644	0.459	0.107	8.69E-111 ExN7	IL17RA
CARD8	1.01E-113	0.32782552	0.282	0.043	3.85E-109 ExN7	CARD8
ARPC1B	6.30E-113	0.37846291	0.282	0.044	2.41E-108 ExN7	ARPC1B
FAM149A	8.46E-113	0.80032582	0.518	0.143	3.24E-108 ExN7	FAM149A
RPS6KA1	5.44E-112	0.35190908	0.256	0.037	2.08E-107 ExN7	RPS6KA1
DOCK43	1.60E-110	1.33313	0.987	0.827	6.12E-106 ExN7	DOCK4
EPS8	9.07E-110	0.65929146	0.497	0.12	3.47E-105 ExN7	EPS8
ADGRG1	9.70E-110	0.62523181	0.415	0.092	3.71E-105 ExN7	ADGRG1
SOCS6	2.97E-108	0.81234506	0.557	0.167	1.13E-103 ExN7	SOCS6
DENND34	9.88E-108	1.12510033	0.764	0.345	3.78E-103 ExN7	DENND3
FRMD4B	1.85E-107	0.74873188	0.596	0.168	7.09E-103 ExN7	FRMD4B
ZNF710	1.78E-106	0.70006895	0.536	0.152	6.79E-102 ExN7	ZNF710
IFNGR1	5.58E-106	0.8832449	0.624	0.219	2.13E-101 ExN7	IFNGR1
ELMO11	1.22E-104	1.26692403	0.93	0.655	4.66E-100 ExN7	ELMO1
BHLHE41	1.08E-102	0.69872479	0.505	0.14	4.13E-98 ExN7	BHLHE41
LPAR1	1.96E-102	0.43063062	0.345	0.065	7.51E-98 ExN7	LPAR1
LINC01141	1.85E-101	0.45209628	0.329	0.063	7.06E-97 ExN7	LINC01141
TXNIP	5.93E-100	0.46552275	0.277	0.046	2.27E-95 ExN7	TXNIP
ARHGAP223	8.97E-100	1.13792471	0.705	0.307	3.43E-95 ExN7	ARHGAP22

MAML3	9.57E-99	1.08823392	0.813	0.361	3.66E-94 ExN7	MAML3
RUBCNL	3.94E-98	0.49290721	0.373	0.082	1.51E-93 ExN7	RUBCNL
MEF2A1	8.24E-98	1.09178119	0.93	0.75	3.15E-93 ExN7	MEF2A
USP6NL	3.19E-96	0.69364843	0.513	0.151	1.22E-91 ExN7	USP6NL
ETV6	5.66E-96	1.08357149	0.855	0.466	2.16E-91 ExN7	ETV6
RNF144B	2.22E-95	0.46376899	0.298	0.054	8.47E-91 ExN7	RNF144B
GNB41	1.02E-93	0.51970697	0.448	0.115	3.89E-89 ExN7	GNB4
SRGAP11	7.11E-93	0.99222429	0.668	0.253	2.72E-88 ExN7	SRGAP1
RUNX2	2.41E-92	0.59336394	0.56	0.162	9.21E-88 ExN7	RUNX2
GCNT2	3.43E-92	0.44969851	0.355	0.075	1.31E-87 ExN7	GCNT2
ANOS1	3.64E-91	0.40717599	0.339	0.07	1.39E-86 ExN7	ANOS1
SAT1	2.03E-89	1.19033373	0.754	0.366	7.77E-85 ExN7	SAT1
AKAP133	2.83E-89	0.97619183	0.756	0.366	1.08E-84 ExN7	AKAP13
MYO1E	7.14E-89	0.7896414	0.352	0.079	2.73E-84 ExN7	MYO1E
ANKRD44	8.30E-88	1.04725616	0.816	0.427	3.17E-83 ExN7	ANKRD44
MGAT4A	1.18E-87	0.95884061	0.837	0.468	4.50E-83 ExN7	MGAT4A
BACH1	3.85E-86	0.89384828	0.632	0.233	1.47E-81 ExN7	BACH1
PLA2G4A	3.61E-84	0.48955663	0.37	0.089	1.38E-79 ExN7	PLA2G4A
PICALM	6.74E-84	0.98271351	0.909	0.674	2.58E-79 ExN7	PICALM
TRIM221	2.24E-83	0.36743599	0.29	0.057	8.56E-79 ExN7	TRIM22
SUSD6	9.95E-83	0.75675265	0.64	0.264	3.80E-78 ExN7	SUSD6
FOXN3	1.07E-82	1.07836369	0.935	0.707	4.10E-78 ExN7	FOXN3
ARHGAP6	4.48E-82	0.72719032	0.541	0.174	1.71E-77 ExN7	ARHGAP6
RASGEF1C1	9.67E-82	0.76436516	0.487	0.156	3.70E-77 ExN7	RASGEF1C
IPCEF13	1.67E-81	1.05657144	0.785	0.402	6.36E-77 ExN7	IPCEF1
CTSS	5.22E-81	0.41367535	0.334	0.077	1.99E-76 ExN7	CTSS
ZC3HAV1	3.96E-80	0.38547652	0.262	0.049	1.51E-75 ExN7	ZC3HAV1
RASSF8	3.77E-77	0.73528897	0.523	0.177	1.44E-72 ExN7	RASSF8
CYFIP1	8.61E-76	0.91571922	0.801	0.46	3.29E-71 ExN7	CYFIP1
SORL13	1.42E-75	1.05957934	0.912	0.679	5.42E-71 ExN7	SORL1
IL6R	7.27E-74	0.38078388	0.329	0.078	2.78E-69 ExN7	IL6R
TGFB1	1.99E-73	0.38155622	0.288	0.063	7.61E-69 ExN7	TGFB1
DOCK11	6.23E-72	0.62348754	0.585	0.212	2.38E-67 ExN7	DOCK11
AC025569.1	6.60E-72	0.36421489	0.251	0.051	2.52E-67 ExN7	AC025569.1
PLSCR1	1.96E-71	0.49524827	0.394	0.113	7.50E-67 ExN7	PLSCR1
GSN	4.70E-70	0.54982533	0.484	0.164	1.80E-65 ExN7	GSN
LPP	3.35E-69	0.8222259	0.832	0.474	1.28E-64 ExN7	LPP
AKNA	3.82E-69	0.38079509	0.339	0.087	1.46E-64 ExN7	AKNA
OTULINL	1.01E-68	0.42569943	0.378	0.108	3.88E-64 ExN7	OTULINL
RAD51B	4.24E-68	0.82835587	0.64	0.282	1.62E-63 ExN7	RAD51B
COTL1	8.51E-68	0.44571168	0.365	0.1	3.25E-63 ExN7	COTL1
PTPRJ	1.31E-67	0.97532338	0.863	0.625	5.02E-63 ExN7	PTPRJ
SPTLC2	3.27E-67	0.77406851	0.63	0.291	1.25E-62 ExN7	SPTLC2
DOCK5	3.47E-67	0.50991298	0.352	0.092	1.32E-62 ExN7	DOCK5
FMNL3	4.09E-67	0.71098914	0.56	0.228	1.56E-62 ExN7	FMNL3
CTSB	2.13E-66	0.8352599	0.689	0.352	8.14E-62 ExN7	CTSB
HSPA1B	2.43E-66	0.44569233	0.311	0.076	9.27E-62 ExN7	HSPA1B
PELI1	1.59E-64	0.72962377	0.591	0.254	6.09E-60 ExN7	PELI1
RYR1	1.90E-64	0.59005752	0.575	0.235	7.28E-60 ExN7	RYR1
RNF213	9.93E-64	0.55822779	0.513	0.198	3.80E-59 ExN7	RNF213
HLA-C	1.55E-63	0.37251848	0.282	0.067	5.92E-59 ExN7	HLA-C
SWAP70	2.39E-63	0.45331254	0.407	0.126	9.12E-59 ExN7	SWAP70
TBC1D22A	4.04E-63	0.77198453	0.881	0.62	1.54E-58 ExN7	TBC1D22A
LINC02798	6.81E-63	0.76231702	0.544	0.212	2.60E-58 ExN7	LINC02798
NAIP	2.96E-61	0.50855038	0.451	0.158	1.13E-56 ExN7	NAIP
PAG12	2.02E-60	0.81660663	0.702	0.374	7.72E-56 ExN7	PAG1
MAF	2.19E-60	0.51432217	0.531	0.186	8.35E-56 ExN7	MAF
EPB41L22	2.51E-60	0.81726744	0.933	0.713	9.59E-56 ExN7	EPB41L2
EHBP1L1	2.70E-60	0.33413133	0.332	0.091	1.03E-55 ExN7	EHBP1L1
LDLRAD4	3.63E-60	0.81530357	0.956	0.781	1.39E-55 ExN7	LDLRAD4
STK10	3.40E-58	0.43283534	0.324	0.091	1.30E-53 ExN7	STK10
NCK21	6.53E-58	0.90827244	0.744	0.444	2.50E-53 ExN7	NCK2
PYGL	8.91E-58	0.30400076	0.259	0.062	3.41E-53 ExN7	PYGL

HSPA1A	2.29E-57	0.71946557	0.464	0.168	8.77E-53	ExN7	HSPA1A
USP53	3.81E-57	0.67187511	0.585	0.271	1.46E-52	ExN7	USP53
PLD11	1.27E-56	0.47074334	0.402	0.129	4.85E-52	ExN7	PLD1
SLC2A9	5.80E-56	0.36186319	0.303	0.081	2.22E-51	ExN7	SLC2A9
KCTD121	1.36E-55	0.37236391	0.293	0.079	5.21E-51	ExN7	KCTD12
PRKX	3.43E-55	0.27624131	0.264	0.064	1.31E-50	ExN7	PRKX
ABR	3.95E-55	0.75115709	0.915	0.717	1.51E-50	ExN7	ABR
DOCK10	4.32E-55	0.64784405	0.811	0.405	1.65E-50	ExN7	DOCK10
ACSL1	5.56E-55	0.93390254	0.503	0.213	2.13E-50	ExN7	ACSL1
ITGB5	1.18E-54	0.28125114	0.254	0.06	4.50E-50	ExN7	ITGB5
QKI	1.87E-54	0.79383995	0.933	0.673	7.14E-50	ExN7	QKI
ST8SIA41	2.43E-54	0.53941744	0.487	0.183	9.27E-50	ExN7	ST8SIA4
GAB2	2.44E-54	0.74571731	0.811	0.505	9.34E-50	ExN7	GAB2
SAMHD1	3.98E-54	0.46227026	0.42	0.15	1.52E-49	ExN7	SAMHD1
GRB2	1.66E-53	0.67050194	0.728	0.417	6.33E-49	ExN7	GRB2
SSH2	1.80E-53	0.70859223	0.959	0.821	6.88E-49	ExN7	SSH2
SMAP2	6.01E-53	0.7398554	0.775	0.501	2.30E-48	ExN7	SMAP2
SKAP21	1.16E-52	0.72823933	0.674	0.381	4.44E-48	ExN7	SKAP2
TBC1D16	3.13E-52	0.39053781	0.35	0.111	1.20E-47	ExN7	TBC1D16
WASF2	4.73E-51	0.56911927	0.565	0.264	1.81E-46	ExN7	WASF2
RAPGEF1	5.30E-51	0.69510404	0.767	0.48	2.03E-46	ExN7	RAPGEF1
SNX29	4.41E-50	0.66194942	0.837	0.581	1.68E-45	ExN7	SNX29
GLDN2	1.10E-49	0.71128329	0.534	0.236	4.20E-45	ExN7	GLDN
STK3	8.44E-49	0.61379754	0.622	0.316	3.23E-44	ExN7	STK3
STK32B	1.34E-48	0.34965814	0.262	0.069	5.13E-44	ExN7	STK32B
SH3RF31	1.82E-48	0.76119015	0.894	0.681	6.94E-44	ExN7	SH3RF3
SRGAP2C	1.83E-48	0.58873835	0.565	0.274	6.99E-44	ExN7	SRGAP2C
MIR646HG1	2.19E-48	0.61766117	0.619	0.277	8.38E-44	ExN7	MIR646HG
LAP3	3.86E-48	0.39916925	0.275	0.079	1.48E-43	ExN7	LAP3
ARHGAP27	4.53E-48	0.27896779	0.254	0.067	1.73E-43	ExN7	ARHGAP27
LRRK13	9.75E-48	0.55940398	0.676	0.331	3.73E-43	ExN7	LRRK1
MTHFD1L	1.23E-47	0.66482662	0.803	0.531	4.69E-43	ExN7	MTHFD1L
HAVCR2	1.58E-47	0.41360961	0.396	0.145	6.03E-43	ExN7	HAVCR2
NCKAP5	1.87E-47	0.46245366	0.518	0.208	7.14E-43	ExN7	NCKAP5
MBNL11	2.29E-47	0.72075537	0.935	0.779	8.77E-43	ExN7	MBNL1
NOTCH2	2.70E-47	0.28864877	0.28	0.079	1.03E-42	ExN7	NOTCH2
CTBP21	1.65E-46	0.54126767	0.674	0.353	6.30E-42	ExN7	CTBP2
ATP11C	2.87E-46	0.32315869	0.275	0.075	1.10E-41	ExN7	ATP11C
SPATA6	4.50E-46	0.54244906	0.472	0.202	1.72E-41	ExN7	SPATA6
PIK3CD	1.18E-45	0.37822734	0.321	0.103	4.50E-41	ExN7	PIK3CD
ST6GALNAC3	3.41E-45	0.96822609	0.762	0.507	1.30E-40	ExN7	ST6GALNAC3
RIN2	6.76E-45	0.4028401	0.526	0.211	2.58E-40	ExN7	RIN2
TANC11	7.99E-45	0.39802563	0.352	0.117	3.05E-40	ExN7	TANC1
MKNK1	1.91E-44	0.59888287	0.744	0.462	7.29E-40	ExN7	MKNK1
ZSWIM6	9.50E-44	0.6303414	0.917	0.73	3.63E-39	ExN7	ZSWIM6
BAZ1A	1.41E-43	0.30253497	0.308	0.099	5.38E-39	ExN7	BAZ1A
DISP1	1.46E-43	0.56545764	0.472	0.206	5.57E-39	ExN7	DISP1
REL	8.13E-43	0.43610885	0.376	0.141	3.11E-38	ExN7	REL
CFLAR	1.02E-42	0.42234823	0.459	0.194	3.89E-38	ExN7	CFLAR
ARHGAP264	1.59E-42	0.56199986	0.979	0.872	6.09E-38	ExN7	ARHGAP26
USP3	1.67E-42	0.37751147	0.446	0.176	6.39E-38	ExN7	USP3
FTL	2.03E-42	0.96824145	0.666	0.379	7.76E-38	ExN7	FTL
FCHSD2	1.47E-41	0.68777782	0.855	0.614	5.63E-37	ExN7	FCHSD2
RASSF3	1.69E-41	0.28395763	0.293	0.091	6.45E-37	ExN7	RASSF3
IL6ST	1.94E-41	0.53795634	0.617	0.327	7.42E-37	ExN7	IL6ST
PTPRE	3.54E-41	0.61189125	0.852	0.633	1.35E-36	ExN7	PTPRE
ATM	4.19E-41	0.62057555	0.788	0.552	1.60E-36	ExN7	ATM
SERPINB9	6.06E-41	0.44817442	0.43	0.181	2.31E-36	ExN7	SERPINB9
EML4	1.61E-40	0.57329815	0.661	0.382	6.17E-36	ExN7	EML4
DIAPH21	2.05E-40	0.62432761	0.873	0.611	7.85E-36	ExN7	DIAPH2
CREB3L2	3.23E-40	0.29821001	0.311	0.105	1.23E-35	ExN7	CREB3L2
CSGALNACT1	3.43E-40	0.71269954	0.863	0.612	1.31E-35	ExN7	CSGALNACT1
TTC7A	5.36E-40	0.54101726	0.549	0.279	2.05E-35	ExN7	TTC7A

ANKS1A	7.50E-40	0.61527513	0.837	0.596	2.87E-35 ExN7	ANKS1A
VASH1	8.64E-40	0.43857297	0.435	0.189	3.30E-35 ExN7	VASH1
FMNL1	1.97E-39	0.30646025	0.342	0.126	7.51E-35 ExN7	FMNL1
TCF12	4.81E-39	0.61543969	0.896	0.705	1.84E-34 ExN7	TCF12
B4GALT1	5.89E-39	0.26134421	0.29	0.095	2.25E-34 ExN7	B4GALT1
KLF6	6.38E-39	0.38839527	0.329	0.121	2.44E-34 ExN7	KLF6
UTRN	1.09E-38	0.46696817	0.549	0.255	4.17E-34 ExN7	UTRN
TBC1D14	1.39E-38	0.60472391	0.588	0.333	5.30E-34 ExN7	TBC1D14
ETV51	6.25E-38	0.4204437	0.425	0.18	2.39E-33 ExN7	ETV5
TAB2	1.02E-37	0.64267064	0.772	0.538	3.91E-33 ExN7	TAB2
LRMP3	1.43E-37	0.3837091	0.389	0.152	5.48E-33 ExN7	LRMP
PFKFB3	1.92E-37	0.56958216	0.598	0.34	7.35E-33 ExN7	PFKFB3
TSPAN14	2.86E-37	0.47749221	0.518	0.26	1.09E-32 ExN7	TSPAN14
GALNT10	3.45E-37	0.33197611	0.373	0.145	1.32E-32 ExN7	GALNT10
PIP4K2A1	4.32E-37	0.58310011	0.705	0.426	1.65E-32 ExN7	PIP4K2A
ETS2	5.65E-37	0.43956219	0.44	0.198	2.16E-32 ExN7	ETS2
GALNT2	7.17E-37	0.57767079	0.733	0.481	2.74E-32 ExN7	GALNT2
FNDC3B1	7.83E-37	0.47137323	0.627	0.345	2.99E-32 ExN7	FNDC3B
LIMS1	1.48E-36	0.58119634	0.601	0.333	5.66E-32 ExN7	LIMS1
PPARD	1.58E-36	0.45717884	0.531	0.27	6.02E-32 ExN7	PPARD
SCAMP2	4.53E-36	0.26075849	0.311	0.112	1.73E-31 ExN7	SCAMP2
ZFAND6	6.90E-36	0.36943728	0.469	0.217	2.64E-31 ExN7	ZFAND6
PACSLN2	7.73E-36	0.48099701	0.627	0.349	2.95E-31 ExN7	PACSLN2
TMSB4X	9.89E-36	0.7212291	0.759	0.513	3.78E-31 ExN7	TMSB4X
ITPKB	1.24E-35	0.31313536	0.269	0.087	4.74E-31 ExN7	ITPKB
RPS19	1.80E-35	0.54353523	0.562	0.291	6.88E-31 ExN7	RPS19
RAB1A	2.69E-35	0.46851456	0.679	0.424	1.03E-30 ExN7	RAB1A
SPRED11	1.13E-34	0.62573192	0.668	0.421	4.33E-30 ExN7	SPRED1
SOAT1	1.40E-34	0.33486573	0.334	0.13	5.37E-30 ExN7	SOAT1
HLA-A	1.48E-34	0.33335473	0.282	0.098	5.66E-30 ExN7	HLA-A
AC087564.1	3.88E-34	0.29018509	0.376	0.142	1.48E-29 ExN7	AC087564.1
NCOA3	5.70E-34	0.47771388	0.658	0.396	2.18E-29 ExN7	NCOA3
ARHGEF6	9.14E-34	0.36040839	0.404	0.177	3.49E-29 ExN7	ARHGEF6
RNF166	9.23E-34	0.27251391	0.259	0.088	3.53E-29 ExN7	RNF166
RCBTB2	9.38E-34	0.31566635	0.324	0.126	3.59E-29 ExN7	RCBTB2
MIS18BP11	1.34E-33	0.38872545	0.453	0.215	5.12E-29 ExN7	MIS18BP1
CEBPB	1.39E-33	0.39843056	0.311	0.119	5.33E-29 ExN7	CEBPB
SYNDIG12	1.83E-33	0.7242936	0.79	0.598	6.99E-29 ExN7	SYNDIG1
HTRA1	2.00E-33	0.36938428	0.402	0.166	7.65E-29 ExN7	HTRA1
RB1	2.37E-33	0.50686206	0.764	0.52	9.08E-29 ExN7	RB1
MED13L	3.22E-33	0.54098737	0.943	0.835	1.23E-28 ExN7	MED13L
FAM49B	4.79E-33	0.52914893	0.933	0.807	1.83E-28 ExN7	FAM49B
BCL6	5.19E-33	0.33320745	0.303	0.113	1.98E-28 ExN7	BCL6
RAP1A	7.10E-33	0.56074308	0.715	0.486	2.72E-28 ExN7	RAP1A
MAP4K41	1.05E-32	0.53792242	0.878	0.723	3.99E-28 ExN7	MAP4K4
HS3ST42	8.84E-32	0.41474373	0.736	0.428	3.38E-27 ExN7	HS3ST4
SLC25A37	8.88E-32	0.48770585	0.65	0.393	3.39E-27 ExN7	SLC25A37
SLC25A13	1.21E-31	0.40981089	0.513	0.263	4.62E-27 ExN7	SLC25A13
IGSF212	1.38E-31	0.58193031	0.759	0.534	5.28E-27 ExN7	IGSF21
ARAP1	1.75E-31	0.34248703	0.352	0.148	6.70E-27 ExN7	ARAP1
UST1	2.60E-31	0.31177825	0.36	0.146	9.93E-27 ExN7	UST
WASHC4	4.52E-31	0.45891026	0.565	0.329	1.73E-26 ExN7	WASHC4
POU2F21	4.56E-31	0.50567705	0.585	0.34	1.74E-26 ExN7	POU2F2
CPQ	5.39E-31	0.44747894	0.456	0.219	2.06E-26 ExN7	CPQ
BIN1	1.30E-30	0.56815863	0.788	0.583	4.95E-26 ExN7	BIN1
GPRIN3	1.33E-30	0.4158541	0.412	0.179	5.08E-26 ExN7	GPRIN3
CEBPD	1.46E-30	0.4940629	0.324	0.137	5.59E-26 ExN7	CEBPD
MYO9B	1.96E-30	0.50445031	0.689	0.446	7.50E-26 ExN7	MYO9B
SLC4A7	2.93E-30	0.50972278	0.674	0.447	1.12E-25 ExN7	SLC4A7
ATG16L2	2.97E-30	0.33318449	0.358	0.157	1.14E-25 ExN7	ATG16L2
PLEKHA21	5.52E-30	0.43543195	0.477	0.249	2.11E-25 ExN7	PLEKHA2
ARHGAP121	5.72E-30	0.46883933	0.588	0.337	2.19E-25 ExN7	ARHGAP12
CTTNBP2NL	6.14E-30	0.45279234	0.534	0.301	2.35E-25 ExN7	CTTNBP2NL

USP15	7.83E-30	0.54807651	0.793	0.6	2.99E-25	ExN7	USP15
LINC022323	1.89E-29	0.35834499	0.44	0.192	7.24E-25	ExN7	LINC02232
AP1B1	2.06E-29	0.43103997	0.505	0.277	7.86E-25	ExN7	AP1B1
RTTN	2.30E-29	0.66676266	0.523	0.302	8.78E-25	ExN7	RTTN
DLEU21	3.04E-29	0.48267191	0.79	0.56	1.16E-24	ExN7	DLEU2
ZNRF2	3.39E-29	0.47599818	0.539	0.313	1.29E-24	ExN7	ZNRF2
MAP3K1	5.39E-29	0.28699384	0.376	0.164	2.06E-24	ExN7	MAP3K1
HIF1A	7.51E-29	0.50018529	0.544	0.317	2.87E-24	ExN7	HIF1A
LRCH1	1.10E-28	0.49751447	0.756	0.542	4.20E-24	ExN7	LRCH1
CTNND12	1.23E-28	0.46185263	0.699	0.474	4.70E-24	ExN7	CTNND1
SH2B3	4.76E-28	0.32702091	0.378	0.176	1.82E-23	ExN7	SH2B3
MANBA	8.21E-28	0.47442178	0.622	0.382	3.14E-23	ExN7	MANBA
CD81	1.08E-27	0.43144656	0.469	0.243	4.13E-23	ExN7	CD81
RASSF41	2.33E-27	0.37180048	0.453	0.23	8.89E-23	ExN7	RASSF4
PSMA1	2.99E-27	0.39986503	0.583	0.346	1.14E-22	ExN7	PSMA1
MGAT1	3.40E-27	0.33522045	0.36	0.163	1.30E-22	ExN7	MGAT1
CST3	3.96E-27	0.26627758	0.259	0.097	1.51E-22	ExN7	CST3
RNF149	4.67E-27	0.47485956	0.754	0.558	1.79E-22	ExN7	RNF149
NEK6	4.82E-27	0.28158503	0.293	0.118	1.84E-22	ExN7	NEK6
ITGAV	4.95E-27	0.43319017	0.482	0.26	1.89E-22	ExN7	ITGAV
ARRB2	5.99E-27	0.39024877	0.42	0.213	2.29E-22	ExN7	ARRB2
CBFB	1.78E-26	0.2704471	0.365	0.165	6.80E-22	ExN7	CBFB
PSAP	2.04E-26	0.44381936	0.855	0.639	7.81E-22	ExN7	PSAP
AFF13	4.11E-26	0.46418131	0.655	0.414	1.57E-21	ExN7	AFF1
RPL13	6.51E-26	0.60056985	0.614	0.4	2.49E-21	ExN7	RPL13
PCED1B2	1.21E-25	0.33359445	0.311	0.133	4.62E-21	ExN7	PCED1B
ZBTB20	1.51E-25	0.28614433	0.78	0.55	5.77E-21	ExN7	ZBTB20
STAT3	1.86E-25	0.42267339	0.513	0.295	7.10E-21	ExN7	STAT3
CORO1A	2.80E-25	0.25077644	0.301	0.128	1.07E-20	ExN7	CORO1A
GPCPD1	3.15E-25	0.37331942	0.44	0.232	1.20E-20	ExN7	GPCPD1
AP3B1	4.51E-25	0.42237204	0.611	0.386	1.73E-20	ExN7	AP3B1
ASAH1	5.77E-25	0.41114114	0.56	0.342	2.20E-20	ExN7	ASAH1
GRAMD1A	9.06E-25	0.36519979	0.334	0.155	3.46E-20	ExN7	GRAMD1A
H2AFY	9.55E-25	0.38199291	0.699	0.49	3.65E-20	ExN7	H2AFY
SERPINB6	1.47E-24	0.34075401	0.402	0.204	5.62E-20	ExN7	SERPINB6
CHSY1	2.41E-24	0.407034	0.547	0.337	9.23E-20	ExN7	CHSY1
CCDC18-AS1	3.04E-24	0.41828521	0.632	0.414	1.16E-19	ExN7	CCDC18-AS1
WNT2B	3.12E-24	0.2880846	0.277	0.116	1.19E-19	ExN7	WNT2B
SCAF11	3.41E-24	0.41472523	0.697	0.494	1.30E-19	ExN7	SCAF11
CDK61	5.06E-24	0.40279726	0.653	0.413	1.93E-19	ExN7	CDK6
IFNGR2	5.23E-24	0.35513562	0.484	0.275	2.00E-19	ExN7	IFNGR2
HPS3	6.02E-24	0.29119404	0.345	0.161	2.30E-19	ExN7	HPS3
SH3BGR1	6.64E-24	0.4002147	0.694	0.475	2.54E-19	ExN7	SH3BGR1
ARHGEF1	8.97E-24	0.25842866	0.321	0.145	3.43E-19	ExN7	ARHGEF1
NRIP1	9.23E-24	0.45592444	0.725	0.522	3.53E-19	ExN7	NRIP1
RASA31	1.16E-23	0.42138681	0.57	0.351	4.42E-19	ExN7	RASA3
TBC1D12	1.43E-23	0.44402552	0.513	0.308	5.47E-19	ExN7	TBC1D12
LRRC8C	3.25E-23	0.37004793	0.531	0.32	1.24E-18	ExN7	LRRC8C
SLC15A2	3.41E-23	0.27620605	0.326	0.151	1.31E-18	ExN7	SLC15A2
NFE2L2	4.82E-23	0.35558125	0.469	0.262	1.84E-18	ExN7	NFE2L2
EDA1	6.83E-23	0.29130763	0.316	0.141	2.61E-18	ExN7	EDA
RHOQ	6.84E-23	0.3073039	0.415	0.215	2.61E-18	ExN7	RHOQ
CKLF	7.95E-23	0.28411423	0.339	0.162	3.04E-18	ExN7	CKLF
DIP2B	1.03E-22	0.42235781	0.829	0.691	3.94E-18	ExN7	DIP2B
CCNY1	2.28E-22	0.40016465	0.86	0.696	8.72E-18	ExN7	CCNY
JAZF11	2.66E-22	0.39121002	0.935	0.82	1.02E-17	ExN7	JAZF1
ARL5A	4.94E-22	0.40416824	0.497	0.299	1.89E-17	ExN7	ARL5A
MBP1	6.11E-22	0.33802339	0.749	0.532	2.34E-17	ExN7	MBP
MARCH3	6.49E-22	0.27298589	0.329	0.148	2.48E-17	ExN7	3-Mar
RPL41	6.58E-22	0.37805759	0.565	0.342	2.52E-17	ExN7	RPL41
PBX3	6.66E-22	0.25745605	0.334	0.155	2.55E-17	ExN7	PBX3
ADPGK	7.35E-22	0.26823352	0.319	0.154	2.81E-17	ExN7	ADPGK
STK4	7.35E-22	0.39275806	0.578	0.371	2.81E-17	ExN7	STK4

CCM2	9.83E-22	0.34818996	0.466	0.275	3.76E-17 ExN7	CCM2
CCND32	1.09E-21	0.41797211	0.598	0.389	4.17E-17 ExN7	CCND3
FHIT1	1.10E-21	0.45866903	0.912	0.744	4.22E-17 ExN7	FHIT
GNAQ	1.11E-21	0.41074581	0.94	0.858	4.23E-17 ExN7	GNAQ
APMAP	1.71E-21	0.33255772	0.446	0.254	6.52E-17 ExN7	APMAP
HERPUD1	1.98E-21	0.31320933	0.386	0.204	7.57E-17 ExN7	HERPUD1
CAB39	2.00E-21	0.40437078	0.715	0.52	7.64E-17 ExN7	CAB39
UGCG	2.46E-21	0.3811157	0.503	0.304	9.40E-17 ExN7	UGCG
SYT17	2.56E-21	0.34059401	0.518	0.3	9.79E-17 ExN7	SYT17
ZFPM2-AS1	2.71E-21	0.27383506	0.259	0.111	1.04E-16 ExN7	ZFPM2-AS1
WDFY2	2.88E-21	0.41745595	0.645	0.446	1.10E-16 ExN7	WDFY2
ARPC2	2.92E-21	0.34163412	0.611	0.405	1.12E-16 ExN7	ARPC2
APAF1	2.94E-21	0.29897128	0.352	0.178	1.12E-16 ExN7	APAF1
GNG71	2.99E-21	0.36634628	0.627	0.409	1.14E-16 ExN7	GNG7
MPZL1	3.16E-21	0.33960657	0.469	0.273	1.21E-16 ExN7	MPZL1
GATAD2A	3.62E-21	0.29917069	0.347	0.169	1.38E-16 ExN7	GATAD2A
ZFAND31	4.10E-21	0.35043331	0.953	0.849	1.57E-16 ExN7	ZFAND3
SNX2	5.07E-21	0.28850232	0.541	0.335	1.94E-16 ExN7	SNX2
MAP3K14	7.69E-21	0.25973156	0.326	0.158	2.94E-16 ExN7	MAP3K14
ACER3	1.04E-20	0.34975341	0.614	0.401	3.99E-16 ExN7	ACER3
VOPP1	1.91E-20	0.35611798	0.676	0.473	7.31E-16 ExN7	VOPP1
CAPZB	2.73E-20	0.38376864	0.785	0.636	1.04E-15 ExN7	CAPZB
APPL2	3.05E-20	0.39223295	0.663	0.466	1.17E-15 ExN7	APPL2
CREBL2	3.06E-20	0.26639726	0.358	0.183	1.17E-15 ExN7	CREBL2
RAP1B	3.15E-20	0.34573154	0.534	0.334	1.20E-15 ExN7	RAP1B
RPS9	3.23E-20	0.31435494	0.422	0.235	1.24E-15 ExN7	RPS9
SIPA1L2	4.88E-20	0.34678286	0.64	0.428	1.87E-15 ExN7	SIPA1L2
TRPM21	4.98E-20	0.37723503	0.609	0.416	1.90E-15 ExN7	TRPM2
TRMT1	7.56E-20	0.25904844	0.396	0.214	2.89E-15 ExN7	TRMT1
RPL13A	8.21E-20	0.39795144	0.495	0.298	3.14E-15 ExN7	RPL13A
ELL23	8.45E-20	0.41894538	0.749	0.548	3.23E-15 ExN7	ELL2
RPS18	1.04E-19	0.38472217	0.482	0.288	3.99E-15 ExN7	RPS18
RPS27A	1.07E-19	0.41499695	0.477	0.282	4.10E-15 ExN7	RPS27A
GLUL	1.22E-19	0.33081986	0.301	0.141	4.66E-15 ExN7	GLUL
C6orf62	1.27E-19	0.35154406	0.557	0.364	4.85E-15 ExN7	C6orf62
SH3KBP1	1.54E-19	0.44602262	0.767	0.606	5.88E-15 ExN7	SH3KBP1
STX7	1.63E-19	0.35817262	0.684	0.499	6.24E-15 ExN7	STX7
UBE2E1	1.64E-19	0.35368645	0.578	0.378	6.28E-15 ExN7	UBE2E1
PKN2	2.42E-19	0.41092626	0.777	0.633	9.26E-15 ExN7	PKN2
SMURF2	3.25E-19	0.3208684	0.573	0.374	1.24E-14 ExN7	SMURF2
SDCCAG81	3.73E-19	0.41008416	0.85	0.714	1.43E-14 ExN7	SDCCAG8
RPS3	4.88E-19	0.38780736	0.541	0.343	1.87E-14 ExN7	RPS3
ITM2B	5.02E-19	0.38616319	0.782	0.62	1.92E-14 ExN7	ITM2B
MTUS1	6.20E-19	0.31789445	0.51	0.299	2.37E-14 ExN7	MTUS1
P4HA1	8.41E-19	0.4318479	0.518	0.339	3.22E-14 ExN7	P4HA1
SETX	8.71E-19	0.36607486	0.725	0.555	3.33E-14 ExN7	SETX
RPS8	9.15E-19	0.37778016	0.534	0.336	3.50E-14 ExN7	RPS8
TBC1D13	1.07E-18	0.39517508	0.751	0.575	4.11E-14 ExN7	TBC1D1
PDE3B1	1.36E-18	0.39977709	0.712	0.519	5.21E-14 ExN7	PDE3B
ANP32A	1.38E-18	0.29005378	0.495	0.306	5.29E-14 ExN7	ANP32A
LPIN2	1.41E-18	0.3306278	0.562	0.364	5.38E-14 ExN7	LPIN2
ACTR3	1.69E-18	0.32369092	0.518	0.337	6.46E-14 ExN7	ACTR3
PLCG2	1.85E-18	0.46000156	0.852	0.651	7.08E-14 ExN7	PLCG2
ERBIN	1.98E-18	0.36712973	0.731	0.539	7.57E-14 ExN7	ERBIN
ATG71	2.06E-18	0.39629876	0.912	0.777	7.89E-14 ExN7	ATG7
JAK21	2.12E-18	0.37381091	0.793	0.611	8.09E-14 ExN7	JAK2
ADAM9	2.53E-18	0.27457995	0.593	0.392	9.67E-14 ExN7	ADAM9
MITF	2.80E-18	0.30767155	0.383	0.199	1.07E-13 ExN7	MITF
PPP6R3	3.72E-18	0.31977193	0.837	0.698	1.42E-13 ExN7	PPP6R3
FTH1	3.88E-18	0.55668564	0.741	0.566	1.48E-13 ExN7	FTH1
PIAS1	4.56E-18	0.35719213	0.837	0.697	1.74E-13 ExN7	PIAS1
KLHL51	4.85E-18	0.30116142	0.531	0.32	1.85E-13 ExN7	KLHL5
GNA13	5.49E-18	0.27606175	0.383	0.211	2.10E-13 ExN7	GNA13

ROCK1	5.89E-18	0.35254116	0.741	0.577	2.25E-13	ExN7	ROCK1
GAS6	7.57E-18	0.36080052	0.459	0.292	2.89E-13	ExN7	GAS6
RPL36A	1.01E-17	0.29114967	0.311	0.156	3.87E-13	ExN7	RPL36A
TRAK1	1.10E-17	0.29833395	0.733	0.542	4.22E-13	ExN7	TRAK1
NUMB1	1.64E-17	0.32832155	0.731	0.557	6.26E-13	ExN7	NUMB
PABPC1	1.68E-17	0.35861646	0.653	0.467	6.42E-13	ExN7	PABPC1
ZEB2	1.69E-17	0.3064316	0.943	0.822	6.47E-13	ExN7	ZEB2
NIPBL	1.87E-17	0.35978567	0.87	0.729	7.16E-13	ExN7	NIPBL
MLXIPL	2.02E-17	0.29375107	0.557	0.357	7.74E-13	ExN7	MLXIPL
RPS28	2.40E-17	0.38166368	0.552	0.359	9.16E-13	ExN7	RPS28
ATP10D	2.79E-17	0.30645916	0.404	0.233	1.07E-12	ExN7	ATP10D
ABHD12	2.99E-17	0.29785846	0.622	0.441	1.14E-12	ExN7	ABHD12
RPL10	3.07E-17	0.34213223	0.539	0.344	1.18E-12	ExN7	RPL10
RPS11	3.09E-17	0.29340275	0.339	0.18	1.18E-12	ExN7	RPS11
NFIA2	3.18E-17	0.2891618	0.653	0.422	1.22E-12	ExN7	NFIA
TET2	3.40E-17	0.31022966	0.627	0.438	1.30E-12	ExN7	TET2
E2F31	3.88E-17	0.32077604	0.528	0.339	1.48E-12	ExN7	E2F3
HNRNPH1	3.99E-17	0.32613204	0.663	0.484	1.52E-12	ExN7	HNRNPH1
ENOX2	3.99E-17	0.30053442	0.342	0.18	1.53E-12	ExN7	ENOX2
BCL21	4.05E-17	0.45638882	0.72	0.527	1.55E-12	ExN7	BCL2
RPL3	5.08E-17	0.42726914	0.484	0.31	1.94E-12	ExN7	RPL3
SLC38A10	5.12E-17	0.25597932	0.355	0.194	1.96E-12	ExN7	SLC38A10
MGST2	5.29E-17	0.26927038	0.368	0.202	2.02E-12	ExN7	MGST2
FMNL23	5.67E-17	0.36924318	0.951	0.874	2.17E-12	ExN7	FMNL2
GSAP	6.79E-17	0.29864702	0.425	0.256	2.59E-12	ExN7	GSAP
PHYKPL	7.38E-17	0.25963416	0.43	0.258	2.82E-12	ExN7	PHYKPL
RPL11	8.39E-17	0.38453629	0.477	0.301	3.21E-12	ExN7	RPL11
TMEM1632	8.90E-17	0.64382307	0.456	0.291	3.40E-12	ExN7	TMEM163
ERICH1	8.90E-17	0.30545898	0.482	0.305	3.40E-12	ExN7	ERICH1
FAM53B	9.25E-17	0.34134687	0.585	0.392	3.54E-12	ExN7	FAM53B
MAP3K51	9.59E-17	0.30396243	0.845	0.642	3.67E-12	ExN7	MAP3K5
DNAJC3	1.10E-16	0.31745319	0.446	0.278	4.20E-12	ExN7	DNAJC3
SKIL	1.38E-16	0.29016776	0.44	0.268	5.29E-12	ExN7	SKIL
ATP11A1	1.61E-16	0.3061995	0.63	0.446	6.14E-12	ExN7	ATP11A
UVRAG	2.04E-16	0.34948473	0.801	0.671	7.80E-12	ExN7	UVRAG
ST3GAL63	2.14E-16	0.30000964	0.63	0.435	8.20E-12	ExN7	ST3GAL6
SHTN1	2.21E-16	0.32195653	0.813	0.675	8.45E-12	ExN7	SHTN1
STAG1	2.71E-16	0.31679426	0.902	0.788	1.03E-11	ExN7	STAG1
ITGA91	2.71E-16	0.31990368	0.645	0.434	1.04E-11	ExN7	ITGA9
RPL28	3.09E-16	0.37662488	0.552	0.368	1.18E-11	ExN7	RPL28
HNRNPM	3.53E-16	0.30988453	0.611	0.438	1.35E-11	ExN7	HNRNPM
DTNBP1	3.64E-16	0.25310111	0.492	0.307	1.39E-11	ExN7	DTNBP1
OGFRL1	4.28E-16	0.35561163	0.484	0.318	1.63E-11	ExN7	OGFRL1
MCF2L	5.12E-16	0.34166601	0.795	0.634	1.96E-11	ExN7	MCF2L
PTBP3	6.35E-16	0.29468067	0.544	0.366	2.43E-11	ExN7	PTBP3
MYH91	8.03E-16	0.28007408	0.482	0.304	3.07E-11	ExN7	MYH9
BAZ2B	9.74E-16	0.3175662	0.837	0.71	3.72E-11	ExN7	BAZ2B
PHC2	1.29E-15	0.33535085	0.653	0.487	4.91E-11	ExN7	PHC2
LYST2	1.33E-15	0.30138022	0.863	0.724	5.09E-11	ExN7	LYST
ATF6	1.34E-15	0.32029162	0.715	0.537	5.14E-11	ExN7	ATF6
MTAP	2.14E-15	0.28541785	0.402	0.239	8.17E-11	ExN7	MTAP
RPS2	2.44E-15	0.29985503	0.415	0.252	9.31E-11	ExN7	RPS2
SLC11A2	2.70E-15	0.2949257	0.528	0.365	1.03E-10	ExN7	SLC11A2
TRPS1	2.84E-15	0.39969014	0.635	0.439	1.08E-10	ExN7	TRPS1
EEF1A1	3.22E-15	0.33511573	0.751	0.576	1.23E-10	ExN7	EEF1A1
FAM133B	3.29E-15	0.26662836	0.575	0.396	1.26E-10	ExN7	FAM133B
PTPN2	3.39E-15	0.32888316	0.655	0.477	1.30E-10	ExN7	PTPN2
MOB1B1	5.88E-15	0.28740574	0.544	0.366	2.25E-10	ExN7	MOB1B
PRMT2	6.05E-15	0.33020697	0.534	0.37	2.31E-10	ExN7	PRMT2
TAOK3	8.47E-15	0.29225612	0.847	0.709	3.24E-10	ExN7	TAOK3
RPLP1	8.66E-15	0.32000415	0.477	0.309	3.31E-10	ExN7	RPLP1
PHF20	8.81E-15	0.29111382	0.632	0.459	3.37E-10	ExN7	PHF20
TBC1D2B	9.79E-15	0.27584917	0.482	0.317	3.74E-10	ExN7	TBC1D2B

IKBBB	1.02E-14	0.26785422	0.373	0.221	3.91E-10 ExN7	IKBBB
SLTM	1.09E-14	0.26365256	0.632	0.462	4.18E-10 ExN7	SLTM
DEPTOR	1.11E-14	0.28087023	0.44	0.266	4.25E-10 ExN7	DEPTOR
OSTF11	1.45E-14	0.25134763	0.412	0.247	5.54E-10 ExN7	OSTF1
ADAM17	1.47E-14	0.25640704	0.606	0.42	5.61E-10 ExN7	ADAM17
CCNL1	2.53E-14	0.28433744	0.482	0.319	9.65E-10 ExN7	CCNL1
RAB12	2.69E-14	0.29040019	0.578	0.408	1.03E-09 ExN7	RAB12
SKI	2.79E-14	0.29557082	0.622	0.464	1.07E-09 ExN7	SKI
STK24	2.86E-14	0.2659608	0.544	0.375	1.09E-09 ExN7	STK24
GAREM12	3.78E-14	0.27860017	0.679	0.471	1.45E-09 ExN7	GAREM1
XIST1	4.08E-14	0.39960333	0.749	0.543	1.56E-09 ExN7	XIST
TMEM1651	4.40E-14	0.30873149	0.575	0.42	1.68E-09 ExN7	TMEM165
SSH1	4.76E-14	0.31384874	0.601	0.432	1.82E-09 ExN7	SSH1
SLC39A112	4.88E-14	0.29641058	0.611	0.42	1.87E-09 ExN7	SLC39A11
ACAP21	4.93E-14	0.30758877	0.806	0.661	1.88E-09 ExN7	ACAP2
RPS12	5.58E-14	0.2539655	0.394	0.235	2.13E-09 ExN7	RPS12
NEK7	6.08E-14	0.26385745	0.378	0.222	2.32E-09 ExN7	NEK7
CHKA	6.83E-14	0.27231434	0.601	0.445	2.61E-09 ExN7	CHKA
XRN2	9.15E-14	0.28115346	0.585	0.427	3.50E-09 ExN7	XRN2
CHST15	1.49E-13	0.283472	0.601	0.42	5.68E-09 ExN7	CHST15
JARID2	1.51E-13	0.33008361	0.775	0.631	5.77E-09 ExN7	JARID2
RAB7A	1.73E-13	0.27390944	0.681	0.517	6.62E-09 ExN7	RAB7A
TPT1	1.85E-13	0.31228334	0.495	0.334	7.09E-09 ExN7	TPT1
EIF4A1	1.89E-13	0.2660201	0.479	0.326	7.23E-09 ExN7	EIF4A1
KIF13B	2.84E-13	0.27157284	0.469	0.312	1.09E-08 ExN7	KIF13B
KMT2C	2.91E-13	0.28479206	0.878	0.774	1.11E-08 ExN7	KMT2C
CDYL	3.12E-13	0.28899045	0.58	0.421	1.19E-08 ExN7	CDYL
RPL26	3.28E-13	0.27718338	0.435	0.271	1.25E-08 ExN7	RPL26
COMMD10	3.57E-13	0.31828077	0.658	0.499	1.36E-08 ExN7	COMMD10
MGAT51	3.63E-13	0.3030704	0.772	0.661	1.39E-08 ExN7	MGAT5
RPL35	4.43E-13	0.26308937	0.422	0.264	1.69E-08 ExN7	RPL35
CD63	4.60E-13	0.26961344	0.288	0.158	1.76E-08 ExN7	CD63
SMAD32	4.82E-13	0.2660537	0.56	0.382	1.84E-08 ExN7	SMAD3
TMEM65	5.23E-13	0.31680393	0.573	0.399	2.00E-08 ExN7	TMEM65
SF3B1	5.61E-13	0.26607783	0.705	0.542	2.14E-08 ExN7	SF3B1
AC008691.1	5.76E-13	0.25590369	0.319	0.177	2.20E-08 ExN7	AC008691.1
EPS152	6.08E-13	0.32504473	0.64	0.488	2.33E-08 ExN7	EPS15
RAB10	1.13E-12	0.2907063	0.712	0.575	4.32E-08 ExN7	RAB10
ATF7IP	1.21E-12	0.28422504	0.63	0.492	4.62E-08 ExN7	ATF7IP
FKBP15	1.36E-12	0.27228393	0.42	0.277	5.22E-08 ExN7	FKBP15
RPS6	1.43E-12	0.34032429	0.365	0.226	5.46E-08 ExN7	RPS6
TPK11	1.50E-12	0.31744987	0.598	0.444	5.72E-08 ExN7	TPK1
KDM6A	1.89E-12	0.27600174	0.744	0.582	7.21E-08 ExN7	KDM6A
PRIM2	1.92E-12	0.2859032	0.427	0.282	7.35E-08 ExN7	PRIM2
SRRM2	2.13E-12	0.25932276	0.845	0.721	8.14E-08 ExN7	SRRM2
DNAJB6	2.26E-12	0.27623584	0.604	0.445	8.62E-08 ExN7	DNAJB6
LRRK21	2.80E-12	0.29759455	0.596	0.439	1.07E-07 ExN7	LRRK2
RPLP2	4.45E-12	0.25225173	0.368	0.226	1.70E-07 ExN7	RPLP2
FNIP22	4.87E-12	0.34011164	0.754	0.616	1.86E-07 ExN7	FNIP2
ZFX	5.07E-12	0.25407503	0.487	0.329	1.94E-07 ExN7	ZFX
ELF2	5.30E-12	0.26329463	0.712	0.558	2.03E-07 ExN7	ELF2
MTSS1	5.37E-12	0.26980393	0.733	0.571	2.05E-07 ExN7	MTSS1
RPL7A	5.83E-12	0.2814073	0.446	0.294	2.23E-07 ExN7	RPL7A
PRRC2B	6.01E-12	0.26494647	0.798	0.665	2.30E-07 ExN7	PRRC2B
CYTH1	7.28E-12	0.25337635	0.596	0.441	2.78E-07 ExN7	CYTH1
PRKCA1	7.98E-12	0.2767209	0.876	0.736	3.05E-07 ExN7	PRKCA
PIK3R12	8.74E-12	0.30283334	0.834	0.692	3.34E-07 ExN7	PIK3R1
RPS25	1.02E-11	0.26467561	0.438	0.292	3.89E-07 ExN7	RPS25
RPS7	1.29E-11	0.25761675	0.407	0.265	4.92E-07 ExN7	RPS7
RPS15	1.36E-11	0.32336503	0.433	0.289	5.22E-07 ExN7	RPS15
RPS23	1.44E-11	0.2527112	0.451	0.296	5.51E-07 ExN7	RPS23
SLC2A3	1.58E-11	0.33185674	0.339	0.211	6.05E-07 ExN7	SLC2A3
ZMAT3	1.97E-11	0.2845435	0.484	0.342	7.52E-07 ExN7	ZMAT3

SNX13	2.56E-11	0.29667884	0.712	0.578	9.78E-07	ExN7	SNX13
DENND4C	3.04E-11	0.26383984	0.637	0.495	1.16E-06	ExN7	DENND4C
DDX5	3.06E-11	0.26621858	0.832	0.716	1.17E-06	ExN7	DDX5
RPL19	3.20E-11	0.33089605	0.422	0.28	1.22E-06	ExN7	RPL19
HDAC9	3.34E-11	0.33812348	0.883	0.779	1.28E-06	ExN7	HDAC9
EIF3H	3.64E-11	0.25477365	0.508	0.363	1.39E-06	ExN7	EIF3H
DCAF6	3.83E-11	0.27798649	0.785	0.626	1.47E-06	ExN7	DCAF6
CORO1C	4.03E-11	0.28982542	0.492	0.35	1.54E-06	ExN7	CORO1C
ACTB	4.46E-11	0.32649842	0.795	0.64	1.70E-06	ExN7	ACTB
RPS14	4.50E-11	0.26781028	0.451	0.311	1.72E-06	ExN7	RPS14
HSPA5	5.21E-11	0.28192209	0.355	0.223	1.99E-06	ExN7	HSPA5
DNAJC13	5.40E-11	0.2529528	0.557	0.416	2.07E-06	ExN7	DNAJC13
RPS24	5.94E-11	0.2712293	0.588	0.427	2.27E-06	ExN7	RPS24
CAMKMT	6.74E-11	0.27110639	0.544	0.382	2.58E-06	ExN7	CAMKMT
RNF13	7.45E-11	0.29112675	0.71	0.577	2.85E-06	ExN7	RNF13
NCOR2	8.34E-11	0.28493586	0.736	0.595	3.19E-06	ExN7	NCOR2
RNF130	8.44E-11	0.25819303	0.826	0.729	3.23E-06	ExN7	RNF130
ACTR2	1.06E-10	0.26750802	0.687	0.529	4.03E-06	ExN7	ACTR2
TBC1D5	1.32E-10	0.28338232	0.92	0.858	5.06E-06	ExN7	TBC1D5
WDFY3	1.96E-10	0.25932618	0.915	0.81	7.48E-06	ExN7	WDFY3
ZHX2	2.51E-10	0.26402006	0.355	0.224	9.58E-06	ExN7	ZHX2
RPL18	3.43E-10	0.25016073	0.459	0.316	1.31E-05	ExN7	RPL18
KCNQ34	6.78E-10	0.25572873	0.969	0.902	2.59E-05	ExN7	KCNQ3
DPYD	8.42E-10	0.31387693	0.834	0.668	3.22E-05	ExN7	DPYD
RIC1	9.10E-10	0.25053678	0.536	0.407	3.48E-05	ExN7	RIC1
LRP1	9.72E-10	0.26062391	0.617	0.486	3.72E-05	ExN7	LRP1
MVB12B	9.94E-10	0.26956333	0.674	0.555	3.80E-05	ExN7	MVB12B
NSMCE2	1.01E-09	0.2556157	0.811	0.672	3.84E-05	ExN7	NSMCE2
NACA	1.07E-09	0.25343284	0.539	0.391	4.10E-05	ExN7	NACA
IRS2	1.11E-09	0.25105603	0.552	0.42	4.23E-05	ExN7	IRS2
KIF16B	1.49E-09	0.25386468	0.671	0.541	5.70E-05	ExN7	KIF16B
SEMA4D	1.95E-09	0.25067775	0.573	0.44	7.44E-05	ExN7	SEMA4D
RPS27	2.25E-09	0.36384981	0.438	0.308	8.60E-05	ExN7	RPS27
SUMF1	7.22E-09	0.25641567	0.705	0.591	0.00027586	ExN7	SUMF1
RPS4X	1.92E-08	0.27121162	0.355	0.245	0.00073533	ExN7	RPS4X
NAMPT	3.18E-08	0.27831593	0.324	0.218	0.00121462	ExN7	NAMPT
RBPJ	6.91E-08	0.28298937	0.674	0.581	0.00264057	ExN7	RBPJ
HHAT	1.46E-05	0.25368248	0.363	0.273	0.55989897	ExN7	HHAT
HSP90AA1	6.07E-05	0.34831123	0.793	0.712	1	ExN7	HSP90AA1
ADARB2	0	2.318592	0.993	0.29	0	InN1	ADARB2
ERBB4	0	2.22004728	0.992	0.523	0	InN1	ERBB4
RGS12	0	2.09118671	0.941	0.463	0	InN1	RGS12
SYNPR	0	2.03183131	0.958	0.485	0	InN1	SYNPR
L3MBTL4	0	1.96069398	0.883	0.339	0	InN1	L3MBTL4
SLC24A3	0	1.92479284	0.866	0.241	0	InN1	SLC24A3
CALB2	0	1.90529752	0.676	0.051	0	InN1	CALB2
AL589740.1	0	1.88006098	0.716	0.403	0	InN1	AL589740.1
THSD7A	0	1.8554226	0.858	0.465	0	InN1	THSD7A
BTBD11	0	1.75222646	0.823	0.203	0	InN1	BTBD11
PLD5	0	1.74383279	0.865	0.254	0	InN1	PLD5
GALNTL6	0	1.65737729	0.96	0.716	0	InN1	GALNTL6
LAMA3	0	1.602751	0.574	0.075	0	InN1	LAMA3
IGFBP5	0	1.59025526	0.489	0.144	0	InN1	IGFBP5
PROX1	0	1.57842054	0.718	0.102	0	InN1	PROX1
AC087564.11	0	1.57690761	0.6	0.082	0	InN1	AC087564.1
RYR3	0	1.5391368	0.56	0.37	0	InN1	RYR3
AC233296.1	0	1.53546109	0.708	0.213	0	InN1	AC233296.1
PWRN1	0	1.51800151	0.87	0.419	0	InN1	PWRN1
PLCE1	0	1.50126374	0.562	0.09	0	InN1	PLCE1
DLX6-AS1	0	1.48936985	0.724	0.179	0	InN1	DLX6-AS1
NR2F2-AS1	0	1.48703434	0.64	0.155	0	InN1	NR2F2-AS1
C8orf34	0	1.43715874	0.71	0.352	0	InN1	C8orf34
NPAS3	0	1.42707948	0.918	0.806	0	InN1	NPAS3

NEAT11	0	1.40575623	0.679	0.345	0	lnN1	NEAT1
ZBTB201	0	1.40139786	0.689	0.534	0	lnN1	ZBTB20
PDE3A	0	1.3965516	0.509	0.088	0	lnN1	PDE3A
PROX1-AS1	0	1.38531796	0.54	0.059	0	lnN1	PROX1-AS1
KCNT21	0	1.37381592	0.807	0.514	0	lnN1	KCNT2
GALNT131	0	1.36307892	0.896	0.658	0	lnN1	GALNT13
LRRC3B	0	1.35490322	0.64	0.205	0	lnN1	LRRC3B
CCNH	0	1.32967405	0.863	0.756	0	lnN1	CCNH
FIGN1	0	1.32813543	0.671	0.317	0	lnN1	FIGN
PTPRE1	0	1.32640146	0.848	0.606	0	lnN1	PTPRE
EGFR	0	1.31277402	0.729	0.18	0	lnN1	EGFR
ANO4	0	1.29244456	0.865	0.566	0	lnN1	ANO4
SHISA6	0	1.27525068	0.64	0.308	0	lnN1	SHISA6
ADAMTS6	0	1.26605004	0.514	0.08	0	lnN1	ADAMTS6
AC013265.1	0	1.25645135	0.448	0.025	0	lnN1	AC013265.1
PDE4B1	0	1.2554735	0.869	0.58	0	lnN1	PDE4B
AL589693.11	0	1.24478344	0.347	0.108	0	lnN1	AL589693.1
GPR149	0	1.23361247	0.484	0.035	0	lnN1	GPR149
SLC22A3	0	1.23047673	0.434	0.008	0	lnN1	SLC22A3
LINC01931	0	1.22176648	0.273	0.038	0	lnN1	LINC01931
TAC3	0	1.21581719	0.316	0.02	0	lnN1	TAC3
ROBO1	0	1.21566042	0.922	0.628	0	lnN1	ROBO1
SEZ6	0	1.20821668	0.57	0.192	0	lnN1	SEZ6
SHISA8	0	1.20713933	0.45	0.025	0	lnN1	SHISA8
AL133346.11	0	1.20665124	0.522	0.103	0	lnN1	AL133346.1
DOCK101	0	1.17394983	0.83	0.351	0	lnN1	DOCK10
VIP	0	1.16851243	0.365	0.014	0	lnN1	VIP
MCC1	0	1.16699146	0.641	0.217	0	lnN1	MCC
ITGA81	0	1.15759265	0.468	0.083	0	lnN1	ITGA8
SDK11	0	1.14524422	0.779	0.443	0	lnN1	SDK1
ZNF536	0	1.13724428	0.89	0.309	0	lnN1	ZNF536
ARHGAP28	0	1.13624203	0.544	0.166	0	lnN1	ARHGAP28
SVEP1	0	1.12765865	0.494	0.165	0	lnN1	SVEP1
COL21A1	0	1.12069888	0.559	0.15	0	lnN1	COL21A1
LINC013221	0	1.09813278	0.729	0.521	0	lnN1	LINC01322
ADRA1B	0	1.0958215	0.526	0.183	0	lnN1	ADRA1B
B4GALT6	0	1.09044152	0.659	0.385	0	lnN1	B4GALT6
SEMA5A1	0	1.0769308	0.46	0.139	0	lnN1	SEMA5A
NKAIN3	0	1.06812537	0.589	0.239	0	lnN1	NKAIN3
PITPNC1	0	1.05802713	0.789	0.457	0	lnN1	PITPNC1
KIAA1211	0	1.05191375	0.771	0.354	0	lnN1	KIAA1211
NCKAP51	0	1.04770026	0.448	0.179	0	lnN1	NCKAP5
AL136114.1	0	1.04162639	0.328	0.079	0	lnN1	AL136114.1
CHD71	0	1.03150704	0.452	0.071	0	lnN1	CHD7
PLXNA4	0	1.01805399	0.913	0.784	0	lnN1	PLXNA4
CALN12	0	1.01787941	0.794	0.645	0	lnN1	CALN1
AC016766.1	0	1.01655956	0.295	0.025	0	lnN1	AC016766.1
PARD3	0	0.99964936	0.637	0.282	0	lnN1	PARD3
AC092422.11	0	0.9992193	0.516	0.258	0	lnN1	AC092422.1
VWC2L1	0	0.99455092	0.665	0.304	0	lnN1	VWC2L
LYPD6B1	0	0.98776279	0.488	0.141	0	lnN1	LYPD6B
DPF31	0	0.97493379	0.566	0.249	0	lnN1	DPF3
GLRA2	0	0.96960399	0.542	0.17	0	lnN1	GLRA2
AL356108.1	0	0.96842815	0.317	0.033	0	lnN1	AL356108.1
SLC35F4	0	0.96692464	0.552	0.195	0	lnN1	SLC35F4
RERG	0	0.96673369	0.527	0.238	0	lnN1	RERG
CCNG21	0	0.96518266	0.507	0.236	0	lnN1	CCNG2
MAPK41	0	0.95652404	0.705	0.451	0	lnN1	MAPK4
TRMT9B1	0	0.95264398	0.71	0.382	0	lnN1	TRMT9B
GALNT171	0	0.94723803	0.893	0.903	0	lnN1	GALNT17
CLVS1	0	0.94230924	0.793	0.641	0	lnN1	CLVS1
ARL4C	0	0.94228853	0.557	0.235	0	lnN1	ARL4C
ASIC4	0	0.93705393	0.452	0.035	0	lnN1	ASIC4

ANKRD29	0	0.93467695	0.499	0.161	0	lnN1	ANKRD29
KCNMB21	0	0.9330378	0.801	0.548	0	lnN1	KCNMB2
ZNF804A	0	0.92747835	0.768	0.516	0	lnN1	ZNF804A
CNR1	0	0.92334071	0.565	0.362	0	lnN1	CNR1
GAD1	0	0.92272689	0.677	0.239	0	lnN1	GAD1
REV3L	0	0.91725334	0.864	0.767	0	lnN1	REV3L
PTPRZ1	0	0.91300306	0.589	0.267	0	lnN1	PTPRZ1
FHOD3	0	0.91017002	0.78	0.623	0	lnN1	FHOD3
ADRA1A	0	0.90641698	0.556	0.17	0	lnN1	ADRA1A
ENTPD3	0	0.90329215	0.587	0.259	0	lnN1	ENTPD3
NLGN1	0	0.89460549	0.979	0.958	0	lnN1	NLGN1
HRH3	0	0.89419098	0.427	0.116	0	lnN1	HRH3
CNTNAP41	0	0.89220231	0.769	0.562	0	lnN1	CNTNAP4
IQGAP2	0	0.8804182	0.257	0.028	0	lnN1	IQGAP2
LYPD6	0	0.87870912	0.403	0.089	0	lnN1	LYPD6
CNTNAP2	0	0.87690416	0.995	0.993	0	lnN1	CNTNAP2
PREX2	0	0.87675917	0.5	0.137	0	lnN1	PREX2
OSBPL3	0	0.87592091	0.648	0.411	0	lnN1	OSBPL3
HIPK2	0	0.87025569	0.607	0.334	0	lnN1	HIPK2
CHRNA2	0	0.85944518	0.383	0.01	0	lnN1	CHRNA2
NHS	0	0.85226852	0.718	0.417	0	lnN1	NHS
SLC44A51	0	0.8449089	0.843	0.677	0	lnN1	SLC44A5
NR3C2	0	0.84401844	0.881	0.796	0	lnN1	NR3C2
AP1S2	0	0.84264094	0.489	0.167	0	lnN1	AP1S2
ADAMTS17	0	0.83835137	0.454	0.201	0	lnN1	ADAMTS17
SLC4A71	0	0.83347657	0.634	0.424	0	lnN1	SLC4A7
RIN21	0	0.8255659	0.501	0.175	0	lnN1	RIN2
KANK1	0	0.81521846	0.358	0.121	0	lnN1	KANK1
CNTN61	0	0.81306738	0.418	0.211	0	lnN1	CNTN6
TCF4	0	0.80777291	0.962	0.957	0	lnN1	TCF4
AC022523.1	0	0.80703648	0.305	0.028	0	lnN1	AC022523.1
NRXN3	0	0.79992739	0.996	0.99	0	lnN1	NRXN3
LCNL1	0	0.79841096	0.313	0.118	0	lnN1	LCNL1
CRB1	0	0.79707919	0.536	0.287	0	lnN1	CRB1
ANK1	0	0.78827021	0.624	0.281	0	lnN1	ANK1
ANGPT1	0	0.78739799	0.271	0.059	0	lnN1	ANGPT1
KCNIP1	0	0.78483535	0.644	0.264	0	lnN1	KCNIP1
SCG2	0	0.78476628	0.454	0.239	0	lnN1	SCG2
ROBO21	0	0.78373659	0.985	0.836	0	lnN1	ROBO2
AFAP1	0	0.77428309	0.613	0.371	0	lnN1	AFAP1
SLC6A1	0	0.77240907	0.75	0.306	0	lnN1	SLC6A1
ZEB21	0	0.77052132	0.877	0.816	0	lnN1	ZEB2
STARD132	0	0.76991188	0.701	0.521	0	lnN1	STARD13
SMARCA2	0	0.76736513	0.861	0.801	0	lnN1	SMARCA2
DNER	0	0.76661026	0.761	0.5	0	lnN1	DNER
NR2F2	0	0.7658951	0.407	0.077	0	lnN1	NR2F2
DSCAM3	0	0.76585781	0.979	0.896	0	lnN1	DSCAM
PDE9A	0	0.7595977	0.324	0.065	0	lnN1	PDE9A
RXRA	0	0.75004659	0.447	0.179	0	lnN1	RXRA
COL11A12	0	0.7482112	0.459	0.236	0	lnN1	COL11A1
AFDN1	0	0.74068502	0.748	0.639	0	lnN1	AFDN
CPNE2	0	0.73700171	0.358	0.05	0	lnN1	CPNE2
HTRA11	0	0.73192271	0.41	0.135	0	lnN1	HTRA1
AL391832.4	0	0.73109192	0.324	0.035	0	lnN1	AL391832.4
PLPPR1	0	0.73068839	0.569	0.263	0	lnN1	PLPPR1
SNTG13	0	0.72830885	0.977	0.938	0	lnN1	SNTG1
ENAH	0	0.72121754	0.657	0.528	0	lnN1	ENAH
PWRN4	0	0.71469442	0.459	0.197	0	lnN1	PWRN4
SMOC1	0	0.71420556	0.283	0.066	0	lnN1	SMOC1
CNTN41	0	0.70810195	0.916	0.844	0	lnN1	CNTN4
LRP1B3	0	0.70764584	0.986	0.946	0	lnN1	LRP1B
FOXN31	0	0.70681105	0.805	0.696	0	lnN1	FOXN3
VOPP11	0	0.69706835	0.633	0.453	0	lnN1	VOPP1

ARHGAP241	0	0.69291799	0.35	0.126	0	lnN1	ARHGAP24
NPR3	0	0.69126585	0.296	0.011	0	lnN1	NPR3
CACNG4	0	0.69027031	0.417	0.128	0	lnN1	CACNG4
LRRC4C2	0	0.68908539	0.943	0.883	0	lnN1	LRRC4C
NCOA1	0	0.68866068	0.892	0.874	0	lnN1	NCOA1
OSBPL1A	0	0.68738185	0.818	0.769	0	lnN1	OSBPL1A
LPP1	0	0.68718671	0.64	0.455	0	lnN1	LPP
ZNF608	0	0.67640771	0.586	0.33	0	lnN1	ZNF608
PPP1R1C	0	0.67233693	0.265	0.016	0	lnN1	PPP1R1C
CHRNA7	0	0.67182025	0.362	0.158	0	lnN1	CHRNA7
PPM1H	0	0.67018252	0.792	0.711	0	lnN1	PPM1H
VWC2	0	0.66939485	0.587	0.329	0	lnN1	VWC2
AC009093.2	0	0.66637488	0.344	0.109	0	lnN1	AC009093.2
RIPOR2	0	0.66009108	0.656	0.445	0	lnN1	RIPOR2
TGFB2	0	0.65950133	0.368	0.133	0	lnN1	TGFB2
FAT4	0	0.65189741	0.37	0.136	0	lnN1	FAT4
TTC28	0	0.65185502	0.845	0.782	0	lnN1	TTC28
HIF3A	0	0.64775609	0.281	0.047	0	lnN1	HIF3A
LINC01102	0	0.64671132	0.53	0.301	0	lnN1	LINC01102
ASIC1	0	0.64160395	0.404	0.162	0	lnN1	ASIC1
ADCYAP1R1	0	0.63783564	0.517	0.276	0	lnN1	ADCYAP1R1
MTUS11	0	0.6362016	0.528	0.271	0	lnN1	MTUS1
TIAM1	0	0.63357895	0.854	0.743	0	lnN1	TIAM1
GRM73	0	0.62805628	0.941	0.854	0	lnN1	GRM7
CACNA1D	0	0.62694901	0.897	0.887	0	lnN1	CACNA1D
LARGE11	0	0.62562738	0.931	0.909	0	lnN1	LARGE1
QKI1	0	0.61912403	0.828	0.654	0	lnN1	QKI
TNIK1	0	0.61844169	0.853	0.799	0	lnN1	TNIK
LRRC39	0	0.6177865	0.374	0.138	0	lnN1	LRRC39
FGD5	0	0.61702351	0.307	0.046	0	lnN1	FGD5
INHBA-AS1	0	0.6154444	0.383	0.123	0	lnN1	INHBA-AS1
ATP1B2	0	0.61427109	0.458	0.205	0	lnN1	ATP1B2
TNS31	0	0.61344265	0.265	0.091	0	lnN1	TNS3
GRIN2D	0	0.61057051	0.395	0.113	0	lnN1	GRIN2D
MTSS11	0	0.60977623	0.739	0.549	0	lnN1	MTSS1
TIMP2	0	0.60907747	0.508	0.279	0	lnN1	TIMP2
HIP1	0	0.60339888	0.381	0.165	0	lnN1	HIP1
KLHL13	0	0.59841997	0.323	0.098	0	lnN1	KLHL13
RGS8	0	0.59218506	0.312	0.047	0	lnN1	RGS8
SOBP	0	0.5869459	0.848	0.816	0	lnN1	SOBP
IGF1	0	0.58663538	0.381	0.124	0	lnN1	IGF1
DGKD	0	0.58500387	0.561	0.282	0	lnN1	DGKD
NINL	0	0.58258334	0.407	0.161	0	lnN1	NINL
NFIB	0	0.57807808	0.829	0.628	0	lnN1	NFIB
DPYSL3	0	0.57612285	0.379	0.174	0	lnN1	DPYSL3
GCNT21	0	0.57580048	0.305	0.046	0	lnN1	GCNT2
SNRPN	0	0.57384721	0.855	0.751	0	lnN1	SNRPN
EMID1	0	0.57265655	0.286	0.076	0	lnN1	EMID1
PXDN	0	0.5671947	0.314	0.095	0	lnN1	PXDN
USP31	0	0.56718599	0.387	0.149	0	lnN1	USP3
SMAD9	0	0.56573657	0.297	0.105	0	lnN1	SMAD9
SILC1	0	0.5657036	0.451	0.191	0	lnN1	SILC1
EPS81	0	0.56312729	0.302	0.1	0	lnN1	EPS8
INSYN2A	0	0.56009165	0.278	0.076	0	lnN1	INSYN2A
AC092691.13	0	0.55844413	0.927	0.862	0	lnN1	AC092691.1
ELFN1	0	0.54799011	0.309	0.057	0	lnN1	ELFN1
SALL1	0	0.54382822	0.28	0.022	0	lnN1	SALL1
FRMD4A	0	0.54329595	0.986	0.988	0	lnN1	FRMD4A
NCAM1	0	0.54051722	0.941	0.937	0	lnN1	NCAM1
SLC25A48	0	0.5356701	0.33	0.098	0	lnN1	SLC25A48
ADAM33	0	0.53178005	0.257	0.027	0	lnN1	ADAM33
SLC47A1	0	0.5258528	0.306	0.085	0	lnN1	SLC47A1
PKP2	0	0.51907075	0.328	0.081	0	lnN1	PKP2

ANO1	0	0.50582266	0.25	0.047	0	lnN1	ANO1
MIR99AHG2	0	0.49767874	0.927	0.891	0	lnN1	MIR99AHG
SLCSA8	0	0.48440852	0.263	0.053	0	lnN1	SLCSA8
TMEM200C	0	0.43923922	0.262	0.061	0	lnN1	TMEM200C
BCL61	0	0.43345454	0.271	0.093	0	lnN1	BCL6
MARCKSL1	0	0.40449249	0.277	0.1	0	lnN1	MARCKSL1
DLX1	0	0.40177445	0.277	0.078	0	lnN1	DLX1
FRMPD3	0	0.3861395	0.271	0.09	0	lnN1	FRMPD3
CXCL14	0	0.27976868	0.445	0.121	0	lnN1	CXCL14
ZNF385D1	0	0.26769526	0.84	0.474	0	lnN1	ZNF385D
KCNJ3	8.41E-308	0.57212889	0.874	0.869	3.21E-303	lnN1	KCNJ3
GNAS	1.14E-307	0.66591566	0.835	0.824	4.36E-303	lnN1	GNAS
GPRIN31	9.18E-305	0.4481685	0.364	0.156	3.51E-300	lnN1	GPRIN3
PARM11	8.98E-304	0.71821478	0.574	0.377	3.43E-299	lnN1	PARM1
PLS3	5.33E-303	0.72447072	0.373	0.181	2.04E-298	lnN1	PLS3
NFIX	4.46E-300	0.62262772	0.742	0.619	1.71E-295	lnN1	NFIX
DOCK111	6.47E-294	0.50862974	0.404	0.19	2.47E-289	lnN1	DOCK11
COL12A12	4.15E-293	0.55646259	0.38	0.177	1.59E-288	lnN1	COL12A1
B3GAT1	3.01E-288	0.66329486	0.631	0.473	1.15E-283	lnN1	B3GAT1
SNRK	1.37E-286	0.61977126	0.5	0.318	5.25E-282	lnN1	SNRK
NEDD4L1	2.80E-283	0.51776095	0.868	0.808	1.07E-278	lnN1	NEDD4L
PPM1E	3.57E-281	0.61679939	0.815	0.755	1.36E-276	lnN1	PPM1E
PCDH8	1.02E-280	0.42740644	0.264	0.101	3.89E-276	lnN1	PCDH8
STIM1	1.28E-280	0.68454128	0.637	0.496	4.89E-276	lnN1	STIM1
TBL1X1	1.74E-278	0.60968634	0.306	0.132	6.64E-274	lnN1	TBL1X
GAB21	3.34E-277	0.64578899	0.652	0.488	1.28E-272	lnN1	GAB2
UBASH3B	6.50E-277	0.4750319	0.55	0.316	2.48E-272	lnN1	UBASH3B
CA8	1.87E-275	0.5697372	0.26	0.1	7.16E-271	lnN1	CA8
CIT1	3.27E-275	0.58274532	0.82	0.745	1.25E-270	lnN1	CIT
SEZ6L1	5.25E-275	0.62595464	0.813	0.718	2.01E-270	lnN1	SEZ6L
AL590705.1	7.38E-273	0.63132952	0.416	0.235	2.82E-268	lnN1	AL590705.1
JAK1	8.13E-272	0.66733097	0.787	0.739	3.11E-267	lnN1	JAK1
PLCB1	2.71E-271	0.42903811	0.969	0.98	1.04E-266	lnN1	PLCB1
CCNI	1.58E-268	0.75000433	0.62	0.502	6.06E-264	lnN1	CCNI
MAF1	3.32E-268	0.3390571	0.373	0.164	1.27E-263	lnN1	MAF
LCORL	8.38E-267	0.74084628	0.625	0.481	3.20E-262	lnN1	LCORL
KCNQ1OT1	8.46E-265	0.77262142	0.632	0.493	3.23E-260	lnN1	KCNQ1OT1
PODXL2	4.48E-263	0.57598073	0.552	0.373	1.71E-258	lnN1	PODXL2
DAB11	6.98E-262	0.38886699	0.956	0.87	2.67E-257	lnN1	DAB1
LSAMP1	8.54E-258	0.38993745	0.982	0.974	3.26E-253	lnN1	LSAMP
RUNX1T11	1.23E-256	0.52078105	0.808	0.739	4.72E-252	lnN1	RUNX1T1
LRFN21	1.34E-254	0.70772494	0.767	0.679	5.12E-250	lnN1	LRFN2
ANKH	4.00E-252	0.55891031	0.803	0.786	1.53E-247	lnN1	ANKH
MIR4300HG	2.12E-251	0.90055641	0.274	0.118	8.11E-247	lnN1	MIR4300HG
CHRM31	2.13E-250	0.49239377	0.942	0.87	8.14E-246	lnN1	CHRM3
LARP1	3.29E-250	0.60380655	0.728	0.663	1.26E-245	lnN1	LARP1
LINC00461	1.23E-249	0.59332041	0.808	0.783	4.70E-245	lnN1	LINC00461
SHTN11	9.67E-245	0.58560867	0.749	0.667	3.70E-240	lnN1	SHTN1
DSEL	1.45E-242	0.46764632	0.266	0.113	5.52E-238	lnN1	DSEL
TRPC6	1.49E-239	0.64321447	0.274	0.118	5.70E-235	lnN1	TRPC6
FXYD6	1.70E-239	0.69941986	0.678	0.613	6.51E-235	lnN1	FXYD6
N4BP2	4.40E-239	0.61734605	0.516	0.348	1.68E-234	lnN1	N4BP2
GRID2	3.45E-238	0.65800547	0.847	0.722	1.32E-233	lnN1	GRID2
KAZN	9.45E-237	0.29251627	0.987	0.949	3.61E-232	lnN1	KAZN
PANTR1	4.40E-236	0.62809048	0.657	0.529	1.68E-231	lnN1	PANTR1
CHST151	6.55E-235	0.84557219	0.54	0.405	2.50E-230	lnN1	CHST15
TP53I11	7.32E-235	0.38989344	0.279	0.123	2.80E-230	lnN1	TP53I11
IRS1	1.11E-228	0.49193116	0.378	0.207	4.26E-224	lnN1	IRS1
ARHGAP5	1.17E-227	0.6042266	0.666	0.583	4.49E-223	lnN1	ARHGAP5
SYT14	1.72E-226	0.52688155	0.797	0.78	6.56E-222	lnN1	SYT14
LINC009231	1.12E-224	0.62197851	0.418	0.236	4.29E-220	lnN1	LINC00923
SGCZ1	5.46E-223	0.68871721	0.658	0.497	2.09E-218	lnN1	SGCZ
ARHGEF26-A	4.32E-222	0.53510488	0.27	0.12	1.65E-217	lnN1	ARHGEF26-A

FRMD51	2.42E-221	0.56926585	0.897	0.861	9.25E-217	lnN1	FRMD5
ATP1B1	1.35E-220	0.65614405	0.775	0.781	5.18E-216	lnN1	ATP1B1
TRAF5	7.44E-220	0.3827645	0.272	0.123	2.84E-215	lnN1	TRAF5
NAALADL2	1.77E-219	0.70745763	0.635	0.508	6.75E-215	lnN1	NAALADL2
AC105285.1	2.25E-219	0.42838238	0.253	0.108	8.61E-215	lnN1	AC105285.1
NBL1	8.26E-219	0.47239767	0.348	0.186	3.16E-214	lnN1	NBL1
BACH11	4.93E-218	0.43852011	0.399	0.215	1.88E-213	lnN1	BACH1
CHST111	5.01E-216	0.58850527	0.649	0.499	1.91E-211	lnN1	CHST11
AC008691.11	3.53E-215	0.79361565	0.317	0.16	1.35E-210	lnN1	AC008691.1
AL445250.11	1.74E-211	0.74406679	0.491	0.326	6.65E-207	lnN1	AL445250.1
TENM3	3.38E-211	0.50365274	0.779	0.662	1.29E-206	lnN1	TENM3
ST8SIA51	1.19E-209	0.60842263	0.703	0.614	4.57E-205	lnN1	ST8SIA5
PROS1	9.50E-208	0.53700058	0.302	0.153	3.63E-203	lnN1	PROS1
MT-CO2	1.55E-206	0.58437627	0.922	0.896	5.92E-202	lnN1	MT-CO2
ZNF322	1.16E-203	0.53913829	0.328	0.177	4.44E-199	lnN1	ZNF322
AUTS2	1.85E-202	0.33491205	0.963	0.975	7.08E-198	lnN1	AUTS2
ZNF292	1.49E-201	0.49437762	0.818	0.814	5.70E-197	lnN1	ZNF292
ASIC21	4.77E-201	0.48744821	0.877	0.845	1.82E-196	lnN1	ASIC2
ARHGAP122	9.66E-201	0.50024164	0.485	0.319	3.69E-196	lnN1	ARHGAP12
GTF2IRD1	7.38E-199	0.60397826	0.576	0.441	2.82E-194	lnN1	GTF2IRD1
USP13	2.72E-198	0.52990687	0.501	0.349	1.04E-193	lnN1	USP13
RANBP17	4.14E-198	0.51088321	0.624	0.454	1.58E-193	lnN1	RANBP17
ECE2	6.55E-197	0.45016021	0.38	0.213	2.51E-192	lnN1	ECE2
AC092640.1	2.45E-196	0.42569107	0.25	0.109	9.37E-192	lnN1	AC092640.1
RPS6KA2	4.53E-196	0.33000948	0.914	0.85	1.73E-191	lnN1	RPS6KA2
FCHSD21	6.49E-196	0.48160976	0.712	0.603	2.48E-191	lnN1	FCHSD2
WVOX	3.79E-195	0.52125466	0.847	0.815	1.45E-190	lnN1	WVOX
LINC011971	4.39E-194	0.5695393	0.503	0.334	1.68E-189	lnN1	LINC01197
ZNF641	6.53E-194	0.39714387	0.294	0.149	2.50E-189	lnN1	ZNF641
TNRC6A	4.91E-193	0.33645018	0.953	0.959	1.88E-188	lnN1	TNRC6A
MYT1L	4.84E-190	0.30630439	0.964	0.972	1.85E-185	lnN1	MYT1L
MARCH31	1.45E-189	0.43397706	0.28	0.132	5.55E-185	lnN1	3-Mar
ANKFN1	7.18E-189	0.81121707	0.35	0.204	2.74E-184	lnN1	ANKFN1
PCSK51	3.32E-184	0.31198439	0.358	0.183	1.27E-179	lnN1	PCSK5
SOX2-OT	6.22E-183	0.90275977	0.611	0.478	2.38E-178	lnN1	SOX2-OT
KCNK21	3.71E-181	0.39605516	0.306	0.155	1.42E-176	lnN1	KCNK2
LANCL1	9.52E-181	0.67081508	0.579	0.493	3.64E-176	lnN1	LANCL1
GALNT71	3.10E-180	0.55570175	0.617	0.502	1.19E-175	lnN1	GALNT7
PTGDS1	9.66E-180	0.73133082	0.416	0.271	3.69E-175	lnN1	PTGDS
IGLON5	6.93E-179	0.33038742	0.252	0.118	2.65E-174	lnN1	IGLON5
CPQ1	3.76E-176	0.47677873	0.351	0.203	1.44E-171	lnN1	CPQ
MAN1A2	1.36E-175	0.5036864	0.761	0.752	5.21E-171	lnN1	MAN1A2
CTTNBP2	1.44E-174	0.55573331	0.71	0.675	5.50E-170	lnN1	CTTNBP2
SLC6A11	6.88E-174	0.50812906	0.384	0.241	2.63E-169	lnN1	SLC6A11
POT1-AS1	6.40E-173	0.64221004	0.522	0.381	2.45E-168	lnN1	POT1-AS1
AC079296.1	1.47E-170	0.35627559	0.322	0.169	5.60E-166	lnN1	AC079296.1
AMPD2	1.40E-169	0.40171209	0.33	0.189	5.36E-165	lnN1	AMPD2
OLFM2	2.42E-169	0.47757171	0.436	0.281	9.25E-165	lnN1	OLFM2
GRIP2	1.32E-168	0.29008229	0.341	0.173	5.04E-164	lnN1	GRIP2
ARNT21	4.56E-168	0.39005503	0.847	0.838	1.74E-163	lnN1	ARNT2
GNAL1	2.79E-167	0.43390868	0.658	0.457	1.07E-162	lnN1	GNAL
PDE1C1	3.21E-166	0.63670654	0.618	0.483	1.23E-161	lnN1	PDE1C
SPECC11	7.85E-165	0.49649705	0.776	0.732	3.00E-160	lnN1	SPECC1
C1orf21	6.83E-162	0.46779349	0.742	0.717	2.61E-157	lnN1	C1orf21
NRIP3	3.15E-160	0.26412533	0.364	0.202	1.20E-155	lnN1	NRIP3
FGD41	1.35E-159	0.49268526	0.462	0.319	5.17E-155	lnN1	FGD4
ANKRD30BL	2.48E-159	0.48717867	0.785	0.699	9.48E-155	lnN1	ANKRD30BL
CRY1	3.08E-159	0.45161445	0.306	0.17	1.18E-154	lnN1	CRY1
CSMD12	4.51E-159	0.41725024	0.992	0.98	1.72E-154	lnN1	CSMD1
NFIA3	9.65E-158	0.38981345	0.571	0.404	3.69E-153	lnN1	NFIA
MT-ND4	2.18E-155	0.51212625	0.879	0.854	8.33E-151	lnN1	MT-ND4
TAFAS	1.16E-154	0.56842086	0.664	0.6	4.45E-150	lnN1	TAFAS
GPHN	1.25E-152	0.35212316	0.928	0.95	4.77E-148	lnN1	GPHN

SPOCK2	1.28E-152	0.45915959	0.537	0.424	4.88E-148	lnN1	SPOCK2
ZBTB161	1.69E-152	0.35945113	0.881	0.878	6.45E-148	lnN1	ZBTB16
INPP4B2	7.43E-152	0.40742109	0.821	0.748	2.84E-147	lnN1	INPP4B
SMIM17	2.30E-151	0.40363263	0.337	0.201	8.78E-147	lnN1	SMIM17
TUSC31	1.59E-150	0.51630062	0.691	0.655	6.09E-146	lnN1	TUSC3
GNG72	5.00E-150	0.52947196	0.522	0.396	1.91E-145	lnN1	GNG7
TRAF3IP2-AS	2.71E-148	0.44839531	0.763	0.748	1.03E-143	lnN1	TRAF3IP2-AS
ELFN2	7.37E-146	0.36914436	0.321	0.189	2.82E-141	lnN1	ELFN2
CAMTA1	1.00E-145	0.31790867	0.902	0.929	3.83E-141	lnN1	CAMTA1
TNKS	6.19E-145	0.41945383	0.805	0.818	2.37E-140	lnN1	TNKS
PCDH11X	6.44E-144	0.54834455	0.631	0.528	2.46E-139	lnN1	PCDH11X
MEG8	5.09E-143	0.39189534	0.865	0.846	1.95E-138	lnN1	MEG8
KIF5C	2.27E-142	0.38469038	0.841	0.859	8.67E-138	lnN1	KIF5C
RARB1	2.59E-142	0.67341781	0.534	0.419	9.90E-138	lnN1	RARB
CNTLN	2.27E-141	0.44938131	0.355	0.222	8.68E-137	lnN1	CNTLN
MACROD2	2.49E-141	0.27295437	0.951	0.951	9.53E-137	lnN1	MACROD2
SUSD4	9.49E-139	0.52328726	0.66	0.606	3.63E-134	lnN1	SUSD4
SYNE1	1.56E-136	0.32373977	0.945	0.953	5.95E-132	lnN1	SYNE1
HDAC92	5.55E-136	0.41557343	0.81	0.776	2.12E-131	lnN1	HDAC9
ASTN2	7.67E-136	0.34178936	0.81	0.729	2.93E-131	lnN1	ASTN2
KAT2B	1.03E-134	0.48393356	0.427	0.3	3.94E-130	lnN1	KAT2B
CDH102	5.44E-132	0.37614916	0.785	0.69	2.08E-127	lnN1	CDH10
SH3D19	3.39E-131	0.55192582	0.548	0.45	1.29E-126	lnN1	SH3D19
KLF3-AS1	4.27E-130	0.45454393	0.386	0.254	1.63E-125	lnN1	KLF3-AS1
OLFM33	3.23E-129	0.48168535	0.783	0.709	1.24E-124	lnN1	OLFM3
SYT171	2.99E-128	0.44280078	0.414	0.287	1.14E-123	lnN1	SYT17
BMERB1	1.28E-127	0.480548	0.734	0.724	4.90E-123	lnN1	BMERB1
MSI2	1.29E-127	0.36940752	0.719	0.654	4.93E-123	lnN1	MSI2
ERO1B	6.20E-126	0.466679	0.508	0.407	2.37E-121	lnN1	ERO1B
DENND2A	1.76E-125	0.45487844	0.39	0.254	6.72E-121	lnN1	DENND2A
DCX	1.35E-124	0.43215645	0.504	0.385	5.18E-120	lnN1	DCX
IL12RB22	2.68E-124	0.47458539	0.316	0.196	1.02E-119	lnN1	IL12RB2
ZFHX2-AS1	1.39E-123	0.43610049	0.377	0.256	5.32E-119	lnN1	ZFHX2-AS1
USP6NL1	2.44E-123	0.34580712	0.254	0.14	9.34E-119	lnN1	USP6NL
HACD3	2.98E-123	0.47167096	0.567	0.503	1.14E-118	lnN1	HACD3
MT-ND31	1.85E-122	0.37400466	0.891	0.868	7.09E-118	lnN1	MT-ND3
CYTH11	1.00E-121	0.45138709	0.53	0.431	3.83E-117	lnN1	CYTH1
C3orf70	2.77E-121	0.41024208	0.326	0.208	1.06E-116	lnN1	C3orf70
SERPINB61	1.39E-119	0.34611341	0.31	0.191	5.31E-115	lnN1	SERPINB6
SLC25A131	3.60E-118	0.40141521	0.37	0.251	1.37E-113	lnN1	SLC25A13
HFM1	1.03E-117	0.35639349	0.299	0.18	3.92E-113	lnN1	HFM1
ZFHX32	1.60E-117	0.4049879	0.409	0.28	6.12E-113	lnN1	ZFHX3
INPP5F	5.86E-117	0.42763176	0.626	0.578	2.24E-112	lnN1	INPP5F
VAV2	1.16E-114	0.31028571	0.3	0.172	4.45E-110	lnN1	VAV2
ANKRD12	1.52E-114	0.38140098	0.78	0.78	5.80E-110	lnN1	ANKRD12
MT-ATP61	7.53E-114	0.39742311	0.898	0.877	2.88E-109	lnN1	MT-ATP6
POU3F3	3.86E-113	0.29339344	0.278	0.16	1.47E-108	lnN1	POU3F3
DENND1B	1.92E-112	0.47604512	0.565	0.499	7.34E-108	lnN1	DENND1B
WWP1	8.50E-112	0.45908609	0.555	0.478	3.25E-107	lnN1	WWP1
ATP1A3	9.88E-110	0.53221384	0.571	0.535	3.78E-105	lnN1	ATP1A3
MT-ND4L	4.04E-107	0.51054893	0.624	0.536	1.55E-102	lnN1	MT-ND4L
NGLY1	4.10E-107	0.42962528	0.487	0.405	1.57E-102	lnN1	NGLY1
PRKD11	6.11E-107	0.50561928	0.587	0.504	2.33E-102	lnN1	PRKD1
MT-CO11	3.27E-106	0.37999009	0.887	0.866	1.25E-101	lnN1	MT-CO1
GTF2I	3.80E-106	0.32756116	0.811	0.838	1.45E-101	lnN1	GTF2I
EEF1A11	6.54E-106	0.51540302	0.631	0.57	2.50E-101	lnN1	EEF1A1
TXNDC16	2.73E-105	0.44003878	0.593	0.54	1.04E-100	lnN1	TXNDC16
TCF121	4.89E-104	0.35264093	0.732	0.703	1.87E-99	lnN1	TCF12
GREB1	1.29E-102	0.40835917	0.437	0.33	4.95E-98	lnN1	GREB1
KIAA19581	6.23E-102	0.38986628	0.529	0.421	2.38E-97	lnN1	KIAA1958
SAMD4A	3.98E-101	0.43557481	0.551	0.461	1.52E-96	lnN1	SAMD4A
PDE10A1	1.30E-100	0.51715378	0.714	0.674	4.96E-96	lnN1	PDE10A
TGFBR3	3.48E-100	0.41273895	0.288	0.18	1.33E-95	lnN1	TGFBR3

KLHL52	8.50E-99	0.40745364	0.429	0.307	3.25E-94 lnN1	KLHL5
KLHL42	1.13E-98	0.40102947	0.499	0.423	4.33E-94 lnN1	KLHL42
GNG21	1.28E-98	0.38995364	0.541	0.435	4.91E-94 lnN1	GNG2
TLE2	2.33E-98	0.34335633	0.299	0.189	8.90E-94 lnN1	TLE2
CCDC91	1.83E-97	0.46589794	0.697	0.697	6.99E-93 lnN1	CCDC91
FNBPL1	3.43E-97	0.36380088	0.5	0.378	1.31E-92 lnN1	FNBPL1
DIP2C	7.00E-97	0.29751103	0.872	0.892	2.68E-92 lnN1	DIP2C
MTRNR2L12	9.47E-97	0.35801631	0.796	0.742	3.62E-92 lnN1	MTRNR2L12
MT-CO31	1.51E-96	0.4380775	0.867	0.848	5.78E-92 lnN1	MT-CO3
SVIL	6.05E-96	0.39391973	0.269	0.165	2.31E-91 lnN1	SVIL
NSG2	1.36E-94	0.39061331	0.599	0.553	5.20E-90 lnN1	NSG2
BID	3.11E-93	0.40026041	0.292	0.189	1.19E-88 lnN1	BID
PKD1L1	4.09E-93	0.40723661	0.366	0.256	1.56E-88 lnN1	PKD1L1
AC106795.31	2.08E-92	0.46455523	0.312	0.211	7.97E-88 lnN1	AC106795.3
GSE1	2.33E-92	0.44911654	0.569	0.495	8.90E-88 lnN1	GSE1
SORCS32	7.32E-92	0.41084424	0.653	0.561	2.80E-87 lnN1	SORCS3
PDE7B1	7.65E-92	0.52688053	0.556	0.476	2.92E-87 lnN1	PDE7B
WSCD2	1.02E-91	0.46994164	0.489	0.408	3.88E-87 lnN1	WSCD2
HIVEP32	2.15E-91	0.29563355	0.854	0.864	8.21E-87 lnN1	HIVEP3
RGS63	2.45E-91	0.61317776	0.77	0.697	9.37E-87 lnN1	RGS6
APP	9.98E-89	0.299943	0.884	0.916	3.81E-84 lnN1	APP
CCK	1.89E-88	1.02205019	0.497	0.452	7.21E-84 lnN1	CCK
ALDOC	2.02E-88	0.33480989	0.269	0.171	7.72E-84 lnN1	ALDOC
PDIA2	3.21E-88	0.6072487	0.446	0.366	1.23E-83 lnN1	PDIA2
RALGPS1	4.87E-87	0.3527015	0.714	0.708	1.86E-82 lnN1	RALGPS1
THSD7B	1.18E-86	0.65651646	0.25	0.153	4.51E-82 lnN1	THSD7B
HSP90AB1	1.52E-86	0.3892541	0.726	0.728	5.83E-82 lnN1	HSP90AB1
SDK21	4.44E-84	0.42590519	0.326	0.224	1.70E-79 lnN1	SDK2
PTPRJ1	6.41E-84	0.39600768	0.649	0.625	2.45E-79 lnN1	PTPRJ
ATP6V0E2	7.65E-84	0.41524758	0.43	0.351	2.92E-79 lnN1	ATP6V0E2
NMNAT2	7.65E-84	0.28416492	0.834	0.856	2.93E-79 lnN1	NMNAT2
MAST41	1.24E-82	0.29510562	0.826	0.818	4.74E-78 lnN1	MAST4
FBXO31	6.31E-82	0.44984666	0.393	0.312	2.41E-77 lnN1	FBXO31
ARHGAP18	3.81E-81	0.56241276	0.295	0.207	1.46E-76 lnN1	ARHGAP18
SLC22A17	5.59E-81	0.45614242	0.587	0.571	2.14E-76 lnN1	SLC22A17
AC004083.1	9.19E-81	0.48594163	0.385	0.293	3.51E-76 lnN1	AC004083.1
AC068587.42	9.54E-81	0.33397187	0.569	0.508	3.65E-76 lnN1	AC068587.4
TUT4	3.38E-80	0.36988085	0.705	0.702	1.29E-75 lnN1	TUT4
ZNF483	4.78E-80	0.35343778	0.737	0.752	1.83E-75 lnN1	ZNF483
L3MBTL1	5.70E-80	0.3622107	0.446	0.362	2.18E-75 lnN1	L3MBTL1
NSG1	1.31E-78	0.26562894	0.265	0.172	5.01E-74 lnN1	NSG1
SLC4A3	1.50E-78	0.29770397	0.291	0.198	5.72E-74 lnN1	SLC4A3
CDC42EP3	3.59E-78	0.27240656	0.268	0.173	1.37E-73 lnN1	CDC42EP3
GSAP1	1.00E-77	0.34825059	0.339	0.247	3.83E-73 lnN1	GSAP
GABRA1	1.09E-77	0.39200372	0.646	0.644	4.16E-73 lnN1	GABRA1
CCDC85A2	3.15E-77	0.37570512	0.697	0.653	1.20E-72 lnN1	CCDC85A
TFDP2	4.08E-77	0.38294421	0.733	0.741	1.56E-72 lnN1	TFDP2
ANO10	2.76E-76	0.40334891	0.579	0.547	1.06E-71 lnN1	ANO10
SMARCD3	7.51E-76	0.37847499	0.435	0.344	2.87E-71 lnN1	SMARCD3
ATRX	2.12E-75	0.28378292	0.814	0.839	8.10E-71 lnN1	ATRX
GPR137C	2.69E-75	0.3572004	0.633	0.605	1.03E-70 lnN1	GPR137C
POLB	9.05E-74	0.33938777	0.292	0.205	3.46E-69 lnN1	POLB
SIPA1L3	4.48E-73	0.40557657	0.599	0.556	1.71E-68 lnN1	SIPA1L3
KCNH74	6.30E-73	0.25250484	0.815	0.721	2.41E-68 lnN1	KCNH7
LINC01551	8.88E-73	0.40648348	0.441	0.374	3.39E-68 lnN1	LINC01551
CDH201	9.45E-73	0.57400359	0.459	0.376	3.61E-68 lnN1	CDH20
CYFIP2	9.89E-73	0.35082818	0.696	0.713	3.78E-68 lnN1	CYFIP2
ARHGAP21	2.78E-72	0.3215735	0.819	0.843	1.06E-67 lnN1	ARHGAP21
OSBPL2	9.10E-72	0.30400082	0.294	0.205	3.48E-67 lnN1	OSBPL2
MAP71	1.27E-70	0.25888615	0.866	0.883	4.87E-66 lnN1	MAP7
KCNMB2-AS1	2.82E-70	0.29056269	0.316	0.221	1.08E-65 lnN1	KCNMB2-AS1
SCMH1	2.85E-70	0.32664778	0.718	0.728	1.09E-65 lnN1	SCMH1
PLCB4	3.05E-70	0.33213696	0.615	0.558	1.16E-65 lnN1	PLCB4

EPHB1	1.56E-69	0.48976983	0.534	0.494	5.95E-65	lnN1	EPHB1
GPR155	1.65E-69	0.36817158	0.614	0.6	6.32E-65	lnN1	GPR155
BCL9	6.35E-69	0.29087437	0.301	0.213	2.43E-64	lnN1	BCL9
KLHL23	1.39E-68	0.38957867	0.505	0.457	5.32E-64	lnN1	KLHL23
PACSIN21	1.57E-68	0.37338834	0.42	0.343	5.99E-64	lnN1	PACSIN2
CDK5RAP2	4.24E-68	0.41630791	0.511	0.465	1.62E-63	lnN1	CDK5RAP2
EXT1	8.12E-68	0.34850528	0.783	0.818	3.10E-63	lnN1	EXT1
LDLRAD42	6.28E-67	0.34173427	0.786	0.782	2.40E-62	lnN1	LDLRAD4
ZHX21	1.15E-66	0.36175456	0.305	0.215	4.41E-62	lnN1	ZHX2
HSP90AA11	1.20E-66	0.41809543	0.707	0.713	4.57E-62	lnN1	HSP90AA1
NAAA	1.94E-66	0.30423291	0.289	0.203	7.41E-62	lnN1	NAAA
MYRIP1	2.05E-66	0.3995885	0.8	0.808	7.84E-62	lnN1	MYRIP
BICD1	3.78E-66	0.26215086	0.79	0.795	1.44E-61	lnN1	BICD1
LRCH2	3.96E-66	0.36522722	0.404	0.334	1.51E-61	lnN1	LRCH2
MAP1B2	6.48E-66	0.28110836	0.876	0.902	2.48E-61	lnN1	MAP1B
ARFGEF31	8.40E-66	0.27560072	0.775	0.781	3.21E-61	lnN1	ARFGEF3
TPP2	1.27E-65	0.38940499	0.529	0.495	4.86E-61	lnN1	TPP2
KLF121	1.32E-65	0.46144633	0.628	0.612	5.06E-61	lnN1	KLF12
NAP1L3	1.70E-65	0.3185686	0.379	0.298	6.50E-61	lnN1	NAP1L3
SRRM41	1.91E-65	0.2696432	0.844	0.857	7.29E-61	lnN1	SRRM4
ACACA	3.91E-65	0.31159984	0.777	0.792	1.50E-60	lnN1	ACACA
RHOQ1	1.31E-64	0.28558233	0.292	0.207	5.00E-60	lnN1	RHOQ
AC002070.1	2.22E-64	0.39646327	0.265	0.184	8.47E-60	lnN1	AC002070.1
HECTD2	6.86E-64	0.38957331	0.522	0.478	2.62E-59	lnN1	HECTD2
PXDNL	1.12E-63	0.33772056	0.304	0.221	4.28E-59	lnN1	PXDNL
SEM1	2.37E-63	0.41756692	0.524	0.478	9.06E-59	lnN1	SEM1
DLGAP4	3.61E-63	0.35841769	0.689	0.681	1.38E-58	lnN1	DLGAP4
TMEM145	4.70E-63	0.34044909	0.413	0.34	1.80E-58	lnN1	TMEM145
TEX21	8.64E-63	0.3603982	0.417	0.347	3.30E-58	lnN1	TEX2
CNTRL	1.25E-62	0.39833292	0.445	0.385	4.78E-58	lnN1	CNTRL
EPS15L1	1.42E-62	0.377025	0.575	0.546	5.41E-58	lnN1	EPS15L1
INSYN2B1	2.81E-62	0.32878393	0.309	0.221	1.07E-57	lnN1	INSYN2B
TPST1	1.29E-61	0.36411207	0.684	0.684	4.93E-57	lnN1	TPST1
NEK10	1.89E-61	0.39837438	0.638	0.632	7.24E-57	lnN1	NEK10
RPL181	2.22E-61	0.37692673	0.381	0.308	8.48E-57	lnN1	RPL18
SEN7	4.43E-61	0.3570651	0.545	0.502	1.69E-56	lnN1	SEN7
IL1RAP1	7.18E-61	0.32411913	0.403	0.319	2.75E-56	lnN1	IL1RAP
KIF1A	8.88E-61	0.36234527	0.633	0.638	3.40E-56	lnN1	KIF1A
RPS271	1.45E-60	0.41978902	0.373	0.3	5.54E-56	lnN1	RPS27
RPL131	2.96E-60	0.44558168	0.452	0.395	1.13E-55	lnN1	RPL13
CSPG5	5.39E-60	0.27762527	0.295	0.216	2.06E-55	lnN1	CSPG5
FOXG1	6.81E-60	0.35255662	0.355	0.281	2.60E-55	lnN1	FOXG1
KCNN31	1.18E-59	0.41724831	0.386	0.314	4.50E-55	lnN1	KCNN3
STAT5B	3.96E-59	0.3052458	0.421	0.345	1.52E-54	lnN1	STAT5B
TACC2	5.04E-59	0.38610874	0.463	0.408	1.92E-54	lnN1	TACC2
RNF180	2.32E-58	0.37780176	0.591	0.58	8.88E-54	lnN1	RNF180
GULP12	2.82E-58	0.53695819	0.415	0.348	1.08E-53	lnN1	GULP1
OSBPL9	3.91E-58	0.34193173	0.58	0.558	1.49E-53	lnN1	OSBPL9
KIF2A	8.61E-58	0.36964618	0.528	0.499	3.29E-53	lnN1	KIF2A
LRRC2	2.00E-57	0.280276	0.261	0.182	7.64E-53	lnN1	LRRC2
CTPS2	2.28E-57	0.263449	0.254	0.175	8.73E-53	lnN1	CTPS2
ABLIM11	9.36E-57	0.26518829	0.829	0.835	3.58E-52	lnN1	ABLIM1
OBSL1	1.87E-56	0.30872179	0.348	0.278	7.14E-52	lnN1	OBSL1
REEP1	5.10E-56	0.34413789	0.625	0.627	1.95E-51	lnN1	REEP1
RPL18A	1.36E-55	0.28460594	0.258	0.181	5.18E-51	lnN1	RPL18A
DIP2A1	4.40E-55	0.30957676	0.513	0.457	1.68E-50	lnN1	DIP2A
ATCAY	1.29E-54	0.34637484	0.605	0.598	4.95E-50	lnN1	ATCAY
MT-ND21	1.85E-54	0.31515343	0.773	0.747	7.06E-50	lnN1	MT-ND2
CRADD	3.10E-54	0.37822174	0.486	0.429	1.19E-49	lnN1	CRADD
ALCAM1	1.14E-53	0.72316369	0.502	0.47	4.37E-49	lnN1	ALCAM
SLC25A12	1.25E-53	0.26125046	0.788	0.823	4.77E-49	lnN1	SLC25A12
SRGAP21	7.33E-53	0.30170679	0.523	0.481	2.80E-48	lnN1	SRGAP2
CTIF	1.35E-52	0.29926794	0.744	0.762	5.17E-48	lnN1	CTIF

ALDH2	2.83E-52	0.2782456	0.289	0.214	1.08E-47	lnN1	ALDH2
LINC00599	5.88E-52	0.30364765	0.712	0.736	2.25E-47	lnN1	LINC00599
MT-CYB1	7.74E-52	0.30127448	0.808	0.785	2.96E-47	lnN1	MT-CYB
OSTM1	1.15E-51	0.29202811	0.327	0.257	4.40E-47	lnN1	OSTM1
AC025159.1	1.98E-51	0.52234453	0.6	0.592	7.56E-47	lnN1	AC025159.1
USP11	3.59E-51	0.3421544	0.556	0.543	1.37E-46	lnN1	USP11
SCAPER	4.16E-51	0.25092366	0.793	0.807	1.59E-46	lnN1	SCAPER
LRIG1	4.28E-51	0.30475196	0.285	0.21	1.64E-46	lnN1	LRIG1
GPD21	5.14E-51	0.31174189	0.39	0.323	1.97E-46	lnN1	GPD2
RGS17	2.45E-50	0.36315892	0.411	0.357	9.37E-46	lnN1	RGS17
C3orf67-AS1	4.70E-50	0.48186103	0.339	0.278	1.80E-45	lnN1	C3orf67-AS1
FNDC3A	5.56E-50	0.30233022	0.67	0.681	2.12E-45	lnN1	FNDC3A
SEL1L3	7.59E-50	0.46060041	0.351	0.286	2.90E-45	lnN1	SEL1L3
SYT111	8.33E-50	0.32035819	0.634	0.649	3.18E-45	lnN1	SYT11
POU2F1	1.24E-49	0.27390399	0.732	0.761	4.75E-45	lnN1	POU2F1
SERINC1	1.28E-49	0.36471171	0.603	0.624	4.89E-45	lnN1	SERINC1
SEMA4B	2.38E-49	0.32757456	0.403	0.348	9.11E-45	lnN1	SEMA4B
ANKRD6	2.61E-49	0.31502094	0.477	0.413	9.96E-45	lnN1	ANKRD6
MT-ND5	5.28E-49	0.36424585	0.607	0.565	2.02E-44	lnN1	MT-ND5
DNAJB2	5.35E-49	0.32500104	0.471	0.426	2.04E-44	lnN1	DNAJB2
MAST2	8.09E-49	0.33772686	0.454	0.404	3.09E-44	lnN1	MAST2
RPL281	8.81E-49	0.3451208	0.421	0.363	3.37E-44	lnN1	RPL28
LINC009701	9.09E-49	0.47668429	0.445	0.403	3.47E-44	lnN1	LINC00970
PCSK1N	1.28E-48	0.45340512	0.489	0.456	4.91E-44	lnN1	PCSK1N
RHBDD1	1.66E-48	0.31898773	0.333	0.27	6.36E-44	lnN1	RHBDD1
PRUNE22	2.13E-48	0.25256355	0.634	0.598	8.15E-44	lnN1	PRUNE2
GALNT142	5.90E-48	0.35036735	0.393	0.327	2.25E-43	lnN1	GALNT14
OSBPL8	7.39E-48	0.34993138	0.722	0.757	2.82E-43	lnN1	OSBPL8
RPS281	8.09E-48	0.37464702	0.408	0.354	3.09E-43	lnN1	RPS28
PWWP2A	1.29E-47	0.32696049	0.426	0.371	4.92E-43	lnN1	PWWP2A
MXD4	1.64E-47	0.29652673	0.317	0.251	6.26E-43	lnN1	MXD4
URI1	1.92E-47	0.30490463	0.507	0.465	7.35E-43	lnN1	URI1
AC007364.1	3.33E-47	0.35027994	0.346	0.276	1.27E-42	lnN1	AC007364.1
NRXN2	7.88E-47	0.29723455	0.639	0.637	3.01E-42	lnN1	NRXN2
ZSWIM5	1.66E-46	0.33624478	0.561	0.545	6.34E-42	lnN1	ZSWIM5
CALY	1.83E-45	0.3960677	0.549	0.55	7.00E-41	lnN1	CALY
PCGF5	2.50E-45	0.28636855	0.628	0.632	9.54E-41	lnN1	PCGF5
ARL6IP1	5.00E-45	0.37836779	0.466	0.445	1.91E-40	lnN1	ARL6IP1
APC	6.82E-45	0.26539666	0.717	0.745	2.61E-40	lnN1	APC
CAMKMT1	8.99E-45	0.40323859	0.43	0.377	3.44E-40	lnN1	CAMKMT
CHRM21	9.81E-44	0.27792719	0.288	0.211	3.75E-39	lnN1	CHRM2
RDX	1.18E-43	0.31184836	0.455	0.4	4.50E-39	lnN1	RDX
ABCC1	1.42E-43	0.34697608	0.403	0.352	5.45E-39	lnN1	ABCC1
NR3C11	2.78E-43	0.31817555	0.68	0.709	1.06E-38	lnN1	NR3C1
RAVER2	7.68E-43	0.27267086	0.349	0.287	2.94E-38	lnN1	RAVER2
LINC01138	1.10E-42	0.34830795	0.463	0.429	4.20E-38	lnN1	LINC01138
ANKRD36C	1.48E-42	0.27835969	0.796	0.82	5.65E-38	lnN1	ANKRD36C
MT-ATP8	2.29E-42	0.46417144	0.617	0.59	8.75E-38	lnN1	MT-ATP8
DNAH143	2.70E-42	0.37781106	0.358	0.293	1.03E-37	lnN1	DNAH14
AL024495.12	3.07E-42	0.53618175	0.347	0.301	1.17E-37	lnN1	AL024495.1
PPP2CB	3.29E-42	0.29391665	0.419	0.374	1.26E-37	lnN1	PPP2CB
PDE8A	1.19E-41	0.30148251	0.484	0.436	4.54E-37	lnN1	PDE8A
CASTOR3	1.31E-41	0.32148829	0.614	0.608	5.00E-37	lnN1	CASTOR3
OIP5-AS1	1.90E-41	0.32748064	0.572	0.572	7.24E-37	lnN1	OIP5-AS1
TSPAN7	6.03E-41	0.27302011	0.713	0.758	2.30E-36	lnN1	TSPAN7
FNBP1	2.05E-40	0.29367921	0.632	0.638	7.84E-36	lnN1	FNBP1
SLC8A3	2.29E-40	0.30424337	0.524	0.484	8.77E-36	lnN1	SLC8A3
CD811	2.34E-40	0.25944685	0.3	0.237	8.96E-36	lnN1	CD81
CNTN32	2.50E-40	0.34777376	0.686	0.663	9.55E-36	lnN1	CNTN3
BTBD3	3.21E-40	0.37582354	0.405	0.369	1.23E-35	lnN1	BTBD3
ERBIN1	5.61E-40	0.32920379	0.557	0.538	2.14E-35	lnN1	ERBIN
PPP1R13B	6.01E-40	0.32019127	0.628	0.647	2.30E-35	lnN1	PPP1R13B
DCLK13	6.47E-40	0.27777812	0.921	0.944	2.47E-35	lnN1	DCLK1

LRRTM2	2.01E-39	0.26272236	0.353	0.295	7.70E-35	lnN1	LRRTM2
BCAT1	2.54E-39	0.268414	0.402	0.346	9.71E-35	lnN1	BCAT1
AMER2	3.34E-39	0.25532231	0.306	0.242	1.28E-34	lnN1	AMER2
ROCK21	3.49E-39	0.26694438	0.754	0.778	1.33E-34	lnN1	ROCK2
CXXC51	3.74E-39	0.28293489	0.403	0.351	1.43E-34	lnN1	CXXC5
ADCY5	5.43E-39	0.31738731	0.49	0.46	2.08E-34	lnN1	ADCY5
WDR6	8.44E-39	0.27681589	0.299	0.238	3.23E-34	lnN1	WDR6
PIK3C2A	1.74E-38	0.31048283	0.494	0.468	6.65E-34	lnN1	PIK3C2A
LMCD1-AS11	2.29E-38	0.40007622	0.344	0.286	8.74E-34	lnN1	LMCD1-AS1
DZIP1	2.46E-38	0.30218854	0.609	0.617	9.41E-34	lnN1	DZIP1
TSPYL2	4.57E-38	0.29388016	0.618	0.632	1.75E-33	lnN1	TSPYL2
CANX	5.51E-38	0.29735979	0.506	0.492	2.11E-33	lnN1	CANX
TBC1D8	9.16E-38	0.32790914	0.459	0.422	3.50E-33	lnN1	TBC1D8
TOP2B	9.73E-38	0.32317829	0.568	0.576	3.72E-33	lnN1	TOP2B
ITGAV1	1.87E-37	0.2725221	0.314	0.255	7.13E-33	lnN1	ITGAV
BICC11	3.20E-37	0.6482854	0.449	0.431	1.22E-32	lnN1	BICC1
SEZ6L2	5.38E-37	0.30829833	0.485	0.464	2.05E-32	lnN1	SEZ6L2
TDRP	5.55E-37	0.29928164	0.349	0.299	2.12E-32	lnN1	TDRP
WWP2	6.08E-37	0.33017702	0.353	0.308	2.33E-32	lnN1	WWP2
RPS231	1.11E-36	0.33009911	0.349	0.291	4.26E-32	lnN1	RPS23
ALDH7A1	1.73E-36	0.25382581	0.272	0.214	6.61E-32	lnN1	ALDH7A1
SLC16A10	2.38E-36	0.31530823	0.423	0.376	9.09E-32	lnN1	SLC16A10
ATAD2B	2.64E-36	0.31385492	0.464	0.437	1.01E-31	lnN1	ATAD2B
AL356124.1	4.01E-36	0.51833003	0.289	0.239	1.53E-31	lnN1	AL356124.1
SLC5A3	6.07E-36	0.26919138	0.348	0.292	2.32E-31	lnN1	SLC5A3
RPS191	1.04E-35	0.28692544	0.341	0.287	3.98E-31	lnN1	RPS19
PACS2	1.36E-35	0.3190165	0.461	0.431	5.19E-31	lnN1	PACS2
TRIM24	2.43E-35	0.31676104	0.421	0.386	9.29E-31	lnN1	TRIM24
AC002460.22	4.35E-35	0.41018693	0.466	0.421	1.66E-30	lnN1	AC002460.2
WDR11-AS1	5.99E-35	0.28510413	0.341	0.289	2.29E-30	lnN1	WDR11-AS1
GIPC2	7.40E-35	0.29636646	0.305	0.252	2.83E-30	lnN1	GIPC2
RASA1	8.05E-35	0.2697472	0.682	0.715	3.08E-30	lnN1	RASA1
POR	1.20E-34	0.26449642	0.301	0.243	4.57E-30	lnN1	POR
MAP4	3.15E-34	0.32833162	0.561	0.561	1.20E-29	lnN1	MAP4
MBOAT21	3.79E-34	0.27848532	0.602	0.589	1.45E-29	lnN1	MBOAT2
SMYD21	4.26E-34	0.26761736	0.327	0.268	1.63E-29	lnN1	SMYD2
SREBF2	6.99E-34	0.31099836	0.578	0.584	2.67E-29	lnN1	SREBF2
ZNF83	1.40E-33	0.3140257	0.372	0.327	5.37E-29	lnN1	ZNF83
AC090115.1	2.97E-33	0.284191	0.273	0.22	1.14E-28	lnN1	AC090115.1
LPIN21	6.25E-33	0.27777736	0.405	0.361	2.39E-28	lnN1	LPIN2
UPF3A	6.80E-33	0.3023905	0.55	0.547	2.60E-28	lnN1	UPF3A
UPP1	6.97E-33	0.30204381	0.381	0.338	2.66E-28	lnN1	UPP1
MIRLET7BHC	1.11E-32	0.28377118	0.458	0.423	4.26E-28	lnN1	MIRLET7BHG
CHST1	1.37E-32	0.28142006	0.338	0.291	5.24E-28	lnN1	CHST1
C5orf56	4.24E-32	0.27586142	0.329	0.279	1.62E-27	lnN1	C5orf56
HSPA4L	4.86E-32	0.28454778	0.498	0.478	1.86E-27	lnN1	HSPA4L
CFAP161	4.92E-32	0.2506971	0.372	0.312	1.88E-27	lnN1	CFAP161
HSPA8	5.55E-32	0.30085776	0.341	0.287	2.12E-27	lnN1	HSPA8
RAMP1	2.29E-31	0.27250386	0.337	0.287	8.74E-27	lnN1	RAMP1
ASPH1	3.90E-31	0.27070909	0.596	0.602	1.49E-26	lnN1	ASPH
AC245297.3	4.27E-31	0.26023702	0.31	0.261	1.63E-26	lnN1	AC245297.3
ARMH4	5.02E-31	0.31176398	0.446	0.421	1.92E-26	lnN1	ARMH4
PCBP4	5.99E-31	0.25238223	0.333	0.287	2.29E-26	lnN1	PCBP4
FAM214A	1.89E-30	0.30269103	0.544	0.542	7.24E-26	lnN1	FAM214A
RPS27A1	4.09E-30	0.32753577	0.329	0.277	1.56E-25	lnN1	RPS27A
RPL14	6.63E-30	0.32291294	0.411	0.377	2.53E-25	lnN1	RPL14
CAPZB1	1.36E-29	0.28184494	0.615	0.64	5.19E-25	lnN1	CAPZB
SMCHD1	9.75E-29	0.29742706	0.632	0.659	3.73E-24	lnN1	SMCHD1
SNRNP70	1.01E-28	0.2795209	0.695	0.726	3.86E-24	lnN1	SNRNP70
HDAC2-AS2	1.24E-28	0.29304336	0.312	0.266	4.73E-24	lnN1	HDAC2-AS2
ANKRD26	2.85E-28	0.27926847	0.721	0.758	1.09E-23	lnN1	ANKRD26
RPL13A1	3.30E-28	0.26089399	0.34	0.294	1.26E-23	lnN1	RPL13A
AC007368.12	4.06E-28	0.30852615	0.491	0.438	1.55E-23	lnN1	AC007368.1

DIXDC1	1.43E-27	0.26165143	0.493	0.463	5.48E-23	lnN1	DIXDC1
SFMBT1	2.05E-27	0.26291887	0.368	0.327	7.83E-23	lnN1	SFMBT1
NPY1R1	4.30E-27	0.28347216	0.391	0.356	1.64E-22	lnN1	NPY1R
LRP11	5.29E-27	0.29936053	0.488	0.487	2.02E-22	lnN1	LRP1
HNRNPA2B1	6.29E-27	0.2605596	0.657	0.688	2.40E-22	lnN1	HNRNPA2B1
PRRC2B1	1.98E-26	0.25193226	0.637	0.67	7.57E-22	lnN1	PRRC2B
INTU	3.26E-26	0.30649274	0.477	0.471	1.25E-21	lnN1	INTU
DHX36	5.37E-26	0.32295397	0.507	0.513	2.05E-21	lnN1	DHX36
NAP1L4	7.01E-26	0.26411874	0.486	0.475	2.68E-21	lnN1	NAP1L4
EPN2	1.21E-25	0.27782944	0.552	0.557	4.62E-21	lnN1	EPN2
RPL101	5.32E-25	0.31950605	0.373	0.342	2.03E-20	lnN1	RPL10
SV2A	6.54E-25	0.26227124	0.568	0.596	2.50E-20	lnN1	SV2A
GAPDH	6.85E-25	0.28671914	0.531	0.529	2.62E-20	lnN1	GAPDH
RPS151	1.10E-24	0.25154897	0.328	0.285	4.21E-20	lnN1	RPS15
TSTD3	1.57E-24	0.26808414	0.315	0.278	6.00E-20	lnN1	TSTD3
SH3KBP11	2.88E-24	0.27789792	0.595	0.609	1.10E-19	lnN1	SH3KBP1
ZNF680	6.48E-24	0.27048409	0.366	0.332	2.48E-19	lnN1	ZNF680
CCDC180	7.71E-24	0.29406385	0.35	0.317	2.95E-19	lnN1	CCDC180
SEMA6D1	1.84E-23	0.61688198	0.55	0.591	7.03E-19	lnN1	SEMA6D
TP53BP1	4.44E-23	0.28940532	0.555	0.57	1.70E-18	lnN1	TP53BP1
NETO2	6.62E-23	0.37091567	0.427	0.411	2.53E-18	lnN1	NETO2
WDR19	1.83E-22	0.30932242	0.522	0.532	6.99E-18	lnN1	WDR19
PLCG21	2.05E-22	0.55494669	0.654	0.652	7.84E-18	lnN1	PLCG2
SLC24A41	2.19E-22	0.30213361	0.39	0.349	8.36E-18	lnN1	SLC24A4
PSAP1	2.55E-22	0.25408561	0.607	0.646	9.76E-18	lnN1	PSAP
TNK2	4.51E-22	0.27773422	0.487	0.49	1.72E-17	lnN1	TNK2
EVA1C	5.16E-22	0.25616483	0.384	0.354	1.97E-17	lnN1	EVA1C
RPS181	6.08E-22	0.27856349	0.323	0.285	2.33E-17	lnN1	RPS18
RNF24	9.55E-22	0.28166293	0.572	0.597	3.65E-17	lnN1	RNF24
GLB1	3.07E-21	0.29744951	0.406	0.392	1.17E-16	lnN1	GLB1
UBXN2A	3.91E-21	0.27754586	0.351	0.32	1.49E-16	lnN1	UBXN2A
MICU1	7.04E-21	0.27395876	0.69	0.731	2.69E-16	lnN1	MICU1
ATF7IP1	7.15E-21	0.25167671	0.496	0.493	2.73E-16	lnN1	ATF7IP
HIBCH	9.60E-21	0.28556984	0.599	0.622	3.67E-16	lnN1	HIBCH
EFCAB2	9.79E-21	0.27464376	0.521	0.518	3.74E-16	lnN1	EFCAB2
CDK8	1.12E-20	0.31070628	0.546	0.567	4.27E-16	lnN1	CDK8
CTBP22	3.05E-20	0.27613681	0.382	0.352	1.17E-15	lnN1	CTBP2
MRPL33	8.93E-19	0.28649125	0.405	0.392	3.41E-14	lnN1	MRPL33
GP1BB	1.03E-18	0.26323176	0.289	0.258	3.95E-14	lnN1	GP1BB
RPL31	1.52E-18	0.26533199	0.339	0.308	5.83E-14	lnN1	RPL3
ATP6VOC	5.41E-18	0.29996547	0.452	0.46	2.07E-13	lnN1	ATP6VOC
LIPA	1.40E-17	0.28912074	0.479	0.485	5.36E-13	lnN1	LIPA
SLC4A8	1.79E-17	0.26103983	0.593	0.628	6.83E-13	lnN1	SLC4A8
PPP1CB	4.57E-17	0.25636197	0.484	0.493	1.75E-12	lnN1	PPP1CB
EDIL32	4.67E-17	0.26832312	0.692	0.739	1.78E-12	lnN1	EDIL3
TRPC4	8.28E-17	0.2660269	0.31	0.275	3.16E-12	lnN1	TRPC4
BCR	1.49E-16	0.25915139	0.423	0.416	5.68E-12	lnN1	BCR
CDRT4	1.91E-16	0.25212596	0.409	0.398	7.29E-12	lnN1	CDRT4
EML51	2.63E-15	0.35876963	0.528	0.57	1.01E-10	lnN1	EML5
CRIM12	7.35E-15	0.26413677	0.485	0.493	2.81E-10	lnN1	CRIM1
RPL6	2.31E-14	0.25270534	0.342	0.32	8.82E-10	lnN1	RPL6
ANKS6	2.56E-14	0.25817395	0.406	0.396	9.78E-10	lnN1	ANKS6
MIR3936HG	2.83E-14	0.26926321	0.476	0.492	1.08E-09	lnN1	MIR3936HG
RPL32	5.42E-14	0.2904657	0.384	0.367	2.07E-09	lnN1	RPL32
DPH6	9.24E-14	0.25428419	0.423	0.417	3.53E-09	lnN1	DPH6
RPS81	2.30E-12	0.25661574	0.35	0.336	8.77E-08	lnN1	RPS8
TCF25	2.52E-12	0.26479296	0.587	0.627	9.65E-08	lnN1	TCF25
HYDIN1	4.36E-12	0.2685674	0.423	0.424	1.67E-07	lnN1	HYDIN
SCG3	1.14E-11	0.25695083	0.428	0.434	4.37E-07	lnN1	SCG3
RPL34	1.71E-11	0.29331425	0.389	0.384	6.52E-07	lnN1	RPL34
RYR11	1.36E-09	0.25575153	0.253	0.236	5.18E-05	lnN1	RYR1
AL627171.2	2.20E-09	0.52251749	0.443	0.456	8.42E-05	lnN1	AL627171.2
MB21D21	4.28E-08	0.25187703	0.393	0.399	0.00163488	lnN1	MB21D2

HTR1E1	1.46E-07	0.34813482	0.541	0.586	0.00559227	lnN1	HTR1E
ZMAT4	7.86E-06	0.32052001	0.617	0.791	0.30061021	lnN1	ZMAT4
RPS241	3.33E-05	0.25733445	0.415	0.431	1	lnN1	RPS24
ANKRD30B	0.00039265	0.2604703	0.275	0.282	1	lnN1	ANKRD30B
GRIK1	0	3.31187761	0.984	0.352	0	lnN2	GRIK1
SOX6	0	2.66947477	0.859	0.177	0	lnN2	SOX6
NXPH1	0	2.40130764	0.976	0.221	0	lnN2	NXPH1
SPOCK3	0	2.33475231	0.977	0.527	0	lnN2	SPOCK3
KIF26B	0	2.32258867	0.887	0.401	0	lnN2	KIF26B
LHFPL31	0	2.08622964	0.774	0.241	0	lnN2	LHFPL3
GRIK31	0	2.0365511	0.864	0.262	0	lnN2	GRIK3
KIAA12171	0	2.02815139	0.984	0.636	0	lnN2	KIAA1217
PCDH151	0	2.01994478	0.698	0.302	0	lnN2	PCDH15
PLCH11	0	1.90257527	0.776	0.172	0	lnN2	PLCH1
ASTN21	0	1.83713483	0.955	0.723	0	lnN2	ASTN2
SYNPR1	0	1.8154131	0.959	0.51	0	lnN2	SYNPR
XKR4	0	1.80797871	0.981	0.853	0	lnN2	XKR4
ROBO22	0	1.80644449	0.992	0.843	0	lnN2	ROBO2
GRID21	0	1.80606351	0.945	0.721	0	lnN2	GRID2
STXBP61	0	1.79750392	0.845	0.356	0	lnN2	STXBP6
TRHDE3	0	1.7887791	0.745	0.506	0	lnN2	TRHDE
ROBO11	0	1.72238862	0.96	0.641	0	lnN2	ROBO1
GPC61	0	1.7156307	0.816	0.47	0	lnN2	GPC6
WLS	0	1.62214652	0.748	0.245	0	lnN2	WLS
COL25A1	0	1.62073355	0.573	0.192	0	lnN2	COL25A1
NPAS31	0	1.60383096	0.938	0.811	0	lnN2	NPAS3
SHISA61	0	1.57345771	0.748	0.318	0	lnN2	SHISA6
GRIN3A	0	1.55560435	0.669	0.209	0	lnN2	GRIN3A
TENM1	0	1.55138069	0.748	0.357	0	lnN2	TENM1
ADCY8	0	1.47433089	0.708	0.26	0	lnN2	ADCY8
GRIK2	0	1.46541526	0.991	0.946	0	lnN2	GRIK2
PCDH11X1	0	1.45972176	0.777	0.522	0	lnN2	PCDH11X
TENM31	0	1.41750576	0.879	0.66	0	lnN2	TENM3
PTPRM	0	1.41321489	0.874	0.565	0	lnN2	PTPRM
RBMS3	0	1.38389116	0.916	0.622	0	lnN2	RBMS3
PAWR	0	1.38093015	0.528	0.058	0	lnN2	PAWR
MAF2	0	1.36809462	0.59	0.159	0	lnN2	MAF
KCNMB22	0	1.32655157	0.781	0.563	0	lnN2	KCNMB2
PCSK52	0	1.30593123	0.488	0.182	0	lnN2	PCSK5
SLC24A31	0	1.29868663	0.719	0.285	0	lnN2	SLC24A3
CDH13	0	1.28866042	0.794	0.636	0	lnN2	CDH13
FBN2	0	1.28391544	0.291	0.035	0	lnN2	FBN2
RUNX1T12	0	1.27163193	0.887	0.737	0	lnN2	RUNX1T1
SATB1-AS12	0	1.24960829	0.713	0.42	0	lnN2	SATB1-AS1
KCNIP11	0	1.23574965	0.756	0.276	0	lnN2	KCNIP1
GAD11	0	1.2160219	0.745	0.258	0	lnN2	GAD1
MGAT4C	0	1.20248928	0.821	0.564	0	lnN2	MGAT4C
TMTC2	0	1.17919154	0.778	0.525	0	lnN2	TMTC2
NETO12	0	1.17841339	0.865	0.723	0	lnN2	NETO1
ELAVL2	0	1.16415694	0.77	0.506	0	lnN2	ELAVL2
LINC013222	0	1.14776373	0.779	0.529	0	lnN2	LINC01322
CDH91	0	1.14416218	0.835	0.607	0	lnN2	CDH9
GALNT143	0	1.14201153	0.591	0.315	0	lnN2	GALNT14
LINC00535	0	1.13756896	0.529	0.285	0	lnN2	LINC00535
NRXN31	0	1.12065958	0.999	0.99	0	lnN2	NRXN3
SLC27A6	0	1.11840615	0.301	0.054	0	lnN2	SLC27A6
TIAM11	0	1.10895509	0.893	0.746	0	lnN2	TIAM1
SEMA6A	0	1.08639642	0.525	0.198	0	lnN2	SEMA6A
RAB3C	0	1.07787431	0.841	0.626	0	lnN2	RAB3C
FLT3	0	1.07562244	0.443	0.051	0	lnN2	FLT3
TSHZ31	0	1.07461974	0.704	0.43	0	lnN2	TSHZ3
SPARCL12	0	1.07438925	0.812	0.657	0	lnN2	SPARCL1
ZNF385D2	0	1.06895464	0.773	0.499	0	lnN2	ZNF385D

GRIP1	0	1.06061337	0.953	0.79	0	lnN2	GRIP1
SST	0	1.03754166	0.282	0.015	0	lnN2	SST
CRB11	0	1.01811997	0.595	0.296	0	lnN2	CRB1
RPS6KA21	0	1.01488175	0.941	0.852	0	lnN2	RPS6KA2
DAPK11	0	1.00749604	0.868	0.748	0	lnN2	DAPK1
MITF1	0	1.00488703	0.443	0.182	0	lnN2	MITF
LHX6	0	0.99123486	0.447	0.049	0	lnN2	LHX6
FRMD32	0	0.98097963	0.598	0.327	0	lnN2	FRMD3
AC027288.3	0	0.97174402	0.488	0.234	0	lnN2	AC027288.3
PAM1	0	0.95775791	0.838	0.754	0	lnN2	PAM
GRIA32	0	0.93186383	0.921	0.803	0	lnN2	GRIA3
TANC12	0	0.92889898	0.388	0.099	0	lnN2	TANC1
KIAA12111	0	0.92289515	0.732	0.379	0	lnN2	KIAA1211
QKI2	0	0.88215805	0.864	0.661	0	lnN2	QKI
SNRPN1	0	0.8613379	0.883	0.754	0	lnN2	SNRPN
ANK11	0	0.84575519	0.644	0.298	0	lnN2	ANK1
CNTNAP21	0	0.83704884	0.997	0.993	0	lnN2	CNTNAP2
VAV21	0	0.819133	0.472	0.166	0	lnN2	VAV2
ARX	0	0.80824478	0.397	0.087	0	lnN2	ARX
ELFN11	0	0.78541238	0.37	0.066	0	lnN2	ELFN1
SLC8A12	0	0.77726928	0.964	0.856	0	lnN2	SLC8A1
DSCAML11	0	0.76835942	0.89	0.751	0	lnN2	DSCAML1
TNIK2	0	0.76151842	0.878	0.8	0	lnN2	TNIK
RAB3B1	0	0.76140402	0.382	0.119	0	lnN2	RAB3B
DOCK112	0	0.75731409	0.474	0.196	0	lnN2	DOCK11
RBFOX11	0	0.74727622	0.999	0.983	0	lnN2	RBFOX1
AUTS21	0	0.74717225	0.981	0.973	0	lnN2	AUTS2
SLC24A24	0	0.74436601	0.924	0.829	0	lnN2	SLC24A2
AC076968.2	0	0.74427828	0.289	0.053	0	lnN2	AC076968.2
LIMCH1	0	0.74222358	0.941	0.917	0	lnN2	LIMCH1
OXR13	0	0.73334186	0.954	0.92	0	lnN2	OXR1
SLC9A2	0	0.72895843	0.278	0.055	0	lnN2	SLC9A2
CADPS1	0	0.72303922	0.968	0.937	0	lnN2	CADPS
AAK1	0	0.72051005	0.896	0.878	0	lnN2	AAK1
DNM3	0	0.71846615	0.921	0.89	0	lnN2	DNM3
GAD2	0	0.66631719	0.601	0.238	0	lnN2	GAD2
KLF5	0	0.65232972	0.266	0.034	0	lnN2	KLF5
PRDM1	0	0.64972873	0.281	0.049	0	lnN2	PRDM1
SLC6A12	0	0.63828959	0.753	0.329	0	lnN2	SLC6A1
MAFB	0	0.61597783	0.28	0.066	0	lnN2	MAFB
MCUB	0	0.6124793	0.254	0.066	0	lnN2	MCUB
TRIM67	0	0.59592121	0.262	0.045	0	lnN2	TRIM67
DLGAP1	0	0.58844724	0.996	0.989	0	lnN2	DLGAP1
NTRK2	0	0.58009505	0.947	0.944	0	lnN2	NTRK2
RELN	0	0.4252783	0.387	0.121	0	lnN2	RELN
TENM21	2.69E-307	0.69135473	0.975	0.931	1.03E-302	lnN2	TENM2
NOS1	2.08E-305	0.87617196	0.317	0.104	7.94E-301	lnN2	NOS1
KLHL53	7.06E-299	0.8157288	0.567	0.303	2.70E-294	lnN2	KLHL5
CACNA2D34	5.93E-295	0.76571941	0.91	0.866	2.27E-290	lnN2	CACNA2D3
RASGRF21	5.70E-293	0.84017498	0.81	0.595	2.18E-288	lnN2	RASGRF2
TOX31	1.11E-289	0.6651837	0.438	0.174	4.26E-285	lnN2	TOX3
UBASH3B1	1.25E-287	0.784978	0.6	0.325	4.79E-283	lnN2	UBASH3B
MARCH111	1.99E-282	0.95207068	0.556	0.328	7.61E-278	lnN2	11-Mar
NAV2	1.29E-281	0.65616375	0.926	0.921	4.92E-277	lnN2	NAV2
AC092969.11	1.04E-277	0.88583624	0.373	0.15	3.97E-273	lnN2	AC092969.1
AL445623.2	3.35E-277	0.91246156	0.593	0.364	1.28E-272	lnN2	AL445623.2
L3MBTL41	4.10E-275	0.93777208	0.642	0.386	1.57E-270	lnN2	L3MBTL4
PCLO3	1.84E-273	0.58893799	0.943	0.922	7.02E-269	lnN2	PCLO
COL19A12	6.35E-269	1.19198048	0.529	0.317	2.43E-264	lnN2	COL19A1
MYO5B	3.83E-263	0.59162653	0.256	0.073	1.46E-258	lnN2	MYO5B
ANKRD441	1.93E-262	0.88879139	0.624	0.416	7.38E-258	lnN2	ANKRD44
NXPH2	2.91E-262	0.79195469	0.302	0.101	1.11E-257	lnN2	NXPH2
FRMD4B1	7.26E-262	0.72223905	0.389	0.156	2.77E-257	lnN2	FRMD4B

SILC11	2.29E-258	0.67644883	0.456	0.205	8.77E-254	lnN2	SILC1
GPRIN32	5.83E-256	0.64046206	0.399	0.165	2.23E-251	lnN2	GPRIN3
CDH83	1.38E-255	0.8474523	0.786	0.654	5.27E-251	lnN2	CDH8
ERC1	5.41E-248	0.60647656	0.892	0.866	2.07E-243	lnN2	ERC1
FAM110B	7.22E-248	0.91090855	0.622	0.421	2.76E-243	lnN2	FAM110B
PTCHD4	7.09E-246	0.73982226	0.642	0.386	2.71E-241	lnN2	PTCHD4
ENOX21	8.51E-244	0.88664824	0.372	0.168	3.25E-239	lnN2	ENOX2
GRIP21	3.29E-242	0.54440722	0.419	0.176	1.26E-237	lnN2	GRIP2
NCOA2	2.67E-240	0.73091846	0.798	0.74	1.02E-235	lnN2	NCOA2
TMTC11	1.97E-239	0.88708368	0.702	0.555	7.54E-235	lnN2	TMTC1
MID11	4.32E-237	0.62514728	0.33	0.128	1.65E-232	lnN2	MID1
MIR181A1HC	6.17E-236	0.83378246	0.636	0.434	2.36E-231	lnN2	MIR181A1HC
SMYD3	4.42E-234	0.61778197	0.935	0.932	1.69E-229	lnN2	SMYD3
AL592156.2	1.36E-230	0.90913215	0.297	0.113	5.21E-226	lnN2	AL592156.2
AL365361.1	8.31E-230	0.52998307	0.299	0.114	3.18E-225	lnN2	AL365361.1
GARNL31	6.50E-227	0.66491554	0.808	0.72	2.48E-222	lnN2	GARNL3
CACNA2D2	5.26E-225	0.58497059	0.378	0.168	2.01E-220	lnN2	CACNA2D2
ZNF6081	4.17E-224	0.71604221	0.57	0.345	1.60E-219	lnN2	ZNF608
PACRG1	3.85E-222	0.82939531	0.783	0.704	1.47E-217	lnN2	PACRG
DLX11	9.00E-222	0.44215964	0.267	0.089	3.44E-217	lnN2	DLX1
BCL11A2	1.07E-220	0.88800782	0.719	0.593	4.10E-216	lnN2	BCL11A
ADAMTSL3	3.62E-217	0.94637431	0.486	0.28	1.38E-212	lnN2	ADAMTSL3
TOX21	1.69E-215	0.74060132	0.406	0.194	6.46E-211	lnN2	TOX2
NBEA	4.86E-215	0.44302812	0.965	0.96	1.86E-210	lnN2	NBEA
RAB311	1.99E-212	0.67829061	0.305	0.122	7.62E-208	lnN2	RAB31
CTNND2	5.04E-210	0.51571846	0.98	0.97	1.93E-205	lnN2	CTNND2
TCF41	7.90E-209	0.44214888	0.956	0.958	3.02E-204	lnN2	TCF4
GRIA1	2.63E-208	0.54230438	0.933	0.922	1.00E-203	lnN2	GRIA1
RIPOR21	2.81E-208	0.75582748	0.635	0.458	1.07E-203	lnN2	RIPOR2
PTPRN21	1.62E-207	0.48433826	0.951	0.95	6.20E-203	lnN2	PTPRN2
GNG4	4.47E-203	0.54376261	0.329	0.135	1.71E-198	lnN2	GNG4
DKK21	3.76E-200	0.63652718	0.272	0.103	1.44E-195	lnN2	DKK2
ZNF462	2.70E-199	0.65997002	0.485	0.276	1.03E-194	lnN2	ZNF462
SFMBT21	7.65E-199	0.87636334	0.562	0.374	2.92E-194	lnN2	SFMBT2
NTN41	2.06E-195	0.62346592	0.425	0.218	7.88E-191	lnN2	NTN4
TRPC61	3.69E-193	0.67747981	0.304	0.124	1.41E-188	lnN2	TRPC6
SHTN12	5.59E-190	0.69800546	0.755	0.671	2.14E-185	lnN2	SHTN1
NPAS1	1.20E-186	0.58297641	0.316	0.137	4.60E-182	lnN2	NPAS1
UST2	3.52E-186	0.60582204	0.314	0.135	1.35E-181	lnN2	UST
PHACTR21	3.89E-185	0.97954669	0.559	0.401	1.49E-180	lnN2	PHACTR2
AC025809.11	6.91E-178	0.75527961	0.492	0.31	2.64E-173	lnN2	AC025809.1
SATB11	4.64E-177	0.80501243	0.495	0.331	1.77E-172	lnN2	SATB1
KAZN1	3.79E-176	0.40874146	0.986	0.951	1.45E-171	lnN2	KAZN
ADCYAP1R11	5.17E-172	0.57915209	0.493	0.291	1.98E-167	lnN2	ADCYAP1R1
BCL11B1	1.08E-167	0.52608789	0.462	0.245	4.15E-163	lnN2	BCL11B
CLMP	8.62E-160	0.63724956	0.3	0.135	3.30E-155	lnN2	CLMP
TMEM47	9.52E-158	0.43107981	0.256	0.106	3.64E-153	lnN2	TMEM47
KIZ	6.68E-157	0.70592635	0.637	0.545	2.55E-152	lnN2	KIZ
DAB12	8.08E-156	0.61083282	0.905	0.878	3.09E-151	lnN2	DAB1
PIP5K1B	5.31E-153	0.71971171	0.614	0.473	2.03E-148	lnN2	PIP5K1B
FAM135B1	4.44E-152	0.69629283	0.73	0.627	1.70E-147	lnN2	FAM135B
PLPPR11	1.15E-151	0.71788333	0.474	0.286	4.39E-147	lnN2	PLPPR1
PDE4B2	6.79E-150	1.00194804	0.698	0.609	2.60E-145	lnN2	PDE4B
AC006115.2	4.42E-149	0.79696595	0.52	0.379	1.69E-144	lnN2	AC006115.2
FRMD4A1	3.32E-148	0.31353152	0.991	0.988	1.27E-143	lnN2	FRMD4A
MYT1L1	4.66E-148	0.35264305	0.97	0.971	1.78E-143	lnN2	MYT1L
SETBP11	1.75E-147	0.46510287	0.893	0.889	6.70E-143	lnN2	SETBP1
AMOTL1	4.69E-147	0.49896264	0.374	0.195	1.79E-142	lnN2	AMOTL1
PITPNC11	7.66E-147	0.57770896	0.658	0.485	2.93E-142	lnN2	PITPNC1
ZNF7041	1.29E-146	0.65049212	0.733	0.669	4.95E-142	lnN2	ZNF704
RIN22	2.36E-146	0.60299556	0.382	0.201	9.03E-142	lnN2	RIN2
DTNA1	5.07E-142	0.45960143	0.884	0.847	1.94E-137	lnN2	DTNA
PPP2R2B2	5.86E-140	0.40984695	0.958	0.956	2.24E-135	lnN2	PPP2R2B

B3GAT21	4.07E-138	0.60497575	0.262	0.119	1.55E-133	lnN2	B3GAT2
SNHG14	4.85E-138	0.25089797	0.943	0.948	1.86E-133	lnN2	SNHG14
NETO21	1.61E-136	0.70491754	0.54	0.404	6.15E-132	lnN2	NETO2
ANKRD36	4.09E-136	0.52754189	0.831	0.842	1.56E-131	lnN2	ANKRD36
AC073332.1	5.31E-133	0.97289144	0.468	0.32	2.03E-128	lnN2	AC073332.1
PALM2-AKAF	6.35E-133	0.6829936	0.733	0.702	2.43E-128	lnN2	PALM2-AKAP
CACNG41	3.02E-129	0.47029619	0.309	0.151	1.15E-124	lnN2	CACNG4
IGF11	6.55E-129	0.41757998	0.305	0.143	2.50E-124	lnN2	IGF1
TIMP21	7.19E-129	0.56056138	0.462	0.295	2.75E-124	lnN2	TIMP2
EPB41L4A2	1.41E-127	0.89303627	0.297	0.156	5.39E-123	lnN2	EPB41L4A
RNASET21	3.25E-126	0.58438984	0.409	0.258	1.24E-121	lnN2	RNASET2
IQSEC12	7.91E-126	0.55194576	0.798	0.781	3.02E-121	lnN2	IQSEC1
TMEFF23	2.37E-124	0.61668884	0.814	0.762	9.05E-120	lnN2	TMEFF2
BACH12	1.91E-123	0.46693325	0.394	0.225	7.29E-119	lnN2	BACH1
RIMS21	5.93E-123	0.34650121	0.97	0.969	2.27E-118	lnN2	RIMS2
CDH71	1.83E-121	0.71398396	0.418	0.267	6.99E-117	lnN2	CDH7
LRP8	6.51E-121	0.66691327	0.438	0.304	2.49E-116	lnN2	LRP8
ST5	4.19E-120	0.62293296	0.481	0.337	1.60E-115	lnN2	ST5
AFAP11	1.11E-119	0.56262761	0.536	0.39	4.25E-115	lnN2	AFAP1
C3orf67-AS1	1.93E-118	0.65989772	0.426	0.275	7.39E-114	lnN2	C3orf67-AS1
OSBPL81	4.21E-118	0.51377521	0.766	0.752	1.61E-113	lnN2	OSBPL8
PEG3	5.96E-118	0.64209228	0.645	0.58	2.28E-113	lnN2	PEG3
RSPO21	1.69E-116	0.71756979	0.538	0.398	6.48E-112	lnN2	RSPO2
SIAH3	5.86E-114	0.5111152	0.378	0.226	2.24E-109	lnN2	SIAH3
SAMD52	8.75E-114	0.93186136	0.438	0.31	3.34E-109	lnN2	SAMD5
MPPED1	2.47E-113	0.57074967	0.562	0.447	9.45E-109	lnN2	MPPED1
KCNC2	1.05E-111	0.40032068	0.86	0.835	4.02E-107	lnN2	KCNC2
ANO41	3.32E-111	0.51830961	0.705	0.594	1.27E-106	lnN2	ANO4
NRIP31	2.22E-110	0.40275472	0.371	0.21	8.48E-106	lnN2	NRIP3
FARP12	5.45E-110	0.53087073	0.71	0.656	2.09E-105	lnN2	FARP1
CTTNBP21	2.37E-109	0.56334554	0.699	0.677	9.06E-105	lnN2	CTTNBP2
ARHGAP61	2.94E-109	0.81068545	0.301	0.168	1.12E-104	lnN2	ARHGAP6
CCDC136	2.67E-107	0.56290765	0.505	0.387	1.02E-102	lnN2	CCDC136
DPP6	7.42E-107	0.49619154	0.887	0.921	2.83E-102	lnN2	DPP6
SLC44A52	1.23E-105	0.50078898	0.776	0.691	4.69E-101	lnN2	SLC44A5
SH3PXD2A	2.01E-105	0.54073769	0.715	0.704	7.67E-101	lnN2	SH3PXD2A
SPHKAP1	1.73E-103	0.91181998	0.292	0.158	6.63E-99	lnN2	SPHKAP
BICD11	1.02E-102	0.47830976	0.791	0.795	3.91E-98	lnN2	BICD1
TMSB4X1	2.32E-102	0.66123436	0.594	0.509	8.86E-98	lnN2	TMSB4X
VPS13C	7.61E-102	0.44284514	0.793	0.808	2.91E-97	lnN2	VPS13C
ANKRD36C1	7.80E-102	0.46603613	0.799	0.818	2.98E-97	lnN2	ANKRD36C
CELF41	7.44E-100	0.43416752	0.895	0.909	2.84E-95	lnN2	CELF4
GRIN2D1	6.04E-99	0.35821949	0.274	0.137	2.31E-94	lnN2	GRIN2D
GRM12	1.31E-98	0.65398536	0.699	0.639	5.02E-94	lnN2	GRM1
TLN22	1.60E-97	0.55732074	0.758	0.736	6.10E-93	lnN2	TLN2
PRKG2	4.65E-97	0.57016364	0.296	0.172	1.78E-92	lnN2	PRKG2
KCNK22	4.67E-97	0.47461675	0.297	0.164	1.79E-92	lnN2	KCNK2
LINC011021	1.47E-96	0.53996157	0.457	0.319	5.61E-92	lnN2	LINC01102
SLC8A31	1.58E-96	0.57418647	0.583	0.482	6.05E-92	lnN2	SLC8A3
RAP1GDS11	1.06E-95	0.55664437	0.652	0.62	4.05E-91	lnN2	RAP1GDS1
INSYN2B2	2.21E-95	0.62918142	0.351	0.222	8.43E-91	lnN2	INSYN2B
FRMD52	2.53E-95	0.37985469	0.898	0.863	9.65E-91	lnN2	FRMD5
HTRA12	1.74E-94	0.40896805	0.294	0.159	6.67E-90	lnN2	HTRA1
PLAGL11	1.21E-93	0.54404498	0.359	0.23	4.63E-89	lnN2	PLAGL1
REV3L1	5.78E-93	0.42652748	0.781	0.778	2.21E-88	lnN2	REV3L
MAP3K52	7.22E-93	0.69559765	0.661	0.642	2.76E-88	lnN2	MAP3K5
MAGI22	1.30E-92	0.25648997	0.987	0.987	4.99E-88	lnN2	MAGI2
CDH23	1.64E-91	0.56194609	0.757	0.758	6.25E-87	lnN2	CDH2
SPRY4-AS1	2.21E-91	0.59224912	0.317	0.192	8.46E-87	lnN2	SPRY4-AS1
ADCY21	2.69E-91	0.53196955	0.784	0.86	1.03E-86	lnN2	ADCY2
EPB41L23	6.34E-90	0.44964086	0.791	0.709	2.42E-85	lnN2	EPB41L2
AP000943.21	1.55E-89	0.51966037	0.341	0.205	5.91E-85	lnN2	AP000943.2
NTM	3.57E-89	0.55011958	0.813	0.855	1.37E-84	lnN2	NTM

OSBPL101	4.18E-88	0.52361237	0.577	0.48	1.60E-83	lnN2	OSBPL10
FSTL5	6.32E-87	0.43940902	0.642	0.494	2.41E-82	lnN2	FSTL5
GRIN2B1	1.74E-86	0.28004394	0.93	0.948	6.66E-82	lnN2	GRIN2B
ABAT	1.55E-85	0.55668524	0.568	0.5	5.92E-81	lnN2	ABAT
EVA1C1	1.70E-85	0.54063224	0.461	0.349	6.50E-81	lnN2	EVA1C
UTRN1	2.01E-81	0.7650866	0.366	0.25	7.68E-77	lnN2	UTRN
NF1	5.22E-81	0.40015207	0.797	0.818	1.99E-76	lnN2	NF1
RBMS1	5.17E-80	0.57408815	0.527	0.447	1.97E-75	lnN2	RBMS1
AC079296.11	8.24E-80	0.37130333	0.305	0.178	3.15E-75	lnN2	AC079296.1
ATP1B21	1.63E-79	0.39232236	0.363	0.225	6.24E-75	lnN2	ATP1B2
RPH3A	5.75E-79	0.46795812	0.597	0.505	2.20E-74	lnN2	RPH3A
NRSN1	6.35E-78	0.50726571	0.553	0.487	2.43E-73	lnN2	NRSN1
ANTXR11	7.24E-78	0.63841878	0.49	0.408	2.77E-73	lnN2	ANTXR1
SCN9A	3.44E-77	0.52388363	0.308	0.196	1.31E-72	lnN2	SCN9A
ADAMTS9-A5	1.01E-76	0.81883767	0.458	0.341	3.87E-72	lnN2	ADAMTS9-A5
AL033504.11	3.27E-76	0.74454191	0.368	0.258	1.25E-71	lnN2	AL033504.1
PTPRG	2.32E-74	0.39818582	0.898	0.91	8.87E-70	lnN2	PTPRG
ADGRL31	6.43E-74	0.25626008	0.972	0.963	2.46E-69	lnN2	ADGRL3
ARHGAP20	6.84E-74	0.56841022	0.522	0.464	2.62E-69	lnN2	ARHGAP20
PAN3	2.18E-72	0.47394691	0.677	0.683	8.34E-68	lnN2	PAN3
LGMN	6.06E-72	0.46657061	0.369	0.262	2.32E-67	lnN2	LGMN
PLOD22	6.60E-72	0.46479633	0.329	0.214	2.52E-67	lnN2	PLOD2
GNAS1	1.23E-71	0.43777726	0.806	0.827	4.68E-67	lnN2	GNAS
STARD9	1.57E-71	0.5624178	0.44	0.345	6.02E-67	lnN2	STARD9
ARHGAP281	1.79E-71	0.42836522	0.323	0.203	6.85E-67	lnN2	ARHGAP28
TNRC6A1	1.86E-71	0.26394099	0.945	0.96	7.11E-67	lnN2	TNRC6A
PWRN12	1.27E-70	0.37540357	0.604	0.464	4.84E-66	lnN2	PWRN1
PPM1K	1.45E-70	0.51537477	0.607	0.589	5.53E-66	lnN2	PPM1K
ADAMTS193	1.03E-69	0.66503701	0.456	0.364	3.94E-65	lnN2	ADAMTS19
MACF1	2.14E-69	0.32753901	0.897	0.924	8.18E-65	lnN2	MACF1
TRIO	4.45E-68	0.29105488	0.909	0.933	1.70E-63	lnN2	TRIO
TRPC41	5.92E-68	0.45588696	0.39	0.271	2.26E-63	lnN2	TRPC4
AGPAT4	1.06E-67	0.44980895	0.702	0.706	4.06E-63	lnN2	AGPAT4
LINC011223	5.63E-67	0.41573603	0.767	0.688	2.15E-62	lnN2	LINC01122
NFASC1	1.27E-66	0.43572583	0.78	0.814	4.85E-62	lnN2	NFASC
ENOX11	3.31E-66	0.39542545	0.831	0.854	1.27E-61	lnN2	ENOX1
ITGA92	3.97E-66	0.70229361	0.496	0.432	1.52E-61	lnN2	ITGA9
KLF122	4.12E-66	0.43323407	0.665	0.61	1.58E-61	lnN2	KLF12
FAM184B	9.08E-66	0.39925249	0.252	0.151	3.47E-61	lnN2	FAM184B
NHS1	9.43E-66	0.39043168	0.57	0.445	3.60E-61	lnN2	NHS
PWRN41	2.79E-65	0.38480192	0.345	0.22	1.07E-60	lnN2	PWRN4
CCSER11	3.93E-65	0.28495618	0.961	0.965	1.50E-60	lnN2	CCSER1
PALLD	1.05E-64	0.46552323	0.501	0.413	4.01E-60	lnN2	PALLD
ANKRD121	1.49E-64	0.45752897	0.759	0.782	5.71E-60	lnN2	ANKRD12
GALNT8	8.50E-64	0.4503639	0.396	0.297	3.25E-59	lnN2	GALNT8
TMEM178B1	6.01E-62	0.26639029	0.912	0.922	2.30E-57	lnN2	TMEM178B
LRP1B4	1.83E-61	0.28782021	0.954	0.95	7.00E-57	lnN2	LRP1B
WASF3	1.60E-60	0.44543261	0.463	0.38	6.10E-56	lnN2	WASF3
EPHA71	2.05E-60	0.53389966	0.592	0.543	7.86E-56	lnN2	EPHA7
TRHDE-AS11	5.48E-60	0.45768179	0.289	0.192	2.09E-55	lnN2	TRHDE-AS1
ZEB22	1.23E-58	0.31228582	0.816	0.823	4.72E-54	lnN2	ZEB2
GREB11	3.87E-58	0.5117925	0.422	0.337	1.48E-53	lnN2	GREB1
PDE1C2	7.82E-57	0.41679467	0.596	0.492	2.99E-52	lnN2	PDE1C
RAB8B	1.53E-56	0.41460086	0.38	0.287	5.85E-52	lnN2	RAB8B
MPDZ	1.77E-56	0.39715443	0.74	0.773	6.76E-52	lnN2	MPDZ
RANBP171	2.16E-56	0.40761716	0.556	0.468	8.24E-52	lnN2	RANBP17
SLC9A91	1.36E-55	0.34025309	0.451	0.349	5.19E-51	lnN2	SLC9A9
NLGN4X	1.08E-54	0.41123061	0.709	0.732	4.14E-50	lnN2	NLGN4X
MARCH4	1.51E-54	0.49455571	0.473	0.404	5.76E-50	lnN2	4-Mar
FAM49B1	2.34E-53	0.3476098	0.775	0.81	8.94E-49	lnN2	FAM49B
CDH4	3.77E-53	0.49309479	0.502	0.424	1.44E-48	lnN2	CDH4
MYRIP2	1.00E-52	0.34809946	0.812	0.807	3.83E-48	lnN2	MYRIP
DIXDC11	1.01E-52	0.4343349	0.523	0.463	3.88E-48	lnN2	DIXDC1

AKAP7	1.16E-51	0.41994682	0.453	0.386	4.42E-47	lnN2	AKAP7
PTPRU1	1.30E-51	0.40053363	0.286	0.196	4.98E-47	lnN2	PTPRU
SIDT12	2.29E-51	0.48321616	0.564	0.517	8.77E-47	lnN2	SIDT1
VAT1L	3.15E-51	0.4273055	0.333	0.242	1.20E-46	lnN2	VAT1L
MTSS12	4.41E-51	0.26929709	0.651	0.566	1.69E-46	lnN2	MTSS1
JAZF12	4.84E-51	0.33428177	0.792	0.824	1.85E-46	lnN2	JAZF1
EPHB61	4.85E-51	0.47818111	0.481	0.424	1.85E-46	lnN2	EPHB6
UMAD1	9.84E-51	0.45085571	0.65	0.651	3.76E-46	lnN2	UMAD1
SAMD4A1	3.10E-50	0.46549528	0.53	0.467	1.18E-45	lnN2	SAMD4A
CACNB42	9.64E-50	0.32690847	0.843	0.855	3.68E-45	lnN2	CACNB4
ABCA5	1.40E-49	0.37032566	0.733	0.763	5.34E-45	lnN2	ABCA5
CHRM22	1.97E-49	0.48862217	0.312	0.213	7.53E-45	lnN2	CHRM2
PPP4R42	2.52E-49	0.44037838	0.474	0.401	9.62E-45	lnN2	PPP4R4
PARD31	3.48E-49	0.27856178	0.441	0.315	1.33E-44	lnN2	PARD3
INPP5F1	5.04E-49	0.42993979	0.591	0.583	1.93E-44	lnN2	INPP5F
ILDR22	5.47E-49	0.46408552	0.417	0.34	2.09E-44	lnN2	ILDR2
POU3F31	1.52E-48	0.32487838	0.258	0.167	5.81E-44	lnN2	POU3F3
CABLES1	1.66E-48	0.54695177	0.424	0.361	6.33E-44	lnN2	CABLES1
GRID11	1.21E-47	0.2960316	0.836	0.854	4.61E-43	lnN2	GRID1
OSBPL91	1.70E-47	0.41272208	0.58	0.559	6.49E-43	lnN2	OSBPL9
RAB3IP	9.43E-46	0.30640516	0.369	0.271	3.60E-41	lnN2	RAB3IP
CCDC88A	7.02E-45	0.31754311	0.831	0.847	2.68E-40	lnN2	CCDC88A
TET21	1.55E-44	0.43797971	0.485	0.437	5.94E-40	lnN2	TET2
HUNK	1.58E-44	0.44233433	0.386	0.307	6.04E-40	lnN2	HUNK
REPS2	4.22E-44	0.37762439	0.687	0.709	1.61E-39	lnN2	REPS2
ST6GALNAC5	7.07E-44	0.34113156	0.776	0.711	2.70E-39	lnN2	ST6GALNAC5
PLA2R1	2.65E-43	0.38000666	0.271	0.189	1.01E-38	lnN2	PLA2R1
PDE3B2	2.76E-43	0.44248531	0.556	0.518	1.05E-38	lnN2	PDE3B
EPHA61	2.92E-43	0.46226322	0.688	0.661	1.12E-38	lnN2	EPHA6
AHR1	1.02E-42	0.46053385	0.332	0.258	3.90E-38	lnN2	AHR
C11orf58	1.73E-42	0.52258612	0.535	0.527	6.61E-38	lnN2	C11orf58
ANXA4	1.30E-41	0.40831544	0.252	0.175	4.98E-37	lnN2	ANXA4
TRAF3IP2-AS	3.32E-41	0.3411687	0.723	0.752	1.27E-36	lnN2	TRAF3IP2-AS
WWC2	6.21E-41	0.41411815	0.507	0.469	2.37E-36	lnN2	WWC2
OSBPL31	7.13E-40	0.34479062	0.503	0.435	2.73E-35	lnN2	OSBPL3
ST6GALNAC3	1.14E-38	0.47045893	0.548	0.506	4.35E-34	lnN2	ST6GALNAC3
FCHSD22	1.79E-38	0.30545204	0.643	0.614	6.86E-34	lnN2	FCHSD2
DAAM1	2.75E-38	0.33014121	0.725	0.754	1.05E-33	lnN2	DAAM1
SLITRK3	1.55E-37	0.34010366	0.276	0.201	5.91E-33	lnN2	SLITRK3
DGKE	1.69E-37	0.39438056	0.468	0.43	6.47E-33	lnN2	DGKE
DMD5	1.50E-36	0.28937672	0.878	0.925	5.71E-32	lnN2	DMD
PHKB1	2.08E-36	0.38219967	0.573	0.576	7.96E-32	lnN2	PHKB
RNF157	1.13E-35	0.39094284	0.541	0.529	4.33E-31	lnN2	RNF157
PRKN1	1.82E-35	0.27946064	0.834	0.866	6.96E-31	lnN2	PRKN
RAPGEF61	2.29E-35	0.34469563	0.673	0.697	8.77E-31	lnN2	RAPGEF6
BACH22	3.01E-35	0.44740196	0.613	0.614	1.15E-30	lnN2	BACH2
TCF122	3.21E-35	0.33268637	0.691	0.708	1.23E-30	lnN2	TCF12
SEPTIN6	3.75E-35	0.36570244	0.357	0.288	1.43E-30	lnN2	SEPTIN6
CYTH3	1.15E-34	0.42164848	0.528	0.518	4.39E-30	lnN2	CYTH3
NREP1	1.81E-34	0.42344061	0.415	0.358	6.94E-30	lnN2	NREP
SRGAP12	2.29E-34	0.35746114	0.326	0.251	8.75E-30	lnN2	SRGAP1
ARL4C1	3.46E-34	0.25680493	0.355	0.268	1.32E-29	lnN2	ARL4C
POLA1	4.48E-34	0.42217331	0.447	0.4	1.71E-29	lnN2	POLA1
KCNB23	5.28E-34	0.41021534	0.71	0.688	2.02E-29	lnN2	KCNB2
FHIT2	1.54E-33	0.32643938	0.733	0.746	5.88E-29	lnN2	FHIT
NAALAD21	2.20E-33	0.44090109	0.497	0.475	8.41E-29	lnN2	NAALAD2
AF117829.1	2.78E-33	0.40860471	0.543	0.533	1.06E-28	lnN2	AF117829.1
IL6ST1	5.60E-33	0.36470819	0.388	0.325	2.14E-28	lnN2	IL6ST
ABLIM12	5.97E-33	0.25906857	0.819	0.835	2.28E-28	lnN2	ABLIM1
WWOX1	8.25E-33	0.36180687	0.782	0.822	3.15E-28	lnN2	WWOX
CRTAC11	9.42E-33	0.30796476	0.314	0.236	3.60E-28	lnN2	CRTAC1
SPATS2L1	1.22E-32	0.35564545	0.658	0.659	4.65E-28	lnN2	SPATS2L
VSTM2L	1.14E-31	0.34533089	0.358	0.297	4.37E-27	lnN2	VSTM2L

PRKCG	1.53E-31	0.39222347	0.355	0.297	5.83E-27	lnN2	PRKCG
AC091138.1	2.56E-31	0.37872135	0.339	0.284	9.80E-27	lnN2	AC091138.1
OSBPL6	2.91E-31	0.25969937	0.764	0.807	1.11E-26	lnN2	OSBPL6
GPI	2.93E-31	0.4574054	0.615	0.663	1.12E-26	lnN2	GPI
LRRFIP1	5.63E-31	0.30961904	0.707	0.753	2.15E-26	lnN2	LRRFIP1
FRAS11	1.57E-30	0.57255542	0.485	0.466	6.02E-26	lnN2	FRAS1
OLFM21	3.75E-30	0.31618259	0.366	0.295	1.43E-25	lnN2	OLFM2
CFAP1611	4.78E-30	0.33308781	0.382	0.315	1.83E-25	lnN2	CFAP161
SCD51	5.86E-30	0.35719293	0.603	0.61	2.24E-25	lnN2	SCD5
AC073050.1	1.36E-29	0.25518349	0.757	0.776	5.19E-25	lnN2	AC073050.1
KLHL322	2.07E-29	0.29556808	0.687	0.689	7.91E-25	lnN2	KLHL32
SH3GL32	2.75E-29	0.33246407	0.771	0.826	1.05E-24	lnN2	SH3GL3
PKD1L11	1.72E-28	0.34818385	0.33	0.265	6.59E-24	lnN2	PKD1L1
LINC023892	2.11E-28	0.40069544	0.507	0.474	8.07E-24	lnN2	LINC02389
DCX1	2.56E-28	0.30610279	0.448	0.396	9.79E-24	lnN2	DCX
TRANK1	2.75E-28	0.40408919	0.579	0.598	1.05E-23	lnN2	TRANK1
CYTH12	3.31E-28	0.38235654	0.472	0.44	1.26E-23	lnN2	CYTH1
TMEM651	4.39E-28	0.38663971	0.429	0.399	1.68E-23	lnN2	TMEM65
ZNF618	5.76E-28	0.3680668	0.328	0.273	2.20E-23	lnN2	ZNF618
KSR1	6.02E-28	0.35280103	0.413	0.366	2.30E-23	lnN2	KSR1
AL158077.23	2.82E-27	0.38561027	0.337	0.275	1.08E-22	lnN2	AL158077.2
VSTM2B	2.83E-27	0.41452135	0.38	0.339	1.08E-22	lnN2	VSTM2B
PODXL21	5.19E-27	0.34119441	0.438	0.391	1.98E-22	lnN2	PODXL2
LINC027981	6.49E-27	0.34542534	0.274	0.21	2.48E-22	lnN2	LINC02798
PDE10A2	1.05E-26	0.33868883	0.691	0.678	4.00E-22	lnN2	PDE10A
PRKG12	1.11E-26	0.35061184	0.647	0.607	4.24E-22	lnN2	PRKG1
SSBP21	1.52E-26	0.30804029	0.764	0.829	5.81E-22	lnN2	SSBP2
LINC011381	1.67E-26	0.39012932	0.455	0.431	6.38E-22	lnN2	LINC01138
NAV1	1.71E-26	0.30507838	0.651	0.678	6.53E-22	lnN2	NAV1
PTPRT3	4.65E-26	0.50330093	0.668	0.689	1.78E-21	lnN2	PTPRT
PDZRN32	7.66E-26	0.26064552	0.765	0.765	2.93E-21	lnN2	PDZRN3
THSD7A1	1.30E-25	0.63191562	0.519	0.511	4.97E-21	lnN2	THSD7A
STAT5B1	3.58E-25	0.36667769	0.39	0.352	1.37E-20	lnN2	STAT5B
MSI21	7.12E-25	0.25000214	0.657	0.662	2.72E-20	lnN2	MSI2
PKD2	1.23E-24	0.35427289	0.597	0.625	4.68E-20	lnN2	PKD2
KIF21A	1.61E-24	0.27930099	0.672	0.724	6.15E-20	lnN2	KIF21A
TGFBR31	2.07E-24	0.27946236	0.25	0.189	7.91E-20	lnN2	TGFBR3
NIPAL3	2.86E-24	0.42156454	0.332	0.292	1.09E-19	lnN2	NIPAL3
SLC9A7	4.00E-24	0.32904093	0.425	0.39	1.53E-19	lnN2	SLC9A7
ENAH1	6.02E-24	0.3209128	0.544	0.543	2.30E-19	lnN2	ENAH
GPR137C1	6.58E-24	0.32117847	0.602	0.609	2.51E-19	lnN2	GPR137C
SERINC5	8.40E-24	0.36572225	0.451	0.424	3.21E-19	lnN2	SERINC5
AKAP9	1.60E-23	0.26368757	0.731	0.781	6.10E-19	lnN2	AKAP9
ACSL6	1.84E-23	0.32567505	0.476	0.457	7.05E-19	lnN2	ACSL6
ANKRD50	2.60E-23	0.26031632	0.255	0.197	9.94E-19	lnN2	ANKRD50
TRMT11	3.19E-23	0.28965921	0.747	0.807	1.22E-18	lnN2	TRMT11
HSPH1	4.34E-23	0.52613018	0.428	0.588	1.66E-18	lnN2	HSPH1
HMGB1	6.55E-23	0.29220018	0.752	0.803	2.50E-18	lnN2	HMGB1
TACC21	1.77E-22	0.32541392	0.438	0.413	6.78E-18	lnN2	TACC2
C2orf27A	2.59E-22	0.3511717	0.345	0.303	9.89E-18	lnN2	C2orf27A
CPSF6	2.66E-22	0.32090003	0.6	0.635	1.02E-17	lnN2	CPSF6
AC011474.11	3.43E-22	0.43617264	0.336	0.294	1.31E-17	lnN2	AC011474.1
GALNT21	5.81E-22	0.3440089	0.492	0.482	2.22E-17	lnN2	GALNT2
CHST152	1.14E-21	0.33204639	0.447	0.419	4.34E-17	lnN2	CHST15
ANKRD36B	1.34E-21	0.35160567	0.523	0.543	5.11E-17	lnN2	ANKRD36B
GLG1	1.44E-21	0.27525107	0.691	0.754	5.52E-17	lnN2	GLG1
ITFG1	1.67E-21	0.28893402	0.737	0.799	6.37E-17	lnN2	ITFG1
CORO2B	2.28E-21	0.34355076	0.571	0.592	8.73E-17	lnN2	CORO2B
FREM1	2.35E-21	0.38276596	0.275	0.221	8.98E-17	lnN2	FREM1
BCAT11	5.17E-21	0.28617932	0.388	0.35	1.97E-16	lnN2	BCAT1
DLEU7	5.64E-21	0.40017354	0.35	0.313	2.15E-16	lnN2	DLEU7
PLA2G4C	5.64E-21	0.39687348	0.431	0.414	2.16E-16	lnN2	PLA2G4C
APC1	8.59E-21	0.26644508	0.695	0.745	3.28E-16	lnN2	APC

KCNMB2-AS1	1.19E-20	0.31712211	0.282	0.229	4.53E-16	lnN2	KCNMB2-AS1
ABCA10	1.41E-20	0.37963427	0.516	0.527	5.39E-16	lnN2	ABCA10
SRGAP22	2.77E-20	0.29264942	0.49	0.486	1.06E-15	lnN2	SRGAP2
TASP1	4.37E-20	0.33761381	0.533	0.549	1.67E-15	lnN2	TASP1
GNG2	5.75E-20	0.29495986	0.476	0.446	2.20E-15	lnN2	GNG2
PTPRJ	1.14E-19	0.272939	0.602	0.629	4.36E-15	lnN2	PTPRJ
PNMA2	2.65E-19	0.34513053	0.518	0.532	1.01E-14	lnN2	PNMA2
TMEFF1	3.74E-19	0.33613287	0.41	0.388	1.43E-14	lnN2	TMEFF1
PHF20L1	5.53E-19	0.34098983	0.588	0.639	2.12E-14	lnN2	PHF20L1
LINC011972	6.01E-19	0.3026059	0.399	0.351	2.30E-14	lnN2	LINC01197
MIR100HG1	6.29E-19	0.29946776	0.662	0.709	2.40E-14	lnN2	MIR100HG
IGSF3	7.20E-19	0.27233862	0.254	0.207	2.75E-14	lnN2	IGSF3
MGLL1	1.05E-18	0.32106848	0.46	0.44	4.01E-14	lnN2	MGLL
UNC13C	1.49E-18	0.32427241	0.567	0.584	5.69E-14	lnN2	UNC13C
RALGPS22	1.82E-18	0.33286302	0.531	0.543	6.95E-14	lnN2	RALGPS2
EEF1A12	2.16E-18	0.36160026	0.569	0.578	8.26E-14	lnN2	EEF1A1
ZFYVE9	2.36E-18	0.2895733	0.64	0.693	9.02E-14	lnN2	ZFYVE9
MAN1A11	6.84E-18	0.27790722	0.521	0.49	2.62E-13	lnN2	MAN1A1
LINC00342	9.05E-18	0.37056737	0.617	0.639	3.46E-13	lnN2	LINC00342
ETV61	2.74E-17	0.38408882	0.473	0.469	1.05E-12	lnN2	ETV6
MT-ATP81	4.65E-17	0.3261145	0.59	0.593	1.78E-12	lnN2	MT-ATP8
ZFHX2-AS11	7.09E-17	0.26412161	0.311	0.267	2.71E-12	lnN2	ZFHX2-AS1
ZC3H12C	9.24E-17	0.329416	0.32	0.288	3.53E-12	lnN2	ZC3H12C
XYLT12	9.87E-17	0.35319989	0.569	0.562	3.77E-12	lnN2	XYLT1
FUT81	1.01E-16	0.2866593	0.657	0.701	3.87E-12	lnN2	FUT8
ZFYVE16	1.39E-16	0.30670631	0.563	0.592	5.33E-12	lnN2	ZFYVE16
PPARG	2.63E-16	0.31816143	0.314	0.274	1.00E-11	lnN2	PPARG
FXVD61	2.86E-16	0.29005477	0.593	0.623	1.09E-11	lnN2	FXVD6
CACNG31	2.96E-16	0.26735185	0.652	0.657	1.13E-11	lnN2	CACNG3
RIMKLB	5.86E-16	0.3036816	0.364	0.342	2.24E-11	lnN2	RIMKLB
PCDH19	6.48E-16	0.31439094	0.367	0.337	2.48E-11	lnN2	PCDH19
FAM189A11	7.61E-16	0.30981177	0.612	0.638	2.91E-11	lnN2	FAM189A1
NRIP11	1.04E-15	0.37676218	0.506	0.525	3.98E-11	lnN2	NRIP1
PCDH11Y1	1.41E-15	0.66766296	0.267	0.226	5.39E-11	lnN2	PCDH11Y
SASH12	1.84E-15	0.46542728	0.368	0.357	7.03E-11	lnN2	SASH1
AK3	2.91E-15	0.29552908	0.314	0.281	1.11E-10	lnN2	AK3
DENND2A1	1.43E-14	0.28155944	0.312	0.267	5.47E-10	lnN2	DENND2A
ALCAM2	1.87E-14	0.39159745	0.482	0.473	7.14E-10	lnN2	ALCAM
CALD11	1.88E-14	0.35067547	0.347	0.322	7.20E-10	lnN2	CALD1
AC092683.1	2.44E-14	0.42051655	0.434	0.427	9.33E-10	lnN2	AC092683.1
LINC00486	3.44E-14	0.35181813	0.595	0.627	1.31E-09	lnN2	LINC00486
KCNC1	4.51E-14	0.31091545	0.541	0.566	1.72E-09	lnN2	KCNC1
HS2ST1	7.61E-14	0.32147185	0.562	0.6	2.91E-09	lnN2	HS2ST1
CACNG2	8.35E-14	0.27694395	0.616	0.661	3.19E-09	lnN2	CACNG2
DENND5A	8.62E-14	0.31512823	0.464	0.471	3.30E-09	lnN2	DENND5A
GAP433	1.00E-13	0.26429781	0.553	0.541	3.84E-09	lnN2	GAP43
RNF1801	1.43E-13	0.27745229	0.547	0.584	5.48E-09	lnN2	RNF180
PEG10	2.31E-13	0.26388622	0.302	0.267	8.84E-09	lnN2	PEG10
DYNC1I2	4.06E-13	0.31197549	0.575	0.627	1.55E-08	lnN2	DYNC1I2
SLC36A11	5.07E-13	0.30676182	0.33	0.311	1.94E-08	lnN2	SLC36A1
KANSL1L	7.58E-13	0.32369511	0.455	0.463	2.90E-08	lnN2	KANSL1L
ANKRD28	9.55E-13	0.2740171	0.612	0.658	3.65E-08	lnN2	ANKRD28
EFHD22	1.82E-12	0.31023783	0.298	0.27	6.97E-08	lnN2	EFHD2
VSTM2A	3.74E-12	0.26248817	0.411	0.395	1.43E-07	lnN2	VSTM2A
AL627171.21	4.48E-12	0.34246371	0.457	0.455	1.71E-07	lnN2	AL627171.2
SNX25	4.95E-12	0.27074816	0.391	0.377	1.89E-07	lnN2	SNX25
GIT2	6.74E-12	0.29267688	0.501	0.531	2.57E-07	lnN2	GIT2
RBPJ1	7.39E-12	0.29818733	0.54	0.585	2.82E-07	lnN2	RBPJ
SH3KBP12	8.06E-12	0.26743398	0.57	0.61	3.08E-07	lnN2	SH3KBP1
PCGF51	2.33E-11	0.25186782	0.58	0.636	8.91E-07	lnN2	PCGF5
ERO1B1	2.47E-11	0.25551905	0.42	0.419	9.46E-07	lnN2	ERO1B
NCALD1	2.53E-11	0.32551607	0.688	0.778	9.67E-07	lnN2	NCALD
POU6F1	2.97E-11	0.28337444	0.325	0.306	1.14E-06	lnN2	POU6F1

GMCL1	3.01E-11	0.289294	0.418	0.427	1.15E-06	lnN2	GMCL1
ADAM10	6.75E-11	0.29569552	0.56	0.612	2.58E-06	lnN2	ADAM10
LMBRD1	8.16E-11	0.27257205	0.572	0.631	3.12E-06	lnN2	LMBRD1
MGAT4A	1.28E-10	0.30076367	0.457	0.472	4.89E-06	lnN2	MGAT4A
AC046134.2	2.85E-10	0.30657571	0.524	0.563	1.09E-05	lnN2	AC046134.2
NUP931	3.09E-10	0.28529593	0.47	0.481	1.18E-05	lnN2	NUP93
SMARCA21	6.66E-10	0.32595517	0.72	0.814	2.55E-05	lnN2	SMARCA2
JARID21	8.32E-10	0.25235185	0.584	0.636	3.18E-05	lnN2	JARID2
DPYSL5	1.56E-09	0.30290107	0.358	0.35	5.95E-05	lnN2	DPYSL5
MIR646HG2	1.69E-09	0.43917708	0.301	0.278	6.47E-05	lnN2	MIR646HG
TBC1D4	2.04E-09	0.28931366	0.459	0.468	7.81E-05	lnN2	TBC1D4
DIP2A2	2.21E-09	0.25409111	0.454	0.464	8.46E-05	lnN2	DIP2A
CPEB2	4.35E-09	0.30868301	0.427	0.443	0.00016633	lnN2	CPEB2
NEXMIF	4.83E-09	0.29199887	0.541	0.586	0.00018472	lnN2	NEXMIF
ZBTB202	8.56E-09	0.36618526	0.524	0.555	0.00032706	lnN2	ZBTB20
SEL1L32	9.44E-09	0.30446001	0.31	0.292	0.00036088	lnN2	SEL1L3
CKMT2-AS1	1.12E-08	0.31041982	0.373	0.376	0.00042991	lnN2	CKMT2-AS1
N4BP21	1.74E-08	0.25796003	0.375	0.367	0.00066655	lnN2	N4BP2
CC2D2A	2.07E-08	0.28505095	0.285	0.269	0.00079232	lnN2	CC2D2A
KCNT1	4.75E-08	0.29915033	0.528	0.568	0.00181455	lnN2	KCNT1
SIPA1L31	7.47E-08	0.25269085	0.525	0.564	0.00285362	lnN2	SIPA1L3
KCNJ61	9.66E-08	0.25102195	0.671	0.747	0.00369226	lnN2	KCNJ6
MAP2K6	1.14E-07	0.28987356	0.35	0.349	0.00436894	lnN2	MAP2K6
MTCL1	1.32E-07	0.26104039	0.558	0.615	0.00505499	lnN2	MTCL1
AC034195.1	1.92E-06	0.27992591	0.269	0.252	0.07343572	lnN2	AC034195.1
LRRC8B1	2.20E-06	0.27460432	0.606	0.684	0.08407914	lnN2	LRRC8B
EPB41L5	3.27E-06	0.25221016	0.431	0.455	0.1249568	lnN2	EPB41L5
DTD1	3.69E-06	0.25357568	0.423	0.449	0.14094938	lnN2	DTD1
GALNTL61	4.23E-06	0.26987203	0.593	0.756	0.16175649	lnN2	GALNTL6
MRPL41	8.04E-06	0.3703763	0.421	0.448	0.30736892	lnN2	MRPL41
LRRN21	6.29E-05	0.30673744	0.473	0.525	1	lnN2	LRRN2
HSPA4L1	7.80E-05	0.25659238	0.448	0.483	1	lnN2	HSPA4L
ERICH31	0.0001139	0.25626687	0.419	0.448	1	lnN2	ERICH3
SGCZ2	0.000267	1.11020621	0.475	0.52	1	lnN2	SGCZ
CTNNA1	0.00033946	0.26903652	0.33	0.34	1	lnN2	CTNNA1
SLC7A8	0.00035425	0.26829583	0.359	0.375	1	lnN2	SLC7A8
CDH111	0.00040637	0.27815381	0.431	0.457	1	lnN2	CDH11
RAPH11	0.00140467	0.28376584	0.456	0.507	1	lnN2	RAPH1
JAM3	0.00404352	0.26729678	0.464	0.517	1	lnN2	JAM3
SOX61	0	2.64375991	0.95	0.176	0	lnN3	SOX6
NXPH11	0	2.54121499	0.984	0.227	0	lnN3	NXPH1
DPP103	0	2.44508874	0.915	0.845	0	lnN3	DPP10
ERBB41	0	2.35437627	0.999	0.552	0	lnN3	ERBB4
TMEM132C	0	2.26706461	0.87	0.227	0	lnN3	TMEM132C
KIAA12172	0	2.18448045	0.99	0.639	0	lnN3	KIAA1217
SLC9A92	0	2.12897213	0.828	0.324	0	lnN3	SLC9A9
SLIT2	0	2.0874352	0.972	0.581	0	lnN3	SLIT2
MYO5B1	0	1.99631381	0.795	0.039	0	lnN3	MYO5B
RUNX21	0	1.97117896	0.81	0.123	0	lnN3	RUNX2
MYO16	0	1.90636622	0.912	0.25	0	lnN3	MYO16
ADAMTS171	0	1.88679157	0.816	0.193	0	lnN3	ADAMTS17
PTPRM1	0	1.8867575	0.972	0.561	0	lnN3	PTPRM
BTBD111	0	1.88483841	0.929	0.235	0	lnN3	BTBD11
SCN1A-AS11	0	1.88309647	0.828	0.234	0	lnN3	SCN1A-AS1
ZNF804A1	0	1.86349316	0.924	0.521	0	lnN3	ZNF804A
ASTN22	0	1.69197448	0.98	0.723	0	lnN3	ASTN2
KCNC21	0	1.66984543	0.968	0.828	0	lnN3	KCNC2
TENM11	0	1.59770061	0.875	0.352	0	lnN3	TENM1
ADAMTS9-AS1	0	1.58872623	0.799	0.32	0	lnN3	ADAMTS9-AS1
SULF11	0	1.56964767	0.579	0.047	0	lnN3	SULF1
MEPE	0	1.55587329	0.311	0.006	0	lnN3	MEPE
ZNF385D3	0	1.51764766	0.969	0.488	0	lnN3	ZNF385D
ZNF5361	0	1.50047237	0.954	0.34	0	lnN3	ZNF536

ADCY81	0	1.49413044	0.809	0.257	0	lnN3	ADCY8
ROR1	0	1.48635399	0.614	0.102	0	lnN3	ROR1
VWC21	0	1.48366482	0.848	0.327	0	lnN3	VWC2
NEAT12	0	1.47460781	0.725	0.362	0	lnN3	NEAT1
TRPC42	0	1.46557184	0.798	0.245	0	lnN3	TRPC4
EPHA62	0	1.46490012	0.903	0.647	0	lnN3	EPHA6
SPARCL13	0	1.42963737	0.92	0.651	0	lnN3	SPARCL1
ANK12	0	1.42782394	0.844	0.288	0	lnN3	ANK1
ANO42	0	1.41145655	0.932	0.58	0	lnN3	ANO4
SPOCK31	0	1.40095394	0.959	0.532	0	lnN3	SPOCK3
GAD21	0	1.36052885	0.846	0.224	0	lnN3	GAD2
LUZP21	0	1.33189165	0.646	0.292	0	lnN3	LUZP2
GAD12	0	1.32593619	0.837	0.256	0	lnN3	GAD1
PRKG13	0	1.30897088	0.947	0.588	0	lnN3	PRKG1
TENM32	0	1.30179022	0.922	0.659	0	lnN3	TENM3
CNTNAP3B1	0	1.29738008	0.66	0.214	0	lnN3	CNTNAP3B
SGCZ3	0	1.28508704	0.868	0.493	0	lnN3	SGCZ
RBMS31	0	1.28310784	0.945	0.623	0	lnN3	RBMS3
GRIK32	0	1.27379008	0.838	0.269	0	lnN3	GRIK3
KIF26B1	0	1.27248993	0.864	0.407	0	lnN3	KIF26B
GPC62	0	1.2610483	0.742	0.478	0	lnN3	GPC6
KLHL54	0	1.20059748	0.766	0.292	0	lnN3	KLHL5
RPS6KA22	0	1.19427662	0.969	0.85	0	lnN3	RPS6KA2
OSBPL32	0	1.18151892	0.822	0.414	0	lnN3	OSBPL3
GABRG32	0	1.18041101	0.954	0.792	0	lnN3	GABRG3
FGF12	0	1.16515823	0.993	0.97	0	lnN3	FGF12
KCNMB23	0	1.16323581	0.933	0.555	0	lnN3	KCNMB2
PTCHD41	0	1.16092857	0.848	0.375	0	lnN3	PTCHD4
CNTNAP31	0	1.14893848	0.62	0.122	0	lnN3	CNTNAP3
KLF123	0	1.1404843	0.885	0.596	0	lnN3	KLF12
KAZN2	0	1.13544237	0.997	0.951	0	lnN3	KAZN
LRRC4C3	0	1.12798771	0.973	0.885	0	lnN3	LRRC4C
SUPT3H	0	1.12284763	0.929	0.789	0	lnN3	SUPT3H
PLCE11	0	1.11554807	0.554	0.12	0	lnN3	PLCE1
GRIP11	0	1.11298335	0.981	0.789	0	lnN3	GRIP1
TAFA4	0	1.09680011	0.484	0.041	0	lnN3	TAFA4
NHS2	0	1.08942657	0.842	0.428	0	lnN3	NHS
PPARGC1A	0	1.07222566	0.745	0.38	0	lnN3	PPARGC1A
PAM2	0	1.06078836	0.919	0.749	0	lnN3	PAM
ELAVL21	0	1.0565806	0.815	0.505	0	lnN3	ELAVL2
DOCK113	0	1.04828411	0.66	0.186	0	lnN3	DOCK11
FAR2	0	1.04789429	0.797	0.515	0	lnN3	FAR2
KCNS3	0	1.03519552	0.52	0.043	0	lnN3	KCNS3
SAMD53	0	1.03186159	0.686	0.295	0	lnN3	SAMD5
CNTNAP22	0	1.02988217	0.999	0.993	0	lnN3	CNTNAP2
SAT11	0	1.02755746	0.661	0.35	0	lnN3	SAT1
MYO1B	0	1.01655954	0.595	0.235	0	lnN3	MYO1B
TRPC51	0	1.01647808	0.705	0.307	0	lnN3	TRPC5
ETV62	0	1.00935248	0.778	0.449	0	lnN3	ETV6
ST8SIA42	0	1.00673431	0.576	0.16	0	lnN3	ST8SIA4
AL445623.21	0	1.00481835	0.733	0.356	0	lnN3	AL445623.2
RSPO22	0	1.00364555	0.731	0.386	0	lnN3	RSPO2
NCALD2	0	0.99249957	0.91	0.763	0	lnN3	NCALD
SLC44A53	0	0.99193904	0.915	0.683	0	lnN3	SLC44A5
TOX32	0	0.99019339	0.629	0.163	0	lnN3	TOX3
PRDM11	0	0.98192681	0.499	0.036	0	lnN3	PRDM1
ESRRG1	0	0.98124574	0.86	0.674	0	lnN3	ESRRG
PLCH12	0	0.97493377	0.688	0.183	0	lnN3	PLCH1
SNRPN2	0	0.96272238	0.938	0.752	0	lnN3	SNRPN
FAM78B	0	0.95605568	0.715	0.432	0	lnN3	FAM78B
RGS5	0	0.95435931	0.474	0.066	0	lnN3	RGS5
OSBPL102	0	0.9532836	0.78	0.467	0	lnN3	OSBPL10
MAGI1	0	0.95182305	0.971	0.921	0	lnN3	MAGI1

XKR41	0	0.95102885	0.961	0.855	0	InN3	XKR4
AP000943.22	0	0.95028348	0.575	0.191	0	InN3	AP000943.2
SLC35F41	0	0.95024961	0.672	0.209	0	InN3	SLC35F4
AL033504.12	0	0.94981267	0.614	0.242	0	InN3	AL033504.1
KCND21	0	0.94352575	0.971	0.867	0	InN3	KCND2
TENM22	0	0.93640326	0.99	0.931	0	InN3	TENM2
ZMAT41	0	0.91410091	0.932	0.759	0	InN3	ZMAT4
CPLX1	0	0.90049761	0.673	0.33	0	InN3	CPLX1
PLCXD31	0	0.88447364	0.703	0.289	0	InN3	PLCXD3
SFMBT22	0	0.88313661	0.651	0.37	0	InN3	SFMBT2
ENOX12	0	0.88246945	0.96	0.845	0	InN3	ENOX1
DTNA2	0	0.87615614	0.949	0.843	0	InN3	DTNA
CACNB43	0	0.8722878	0.956	0.848	0	InN3	CACNB4
CLEC16A	0	0.8617719	0.831	0.649	0	InN3	CLEC16A
LANCL11	0	0.86126832	0.729	0.489	0	InN3	LANCL1
FRMD53	0	0.8563272	0.97	0.859	0	InN3	FRMD5
SH3RF32	0	0.8546156	0.887	0.669	0	InN3	SH3RF3
FHIT3	0	0.8541203	0.888	0.736	0	InN3	FHIT
SOX54	0	0.85398746	0.926	0.656	0	InN3	SOX5
TAFA22	0	0.85156228	0.94	0.782	0	InN3	TAFA2
TCF123	0	0.84900854	0.878	0.695	0	InN3	TCF12
SERPINI11	0	0.84715492	0.841	0.669	0	InN3	SERPINI1
PTPRZ11	0	0.84043627	0.623	0.285	0	InN3	PTPRZ1
SLC26A4	0	0.83543443	0.59	0.247	0	InN3	SLC26A4
SLC4A41	0	0.83109767	0.665	0.314	0	InN3	SLC4A4
LINC023893	0	0.83105015	0.75	0.459	0	InN3	LINC02389
TSPAN9	0	0.82441176	0.627	0.242	0	InN3	TSPAN9
PLXNA41	0	0.82028322	0.92	0.792	0	InN3	PLXNA4
MITF2	0	0.82009988	0.585	0.175	0	InN3	MITF
GRIP22	0	0.81691953	0.603	0.166	0	InN3	GRIP2
CACNA2D21	0	0.81591641	0.567	0.157	0	InN3	CACNA2D2
SLC6A13	0	0.81557463	0.87	0.325	0	InN3	SLC6A1
LPP2	0	0.80929819	0.748	0.459	0	InN3	LPP
ARHGAP42	0	0.80308335	0.42	0.071	0	InN3	ARHGAP42
ADCY12	0	0.80137191	0.809	0.589	0	InN3	ADCY1
IL1RAPL1	0	0.8006568	0.993	0.974	0	InN3	IL1RAPL1
PPARG1	0	0.79785063	0.596	0.256	0	InN3	PPARG
SILC12	0	0.79279465	0.606	0.197	0	InN3	SILC1
COL12A13	0	0.79271389	0.527	0.18	0	InN3	COL12A1
MTSS13	0	0.7897186	0.846	0.554	0	InN3	MTSS1
PLD51	0	0.78491423	0.762	0.299	0	InN3	PLD5
SCN1A1	0	0.78331859	0.934	0.838	0	InN3	SCN1A
HS6ST2	0	0.77743038	0.499	0.202	0	InN3	HS6ST2
LHX61	0	0.77713775	0.508	0.049	0	InN3	LHX6
DLGAP11	0	0.77610421	0.995	0.989	0	InN3	DLGAP1
SLC24A25	0	0.77603957	0.963	0.827	0	InN3	SLC24A2
TAC1	0	0.7688755	0.398	0.018	0	InN3	TAC1
RNF144B1	0	0.76841953	0.438	0.031	0	InN3	RNF144B
CRTAC12	0	0.76104195	0.55	0.221	0	InN3	CRTAC1
TBC1D41	0	0.7578852	0.716	0.451	0	InN3	TBC1D4
LRRFIP11	0	0.75571094	0.869	0.742	0	InN3	LRRFIP1
SETBP12	0	0.74282928	0.948	0.885	0	InN3	SETBP1
NCOA21	0	0.74047659	0.866	0.736	0	InN3	NCOA2
ALK	0	0.73886657	0.661	0.224	0	InN3	ALK
CFAP1612	0	0.73729366	0.611	0.3	0	InN3	CFAP161
PRKCA2	0	0.7357539	0.9	0.727	0	InN3	PRKCA
HCN12	0	0.73037285	0.936	0.855	0	InN3	HCN1
KCNAB3	0	0.72672577	0.495	0.105	0	InN3	KCNAB3
RHOBTB3	0	0.72401035	0.573	0.237	0	InN3	RHOBTB3
NTRK21	0	0.70907489	0.969	0.943	0	InN3	NTRK2
DGKD1	0	0.7070716	0.667	0.292	0	InN3	DGKD
COL4A2	0	0.70083576	0.561	0.229	0	InN3	COL4A2
SIAH31	0	0.69228174	0.554	0.216	0	InN3	SIAH3

WIF1	0	0.68553035	0.404	0.036	0	lnN3	WIF1
RAB3IP1	0	0.6829989	0.607	0.256	0	lnN3	RAB3IP
TNIK3	0	0.68276683	0.915	0.798	0	lnN3	TNIK
CADPS3	0	0.67840779	0.978	0.936	0	lnN3	CADPS
AC087457.1	0	0.67828481	0.478	0.103	0	lnN3	AC087457.1
ADCYAP1R12	0	0.67794274	0.654	0.282	0	lnN3	ADCYAP1R1
CLMP1	0	0.66645604	0.449	0.126	0	lnN3	CLMP
BCL11B2	0	0.66639401	0.583	0.239	0	lnN3	BCL11B
MIR34AHG	0	0.66604677	0.439	0.117	0	lnN3	MIR34AHG
HGF	0	0.66350082	0.351	0.025	0	lnN3	HGF
MTUS12	0	0.65381294	0.608	0.281	0	lnN3	MTUS1
VAV22	0	0.63210961	0.522	0.165	0	lnN3	VAV2
DNM31	0	0.62760913	0.944	0.889	0	lnN3	DNM3
CAMTA11	0	0.61955221	0.957	0.923	0	lnN3	CAMTA1
ARX1	0	0.61423712	0.462	0.086	0	lnN3	ARX
DLC11	0	0.6121057	0.723	0.341	0	lnN3	DLC1
MAF3	0	0.6091379	0.546	0.166	0	lnN3	MAF
AMOTL11	0	0.58922462	0.498	0.188	0	lnN3	AMOTL1
GLRA21	0	0.58230706	0.515	0.194	0	lnN3	GLRA2
CCNJL	0	0.58210435	0.422	0.113	0	lnN3	CCNJL
PVALB	0	0.57319563	0.251	0.004	0	lnN3	PVALB
MYBPC1	0	0.55893718	0.258	0.05	0	lnN3	MYBPC1
RASSF81	0	0.55126075	0.458	0.162	0	lnN3	RASSF8
SGO1-AS1	0	0.50900348	0.41	0.121	0	lnN3	SGO1-AS1
C1QL1	0	0.50663897	0.286	0.026	0	lnN3	C1QL1
LYPD61	0	0.50506606	0.405	0.108	0	lnN3	LYPD6
GOLIM41	0	0.49908825	0.434	0.15	0	lnN3	GOLIM4
POSTN	0	0.49344797	0.262	0.02	0	lnN3	POSTN
MAGI23	0	0.49083548	0.994	0.987	0	lnN3	MAGI2
TENM3-AS1	0	0.49077154	0.307	0.063	0	lnN3	TENM3-AS1
FLT31	0	0.48839037	0.348	0.061	0	lnN3	FLT3
ACADL	0	0.4829293	0.307	0.03	0	lnN3	ACADL
NRXN32	0	0.46027523	0.997	0.99	0	lnN3	NRXN3
HHATL	0	0.44292368	0.322	0.075	0	lnN3	HHATL
GRIN2D2	0	0.44261967	0.417	0.129	0	lnN3	GRIN2D
TACR1	0	0.43924027	0.345	0.081	0	lnN3	TACR1
MYO3B	0	0.43133682	0.27	0.044	0	lnN3	MYO3B
DNAI1	0	0.42885611	0.298	0.074	0	lnN3	DNAI1
NACC2	0	0.42853145	0.339	0.101	0	lnN3	NACC2
DUSP10	0	0.42682513	0.297	0.052	0	lnN3	DUSP10
RASSF31	0	0.41782514	0.306	0.079	0	lnN3	RASSF3
LINC00886	0	0.41631565	0.26	0.038	0	lnN3	LINC00886
RPH3AL	0	0.41589571	0.261	0.062	0	lnN3	RPH3AL
NDST4	0	0.40402151	0.278	0.058	0	lnN3	NDST4
SNHG141	0	0.39448414	0.97	0.946	0	lnN3	SNHG14
PAWR1	0	0.37215883	0.302	0.077	0	lnN3	PAWR
PPARA	0	0.36718911	0.29	0.062	0	lnN3	PPARA
TIAM12	1.69E-305	0.7153442	0.89	0.747	6.45E-301	lnN3	TIAM1
ANKRD18A1	2.98E-305	0.52937513	0.367	0.12	1.14E-300	lnN3	ANKRD18A
PLOD23	2.57E-304	0.57546524	0.497	0.204	9.83E-300	lnN3	PLOD2
KCTD81	1.68E-303	0.78087593	0.868	0.648	6.43E-299	lnN3	KCTD8
AL596087.2	1.14E-302	0.81598013	0.459	0.192	4.34E-298	lnN3	AL596087.2
GPR1491	2.01E-301	0.49257783	0.29	0.076	7.69E-297	lnN3	GPR149
ANKRD34C-A	1.21E-298	0.7798879	0.739	0.483	4.61E-294	lnN3	ANKRD34C-A
SNCG	1.78E-297	0.37940254	0.301	0.086	6.80E-293	lnN3	SNCG
ST8SIA12	3.62E-296	0.72850283	0.777	0.548	1.38E-291	lnN3	ST8SIA1
SDK12	1.99E-294	0.98364127	0.747	0.466	7.62E-290	lnN3	SDK1
EYS	2.36E-292	0.69426584	0.328	0.102	9.03E-288	lnN3	EYS
NEFH	4.71E-287	0.32950811	0.266	0.07	1.80E-282	lnN3	NEFH
FBLN7	1.64E-284	0.50632862	0.446	0.176	6.27E-280	lnN3	FBLN7
TMEM131L	8.65E-284	0.68004122	0.607	0.324	3.31E-279	lnN3	TMEM131L
ABCA1	2.24E-283	0.45517362	0.359	0.117	8.55E-279	lnN3	ABCA1
OPRD11	1.18E-277	0.71621765	0.533	0.26	4.50E-273	lnN3	OPRD1

GDPD5	1.63E-275	0.35260288	0.304	0.091	6.23E-271	lnN3	GDPD5
FGFR2	3.52E-275	0.6299087	0.451	0.187	1.34E-270	lnN3	FGFR2
OXR14	4.50E-274	0.56062278	0.97	0.919	1.72E-269	lnN3	OXR1
FRMD4B2	1.82E-272	0.54053169	0.423	0.155	6.94E-268	lnN3	FRMD4B
AFAP12	1.49E-270	0.65443389	0.663	0.383	5.70E-266	lnN3	AFAP1
HUNK1	5.55E-269	0.65488455	0.574	0.295	2.12E-264	lnN3	HUNK
FGF13	4.72E-268	0.43049138	0.675	0.404	1.80E-263	lnN3	FGF13
GLDC	1.10E-266	0.44502337	0.329	0.108	4.21E-262	lnN3	GLDC
MEF2C2	3.53E-266	0.57201551	0.969	0.937	1.35E-261	lnN3	MEF2C
INPP5J	2.16E-265	0.28853164	0.25	0.066	8.26E-261	lnN3	INPP5J
KCNAB1	1.04E-262	0.56305041	0.377	0.133	3.96E-258	lnN3	KCNAB1
GNAL2	1.05E-262	0.61061388	0.784	0.461	4.01E-258	lnN3	GNAL
RAB3C1	3.87E-262	0.58462994	0.841	0.627	1.48E-257	lnN3	RAB3C
TMEM178A1	1.30E-260	0.7134316	0.775	0.582	4.95E-256	lnN3	TMEM178A
AC092969.12	5.63E-259	0.49013482	0.405	0.149	2.15E-254	lnN3	AC092969.1
MARCH112	1.59E-258	0.63008738	0.603	0.327	6.07E-254	lnN3	11-Mar
GALNT72	7.17E-258	0.68860653	0.726	0.502	2.74E-253	lnN3	GALNT7
SLC8A32	8.86E-257	0.68024377	0.725	0.473	3.39E-252	lnN3	SLC8A3
FHOD31	2.28E-253	0.69283922	0.815	0.63	8.71E-249	lnN3	FHOD3
GRK3	1.08E-250	0.63715969	0.851	0.7	4.15E-246	lnN3	GRK3
PLCL12	1.74E-250	0.84505929	0.828	0.639	6.64E-246	lnN3	PLCL1
NDST31	1.97E-250	0.75129084	0.791	0.547	7.53E-246	lnN3	NDST3
SCN7A	4.88E-248	0.42790308	0.305	0.097	1.87E-243	lnN3	SCN7A
AFF21	1.02E-247	0.64454189	0.654	0.376	3.89E-243	lnN3	AFF2
AC006148.1	5.20E-246	0.74925699	0.853	0.7	1.99E-241	lnN3	AC006148.1
DNER1	1.52E-245	0.4919868	0.8	0.514	5.80E-241	lnN3	DNER
SATB1-AS13	2.23E-245	0.66471944	0.721	0.422	8.52E-241	lnN3	SATB1-AS1
ERC11	1.51E-244	0.54654196	0.922	0.864	5.78E-240	lnN3	ERC1
KIAA12112	1.62E-244	0.47688543	0.73	0.382	6.20E-240	lnN3	KIAA1211
NAV21	2.78E-242	0.45944607	0.962	0.919	1.06E-237	lnN3	NAV2
SYTL5	6.63E-242	0.40053921	0.308	0.098	2.53E-237	lnN3	SYTL5
FMN14	3.04E-241	0.61194484	0.908	0.752	1.16E-236	lnN3	FMN1
AC008105.3	3.05E-241	0.54673243	0.471	0.219	1.17E-236	lnN3	AC008105.3
DCX2	5.15E-241	0.60291858	0.644	0.383	1.97E-236	lnN3	DCX
UPP11	1.12E-237	0.59811529	0.58	0.327	4.29E-233	lnN3	UPP1
AKNA1	1.79E-233	0.30711575	0.261	0.078	6.84E-229	lnN3	AKNA
NAV11	9.35E-233	0.63846655	0.81	0.667	3.57E-228	lnN3	NAV1
KLHL131	3.47E-232	0.41369138	0.325	0.111	1.32E-227	lnN3	KLHL13
CNTN42	7.17E-232	0.65414862	0.925	0.848	2.74E-227	lnN3	CNTN4
MSI22	4.46E-231	0.57511078	0.83	0.651	1.70E-226	lnN3	MSI2
ASIC22	2.05E-230	0.57104282	0.965	0.841	7.85E-226	lnN3	ASIC2
LYPD6B2	2.26E-230	0.41582533	0.425	0.167	8.63E-226	lnN3	LYPD6B
SPTB	2.78E-230	0.56673951	0.571	0.318	1.06E-225	lnN3	SPTB
SEPTIN4	1.46E-229	0.44499586	0.402	0.165	5.60E-225	lnN3	SEPTIN4
NXPH21	4.15E-227	0.32509408	0.316	0.102	1.59E-222	lnN3	NXPH2
ZEB23	3.47E-222	0.57171943	0.92	0.816	1.33E-217	lnN3	ZEB2
CMTM81	3.47E-221	0.41420537	0.296	0.098	1.33E-216	lnN3	CMTM8
INPP4B3	1.32E-220	0.46532245	0.921	0.745	5.03E-216	lnN3	INPP4B
IGF12	6.98E-219	0.33602216	0.38	0.139	2.67E-214	lnN3	IGF1
FCHSD23	7.65E-219	0.57083807	0.8	0.604	2.93E-214	lnN3	FCHSD2
PCDH152	4.97E-217	0.95733064	0.567	0.314	1.90E-212	lnN3	PCDH15
SHTN13	4.09E-215	0.60153596	0.812	0.668	1.56E-210	lnN3	SHTN1
ARHGAP123	1.53E-213	0.51861451	0.583	0.323	5.85E-209	lnN3	ARHGAP12
STXBP62	8.93E-213	0.47886587	0.677	0.371	3.41E-208	lnN3	STXBP6
PDE3B3	1.37E-212	0.67700758	0.726	0.507	5.23E-208	lnN3	PDE3B
UBASH3B2	1.73E-210	0.45068054	0.617	0.326	6.61E-206	lnN3	UBASH3B
CYTH31	1.02E-209	0.64681125	0.703	0.506	3.88E-205	lnN3	CYTH3
FAM135B2	1.76E-209	0.61909031	0.816	0.622	6.71E-205	lnN3	FAM135B
KANSL1L1	3.25E-209	0.60937819	0.668	0.448	1.24E-204	lnN3	KANSL1L
QKI3	2.94E-207	0.47971737	0.876	0.662	1.12E-202	lnN3	QKI
SLITRK2	4.75E-207	0.38314947	0.345	0.136	1.82E-202	lnN3	SLITRK2
PALLD1	8.27E-206	0.57663749	0.646	0.404	3.16E-201	lnN3	PALLD
NF11	1.89E-205	0.52153655	0.873	0.813	7.22E-201	lnN3	NF1

ANKS1A1	1.03E-204	0.62953657	0.744	0.589	3.95E-200	lnN3	ANKS1A
MCC2	5.14E-204	0.46040478	0.525	0.25	1.96E-199	lnN3	MCC
SLC35F14	1.52E-203	0.51910971	0.918	0.698	5.80E-199	lnN3	SLC35F1
ACSL61	6.36E-202	0.58279557	0.656	0.445	2.43E-197	lnN3	ACSL6
ADARB1	7.61E-202	0.62193844	0.674	0.479	2.91E-197	lnN3	ADARB1
CLMN	1.62E-200	0.48614856	0.388	0.163	6.18E-196	lnN3	CLMN
VAV32	2.57E-200	0.46587209	0.35	0.137	9.84E-196	lnN3	VAV3
GREB12	1.33E-199	0.54272746	0.566	0.328	5.08E-195	lnN3	GREB1
ME3	6.04E-198	0.57321168	0.829	0.701	2.31E-193	lnN3	ME3
TSHZ32	9.69E-197	0.58825266	0.674	0.434	3.70E-192	lnN3	TSHZ3
DIXDC12	4.57E-196	0.59009454	0.67	0.454	1.75E-191	lnN3	DIXDC1
XYLT13	6.14E-196	0.70894598	0.76	0.549	2.35E-191	lnN3	XYLT1
BACH13	8.42E-196	0.42177385	0.473	0.221	3.22E-191	lnN3	BACH1
UBA6-AS1	3.82E-195	0.68508658	0.762	0.596	1.46E-190	lnN3	UBA6-AS1
RASA11	1.32E-194	0.60431158	0.8	0.705	5.06E-190	lnN3	RASA1
ABAT1	2.27E-193	0.55215432	0.695	0.492	8.68E-189	lnN3	ABAT
SYN22	1.52E-192	0.46750802	0.94	0.898	5.82E-188	lnN3	SYN2
PLCH2	2.44E-187	0.41183383	0.401	0.182	9.34E-183	lnN3	PLCH2
AC007405.1	4.79E-187	0.34002498	0.303	0.112	1.83E-182	lnN3	AC007405.1
UNC5D2	6.10E-187	0.64124781	0.945	0.825	2.33E-182	lnN3	UNC5D
GHR2	3.05E-185	0.57646082	0.62	0.371	1.17E-180	lnN3	GHR
GRIA41	1.60E-179	0.43643357	0.968	0.838	6.10E-175	lnN3	GRIA4
NINL1	3.26E-179	0.3433486	0.403	0.177	1.24E-174	lnN3	NINL
AC025809.12	3.79E-176	0.48836889	0.542	0.308	1.45E-171	lnN3	AC025809.1
PTPRN22	4.02E-174	0.4006237	0.968	0.949	1.54E-169	lnN3	PTPRN2
GABRB2	2.39E-173	0.42858665	0.949	0.921	9.12E-169	lnN3	GABRB2
SHISA91	2.71E-173	0.48830641	0.936	0.817	1.04E-168	lnN3	SHISA9
RNASSET22	5.88E-173	0.42214768	0.48	0.254	2.25E-168	lnN3	RNASSET2
PITPNC12	7.93E-173	0.40737983	0.743	0.481	3.03E-168	lnN3	PITPNC1
RASGRF22	1.67E-172	0.48668375	0.839	0.594	6.39E-168	lnN3	RASGRF2
RALGPS11	2.09E-172	0.50566213	0.817	0.701	7.99E-168	lnN3	RALGPS1
PLPPR12	3.62E-170	0.52576007	0.53	0.284	1.38E-165	lnN3	PLPPR1
CEMIP3	4.58E-170	0.74823675	0.61	0.399	1.75E-165	lnN3	CEMIP
TRERF11	1.30E-168	0.57112669	0.788	0.649	4.98E-164	lnN3	TRERF1
SPAG161	6.43E-167	0.55996743	0.806	0.68	2.46E-162	lnN3	SPAG16
SLC4A72	9.01E-166	0.51176603	0.639	0.437	3.45E-161	lnN3	SLC4A7
GAS2	2.60E-165	0.55944281	0.595	0.4	9.93E-161	lnN3	GAS2
DECR1	1.77E-164	0.42572178	0.459	0.248	6.78E-160	lnN3	DECR1
DEPTOR1	2.93E-163	0.46094126	0.474	0.254	1.12E-158	lnN3	DEPTOR
PLEKHA7	7.14E-163	0.29469381	0.258	0.095	2.73E-158	lnN3	PLEKHA7
NCOA31	2.75E-161	0.54599687	0.592	0.385	1.05E-156	lnN3	NCOA3
PRPSAP1	1.70E-160	0.46772354	0.515	0.305	6.48E-156	lnN3	PRPSAP1
CLEC2L	1.76E-160	0.44259415	0.429	0.224	6.73E-156	lnN3	CLEC2L
PDE8A1	8.92E-160	0.50760679	0.636	0.429	3.41E-155	lnN3	PDE8A
TIMP22	3.42E-159	0.40084198	0.537	0.292	1.31E-154	lnN3	TIMP2
MANBA1	1.59E-158	0.51754513	0.575	0.372	6.08E-154	lnN3	MANBA
TOX22	3.61E-158	0.40228111	0.409	0.195	1.38E-153	lnN3	TOX2
FILIP11	2.88E-157	0.40447607	0.25	0.094	1.10E-152	lnN3	FILIP1
TGFBR32	4.41E-156	0.42278662	0.381	0.181	1.68E-151	lnN3	TGFBR3
PTPN131	7.50E-156	0.51801724	0.617	0.385	2.87E-151	lnN3	PTPN13
TRPS11	4.55E-155	0.57360955	0.636	0.428	1.74E-150	lnN3	TRPS1
AAK11	1.68E-154	0.39588056	0.907	0.878	6.41E-150	lnN3	AAK1
AC233296.11	1.24E-153	0.44592645	0.498	0.257	4.75E-149	lnN3	AC233296.1
GPR176	2.28E-153	0.53164525	0.523	0.323	8.73E-149	lnN3	GPR176
CLIP4	2.55E-153	0.51242521	0.685	0.535	9.76E-149	lnN3	CLIP4
EFR3B	3.44E-152	0.56390713	0.681	0.495	1.32E-147	lnN3	EFR3B
AL158077.24	6.61E-152	0.479355	0.479	0.266	2.53E-147	lnN3	AL158077.2
COL4A1	1.69E-151	0.35731064	0.345	0.157	6.44E-147	lnN3	COL4A1
PCLO4	2.21E-150	0.38326816	0.962	0.921	8.45E-146	lnN3	PCLO
ATP8A2	4.32E-150	0.30411011	0.973	0.951	1.65E-145	lnN3	ATP8A2
CBLB	1.59E-149	0.49190111	0.599	0.401	6.07E-145	lnN3	CBLB
WLS1	2.37E-149	0.38040325	0.501	0.265	9.08E-145	lnN3	WLS
KATNAL2	4.08E-149	0.45217594	0.44	0.239	1.56E-144	lnN3	KATNAL2

ZNF124	5.45E-149	0.37892277	0.34	0.158	2.08E-144	lnN3	ZNF124
ATRN14	1.84E-148	0.42868786	0.981	0.928	7.02E-144	lnN3	ATRN14
GRIN2B2	8.47E-148	0.34301575	0.962	0.946	3.24E-143	lnN3	GRIN2B
GAB22	1.22E-147	0.5161435	0.682	0.496	4.66E-143	lnN3	GAB2
SGK1	2.64E-147	0.58886615	0.681	0.499	1.01E-142	lnN3	SGK1
CACNA1A2	5.14E-145	0.4410836	0.959	0.907	1.96E-140	lnN3	CACNA1A
SRRM42	2.41E-144	0.46247616	0.9	0.852	9.20E-140	lnN3	SRRM4
LUZP1	2.17E-143	0.51391581	0.67	0.509	8.28E-139	lnN3	LUZP1
OSBPL61	1.03E-142	0.44337464	0.853	0.801	3.95E-138	lnN3	OSBPL6
PPP2R2B3	2.16E-142	0.36739328	0.976	0.955	8.25E-138	lnN3	PPP2R2B
LRRC391	6.44E-142	0.27164778	0.344	0.155	2.46E-137	lnN3	LRRC39
EPB412	1.12E-141	0.52812616	0.641	0.447	4.27E-137	lnN3	EPB41
AC115622.1	1.21E-141	0.31653066	0.253	0.099	4.64E-137	lnN3	AC115622.1
TRIO1	3.18E-141	0.33694826	0.947	0.93	1.22E-136	lnN3	TRIO
DOK6	1.44E-140	0.60400165	0.825	0.7	5.52E-136	lnN3	DOK6
LRP81	2.56E-140	0.46023622	0.497	0.301	9.78E-136	lnN3	LRP8
CHRM23	3.23E-140	0.8392063	0.387	0.209	1.23E-135	lnN3	CHRM2
KCNC11	4.32E-140	0.5055853	0.71	0.554	1.65E-135	lnN3	KCNC1
LDLRAD43	7.24E-140	0.47670322	0.888	0.775	2.77E-135	lnN3	LDLRAD4
VPS13D3	6.99E-139	0.47410669	0.839	0.748	2.67E-134	lnN3	VPS13D
UTRN2	5.76E-138	0.51187693	0.446	0.245	2.20E-133	lnN3	UTRN
LINC027982	5.50E-137	0.39315099	0.396	0.203	2.10E-132	lnN3	LINC02798
RBFOX12	7.38E-137	0.29937742	0.999	0.983	2.82E-132	lnN3	RBFOX1
EEF2K	1.70E-135	0.45537635	0.505	0.31	6.49E-131	lnN3	EEF2K
TASOR2	1.07E-134	0.5004609	0.677	0.523	4.10E-130	lnN3	TASOR2
TBC1D30	1.58E-134	0.39189806	0.487	0.29	6.05E-130	lnN3	TBC1D30
RYR12	1.60E-133	0.47639276	0.409	0.227	6.13E-129	lnN3	RYR1
KLF3-AS11	6.69E-133	0.60197523	0.441	0.258	2.56E-128	lnN3	KLF3-AS1
DENND1B1	1.07E-132	0.45427882	0.661	0.496	4.07E-128	lnN3	DENND1B
APC2	1.83E-132	0.45049844	0.811	0.737	7.01E-128	lnN3	APC
NTN42	4.52E-132	0.34262176	0.421	0.22	1.73E-127	lnN3	NTN4
KSR11	7.32E-130	0.42525094	0.555	0.357	2.80E-125	lnN3	KSR1
ABLIM13	1.14E-129	0.402493	0.903	0.83	4.35E-125	lnN3	ABLIM1
FNBP1L2	3.67E-129	0.44306077	0.594	0.379	1.40E-124	lnN3	FNBP1L
PRKCE	2.19E-128	0.35282312	0.942	0.912	8.37E-124	lnN3	PRKCE
NQO2	6.34E-128	0.50631237	0.689	0.554	2.42E-123	lnN3	NQO2
ARHGAP201	7.03E-128	0.49068757	0.616	0.459	2.69E-123	lnN3	ARHGAP20
CNTN52	1.75E-126	0.46157941	0.909	0.811	6.69E-122	lnN3	CNTN5
HS3ST1	2.44E-126	0.37533802	0.327	0.16	9.31E-122	lnN3	HS3ST1
CNTNAP51	8.52E-126	0.51984585	0.926	0.9	3.26E-121	lnN3	CNTNAP5
WWOX2	1.38E-125	0.47192643	0.901	0.813	5.28E-121	lnN3	WWOX
ZFYVE161	3.64E-125	0.50712904	0.716	0.582	1.39E-120	lnN3	ZFYVE16
TCF42	1.10E-123	0.28135522	0.971	0.957	4.21E-119	lnN3	TCF4
ATP10D1	3.55E-123	0.34336213	0.406	0.223	1.36E-118	lnN3	ATP10D
AHI1	5.44E-122	0.36883655	0.943	0.919	2.08E-117	lnN3	AHI1
ENTPD31	6.30E-122	0.30501129	0.499	0.285	2.41E-117	lnN3	ENTPD3
GPSM2	7.68E-122	0.25971043	0.258	0.109	2.93E-117	lnN3	GPSM2
PHACTR22	1.35E-120	0.43262579	0.599	0.4	5.17E-116	lnN3	PHACTR2
SH3PXD2A1	1.79E-120	0.43831601	0.796	0.699	6.83E-116	lnN3	SH3PXD2A
KCNMB2-AS1	2.25E-120	0.40658541	0.408	0.221	8.59E-116	lnN3	KCNMB2-AS1
JARID22	4.43E-120	0.4551727	0.738	0.625	1.69E-115	lnN3	JARID2
GPRC5B	6.61E-120	0.28004794	0.344	0.163	2.53E-115	lnN3	GPRC5B
TEAD11	1.93E-119	0.47909863	0.705	0.556	7.37E-115	lnN3	TEAD1
CCDC911	2.16E-119	0.41369692	0.792	0.69	8.25E-115	lnN3	CCDC91
ADGRL32	8.77E-119	0.3107743	0.982	0.963	3.35E-114	lnN3	ADGRL3
RAB3B2	1.12E-118	0.30383013	0.284	0.128	4.29E-114	lnN3	RAB3B
PKD21	2.81E-118	0.45980291	0.721	0.617	1.07E-113	lnN3	PKD2
TCP11L2	3.22E-118	0.27647995	0.282	0.128	1.23E-113	lnN3	TCP11L2
FAM189A12	4.94E-118	0.48543098	0.751	0.628	1.89E-113	lnN3	FAM189A1
GRM83	1.13E-117	0.72048392	0.517	0.346	4.31E-113	lnN3	GRM8
AK31	1.96E-117	0.36091441	0.461	0.271	7.50E-113	lnN3	AK3
DAAM11	1.43E-116	0.4074921	0.818	0.747	5.46E-112	lnN3	DAAM1
MB21D22	2.13E-116	0.44771277	0.572	0.387	8.14E-112	lnN3	MB21D2

TMEM1082	2.89E-116	0.39315988	0.906	0.816	1.10E-111	lnN3	TMEM108
PKNOX2	3.88E-116	0.48197172	0.835	0.753	1.48E-111	lnN3	PKNOX2
SASH13	1.07E-115	0.47403344	0.531	0.346	4.08E-111	lnN3	SASH1
GRID12	1.66E-114	0.39230023	0.89	0.85	6.36E-110	lnN3	GRID1
TNRC6A2	6.20E-114	0.298327	0.962	0.958	2.37E-109	lnN3	TNRC6A
ATP1B11	5.90E-113	0.45264754	0.84	0.776	2.25E-108	lnN3	ATP1B1
GNG73	5.11E-112	0.42715037	0.584	0.399	1.95E-107	lnN3	GNG7
FAM49B2	1.46E-111	0.37304351	0.856	0.805	5.57E-107	lnN3	FAM49B
ZNF4621	1.54E-110	0.32822636	0.474	0.279	5.88E-106	lnN3	ZNF462
SLC7A81	3.84E-110	0.39766529	0.535	0.363	1.47E-105	lnN3	SLC7A8
KIAA1324L	4.26E-110	0.42432768	0.65	0.491	1.63E-105	lnN3	KIAA1324L
NOS11	4.75E-110	0.26323337	0.253	0.11	1.81E-105	lnN3	NOS1
PLAGL12	7.49E-109	0.30591454	0.409	0.227	2.86E-104	lnN3	PLAGL1
FGD42	7.20E-108	0.43957241	0.5	0.325	2.75E-103	lnN3	FGD4
ADRA1A1	1.69E-107	0.25352454	0.402	0.204	6.44E-103	lnN3	ADRA1A
MIR181A1HC	1.82E-107	0.45064454	0.617	0.437	6.94E-103	lnN3	MIR181A1HC
SERINC51	7.30E-107	0.41435792	0.594	0.415	2.79E-102	lnN3	SERINC5
COG5	1.68E-106	0.40809426	0.784	0.706	6.43E-102	lnN3	COG5
GABRG3-AS1	3.82E-106	0.28505354	0.259	0.118	1.46E-101	lnN3	GABRG3-AS1
BACH23	5.05E-106	0.46143682	0.741	0.605	1.93E-101	lnN3	BACH2
TCAIM	6.23E-106	0.41516661	0.546	0.387	2.38E-101	lnN3	TCAIM
LRCH11	1.16E-105	0.40836895	0.677	0.535	4.44E-101	lnN3	LRCH1
FLRT3	5.90E-105	0.35053884	0.37	0.207	2.26E-100	lnN3	FLRT3
USP2-AS1	6.02E-105	0.34614685	0.372	0.207	2.30E-100	lnN3	USP2-AS1
RAPGEF42	8.50E-105	0.31600108	0.907	0.874	3.25E-100	lnN3	RAPGEF4
ZC3H12C1	1.91E-104	0.37925136	0.45	0.28	7.31E-100	lnN3	ZC3H12C
GRIA11	2.63E-104	0.36741465	0.948	0.921	1.01E-99	lnN3	GRIA1
STS	5.32E-104	0.50522194	0.574	0.409	2.03E-99	lnN3	STS
STARD91	1.49E-103	0.44648014	0.508	0.342	5.70E-99	lnN3	STARD9
PCTP	1.50E-103	0.29750678	0.3	0.15	5.73E-99	lnN3	PCTP
KCNIP21	2.41E-103	0.35753902	0.536	0.346	9.22E-99	lnN3	KCNIP2
PRKN2	3.46E-103	0.37905709	0.9	0.861	1.32E-98	lnN3	PRKN
DIP2C1	4.91E-103	0.33043072	0.91	0.888	1.88E-98	lnN3	DIP2C
ITSN1	3.80E-101	0.39772486	0.806	0.748	1.45E-96	lnN3	ITSN1
LIMA1	3.82E-101	0.30286079	0.361	0.196	1.46E-96	lnN3	LIMA1
PACRG2	7.04E-100	0.45620633	0.799	0.704	2.69E-95	lnN3	PACRG
TTBK2	1.13E-99	0.39469623	0.77	0.68	4.31E-95	lnN3	TTBK2
MACF11	2.03E-99	0.3133004	0.946	0.92	7.78E-95	lnN3	MACF1
MEIKIN	2.61E-99	0.35996646	0.334	0.179	9.98E-95	lnN3	MEIKIN
PPIP5K2	4.07E-99	0.43199903	0.714	0.623	1.56E-94	lnN3	PPIP5K2
AIG1	4.97E-99	0.39726584	0.835	0.77	1.90E-94	lnN3	AIG1
ZNF718	1.58E-97	0.39817973	0.524	0.369	6.05E-93	lnN3	ZNF718
TDRD3	2.02E-97	0.4378245	0.641	0.509	7.72E-93	lnN3	TDRD3
CDC42EP31	8.99E-97	0.29221985	0.33	0.175	3.43E-92	lnN3	CDC42EP3
ARHGAP291	1.82E-96	0.31174151	0.343	0.186	6.97E-92	lnN3	ARHGAP29
AFF14	2.35E-96	0.38331573	0.585	0.405	8.98E-92	lnN3	AFF1
TAOK31	2.50E-96	0.42217622	0.773	0.706	9.56E-92	lnN3	TAOK3
ATP2B2	3.43E-96	0.32412737	0.921	0.877	1.31E-91	lnN3	ATP2B2
GSAP2	4.58E-96	0.30318473	0.416	0.247	1.75E-91	lnN3	GSAP
SACS	8.91E-96	0.41740023	0.747	0.637	3.41E-91	lnN3	SACS
BEND6	1.63E-95	0.4136213	0.589	0.443	6.24E-91	lnN3	BEND6
AC073050.11	2.07E-95	0.39750093	0.862	0.769	7.92E-91	lnN3	AC073050.1
CUX13	3.22E-95	0.35690304	0.845	0.724	1.23E-90	lnN3	CUX1
DSCAML12	3.88E-95	0.35492253	0.842	0.755	1.48E-90	lnN3	DSCAML1
AF117829.11	1.13E-94	0.429849	0.656	0.526	4.33E-90	lnN3	AF117829.1
EPRS	3.93E-94	0.40663542	0.567	0.418	1.50E-89	lnN3	EPRS
PTPRG1	1.88E-93	0.39578516	0.927	0.908	7.19E-89	lnN3	PTPRG
WASF31	3.38E-93	0.34593474	0.537	0.376	1.29E-88	lnN3	WASF3
NEK1	3.63E-93	0.37975507	0.717	0.611	1.39E-88	lnN3	NEK1
SPIN1	7.03E-92	0.3542173	0.777	0.717	2.69E-87	lnN3	SPIN1
SEPTIN61	1.31E-91	0.31336643	0.457	0.282	5.01E-87	lnN3	SEPTIN6
SETD7	6.64E-91	0.31214136	0.393	0.232	2.54E-86	lnN3	SETD7
FAM110B1	1.04E-90	0.311295	0.599	0.424	3.99E-86	lnN3	FAM110B

DLGAP23	1.17E-90	0.31001335	0.975	0.929	4.47E-86	lnN3	DLGAP2
UMAD11	6.24E-89	0.39104959	0.741	0.645	2.39E-84	lnN3	UMAD1
AC011346.1	1.57E-88	0.45670832	0.483	0.324	5.99E-84	lnN3	AC011346.1
ARSG	3.60E-88	0.34563583	0.413	0.256	1.37E-83	lnN3	ARSG
CCDC1361	5.37E-88	0.34843736	0.549	0.385	2.05E-83	lnN3	CCDC136
RASAL22	2.09E-87	0.30526771	0.913	0.876	8.00E-83	lnN3	RASAL2
ZNF487	2.48E-87	0.31905352	0.333	0.187	9.46E-83	lnN3	ZNF487
LGMN1	5.74E-87	0.34348358	0.416	0.26	2.19E-82	lnN3	LGMN
CYP4V2	7.20E-87	0.30150808	0.384	0.234	2.75E-82	lnN3	CYP4V2
KCNT11	2.16E-86	0.42337361	0.666	0.558	8.24E-82	lnN3	KCNT1
MEG81	2.92E-85	0.32473475	0.894	0.845	1.12E-80	lnN3	MEG8
CORO6	3.00E-85	0.43923277	0.557	0.429	1.15E-80	lnN3	CORO6
PCSK61	6.39E-85	0.28494739	0.372	0.21	2.44E-80	lnN3	PCSK6
AL645568.1	6.43E-85	0.35981206	0.588	0.445	2.46E-80	lnN3	AL645568.1
CHCHD3	8.48E-85	0.37139453	0.76	0.686	3.24E-80	lnN3	CHCHD3
AGBL44	9.83E-85	0.26256388	0.973	0.931	3.76E-80	lnN3	AGBL4
WWC21	2.04E-84	0.36428756	0.608	0.462	7.79E-80	lnN3	WWC2
DST	2.16E-84	0.26399874	0.964	0.953	8.25E-80	lnN3	DST
RASSF42	6.22E-84	0.25932859	0.379	0.222	2.38E-79	lnN3	RASSF4
HTR41	2.58E-83	0.44654002	0.392	0.248	9.84E-79	lnN3	HTR4
NEGR13	5.14E-83	0.33254858	0.979	0.954	1.96E-78	lnN3	NEGR1
DLEU71	1.85E-82	0.35183666	0.463	0.306	7.06E-78	lnN3	DLEU7
ST6GALNAC3	1.24E-81	0.40446057	0.648	0.5	4.75E-77	lnN3	ST6GALNAC3
ZNF516	1.31E-81	0.33383281	0.491	0.322	5.02E-77	lnN3	ZNF516
GABRD	1.44E-81	0.35818658	0.401	0.256	5.51E-77	lnN3	GABRD
EFCAB21	5.71E-81	0.41272281	0.638	0.511	2.18E-76	lnN3	EFCAB2
SLC7A14	7.90E-81	0.37914435	0.643	0.508	3.02E-76	lnN3	SLC7A14
SMARCA22	2.01E-80	0.35226978	0.84	0.806	7.68E-76	lnN3	SMARCA2
SND11	2.59E-79	0.39695793	0.765	0.695	9.92E-75	lnN3	SND1
VPS13C1	5.22E-79	0.34117813	0.835	0.805	2.00E-74	lnN3	VPS13C
VSTM2L1	4.73E-78	0.32046135	0.446	0.292	1.81E-73	lnN3	VSTM2L
SIPA1L32	5.13E-78	0.3820626	0.675	0.554	1.96E-73	lnN3	SIPA1L3
ANKRD442	1.25E-77	0.30306539	0.585	0.421	4.77E-73	lnN3	ANKRD44
IDH3A	1.43E-77	0.31116193	0.422	0.278	5.48E-73	lnN3	IDH3A
LINC008941	2.75E-77	0.41269941	0.541	0.396	1.05E-72	lnN3	LINC00894
CALN13	3.16E-77	0.39586315	0.766	0.657	1.21E-72	lnN3	CALN1
C2orf27A1	4.27E-77	0.32647064	0.447	0.297	1.63E-72	lnN3	C2orf27A
GRM52	8.49E-77	0.27767063	0.97	0.896	3.25E-72	lnN3	GRM5
NDUFS4	2.73E-76	0.3390224	0.544	0.412	1.04E-71	lnN3	NDUFS4
ARHGEF10L	5.69E-76	0.28140963	0.376	0.232	2.17E-71	lnN3	ARHGEF10L
TRPM32	7.93E-76	0.97516328	0.552	0.404	3.03E-71	lnN3	TRPM3
MROH1	1.23E-75	0.38004306	0.668	0.558	4.69E-71	lnN3	MROH1
SNCAIP	1.24E-75	0.27070662	0.29	0.156	4.73E-71	lnN3	SNCAIP
VWA81	1.30E-75	0.34541961	0.787	0.738	4.97E-71	lnN3	VWA8
SIK31	1.83E-75	0.30005991	0.887	0.859	7.00E-71	lnN3	SIK3
ATP1A31	2.14E-75	0.35349113	0.659	0.531	8.17E-71	lnN3	ATP1A3
GOT1	5.19E-75	0.32361802	0.441	0.3	1.99E-70	lnN3	GOT1
AOPEP	5.89E-75	0.32731043	0.805	0.741	2.25E-70	lnN3	AOPEP
GRK4	9.08E-75	0.36452944	0.566	0.432	3.47E-70	lnN3	GRK4
GALNT81	1.37E-74	0.29006751	0.45	0.294	5.24E-70	lnN3	GALNT8
MAN1A21	1.60E-74	0.38148372	0.8	0.75	6.12E-70	lnN3	MAN1A2
PCCA	2.51E-74	0.34884891	0.76	0.693	9.59E-70	lnN3	PCCA
PPM1E1	3.24E-74	0.36565614	0.816	0.758	1.24E-69	lnN3	PPM1E
LINC01619	5.58E-74	0.25445948	0.273	0.144	2.13E-69	lnN3	LINC01619
IL1RAP2	8.56E-74	0.35489923	0.473	0.319	3.27E-69	lnN3	IL1RAP
RNF1571	9.03E-74	0.33544797	0.643	0.523	3.45E-69	lnN3	RNF157
NLGN4X1	2.75E-73	0.37139492	0.788	0.726	1.05E-68	lnN3	NLGN4X
PXDNL1	2.85E-73	0.34734095	0.361	0.222	1.09E-68	lnN3	PXDNL
MFHAS1	5.91E-73	0.34946238	0.524	0.385	2.26E-68	lnN3	MFHAS1
SLC38A1	1.18E-72	0.32999612	0.697	0.593	4.51E-68	lnN3	SLC38A1
AUH	2.70E-72	0.36421756	0.692	0.607	1.03E-67	lnN3	AUH
TTC39B	9.40E-72	0.3470719	0.582	0.455	3.59E-67	lnN3	TTC39B
KDM4C	1.05E-71	0.33071044	0.792	0.735	4.00E-67	lnN3	KDM4C

MYO19	1.90E-71	0.29376566	0.389	0.251	7.26E-67	lnN3	MYO19
GARNL32	3.49E-71	0.2897381	0.828	0.72	1.33E-66	lnN3	GARNL3
BCAS4	3.49E-71	0.30126613	0.363	0.225	1.33E-66	lnN3	BCAS4
NMNAT21	4.07E-71	0.31455801	0.883	0.852	1.56E-66	lnN3	NMNAT2
P3H2	7.26E-71	0.36233698	0.484	0.343	2.77E-66	lnN3	P3H2
DNMBP	1.08E-70	0.25115675	0.332	0.197	4.13E-66	lnN3	DNMBP
HERC6	1.12E-70	0.28230432	0.376	0.234	4.26E-66	lnN3	HERC6
APBB21	1.15E-70	0.33733612	0.762	0.687	4.41E-66	lnN3	APBB2
CDS1	2.04E-69	0.26240265	0.394	0.253	7.79E-65	lnN3	CDS1
ATG5	3.10E-69	0.3433596	0.615	0.495	1.19E-64	lnN3	ATG5
KIF9-AS1	4.11E-69	0.40353376	0.697	0.594	1.57E-64	lnN3	KIF9-AS1
PPM1K1	4.66E-69	0.34834798	0.677	0.584	1.78E-64	lnN3	PPM1K
LINC01473	5.40E-68	0.38188196	0.65	0.545	2.07E-63	lnN3	LINC01473
CACNG21	1.41E-67	0.3521489	0.733	0.653	5.39E-63	lnN3	CACNG2
AKAP1	2.06E-67	0.2524199	0.398	0.26	7.89E-63	lnN3	AKAP1
ETFDH	7.74E-67	0.29962071	0.481	0.348	2.96E-62	lnN3	ETFDH
SATB12	1.79E-66	0.26258452	0.479	0.333	6.84E-62	lnN3	SATB1
CHD6	2.47E-66	0.3022928	0.775	0.725	9.43E-62	lnN3	CHD6
PDGFC3	2.56E-66	0.33329017	0.414	0.276	9.78E-62	lnN3	PDGFC
FAM20C	5.52E-66	0.25128194	0.296	0.171	2.11E-61	lnN3	FAM20C
RDX1	1.17E-65	0.28875041	0.54	0.398	4.47E-61	lnN3	RDX
CDH72	3.07E-65	0.30289864	0.415	0.269	1.17E-60	lnN3	CDH7
FBN1	4.81E-65	0.35805305	0.721	0.642	1.84E-60	lnN3	FBN1
TPST2	4.89E-65	0.2956216	0.354	0.224	1.87E-60	lnN3	TPST2
PPP2R3A	5.29E-65	0.3196384	0.442	0.309	2.02E-60	lnN3	PPP2R3A
MGAT52	9.65E-65	0.3361911	0.732	0.658	3.69E-60	lnN3	MGAT5
PTPRS	1.09E-64	0.32960984	0.772	0.711	4.16E-60	lnN3	PTPRS
SFXN4	1.28E-64	0.26355039	0.325	0.198	4.91E-60	lnN3	SFXN4
CCDC146	1.43E-64	0.34939493	0.465	0.33	5.45E-60	lnN3	CCDC146
DENND5A1	1.70E-64	0.32432624	0.589	0.462	6.50E-60	lnN3	DENND5A
ABCA101	4.82E-64	0.33590237	0.63	0.52	1.84E-59	lnN3	ABCA10
MRRF	9.47E-64	0.25544923	0.357	0.229	3.62E-59	lnN3	MRRF
NRG2	1.03E-63	0.31913046	0.705	0.614	3.94E-59	lnN3	NRG2
LGR4	1.62E-63	0.32405668	0.423	0.292	6.21E-59	lnN3	LGR4
OSBPL82	2.77E-63	0.28235093	0.809	0.749	1.06E-58	lnN3	OSBPL8
HSPA4L2	1.71E-62	0.30517776	0.594	0.473	6.52E-58	lnN3	HSPA4L
HIVEP21	4.16E-62	0.30327173	0.837	0.798	1.59E-57	lnN3	HIVEP2
CDK62	4.42E-62	0.35339406	0.544	0.407	1.69E-57	lnN3	CDK6
DHX32	8.31E-62	0.28754169	0.408	0.276	3.18E-57	lnN3	DHX32
PIP5K1B1	9.55E-62	0.25239258	0.622	0.474	3.65E-57	lnN3	PIP5K1B
FASTKD1	1.08E-61	0.32174254	0.557	0.443	4.13E-57	lnN3	FASTKD1
UBL3	1.64E-61	0.33279601	0.575	0.457	6.26E-57	lnN3	UBL3
ARFGEF2	4.11E-61	0.33086295	0.694	0.608	1.57E-56	lnN3	ARFGEF2
STK392	4.14E-61	0.34088639	0.686	0.597	1.58E-56	lnN3	STK39
TMEM652	1.43E-60	0.30887368	0.525	0.392	5.47E-56	lnN3	TMEM65
ABCA9	2.71E-60	0.29010073	0.409	0.279	1.04E-55	lnN3	ABCA9
FAM3C1	1.37E-59	0.3207292	0.533	0.408	5.22E-55	lnN3	FAM3C
UBE2O	1.40E-59	0.3474418	0.618	0.522	5.34E-55	lnN3	UBE2O
FRYL	1.98E-59	0.32166734	0.769	0.701	7.58E-55	lnN3	FRYL
EPM2A	2.00E-59	0.2828004	0.371	0.244	7.65E-55	lnN3	EPM2A
CPEB3	2.39E-59	0.27860496	0.883	0.845	9.13E-55	lnN3	CPEB3
TRPM22	2.93E-59	0.30280073	0.53	0.41	1.12E-54	lnN3	TRPM2
PARVA1	3.62E-59	0.25563667	0.371	0.24	1.39E-54	lnN3	PARVA
STAU2	4.78E-59	0.29385291	0.832	0.806	1.83E-54	lnN3	STAU2
VPS13B	8.34E-59	0.29267626	0.848	0.816	3.19E-54	lnN3	VPS13B
SRGAP23	1.05E-58	0.27280268	0.591	0.479	4.02E-54	lnN3	SRGAP2
LMBR1	1.40E-58	0.33665237	0.664	0.577	5.36E-54	lnN3	LMBR1
GTF2IRD11	1.83E-58	0.31073915	0.582	0.449	6.98E-54	lnN3	GTF2IRD1
TRAF3IP2-AS	2.11E-58	0.29065759	0.804	0.747	8.08E-54	lnN3	TRAF3IP2-AS
GAS61	5.49E-58	0.26805581	0.413	0.286	2.10E-53	lnN3	GAS6
ANXA6	6.37E-58	0.29705505	0.512	0.386	2.43E-53	lnN3	ANXA6
SIDT13	7.71E-58	0.30769861	0.645	0.513	2.95E-53	lnN3	SIDT1
GUCY1A1	1.01E-57	0.31902929	0.451	0.322	3.87E-53	lnN3	GUCY1A1

CC2D2A1	2.14E-57	0.25932457	0.389	0.263	8.18E-53	lnN3	CC2D2A
JDP2	3.11E-57	0.26652485	0.369	0.244	1.19E-52	lnN3	JDP2
CCDC88A1	1.01E-56	0.26741493	0.882	0.844	3.87E-52	lnN3	CCDC88A
CRADD1	1.75E-56	0.33212937	0.561	0.428	6.70E-52	lnN3	CRADD
SYT141	2.90E-56	0.26869958	0.814	0.78	1.11E-51	lnN3	SYT14
PIK3R3	8.37E-56	0.26112019	0.449	0.312	3.20E-51	lnN3	PIK3R3
FARP13	2.25E-55	0.28396616	0.754	0.653	8.58E-51	lnN3	FARP1
COX10	1.89E-54	0.26949916	0.383	0.263	7.22E-50	lnN3	COX10
ZBTB1	1.93E-54	0.2797757	0.493	0.369	7.39E-50	lnN3	ZBTB1
NCK22	2.17E-54	0.28300048	0.564	0.439	8.29E-50	lnN3	NCK2
AC084198.2	2.48E-54	0.25816102	0.421	0.294	9.47E-50	lnN3	AC084198.2
EPHA7	3.04E-54	0.30330864	0.658	0.539	1.16E-49	lnN3	EPHA7
AC120193.14	3.85E-54	0.58269555	0.439	0.323	1.47E-49	lnN3	AC120193.1
WIPF32	3.08E-53	0.29665358	0.526	0.404	1.18E-48	lnN3	WIPF3
TRANK11	6.34E-53	0.31544012	0.676	0.592	2.42E-48	lnN3	TRANK1
CDH112	7.85E-53	0.44038565	0.548	0.449	3.00E-48	lnN3	CDH11
EML2	2.79E-52	0.29175847	0.507	0.389	1.07E-47	lnN3	EML2
DGKE1	4.51E-52	0.29638408	0.537	0.426	1.72E-47	lnN3	DGKE
SFXN51	5.21E-52	0.30578874	0.624	0.526	1.99E-47	lnN3	SFXN5
HSPD1	6.84E-52	0.33180939	0.454	0.33	2.62E-47	lnN3	HSPD1
MPC1	1.12E-51	0.26070618	0.407	0.293	4.27E-47	lnN3	MPC1
SLC25A42	1.13E-51	0.25381839	0.393	0.27	4.33E-47	lnN3	SLC25A42
SLC25A121	1.23E-51	0.27042644	0.842	0.817	4.68E-47	lnN3	SLC25A12
CCDC148	1.29E-51	0.30887671	0.464	0.347	4.94E-47	lnN3	CCDC148
SEN71	2.01E-51	0.27716962	0.606	0.501	7.69E-47	lnN3	SEN7
NUBPL	2.24E-51	0.30594751	0.564	0.452	8.58E-47	lnN3	NUBPL
URI11	2.51E-51	0.27412815	0.574	0.463	9.60E-47	lnN3	URI1
UHRF1BP1	6.96E-51	0.27265454	0.436	0.315	2.66E-46	lnN3	UHRF1BP1
ERBIN2	7.08E-51	0.28885164	0.64	0.534	2.70E-46	lnN3	ERBIN
SESTD1	1.08E-49	0.30110835	0.687	0.62	4.13E-45	lnN3	SESTD1
TUT41	1.26E-49	0.27882827	0.753	0.699	4.81E-45	lnN3	TUT4
DNAJC21	1.93E-49	0.26222006	0.4	0.284	7.40E-45	lnN3	DNAJC21
SPECC12	3.35E-49	0.27062286	0.796	0.733	1.28E-44	lnN3	SPECC1
COA1	8.57E-49	0.3071303	0.629	0.547	3.28E-44	lnN3	COA1
OSBPL92	7.09E-48	0.25241581	0.644	0.555	2.71E-43	lnN3	OSBPL9
RARB2	8.54E-48	0.29506652	0.555	0.425	3.26E-43	lnN3	RARB
LPCAT4	1.13E-47	0.28113266	0.471	0.364	4.31E-43	lnN3	LPCAT4
CLVS21	1.31E-47	0.28738204	0.67	0.595	5.01E-43	lnN3	CLVS2
HERC3	1.89E-47	0.27717754	0.633	0.542	7.24E-43	lnN3	HERC3
PTPRJ3	2.26E-47	0.27170119	0.697	0.623	8.63E-43	lnN3	PTPRJ
BTD	3.54E-47	0.26908325	0.423	0.304	1.35E-42	lnN3	BTD
INSR	4.32E-47	0.288945	0.729	0.66	1.65E-42	lnN3	INSR
MAGED1	1.37E-46	0.2820029	0.657	0.572	5.22E-42	lnN3	MAGED1
TUBGCP5	1.69E-46	0.25183511	0.409	0.294	6.47E-42	lnN3	TUBGCP5
SLC45A4	6.27E-45	0.26860051	0.43	0.318	2.40E-40	lnN3	SLC45A4
MTR	1.07E-44	0.27494343	0.662	0.593	4.11E-40	lnN3	MTR
PIP4K2A2	1.14E-44	0.31314508	0.531	0.422	4.34E-40	lnN3	PIP4K2A
WDR60	1.36E-44	0.28482359	0.699	0.63	5.20E-40	lnN3	WDR60
AC007364.11	1.61E-44	0.28752644	0.391	0.277	6.14E-40	lnN3	AC007364.1
NT5DC1	7.43E-44	0.28777873	0.467	0.359	2.84E-39	lnN3	NT5DC1
C11orf581	1.38E-43	0.33187749	0.597	0.523	5.26E-39	lnN3	C11orf58
TBC1D81	1.99E-43	0.25059452	0.53	0.419	7.62E-39	lnN3	TBC1D8
CMC1	3.77E-43	0.26542987	0.454	0.348	1.44E-38	lnN3	CMC1
NRSN11	4.67E-43	0.29841445	0.584	0.485	1.78E-38	lnN3	NRSN1
PCGF52	5.58E-43	0.25865787	0.692	0.628	2.13E-38	lnN3	PCGF5
AC105383.1	7.73E-43	0.285691	0.424	0.319	2.95E-38	lnN3	AC105383.1
SH3KBP13	3.46E-42	0.27501086	0.683	0.603	1.32E-37	lnN3	SH3KBP1
PUS7L	7.17E-42	0.26376226	0.556	0.462	2.74E-37	lnN3	PUS7L
TMTC12	9.30E-42	0.25119657	0.679	0.557	3.56E-37	lnN3	TMTC1
AC046134.21	2.38E-41	0.30537274	0.633	0.555	9.08E-37	lnN3	AC046134.2
ACYP2	2.91E-41	0.2864627	0.764	0.72	1.11E-36	lnN3	ACYP2
SRRM3	3.19E-41	0.25307271	0.834	0.808	1.22E-36	lnN3	SRRM3
ST3GAL3	3.69E-41	0.26591058	0.628	0.548	1.41E-36	lnN3	ST3GAL3

BMPR1A	2.61E-40	0.26350607	0.604	0.518	9.98E-36	lnN3	BMPR1A
PNKD	3.93E-40	0.26966994	0.449	0.35	1.50E-35	lnN3	PNKD
USP45	4.49E-40	0.26818156	0.442	0.341	1.71E-35	lnN3	USP45
CHRD	4.61E-40	0.26866486	0.386	0.288	1.76E-35	lnN3	CHRD
MEF2C-AS1	5.64E-40	0.28550521	0.801	0.741	2.16E-35	lnN3	MEF2C-AS1
RALGAPA21	1.06E-39	0.25310871	0.66	0.588	4.06E-35	lnN3	RALGAPA2
TARSL2	1.43E-39	0.27597285	0.562	0.478	5.46E-35	lnN3	TARSL2
TAFAS1	8.33E-39	0.30906995	0.672	0.603	3.18E-34	lnN3	TAFAS
ANKRD261	1.10E-38	0.27654369	0.787	0.752	4.19E-34	lnN3	ANKRD26
STX18-AS1	1.22E-38	0.29416224	0.667	0.591	4.67E-34	lnN3	STX18-AS1
LINC01505	1.38E-37	0.31047012	0.313	0.214	5.29E-33	lnN3	LINC01505
TTC21B	3.27E-37	0.25995575	0.658	0.599	1.25E-32	lnN3	TTC21B
SERPINB91	2.97E-36	0.44481209	0.271	0.177	1.14E-31	lnN3	SERPINB9
U91319.1	1.00E-35	0.25324537	0.537	0.432	3.84E-31	lnN3	U91319.1
GDPD1	1.06E-35	0.26559971	0.528	0.439	4.03E-31	lnN3	GDPD1
DZIP11	1.83E-35	0.26289943	0.673	0.613	6.98E-31	lnN3	DZIP1
ARHGAP62	2.27E-35	0.36767991	0.255	0.172	8.66E-31	lnN3	ARHGAP6
CDC14B	3.78E-35	0.25155616	0.575	0.489	1.45E-30	lnN3	CDC14B
CNNM2	9.43E-35	0.25050203	0.732	0.692	3.60E-30	lnN3	CNNM2
ZSWIM51	3.55E-33	0.25680833	0.617	0.542	1.36E-28	lnN3	ZSWIM5
SVIL1	3.62E-33	0.39362733	0.25	0.172	1.38E-28	lnN3	SVIL
AC073332.11	7.77E-33	0.3081209	0.423	0.324	2.97E-28	lnN3	AC073332.1
DENND2A2	1.18E-32	0.26578513	0.362	0.264	4.50E-28	lnN3	DENND2A
MAP1A	1.39E-32	0.26565462	0.542	0.461	5.33E-28	lnN3	MAP1A
KCNA21	4.45E-28	0.2938395	0.431	0.339	1.70E-23	lnN3	KCNA2
KCNN21	1.17E-27	0.25043774	0.572	0.492	4.47E-23	lnN3	KCNN2
ZNF804B3	4.13E-24	0.41497198	0.432	0.356	1.58E-19	lnN3	ZNF804B
PLCG22	1.01E-19	0.35050063	0.704	0.649	3.85E-15	lnN3	PLCG2
KLHL29	2.27E-12	0.29385405	0.694	0.702	8.68E-08	lnN3	KLHL29
PCDH11X2	9.06E-11	0.25772381	0.541	0.54	3.46E-06	lnN3	PCDH11X
GPC53	9.94E-09	0.7506003	0.441	0.424	0.00037978	lnN3	GPC5
GALNTL62	2.55E-06	0.26321584	0.692	0.748	0.09748931	lnN3	GALNTL6
MT-CO21	0.00051013	0.30757033	0.884	0.9	1	lnN3	MT-CO2
FBXL7	0	3.56951733	0.957	0.13	0	lnN4	FBXL7
FGF131	0	3.3795477	0.968	0.388	0	lnN4	FGF13
AC132803.1	0	3.19666093	0.842	0.143	0	lnN4	AC132803.1
PRELID2	0	3.1664132	0.919	0.385	0	lnN4	PRELID2
NTNG11	0	2.73084873	0.917	0.253	0	lnN4	NTNG1
ALK1	0	2.66681684	0.933	0.211	0	lnN4	ALK
EYA4	0	2.54684887	0.834	0.063	0	lnN4	EYA4
KIT	0	2.52283133	0.841	0.06	0	lnN4	KIT
ADARB21	0	2.49755819	0.984	0.338	0	lnN4	ADARB2
SGCZ4	0	2.41536822	0.984	0.489	0	lnN4	SGCZ
MYO161	0	2.38195366	0.924	0.253	0	lnN4	MYO16
SLC6A14	0	2.35939229	0.947	0.324	0	lnN4	SLC6A1
SOX2-OT1	0	2.25438065	0.898	0.47	0	lnN4	SOX2-OT
PTCHD42	0	2.24172303	0.914	0.374	0	lnN4	PTCHD4
KCNIP12	0	2.20329458	0.931	0.273	0	lnN4	KCNIP1
RBMS32	0	2.14276195	0.976	0.623	0	lnN4	RBMS3
GRIK11	0	2.05964659	0.969	0.362	0	lnN4	GRIK1
UNC13C1	0	2.04528574	0.937	0.562	0	lnN4	UNC13C
ZNF5362	0	2.02778916	0.958	0.344	0	lnN4	ZNF536
NXPH12	0	2.0028902	0.96	0.233	0	lnN4	NXPH1
LUZP22	0	1.94901134	0.869	0.281	0	lnN4	LUZP2
FSTL51	0	1.92384536	0.947	0.478	0	lnN4	FSTL5
GRIP12	0	1.91481579	0.99	0.79	0	lnN4	GRIP1
DNER2	0	1.89384259	0.928	0.508	0	lnN4	DNER
GAD22	0	1.87647337	0.853	0.228	0	lnN4	GAD2
UBASH3B3	0	1.8390328	0.852	0.314	0	lnN4	UBASH3B
EGFR1	0	1.82685279	0.891	0.208	0	lnN4	EGFR
SV2C	0	1.7784791	0.701	0.052	0	lnN4	SV2C
PTPRT4	0	1.77361166	0.976	0.67	0	lnN4	PTPRT
NKAIN31	0	1.75653193	0.704	0.255	0	lnN4	NKAIN3

AC137770.1	0	1.75518131	0.656	0.082	0	InN4	AC137770.1
SPHKAP2	0	1.71892547	0.729	0.134	0	InN4	SPHKAP
PID11	0	1.70450796	0.856	0.48	0	InN4	PID1
CDH131	0	1.70448198	0.866	0.634	0	InN4	CDH13
RAB3C2	0	1.69841606	0.91	0.625	0	InN4	RAB3C
PDGFD1	0	1.69439852	0.54	0.176	0	InN4	PDGFD
GRIN3A1	0	1.67106259	0.789	0.208	0	InN4	GRIN3A
CHST9	0	1.6596597	0.321	0.054	0	InN4	CHST9
NFIB1	0	1.64689746	0.952	0.634	0	InN4	NFIB
ADAMTSL31	0	1.61765174	0.749	0.267	0	InN4	ADAMTSL3
TOX23	0	1.59821329	0.772	0.175	0	InN4	TOX2
WWP11	0	1.58443578	0.834	0.467	0	InN4	WWP1
ADAMTS9-A5	0	1.58043868	0.872	0.318	0	InN4	ADAMTS9-A5
TACR11	0	1.57232497	0.641	0.065	0	InN4	TACR1
KAZN3	0	1.55554216	0.997	0.951	0	InN4	KAZN
TMTC21	0	1.53559215	0.884	0.523	0	InN4	TMTC2
PKP21	0	1.52289053	0.66	0.078	0	InN4	PKP2
KIAA12113	0	1.51653163	0.871	0.376	0	InN4	KIAA1211
LINC00298	0	1.51649041	0.639	0.069	0	InN4	LINC00298
MGAT4C1	0	1.50770285	0.934	0.561	0	InN4	MGAT4C
DGKD2	0	1.50237432	0.771	0.289	0	InN4	DGKD
DOCK102	0	1.48528568	0.881	0.381	0	InN4	DOCK10
NXPH22	0	1.44793525	0.621	0.085	0	InN4	NXPH2
PMEPA1	0	1.44599586	0.646	0.144	0	InN4	PMEPA1
BCL11B3	0	1.40896511	0.768	0.23	0	InN4	BCL11B
PTPRM2	0	1.40323171	0.924	0.566	0	InN4	PTPRM
GRIN2A	0	1.39647878	0.983	0.922	0	InN4	GRIN2A
SGK11	0	1.38937915	0.838	0.49	0	InN4	SGK1
RAB3IP2	0	1.37093024	0.722	0.252	0	InN4	RAB3IP
NRIP32	0	1.37023106	0.687	0.194	0	InN4	NRIP3
CDHR32	0	1.35442322	0.752	0.36	0	InN4	CDHR3
UNC5D3	0	1.34981073	0.959	0.825	0	InN4	UNC5D
DSCAML13	0	1.34979473	0.957	0.749	0	InN4	DSCAML1
TMEM132D3	0	1.34962624	0.976	0.773	0	InN4	TMEM132D
UNC5C1	0	1.34597945	0.95	0.776	0	InN4	UNC5C
IGSF11	0	1.33351167	0.793	0.498	0	InN4	IGSF11
NFIA4	0	1.32523616	0.759	0.404	0	InN4	NFIA
MTSS14	0	1.32469955	0.886	0.553	0	InN4	MTSS1
IL1RAPL11	0	1.31572811	0.996	0.974	0	InN4	IL1RAPL1
PIP5K1B2	0	1.30521786	0.815	0.463	0	InN4	PIP5K1B
QKI4	0	1.30347045	0.918	0.661	0	InN4	QKI
CHST112	0	1.30195757	0.848	0.497	0	InN4	CHST11
SLC35F42	0	1.3000503	0.686	0.211	0	InN4	SLC35F4
CTXND1	0	1.29805725	0.549	0.044	0	InN4	CTXND1
GRK31	0	1.29422672	0.907	0.697	0	InN4	GRK3
RPH3A1	0	1.29105967	0.837	0.492	0	InN4	RPH3A
SOX1-OT	0	1.29059141	0.619	0.093	0	InN4	SOX1-OT
FAM110B2	0	1.28926229	0.781	0.415	0	InN4	FAM110B
NYAP21	0	1.28268967	0.816	0.493	0	InN4	NYAP2
MSI23	0	1.27249747	0.884	0.649	0	InN4	MSI2
CNTNAP42	0	1.27121311	0.906	0.567	0	InN4	CNTNAP4
ROR2	0	1.26439028	0.506	0.038	0	InN4	ROR2
EEPD1	0	1.26136383	0.758	0.365	0	InN4	EEPD1
LTBP1	0	1.23921964	0.518	0.104	0	InN4	LTBP1
ATP11C1	0	1.23401725	0.577	0.048	0	InN4	ATP11C
MACROD21	0	1.20899936	0.983	0.949	0	InN4	MACROD2
ATP8A21	0	1.19638772	0.983	0.95	0	InN4	ATP8A2
ARHGAP311	0	1.19220108	0.499	0.024	0	InN4	ARHGAP31
LINC00472	0	1.17225153	0.537	0.129	0	InN4	LINC00472
LINC01344	0	1.17116703	0.375	0.015	0	InN4	LINC01344
GRIA42	0	1.16427171	0.965	0.839	0	InN4	GRIA4
EXT11	0	1.16195665	0.933	0.806	0	InN4	EXT1
GOLIM42	0	1.16154072	0.603	0.141	0	InN4	GOLIM4

KIRREL1	0	1.15913564	0.571	0.064	0	lnN4	KIRREL1
CACNA2D11	0	1.15597458	0.933	0.767	0	lnN4	CACNA2D1
SH3RF33	0	1.13749623	0.879	0.671	0	lnN4	SH3RF3
RERG1	0	1.12423163	0.698	0.247	0	lnN4	RERG
ZBTB203	0	1.1179554	0.807	0.537	0	lnN4	ZBTB20
HPSE2	0	1.09662909	0.347	0.099	0	lnN4	HPSE2
SPOCK13	0	1.09300537	0.946	0.74	0	lnN4	SPOCK1
TOX33	0	1.0898281	0.606	0.168	0	lnN4	TOX3
COL4A21	0	1.08903736	0.609	0.228	0	lnN4	COL4A2
AP001347.1	0	1.08607075	0.789	0.591	0	lnN4	AP001347.1
TIAM13	0	1.08585081	0.922	0.746	0	lnN4	TIAM1
GRIP23	0	1.08246308	0.633	0.167	0	lnN4	GRIP2
KIRREL31	0	1.07265323	0.965	0.784	0	lnN4	KIRREL3
KCNC22	0	1.0699595	0.942	0.83	0	lnN4	KCNC2
SLC35F15	0	1.06765574	0.938	0.698	0	lnN4	SLC35F1
FGF14	0	1.06742311	0.994	0.989	0	lnN4	FGF14
TOX4	0	1.0644621	0.786	0.426	0	lnN4	TOX
TRPC3	0	1.06196646	0.463	0.052	0	lnN4	TRPC3
LSAMP2	0	1.05892211	0.996	0.973	0	lnN4	LSAMP
VWC22	0	1.05239987	0.739	0.337	0	lnN4	VWC2
PREX21	0	1.05189261	0.52	0.161	0	lnN4	PREX2
FREM11	0	1.05032149	0.505	0.208	0	lnN4	FREM1
ZEB24	0	1.04145447	0.933	0.816	0	lnN4	ZEB2
RIN23	0	1.02713691	0.619	0.19	0	lnN4	RIN2
COL25A11	0	1.02594842	0.495	0.202	0	lnN4	COL25A1
CDK141	0	1.01801902	0.936	0.861	0	lnN4	CDK14
MTUS2	0	1.00756955	0.979	0.923	0	lnN4	MTUS2
DOCK9	0	0.99896745	0.889	0.745	0	lnN4	DOCK9
ADRA1A2	0	0.9988358	0.655	0.19	0	lnN4	ADRA1A
GRIK42	0	0.99120961	0.742	0.43	0	lnN4	GRIK4
MPPED11	0	0.98354681	0.736	0.438	0	lnN4	MPPED1
GNG41	0	0.98168525	0.534	0.126	0	lnN4	GNG4
HOMER2	0	0.97904626	0.635	0.329	0	lnN4	HOMER2
FRY	0	0.97282861	0.927	0.848	0	lnN4	FRY
UTRN3	0	0.97090467	0.587	0.238	0	lnN4	UTRN
AC079296.12	0	0.96179684	0.544	0.166	0	lnN4	AC079296.1
KIAA1324L1	0	0.95690572	0.715	0.488	0	lnN4	KIAA1324L
PDGFRA	0	0.95343571	0.42	0.026	0	lnN4	PDGFRA
PRKCA3	0	0.94989954	0.91	0.727	0	lnN4	PRKCA
CA2	0	0.93688383	0.434	0.036	0	lnN4	CA2
LYPD62	0	0.92978784	0.509	0.104	0	lnN4	LYPD6
PITPNC13	0	0.92659707	0.798	0.479	0	lnN4	PITPNC1
ERBB42	0	0.92010368	0.992	0.555	0	lnN4	ERBB4
SYN23	0	0.91982045	0.945	0.898	0	lnN4	SYN2
DLX6-AS11	0	0.91857024	0.676	0.219	0	lnN4	DLX6-AS1
FOXO1	0	0.91558809	0.464	0.111	0	lnN4	FOXO1
SOX13	0	0.91196393	0.442	0.029	0	lnN4	SOX13
ITGB51	0	0.90936105	0.435	0.04	0	lnN4	ITGB5
ZNF4622	0	0.90709372	0.613	0.272	0	lnN4	ZNF462
ZNF385D4	0	0.90652921	0.853	0.498	0	lnN4	ZNF385D
ENTPD32	0	0.89038034	0.611	0.28	0	lnN4	ENTPD3
WVOX3	0	0.8894019	0.914	0.813	0	lnN4	WVOX
SLC25A481	0	0.88495807	0.414	0.109	0	lnN4	SLC25A48
CRTAC13	0	0.88015635	0.583	0.221	0	lnN4	CRTAC1
MAF4	0	0.87865576	0.583	0.166	0	lnN4	MAF
AP1S21	0	0.87548582	0.553	0.185	0	lnN4	AP1S2
HAPLN1	0	0.87002464	0.405	0.025	0	lnN4	HAPLN1
COBL3	0	0.85218621	0.898	0.743	0	lnN4	COBL
PRKCE1	0	0.84612413	0.96	0.911	0	lnN4	PRKCE
PDE8B1	0	0.82943473	0.876	0.653	0	lnN4	PDE8B
NAV22	0	0.82815489	0.962	0.919	0	lnN4	NAV2
MARCH32	0	0.82450809	0.422	0.133	0	lnN4	3-Mar
SCN1A2	0	0.81545759	0.916	0.84	0	lnN4	SCN1A

NTM1	0	0.80252228	0.942	0.846	0	lnN4	NTM
LINC00354	0	0.78589169	0.389	0.043	0	lnN4	LINC00354
NTRK22	0	0.78174013	0.971	0.943	0	lnN4	NTRK2
TMEM132B	0	0.78172581	0.962	0.918	0	lnN4	TMEM132B
LAMP51	0	0.76713127	0.47	0.161	0	lnN4	LAMP5
CA81	0	0.76634239	0.401	0.102	0	lnN4	CA8
LINC01237	0	0.76187274	0.456	0.148	0	lnN4	LINC01237
DPP61	0	0.75990743	0.982	0.915	0	lnN4	DPP6
DAB13	0	0.758111	0.976	0.874	0	lnN4	DAB1
PCBP31	0	0.75630479	0.463	0.169	0	lnN4	PCBP3
PARD32	0	0.75054793	0.694	0.302	0	lnN4	PARD3
GAD13	0	0.74601262	0.675	0.269	0	lnN4	GAD1
TENM43	0	0.73934728	0.957	0.854	0	lnN4	TENM4
GRIK21	0	0.72062953	0.978	0.947	0	lnN4	GRIK2
GPRC5B1	0	0.71833134	0.476	0.156	0	lnN4	GPRC5B
TPD52L1	0	0.71039652	0.428	0.135	0	lnN4	TPD52L1
PRSS12	0	0.70837837	0.376	0.067	0	lnN4	PRSS12
AC023095.1	0	0.70680959	0.32	0.062	0	lnN4	AC023095.1
GRIA12	0	0.70186437	0.954	0.921	0	lnN4	GRIA1
WLS2	0	0.69605456	0.602	0.26	0	lnN4	WLS
IGF13	0	0.68258959	0.47	0.136	0	lnN4	IGF1
TCF43	0	0.67650738	0.974	0.957	0	lnN4	TCF4
CHRD11	0	0.66853579	0.346	0.055	0	lnN4	CHRD11
RUNX22	0	0.65955153	0.49	0.146	0	lnN4	RUNX2
FAT1	0	0.65765918	0.388	0.074	0	lnN4	FAT1
ARID1B	0	0.62990185	0.94	0.918	0	lnN4	ARID1B
RGS71	0	0.61189297	0.982	0.956	0	lnN4	RGS7
TNFAIP8L3	0	0.58523266	0.336	0.07	0	lnN4	TNFAIP8L3
FRMPD1	0	0.58068274	0.326	0.056	0	lnN4	FRMPD1
MYRFL	0	0.56980248	0.26	0.046	0	lnN4	MYRFL
CPLX3	0	0.55615632	0.253	0.017	0	lnN4	CPLX3
COL18A1	0	0.54553813	0.34	0.101	0	lnN4	COL18A1
HEG1	0	0.53679582	0.323	0.061	0	lnN4	HEG1
CLIC4	0	0.53521851	0.284	0.042	0	lnN4	CLIC4
MDGA1	0	0.5178441	0.287	0.065	0	lnN4	MDGA1
SFRP1	0	0.51502289	0.266	0.029	0	lnN4	SFRP1
SLC7A2	0	0.50652633	0.298	0.072	0	lnN4	SLC7A2
SOX1	0	0.48411927	0.276	0.034	0	lnN4	SOX1
SOX2	0	0.44400836	0.307	0.08	0	lnN4	SOX2
ANO11	0	0.4137076	0.263	0.06	0	lnN4	ANO1
PLCB11	2.00E-307	0.68125865	0.983	0.978	7.63E-303	lnN4	PLCB1
GABRB21	4.32E-299	0.71806957	0.947	0.921	1.65E-294	lnN4	GABRB2
ASTN23	2.39E-297	0.68017811	0.91	0.729	9.13E-293	lnN4	ASTN2
SEMA6D2	6.79E-289	1.13871224	0.796	0.574	2.60E-284	lnN4	SEMA6D
COL4A11	1.66E-287	0.67598129	0.41	0.154	6.35E-283	lnN4	COL4A1
CA3	2.62E-285	1.04280711	0.453	0.196	1.00E-280	lnN4	CA3
PDZRN33	3.39E-284	0.82783311	0.904	0.756	1.30E-279	lnN4	PDZRN3
B3GALT2	1.38E-282	0.60528218	0.379	0.134	5.27E-278	lnN4	B3GALT2
JAM2	6.89E-282	0.67569581	0.413	0.156	2.64E-277	lnN4	JAM2
SH3GL33	9.30E-282	0.72779847	0.884	0.818	3.55E-277	lnN4	SH3GL3
RNF150	5.24E-281	0.85238932	0.805	0.653	2.00E-276	lnN4	RNF150
RORA2	1.79E-280	0.57876561	0.989	0.962	6.83E-276	lnN4	RORA
ZNF6082	3.30E-279	0.75876545	0.644	0.344	1.26E-274	lnN4	ZNF608
DDR2	1.84E-275	0.48203988	0.281	0.075	7.05E-271	lnN4	DDR2
RIMBP2	2.55E-274	0.78765407	0.843	0.755	9.73E-270	lnN4	RIMBP2
PLCXD32	7.08E-274	0.98379644	0.599	0.298	2.71E-269	lnN4	PLCXD3
CCSER12	5.61E-273	0.55447878	0.977	0.964	2.15E-268	lnN4	CCSER1
GNG12	4.87E-269	0.42146544	0.26	0.065	1.86E-264	lnN4	GNG12
CXCL141	5.36E-267	0.45310956	0.415	0.145	2.05E-262	lnN4	CXCL14
LRRC71	2.71E-265	0.54838756	0.978	0.965	1.03E-260	lnN4	LRRC7
TMEM132C1	1.54E-264	0.58727916	0.565	0.249	5.88E-260	lnN4	TMEM132C
AC092691.14	1.08E-263	0.67820558	0.952	0.865	4.13E-259	lnN4	AC092691.1
TCF124	5.37E-263	0.86901449	0.826	0.7	2.05E-258	lnN4	TCF12

PROX11	1.00E-262	0.46705994	0.454	0.16	3.83E-258	lnN4	PROX1
ANKH1	8.56E-262	0.74713559	0.862	0.784	3.27E-257	lnN4	ANKH
XKR42	2.32E-260	0.61400947	0.934	0.858	8.85E-256	lnN4	XKR4
GRID13	2.05E-258	0.69148889	0.911	0.849	7.83E-254	lnN4	GRID1
ADD31	1.74E-254	0.79458415	0.75	0.573	6.67E-250	lnN4	ADD3
C8orf341	1.92E-254	0.96706455	0.665	0.378	7.35E-250	lnN4	C8orf34
AC005009.2	2.18E-254	0.52970168	0.347	0.12	8.35E-250	lnN4	AC005009.2
VAV23	5.91E-254	0.53065285	0.444	0.172	2.26E-249	lnN4	VAV2
ANKRD55	7.25E-253	0.56232842	0.335	0.111	2.77E-248	lnN4	ANKRD55
ANKRD443	4.61E-250	0.72724461	0.679	0.416	1.76E-245	lnN4	ANKRD44
RPS6KA23	6.15E-248	0.58427418	0.937	0.853	2.35E-243	lnN4	RPS6KA2
BACH14	9.86E-243	0.67424664	0.492	0.222	3.77E-238	lnN4	BACH1
RIMS11	1.69E-241	0.60845053	0.927	0.891	6.48E-237	lnN4	RIMS1
GPR1581	1.98E-240	0.7055082	0.85	0.746	7.55E-236	lnN4	GPR158
ABI1	2.85E-240	0.85251574	0.721	0.57	1.09E-235	lnN4	ABI1
PARD3B	3.63E-240	0.72624452	0.325	0.11	1.39E-235	lnN4	PARD3B
VLDLR-AS1	4.39E-240	0.79286764	0.596	0.343	1.68E-235	lnN4	VLDLR-AS1
AKAP6	1.16E-238	0.52316963	0.952	0.944	4.42E-234	lnN4	AKAP6
RASSF8	1.32E-237	0.62442057	0.413	0.166	5.04E-233	lnN4	RASSF8
LRRC3B1	1.15E-236	0.64243971	0.521	0.242	4.38E-232	lnN4	LRRC3B
ARL4C2	8.21E-236	0.68451713	0.53	0.258	3.14E-231	lnN4	ARL4C
CELF42	2.98E-235	0.57304944	0.947	0.905	1.14E-230	lnN4	CELF4
LRIG11	6.46E-233	0.60144093	0.458	0.205	2.47E-228	lnN4	LRIG1
SLC24A32	8.68E-233	0.413999	0.647	0.296	3.32E-228	lnN4	SLC24A3
PROX1-AS11	8.45E-232	0.43899931	0.328	0.104	3.23E-227	lnN4	PROX1-AS1
MAP3K53	4.61E-231	0.77908377	0.817	0.633	1.76E-226	lnN4	MAP3K5
UNC5B	2.82E-230	0.53098269	0.37	0.141	1.08E-225	lnN4	UNC5B
AL136456.12	5.12E-230	1.55350626	0.349	0.137	1.96E-225	lnN4	AL136456.1
KLF3-AS12	2.26E-227	0.69420395	0.518	0.255	8.65E-223	lnN4	KLF3-AS1
HS3ST51	9.43E-227	0.76340619	0.579	0.303	3.61E-222	lnN4	HS3ST5
PTPRB1	3.66E-225	0.85404291	0.625	0.41	1.40E-220	lnN4	PTPRB
ATXN11	7.25E-225	0.53235864	0.948	0.926	2.77E-220	lnN4	ATXN1
TLE21	2.12E-221	0.58366604	0.431	0.189	8.08E-217	lnN4	TLE2
DLGAP12	2.12E-220	0.46920325	0.994	0.989	8.10E-216	lnN4	DLGAP1
CCNH1	3.90E-220	0.79072102	0.853	0.764	1.49E-215	lnN4	CCNH
SLCO5A1	1.01E-219	0.7113601	0.307	0.107	3.87E-215	lnN4	SLCO5A1
SLC2A131	1.12E-219	0.70799637	0.896	0.855	4.27E-215	lnN4	SLC2A13
PBX1	1.43E-219	0.66986585	0.933	0.887	5.45E-215	lnN4	PBX1
PAWR2	6.39E-219	0.40293308	0.272	0.08	2.44E-214	lnN4	PAWR
PKNOX21	4.17E-218	0.72253623	0.857	0.752	1.60E-213	lnN4	PKNOX2
PTPRG2	1.78E-216	0.59096923	0.941	0.908	6.82E-212	lnN4	PTPRG
KCNAB11	5.14E-216	0.69677213	0.358	0.135	1.97E-211	lnN4	KCNAB1
PLEKHO1	1.51E-215	0.62562814	0.463	0.23	5.76E-211	lnN4	PLEKHO1
HPCAL11	1.22E-214	0.68896847	0.545	0.283	4.68E-210	lnN4	HPCAL1
DNM32	1.58E-213	0.5480977	0.919	0.891	6.04E-209	lnN4	DNM3
PCP4L1	9.03E-213	0.3660898	0.258	0.077	3.45E-208	lnN4	PCP4L1
AF279873.3	1.44E-212	0.66418501	0.36	0.139	5.52E-208	lnN4	AF279873.3
SERTM1	2.62E-212	0.43279957	0.284	0.095	1.00E-207	lnN4	SERTM1
SYT15	4.13E-210	0.46192705	0.995	0.985	1.58E-205	lnN4	SYT1
LINC002992	2.52E-209	0.69785313	0.528	0.271	9.63E-205	lnN4	LINC00299
AC073050.12	3.73E-208	0.78939944	0.863	0.77	1.43E-203	lnN4	AC073050.1
ANK3	3.77E-207	0.39689999	0.98	0.976	1.44E-202	lnN4	ANK3
NHS3	8.74E-205	0.67294996	0.707	0.438	3.34E-200	lnN4	NHS
SAMD12	1.04E-204	0.51259472	0.941	0.921	3.97E-200	lnN4	SAMD12
EPHA33	5.08E-203	0.75723855	0.658	0.411	1.94E-198	lnN4	EPHA3
RXRA1	5.85E-202	0.5416822	0.435	0.198	2.24E-197	lnN4	RXRA
DOK5	1.43E-201	0.71452915	0.54	0.306	5.46E-197	lnN4	DOK5
NFIX1	7.15E-201	0.70987867	0.778	0.626	2.73E-196	lnN4	NFIX
USP32	9.43E-201	0.47093856	0.396	0.165	3.60E-196	lnN4	USP3
ANK13	1.70E-197	0.51358451	0.606	0.306	6.49E-193	lnN4	ANK1
NXN	3.41E-195	0.5630738	0.355	0.141	1.31E-190	lnN4	NXN
SPOCK21	8.92E-194	0.75550454	0.623	0.426	3.41E-189	lnN4	SPOCK2
PIK3R31	1.26E-191	0.6716941	0.542	0.307	4.82E-187	lnN4	PIK3R3

WASF32	2.41E-191	0.64388807	0.589	0.374	9.23E-187	lnN4	WASF3
NRG13	2.82E-191	0.92997976	0.761	0.538	1.08E-186	lnN4	NRG1
KCNQ35	4.00E-191	0.5320631	0.963	0.899	1.53E-186	lnN4	KCNQ3
GALNT181	1.47E-190	0.62811454	0.874	0.739	5.63E-186	lnN4	GALNT18
SLIT21	1.90E-190	0.96140194	0.771	0.596	7.26E-186	lnN4	SLIT2
SOX55	4.76E-189	0.67612927	0.889	0.66	1.82E-184	lnN4	SOX5
ARX2	4.99E-186	0.34724836	0.29	0.098	1.91E-181	lnN4	ARX
AC003991.1	2.56E-185	0.54031763	0.284	0.104	9.77E-181	lnN4	AC003991.1
CDH41	7.11E-184	0.71715894	0.634	0.417	2.72E-179	lnN4	CDH4
TRPS12	1.93E-183	0.83444469	0.637	0.429	7.38E-179	lnN4	TRPS1
ETV11	1.09E-182	0.46058244	0.283	0.103	4.18E-178	lnN4	ETV1
DOK61	1.05E-181	0.78303153	0.824	0.701	4.02E-177	lnN4	DOK6
PDSS1	3.64E-180	0.58226438	0.411	0.201	1.39E-175	lnN4	PDSS1
ARID5B	1.11E-179	0.65699653	0.808	0.726	4.24E-175	lnN4	ARID5B
ST6GAL24	8.27E-179	0.69450459	0.595	0.382	3.16E-174	lnN4	ST6GAL2
AMMECR1	1.70E-178	0.75978566	0.717	0.572	6.51E-174	lnN4	AMMECR1
RASGRF1	2.15E-178	0.67406214	0.677	0.505	8.23E-174	lnN4	RASGRF1
NOS12	5.87E-178	0.69599983	0.289	0.109	2.24E-173	lnN4	NOS1
CA13	1.58E-176	0.64779212	0.349	0.157	6.04E-172	lnN4	CA13
FRMD4B3	1.19E-175	0.5972558	0.376	0.16	4.54E-171	lnN4	FRMD4B
CSMD3	1.35E-175	0.44820622	0.97	0.94	5.15E-171	lnN4	CSMD3
ITGA82	2.72E-175	0.78671449	0.306	0.119	1.04E-170	lnN4	ITGA8
SBF2	2.49E-173	0.55621462	0.841	0.799	9.53E-169	lnN4	SBF2
FOXN32	3.16E-172	0.64348906	0.815	0.703	1.21E-167	lnN4	FOXN3
SLCO3A12	4.17E-170	0.6010199	0.826	0.732	1.60E-165	lnN4	SLCO3A1
BICD12	6.45E-170	0.56238931	0.85	0.792	2.47E-165	lnN4	BICD1
FAM13C1	2.58E-168	0.70949538	0.665	0.505	9.86E-164	lnN4	FAM13C
KCNH54	1.27E-167	0.6645474	0.648	0.408	4.87E-163	lnN4	KCNH5
OSBPL33	1.49E-167	0.66862485	0.647	0.427	5.68E-163	lnN4	OSBPL3
LRRFIP2	1.77E-167	0.67815684	0.769	0.689	6.78E-163	lnN4	LRRFIP2
MYRIP3	9.30E-167	0.52572754	0.886	0.803	3.55E-162	lnN4	MYRIP
AJAP1	5.16E-165	0.64760088	0.725	0.575	1.97E-160	lnN4	AJAP1
SLC8A13	1.07E-164	0.50666032	0.969	0.857	4.08E-160	lnN4	SLC8A1
MTR1	1.10E-163	0.64451043	0.708	0.591	4.21E-159	lnN4	MTR
VPS13C2	8.89E-163	0.5644497	0.844	0.805	3.40E-158	lnN4	VPS13C
MBP2	1.16E-162	0.63097562	0.708	0.524	4.45E-158	lnN4	MBP
PRICKLE21	2.42E-162	0.61543792	0.844	0.792	9.25E-158	lnN4	PRICKLE2
ABCC11	6.52E-162	0.6503827	0.549	0.347	2.49E-157	lnN4	ABCC1
GALNT22	2.51E-161	0.65696021	0.637	0.474	9.60E-157	lnN4	GALNT2
AC087457.11	3.35E-160	0.35182756	0.301	0.116	1.28E-155	lnN4	AC087457.1
ERC12	8.38E-160	0.47411326	0.894	0.866	3.20E-155	lnN4	ERC1
CNTN53	8.03E-159	0.56266665	0.947	0.81	3.07E-154	lnN4	CNTN5
MMD2	2.09E-158	0.55584239	0.333	0.143	7.99E-154	lnN4	MMD2
GRIN2B3	2.72E-158	0.42915775	0.959	0.946	1.04E-153	lnN4	GRIN2B
REV3L2	1.84E-157	0.52438258	0.836	0.775	7.01E-153	lnN4	REV3L
PCDH153	7.39E-157	0.44784463	0.575	0.315	2.82E-152	lnN4	PCDH15
ANKRD61	2.96E-156	0.63588664	0.61	0.409	1.13E-151	lnN4	ANKRD6
GRM41	5.73E-155	0.4413183	0.379	0.176	2.19E-150	lnN4	GRM4
OSBPL62	6.26E-155	0.5294416	0.844	0.802	2.39E-150	lnN4	OSBPL6
CDH202	1.64E-153	0.64435827	0.611	0.372	6.27E-149	lnN4	CDH20
NR2F1-AS11	2.24E-153	0.56528397	0.855	0.785	8.56E-149	lnN4	NR2F1-AS1
KIAA1109	3.81E-153	0.55619949	0.838	0.801	1.46E-148	lnN4	KIAA1109
LPIN22	1.50E-152	0.61569859	0.554	0.355	5.75E-148	lnN4	LPIN2
MCTP13	8.26E-151	0.46426823	0.883	0.763	3.16E-146	lnN4	MCTP1
RERE	2.33E-150	0.40524828	0.929	0.925	8.89E-146	lnN4	RERE
NINL2	5.52E-150	0.39528392	0.386	0.179	2.11E-145	lnN4	NINL
IL6ST2	9.16E-150	0.6124202	0.515	0.319	3.50E-145	lnN4	IL6ST
TLK11	1.88E-148	0.62219472	0.734	0.623	7.20E-144	lnN4	TLK1
SERINC52	1.11E-146	0.60769628	0.601	0.415	4.26E-142	lnN4	SERINC5
OPHN1	3.79E-146	0.66989086	0.71	0.607	1.45E-141	lnN4	OPHN1
AMOTL12	1.66E-143	0.41701059	0.405	0.195	6.35E-139	lnN4	AMOTL1
FARP14	1.43E-142	0.55424483	0.787	0.652	5.46E-138	lnN4	FARP1
ADAM22	4.07E-141	0.54255887	0.846	0.825	1.56E-136	lnN4	ADAM22

MAML31	1.29E-140	0.68209884	0.559	0.353	4.92E-136	lnN4	MAML3
LRRTM32	8.65E-140	0.66266544	0.891	0.83	3.31E-135	lnN4	LRRTM3
MTUS13	1.21E-139	0.47932183	0.513	0.289	4.61E-135	lnN4	MTUS1
ARHGEF26-A	1.46E-139	0.40981475	0.304	0.128	5.58E-135	lnN4	ARHGEF26-A
SWAP701	4.45E-139	0.36221259	0.286	0.119	1.70E-134	lnN4	SWAP70
KCNQ4	1.19E-138	0.34284945	0.255	0.099	4.54E-134	lnN4	KCNQ4
MGLL2	2.31E-138	0.57161845	0.616	0.431	8.83E-134	lnN4	MGLL
HECW2	1.44E-134	0.4542005	0.89	0.866	5.51E-130	lnN4	HECW2
PHYHIPL1	2.85E-132	0.62331776	0.702	0.588	1.09E-127	lnN4	PHYHIPL
LYPD6B3	3.46E-132	0.38568705	0.372	0.171	1.32E-127	lnN4	LYPD6B
SEC14L1	2.11E-131	0.57606801	0.553	0.381	8.08E-127	lnN4	SEC14L1
FCHSD24	1.90E-129	0.51464608	0.744	0.608	7.28E-125	lnN4	FCHSD2
MIRLET7BHC	4.05E-128	0.59491832	0.587	0.418	1.55E-123	lnN4	MIRLET7BHG
ATP1B22	8.66E-128	0.45341167	0.423	0.224	3.31E-123	lnN4	ATP1B2
MIR181A1HC	8.13E-123	0.59483746	0.612	0.439	3.11E-118	lnN4	MIR181A1HC
ADCYAP1R13	1.71E-122	0.43919924	0.504	0.293	6.54E-118	lnN4	ADCYAP1R1
KCTD162	3.26E-122	0.46306902	0.938	0.864	1.25E-117	lnN4	KCTD16
SGMS11	3.91E-122	0.57854423	0.74	0.665	1.50E-117	lnN4	SGMS1
BCKDHB	1.45E-119	0.59922204	0.609	0.469	5.55E-115	lnN4	BCKDHB
PKP4	5.32E-118	0.46403448	0.867	0.821	2.03E-113	lnN4	PKP4
CACNA1A3	8.88E-117	0.39750956	0.946	0.908	3.40E-112	lnN4	CACNA1A
ANO61	7.45E-116	0.53017888	0.463	0.289	2.85E-111	lnN4	ANO6
FXVD62	4.21E-114	0.56077849	0.708	0.615	1.61E-109	lnN4	FXVD6
MEF2C-AS11	8.00E-113	0.55098255	0.809	0.741	3.06E-108	lnN4	MEF2C-AS1
ATXN7L1	1.18E-112	0.53124557	0.77	0.696	4.50E-108	lnN4	ATXN7L1
RASGRP12	5.31E-112	0.43304433	0.352	0.186	2.03E-107	lnN4	RASGRP1
ZMAT42	3.34E-111	0.45418671	0.867	0.764	1.28E-106	lnN4	ZMAT4
DOCK3	4.10E-111	0.31850017	0.962	0.965	1.57E-106	lnN4	DOCK3
RBMS11	1.02E-109	0.53724241	0.595	0.444	3.89E-105	lnN4	RBMS1
FAM135B3	1.04E-109	0.5321377	0.758	0.627	3.97E-105	lnN4	FAM135B
HUNK2	5.65E-109	0.52807904	0.478	0.303	2.16E-104	lnN4	HUNK
SSH21	6.23E-109	0.44439133	0.853	0.82	2.38E-104	lnN4	SSH2
MYT1	2.60E-108	0.29537821	0.25	0.107	9.94E-104	lnN4	MYT1
CCDC85A3	1.20E-106	0.54513286	0.77	0.652	4.57E-102	lnN4	CCDC85A
CFAP1613	1.86E-106	0.53623954	0.485	0.31	7.12E-102	lnN4	CFAP161
KCNN22	6.32E-104	0.54003479	0.63	0.489	2.42E-99	lnN4	KCNN2
TMEM653	1.66E-103	0.52044214	0.544	0.392	6.36E-99	lnN4	TMEM65
ID2	1.77E-103	0.45074285	0.341	0.186	6.75E-99	lnN4	ID2
AC007405.11	6.37E-103	0.33748521	0.259	0.116	2.44E-98	lnN4	AC007405.1
CPEB31	8.35E-103	0.41795486	0.857	0.847	3.19E-98	lnN4	CPEB3
CYFIP21	2.12E-102	0.46695929	0.759	0.709	8.12E-98	lnN4	CYFIP2
KCNJ31	2.75E-102	0.41184135	0.886	0.869	1.05E-97	lnN4	KCNJ3
MPDZ1	6.79E-102	0.50757891	0.795	0.769	2.59E-97	lnN4	MPDZ
NECAB2	2.83E-101	0.37231459	0.328	0.171	1.08E-96	lnN4	NECAB2
EPHB2	1.70E-99	0.53471625	0.53	0.375	6.52E-95	lnN4	EPHB2
CDC42BPA	3.15E-99	0.36538954	0.91	0.905	1.20E-94	lnN4	CDC42BPA
TGFB21	8.68E-99	0.35670872	0.308	0.153	3.32E-94	lnN4	TGFB2
RALGPS12	5.55E-98	0.46871091	0.76	0.705	2.12E-93	lnN4	RALGPS1
CNTNAP52	8.91E-98	0.50769224	0.931	0.9	3.41E-93	lnN4	CNTNAP5
SLC20A2	1.31E-96	0.52789627	0.717	0.634	5.01E-92	lnN4	SLC20A2
PAK51	5.59E-96	0.44303796	0.812	0.758	2.14E-91	lnN4	PAK5
KANSL1L2	2.37E-94	0.50213233	0.584	0.455	9.06E-90	lnN4	KANSL1L
VAT1L1	2.76E-94	0.47845602	0.399	0.239	1.05E-89	lnN4	VAT1L
MYH14	5.17E-94	0.33768345	0.289	0.144	1.98E-89	lnN4	MYH14
BTBD8	7.73E-94	0.52481832	0.692	0.622	2.96E-89	lnN4	BTBD8
MAST42	7.82E-94	0.41247734	0.865	0.816	2.99E-89	lnN4	MAST4
SSBP22	1.80E-93	0.44923296	0.837	0.824	6.89E-89	lnN4	SSBP2
LCORL1	2.00E-92	0.48432544	0.617	0.491	7.66E-88	lnN4	LCORL
SVIL2	5.29E-92	0.41224503	0.319	0.169	2.02E-87	lnN4	SVIL
SDK13	1.26E-91	0.60233811	0.636	0.474	4.80E-87	lnN4	SDK1
AC087564.12	2.00E-91	0.36135126	0.287	0.136	7.65E-87	lnN4	AC087564.1
CSMD21	4.95E-91	0.44344362	0.811	0.771	1.89E-86	lnN4	CSMD2
PHF14	6.63E-91	0.44537233	0.796	0.78	2.54E-86	lnN4	PHF14

NCOA22	1.43E-90	0.40479723	0.793	0.741	5.47E-86	lnN4	NCOA2
HDAC93	2.26E-90	0.4097395	0.847	0.776	8.65E-86	lnN4	HDAC9
LINC027983	1.34E-89	0.44267941	0.357	0.206	5.11E-85	lnN4	LINC02798
FUT82	3.29E-88	0.45564863	0.749	0.695	1.26E-83	lnN4	FUT8
TENM12	4.29E-88	0.33307689	0.564	0.374	1.64E-83	lnN4	TENM1
TSPAN91	8.77E-88	0.41632171	0.418	0.257	3.35E-83	lnN4	TSPAN9
LINC005991	4.47E-87	0.45593713	0.764	0.731	1.71E-82	lnN4	LINC00599
TMEM164	3.10E-86	0.42381221	0.389	0.241	1.18E-81	lnN4	TMEM164
MARCH41	3.17E-86	0.49420582	0.538	0.401	1.21E-81	lnN4	4-Mar
SSTR23	1.15E-85	0.387438	0.323	0.181	4.41E-81	lnN4	SSTR2
ADAMTS21	3.40E-85	0.36002824	0.278	0.14	1.30E-80	lnN4	ADAMTS2
APBA1	5.47E-85	0.43747931	0.789	0.754	2.09E-80	lnN4	APBA1
MAP3K11	8.18E-85	0.32074909	0.301	0.158	3.13E-80	lnN4	MAP3K1
PPFIBP13	1.35E-84	0.44944707	0.76	0.659	5.14E-80	lnN4	PPFIBP1
RARS2	2.20E-84	0.4567176	0.526	0.399	8.42E-80	lnN4	RARS2
UBTD2	6.93E-84	0.3367982	0.295	0.157	2.65E-79	lnN4	UBTD2
HRH11	8.83E-84	0.47425402	0.368	0.225	3.37E-79	lnN4	HRH1
MTMR7	3.14E-83	0.46150723	0.678	0.613	1.20E-78	lnN4	MTMR7
PRKG21	4.22E-83	0.40057921	0.311	0.172	1.61E-78	lnN4	PRKG2
CACNG32	8.65E-83	0.48487101	0.743	0.652	3.31E-78	lnN4	CACNG3
MXD41	1.01E-82	0.41010113	0.399	0.25	3.87E-78	lnN4	MXD4
ST51	3.53E-82	0.53341415	0.475	0.339	1.35E-77	lnN4	ST5
URI12	5.23E-82	0.4509255	0.574	0.464	2.00E-77	lnN4	URI1
SNCAIP1	1.00E-81	0.37123304	0.296	0.157	3.84E-77	lnN4	SNCAIP
PODXL22	1.35E-81	0.43255773	0.535	0.386	5.15E-77	lnN4	PODXL2
CACNA1I	1.10E-80	0.40634858	0.442	0.292	4.22E-76	lnN4	CACNA1I
TRERF12	1.30E-80	0.43144801	0.734	0.653	4.97E-76	lnN4	TRERF1
FTO	3.53E-79	0.35655252	0.852	0.855	1.35E-74	lnN4	FTO
PDE10A3	9.87E-79	0.4166215	0.785	0.672	3.77E-74	lnN4	PDE10A
ITM2C	1.23E-78	0.4977049	0.392	0.258	4.71E-74	lnN4	ITM2C
PLAGL13	1.78E-78	0.37243195	0.378	0.23	6.79E-74	lnN4	PLAGL1
CAP21	5.97E-78	0.45584206	0.729	0.654	2.28E-73	lnN4	CAP2
BRINP21	1.26E-77	0.46722605	0.746	0.644	4.82E-73	lnN4	BRINP2
CASK	2.73E-77	0.4361164	0.688	0.631	1.04E-72	lnN4	CASK
ZDHHC141	5.47E-76	0.38088157	0.837	0.775	2.09E-71	lnN4	ZDHHC14
ADGRL23	5.75E-76	0.40835194	0.907	0.855	2.20E-71	lnN4	ADGRL2
TMEFF24	6.21E-76	0.47665333	0.815	0.763	2.37E-71	lnN4	TMEFF2
VAV33	2.36E-75	0.59340273	0.266	0.143	9.02E-71	lnN4	VAV3
GABBR2	3.47E-75	0.31201366	0.924	0.918	1.33E-70	lnN4	GABBR2
POLA11	1.07E-74	0.48173667	0.519	0.397	4.11E-70	lnN4	POLA1
ST8SIA43	1.26E-74	0.3817187	0.315	0.179	4.83E-70	lnN4	ST8SIA4
CCNJL1	2.56E-74	0.27592112	0.251	0.125	9.80E-70	lnN4	CCNJL
SNRPN3	7.25E-74	0.37765501	0.816	0.76	2.77E-69	lnN4	SNRPN
PDE8A2	2.37E-73	0.4370557	0.557	0.435	9.04E-69	lnN4	PDE8A
ANKRD30BL1	4.74E-73	0.42788758	0.784	0.705	1.81E-68	lnN4	ANKRD30BL
LMCD1-AS12	7.16E-73	0.62981383	0.417	0.285	2.74E-68	lnN4	LMCD1-AS1
KIAA19582	2.23E-72	0.42310066	0.559	0.426	8.53E-68	lnN4	KIAA1958
GPR1551	2.38E-72	0.445736	0.664	0.598	9.09E-68	lnN4	GPR155
SH3PXD2B	2.49E-72	0.29021467	0.258	0.134	9.53E-68	lnN4	SH3PXD2B
TRAF3IP2-AS	2.15E-71	0.39683507	0.775	0.749	8.23E-67	lnN4	TRAF3IP2-AS
ST3GAL12	2.31E-71	0.45104032	0.435	0.297	8.84E-67	lnN4	ST3GAL1
MBOAT22	5.71E-71	0.41900515	0.679	0.586	2.18E-66	lnN4	MBOAT2
GRIN2D3	5.90E-71	0.2575821	0.272	0.139	2.26E-66	lnN4	GRIN2D
DCX3	2.07E-70	0.39108006	0.53	0.392	7.89E-66	lnN4	DCX
LRRC8B2	4.32E-70	0.43887711	0.723	0.676	1.65E-65	lnN4	LRRC8B
ATP13A3	4.32E-70	0.46442975	0.535	0.437	1.65E-65	lnN4	ATP13A3
TBC1D42	4.67E-70	0.44595416	0.574	0.461	1.79E-65	lnN4	TBC1D4
SH3KBP14	5.59E-70	0.43680752	0.675	0.604	2.14E-65	lnN4	SH3KBP1
TNR1	6.08E-70	0.40472236	0.862	0.799	2.32E-65	lnN4	TNR
SYNE11	9.21E-70	0.30672112	0.962	0.952	3.52E-65	lnN4	SYNE1
CCK1	1.64E-69	0.36178698	0.58	0.45	6.27E-65	lnN4	CCK
LINC01630	2.41E-69	0.35661683	0.251	0.131	9.22E-65	lnN4	LINC01630
ASPH2	1.36E-68	0.45043942	0.661	0.598	5.19E-64	lnN4	ASPH

TTC39B1	7.14E-68	0.45412854	0.558	0.457	2.73E-63	lnN4	TTC39B
KIF21A1	9.32E-68	0.41613176	0.738	0.719	3.56E-63	lnN4	KIF21A
GRM53	4.59E-67	0.30202074	0.96	0.897	1.75E-62	lnN4	GRM5
TTC39C2	2.89E-66	0.42745886	0.683	0.599	1.11E-61	lnN4	TTC39C
NF2	3.04E-66	0.42761841	0.418	0.294	1.16E-61	lnN4	NF2
IL1RAP3	6.37E-66	0.57062849	0.438	0.322	2.44E-61	lnN4	IL1RAP
MPP61	1.32E-65	0.46827119	0.652	0.582	5.05E-61	lnN4	MPP6
EPN21	1.44E-65	0.4402404	0.634	0.552	5.49E-61	lnN4	EPN2
NETO13	3.84E-65	0.37467208	0.798	0.729	1.47E-60	lnN4	NETO1
GALNT101	4.08E-65	0.37181495	0.254	0.141	1.56E-60	lnN4	GALNT10
KLF3	6.31E-65	0.26207735	0.256	0.138	2.41E-60	lnN4	KLF3
ARG2	8.68E-65	0.25076479	0.257	0.139	3.32E-60	lnN4	ARG2
LIFR	1.23E-64	0.46359854	0.432	0.311	4.70E-60	lnN4	LIFR
CYTH13	3.94E-64	0.40357434	0.546	0.437	1.51E-59	lnN4	CYTH1
CLIP41	1.21E-63	0.42664996	0.606	0.541	4.64E-59	lnN4	CLIP4
KITLG1	1.52E-63	0.42759409	0.416	0.288	5.81E-59	lnN4	KITLG
AIG11	2.69E-63	0.36995904	0.788	0.773	1.03E-58	lnN4	AIG1
PLPPR13	8.03E-63	0.26743971	0.454	0.29	3.07E-58	lnN4	PLPPR1
SRGAP3	1.59E-62	0.32010847	0.883	0.873	6.06E-58	lnN4	SRGAP3
PWRN13	1.79E-62	0.34670917	0.631	0.464	6.83E-58	lnN4	PWRN1
RBFOX32	1.01E-61	0.31130389	0.912	0.883	3.85E-57	lnN4	RBFOX3
DYNC1I14	1.24E-61	0.31219733	0.883	0.873	4.75E-57	lnN4	DYNC1I1
NAV12	1.37E-61	0.39738817	0.719	0.674	5.22E-57	lnN4	NAV1
JAK11	8.98E-61	0.38160893	0.757	0.744	3.43E-56	lnN4	JAK1
LINGO22	1.56E-60	0.31812789	0.953	0.819	5.98E-56	lnN4	LINGO2
CALD12	7.85E-60	0.37111835	0.442	0.317	3.00E-55	lnN4	CALD1
RIPOR22	1.10E-59	0.35468348	0.584	0.464	4.20E-55	lnN4	RIPOR2
MOB3B	1.30E-59	0.46456693	0.502	0.388	4.97E-55	lnN4	MOB3B
VSTM2L2	5.26E-59	0.41066408	0.417	0.295	2.01E-54	lnN4	VSTM2L
ECE21	1.55E-58	0.30062205	0.357	0.226	5.92E-54	lnN4	ECE2
ABLIM14	1.62E-58	0.27687527	0.866	0.832	6.21E-54	lnN4	ABLIM1
PIK3C2B	5.86E-58	0.33356869	0.356	0.235	2.24E-53	lnN4	PIK3C2B
PACSIN22	7.94E-58	0.39665841	0.461	0.345	3.04E-53	lnN4	PACSIN2
CHD3	1.72E-57	0.39994977	0.47	0.362	6.57E-53	lnN4	CHD3
C5orf561	2.44E-57	0.34604782	0.404	0.278	9.33E-53	lnN4	C5orf56
TTBK21	5.57E-57	0.41166779	0.709	0.684	2.13E-52	lnN4	TTBK2
SLC7A82	5.94E-57	0.39577827	0.478	0.368	2.27E-52	lnN4	SLC7A8
ANKRD30B1	8.08E-57	0.43019712	0.391	0.275	3.09E-52	lnN4	ANKRD30B
FNBP1L3	1.47E-56	0.32237496	0.528	0.384	5.63E-52	lnN4	FNBP1L
TCF20	1.84E-56	0.39085984	0.677	0.63	7.03E-52	lnN4	TCF20
CDK81	3.46E-56	0.4061436	0.624	0.561	1.32E-51	lnN4	CDK8
DST1	3.90E-56	0.25178534	0.949	0.954	1.49E-51	lnN4	DST
BACH24	4.52E-56	0.38602949	0.681	0.61	1.73E-51	lnN4	BACH2
PLCH21	9.20E-56	0.28275773	0.307	0.189	3.52E-51	lnN4	PLCH2
PLXDC1	6.32E-55	0.33264808	0.292	0.18	2.42E-50	lnN4	PLXDC1
TMEM74B	8.54E-55	0.27286999	0.265	0.158	3.26E-50	lnN4	TMEM74B
CCBE1	1.48E-53	0.48806907	0.325	0.212	5.64E-49	lnN4	CCBE1
CHL11	2.75E-53	0.34362834	0.846	0.805	1.05E-48	lnN4	CHL1
GPR1761	6.26E-53	0.38884034	0.442	0.329	2.39E-48	lnN4	GPR176
RGS7BP	9.51E-53	0.43097486	0.678	0.634	3.63E-48	lnN4	RGS7BP
BCAT12	1.40E-52	0.33509538	0.461	0.346	5.36E-48	lnN4	BCAT1
TRPC52	8.72E-52	0.35818944	0.451	0.325	3.33E-47	lnN4	TRPC5
PNPLA7	9.17E-52	0.42568776	0.499	0.411	3.50E-47	lnN4	PNPLA7
GABRB1	1.42E-51	0.28695045	0.917	0.917	5.42E-47	lnN4	GABRB1
PWRN42	1.75E-51	0.26890096	0.355	0.221	6.68E-47	lnN4	PWRN4
EXOC2	3.86E-51	0.38912844	0.643	0.59	1.47E-46	lnN4	EXOC2
PALLD2	4.64E-51	0.34395614	0.527	0.413	1.77E-46	lnN4	PALLD
DIP2B1	2.68E-50	0.35020806	0.713	0.691	1.02E-45	lnN4	DIP2B
RAPGEF43	1.42E-49	0.26153469	0.882	0.875	5.43E-45	lnN4	RAPGEF4
EFR3B1	8.79E-49	0.37689672	0.586	0.502	3.36E-44	lnN4	EFR3B
CRADD2	1.18E-48	0.47899647	0.525	0.431	4.50E-44	lnN4	CRADD
GARNL33	1.64E-48	0.29790837	0.778	0.724	6.29E-44	lnN4	GARNL3
PXK	1.72E-48	0.39932005	0.555	0.468	6.56E-44	lnN4	PXK

TIAM21	2.37E-48	0.3791207	0.76	0.736	9.05E-44	lnN4	TIAM2
NRG21	2.92E-48	0.34559447	0.666	0.616	1.12E-43	lnN4	NRG2
GLDN3	3.16E-48	0.28275196	0.351	0.232	1.21E-43	lnN4	GLDN
CADM1	3.34E-47	0.312328	0.865	0.861	1.28E-42	lnN4	CADM1
RNF217-AS1	3.97E-47	0.33734052	0.259	0.159	1.52E-42	lnN4	RNF217-AS1
KSR12	4.75E-47	0.35623122	0.468	0.364	1.82E-42	lnN4	KSR1
CNNM21	6.60E-47	0.36140483	0.724	0.692	2.52E-42	lnN4	CNNM2
ADCY22	1.17E-46	0.29481729	0.863	0.854	4.46E-42	lnN4	ADCY2
KIDINS220	2.17E-46	0.3369178	0.739	0.739	8.29E-42	lnN4	KIDINS220
CFLAR1	2.82E-46	0.2983911	0.295	0.19	1.08E-41	lnN4	CFLAR
CDC73	4.36E-46	0.42974011	0.549	0.479	1.67E-41	lnN4	CDC73
VSTM2A1	9.77E-46	0.33634307	0.495	0.39	3.74E-41	lnN4	VSTM2A
GSE11	1.05E-45	0.38239517	0.589	0.499	4.03E-41	lnN4	GSE1
NEBL1	2.07E-45	0.31872684	0.88	0.876	7.90E-41	lnN4	NEBL
SAT12	2.63E-45	0.39324349	0.461	0.364	1.00E-40	lnN4	SAT1
CPEB21	2.92E-45	0.40971215	0.511	0.438	1.12E-40	lnN4	CPEB2
FMNL24	6.17E-45	0.29049858	0.892	0.873	2.36E-40	lnN4	FMNL2
KCNN32	6.27E-45	0.36342518	0.423	0.317	2.40E-40	lnN4	KCNN3
PLCL21	9.14E-45	0.35925148	0.72	0.696	3.49E-40	lnN4	PLCL2
NDRG1	1.06E-44	0.28325316	0.268	0.168	4.05E-40	lnN4	NDRG1
KLHL291	2.61E-44	0.4131669	0.711	0.701	9.98E-40	lnN4	KLHL29
NMNAT33	2.67E-44	0.33390331	0.354	0.247	1.02E-39	lnN4	NMNAT3
GABRA51	6.10E-44	0.3757206	0.337	0.236	2.33E-39	lnN4	GABRA5
OIP5-AS11	9.62E-44	0.43726335	0.622	0.569	3.68E-39	lnN4	OIP5-AS1
C1orf211	1.01E-43	0.30623757	0.735	0.719	3.87E-39	lnN4	C1orf21
CC2D2A2	1.64E-43	0.35975243	0.363	0.265	6.25E-39	lnN4	CC2D2A
GNAL3	3.04E-43	0.33707504	0.629	0.473	1.16E-38	lnN4	GNAL
LINC015051	2.31E-42	0.38379977	0.317	0.214	8.83E-38	lnN4	LINC01505
PGAP1	9.34E-42	0.36759559	0.523	0.454	3.57E-37	lnN4	PGAP1
BCL22	9.35E-42	0.3916524	0.603	0.524	3.57E-37	lnN4	BCL2
AC004083.11	1.48E-41	0.37375891	0.397	0.298	5.64E-37	lnN4	AC004083.1
PRKN3	3.42E-41	0.25944152	0.854	0.864	1.31E-36	lnN4	PRKN
NEDD4L2	1.14E-40	0.27012229	0.851	0.813	4.35E-36	lnN4	NEDD4L
DIAPH22	1.59E-40	0.28858265	0.705	0.608	6.06E-36	lnN4	DIAPH2
CRIM13	1.85E-40	0.37942734	0.573	0.487	7.08E-36	lnN4	CRIM1
DAAM12	2.38E-40	0.29952373	0.757	0.751	9.11E-36	lnN4	DAAM1
GTF2I1	2.59E-40	0.25156651	0.822	0.835	9.88E-36	lnN4	GTF2I
PELI21	5.94E-40	0.30876709	0.393	0.281	2.27E-35	lnN4	PELI2
APC3	1.34E-39	0.30443055	0.743	0.742	5.14E-35	lnN4	APC
B3GLCT2	1.95E-39	0.61857513	0.374	0.296	7.44E-35	lnN4	B3GLCT
AC007368.13	4.53E-39	0.36180685	0.55	0.438	1.73E-34	lnN4	AC007368.1
SH3BGR11	4.64E-39	0.33931008	0.542	0.474	1.77E-34	lnN4	SH3BGR1
CRB12	7.84E-39	0.29318929	0.417	0.31	3.00E-34	lnN4	CRB1
GREB13	1.62E-38	0.30275258	0.432	0.337	6.21E-34	lnN4	GREB1
ST3GAL5	2.69E-38	0.36602722	0.5	0.43	1.03E-33	lnN4	ST3GAL5
CDR2	3.94E-38	0.32525727	0.618	0.554	1.51E-33	lnN4	CDR2
PHACTR23	5.90E-38	0.28389226	0.508	0.406	2.25E-33	lnN4	PHACTR2
USP311	8.38E-38	0.39690318	0.49	0.422	3.20E-33	lnN4	USP31
SEM11	1.02E-37	0.38806657	0.545	0.48	3.89E-33	lnN4	SEM1
RFC1	1.06E-37	0.33059352	0.386	0.298	4.04E-33	lnN4	RFC1
FAM168A	2.48E-37	0.29816534	0.766	0.764	9.47E-33	lnN4	FAM168A
AFF22	3.34E-37	0.30918276	0.485	0.387	1.28E-32	lnN4	AFF2
C1orf61	3.99E-37	0.3312133	0.413	0.326	1.53E-32	lnN4	C1orf61
CEP164	4.84E-37	0.35992192	0.453	0.374	1.85E-32	lnN4	CEP164
ZNF8272	4.85E-37	0.36158348	0.549	0.483	1.85E-32	lnN4	ZNF827
MXRA7	6.81E-37	0.29348181	0.346	0.253	2.60E-32	lnN4	MXRA7
PTPRS1	2.19E-36	0.3104007	0.736	0.714	8.36E-32	lnN4	PTPRS
BIRC6	4.97E-36	0.28734382	0.805	0.817	1.90E-31	lnN4	BIRC6
NR3C21	8.59E-36	0.27735761	0.817	0.805	3.28E-31	lnN4	NR3C2
AC098829.1	1.34E-35	0.46789449	0.327	0.238	5.12E-31	lnN4	AC098829.1
FAM49A	1.40E-35	0.33548511	0.724	0.716	5.36E-31	lnN4	FAM49A
ATP1B12	1.93E-35	0.28417418	0.779	0.78	7.39E-31	lnN4	ATP1B1
ZSWIM52	2.22E-35	0.32773376	0.597	0.544	8.49E-31	lnN4	ZSWIM5

SSH11	2.46E-35	0.36377048	0.494	0.43	9.42E-31	lnN4	SSH1
SREBF21	3.99E-35	0.35093884	0.615	0.581	1.53E-30	lnN4	SREBF2
PLPP1	4.36E-35	0.37083071	0.577	0.534	1.67E-30	lnN4	PLPP1
EFCAB22	9.22E-35	0.34304433	0.576	0.515	3.52E-30	lnN4	EFCAB2
ZSWIM61	2.52E-34	0.33901392	0.745	0.73	9.63E-30	lnN4	ZSWIM6
SPOPL	8.74E-34	0.33558739	0.42	0.345	3.34E-29	lnN4	SPOPL
L3MBTL11	1.04E-33	0.31174916	0.448	0.367	3.99E-29	lnN4	L3MBTL1
LIMA11	6.48E-33	0.25846521	0.288	0.201	2.48E-28	lnN4	LIMA1
WSB11	2.03E-32	0.3305616	0.629	0.626	7.76E-28	lnN4	WSB1
DENND5A2	3.31E-32	0.3220855	0.53	0.467	1.26E-27	lnN4	DENND5A
ANKRD262	9.52E-32	0.32082865	0.752	0.754	3.64E-27	lnN4	ANKRD26
ARHGAP51	3.79E-31	0.30735506	0.623	0.591	1.45E-26	lnN4	ARHGAP5
NAAA1	3.82E-31	0.26191704	0.293	0.209	1.46E-26	lnN4	NAAA
FUT92	3.89E-31	0.27848504	0.819	0.817	1.49E-26	lnN4	FUT9
ELAVL3	4.64E-31	0.2984984	0.774	0.776	1.77E-26	lnN4	ELAVL3
INSR1	4.88E-31	0.32097837	0.685	0.663	1.86E-26	lnN4	INSR
TACC22	7.39E-31	0.29546968	0.479	0.411	2.83E-26	lnN4	TACC2
MT-ND32	2.24E-30	0.49862598	0.866	0.871	8.55E-26	lnN4	MT-ND3
SRGAP24	2.83E-30	0.27762109	0.54	0.483	1.08E-25	lnN4	SRGAP2
FYN	6.02E-30	0.27734494	0.746	0.749	2.30E-25	lnN4	FYN
CHD9	7.25E-30	0.25212507	0.825	0.839	2.77E-25	lnN4	CHD9
GABRD1	7.92E-30	0.31699426	0.335	0.26	3.03E-25	lnN4	GABRD
CCDC144A1	1.79E-29	0.32658463	0.704	0.658	6.86E-25	lnN4	CCDC144A
ITSN11	2.30E-29	0.29020731	0.743	0.752	8.78E-25	lnN4	ITSN1
PPP1R2	3.93E-29	0.29162979	0.347	0.275	1.50E-24	lnN4	PPP1R2
TRAF3	8.02E-29	0.31892668	0.572	0.526	3.06E-24	lnN4	TRAF3
AC073332.12	1.02E-28	0.4224328	0.403	0.326	3.89E-24	lnN4	AC073332.1
AL357054.2	1.38E-28	0.27887125	0.294	0.216	5.27E-24	lnN4	AL357054.2
ABAT2	1.64E-28	0.29800614	0.549	0.502	6.26E-24	lnN4	ABAT
ADCY51	2.76E-28	0.28336083	0.52	0.46	1.05E-23	lnN4	ADCY5
APBB22	5.74E-28	0.27527459	0.701	0.691	2.19E-23	lnN4	APBB2
PDCD4	6.75E-28	0.2927623	0.419	0.351	2.58E-23	lnN4	PDCD4
NAALADL21	2.16E-27	0.34675286	0.572	0.521	8.26E-23	lnN4	NAALADL2
ANKMY1	2.29E-27	0.25809394	0.287	0.212	8.74E-23	lnN4	ANKMY1
REPS1	2.48E-27	0.29788107	0.635	0.642	9.46E-23	lnN4	REPS1
ZNF804B4	7.43E-27	0.45363212	0.441	0.356	2.84E-22	lnN4	ZNF804B
GTF2IRD12	1.33E-26	0.31364495	0.517	0.454	5.10E-22	lnN4	GTF2IRD1
TUT42	1.50E-26	0.26722909	0.691	0.703	5.73E-22	lnN4	TUT4
GPR631	2.33E-26	0.28152878	0.322	0.251	8.89E-22	lnN4	GPR63
SLC4A31	4.38E-26	0.25374925	0.28	0.205	1.67E-21	lnN4	SLC4A3
AC009899.11	1.26E-25	0.31604502	0.549	0.497	4.83E-21	lnN4	AC009899.1
PKD1L12	1.29E-25	0.25377246	0.349	0.264	4.93E-21	lnN4	PKD1L1
SLC43A2	2.68E-25	0.3137063	0.363	0.293	1.02E-20	lnN4	SLC43A2
KIAA0895	4.99E-25	0.26723701	0.321	0.251	1.91E-20	lnN4	KIAA0895
RALGAPA22	5.62E-25	0.27566393	0.621	0.591	2.15E-20	lnN4	RALGAPA2
ATAD2B1	7.92E-25	0.29877156	0.489	0.437	3.03E-20	lnN4	ATAD2B
ANKS1A2	8.28E-25	0.30126838	0.618	0.597	3.16E-20	lnN4	ANKS1A
PER3	8.31E-25	0.295137	0.538	0.491	3.18E-20	lnN4	PER3
BAZ2B1	1.58E-24	0.28033163	0.713	0.711	6.05E-20	lnN4	BAZ2B
RNF217	2.35E-24	0.29800984	0.452	0.395	8.98E-20	lnN4	RNF217
GNG74	2.98E-24	0.29645612	0.477	0.407	1.14E-19	lnN4	GNG7
SEPTIN62	3.62E-24	0.25189517	0.367	0.289	1.38E-19	lnN4	SEPTIN6
SLC5A31	3.94E-24	0.25644262	0.368	0.294	1.51E-19	lnN4	SLC5A3
VPS45	4.78E-24	0.30945928	0.589	0.575	1.83E-19	lnN4	VPS45
NFIC1	5.14E-24	0.30104777	0.556	0.512	1.96E-19	lnN4	NFIC
UBAC2	5.57E-24	0.28224053	0.621	0.618	2.13E-19	lnN4	UBAC2
HSP90AA12	7.62E-24	0.48213127	0.722	0.712	2.91E-19	lnN4	HSP90AA1
NR6A1	9.36E-24	0.32789281	0.591	0.567	3.58E-19	lnN4	NR6A1
SLC1A1	3.81E-23	0.27671227	0.451	0.392	1.46E-18	lnN4	SLC1A1
NME91	1.11E-22	0.35655446	0.392	0.336	4.25E-18	lnN4	NME9
TMEM50B	1.43E-22	0.26955441	0.363	0.301	5.46E-18	lnN4	TMEM50B
ELOVL5	2.55E-22	0.38108579	0.341	0.274	9.74E-18	lnN4	ELOVL5
PCDH11Y2	2.81E-22	0.40147608	0.294	0.225	1.07E-17	lnN4	PCDH11Y

SUSD41	2.87E-22	0.28967903	0.633	0.611	1.10E-17	lnN4	SUSD4
CHCHD6	4.89E-22	0.29538055	0.509	0.479	1.87E-17	lnN4	CHCHD6
ZBTB11	6.00E-22	0.27878843	0.428	0.374	2.29E-17	lnN4	ZBTB1
SEPTIN7	6.08E-22	0.25324349	0.687	0.695	2.32E-17	lnN4	SEPTIN7
MAMLD11	2.40E-21	0.30116884	0.369	0.307	9.19E-17	lnN4	MAMLD1
DPYSL5	2.91E-21	0.2641551	0.408	0.347	1.11E-16	lnN4	DPYSL5
DOCK7	4.59E-21	0.26543686	0.559	0.538	1.75E-16	lnN4	DOCK7
SYNDIG13	4.76E-21	0.34071608	0.615	0.599	1.82E-16	lnN4	SYNDIG1
MGAT5	4.79E-21	0.25546183	0.676	0.661	1.83E-16	lnN4	MGAT5
GRK5	5.71E-21	0.31712285	0.342	0.28	2.18E-16	lnN4	GRK5
CD99L2	6.08E-21	0.29953461	0.465	0.424	2.32E-16	lnN4	CD99L2
TRAPPC9	6.43E-21	0.28842663	0.641	0.639	2.46E-16	lnN4	TRAPPC9
RNF157	7.47E-21	0.26598284	0.555	0.529	2.85E-16	lnN4	RNF157
AGPS	8.47E-21	0.27303701	0.453	0.414	3.24E-16	lnN4	AGPS
PDK31	9.69E-21	0.28202573	0.517	0.474	3.70E-16	lnN4	PDK3
MT-ND4	1.61E-20	0.4482222	0.843	0.858	6.15E-16	lnN4	MT-ND4
LRRN2	1.87E-20	0.2821757	0.553	0.519	7.17E-16	lnN4	LRRN2
GABPB2	2.16E-20	0.29479139	0.377	0.317	8.26E-16	lnN4	GABPB2
FAM214A1	2.65E-20	0.2805984	0.563	0.541	1.01E-15	lnN4	FAM214A
XPO1	8.69E-20	0.33154614	0.623	0.618	3.32E-15	lnN4	XPO1
RRAS2	1.03E-19	0.25517403	0.354	0.294	3.96E-15	lnN4	RRAS2
PIP4K2A3	1.12E-19	0.2984167	0.476	0.426	4.29E-15	lnN4	PIP4K2A
EPHA5	1.31E-19	0.27169706	0.638	0.599	5.02E-15	lnN4	EPHA5
LGI1	1.41E-19	0.31018795	0.477	0.441	5.41E-15	lnN4	LGI1
MRPS6	2.04E-19	0.2532196	0.361	0.3	7.79E-15	lnN4	MRPS6
PRMT8	2.05E-19	0.30368007	0.468	0.423	7.82E-15	lnN4	PRMT8
EXOSC10	2.63E-19	0.28314889	0.368	0.315	1.00E-14	lnN4	EXOSC10
SVOP	3.21E-19	0.29041868	0.537	0.508	1.23E-14	lnN4	SVOP
NR2F1	4.10E-19	0.30049022	0.451	0.404	1.57E-14	lnN4	NR2F1
OLFM2	6.08E-19	0.25363374	0.368	0.296	2.33E-14	lnN4	OLFM2
ZNF83	1.33E-18	0.25917324	0.382	0.329	5.07E-14	lnN4	ZNF83
SH3PXD2A	1.70E-18	0.25860975	0.696	0.705	6.48E-14	lnN4	SH3PXD2A
MT-ND1	2.03E-18	0.35490809	0.789	0.782	7.76E-14	lnN4	MT-ND1
DNM2	2.18E-18	0.3027293	0.482	0.447	8.33E-14	lnN4	DNM2
ALOX12-AS1	6.05E-18	0.2958929	0.454	0.414	2.31E-13	lnN4	ALOX12-AS1
TMEM131L	9.21E-18	0.25164465	0.396	0.338	3.52E-13	lnN4	TMEM131L
UBA6-AS1	9.97E-18	0.26320671	0.625	0.605	3.81E-13	lnN4	UBA6-AS1
APLP2	1.05E-17	0.29750837	0.591	0.597	4.01E-13	lnN4	APLP2
AP2A2	1.09E-17	0.26439756	0.577	0.568	4.18E-13	lnN4	AP2A2
FLNB	3.70E-17	0.26898241	0.487	0.454	1.41E-12	lnN4	FLNB
PITPNM2	3.88E-17	0.26425176	0.577	0.559	1.48E-12	lnN4	PITPNM2
HLF	5.15E-17	0.29058086	0.534	0.514	1.97E-12	lnN4	HLF
LSS	5.85E-17	0.26253201	0.331	0.278	2.24E-12	lnN4	LSS
GABRA4	9.50E-17	0.26181569	0.619	0.623	3.63E-12	lnN4	GABRA4
FDFT1	1.38E-16	0.27006629	0.345	0.297	5.27E-12	lnN4	FDFT1
PTPRO	2.24E-16	0.2615442	0.739	0.679	8.58E-12	lnN4	PTPRO
RYBP	3.28E-16	0.25182775	0.477	0.437	1.25E-11	lnN4	RYBP
MT-ND4L	3.72E-16	0.37796696	0.575	0.545	1.42E-11	lnN4	MT-ND4L
FAIM2	6.05E-16	0.25655299	0.664	0.677	2.31E-11	lnN4	FAIM2
RAD21	7.48E-16	0.25239631	0.411	0.373	2.86E-11	lnN4	RAD21
CAMKMT	7.56E-16	0.28598707	0.425	0.381	2.89E-11	lnN4	CAMKMT
AC027288.3	8.03E-16	0.28514828	0.304	0.249	3.07E-11	lnN4	AC027288.3
MTRNR2L12	1.42E-15	0.2542449	0.752	0.748	5.43E-11	lnN4	MTRNR2L12
MT-ND2	3.59E-15	0.30899475	0.749	0.75	1.37E-10	lnN4	MT-ND2
SKI	4.81E-15	0.252051	0.489	0.464	1.84E-10	lnN4	SKI
HMGCS1	4.90E-15	0.35578219	0.358	0.315	1.87E-10	lnN4	HMGCS1
PLCG2	5.27E-15	0.3924991	0.679	0.651	2.01E-10	lnN4	PLCG2
LINC00937	2.13E-14	0.25178097	0.337	0.287	8.13E-10	lnN4	LINC00937
TET2	2.42E-14	0.25249045	0.471	0.438	9.26E-10	lnN4	TET2
DPH6	4.30E-14	0.25712634	0.451	0.416	1.64E-09	lnN4	DPH6
NCS1	4.70E-14	0.25128301	0.507	0.486	1.80E-09	lnN4	NCS1
AMN1	7.58E-14	0.27198403	0.439	0.408	2.90E-09	lnN4	AMN1
COLQ	1.83E-13	0.25415875	0.443	0.414	6.99E-09	lnN4	COLQ

IQCK	4.54E-13	0.26964408	0.345	0.306	1.73E-08	lnN4	IQCK
SPANXA2-OT	7.89E-13	0.3559112	0.308	0.264	3.02E-08	lnN4	SPANXA2-OT
AC098588.3	9.87E-13	0.28938219	0.565	0.547	3.77E-08	lnN4	AC098588.3
PRKD12	1.01E-12	0.42381824	0.517	0.514	3.86E-08	lnN4	PRKD1
MT-CO22	6.82E-12	0.26991665	0.891	0.899	2.61E-07	lnN4	MT-CO2
MT-ND51	7.78E-12	0.34588927	0.579	0.57	2.97E-07	lnN4	MT-ND5
AL627171.22	1.20E-11	0.43331638	0.482	0.453	4.60E-07	lnN4	AL627171.2
LINC02245	2.08E-11	0.27991862	0.508	0.495	7.96E-07	lnN4	LINC02245
MT-CYB2	1.35E-10	0.33020936	0.777	0.788	5.14E-06	lnN4	MT-CYB
MT-ATP62	1.38E-10	0.34290671	0.862	0.881	5.28E-06	lnN4	MT-ATP6
AC119673.2	2.85E-10	0.29419171	0.37	0.349	1.09E-05	lnN4	AC119673.2
NECTIN31	7.65E-08	0.25475702	0.496	0.484	0.00292312	lnN4	NECTIN3
MRPL411	9.47E-08	0.25294521	0.45	0.446	0.00362126	lnN4	MRPL41
CXCL142	0	3.39736596	0.885	0.125	0	lnN5	CXCL14
RELN1	0	3.0564758	0.514	0.121	0	lnN5	RELN
THSD7B1	0	2.81762737	0.754	0.137	0	lnN5	THSD7B
SGO1-AS11	0	2.55056752	0.551	0.119	0	lnN5	SGO1-AS1
ADARB22	0	2.26530898	0.999	0.345	0	lnN5	ADARB2
FSTL52	0	2.19864844	0.91	0.485	0	lnN5	FSTL5
PLD52	0	2.10603747	0.91	0.3	0	lnN5	PLD5
INPP4B4	0	1.9464761	0.935	0.748	0	lnN5	INPP4B
DLX6-AS12	0	1.90532147	0.753	0.22	0	lnN5	DLX6-AS1
HS3ST52	0	1.84536106	0.693	0.301	0	lnN5	HS3ST5
ERBB43	0	1.82912263	0.997	0.56	0	lnN5	ERBB4
SDK14	0	1.815611	0.882	0.464	0	lnN5	SDK1
EGFR2	0	1.81166387	0.83	0.218	0	lnN5	EGFR
ADRA1A3	0	1.802236	0.82	0.188	0	lnN5	ADRA1A
PRELID21	0	1.71055304	0.82	0.395	0	lnN5	PRELID2
CNTNAP43	0	1.69165668	0.896	0.572	0	lnN5	CNTNAP4
RGS121	0	1.67828498	0.949	0.5	0	lnN5	RGS12
NR2F2-AS11	0	1.67461401	0.796	0.186	0	lnN5	NR2F2-AS1
CNTN54	0	1.64159024	0.97	0.81	0	lnN5	CNTN5
AC132803.11	0	1.63340635	0.654	0.16	0	lnN5	AC132803.1
GRIK22	0	1.63045721	0.991	0.947	0	lnN5	GRIK2
DOCK103	0	1.62990614	0.906	0.385	0	lnN5	DOCK10
SLC25A482	0	1.62091333	0.706	0.098	0	lnN5	SLC25A48
C8orf342	0	1.59432544	0.831	0.374	0	lnN5	C8orf34
ZNF385D5	0	1.57443311	0.872	0.501	0	lnN5	ZNF385D
RPH3A2	0	1.54251255	0.88	0.494	0	lnN5	RPH3A
NCAM21	0	1.48035756	0.986	0.873	0	lnN5	NCAM2
GALNTL63	0	1.46331276	0.949	0.735	0	lnN5	GALNTL6
CHST113	0	1.4345049	0.855	0.501	0	lnN5	CHST11
PROX12	0	1.42229868	0.716	0.15	0	lnN5	PROX1
CNR11	0	1.39661592	0.71	0.371	0	lnN5	CNR1
COL21A11	0	1.39418445	0.639	0.178	0	lnN5	COL21A1
CHRNA71	0	1.39291534	0.627	0.161	0	lnN5	CHRNA7
AL136114.11	0	1.3782123	0.53	0.088	0	lnN5	AL136114.1
NPAS32	0	1.37527363	0.956	0.813	0	lnN5	NPAS3
NR2F21	0	1.33773716	0.608	0.093	0	lnN5	NR2F2
MEGF111	0	1.32142672	0.555	0.129	0	lnN5	MEGF11
DNER3	0	1.31454587	0.85	0.516	0	lnN5	DNER
TOX34	0	1.30886354	0.602	0.173	0	lnN5	TOX3
ZNF5363	0	1.301698	0.927	0.352	0	lnN5	ZNF536
HPSE21	0	1.28762054	0.42	0.099	0	lnN5	HPSE2
GAD23	0	1.26615565	0.729	0.241	0	lnN5	GAD2
SCG21	0	1.2632471	0.59	0.249	0	lnN5	SCG2
GRIK12	0	1.21440236	0.793	0.377	0	lnN5	GRIK1
CCNH2	0	1.20745165	0.893	0.763	0	lnN5	CCNH
BTBD112	0	1.16151559	0.796	0.253	0	lnN5	BTBD11
DAB14	0	1.15613902	0.952	0.877	0	lnN5	DAB1
PTPRM3	0	1.1457759	0.848	0.574	0	lnN5	PTPRM
PLPPR14	0	1.13887358	0.643	0.283	0	lnN5	PLPPR1
AL161629.1	0	1.12688482	0.426	0.022	0	lnN5	AL161629.1

RERG2	0	1.12539845	0.66	0.254	0	lnN5	RERG
FAT41	0	1.11503186	0.551	0.145	0	lnN5	FAT4
HDAC94	0	1.10933181	0.911	0.774	0	lnN5	HDAC9
SPOCK32	0	1.09230619	0.916	0.541	0	lnN5	SPOCK3
PEX5L3	0	1.08271532	0.938	0.825	0	lnN5	PEX5L
RAB3C3	0	1.06332567	0.857	0.63	0	lnN5	RAB3C
AC233296.12	0	1.05958055	0.625	0.255	0	lnN5	AC233296.1
GNG121	0	1.01350755	0.39	0.061	0	lnN5	GNG12
PWRN14	0	0.99924767	0.816	0.457	0	lnN5	PWRN1
CALB21	0	0.98349538	0.481	0.109	0	lnN5	CALB2
DISC11	0	0.95612531	0.432	0.127	0	lnN5	DISC1
GAD14	0	0.95165737	0.688	0.273	0	lnN5	GAD1
PREX22	0	0.94419305	0.511	0.165	0	lnN5	PREX2
ARHGAP421	0	0.91630046	0.401	0.078	0	lnN5	ARHGAP42
TAFA41	0	0.90603146	0.273	0.059	0	lnN5	TAFA4
BMP6	0	0.89573754	0.327	0.038	0	lnN5	BMP6
AL391832.41	0	0.89468336	0.393	0.054	0	lnN5	AL391832.4
PWRN43	0	0.89367507	0.552	0.213	0	lnN5	PWRN4
AC137770.11	0	0.88507951	0.415	0.1	0	lnN5	AC137770.1
EPS82	0	0.86715244	0.416	0.11	0	lnN5	EPS8
NPAS11	0	0.84801875	0.464	0.134	0	lnN5	NPAS1
KAZN4	0	0.84125242	0.994	0.952	0	lnN5	KAZN
SNCAIP2	0	0.83992174	0.446	0.151	0	lnN5	SNCAIP
CNTNAP23	0	0.83167534	0.996	0.993	0	lnN5	CNTNAP2
SMOC11	0	0.80755425	0.333	0.081	0	lnN5	SMOC1
IGF14	0	0.74797064	0.446	0.141	0	lnN5	IGF1
NDNF	0	0.73851474	0.264	0.007	0	lnN5	NDNF
TCF44	0	0.73309568	0.98	0.957	0	lnN5	TCF4
AC009093.21	0	0.73287997	0.407	0.124	0	lnN5	AC009093.2
PROX1-AS12	0	0.71267571	0.387	0.104	0	lnN5	PROX1-AS1
RXRG	0	0.64032124	0.25	0.024	0	lnN5	RXRG
MN1	0	0.61074753	0.343	0.082	0	lnN5	MN1
DLX12	0	0.60155027	0.346	0.09	0	lnN5	DLX1
KMO	0	0.58803413	0.269	0.055	0	lnN5	KMO
PNOC	0	0.5638335	0.274	0.033	0	lnN5	PNOC
GCNT22	0	0.53198506	0.308	0.066	0	lnN5	GCNT2
NR2E1	0	0.51612051	0.277	0.035	0	lnN5	NR2E1
SDK22	1.28E-307	0.94391122	0.544	0.221	4.89E-303	lnN5	SDK2
PRKCA4	8.06E-303	0.95182245	0.903	0.73	3.08E-298	lnN5	PRKCA
PARD33	1.13E-301	0.85740183	0.686	0.307	4.33E-297	lnN5	PARD3
PLS31	1.51E-290	0.82009684	0.493	0.19	5.76E-286	lnN5	PLS3
SLC6A15	1.07E-286	0.9624163	0.721	0.342	4.10E-282	lnN5	SLC6A1
LINC004721	2.55E-286	0.73976488	0.42	0.139	9.76E-282	lnN5	LINC00472
L3MBTL42	1.06E-278	1.03222827	0.711	0.389	4.05E-274	lnN5	L3MBTL4
AFF23	1.26E-277	0.97929981	0.675	0.379	4.82E-273	lnN5	AFF2
ARHGEF26-A	2.95E-271	0.71953365	0.39	0.126	1.13E-266	lnN5	ARHGEF26-A
ADAMTS9-AS1	1.55E-267	1.57563183	0.639	0.335	5.91E-263	lnN5	ADAMTS9-AS1
KCNIP13	3.81E-264	0.69510605	0.673	0.292	1.46E-259	lnN5	KCNIP1
PRR161	2.72E-263	1.1069939	0.761	0.543	1.04E-258	lnN5	PRR16
AC087564.13	1.30E-257	0.66735095	0.41	0.131	4.96E-253	lnN5	AC087564.1
NINL3	2.79E-255	0.67080495	0.466	0.177	1.06E-250	lnN5	NINL
SEMA3C1	5.38E-254	0.83574949	0.38	0.131	2.06E-249	lnN5	SEMA3C
PCSK53	3.08E-253	0.67946518	0.496	0.19	1.18E-248	lnN5	PCSK5
SLC44A54	6.14E-253	0.89652489	0.877	0.688	2.35E-248	lnN5	SLC44A5
PITPNC14	1.11E-249	0.87465083	0.774	0.484	4.24E-245	lnN5	PITPNC1
THSD7A2	1.40E-243	1.22109779	0.729	0.501	5.37E-239	lnN5	THSD7A
LUZP23	2.49E-242	0.99121791	0.617	0.299	9.50E-238	lnN5	LUZP2
GRIN2D4	1.87E-240	0.58438018	0.396	0.135	7.16E-236	lnN5	GRIN2D
GNG12-AS1	3.74E-239	0.87074509	0.302	0.088	1.43E-234	lnN5	GNG12-AS1
AMOTL13	8.30E-237	0.65806874	0.479	0.194	3.17E-232	lnN5	AMOTL1
NDST41	2.27E-236	0.61863573	0.255	0.063	8.67E-232	lnN5	NDST4
GRIP13	6.67E-235	0.80537266	0.931	0.795	2.55E-230	lnN5	GRIP1
PDE1C3	8.01E-232	1.04878656	0.749	0.487	3.06E-227	lnN5	PDE1C

DDR21	7.86E-230	0.56419887	0.283	0.078	3.00E-225	lnN5	DDR2
CHSY33	4.21E-229	0.87619573	0.924	0.833	1.61E-224	lnN5	CHSY3
KCNC23	2.13E-228	0.71127374	0.914	0.833	8.13E-224	lnN5	KCNC2
MARCH33	2.98E-228	0.70634243	0.388	0.138	1.14E-223	lnN5	3-Mar
NCKAP52	1.13E-226	1.08220344	0.469	0.199	4.33E-222	lnN5	NCKAP5
SLCO5A11	2.73E-224	0.72590321	0.333	0.108	1.05E-219	lnN5	SLCO5A1
ROBO12	1.55E-223	1.02283963	0.878	0.653	5.94E-219	lnN5	ROBO1
GRIK43	6.28E-221	0.91465038	0.695	0.436	2.40E-216	lnN5	GRIK4
GRIN3A2	2.77E-220	0.69697778	0.534	0.227	1.06E-215	lnN5	GRIN3A
ANKFN11	5.83E-219	0.91034873	0.473	0.209	2.23E-214	lnN5	ANKFN1
AUTS22	1.81E-217	0.52156895	0.98	0.974	6.90E-213	lnN5	AUTS2
TTC281	3.32E-217	0.75609699	0.867	0.786	1.27E-212	lnN5	TTC28
ZNF6083	2.55E-216	0.78524912	0.629	0.348	9.74E-212	lnN5	ZNF608
PCP4L11	8.37E-216	0.46378222	0.277	0.078	3.20E-211	lnN5	PCP4L1
NLGN11	2.98E-214	0.64611347	0.984	0.96	1.14E-209	lnN5	NLGN1
EXT12	1.36E-213	0.88142916	0.876	0.81	5.19E-209	lnN5	EXT1
MTSS15	2.19E-213	0.80127731	0.779	0.562	8.38E-209	lnN5	MTSS1
NYAP22	5.35E-213	0.87493545	0.729	0.501	2.04E-208	lnN5	NYAP2
PANTR11	7.50E-209	0.91762948	0.723	0.536	2.87E-204	lnN5	PANTR1
NHS4	1.74E-208	0.79911061	0.721	0.441	6.64E-204	lnN5	NHS
BCL11B4	5.69E-208	0.71362974	0.534	0.247	2.18E-203	lnN5	BCL11B
LINC011022	2.11E-206	0.76973221	0.58	0.316	8.08E-202	lnN5	LINC01102
NECAB21	1.94E-205	0.65542879	0.409	0.168	7.41E-201	lnN5	NECAB2
NEBL2	2.92E-205	0.6726383	0.919	0.874	1.12E-200	lnN5	NEBL
SLC24A33	5.19E-203	0.9025903	0.613	0.301	1.98E-198	lnN5	SLC24A3
RIPOR23	2.93E-202	0.80889139	0.695	0.46	1.12E-197	lnN5	RIPOR2
KIAA12114	4.11E-200	0.59511549	0.727	0.388	1.57E-195	lnN5	KIAA1211
MTUS21	9.68E-195	0.58564655	0.957	0.924	3.70E-190	lnN5	MTUS2
NFIX2	1.57E-194	0.7876438	0.783	0.627	5.99E-190	lnN5	NFIX
NRIP33	5.80E-194	0.59599622	0.474	0.209	2.22E-189	lnN5	NRIP3
C1orf212	2.30E-191	0.80333715	0.808	0.716	8.78E-187	lnN5	C1orf21
ANKRD63	4.42E-190	0.78812676	0.638	0.41	1.69E-185	lnN5	ANKRD6
SRGAP13	1.04E-188	0.88128444	0.487	0.245	3.98E-184	lnN5	SRGAP1
ARL4C3	4.20E-187	0.64952032	0.522	0.262	1.61E-182	lnN5	ARL4C
ADAMTS61	4.31E-185	0.64888702	0.343	0.122	1.65E-180	lnN5	ADAMTS6
GRIP24	7.91E-185	0.5126405	0.444	0.181	3.02E-180	lnN5	GRIP2
NFIB2	1.51E-183	0.66946097	0.851	0.643	5.76E-179	lnN5	NFIB
EPHA73	8.09E-182	0.91116354	0.719	0.539	3.09E-177	lnN5	EPHA7
FRMPD31	2.34E-179	0.45584595	0.303	0.103	8.93E-175	lnN5	FRMPD3
LINGO23	4.71E-179	0.6595611	0.952	0.82	1.80E-174	lnN5	LINGO2
ADCY23	1.19E-177	0.65545864	0.906	0.852	4.55E-173	lnN5	ADCY2
LSAMP3	1.98E-177	0.55662415	0.993	0.974	7.58E-173	lnN5	LSAMP
FAT11	2.83E-176	0.5932432	0.263	0.084	1.08E-171	lnN5	FAT1
FOXN33	5.03E-176	0.68498441	0.822	0.704	1.92E-171	lnN5	FOXN3
MIR4300HG1	1.66E-175	1.16699624	0.329	0.127	6.36E-171	lnN5	MIR4300HG
PTPRO2	8.92E-175	0.7642945	0.831	0.676	3.41E-170	lnN5	PTPRO
SOX21	1.75E-173	0.42100592	0.269	0.085	6.69E-169	lnN5	SOX2
GNAL4	7.82E-173	0.67419384	0.741	0.469	2.99E-168	lnN5	GNAL
MGAT4C2	2.01E-171	0.88398236	0.793	0.572	7.70E-167	lnN5	MGAT4C
PKNOX22	3.69E-171	0.6803788	0.854	0.754	1.41E-166	lnN5	PKNOX2
SLC7A21	5.52E-170	0.43358912	0.251	0.077	2.11E-165	lnN5	SLC7A2
BICD13	2.87E-166	0.66604224	0.864	0.792	1.10E-161	lnN5	BICD1
ATP1B23	2.01E-165	0.57245193	0.467	0.224	7.67E-161	lnN5	ATP1B2
ARHGAP181	6.68E-165	0.95378035	0.419	0.208	2.55E-160	lnN5	ARHGAP18
SOX2-OT2	8.06E-165	0.99711093	0.687	0.485	3.08E-160	lnN5	SOX2-OT
AL589740.11	6.14E-164	1.07446467	0.635	0.431	2.35E-159	lnN5	AL589740.1
MIR99AHG3	6.93E-163	0.64791525	0.933	0.894	2.65E-158	lnN5	MIR99AHG
TCF125	1.74E-162	0.69876637	0.812	0.702	6.65E-158	lnN5	TCF12
SLC1A21	3.53E-162	0.7228063	0.645	0.455	1.35E-157	lnN5	SLC1A2
AP1S22	5.28E-162	0.54958043	0.431	0.195	2.02E-157	lnN5	AP1S2
SCLT1	1.48E-161	0.82845891	0.714	0.568	5.67E-157	lnN5	SCLT1
XKR43	1.69E-160	0.61723994	0.918	0.859	6.46E-156	lnN5	XKR4
MAML32	5.37E-160	1.00967977	0.569	0.355	2.05E-155	lnN5	MAML3

LINC002981	1.77E-159	0.66996947	0.27	0.093	6.75E-155	lnN5	LINC00298
CDR21	2.89E-158	0.78930091	0.706	0.55	1.10E-153	lnN5	CDR2
QKI5	3.13E-155	0.6291707	0.835	0.667	1.20E-150	lnN5	QKI
EPHA63	3.49E-155	0.65398893	0.869	0.654	1.34E-150	lnN5	EPHA6
LINC016301	1.59E-151	0.66158093	0.323	0.129	6.08E-147	lnN5	LINC01630
PKP22	2.45E-150	0.41221078	0.291	0.102	9.36E-146	lnN5	PKP2
POU3F32	1.61E-149	0.51358813	0.372	0.164	6.17E-145	lnN5	POU3F3
ANO43	8.59E-149	0.63863276	0.788	0.593	3.28E-144	lnN5	ANO4
MTUS14	1.44E-147	0.65512881	0.52	0.291	5.49E-143	lnN5	MTUS1
ADRA1B1	1.44E-147	0.73009053	0.428	0.214	5.51E-143	lnN5	ADRA1B
DSCAML14	5.93E-146	0.58597301	0.885	0.754	2.27E-141	lnN5	DSCAML1
SEMA6A1	1.00E-144	0.61804604	0.431	0.211	3.82E-140	lnN5	SEMA6A
PID12	2.02E-143	0.75391145	0.681	0.493	7.70E-139	lnN5	PID1
MAGI24	1.41E-142	0.5540039	0.99	0.987	5.40E-138	lnN5	MAGI2
SORCS33	3.96E-142	0.63110805	0.762	0.563	1.51E-137	lnN5	SORCS3
SIPA1L21	4.94E-142	0.96443764	0.578	0.422	1.89E-137	lnN5	SIPA1L2
SNRPN4	1.53E-141	0.57021236	0.864	0.758	5.85E-137	lnN5	SNRPN
SLC35F43	2.02E-141	0.58602505	0.477	0.227	7.72E-137	lnN5	SLC35F4
ERC13	1.56E-140	0.5250457	0.894	0.866	5.94E-136	lnN5	ERC1
GLRA22	3.17E-137	0.57394844	0.422	0.204	1.21E-132	lnN5	GLRA2
ANKRD501	1.56E-136	0.57026259	0.392	0.192	5.97E-132	lnN5	ANKRD50
PODXL23	1.05E-135	0.63175776	0.581	0.385	4.00E-131	lnN5	PODXL2
SILC13	2.93E-134	0.52593504	0.439	0.212	1.12E-129	lnN5	SILC1
ZBTB162	5.02E-134	0.52015226	0.91	0.876	1.92E-129	lnN5	ZBTB16
MCC3	1.98E-133	0.59849951	0.491	0.257	7.55E-129	lnN5	MCC
ARHGAP282	2.63E-133	0.61375863	0.413	0.202	1.00E-128	lnN5	ARHGAP28
CHRM32	1.29E-132	0.55117748	0.951	0.875	4.92E-128	lnN5	CHRM3
ESRRG2	2.56E-132	0.7803226	0.805	0.68	9.77E-128	lnN5	ESRRG
FNBP1L4	6.96E-131	0.65081683	0.59	0.383	2.66E-126	lnN5	FNBP1L
POU2F11	1.42E-129	0.63693226	0.796	0.756	5.43E-125	lnN5	POU2F1
EMID11	8.30E-128	0.36736918	0.257	0.094	3.17E-123	lnN5	EMID1
LINC011973	8.84E-127	0.65496821	0.559	0.344	3.38E-122	lnN5	LINC01197
FREM12	9.75E-127	1.03060947	0.402	0.216	3.73E-122	lnN5	FREM1
PEG101	1.26E-126	0.83208471	0.452	0.26	4.83E-122	lnN5	PEG10
MSI24	4.88E-126	0.69887887	0.764	0.657	1.87E-121	lnN5	MSI2
AC079296.13	1.32E-125	0.47293005	0.379	0.178	5.04E-121	lnN5	AC079296.1
FAM110B3	5.02E-125	0.6241398	0.62	0.427	1.92E-120	lnN5	FAM110B
PTPRS2	4.18E-123	0.63194179	0.786	0.711	1.60E-118	lnN5	PTPRS
BACH15	5.91E-123	0.56815819	0.433	0.227	2.26E-118	lnN5	BACH1
RANBP172	9.32E-123	0.60124009	0.665	0.465	3.56E-118	lnN5	RANBP17
COL25A12	9.55E-122	0.57092698	0.411	0.21	3.65E-117	lnN5	COL25A1
TMTC22	6.69E-121	0.78282092	0.714	0.535	2.56E-116	lnN5	TMTC2
SYNPR2	9.66E-120	0.62781211	0.723	0.533	3.69E-115	lnN5	SYNPR
TIMP23	2.05E-119	0.6205936	0.5	0.298	7.84E-115	lnN5	TIMP2
CNTN43	8.28E-119	0.72020355	0.895	0.85	3.17E-114	lnN5	CNTN4
AKAP61	6.70E-118	0.41757042	0.953	0.944	2.56E-113	lnN5	AKAP6
MACROD22	3.09E-117	0.52040015	0.96	0.951	1.18E-112	lnN5	MACROD2
PCSK23	3.49E-116	0.57327681	0.86	0.801	1.33E-111	lnN5	PCSK2
KIAA19583	1.85E-115	0.6300715	0.612	0.425	7.06E-111	lnN5	KIAA1958
MAML21	1.01E-114	0.78432841	0.42	0.228	3.87E-110	lnN5	MAML2
PRICKLE22	2.20E-114	0.7889163	0.822	0.794	8.41E-110	lnN5	PRICKLE2
CACNB21	2.35E-114	0.49360898	0.928	0.874	8.99E-110	lnN5	CACNB2
AC092691.15	1.14E-113	0.4988579	0.939	0.866	4.37E-109	lnN5	AC092691.1
CEP1121	1.29E-113	0.7200912	0.706	0.59	4.92E-109	lnN5	CEP112
GRB141	3.42E-112	0.42589149	0.253	0.101	1.31E-107	lnN5	GRB14
NTN43	6.28E-111	0.68390675	0.407	0.224	2.40E-106	lnN5	NTN4
AFAP13	2.11E-109	0.54401244	0.576	0.392	8.07E-105	lnN5	AFAP1
CSMD31	2.89E-109	0.51382973	0.959	0.941	1.11E-104	lnN5	CSMD3
FGF141	2.85E-108	0.38331077	0.989	0.989	1.09E-103	lnN5	FGF14
FIGN2	4.94E-108	0.58831561	0.549	0.35	1.89E-103	lnN5	FIGN
KCNT22	2.99E-107	0.53926512	0.724	0.541	1.14E-102	lnN5	KCNT2
DISP3	3.69E-107	0.48127434	0.342	0.17	1.41E-102	lnN5	DISP3
SNTG14	1.26E-106	0.47024005	0.97	0.941	4.82E-102	lnN5	SNTG1

SGK12	5.57E-105	0.58347162	0.656	0.503	2.13E-100	lnN5	SGK1
ANKRD444	7.56E-103	0.54333413	0.601	0.423	2.89E-98	lnN5	ANKRD44
MT-ND33	3.28E-101	0.65457562	0.905	0.869	1.26E-96	lnN5	MT-ND3
ZBTB204	6.76E-101	1.1829297	0.661	0.547	2.59E-96	lnN5	ZBTB20
NAP1L31	1.23E-99	0.64046186	0.461	0.3	4.68E-95	lnN5	NAP1L3
LHFPL32	5.04E-99	0.55552105	0.47	0.269	1.93E-94	lnN5	LHFPL3
IL1RAPL23	6.53E-98	0.52067147	0.55	0.316	2.49E-93	lnN5	IL1RAPL2
PEG31	6.90E-98	0.67699616	0.654	0.582	2.64E-93	lnN5	PEG3
MT-ND42	1.15E-97	0.59113611	0.91	0.854	4.39E-93	lnN5	MT-ND4
KIDINS2201	3.56E-97	0.52413817	0.769	0.738	1.36E-92	lnN5	KIDINS220
KCNJ32	1.87E-96	0.53091457	0.891	0.869	7.17E-92	lnN5	KCNJ3
CACNG42	2.41E-96	0.38432915	0.325	0.155	9.23E-92	lnN5	CACNG4
MYT1L2	6.22E-96	0.32583158	0.974	0.971	2.38E-91	lnN5	MYT1L
GABBR21	3.27E-95	0.40474825	0.927	0.918	1.25E-90	lnN5	GABBR2
PRKCE2	5.17E-94	0.3869806	0.93	0.913	1.97E-89	lnN5	PRKCE
KLHL132	2.19E-92	0.50673873	0.262	0.118	8.37E-88	lnN5	KLHL13
NRXN11	6.02E-92	0.3667415	0.994	0.986	2.30E-87	lnN5	NRXN1
SHISA92	4.60E-91	0.51110829	0.898	0.821	1.76E-86	lnN5	SHISA9
ABLIM15	2.79E-90	0.458564	0.868	0.833	1.07E-85	lnN5	ABLIM1
APBA11	1.18E-89	0.51891978	0.785	0.755	4.53E-85	lnN5	APBA1
JAM21	1.44E-89	0.48236762	0.318	0.163	5.50E-85	lnN5	JAM2
NMNAT22	1.53E-89	0.44614944	0.857	0.854	5.86E-85	lnN5	NMNAT2
SYT172	1.88E-89	0.63310842	0.454	0.295	7.18E-85	lnN5	SYT17
DNAH144	3.14E-89	0.56714481	0.465	0.293	1.20E-84	lnN5	DNAH14
NETO22	9.63E-89	0.69060236	0.541	0.407	3.68E-84	lnN5	NETO2
PDE3A1	1.04E-88	0.59632756	0.284	0.131	3.99E-84	lnN5	PDE3A
UBASH3B4	2.17E-88	0.37627037	0.536	0.335	8.31E-84	lnN5	UBASH3B
AF279873.31	4.80E-88	0.51455457	0.297	0.144	1.84E-83	lnN5	AF279873.3
HIP11	4.92E-87	0.42354678	0.352	0.183	1.88E-82	lnN5	HIP1
TLE3	6.34E-87	0.41022464	0.268	0.126	2.42E-82	lnN5	TLE3
ADCYAP1R14	9.24E-87	0.43872373	0.48	0.297	3.53E-82	lnN5	ADCYAP1R1
FOXO11	9.45E-87	0.61385626	0.266	0.125	3.61E-82	lnN5	FOXO1
MARCH13	1.32E-86	0.62769434	0.846	0.757	5.06E-82	lnN5	1-Mar
MT-CO23	1.49E-86	0.55506981	0.931	0.897	5.68E-82	lnN5	MT-CO2
NRXN21	5.62E-85	0.53523336	0.709	0.634	2.15E-80	lnN5	NRXN2
LONRF3	1.12E-84	0.37397007	0.277	0.131	4.30E-80	lnN5	LONRF3
VSTM2A2	1.79E-84	0.57383962	0.531	0.39	6.83E-80	lnN5	VSTM2A
CDH92	3.47E-84	0.67008048	0.764	0.616	1.32E-79	lnN5	CDH9
GPRIN33	7.29E-84	0.3670442	0.339	0.174	2.79E-79	lnN5	GPRIN3
ELAVL22	8.66E-84	0.58641339	0.662	0.518	3.31E-79	lnN5	ELAVL2
NCAM11	1.64E-83	0.35250185	0.95	0.937	6.27E-79	lnN5	NCAM1
LRRC4C4	7.08E-82	0.29460454	0.943	0.888	2.70E-77	lnN5	LRRC4C
AP001347.11	3.00E-81	0.56999822	0.691	0.598	1.15E-76	lnN5	AP001347.1
GPR137C2	3.86E-81	0.57884961	0.684	0.605	1.48E-76	lnN5	GPR137C
MAGI33	8.28E-81	0.55890528	0.752	0.687	3.16E-76	lnN5	MAGI3
MARCKSL11	7.45E-80	0.33106744	0.251	0.115	2.85E-75	lnN5	MARCKSL1
AC019197.1	3.24E-78	1.03567778	0.258	0.132	1.24E-73	lnN5	AC019197.1
LPIN23	9.22E-78	0.54212836	0.499	0.36	3.53E-73	lnN5	LPIN2
RIMBP21	2.66E-77	0.57384431	0.771	0.76	1.02E-72	lnN5	RIMBP2
HIVEP33	1.08E-76	0.41404159	0.879	0.862	4.12E-72	lnN5	HIVEP3
SH3RF34	2.69E-76	0.5027437	0.75	0.68	1.03E-71	lnN5	SH3RF3
ZMAT43	4.17E-75	0.51712502	0.766	0.77	1.60E-70	lnN5	ZMAT4
OSTM11	5.68E-75	0.48676998	0.399	0.259	2.17E-70	lnN5	OSTM1
RBMS33	1.73E-74	0.66190975	0.73	0.638	6.63E-70	lnN5	RBMS3
RASSF83	7.33E-74	0.51364496	0.316	0.174	2.80E-69	lnN5	RASSF8
HS6ST32	1.69E-73	0.34846502	0.925	0.742	6.47E-69	lnN5	HS6ST3
OSBPL93	1.73E-73	0.49686434	0.636	0.557	6.62E-69	lnN5	OSBPL9
SLC7A141	1.14E-72	0.59274717	0.606	0.512	4.36E-68	lnN5	SLC7A14
NBEA1	3.25E-72	0.39114146	0.963	0.96	1.24E-67	lnN5	NBEA
MYO1B1	1.07E-71	0.54697171	0.396	0.251	4.10E-67	lnN5	MYO1B
AL133346.12	1.94E-71	0.42478749	0.292	0.147	7.43E-67	lnN5	AL133346.1
CHD31	3.54E-71	0.54162318	0.488	0.362	1.35E-66	lnN5	CHD3
NIPAL31	1.13E-70	0.47929189	0.424	0.288	4.31E-66	lnN5	NIPAL3

IL6ST3	1.16E-70	0.51988964	0.459	0.323	4.42E-66 lnN5	IL6ST
ANKRD30BL	3.66E-70	0.5173279	0.786	0.706	1.40E-65 lnN5	ANKRD30BL
RGMB	1.06E-69	0.50018066	0.386	0.252	4.04E-65 lnN5	RGMB
GABRB22	2.52E-69	0.3895668	0.91	0.923	9.63E-65 lnN5	GABRB2
SLC35F16	3.07E-69	0.45176826	0.831	0.706	1.17E-64 lnN5	SLC35F1
LRRN32	3.38E-69	0.50776598	0.469	0.333	1.29E-64 lnN5	LRRN3
TPD52L11	6.28E-69	0.39112814	0.281	0.146	2.40E-64 lnN5	TPD52L1
DACH2	1.13E-68	1.12055565	0.344	0.227	4.34E-64 lnN5	DACH2
PTPRE2	2.14E-68	0.51725525	0.695	0.632	8.18E-64 lnN5	PTPRE
B3GLCT3	3.27E-68	0.59839869	0.43	0.295	1.25E-63 lnN5	B3GLCT
CACNA1D1	3.36E-68	0.38762453	0.886	0.888	1.28E-63 lnN5	CACNA1D
GRID22	9.06E-68	0.63832929	0.809	0.734	3.46E-63 lnN5	GRID2
COL5A22	1.89E-67	0.67466898	0.261	0.137	7.22E-63 lnN5	COL5A2
PLPPR4	2.13E-67	0.49047578	0.641	0.585	8.14E-63 lnN5	PLPPR4
OLFM23	1.35E-66	0.40587264	0.443	0.293	5.16E-62 lnN5	OLFM2
ZHX22	1.21E-65	0.47791573	0.361	0.219	4.62E-61 lnN5	ZHX2
POT1-AS11	1.39E-65	0.57165836	0.521	0.392	5.31E-61 lnN5	POT1-AS1
ANK31	5.92E-65	0.25694541	0.979	0.976	2.26E-60 lnN5	ANK3
MT-ATP63	6.50E-65	0.44106814	0.909	0.878	2.49E-60 lnN5	MT-ATP6
GNAS2	1.02E-64	0.52054323	0.818	0.825	3.91E-60 lnN5	GNAS
GABRB11	1.23E-64	0.34208584	0.919	0.916	4.72E-60 lnN5	GABRB1
MT-CO32	2.44E-63	0.56719702	0.881	0.848	9.31E-59 lnN5	MT-CO3
USP131	9.03E-63	0.44420568	0.487	0.361	3.45E-58 lnN5	USP13
DGKD3	1.98E-61	0.36819131	0.467	0.309	7.55E-57 lnN5	DGKD
GRK32	1.35E-60	0.50295428	0.713	0.709	5.17E-56 lnN5	GRK3
LRRC392	1.46E-60	0.37322958	0.287	0.161	5.59E-56 lnN5	LRRC39
ADCY82	1.11E-59	0.31555179	0.446	0.284	4.23E-55 lnN5	ADCY8
GSE12	2.41E-59	0.45010744	0.601	0.5	9.20E-55 lnN5	GSE1
PCDH154	5.12E-59	0.66066295	0.46	0.323	1.96E-54 lnN5	PCDH15
NCOA23	5.20E-59	0.40285814	0.774	0.743	1.99E-54 lnN5	NCOA2
TXNDC161	6.54E-59	0.47918093	0.606	0.543	2.50E-54 lnN5	TXNDC16
LINC012371	2.53E-58	0.4264605	0.282	0.159	9.68E-54 lnN5	LINC01237
DAAM13	2.56E-58	0.39452789	0.765	0.751	9.77E-54 lnN5	DAAM1
PDE7B2	6.69E-58	0.59141695	0.609	0.48	2.56E-53 lnN5	PDE7B
TNR2	1.11E-56	0.46402653	0.807	0.803	4.23E-52 lnN5	TNR
ANK14	1.79E-56	0.32470417	0.487	0.315	6.84E-52 lnN5	ANK1
ATP1B13	2.41E-56	0.53965701	0.771	0.781	9.20E-52 lnN5	ATP1B1
MT-CO12	1.18E-55	0.42399125	0.902	0.867	4.53E-51 lnN5	MT-CO1
RTN3	2.21E-55	0.32666822	0.885	0.903	8.45E-51 lnN5	RTN3
HSP90AA13	2.96E-55	0.53488149	0.743	0.711	1.13E-50 lnN5	HSP90AA1
SRM	3.25E-55	0.33534281	0.287	0.17	1.24E-50 lnN5	SRM
PARM12	3.88E-55	0.52349395	0.506	0.396	1.48E-50 lnN5	PARM1
SLCO3A13	1.90E-54	0.49935474	0.748	0.737	7.27E-50 lnN5	SLCO3A1
REV3L3	1.72E-53	0.33980324	0.794	0.778	6.58E-49 lnN5	REV3L
ABI11	1.91E-53	0.47846254	0.631	0.576	7.31E-49 lnN5	ABI1
HSP90AB11	2.22E-53	0.49227358	0.735	0.728	8.50E-49 lnN5	HSP90AB1
PCDH102	2.54E-53	0.51362353	0.542	0.449	9.72E-49 lnN5	PCDH10
VOPP12	2.70E-53	0.44445598	0.57	0.47	1.03E-48 lnN5	VOPP1
CACNA1E2	6.32E-53	0.43350788	0.802	0.811	2.42E-48 lnN5	CACNA1E
LINC004611	8.32E-53	0.39096928	0.789	0.786	3.18E-48 lnN5	LINC00461
GAS71	8.50E-53	0.41310167	0.793	0.78	3.25E-48 lnN5	GAS7
MTRNR2L12	1.44E-52	0.61955262	0.799	0.746	5.50E-48 lnN5	MTRNR2L12
NPTXR2	2.08E-52	0.45710974	0.603	0.532	7.95E-48 lnN5	NPTXR
SERINC53	2.14E-52	0.46849572	0.521	0.421	8.18E-48 lnN5	SERINC5
THRB3	4.19E-52	0.33621418	0.919	0.917	1.60E-47 lnN5	THRB
REEP11	6.13E-52	0.44256333	0.655	0.625	2.34E-47 lnN5	REEP1
N4BP22	6.25E-52	0.41288824	0.477	0.363	2.39E-47 lnN5	N4BP2
PDSS11	9.87E-52	0.38819533	0.324	0.207	3.77E-47 lnN5	PDSS1
SOBP1	1.14E-51	0.34922526	0.827	0.819	4.35E-47 lnN5	SOBP
GTF2I2	2.12E-50	0.33558382	0.835	0.835	8.09E-46 lnN5	GTF2I
NSG21	2.41E-50	0.4692581	0.609	0.556	9.20E-46 lnN5	NSG2
CAMK42	2.73E-50	0.39359098	0.774	0.72	1.04E-45 lnN5	CAMK4
TMEM2322	3.57E-50	0.45216259	0.808	0.773	1.36E-45 lnN5	TMEM232

MT-ND4L2	6.01E-50	0.45452814	0.635	0.542	2.30E-45	lnN5	MT-ND4L
LPP3	6.42E-49	0.42803696	0.58	0.472	2.45E-44	lnN5	LPP
ERBIN3	8.71E-49	0.43617592	0.612	0.537	3.33E-44	lnN5	ERBIN
CHD91	1.17E-48	0.33776366	0.837	0.839	4.48E-44	lnN5	CHD9
LCORL2	6.05E-48	0.44209534	0.575	0.494	2.31E-43	lnN5	LCORL
MYRIP4	1.15E-47	0.42121861	0.816	0.807	4.41E-43	lnN5	MYRIP
IRF2BP2	1.59E-47	0.35708293	0.276	0.168	6.07E-43	lnN5	IRF2BP2
CHL12	1.77E-47	0.47976111	0.817	0.807	6.78E-43	lnN5	CHL1
TNRC6A3	4.93E-47	0.25306265	0.946	0.959	1.88E-42	lnN5	TNRC6A
GNAI1	1.07E-46	0.46624157	0.585	0.526	4.08E-42	lnN5	GNAI1
MAST21	1.43E-46	0.42531186	0.494	0.406	5.45E-42	lnN5	MAST2
SGCZ5	1.98E-46	0.40488591	0.61	0.512	7.57E-42	lnN5	SGCZ
SEZ6L21	4.52E-46	0.48637927	0.531	0.463	1.73E-41	lnN5	SEZ6L2
PXDNL2	1.15E-45	0.57730114	0.331	0.226	4.39E-41	lnN5	PXDNL
SBF21	3.82E-45	0.32916693	0.804	0.802	1.46E-40	lnN5	SBF2
PLCB41	2.56E-44	0.40446597	0.638	0.562	9.77E-40	lnN5	PLCB4
SHANK2	2.66E-44	0.3283366	0.82	0.816	1.02E-39	lnN5	SHANK2
INHBA-AS11	3.80E-44	0.31887143	0.255	0.15	1.45E-39	lnN5	INHBA-AS1
ARHGAP52	8.37E-44	0.43970342	0.638	0.591	3.20E-39	lnN5	ARHGAP5
ZNF5161	8.68E-44	0.37911547	0.439	0.327	3.32E-39	lnN5	ZNF516
TUBB2A	1.33E-43	0.46842909	0.387	0.286	5.07E-39	lnN5	TUBB2A
COLGALT2	2.46E-43	0.4283586	0.522	0.441	9.39E-39	lnN5	COLGALT2
SCN3A	2.53E-43	0.35218962	0.793	0.786	9.67E-39	lnN5	SCN3A
BCL23	4.89E-43	0.45416649	0.604	0.525	1.87E-38	lnN5	BCL2
ATRX1	6.94E-43	0.32119814	0.821	0.837	2.65E-38	lnN5	ATRX
ARNT22	7.85E-43	0.30207151	0.854	0.838	3.00E-38	lnN5	ARNT2
JAK12	9.44E-43	0.39960091	0.752	0.745	3.61E-38	lnN5	JAK1
SLC41A2	1.71E-42	0.41552125	0.623	0.581	6.55E-38	lnN5	SLC41A2
MSRA4	2.46E-42	0.26465043	0.939	0.908	9.40E-38	lnN5	MSRA
DOK62	3.02E-42	0.5256549	0.743	0.706	1.15E-37	lnN5	DOK6
ENTPD33	5.61E-42	0.31338333	0.414	0.293	2.14E-37	lnN5	ENTPD3
HIPK21	1.25E-41	0.5112083	0.458	0.363	4.78E-37	lnN5	HIPK2
ATXN12	1.45E-41	0.26233535	0.927	0.928	5.52E-37	lnN5	ATXN1
OCA22	4.06E-41	0.54038546	0.373	0.273	1.55E-36	lnN5	OCA2
TMEM1451	4.32E-41	0.36669449	0.438	0.345	1.65E-36	lnN5	TMEM145
AC008591.11	6.33E-41	0.64970443	0.371	0.27	2.42E-36	lnN5	AC008591.1
USP34	1.67E-40	0.26131051	0.283	0.173	6.37E-36	lnN5	USP3
TMEM1083	1.76E-40	0.40568715	0.852	0.82	6.72E-36	lnN5	TMEM108
MT-ND52	3.36E-40	0.45088292	0.638	0.567	1.28E-35	lnN5	MT-ND5
CDK82	7.02E-40	0.47951257	0.599	0.562	2.68E-35	lnN5	CDK8
TMEFF25	1.96E-39	0.3184732	0.797	0.764	7.47E-35	lnN5	TMEFF2
AC008691.12	2.73E-39	0.4429348	0.275	0.174	1.05E-34	lnN5	AC008691.1
NT5DC3	2.99E-39	0.38452663	0.399	0.302	1.14E-34	lnN5	NT5DC3
CLIP3	2.05E-38	0.43876219	0.469	0.397	7.82E-34	lnN5	CLIP3
COL16A1	3.85E-38	0.55843463	0.27	0.184	1.47E-33	lnN5	COL16A1
PIP5K1B3	6.98E-38	0.42210756	0.557	0.48	2.67E-33	lnN5	PIP5K1B
GREM21	9.49E-38	0.32868136	0.271	0.169	3.63E-33	lnN5	GREM2
EEPD11	2.75E-37	0.36505502	0.483	0.383	1.05E-32	lnN5	EEPD1
TRMT9B2	4.14E-37	0.27638426	0.536	0.415	1.58E-32	lnN5	TRMT9B
SEMA6D3	5.40E-37	0.44267406	0.649	0.583	2.06E-32	lnN5	SEMA6D
SEMA5A2	9.67E-37	0.4253938	0.275	0.173	3.70E-32	lnN5	SEMA5A
STARD133	2.42E-36	0.5169578	0.591	0.54	9.24E-32	lnN5	STARD13
KIAA1549L2	3.18E-36	0.35765385	0.83	0.838	1.21E-31	lnN5	KIAA1549L
MT-CYB3	3.87E-36	0.37153728	0.819	0.786	1.48E-31	lnN5	MT-CYB
B3GAT11	4.10E-36	0.38920073	0.551	0.489	1.57E-31	lnN5	B3GAT1
CBLB1	4.15E-36	0.5456373	0.473	0.41	1.59E-31	lnN5	CBLB
FCHSD25	1.11E-35	0.31341234	0.67	0.614	4.24E-31	lnN5	FCHSD2
RIN24	1.33E-35	0.27280366	0.322	0.209	5.07E-31	lnN5	RIN2
DCX4	1.89E-35	0.33843494	0.49	0.395	7.22E-31	lnN5	DCX
ASIC11	4.19E-35	0.26614297	0.284	0.186	1.60E-30	lnN5	ASIC1
AL356124.11	8.52E-35	0.57413804	0.326	0.241	3.26E-30	lnN5	AL356124.1
CELF43	9.65E-35	0.25266331	0.898	0.908	3.69E-30	lnN5	CELF4
MT-ND12	1.18E-34	0.33881632	0.817	0.781	4.51E-30	lnN5	MT-ND1

FRMPD42	4.33E-34	0.2996368	0.945	0.938	1.66E-29	lnN5	FRMPD4
WASF33	5.00E-34	0.35489644	0.46	0.382	1.91E-29	lnN5	WASF3
AGPAT41	1.01E-33	0.35935919	0.717	0.705	3.87E-29	lnN5	AGPAT4
ARL6IP11	1.17E-33	0.49023572	0.491	0.446	4.47E-29	lnN5	ARL6IP1
PGBD51	1.30E-33	0.34374521	0.705	0.689	4.97E-29	lnN5	PGBD5
CSRNP3	2.95E-33	0.30949651	0.819	0.851	1.13E-28	lnN5	CSRNP3
ANKRD263	3.45E-33	0.34807004	0.744	0.754	1.32E-28	lnN5	ANKRD26
PRNP	3.91E-33	0.41010874	0.67	0.661	1.50E-28	lnN5	PRNP
MT-ND23	4.77E-33	0.31545506	0.791	0.748	1.82E-28	lnN5	MT-ND2
ZEB25	7.98E-33	0.27007394	0.831	0.822	3.05E-28	lnN5	ZEB2
CYFIP22	8.50E-33	0.31514298	0.707	0.712	3.25E-28	lnN5	CYFIP2
KDM6A1	1.24E-32	0.41170913	0.61	0.582	4.73E-28	lnN5	KDM6A
ADAM221	1.52E-32	0.3029219	0.809	0.827	5.81E-28	lnN5	ADAM22
NR2F11	1.61E-32	0.4001138	0.471	0.404	6.16E-28	lnN5	NR2F1
HDAC2-AS21	1.95E-32	0.35297876	0.363	0.267	7.44E-28	lnN5	HDAC2-AS2
TUT43	2.87E-32	0.32367876	0.696	0.702	1.10E-27	lnN5	TUT4
LYPD6B4	4.74E-32	0.27886402	0.278	0.178	1.81E-27	lnN5	LYPD6B
PELI22	5.34E-32	0.38180278	0.377	0.283	2.04E-27	lnN5	PELI2
LURAP1L	5.88E-32	0.29699194	0.268	0.181	2.25E-27	lnN5	LURAP1L
DOCK71	1.02E-31	0.3679499	0.571	0.538	3.90E-27	lnN5	DOCK7
GREB1L1	1.06E-31	0.32877148	0.421	0.313	4.04E-27	lnN5	GREB1L
SIPA1L33	1.33E-31	0.36917329	0.6	0.56	5.07E-27	lnN5	SIPA1L3
MGLL3	2.74E-31	0.37495437	0.514	0.438	1.05E-26	lnN5	MGLL
SEPTIN63	8.16E-31	0.3337869	0.378	0.289	3.12E-26	lnN5	SEPTIN6
TMEM1171	3.45E-30	0.34626708	0.689	0.646	1.32E-25	lnN5	TMEM117
FNBP11	4.07E-30	0.339154	0.651	0.636	1.56E-25	lnN5	FNBP1
SYT112	5.73E-30	0.34575504	0.654	0.647	2.19E-25	lnN5	SYT11
INPP5F2	6.52E-30	0.34308033	0.614	0.583	2.49E-25	lnN5	INPP5F
PIK3R32	1.68E-29	0.34426182	0.4	0.317	6.42E-25	lnN5	PIK3R3
CHST153	2.60E-29	0.47456449	0.473	0.419	9.94E-25	lnN5	CHST15
CANX1	3.49E-29	0.39935666	0.529	0.492	1.33E-24	lnN5	CANX
USP111	9.80E-29	0.37510733	0.572	0.543	3.74E-24	lnN5	USP11
MITF3	9.80E-29	0.28816133	0.289	0.196	3.75E-24	lnN5	MITF
ANKRD122	1.03E-28	0.30267071	0.768	0.781	3.93E-24	lnN5	ANKRD12
SYNGR3	1.04E-28	0.32488055	0.333	0.254	3.98E-24	lnN5	SYNGR3
ZNF2921	1.07E-28	0.26837582	0.785	0.816	4.10E-24	lnN5	ZNF292
TSPYL21	1.08E-28	0.37463592	0.635	0.63	4.14E-24	lnN5	TSPYL2
MAPK42	1.23E-28	0.31699773	0.553	0.478	4.71E-24	lnN5	MAPK4
GNG23	2.48E-28	0.34973994	0.525	0.444	9.47E-24	lnN5	GNG2
FGF132	2.62E-28	0.40323663	0.47	0.418	1.00E-23	lnN5	FGF13
ERO1B2	2.91E-28	0.30739205	0.478	0.416	1.11E-23	lnN5	ERO1B
RPL282	4.11E-28	0.42343095	0.433	0.367	1.57E-23	lnN5	RPL28
ECE22	5.63E-28	0.28778653	0.319	0.229	2.15E-23	lnN5	ECE2
WSCD21	7.77E-28	0.36480054	0.482	0.415	2.97E-23	lnN5	WSCD2
RIF1	1.74E-27	0.35151317	0.592	0.568	6.64E-23	lnN5	RIF1
MXD42	5.81E-27	0.29849633	0.337	0.255	2.22E-22	lnN5	MXD4
GPD22	6.11E-27	0.2966608	0.406	0.328	2.34E-22	lnN5	GPD2
SRRM43	7.90E-27	0.25202759	0.845	0.856	3.02E-22	lnN5	SRRM4
AC007364.12	8.32E-27	0.43457169	0.359	0.281	3.18E-22	lnN5	AC007364.1
SERINC11	1.82E-26	0.40505085	0.609	0.622	6.97E-22	lnN5	SERINC1
INTU1	3.56E-26	0.37527975	0.501	0.471	1.36E-21	lnN5	INTU
CAMKMT3	6.00E-26	0.4225095	0.448	0.38	2.29E-21	lnN5	CAMKMT
SLC22A23	6.86E-26	0.34744451	0.603	0.59	2.62E-21	lnN5	SLC22A23
APC4	1.61E-25	0.27472343	0.726	0.742	6.14E-21	lnN5	APC
ADGRB1	2.12E-25	0.44952122	0.494	0.466	8.08E-21	lnN5	ADGRB1
SCAPER1	2.18E-25	0.28031423	0.795	0.806	8.33E-21	lnN5	SCAPER
RYR32	2.35E-25	0.39634655	0.459	0.389	8.99E-21	lnN5	RYR3
RXRA2	2.54E-25	0.25245065	0.292	0.208	9.72E-21	lnN5	RXRA
GRM74	4.70E-25	0.40151198	0.891	0.863	1.80E-20	lnN5	GRM7
FOXG11	5.98E-25	0.33214196	0.355	0.287	2.28E-20	lnN5	FOXG1
RDX2	1.03E-24	0.35181541	0.463	0.404	3.94E-20	lnN5	RDX
KLHL421	1.83E-24	0.34043767	0.477	0.43	6.98E-20	lnN5	KLHL42
MBOAT23	2.52E-24	0.30839149	0.621	0.589	9.63E-20	lnN5	MBOAT2

SLC16A2	2.53E-24	0.27884527	0.28	0.203	9.68E-20	lnN5	SLC16A2
SV2A1	2.81E-24	0.35053114	0.599	0.592	1.07E-19	lnN5	SV2A
AC006148.11	2.89E-24	0.36394291	0.717	0.71	1.10E-19	lnN5	AC006148.1
TRIM36	5.90E-24	0.29239054	0.288	0.213	2.25E-19	lnN5	TRIM36
AL445250.12	6.80E-24	0.47379828	0.409	0.343	2.60E-19	lnN5	AL445250.1
HACD31	6.94E-24	0.31717604	0.538	0.509	2.65E-19	lnN5	HACD3
EEF1A13	9.02E-24	0.36900436	0.601	0.577	3.45E-19	lnN5	EEF1A1
GABRA11	1.11E-23	0.33164477	0.641	0.644	4.24E-19	lnN5	GABRA1
PNMA21	1.32E-23	0.37677585	0.545	0.53	5.03E-19	lnN5	PNMA2
NPAS2	2.34E-23	0.37435905	0.625	0.606	8.95E-19	lnN5	NPAS2
BMERB11	2.89E-23	0.29887958	0.706	0.726	1.10E-18	lnN5	BMERB1
GALNT132	4.52E-23	0.47536517	0.701	0.686	1.73E-18	lnN5	GALNT13
FRYL1	6.21E-23	0.27142824	0.697	0.706	2.37E-18	lnN5	FRYL
HIVEP12	8.73E-23	0.35371426	0.508	0.462	3.34E-18	lnN5	HIVEP1
MT-ATP82	9.41E-23	0.43816055	0.619	0.592	3.60E-18	lnN5	MT-ATP8
PALLD3	1.32E-22	0.31896042	0.485	0.416	5.06E-18	lnN5	PALLD
TNRC18	3.49E-22	0.30477031	0.599	0.589	1.34E-17	lnN5	TNRC18
PGRMC1	3.53E-22	0.35848968	0.391	0.339	1.35E-17	lnN5	PGRMC1
ALK2	6.37E-22	0.44431746	0.326	0.248	2.43E-17	lnN5	ALK
ANKRD30B2	1.16E-21	0.58826341	0.334	0.279	4.44E-17	lnN5	ANKRD30B
KCNH75	9.70E-21	0.30725157	0.781	0.73	3.71E-16	lnN5	KCNH7
PNMA8A	9.86E-21	0.28181394	0.312	0.246	3.77E-16	lnN5	PNMA8A
EIF1AX	4.15E-20	0.3380759	0.379	0.326	1.59E-15	lnN5	EIF1AX
AMMECR11	4.20E-20	0.31969668	0.596	0.579	1.61E-15	lnN5	AMMECR1
BCAT13	4.21E-20	0.29959363	0.407	0.35	1.61E-15	lnN5	BCAT1
PLPPR5	4.78E-20	0.31016806	0.525	0.504	1.83E-15	lnN5	PLPPR5
PLXNC1	4.94E-20	0.39832837	0.444	0.412	1.89E-15	lnN5	PLXNC1
SEL1L33	8.65E-20	0.29523159	0.357	0.29	3.31E-15	lnN5	SEL1L3
LINC011224	1.22E-19	0.26020125	0.724	0.692	4.66E-15	lnN5	LINC01122
SEM12	1.32E-19	0.32161815	0.523	0.482	5.05E-15	lnN5	SEM1
ABHD21	1.34E-19	0.26288199	0.654	0.654	5.10E-15	lnN5	ABHD2
SAMD4A2	2.65E-19	0.33049146	0.513	0.47	1.01E-14	lnN5	SAMD4A
TUBB	4.17E-19	0.27089921	0.342	0.283	1.59E-14	lnN5	TUBB
PLCL22	5.27E-19	0.27959594	0.682	0.698	2.01E-14	lnN5	PLCL2
CSGALNACT1	6.10E-19	0.5022315	0.574	0.616	2.33E-14	lnN5	CSGALNACT1
SYT4	6.33E-19	0.29419471	0.406	0.354	2.42E-14	lnN5	SYT4
CALN14	8.15E-19	0.26817508	0.702	0.661	3.11E-14	lnN5	CALN1
SUSD42	1.23E-18	0.3958594	0.613	0.612	4.69E-14	lnN5	SUSD4
EPHA54	1.68E-18	0.25451744	0.643	0.6	6.43E-14	lnN5	EPHA5
PHYHIPL2	2.42E-18	0.26030394	0.609	0.594	9.24E-14	lnN5	PHYHIPL
TENM33	2.80E-18	0.39488053	0.685	0.675	1.07E-13	lnN5	TENM3
HIPK1	4.34E-18	0.26842851	0.34	0.282	1.66E-13	lnN5	HIPK1
RCN2	4.41E-18	0.28857288	0.41	0.366	1.69E-13	lnN5	RCN2
SLC9A71	5.56E-18	0.26159743	0.437	0.39	2.13E-13	lnN5	SLC9A7
CDH42	7.83E-18	0.61887941	0.449	0.428	2.99E-13	lnN5	CDH4
TACC23	9.42E-18	0.28009083	0.453	0.413	3.60E-13	lnN5	TACC2
LINC005992	1.27E-17	0.27386134	0.706	0.734	4.85E-13	lnN5	LINC00599
FXVD63	1.33E-17	0.37990138	0.587	0.622	5.09E-13	lnN5	FXVD6
TCF201	1.72E-17	0.27141464	0.635	0.633	6.59E-13	lnN5	TCF20
SRP14	2.48E-17	0.35038586	0.355	0.3	9.50E-13	lnN5	SRP14
ATP6VOC1	2.67E-17	0.38900199	0.479	0.459	1.02E-12	lnN5	ATP6VOC
CD812	4.08E-17	0.26256775	0.303	0.242	1.56E-12	lnN5	CD81
GALNT82	4.77E-17	0.31288088	0.356	0.301	1.82E-12	lnN5	GALNT8
ATP1A1	5.62E-17	0.34558965	0.598	0.603	2.15E-12	lnN5	ATP1A1
MACROD1	7.72E-17	0.25218463	0.278	0.217	2.95E-12	lnN5	MACROD1
DIP2A3	1.47E-16	0.25875929	0.494	0.462	5.62E-12	lnN5	DIP2A
PITPNM3	1.56E-16	0.28653723	0.338	0.288	5.96E-12	lnN5	PITPNM3
DKK31	1.57E-16	0.29886089	0.632	0.636	6.00E-12	lnN5	DKK3
HMBBOX1	2.30E-16	0.28479195	0.586	0.593	8.79E-12	lnN5	HMBBOX1
SPOCK22	2.82E-16	0.25692301	0.475	0.436	1.08E-11	lnN5	SPOCK2
CAPN2	3.78E-16	0.26305006	0.284	0.228	1.45E-11	lnN5	CAPN2
ATP1A32	4.82E-16	0.38550411	0.535	0.539	1.84E-11	lnN5	ATP1A3
GRM84	5.03E-16	0.47573751	0.405	0.354	1.92E-11	lnN5	GRM8

XPO11	5.30E-16	0.25363958	0.604	0.619	2.03E-11	lnN5	XPO1
L3MBTL12	8.08E-16	0.27662467	0.415	0.37	3.09E-11	lnN5	L3MBTL1
SCAMP1	1.14E-15	0.27353307	0.52	0.514	4.36E-11	lnN5	SCAMP1
HPCAL4	1.15E-15	0.27266923	0.388	0.345	4.38E-11	lnN5	HPCAL4
TSPYL4	1.43E-15	0.29227864	0.351	0.303	5.45E-11	lnN5	TSPYL4
KCTD8	2.82E-15	0.46606846	0.637	0.663	1.08E-10	lnN5	KCTD8
WWP12	3.34E-15	0.32225212	0.513	0.486	1.28E-10	lnN5	WWP1
SLC1A11	3.43E-15	0.25741256	0.432	0.393	1.31E-10	lnN5	SLC1A1
SLC38A12	3.60E-15	0.27136652	0.589	0.6	1.38E-10	lnN5	SLC38A1
ZNF7042	5.20E-15	0.28365433	0.666	0.674	1.99E-10	lnN5	ZNF704
ACTG1	5.61E-15	0.3336429	0.413	0.377	2.14E-10	lnN5	ACTG1
PTPN21	1.28E-14	0.30396784	0.492	0.478	4.89E-10	lnN5	PTPN2
PLD3	1.34E-14	0.26390012	0.654	0.686	5.12E-10	lnN5	PLD3
HSPA4L3	1.37E-14	0.27640941	0.5	0.479	5.25E-10	lnN5	HSPA4L
HSPA51	1.39E-14	0.28156034	0.273	0.222	5.31E-10	lnN5	HSPA5
TSHZ11	1.47E-14	0.32039246	0.416	0.383	5.61E-10	lnN5	TSHZ1
PTMA1	2.58E-14	0.3491197	0.486	0.467	9.85E-10	lnN5	PTMA
ZSWIM53	2.62E-14	0.28775542	0.549	0.547	1.00E-09	lnN5	ZSWIM5
PGM2L1	3.13E-14	0.28436316	0.516	0.506	1.20E-09	lnN5	PGM2L1
UBB	3.59E-14	0.34666457	0.386	0.338	1.37E-09	lnN5	UBB
SHISA62	8.34E-14	0.39847135	0.398	0.346	3.19E-09	lnN5	SHISA6
OIP5-AS12	1.12E-13	0.30534821	0.564	0.573	4.27E-09	lnN5	OIP5-AS1
ABCC12	1.17E-13	0.31021093	0.394	0.357	4.48E-09	lnN5	ABCC1
KIF1A1	1.76E-13	0.25941803	0.605	0.639	6.74E-09	lnN5	KIF1A
STMN12	1.77E-13	0.27950708	0.501	0.477	6.77E-09	lnN5	STMN1
ADAMTS194	2.25E-13	0.28638207	0.423	0.368	8.61E-09	lnN5	ADAMTS19
PGAP11	3.35E-13	0.26313376	0.47	0.457	1.28E-08	lnN5	PGAP1
RPS27A2	4.16E-13	0.31484433	0.334	0.281	1.59E-08	lnN5	RPS27A
PRMT81	4.54E-13	0.30973815	0.449	0.424	1.73E-08	lnN5	PRMT8
TRIM241	4.90E-13	0.27721127	0.415	0.389	1.87E-08	lnN5	TRIM24
LRP12	6.70E-13	0.29989172	0.445	0.428	2.56E-08	lnN5	LRP12
TET23	1.22E-12	0.26723409	0.461	0.439	4.67E-08	lnN5	TET2
SLC5A32	1.84E-12	0.27894251	0.338	0.297	7.05E-08	lnN5	SLC5A3
TMX4	2.85E-12	0.31297848	0.446	0.44	1.09E-07	lnN5	TMX4
PCSK1N1	2.85E-12	0.31883429	0.472	0.46	1.09E-07	lnN5	PCSK1N
AL445623.22	3.90E-12	0.28339299	0.423	0.378	1.49E-07	lnN5	AL445623.2
CLVS11	5.39E-12	0.26051337	0.635	0.66	2.06E-07	lnN5	CLVS1
TERF2IP	7.63E-12	0.27058171	0.558	0.566	2.92E-07	lnN5	TERF2IP
KLC1	8.03E-12	0.26511343	0.633	0.661	3.07E-07	lnN5	KLC1
SARAF	8.07E-12	0.31972147	0.557	0.577	3.08E-07	lnN5	SARAF
RPL13A2	8.13E-12	0.31077325	0.337	0.298	3.11E-07	lnN5	RPL13A
PUS7L1	9.91E-12	0.2784521	0.475	0.468	3.79E-07	lnN5	PUS7L
LRRTM21	1.03E-11	0.25488737	0.337	0.3	3.92E-07	lnN5	LRRTM2
H3F3B	1.04E-11	0.277713	0.331	0.29	3.97E-07	lnN5	H3F3B
UBC	1.18E-11	0.30760912	0.407	0.374	4.50E-07	lnN5	UBC
REPS21	1.42E-11	0.26005517	0.661	0.71	5.41E-07	lnN5	REPS2
SEZ6L3	3.27E-11	0.2554687	0.72	0.73	1.25E-06	lnN5	SEZ6L
PDE4A	3.41E-11	0.25986289	0.451	0.432	1.30E-06	lnN5	PDE4A
SLMAP	5.75E-11	0.27425349	0.574	0.593	2.20E-06	lnN5	SLMAP
CCBE11	6.15E-11	0.31463985	0.263	0.216	2.35E-06	lnN5	CCBE1
TUBA1A	9.68E-11	0.30117997	0.355	0.323	3.70E-06	lnN5	TUBA1A
RG57BP1	1.12E-10	0.26266277	0.609	0.637	4.30E-06	lnN5	RG57BP
CALY1	1.15E-10	0.29085533	0.533	0.551	4.38E-06	lnN5	CALY
PPP2R1A	5.66E-10	0.25296399	0.43	0.421	2.16E-05	lnN5	PPP2R1A
LYPLA1	5.88E-10	0.26993276	0.271	0.234	2.25E-05	lnN5	LYPLA1
FEZ1	8.29E-10	0.28728069	0.412	0.399	3.17E-05	lnN5	FEZ1
TMEM179	8.73E-10	0.26531933	0.324	0.293	3.34E-05	lnN5	TMEM179
SLITRK4	1.17E-09	0.25695832	0.396	0.372	4.49E-05	lnN5	SLITRK4
ATAD2B2	1.24E-09	0.25804263	0.448	0.44	4.76E-05	lnN5	ATAD2B
MARCH42	1.33E-09	0.25716474	0.426	0.408	5.07E-05	lnN5	4-Mar
SPINT2	2.44E-09	0.26512196	0.306	0.279	9.32E-05	lnN5	SPINT2
LRRC4B	2.62E-09	0.25065838	0.517	0.518	1.00E-04	lnN5	LRRC4B
RPS282	2.66E-09	0.31075578	0.384	0.359	0.00010155	lnN5	RPS28

CDHR33	4.13E-09	0.30163931	0.407	0.381	0.00015776	lnN5	CDHR3
RNF1573	4.24E-09	0.25848902	0.521	0.53	0.00016196	lnN5	RNF157
MORF4L1	5.17E-09	0.26207657	0.52	0.533	0.00019747	lnN5	MORF4L1
CCSAP	7.66E-09	0.25006859	0.473	0.481	0.00029285	lnN5	CCSAP
ADCY3	8.68E-09	0.2680493	0.4	0.387	0.00033183	lnN5	ADCY3
AC011346.11	9.32E-09	0.28367169	0.36	0.332	0.00035627	lnN5	AC011346.1
H3F3A	1.46E-08	0.29175855	0.292	0.263	0.00055919	lnN5	H3F3A
PALM2-AKAF	2.32E-08	0.28185167	0.655	0.707	0.00088567	lnN5	PALM2-AKAP
GAPDH1	2.78E-08	0.3040799	0.526	0.53	0.00106441	lnN5	GAPDH
RPS6KA3	7.30E-08	0.26897402	0.562	0.597	0.00279021	lnN5	RPS6KA3
RPS272	7.92E-08	0.28124391	0.334	0.308	0.00302856	lnN5	RPS27
RPL321	1.79E-06	0.29193623	0.384	0.368	0.06844201	lnN5	RPL32
ATP2C1	2.28E-06	0.25505516	0.63	0.678	0.0873076	lnN5	ATP2C1
HSP90B1	2.35E-06	0.25117438	0.446	0.453	0.08993138	lnN5	HSP90B1
PXK1	6.33E-06	0.26499857	0.464	0.473	0.24183417	lnN5	PXK
HOMER21	6.74E-06	0.25136853	0.354	0.346	0.25755293	lnN5	HOMER2
NKAIN32	8.94E-06	0.48161863	0.294	0.28	0.34188746	lnN5	NKAIN3
RPL411	1.13E-05	0.26450264	0.358	0.343	0.4303933	lnN5	RPL41
ALCAM3	1.30E-05	0.27949019	0.476	0.473	0.49704645	lnN5	ALCAM
RPL191	1.94E-05	0.30326561	0.297	0.28	0.74326949	lnN5	RPL19
RPS152	2.82E-05	0.26621119	0.31	0.29	1	lnN5	RPS15
CREB51	3.89E-05	0.45755138	0.282	0.274	1	lnN5	CREB5
WWC11	4.30E-05	0.28677561	0.354	0.359	1	lnN5	WWC1
AC005225.2	0.00017457	0.25360032	0.4	0.404	1	lnN5	AC005225.2
RPL15	0.00041683	0.2522672	0.362	0.363	1	lnN5	RPL15
RPL61	0.00085951	0.26609236	0.324	0.323	1	lnN5	RPL6
MPP62	0.00086548	0.33857884	0.53	0.589	1	lnN5	MPP6
RPS251	0.00250236	0.25749574	0.298	0.293	1	lnN5	RPS25
AC006115.21	0.00376154	0.26423017	0.37	0.39	1	lnN5	AC006115.2
MPPED12	0.00682069	0.35101051	0.405	0.457	1	lnN5	MPPED1
RPL261	0.00750977	0.2556995	0.278	0.272	1	lnN5	RPL26
RELN2	0	3.29692493	0.725	0.129	0	lnN6	RELN
CXCL143	0	2.51824417	0.873	0.147	0	lnN6	CXCL14
CNR12	0	2.44727658	0.838	0.378	0	lnN6	CNR1
ADARB23	0	2.38785636	0.997	0.363	0	lnN6	ADARB2
ZNF385D6	0	2.36400803	0.97	0.51	0	lnN6	ZNF385D
CDH43	0	2.13711328	0.904	0.421	0	lnN6	CDH4
SORCS34	0	2.07450099	0.951	0.565	0	lnN6	SORCS3
RBMS34	0	2.065819	0.989	0.636	0	lnN6	RBMS3
AC006305.1	0	1.97082612	0.573	0.009	0	lnN6	AC006305.1
MAML33	0	1.92817844	0.882	0.356	0	lnN6	MAML3
SLC35F44	0	1.88921937	0.873	0.227	0	lnN6	SLC35F4
DDR22	0	1.87716355	0.608	0.078	0	lnN6	DDR2
SDK23	0	1.77313747	0.8	0.226	0	lnN6	SDK2
MYO162	0	1.75839681	0.844	0.281	0	lnN6	MYO16
NR2F2-AS12	0	1.73065901	0.82	0.202	0	lnN6	NR2F2-AS1
CHRNA72	0	1.70230049	0.753	0.172	0	lnN6	CHRNA7
EYA1	0	1.47930454	0.371	0.038	0	lnN6	EYA1
PLS32	0	1.46457562	0.756	0.194	0	lnN6	PLS3
LINC01416	0	1.36464014	0.419	0.012	0	lnN6	LINC01416
SLC25A483	0	1.25347619	0.687	0.116	0	lnN6	SLC25A48
FBXL71	0	1.15613927	0.733	0.167	0	lnN6	FBXL7
WIF11	0	1.14065598	0.532	0.051	0	lnN6	WIF1
CDH231	0	0.88991188	0.314	0.025	0	lnN6	CDH23
ST8SIA6	0	0.68120295	0.276	0.025	0	lnN6	ST8SIA6
PAX6	0	0.67252715	0.336	0.011	0	lnN6	PAX6
CPLX31	0	0.66313027	0.293	0.026	0	lnN6	CPLX3
SP8	0	0.47080308	0.272	0.015	0	lnN6	SP8
NRXN33	4.33E-303	1.14741418	0.999	0.99	1.65E-298	lnN6	NRXN3
KCNIP14	9.82E-303	1.31679927	0.89	0.299	3.76E-298	lnN6	KCNIP1
ARHGAP422	2.34E-299	0.91178872	0.469	0.086	8.95E-295	lnN6	ARHGAP42
GRIP14	1.39E-296	1.66977422	0.995	0.798	5.33E-292	lnN6	GRIP1
PLD53	3.52E-293	1.76345302	0.846	0.318	1.34E-288	lnN6	PLD5

ROR11	1.11E-290	1.13472183	0.572	0.126	4.24E-286	lnN6	ROR1
IL1RAPL24	8.52E-290	1.7947869	0.861	0.317	3.26E-285	lnN6	IL1RAPL2
FRMD4B4	3.16E-287	1.14929596	0.64	0.164	1.21E-282	lnN6	FRMD4B
NPAS33	3.89E-286	1.76122672	0.988	0.817	1.49E-281	lnN6	NPAS3
NR2F22	1.03E-279	0.89949198	0.522	0.109	3.93E-275	lnN6	NR2F2
RGS122	1.20E-271	1.51036898	0.947	0.512	4.58E-267	lnN6	RGS12
ANGPT11	4.37E-271	1.02271588	0.427	0.078	1.67E-266	lnN6	ANGPT1
ZNF5364	4.67E-268	1.34299435	0.942	0.368	1.78E-263	lnN6	ZNF536
SYT6	2.02E-267	0.5158378	0.276	0.034	7.71E-263	lnN6	SYT6
SHISA63	3.23E-267	1.44679946	0.846	0.339	1.24E-262	lnN6	SHISA6
AC064875.1	4.11E-266	0.76354474	0.318	0.045	1.57E-261	lnN6	AC064875.1
AC073050.13	1.18E-265	1.86290329	0.954	0.772	4.53E-261	lnN6	AC073050.1
WLS3	9.15E-264	1.28797096	0.762	0.271	3.50E-259	lnN6	WLS
L3MBTL43	3.06E-261	1.52534849	0.88	0.395	1.17E-256	lnN6	L3MBTL4
SLC7A22	9.08E-259	0.72683574	0.42	0.078	3.47E-254	lnN6	SLC7A2
GRIK23	3.17E-257	1.31076725	0.991	0.948	1.21E-252	lnN6	GRIK2
HS3ST53	1.01E-255	1.36219598	0.794	0.31	3.86E-251	lnN6	HS3ST5
AP1S23	1.42E-251	1.12916802	0.645	0.198	5.41E-247	lnN6	AP1S2
ALK3	3.05E-247	1.7415105	0.702	0.243	1.17E-242	lnN6	ALK
KIAA12115	9.19E-247	1.32365352	0.883	0.395	3.51E-242	lnN6	KIAA1211
MAML22	2.35E-243	1.54189668	0.668	0.229	8.97E-239	lnN6	MAML2
HMBX11	1.40E-234	1.43493247	0.865	0.588	5.37E-230	lnN6	HMBX1
RASSF32	6.68E-232	0.72351081	0.422	0.087	2.55E-227	lnN6	RASSF3
PRKCA5	5.20E-231	1.23838278	0.966	0.733	1.99E-226	lnN6	PRKCA
DLX6-AS13	1.33E-229	1.05982024	0.732	0.236	5.07E-225	lnN6	DLX6-AS1
ATP11C2	4.73E-226	0.63979525	0.385	0.072	1.81E-221	lnN6	ATP11C
GALNTL64	2.66E-222	1.59633154	0.957	0.741	1.02E-217	lnN6	GALNTL6
WWP13	2.12E-221	1.3546075	0.838	0.481	8.11E-217	lnN6	WWP1
TNFAIP8L31	1.95E-215	0.68928776	0.389	0.079	7.45E-211	lnN6	TNFAIP8L3
NFIB3	4.79E-215	1.268382	0.957	0.647	1.83E-210	lnN6	NFIB
LINC004722	4.04E-213	0.89891571	0.531	0.145	1.54E-208	lnN6	LINC00472
DOCK104	2.98E-212	1.134633	0.876	0.4	1.14E-207	lnN6	DOCK10
NXPH13	4.27E-204	1.53833359	0.741	0.266	1.63E-199	lnN6	NXPH1
PITPNC15	3.72E-203	1.18682001	0.892	0.49	1.42E-198	lnN6	PITPNC1
CNTNAP24	1.31E-201	1.180007	1	0.993	5.02E-197	lnN6	CNTNAP2
PID13	1.00E-198	1.37227001	0.855	0.495	3.83E-194	lnN6	PID1
PBX31	2.73E-194	1.307872	0.507	0.15	1.04E-189	lnN6	PBX3
ROBO13	4.68E-193	1.52860577	0.949	0.658	1.79E-188	lnN6	ROBO1
ENOX13	1.14E-191	1.27174195	0.962	0.85	4.37E-187	lnN6	ENOX1
SHISA93	5.37E-190	1.09425247	0.97	0.822	2.05E-185	lnN6	SHISA9
NPAS12	2.39E-188	0.82989423	0.501	0.143	9.13E-184	lnN6	NPAS1
SGCD3	3.53E-187	1.60738395	0.894	0.589	1.35E-182	lnN6	SGCD
FSTL53	1.53E-185	1.25619911	0.898	0.497	5.84E-181	lnN6	FSTL5
FAM110B4	8.23E-183	1.15552357	0.795	0.429	3.15E-178	lnN6	FAM110B
KAZN5	1.98E-178	0.86873319	0.999	0.953	7.57E-174	lnN6	KAZN
SEMA6D4	4.36E-176	1.28694672	0.894	0.581	1.67E-171	lnN6	SEMA6D
MTSS16	3.62E-174	1.0436946	0.886	0.566	1.38E-169	lnN6	MTSS1
SPOCK33	9.15E-174	1.25749922	0.928	0.552	3.50E-169	lnN6	SPOCK3
NRIP34	3.15E-173	0.83416516	0.611	0.214	1.20E-168	lnN6	NRIP3
RAB3C4	5.37E-172	1.06847211	0.901	0.636	2.05E-167	lnN6	RAB3C
EPS83	5.42E-172	0.82149902	0.442	0.118	2.07E-167	lnN6	EPS8
PNOC1	8.99E-172	0.44328622	0.25	0.04	3.44E-167	lnN6	PNOC
MCC4	6.67E-171	0.95736	0.681	0.26	2.55E-166	lnN6	MCC
CNTN55	1.30E-164	1.34440266	0.959	0.815	4.97E-160	lnN6	CNTN5
TMEM200C1	2.12E-164	0.5465176	0.353	0.08	8.09E-160	lnN6	TMEM200C
SLC6A16	2.88E-164	0.86191582	0.824	0.351	1.10E-159	lnN6	SLC6A1
PTPRM4	1.18E-163	1.1907021	0.901	0.58	4.50E-159	lnN6	PTPRM
AC068722.1	5.22E-163	0.71500474	0.343	0.077	2.00E-158	lnN6	AC068722.1
PARD34	1.46E-160	1.02658058	0.745	0.317	5.58E-156	lnN6	PARD3
EGFR3	4.50E-159	0.79810836	0.682	0.238	1.72E-154	lnN6	EGFR
CDHR34	6.92E-159	1.13190431	0.749	0.376	2.64E-154	lnN6	CDHR3
ROBO23	1.52E-157	1.08816123	0.999	0.851	5.79E-153	lnN6	ROBO2
QKI6	6.91E-156	0.97684505	0.922	0.671	2.64E-151	lnN6	QKI

SCN7A1	1.15E-154	0.75657615	0.396	0.105	4.40E-150	lnN6	SCN7A
PRR162	1.13E-152	1.31570006	0.834	0.548	4.31E-148	lnN6	PRR16
MSI25	8.30E-151	0.97343087	0.895	0.658	3.17E-146	lnN6	MSI2
SYTL51	1.31E-150	0.70054285	0.401	0.106	5.01E-146	lnN6	SYTL5
FGD51	1.55E-150	0.52616514	0.325	0.073	5.91E-146	lnN6	FGD5
PDLIM5	4.47E-148	0.9688057	0.359	0.093	1.71E-143	lnN6	PDLIM5
DAB15	2.47E-147	0.86257226	0.979	0.878	9.44E-143	lnN6	DAB1
CCDC85A4	1.14E-146	1.21007616	0.862	0.655	4.36E-142	lnN6	CCDC85A
PWRN44	3.90E-146	0.84728111	0.597	0.222	1.49E-141	lnN6	PWRN4
ABTB2	8.33E-146	0.52218402	0.281	0.057	3.19E-141	lnN6	ABTB2
ENTPD34	6.46E-144	0.89613251	0.65	0.292	2.47E-139	lnN6	ENTPD3
CHST114	8.33E-143	1.06684737	0.833	0.511	3.19E-138	lnN6	CHST11
NRXN12	4.79E-142	0.63748036	1	0.986	1.83E-137	lnN6	NRXN1
TNS32	2.33E-141	0.67907222	0.388	0.107	8.91E-137	lnN6	TNS3
SILC14	1.12E-139	0.77151896	0.583	0.216	4.30E-135	lnN6	SILC1
MN11	2.37E-139	0.58977045	0.348	0.089	9.07E-135	lnN6	MN1
HIF3A1	2.94E-138	0.52500983	0.31	0.071	1.12E-133	lnN6	HIF3A
DCHS22	1.06E-137	0.67910479	0.415	0.123	4.06E-133	lnN6	DCHS2
CLMP2	2.97E-136	0.85727202	0.443	0.141	1.14E-131	lnN6	CLMP
PLCXD33	7.14E-136	1.22840089	0.664	0.309	2.73E-131	lnN6	PLCXD3
FBN21	1.01E-135	0.65744923	0.252	0.05	3.85E-131	lnN6	FBN2
AC233296.13	1.29E-133	0.89086989	0.649	0.266	4.94E-129	lnN6	AC233296.1
PWRN15	5.44E-133	0.90289903	0.848	0.467	2.08E-128	lnN6	PWRN1
GRIK13	2.39E-131	0.59036753	0.824	0.389	9.13E-127	lnN6	GRIK1
DPP62	3.31E-130	0.89058598	0.987	0.917	1.26E-125	lnN6	DPP6
SPHKAP3	2.72E-129	1.07524308	0.474	0.162	1.04E-124	lnN6	SPHKAP
KCNT23	1.23E-128	0.97008276	0.854	0.544	4.71E-124	lnN6	KCNT2
GABRG33	2.63E-128	0.8508108	0.95	0.8	1.01E-123	lnN6	GABRG3
ERBB44	3.38E-128	0.49849777	0.986	0.572	1.29E-123	lnN6	ERBB4
CUBN	5.74E-128	0.59824595	0.327	0.085	2.19E-123	lnN6	CUBN
ADAMTS62	1.07E-126	0.91059013	0.413	0.127	4.09E-122	lnN6	ADAMTS6
CCK2	2.39E-126	1.93911163	0.706	0.453	9.15E-122	lnN6	CCK
VWC23	3.52E-125	0.98379003	0.719	0.353	1.34E-120	lnN6	VWC2
GRIP25	3.33E-124	0.6174956	0.53	0.187	1.27E-119	lnN6	GRIP2
NR3C22	4.40E-124	0.83264594	0.93	0.804	1.68E-119	lnN6	NR3C2
RIMS22	3.55E-122	0.6866875	0.991	0.968	1.36E-117	lnN6	RIMS2
DENND2A3	3.86E-122	0.85799329	0.598	0.265	1.47E-117	lnN6	DENND2A
GREB1L2	4.46E-122	1.02789282	0.653	0.312	1.70E-117	lnN6	GREB1L
GRID23	9.10E-119	0.96648922	0.961	0.733	3.48E-114	lnN6	GRID2
SLCO5A12	4.37E-118	0.59633441	0.378	0.114	1.67E-113	lnN6	SLCO5A1
CHL13	2.15E-114	0.81972232	0.926	0.805	8.23E-110	lnN6	CHL1
SCG22	4.69E-114	0.89097379	0.581	0.259	1.79E-109	lnN6	SCG2
EEPD12	6.52E-114	0.93089141	0.678	0.382	2.49E-109	lnN6	EEPD1
PLPPR15	1.81E-112	0.82772193	0.635	0.294	6.93E-108	lnN6	PLPPR1
FGF133	1.99E-112	0.89083484	0.711	0.416	7.60E-108	lnN6	FGF13
TP53I111	7.82E-112	0.67252782	0.398	0.137	2.99E-107	lnN6	TP53I11
LINC01470	1.56E-111	0.99943748	0.301	0.081	5.96E-107	lnN6	LINC01470
TCF45	1.79E-111	0.59371046	0.986	0.957	6.82E-107	lnN6	TCF4
TMEM132C2	4.34E-111	0.6549177	0.616	0.261	1.66E-106	lnN6	TMEM132C
BCL11B5	2.00E-110	0.82157281	0.582	0.255	7.63E-106	lnN6	BCL11B
SH3D191	2.42E-110	0.99208534	0.725	0.457	9.25E-106	lnN6	SH3D19
DLX13	8.93E-108	0.42989765	0.342	0.097	3.41E-103	lnN6	DLX1
GAD24	7.93E-107	0.49928528	0.649	0.256	3.03E-102	lnN6	GAD2
PALLD4	2.95E-106	0.94451276	0.695	0.414	1.13E-101	lnN6	PALLD
DNER4	4.47E-106	0.75527732	0.82	0.526	1.71E-101	lnN6	DNER
DSCAML15	2.31E-105	0.75576931	0.93	0.757	8.84E-101	lnN6	DSCAML1
KCNJ33	3.40E-105	0.74161872	0.942	0.868	1.30E-100	lnN6	KCNJ3
KIRREL32	7.01E-103	0.94034532	0.934	0.792	2.68E-98	lnN6	KIRREL3
TMTC23	6.99E-102	0.94940377	0.815	0.538	2.67E-97	lnN6	TMTC2
GCNT23	7.45E-101	0.35881627	0.284	0.074	2.85E-96	lnN6	GCNT2
IGF15	7.27E-100	0.63278054	0.426	0.15	2.78E-95	lnN6	IGF1
LRRC3B2	4.00E-99	0.64261951	0.572	0.252	1.53E-94	lnN6	LRRC3B
AL391832.42	1.62E-98	0.53359807	0.261	0.066	6.21E-94	lnN6	AL391832.4

NTRK23	3.80E-98	0.68195795	0.963	0.944	1.45E-93	lnN6	NTRK2
SPOCK14	5.00E-98	0.71533262	0.946	0.748	1.91E-93	lnN6	SPOCK1
NHS5	3.18E-97	0.76015707	0.762	0.448	1.22E-92	lnN6	NHS
ANO44	4.73E-97	0.67929656	0.87	0.597	1.81E-92	lnN6	ANO4
ZNF804B5	5.14E-96	1.14935992	0.648	0.356	1.96E-91	lnN6	ZNF804B
B3GAT22	1.20E-93	0.51156884	0.365	0.124	4.58E-89	lnN6	B3GAT2
RASSF84	1.38E-92	0.63749266	0.444	0.176	5.28E-88	lnN6	RASSF8
UNC5B1	3.01E-92	0.57690765	0.401	0.149	1.15E-87	lnN6	UNC5B
SYT173	8.69E-92	0.66244123	0.593	0.297	3.32E-87	lnN6	SYT17
SVEP11	3.47E-91	0.67742296	0.476	0.199	1.33E-86	lnN6	SVEP1
CACNG43	1.32E-90	0.5014594	0.426	0.158	5.04E-86	lnN6	CACNG4
DNAH2	5.69E-90	0.47681283	0.269	0.077	2.18E-85	lnN6	DNAH2
KLHL292	1.10E-89	1.07171905	0.819	0.699	4.20E-85	lnN6	KLHL29
PRKD13	1.28E-89	0.88217021	0.77	0.509	4.89E-85	lnN6	PRKD1
SLC24A34	4.30E-89	0.36151322	0.693	0.309	1.64E-84	lnN6	SLC24A3
ELAVL23	1.32E-88	0.7075258	0.796	0.519	5.05E-84	lnN6	ELAVL2
FOXO12	3.29E-88	0.63817657	0.361	0.127	1.26E-83	lnN6	FOXO1
GABRA12	1.29E-87	0.79146545	0.8	0.641	4.94E-83	lnN6	GABRA1
PDE4B3	1.32E-87	0.81531899	0.838	0.611	5.05E-83	lnN6	PDE4B
FGF142	3.67E-87	0.45264083	0.996	0.989	1.40E-82	lnN6	FGF14
TLE22	6.60E-87	0.64275052	0.457	0.198	2.52E-82	lnN6	TLE2
PLCB42	1.71E-86	0.85260906	0.77	0.562	6.52E-82	lnN6	PLCB4
TIMP24	5.12E-86	0.68502036	0.589	0.302	1.96E-81	lnN6	TIMP2
MARCH113	2.62E-85	0.78686809	0.597	0.34	1.00E-80	lnN6	11-Mar
INHBA-AS12	2.38E-84	0.50504344	0.399	0.15	9.10E-80	lnN6	INHBA-AS1
COL16A11	2.79E-84	0.74864984	0.422	0.183	1.07E-79	lnN6	COL16A1
SHISAL1	3.87E-84	0.54299007	0.38	0.146	1.48E-79	lnN6	SHISAL1
RERG3	3.29E-83	0.84703194	0.545	0.268	1.26E-78	lnN6	RERG
DOCK91	4.54E-83	0.721869	0.857	0.752	1.73E-78	lnN6	DOCK9
ADRA1A4	4.54E-83	0.78914679	0.488	0.211	1.74E-78	lnN6	ADRA1A
RIPOR24	1.20E-82	0.69985425	0.724	0.466	4.57E-78	lnN6	RIPOR2
DCX5	1.34E-82	0.75290716	0.649	0.395	5.11E-78	lnN6	DCX
CHRM24	1.91E-82	0.65914875	0.498	0.215	7.29E-78	lnN6	CHRM2
HIVEP13	2.05E-82	0.76321889	0.691	0.46	7.83E-78	lnN6	HIVEP1
SEZ6L4	2.96E-82	0.77556775	0.865	0.727	1.13E-77	lnN6	SEZ6L
MACROD23	8.67E-82	0.8493569	0.976	0.951	3.31E-77	lnN6	MACROD2
INSYN2A1	8.93E-82	0.48615503	0.302	0.097	3.41E-77	lnN6	INSYN2A
SCN9A1	2.32E-81	0.628465	0.449	0.199	8.86E-77	lnN6	SCN9A
NINL4	3.18E-80	0.49897679	0.451	0.186	1.22E-75	lnN6	NINL
AMOTL14	3.38E-80	0.51863302	0.474	0.202	1.29E-75	lnN6	AMOTL1
RGS81	7.46E-80	0.33477676	0.261	0.076	2.85E-75	lnN6	RGS8
TCF126	1.07E-79	0.68925645	0.85	0.704	4.08E-75	lnN6	TCF12
LHFPL33	9.46E-79	0.68154676	0.568	0.273	3.62E-74	lnN6	LHFPL3
GABRG11	3.30E-78	0.50357159	0.364	0.134	1.26E-73	lnN6	GABRG1
PIK3R33	5.75E-78	0.76561106	0.573	0.316	2.20E-73	lnN6	PIK3R3
PLCB12	6.55E-78	0.55108371	0.996	0.978	2.51E-73	lnN6	PLCB1
GLYATL2	3.81E-77	0.47818815	0.369	0.143	1.46E-72	lnN6	GLYATL2
ZNF4623	8.09E-77	0.64359048	0.548	0.286	3.09E-72	lnN6	ZNF462
SYNE12	7.00E-76	0.54628388	0.978	0.952	2.67E-71	lnN6	SYNE1
FNBP1L5	7.84E-75	0.64925474	0.654	0.388	3.00E-70	lnN6	FNBP1L
AC087564.14	3.03E-74	0.52765145	0.377	0.14	1.16E-69	lnN6	AC087564.1
GAD15	5.34E-74	0.45579601	0.627	0.286	2.04E-69	lnN6	GAD1
CACNA1B	5.90E-74	0.52686743	0.957	0.911	2.26E-69	lnN6	CACNA1B
MGAT54	6.91E-74	0.82139135	0.788	0.66	2.64E-69	lnN6	MGAT5
ITGB83	3.44E-73	0.87240974	0.528	0.286	1.31E-68	lnN6	ITGB8
SLC29A4	4.37E-73	0.44354363	0.382	0.155	1.67E-68	lnN6	SLC29A4
GPR1582	7.63E-73	0.68276059	0.878	0.75	2.92E-68	lnN6	GPR158
ARHGAP283	1.94E-72	0.56325006	0.465	0.207	7.40E-68	lnN6	ARHGAP28
REV3L4	5.37E-72	0.57586092	0.876	0.777	2.05E-67	lnN6	REV3L
GRAMD1B	1.49E-71	0.68799535	0.807	0.668	5.68E-67	lnN6	GRAMD1B
ANKRD30BL	2.46E-71	0.66537015	0.854	0.707	9.40E-67	lnN6	ANKRD30BL
SPATA131	3.29E-69	0.57720504	0.355	0.143	1.26E-64	lnN6	SPATA13
NTM2	2.04E-68	0.69073917	0.954	0.85	7.78E-64	lnN6	NTM

LINC012372	5.97E-68	0.51356256	0.384	0.161	2.28E-63	lnN6	LINC01237
GNG42	6.35E-68	0.4266062	0.369	0.145	2.43E-63	lnN6	GNG4
CAMK2D2	1.89E-67	0.78763723	0.829	0.669	7.23E-63	lnN6	CAMK2D
ANKRD502	7.51E-67	0.52745163	0.424	0.197	2.87E-62	lnN6	ANKRD50
PYGO1	2.07E-66	0.31682944	0.265	0.086	7.93E-62	lnN6	PYGO1
AP000721.2	6.72E-66	0.40905673	0.304	0.111	2.57E-61	lnN6	AP000721.2
SLC8A14	7.20E-66	0.64295887	0.963	0.862	2.75E-61	lnN6	SLC8A1
ABCA11	8.56E-66	0.4279617	0.335	0.128	3.27E-61	lnN6	ABCA1
PDE3A2	1.93E-65	0.74581637	0.342	0.135	7.38E-61	lnN6	PDE3A
LRRC393	1.18E-64	0.5129435	0.377	0.163	4.51E-60	lnN6	LRRC39
NCOA11	4.79E-64	0.58979526	0.907	0.875	1.83E-59	lnN6	NCOA1
SOX2-OT3	5.95E-64	0.90340675	0.715	0.49	2.28E-59	lnN6	SOX2-OT
ZNF6084	8.73E-64	0.54824249	0.616	0.356	3.34E-59	lnN6	ZNF608
U91319.11	1.17E-63	0.78562921	0.636	0.435	4.47E-59	lnN6	U91319.1
TRDMT1	1.77E-63	0.5287768	0.388	0.175	6.75E-59	lnN6	TRDMT1
PELI23	2.44E-63	0.68647941	0.519	0.284	9.32E-59	lnN6	PELI2
OSBPL83	3.17E-63	0.64382943	0.837	0.751	1.21E-58	lnN6	OSBPL8
KCNQ53	5.63E-63	0.77529718	0.988	0.904	2.15E-58	lnN6	KCNQ5
GLUL1	7.21E-63	0.42982163	0.343	0.139	2.75E-58	lnN6	GLUL
FREM13	1.68E-62	0.83719968	0.438	0.221	6.43E-58	lnN6	FREM1
ARID1B1	2.56E-62	0.46903218	0.953	0.919	9.80E-58	lnN6	ARID1B
EGLN3	7.67E-61	0.42139614	0.314	0.122	2.93E-56	lnN6	EGLN3
SLC2A132	7.90E-61	0.54923206	0.907	0.856	3.02E-56	lnN6	SLC2A13
SH3RF35	1.54E-60	0.58330061	0.836	0.68	5.90E-56	lnN6	SH3RF3
ADCY83	3.26E-60	0.50109285	0.552	0.287	1.25E-55	lnN6	ADCY8
APP1	2.46E-59	0.53097261	0.942	0.911	9.40E-55	lnN6	APP
BICD14	7.13E-59	0.49544509	0.875	0.793	2.72E-54	lnN6	BICD1
SPOCK23	7.17E-59	0.64435547	0.636	0.434	2.74E-54	lnN6	SPOCK2
PBX4	8.90E-59	0.50022194	0.36	0.162	3.40E-54	lnN6	PBX4
SGK13	1.42E-58	0.64874572	0.696	0.507	5.42E-54	lnN6	SGK1
ARHGAP211	3.57E-58	0.51188914	0.883	0.839	1.36E-53	lnN6	ARHGAP21
VWA5A	4.69E-58	0.29933634	0.268	0.095	1.79E-53	lnN6	VWA5A
SLCO3A14	6.07E-58	0.64614673	0.83	0.735	2.32E-53	lnN6	SLCO3A1
PTN	1.26E-57	0.45209327	0.298	0.118	4.81E-53	lnN6	PTN
TRMT9B3	2.76E-57	0.57212672	0.653	0.417	1.06E-52	lnN6	TRMT9B
NCAM12	2.82E-57	0.42497883	0.962	0.937	1.08E-52	lnN6	NCAM1
RAB37	3.57E-57	0.72399829	0.439	0.236	1.36E-52	lnN6	RAB37
LIMA12	3.60E-57	0.52254252	0.415	0.202	1.38E-52	lnN6	LIMA1
SLC1A22	7.81E-57	0.58034278	0.661	0.46	2.98E-52	lnN6	SLC1A2
PCBP32	9.37E-56	0.44944584	0.393	0.182	3.58E-51	lnN6	PCBP3
MGAT4C3	6.84E-55	0.48466725	0.848	0.577	2.62E-50	lnN6	MGAT4C
FRMPD32	2.75E-53	0.35427916	0.283	0.109	1.05E-48	lnN6	FRMPD3
ATP1B24	5.30E-53	0.43947826	0.459	0.231	2.02E-48	lnN6	ATP1B2
MOB3B1	9.08E-53	0.78138266	0.577	0.391	3.47E-48	lnN6	MOB3B
GRK33	1.70E-52	0.56940638	0.816	0.707	6.48E-48	lnN6	GRK3
DPF32	3.95E-52	0.56633056	0.507	0.283	1.51E-47	lnN6	DPF3
ANKRD291	8.96E-52	0.46507158	0.403	0.198	3.42E-47	lnN6	ANKRD29
ECE23	1.69E-51	0.49022508	0.439	0.229	6.44E-47	lnN6	ECE2
NECAB22	1.73E-51	0.42787416	0.369	0.176	6.61E-47	lnN6	NECAB2
FOXN34	3.47E-51	0.53314315	0.84	0.707	1.33E-46	lnN6	FOXN3
UBE2QL1	6.00E-51	0.58049401	0.549	0.356	2.29E-46	lnN6	UBE2QL1
PBX11	6.97E-51	0.73544586	0.892	0.89	2.66E-46	lnN6	PBX1
TRIM361	7.40E-51	0.47365445	0.414	0.213	2.83E-46	lnN6	TRIM36
AF279873.32	1.08E-50	0.50332906	0.335	0.148	4.11E-46	lnN6	AF279873.3
MITF4	4.10E-50	0.46292158	0.41	0.196	1.57E-45	lnN6	MITF
EPHA64	7.49E-50	0.49377616	0.891	0.659	2.86E-45	lnN6	EPHA6
INPP4B5	3.29E-49	0.47882724	0.907	0.754	1.26E-44	lnN6	INPP4B
DGKD4	7.22E-49	0.36343751	0.557	0.311	2.76E-44	lnN6	DGKD
FLNB1	1.11E-48	0.53867771	0.625	0.452	4.25E-44	lnN6	FLNB
ZNF7043	1.26E-48	0.63421434	0.794	0.671	4.83E-44	lnN6	ZNF704
WWOX4	1.81E-48	0.56132123	0.903	0.817	6.91E-44	lnN6	WWOX
ADCYAP1R15	2.16E-48	0.4426859	0.531	0.301	8.25E-44	lnN6	ADCYAP1R1
HES4	5.20E-48	0.39572761	0.314	0.14	1.99E-43	lnN6	HES4

MAN1A12	1.49E-47	0.65563083	0.683	0.489	5.70E-43	lnN6	MAN1A1
RXRA3	1.90E-47	0.38252368	0.411	0.208	7.27E-43	lnN6	RXRA
PODXL24	2.07E-47	0.50062553	0.587	0.391	7.91E-43	lnN6	PODXL2
SNCAIP3	3.54E-47	0.49706527	0.343	0.161	1.35E-42	lnN6	SNCAIP
TOX24	3.96E-47	0.4226092	0.413	0.205	1.51E-42	lnN6	TOX2
AL445623.23	5.47E-47	0.54873108	0.589	0.376	2.09E-42	lnN6	AL445623.2
GRIA13	2.43E-46	0.45045543	0.954	0.922	9.29E-42	lnN6	GRIA1
CNTLN1	3.09E-46	0.4938507	0.426	0.234	1.18E-41	lnN6	CNTLN
RAB8B1	8.03E-46	0.48628844	0.484	0.29	3.07E-41	lnN6	RAB8B
GABRG2	1.31E-45	0.54424595	0.821	0.744	5.02E-41	lnN6	GABRG2
GPR137C3	1.93E-45	0.54758127	0.735	0.606	7.38E-41	lnN6	GPR137C
GNAS3	3.57E-45	0.54824841	0.883	0.824	1.36E-40	lnN6	GNAS
NKAIN25	4.25E-45	0.66157382	0.949	0.839	1.62E-40	lnN6	NKAIN2
BMERB12	2.57E-44	0.58956999	0.804	0.724	9.82E-40	lnN6	BMERB1
FRMD33	3.38E-44	0.50147351	0.548	0.342	1.29E-39	lnN6	FRMD3
GRID14	6.17E-44	0.49375817	0.892	0.852	2.36E-39	lnN6	GRID1
SGO1-AS12	6.36E-44	0.76772129	0.3	0.136	2.43E-39	lnN6	SGO1-AS1
LARP11	8.86E-44	0.50070519	0.769	0.669	3.39E-39	lnN6	LARP1
AKAP62	3.63E-43	0.33760344	0.97	0.944	1.39E-38	lnN6	AKAP6
LAMA31	4.94E-43	0.3998787	0.302	0.132	1.89E-38	lnN6	LAMA3
HIVEP34	5.81E-43	0.41034659	0.898	0.862	2.22E-38	lnN6	HIVEP3
GPR1552	6.17E-43	0.56363381	0.716	0.6	2.36E-38	lnN6	GPR155
NKAIN33	7.90E-43	0.57077951	0.485	0.277	3.02E-38	lnN6	NKAIN3
CCNH3	1.12E-42	0.50940667	0.844	0.768	4.29E-38	lnN6	CCNH
PREX23	1.60E-42	0.37329106	0.375	0.178	6.13E-38	lnN6	PREX2
C8orf343	2.13E-42	0.66948287	0.594	0.391	8.14E-38	lnN6	C8orf34
RNF1301	2.26E-42	0.49706213	0.8	0.728	8.63E-38	lnN6	RNF130
GRIA21	2.33E-42	0.41594192	0.963	0.95	8.91E-38	lnN6	GRIA2
ARHGAP63	2.41E-42	0.84768223	0.339	0.175	9.20E-38	lnN6	ARHGAP6
KCNQ1OT11	3.29E-42	0.60531358	0.65	0.507	1.26E-37	lnN6	KCNQ1OT1
ANK32	7.71E-42	0.29532631	0.986	0.976	2.95E-37	lnN6	ANK3
NR2F12	8.47E-42	0.52309872	0.578	0.404	3.24E-37	lnN6	NR2F1
GRIN3A3	1.01E-41	0.34698907	0.459	0.237	3.85E-37	lnN6	GRIN3A
NACC21	2.27E-41	0.25681959	0.268	0.113	8.67E-37	lnN6	NACC2
GRAMD1C	3.63E-41	0.46632926	0.293	0.141	1.39E-36	lnN6	GRAMD1C
MAF5	1.59E-40	0.28042135	0.388	0.186	6.07E-36	lnN6	MAF
LRRC4C5	6.94E-40	0.25912426	0.967	0.889	2.65E-35	lnN6	LRRC4C
ADD32	1.13E-39	0.47608079	0.711	0.581	4.31E-35	lnN6	ADD3
MTUS15	1.59E-39	0.39977518	0.509	0.298	6.10E-35	lnN6	MTUS1
EPHA55	4.37E-39	0.77202262	0.72	0.599	1.67E-34	lnN6	EPHA5
GAS72	7.96E-39	0.47637237	0.846	0.78	3.04E-34	lnN6	GAS7
NAAA2	2.84E-38	0.40378377	0.384	0.21	1.09E-33	lnN6	NAAA
DSCAM4	2.95E-38	0.34702038	0.98	0.904	1.13E-33	lnN6	DSCAM
TOX35	3.04E-38	0.38024176	0.381	0.189	1.16E-33	lnN6	TOX3
SLC7A142	5.50E-38	0.52492792	0.644	0.514	2.10E-33	lnN6	SLC7A14
MAP3K12	7.55E-38	0.35825724	0.327	0.163	2.89E-33	lnN6	MAP3K1
LPIN24	8.15E-38	0.4826787	0.534	0.363	3.11E-33	lnN6	LPIN2
POT1-AS12	8.65E-38	0.57953201	0.573	0.394	3.31E-33	lnN6	POT1-AS1
CRTAC14	1.07E-37	0.4030947	0.426	0.238	4.08E-33	lnN6	CRTAC1
HIP12	2.11E-37	0.31573147	0.367	0.188	8.06E-33	lnN6	HIP1
TGFBR33	2.35E-37	0.39785387	0.363	0.19	8.98E-33	lnN6	TGFBR3
AC079296.14	9.68E-37	0.30507786	0.363	0.184	3.70E-32	lnN6	AC079296.1
NYAP23	1.22E-36	0.46323473	0.673	0.509	4.68E-32	lnN6	NYAP2
SAMD4A3	1.44E-36	0.53158306	0.628	0.469	5.51E-32	lnN6	SAMD4A
HTRA13	2.49E-36	0.29638174	0.336	0.165	9.54E-32	lnN6	HTRA1
INTS7	3.04E-36	0.45839683	0.393	0.227	1.16E-31	lnN6	INTS7
FAM13C2	3.28E-36	0.49874982	0.645	0.511	1.25E-31	lnN6	FAM13C
UBASH3B5	3.88E-36	0.30800537	0.556	0.34	1.48E-31	lnN6	UBASH3B
FXVD64	5.60E-36	0.54464343	0.704	0.619	2.14E-31	lnN6	FXVD6
AC092640.11	9.07E-36	0.39030049	0.269	0.123	3.47E-31	lnN6	AC092640.1
SNCA4	1.55E-35	0.54749506	0.748	0.612	5.92E-31	lnN6	SNCA
TTC282	1.89E-35	0.40564383	0.858	0.788	7.23E-31	lnN6	TTC28
LRCH21	2.42E-35	0.47237981	0.507	0.339	9.26E-31	lnN6	LRCH2

FCHSD26	3.06E-35	0.43384878	0.74	0.614	1.17E-30	lnN6	FCHSD2
RASGRF11	3.52E-35	0.43310999	0.648	0.512	1.34E-30	lnN6	RASGRF1
SYN33	3.86E-35	0.39196209	0.967	0.865	1.47E-30	lnN6	SYN3
ARL4C4	4.17E-35	0.38166759	0.457	0.27	1.59E-30	lnN6	ARL4C
DHRX	4.68E-35	0.49666443	0.574	0.416	1.79E-30	lnN6	DHRX
FAM107A	1.29E-34	0.34442999	0.272	0.128	4.93E-30	lnN6	FAM107A
KCNC24	1.50E-34	0.26049583	0.925	0.835	5.75E-30	lnN6	KCNC2
NSG22	2.43E-34	0.49174334	0.69	0.556	9.28E-30	lnN6	NSG2
NR2F1-AS12	2.64E-34	0.46375638	0.859	0.788	1.01E-29	lnN6	NR2F1-AS1
GPR161	3.41E-34	0.26919246	0.252	0.114	1.30E-29	lnN6	GPR161
IRF2BP21	4.15E-34	0.40536342	0.322	0.17	1.59E-29	lnN6	IRF2BP2
SIPA1L22	5.23E-34	0.520545	0.572	0.427	2.00E-29	lnN6	SIPA1L2
KCND22	5.77E-34	0.4559898	0.946	0.872	2.20E-29	lnN6	KCND2
CFAP1614	1.26E-33	0.4995433	0.491	0.316	4.83E-29	lnN6	CFAP161
MACROD11	1.54E-33	0.38123031	0.377	0.217	5.88E-29	lnN6	MACROD1
LIFR1	2.19E-33	0.45694502	0.472	0.315	8.36E-29	lnN6	LIFR
CNTFR	2.50E-33	0.31269377	0.307	0.157	9.55E-29	lnN6	CNTFR
AFDN2	2.64E-33	0.39719489	0.752	0.65	1.01E-28	lnN6	AFDN
CPEB22	3.51E-33	0.47204533	0.58	0.44	1.34E-28	lnN6	CPEB2
LYPD6B5	5.49E-33	0.3791354	0.347	0.18	2.10E-28	lnN6	LYPD6B
WASF34	9.78E-33	0.4416475	0.541	0.383	3.74E-28	lnN6	WASF3
LPGAT11	1.14E-32	0.60106498	0.647	0.546	4.37E-28	lnN6	LPGAT1
ERBIN4	1.22E-32	0.42108981	0.675	0.538	4.68E-28	lnN6	ERBIN
USP35	1.41E-32	0.31381882	0.336	0.175	5.40E-28	lnN6	USP3
HS6ST21	1.55E-32	0.45728686	0.375	0.218	5.91E-28	lnN6	HS6ST2
KCND31	2.03E-32	0.40075562	0.895	0.827	7.76E-28	lnN6	KCND3
OSBPL103	2.68E-32	0.47706203	0.628	0.484	1.02E-27	lnN6	OSBPL10
KIDINS2202	4.62E-32	0.41365214	0.777	0.739	1.77E-27	lnN6	KIDINS220
KIAA19584	5.74E-32	0.45020727	0.595	0.431	2.19E-27	lnN6	KIAA1958
GABRA21	8.08E-32	0.44284784	0.744	0.638	3.09E-27	lnN6	GABRA2
KCNQ36	8.15E-32	0.45534059	0.941	0.902	3.11E-27	lnN6	KCNQ3
DPYSL31	8.22E-32	0.38325829	0.351	0.196	3.14E-27	lnN6	DPYSL3
LTBP11	1.36E-31	0.30323065	0.264	0.124	5.22E-27	lnN6	LTBP1
RGMB1	1.78E-31	0.40361168	0.413	0.255	6.82E-27	lnN6	RGMB
TENM34	4.39E-31	0.43604882	0.821	0.673	1.68E-26	lnN6	TENM3
HIPK22	1.04E-30	0.44764579	0.519	0.364	3.96E-26	lnN6	HIPK2
SLC9A93	1.17E-30	0.30615189	0.532	0.353	4.49E-26	lnN6	SLC9A9
CPEB32	2.08E-30	0.36991548	0.871	0.847	7.96E-26	lnN6	CPEB3
GPRC5B2	3.00E-30	0.29629801	0.325	0.171	1.15E-25	lnN6	GPRC5B
GTF2I3	3.76E-30	0.3629678	0.871	0.834	1.44E-25	lnN6	GTF2I
GALNT23	4.67E-30	0.48409885	0.606	0.481	1.78E-25	lnN6	GALNT2
AC106795.32	8.92E-30	0.3122484	0.382	0.22	3.41E-25	lnN6	AC106795.3
SNRPN5	1.01E-29	0.35876585	0.845	0.762	3.88E-25	lnN6	SNRPN
ABCC13	1.40E-29	0.41172053	0.502	0.356	5.36E-25	lnN6	ABCC1
GLRA23	3.35E-29	0.33154245	0.381	0.211	1.28E-24	lnN6	GLRA2
PCSK1N2	4.28E-29	0.57037242	0.586	0.458	1.64E-24	lnN6	PCSK1N
AC087457.12	4.77E-29	0.25679104	0.26	0.124	1.82E-24	lnN6	AC087457.1
SLC8A33	6.06E-29	0.43440194	0.631	0.487	2.32E-24	lnN6	SLC8A3
MYT1L3	8.66E-29	0.25021275	0.975	0.971	3.31E-24	lnN6	MYT1L
NRSN12	1.05E-28	0.41484716	0.619	0.489	4.03E-24	lnN6	NRSN1
MXD43	1.13E-28	0.32907323	0.413	0.256	4.32E-24	lnN6	MXD4
DLG51	2.06E-28	0.42221957	0.461	0.312	7.89E-24	lnN6	DLG5
VSTM2A3	4.46E-28	0.41339396	0.548	0.394	1.70E-23	lnN6	VSTM2A
SYT113	6.75E-28	0.43261958	0.731	0.646	2.58E-23	lnN6	SYT11
SYT91	9.05E-28	0.31913527	0.276	0.145	3.46E-23	lnN6	SYT9
AC007364.13	1.28E-27	0.42766954	0.435	0.281	4.89E-23	lnN6	AC007364.1
SESN31	2.45E-27	0.46192338	0.715	0.631	9.36E-23	lnN6	SESN3
PHYHIPL3	4.06E-27	0.43281087	0.683	0.593	1.55E-22	lnN6	PHYHIPL
ADCY24	5.28E-27	0.38027705	0.887	0.854	2.02E-22	lnN6	ADCY2
CA31	6.54E-27	0.38085353	0.35	0.208	2.50E-22	lnN6	CA3
HDAC2-AS22	1.16E-26	0.35528115	0.422	0.269	4.44E-22	lnN6	HDAC2-AS2
ULK2	1.20E-26	0.43141762	0.635	0.547	4.59E-22	lnN6	ULK2
SERINC12	1.28E-26	0.50403327	0.686	0.62	4.91E-22	lnN6	SERINC1

SLC38A13	2.83E-26	0.46625558	0.678	0.598	1.08E-21	lnN6	SLC38A1
CPLX21	3.02E-26	0.42809147	0.664	0.573	1.15E-21	lnN6	CPLX2
PNPLA71	3.38E-26	0.39056696	0.548	0.414	1.29E-21	lnN6	PNPLA7
DAAM14	4.19E-26	0.38098495	0.79	0.751	1.60E-21	lnN6	DAAM1
SLC4A73	7.81E-26	0.38051275	0.58	0.447	2.98E-21	lnN6	SLC4A7
ATP1B14	1.08E-25	0.49420199	0.79	0.78	4.13E-21	lnN6	ATP1B1
PALM2-AKAF	2.08E-25	0.42182748	0.763	0.704	7.93E-21	lnN6	PALM2-AKAP
PDE8B2	2.22E-25	0.33173543	0.821	0.663	8.49E-21	lnN6	PDE8B
ARHGAP53	7.63E-25	0.43526143	0.668	0.592	2.92E-20	lnN6	ARHGAP5
ADAM222	1.05E-24	0.31826999	0.848	0.826	4.00E-20	lnN6	ADAM22
LINC004612	1.21E-24	0.38546327	0.827	0.785	4.62E-20	lnN6	LINC00461
REEP12	2.29E-24	0.38896711	0.694	0.625	8.74E-20	lnN6	REEP1
TSPAN52	2.34E-24	0.3700905	0.892	0.844	8.93E-20	lnN6	TSPAN5
APC5	2.46E-24	0.35823603	0.777	0.741	9.40E-20	lnN6	APC
RAVER21	3.58E-24	0.38886574	0.426	0.292	1.37E-19	lnN6	RAVER2
SUSD43	3.83E-24	0.41162159	0.691	0.611	1.46E-19	lnN6	SUSD4
RERE1	4.07E-24	0.25351767	0.945	0.925	1.55E-19	lnN6	RERE
C1orf611	4.83E-24	0.36223429	0.457	0.329	1.85E-19	lnN6	C1orf61
GTF2IRD13	6.66E-24	0.36129839	0.583	0.455	2.55E-19	lnN6	GTF2IRD1
BACH16	6.73E-24	0.3420771	0.385	0.234	2.57E-19	lnN6	BACH1
FYN1	7.97E-24	0.36968629	0.779	0.748	3.05E-19	lnN6	FYN
TCF202	1.61E-23	0.38997874	0.707	0.632	6.17E-19	lnN6	TCF20
JAK13	3.58E-23	0.40144354	0.787	0.744	1.37E-18	lnN6	JAK1
NNMT	4.20E-23	0.33700162	0.25	0.134	1.60E-18	lnN6	NNMT
AFAP14	6.33E-23	0.3312014	0.547	0.398	2.42E-18	lnN6	AFAP1
SRGAP25	9.67E-23	0.37143385	0.598	0.484	3.70E-18	lnN6	SRGAP2
TBC1D301	1.05E-22	0.39100827	0.426	0.3	4.03E-18	lnN6	TBC1D30
NRXN22	1.10E-22	0.38947484	0.699	0.636	4.21E-18	lnN6	NRXN2
ELFN21	1.23E-22	0.32792088	0.33	0.203	4.69E-18	lnN6	ELFN2
PCSK62	1.65E-22	0.42904846	0.342	0.218	6.30E-18	lnN6	PCSK6
NMNAT23	2.28E-22	0.30693108	0.88	0.853	8.72E-18	lnN6	NMNAT2
FOXO3	3.19E-22	0.37670572	0.746	0.691	1.22E-17	lnN6	FOXO3
MT-ND43	3.98E-22	0.45188097	0.879	0.856	1.52E-17	lnN6	MT-ND4
AC009093.22	4.57E-22	0.25118988	0.252	0.135	1.75E-17	lnN6	AC009093.2
COBL4	8.25E-22	0.3147212	0.857	0.75	3.15E-17	lnN6	COBL
EPHA74	1.03E-21	0.52863582	0.641	0.545	3.95E-17	lnN6	EPHA7
B3GALNT2	1.36E-21	0.38031445	0.439	0.321	5.21E-17	lnN6	B3GALNT2
ABLIM16	2.13E-21	0.2887745	0.899	0.833	8.15E-17	lnN6	ABLIM1
ARL6IP12	2.36E-21	0.4424383	0.547	0.446	9.03E-17	lnN6	ARL6IP1
GABRB23	3.61E-21	0.26304304	0.941	0.922	1.38E-16	lnN6	GABRB2
GRK51	4.17E-21	0.34396987	0.41	0.281	1.60E-16	lnN6	GRK5
CCND2	5.56E-21	0.40943963	0.598	0.507	2.13E-16	lnN6	CCND2
MT-ND34	6.92E-21	0.50296174	0.891	0.87	2.65E-16	lnN6	MT-ND3
LAPTM4B	7.82E-21	0.31460752	0.317	0.195	2.99E-16	lnN6	LAPTM4B
SBF22	1.83E-20	0.27910814	0.841	0.801	7.01E-16	lnN6	SBF2
DNM21	2.10E-20	0.39274923	0.552	0.447	8.04E-16	lnN6	DNM2
DISC12	6.65E-20	0.27321759	0.251	0.139	2.54E-15	lnN6	DISC1
MT-CO24	8.32E-20	0.51165716	0.908	0.899	3.18E-15	lnN6	MT-CO2
ENAH2	8.70E-20	0.32925133	0.628	0.541	3.33E-15	lnN6	ENAH
TAFAS2	9.54E-20	0.41350109	0.674	0.606	3.65E-15	lnN6	TAFAS
N4BP23	1.65E-19	0.32321546	0.495	0.366	6.30E-15	lnN6	N4BP2
FRYL2	2.86E-19	0.32531669	0.756	0.704	1.09E-14	lnN6	FRYL
NXN1	3.53E-19	0.29684178	0.263	0.151	1.35E-14	lnN6	NXN
SHANK21	3.80E-19	0.30249263	0.862	0.815	1.45E-14	lnN6	SHANK2
MAST22	4.24E-19	0.34381054	0.507	0.408	1.62E-14	lnN6	MAST2
CAMK43	9.01E-19	0.38258919	0.781	0.721	3.44E-14	lnN6	CAMK4
CADM11	1.67E-18	0.30488302	0.896	0.86	6.37E-14	lnN6	CADM1
NAP1L32	1.83E-18	0.38019875	0.423	0.305	7.01E-14	lnN6	NAP1L3
RYBP1	1.88E-18	0.37349774	0.541	0.438	7.19E-14	lnN6	RYBP
ZMIZ1	1.95E-18	0.3426258	0.495	0.384	7.46E-14	lnN6	ZMIZ1
PARM13	2.65E-18	0.41077702	0.511	0.399	1.01E-13	lnN6	PARM1
RAB3IP3	2.78E-18	0.27344331	0.406	0.276	1.06E-13	lnN6	RAB3IP
ARNT23	3.00E-18	0.28049607	0.865	0.839	1.15E-13	lnN6	ARNT2

SEMA4B1	3.28E-18	0.35027468	0.459	0.353	1.25E-13	lnN6	SEMA4B
ZNF4831	3.49E-18	0.33718576	0.779	0.75	1.34E-13	lnN6	ZNF483
COL12A14	3.75E-18	0.39056822	0.314	0.199	1.43E-13	lnN6	COL12A1
GPR1762	6.88E-18	0.3363166	0.448	0.334	2.63E-13	lnN6	GPR176
SMAD5	8.30E-18	0.34797196	0.402	0.296	3.17E-13	lnN6	SMAD5
MGLL4	8.60E-18	0.31456639	0.557	0.439	3.29E-13	lnN6	MGLL
OSTM12	1.02E-17	0.31980257	0.375	0.263	3.91E-13	lnN6	OSTM1
MGST21	2.18E-17	0.25203163	0.314	0.202	8.35E-13	lnN6	MGST2
KMT2A	5.67E-17	0.31359548	0.836	0.832	2.17E-12	lnN6	KMT2A
LINC011974	8.13E-17	0.2889706	0.485	0.352	3.11E-12	lnN6	LINC01197
FNBP12	9.97E-17	0.33536754	0.689	0.636	3.81E-12	lnN6	FNBP1
PCDH155	1.67E-16	0.32257856	0.459	0.327	6.39E-12	lnN6	PCDH15
SLITRK41	1.74E-16	0.38718266	0.469	0.372	6.64E-12	lnN6	SLITRK4
ZNF5162	1.81E-16	0.33343379	0.447	0.33	6.91E-12	lnN6	ZNF516
WSB12	2.04E-16	0.33417392	0.668	0.625	7.80E-12	lnN6	WSB1
ANKRD64	2.26E-16	0.31161048	0.532	0.419	8.66E-12	lnN6	ANKRD6
NEAT13	2.55E-16	0.57171279	0.501	0.383	9.75E-12	lnN6	NEAT1
STAT5B2	2.92E-16	0.30586499	0.457	0.353	1.11E-11	lnN6	STAT5B
GSE13	3.60E-16	0.33149145	0.608	0.502	1.38E-11	lnN6	GSE1
HSP90AB12	3.71E-16	0.37479883	0.756	0.727	1.42E-11	lnN6	HSP90AB1
TNKS1	3.85E-16	0.28278586	0.819	0.816	1.47E-11	lnN6	TNKS
TRAF3IP2-AS	4.27E-16	0.31235674	0.782	0.75	1.63E-11	lnN6	TRAF3IP2-AS
MT-CO13	4.36E-16	0.45741822	0.899	0.868	1.67E-11	lnN6	MT-CO1
HOMER22	4.42E-16	0.33395455	0.443	0.345	1.69E-11	lnN6	HOMER2
SEMA5A3	4.44E-16	0.43173666	0.284	0.176	1.70E-11	lnN6	SEMA5A
CSAD	4.51E-16	0.33945111	0.52	0.433	1.73E-11	lnN6	CSAD
C14orf1321	4.58E-16	0.3254059	0.451	0.341	1.75E-11	lnN6	C14orf132
PGRMC11	4.95E-16	0.30314377	0.442	0.339	1.89E-11	lnN6	PGRMC1
SEM13	5.40E-16	0.37475632	0.57	0.482	2.06E-11	lnN6	SEM1
ANKH2	5.97E-16	0.25601345	0.817	0.788	2.28E-11	lnN6	ANKH
HACD32	7.40E-16	0.30341198	0.586	0.509	2.83E-11	lnN6	HACD3
DIP2B2	7.61E-16	0.30365765	0.74	0.691	2.91E-11	lnN6	DIP2B
AL589740.12	9.59E-16	0.44201183	0.536	0.439	3.67E-11	lnN6	AL589740.1
DGKH2	1.05E-15	0.36845594	0.481	0.384	4.00E-11	lnN6	DGKH
ARSB	1.08E-15	0.29244337	0.455	0.349	4.13E-11	lnN6	ARSB
CANX2	1.09E-15	0.3262284	0.573	0.493	4.18E-11	lnN6	CANX
ABAT3	1.16E-15	0.27462113	0.594	0.503	4.42E-11	lnN6	ABAT
AGPAT42	1.43E-15	0.30597601	0.741	0.705	5.46E-11	lnN6	AGPAT4
CDH203	1.53E-15	0.2517745	0.524	0.383	5.84E-11	lnN6	CDH20
PPFIBP14	2.52E-15	0.33380973	0.752	0.663	9.64E-11	lnN6	PPFIBP1
TBL1XR1	5.56E-15	0.27292938	0.795	0.762	2.12E-10	lnN6	TBL1XR1
APBB23	6.66E-15	0.28334343	0.733	0.691	2.54E-10	lnN6	APBB2
TACC24	8.76E-15	0.30074956	0.506	0.413	3.35E-10	lnN6	TACC2
AK32	8.82E-15	0.25381803	0.389	0.281	3.37E-10	lnN6	AK3
ELAVL31	1.08E-14	0.29479636	0.798	0.775	4.12E-10	lnN6	ELAVL3
PRKG22	1.14E-14	0.29072488	0.275	0.178	4.34E-10	lnN6	PRKG2
RRAS21	1.41E-14	0.29011817	0.398	0.296	5.41E-10	lnN6	RRAS2
FOXG12	2.07E-14	0.29219522	0.386	0.288	7.90E-10	lnN6	FOXG1
PIK3C2A1	2.77E-14	0.27168117	0.555	0.47	1.06E-09	lnN6	PIK3C2A
CA131	3.07E-14	0.25410616	0.259	0.167	1.17E-09	lnN6	CA13
NXPE3	3.63E-14	0.2594943	0.377	0.28	1.39E-09	lnN6	NXPE3
PAG13	4.08E-14	0.29781044	0.473	0.375	1.56E-09	lnN6	PAG1
PGAP12	4.67E-14	0.34694068	0.532	0.456	1.78E-09	lnN6	PGAP1
ANP32A1	5.22E-14	0.33068877	0.405	0.306	2.00E-09	lnN6	ANP32A
WWP21	7.96E-14	0.30908828	0.407	0.311	3.04E-09	lnN6	WWP2
RPS6KA31	8.77E-14	0.32115092	0.643	0.595	3.35E-09	lnN6	RPS6KA3
GLDN4	9.36E-14	0.26394726	0.339	0.237	3.58E-09	lnN6	GLDN
TXNDC162	1.01E-13	0.28533349	0.603	0.545	3.87E-09	lnN6	TXNDC16
PHF141	1.54E-13	0.27774668	0.788	0.78	5.89E-09	lnN6	PHF14
RANBP173	1.66E-13	0.2657314	0.583	0.472	6.33E-09	lnN6	RANBP17
WDR11-AS1:	1.76E-13	0.29597086	0.39	0.293	6.73E-09	lnN6	WDR11-AS1
RAB30	1.80E-13	0.32656328	0.432	0.35	6.88E-09	lnN6	RAB30
MT-ND13	2.45E-13	0.38246382	0.821	0.782	9.38E-09	lnN6	MT-ND1

EPDR1	3.39E-13	0.25560721	0.311	0.223	1.30E-08	lnN6	EPDR1
LUZP24	3.80E-13	0.31591247	0.438	0.311	1.45E-08	lnN6	LUZP2
TMOD11	4.05E-13	0.31208276	0.562	0.486	1.55E-08	lnN6	TMOD1
CAPZB2	4.28E-13	0.32510409	0.658	0.637	1.64E-08	lnN6	CAPZB
JAM22	4.53E-13	0.26450292	0.256	0.169	1.73E-08	lnN6	JAM2
NFE2L1	5.74E-13	0.29652303	0.43	0.348	2.19E-08	lnN6	NFE2L1
RAP1GDS12	6.58E-13	0.28444052	0.664	0.622	2.51E-08	lnN6	RAP1GDS1
DNAH145	6.95E-13	0.28596151	0.403	0.299	2.66E-08	lnN6	DNAH14
TET24	7.07E-13	0.25247371	0.526	0.438	2.70E-08	lnN6	TET2
HSP90AA14	7.55E-13	0.47711113	0.735	0.712	2.89E-08	lnN6	HSP90AA1
SEC14L11	1.44E-12	0.30852946	0.47	0.389	5.51E-08	lnN6	SEC14L1
TBC1D9	1.71E-12	0.26404869	0.499	0.417	6.54E-08	lnN6	TBC1D9
DKK32	1.83E-12	0.26934632	0.677	0.635	6.98E-08	lnN6	DKK3
PRNP1	1.83E-12	0.32109623	0.685	0.661	6.98E-08	lnN6	PRNP
ERO1A	1.83E-12	0.29901862	0.435	0.352	7.01E-08	lnN6	ERO1A
MTRNR2L12	2.43E-12	0.50937354	0.787	0.748	9.29E-08	lnN6	MTRNR2L12
FAM49A1	5.61E-12	0.3113158	0.728	0.717	2.14E-07	lnN6	FAM49A
FAM214A2	5.63E-12	0.30592441	0.593	0.541	2.15E-07	lnN6	FAM214A
ELP4	5.77E-12	0.3312528	0.587	0.542	2.21E-07	lnN6	ELP4
PCLO5	7.72E-12	0.32149815	0.915	0.924	2.95E-07	lnN6	PCLO
UBA6-AS12	1.03E-11	0.31458576	0.661	0.605	3.94E-07	lnN6	UBA6-AS1
CD813	1.13E-11	0.25129057	0.334	0.243	4.33E-07	lnN6	CD81
MTMR71	1.25E-11	0.29151772	0.648	0.616	4.78E-07	lnN6	MTMR7
ATP1A33	1.29E-11	0.34486434	0.578	0.538	4.92E-07	lnN6	ATP1A3
AC098829.11	1.29E-11	0.26166613	0.336	0.241	4.94E-07	lnN6	AC098829.1
KLC11	1.31E-11	0.2812124	0.694	0.659	5.00E-07	lnN6	KLC1
TMEM50B1	2.09E-11	0.25007677	0.393	0.303	7.99E-07	lnN6	TMEM50B
MT-CO33	2.34E-11	0.46775646	0.838	0.85	8.95E-07	lnN6	MT-CO3
SPATA6L	2.35E-11	0.26023056	0.485	0.402	8.99E-07	lnN6	SPATA6L
ZEB26	2.41E-11	0.2826799	0.812	0.823	9.21E-07	lnN6	ZEB2
RPL283	2.64E-11	0.33306727	0.445	0.368	1.01E-06	lnN6	RPL28
HIPK11	2.66E-11	0.28153355	0.368	0.283	1.02E-06	lnN6	HIPK1
TUBA1A1	2.99E-11	0.35091664	0.401	0.323	1.14E-06	lnN6	TUBA1A
MT-ND4L3	3.66E-11	0.34426925	0.611	0.546	1.40E-06	lnN6	MT-ND4L
RALGPS13	3.84E-11	0.27102948	0.716	0.708	1.47E-06	lnN6	RALGPS1
TMEFF26	3.88E-11	0.38027498	0.794	0.765	1.48E-06	lnN6	TMEFF2
TRIM242	3.97E-11	0.28095982	0.464	0.389	1.52E-06	lnN6	TRIM24
SARAF1	4.72E-11	0.29572462	0.614	0.575	1.80E-06	lnN6	SARAF
ATCAY1	5.53E-11	0.28350373	0.639	0.599	2.11E-06	lnN6	ATCAY
SPANXA2-OT	5.56E-11	0.45331644	0.344	0.265	2.13E-06	lnN6	SPANXA2-OT
KIF1A2	6.53E-11	0.27409478	0.664	0.637	2.50E-06	lnN6	KIF1A
PLXNA21	6.80E-11	0.26924466	0.717	0.674	2.60E-06	lnN6	PLXNA2
RIMBP22	6.90E-11	0.25283435	0.786	0.76	2.64E-06	lnN6	RIMBP2
LRRC8A	7.53E-11	0.25558206	0.264	0.186	2.88E-06	lnN6	LRRC8A
SV2A2	9.56E-11	0.28360513	0.619	0.592	3.65E-06	lnN6	SV2A
ARRB1	1.06E-10	0.25222822	0.505	0.432	4.04E-06	lnN6	ARRB1
AC002460.23	1.31E-10	0.39387289	0.506	0.425	5.00E-06	lnN6	AC002460.2
GFRA2	1.64E-10	0.26819151	0.327	0.247	6.28E-06	lnN6	GFRA2
CASK1	1.69E-10	0.26036535	0.674	0.633	6.46E-06	lnN6	CASK
NBL11	1.70E-10	0.34904951	0.28	0.204	6.50E-06	lnN6	NBL1
MIR646HG3	2.03E-10	0.78559973	0.338	0.279	7.78E-06	lnN6	MIR646HG
TNRC181	2.56E-10	0.25379176	0.629	0.589	9.80E-06	lnN6	TNRC18
TLE5	2.87E-10	0.30226017	0.482	0.421	1.10E-05	lnN6	TLE5
EPB41L31	2.94E-10	0.25857838	0.82	0.782	1.12E-05	lnN6	EPB41L3
CDR22	3.36E-10	0.30024896	0.612	0.557	1.29E-05	lnN6	CDR2
SPINT21	3.48E-10	0.28484681	0.351	0.279	1.33E-05	lnN6	SPINT2
SLC1A12	3.48E-10	0.29073382	0.46	0.394	1.33E-05	lnN6	SLC1A1
CRADD3	4.59E-10	0.33656175	0.511	0.435	1.76E-05	lnN6	CRADD
VLDLR-AS11	6.18E-10	0.31077542	0.436	0.356	2.36E-05	lnN6	VLDLR-AS1
PVT11	8.00E-10	0.30224571	0.527	0.444	3.06E-05	lnN6	PVT1
RDX3	9.28E-10	0.26662114	0.472	0.405	3.55E-05	lnN6	RDX
DCBLD2	9.97E-10	0.25818525	0.443	0.378	3.81E-05	lnN6	DCBLD2
EPN22	1.01E-09	0.26019248	0.603	0.556	3.87E-05	lnN6	EPN2

PLPPR51	1.11E-09	0.2728856	0.558	0.504	4.25E-05	lnN6	PLPPR5
ST8SIA52	1.19E-09	0.27325755	0.656	0.624	4.56E-05	lnN6	ST8SIA5
GALNT83	1.44E-09	0.25179941	0.38	0.303	5.50E-05	lnN6	GALNT8
EFNB21	1.91E-09	0.27495579	0.355	0.284	7.31E-05	lnN6	EFNB2
NLGN4X2	2.48E-09	0.27015091	0.74	0.73	9.48E-05	lnN6	NLGN4X
LGR41	4.66E-09	0.27457524	0.372	0.299	0.00017824	lnN6	LGR4
OIP5-AS13	5.29E-09	0.2832509	0.611	0.572	0.00020204	lnN6	OIP5-AS1
KITLG2	5.66E-09	0.31205366	0.367	0.294	0.00021623	lnN6	KITLG
GUCY1B1	6.95E-09	0.29047689	0.56	0.518	0.00026559	lnN6	GUCY1B1
URI13	9.65E-09	0.25345302	0.523	0.469	0.00036876	lnN6	URI1
LMCD1-AS13	1.03E-08	0.30826558	0.367	0.291	0.00039315	lnN6	LMCD1-AS1
MT-ATP64	1.12E-08	0.2922407	0.861	0.88	0.00042751	lnN6	MT-ATP6
RNF1501	1.93E-08	0.26522768	0.685	0.661	0.00073807	lnN6	RNF150
CLVS22	1.96E-08	0.26549575	0.636	0.599	0.00074959	lnN6	CLVS2
DNAJB21	2.20E-08	0.27911064	0.486	0.43	0.00083998	lnN6	DNAJB2
ANKRD30B3	2.20E-08	0.33867888	0.347	0.28	0.00084002	lnN6	ANKRD30B
HIBCH1	3.27E-08	0.25845157	0.654	0.619	0.00125038	lnN6	HIBCH
STIM11	3.58E-08	0.25622147	0.553	0.512	0.00136906	lnN6	STIM1
APLP21	4.08E-08	0.29573237	0.607	0.596	0.00156079	lnN6	APLP2
MT-CYB4	4.16E-08	0.27152737	0.811	0.787	0.00159196	lnN6	MT-CYB
GRB10	4.46E-08	0.25193509	0.618	0.578	0.00170589	lnN6	GRB10
USP112	4.47E-08	0.25430489	0.572	0.544	0.0017094	lnN6	USP11
UBB1	4.71E-08	0.33749745	0.406	0.339	0.00180046	lnN6	UBB
GNAI11	6.59E-08	0.30988833	0.562	0.528	0.00252071	lnN6	GNAI1
PLPPR41	6.93E-08	0.30318642	0.595	0.588	0.00264911	lnN6	PLPPR4
RASGEF1B	9.01E-08	0.46236713	0.272	0.214	0.00344311	lnN6	RASGEF1B
ENTPD1-AS1	1.62E-07	0.27722571	0.453	0.402	0.00619693	lnN6	ENTPD1-AS1
PHF20L11	2.48E-07	0.32381338	0.62	0.635	0.00946341	lnN6	PHF20L1
CNTNAP44	8.54E-07	0.75653623	0.564	0.587	0.03265688	lnN6	CNTNAP4
MXI1	1.12E-06	0.25623233	0.54	0.513	0.04274436	lnN6	MXI1
HSPA81	5.02E-06	0.2666344	0.348	0.292	0.19170594	lnN6	HSPA8
NAALADL22	6.40E-06	0.33387113	0.544	0.523	0.24474255	lnN6	NAALADL2
CACNA1D2	7.57E-06	0.31872226	0.848	0.889	0.2894356	lnN6	CACNA1D
ADNP	8.57E-06	0.25005236	0.591	0.571	0.32739802	lnN6	ADNP
AP1G2	1.55E-05	0.25841367	0.468	0.442	0.5931548	lnN6	AP1G2
LARGE12	0.00010469	0.26199786	0.878	0.912	1	lnN6	LARGE1
AL024495.13	0.00037983	0.39841595	0.323	0.306	1	lnN6	AL024495.1

Supplementary Table 5 Pseudotime Association

	waldStat	df	pvalue	meanLogFC
DGKB	21401.9104	4	0	1.00181614
TSHZ2	19795.448	4	0	2.07130829
PDZD2	18260.5429	4	0	1.14361889
HS6ST3	18228.569	4	0	0.80759053
GRIA4	17214.5205	4	0	0.51250846
DCC	16371.8301	4	0	1.27104268
PTPRT	14718.8239	4	0	1.01295595
RORB	14333.6063	4	0	1.2339871
IL1RAPL2	12290.1667	4	0	1.44414347
POU6F2	12254.4271	4	0	1.4713195
EPHA6	11663.749	4	0	1.11536445
CNTNAP2	11563.1283	4	0	0.32871539
RORA	11500.2166	4	0	0.44275121
SLC35F1	11381.0902	4	0	1.25662991
CBLN2	11310.9912	4	0	1.14154363
RGS6	11222.0237	4	0	0.902473
TMEM132D	10799.4392	4	0	0.62933147
DAB1	10695.7416	4	0	0.53605928
FAM19A1	10395.3841	4	0	1.18542228
SNTG1	9844.11043	4	0	0.42638234
ADGRL3	9587.99396	4	0	0.35673343
FSTL5	9554.06909	4	0	1.87463727
LRRC4C	9468.04703	4	0	0.96292247
SOX5	9451.59818	4	0	0.92497301
KCNH5	9318.39395	4	0	1.06237686
GRID2	9264.15234	4	0	0.86857553
PLCH1	9155.00714	4	0	3.74591365
VWC2L	9076.63987	4	0	1.65454812
CTNNA2	8966.04076	4	0	0.42301163
CDH9	8963.39794	4	0	0.62808922
TOX	8913.35239	4	0	0.97912833
PHACTR1	8762.22622	4	0	0.32618842
KAZN	8587.01787	4	0	0.42074794
ROBO1	8561.22222	4	0	1.46502532
FOXP2	8511.22816	4	0	1.87721201
RASGRF2	8476.43513	4	0	0.9089749
AC011287.1	8283.21028	4	0	0.87625189
TMEM108	8179.32964	4	0	0.55341714
KCNQ3	7973.72448	4	0	0.40766243
MEIS2	7836.82597	4	0	1.46607053
LINC01122	7805.73718	4	0	0.80204318

SPOCK1	7757.70753	4	0 0.60539835
TANC2	7721.45927	4	0 0.41243214
CUX2	7523.82369	4	0 1.09038083
CHRM3	7521.09299	4	0 0.35408383
DGKG	7447.37698	4	0 0.77115103
KCNH7	7334.01129	4	0 1.35352002
GRM3	7168.94267	4	0 0.91612806
GALNT13	7020.25883	4	0 1.07354232
CACNB4	6999.35323	4	0 0.75103593
RFX3	6973.91425	4	0 0.43983656
CADPS	6791.79239	4	0 0.45997081
LSAMP	6708.33888	4	0 0.46169401
GRIK2	6612.79743	4	0 0.36178779
RARB	6469.96189	4	0 0.72845025
TRHDE	6434.67505	4	0 0.94566203
ST6GALNAC5	6430.3679	4	0 0.51525696
ROBO2	6430.05051	4	0 0.98582612
LRRTM4	6342.18586	4	0 0.26706044
NTNG1	6250.0199	4	0 1.24004109
CACNA2D3	6239.82347	4	0 0.42306807
RCAN2	6141.24038	4	0 0.56607951
NDST3	6022.86823	4	0 0.61884338
NKAIN2	5956.18906	4	0 0.50084314
DIAPH2	5949.13916	4	0 0.59027377
AC016687.2	5902.26707	4	0 1.97721525
GABRG3	5781.76208	4	0 0.43786402
ENC1	5765.37805	4	0 0.52374916
PTPRR	5737.21203	4	0 0.433383
CA10	5733.54696	4	0 1.65266524
KCNAB1	5721.02951	4	0 1.05003679
LHFPL6	5623.47814	4	0 0.98314392
CPNE4	5523.76943	4	0 0.91893804
GLIS3	5459.67735	4	0 1.57236645
SGCD	5451.49551	4	0 0.72036786
AK5	5380.39815	4	0 0.42816584
GNAL	5339.3465	4	0 1.3761478
SLIT3	5306.15666	4	0 1.3191004
AJ009632.2	5280.91219	4	0 2.21838928
RIT2	5254.00786	4	0 1.420237
PTPRD	5217.67085	4	0 0.37173297
RBFOX1	5128.54175	4	0 0.23223348
PTCHD4	5125.42893	4	0 1.46957861
SLC44A5	5114.24837	4	0 0.57156754

MAP3K5	5102.8434	4	0 0.40263226
SIPA1L1	5050.52673	4	0 0.29485252
PCLO	5043.96651	4	0 0.27538145
LINC01378	4944.36813	4	0 1.25786532
ALCAM	4898.43847	4	0 0.69550474
GREB1L	4890.63071	4	0 1.07315583
DPY19L1	4885.54761	4	0 0.9488995
MCTP1	4872.90429	4	0 0.66958511
ERC2	4866.76518	4	0 0.31069103
SYNPR	4833.86312	4	0 1.58856221
PLCXD3	4812.30219	4	0 1.45939211
CNTNAP4	4809.32444	4	0 0.55984458
PLEKHA5	4783.67646	4	0 0.5020194
LINC01725	4781.20838	4	0 0.66266923
AC109466.1	4742.65314	4	0 1.91622097
CLSTN2	4732.3923	4	0 0.72471455
PCDH7	4720.32867	4	0 0.52656829
NRG1	4715.11961	4	0 0.81417917
GPC6	4714.29485	4	0 0.90679222
PRKCA	4696.98055	4	0 0.72537311
KCTD16	4675.6326	4	0 0.36029033
ABLIM1	4634.71554	4	0 0.51115726
MGAT4C	4628.84783	4	0 1.87387178
DPP10	4618.86985	4	0 0.49702479
AC022639.1	4596.58102	4	0 0.7336135
NECAB1	4595.29468	4	0 0.46910507
AC098850.3	4563.09375	4	0 0.44436666
THSD7A	4562.53947	4	0 0.85215334
ZNF804A	4530.49202	4	0 0.75442935
COL5A2	4485.41826	4	0 1.62941267
MYRIP	4445.66684	4	0 0.3662975
GRIA3	4444.05684	4	0 0.49499439
OXR1	4427.86514	4	0 0.39952986
EDIL3	4411.03911	4	0 0.69599807
TMTC2	4335.99314	4	0 0.96366463
GRIN2B	4324.18659	4	0 0.31208572
PDE1C	4290.41682	4	0 1.0537543
SLC24A2	4261.03889	4	0 0.3017465
AC110023.1	4236.96482	4	0 0.9755914
KHDRBS2	4233.17215	4	0 0.22568445
HS3ST4	4226.99909	4	0 1.12252605
AC092422.1	4092.08671	4	0 0.96063115
CNTN4	4036.34592	4	0 0.54389783

PTPRK	4024.29742	4	0	0.25442812
1-Mar	4014.07771	4	0	0.53685697
FAM135B	4006.00166	4	0	0.97629624
GRM8	3993.38936	4	0	1.02603655
CYP1B1-AS1	3980.84374	4	0	1.1820455
RXFP1	3980.29808	4	0	1.8313282
PTPRO	3978.94655	4	0	0.81912029
ARFGEF3	3967.8815	4	0	0.34472438
TENM3	3960.87059	4	0	0.74998819
LRP1B	3950.3686	4	0	0.2784934
LINC02232	3945.66182	4	0	1.441968
STXBP6	3942.53931	4	0	0.49614435
CNTN3	3937.81531	4	0	0.86120367
KIAA1217	3926.45201	4	0	0.89142337
AC092691.1	3897.33651	4	0	0.46636683
PEX5L	3894.39695	4	0	0.82273004
ADAMTS19	3870.17237	4	0	0.91776865
CDH13	3866.78941	4	0	1.33920716
FMN1	3866.19783	4	0	0.41982447
LRRK1	3858.36194	4	0	0.89457065
BTBD9	3786.72169	4	0	0.24253907
OPCML	3750.54095	4	0	0.2839183
PPFIA2	3732.30885	4	0	0.28195872
TMEM132B	3724.02373	4	0	0.26672875
DLGAP1	3693.96133	4	0	0.19551183
PRKG1	3675.53591	4	0	1.42990353
DOK6	3668.96741	4	0	0.70551026
ARNT2	3607.41005	4	0	0.23855327
CDH8	3601.78971	4	0	0.72533024
GRM7	3601.69341	4	0	0.32690676
STXBP5L	3596.85621	4	0	0.32112697
PTK2B	3569.63926	4	0	0.34923926
SORBS2	3562.03018	4	0	0.3434105
TLN2	3559.68601	4	0	0.49653509
AC084816.1	3483.74957	4	0	1.30422056
ARL15	3482.44965	4	0	0.47404232
DTNA	3477.92	4	0	0.43145244
AC008415.1	3477.52709	4	0	2.1574514
PDGFD	3466.35129	4	0	1.31420204
CALN1	3459.00404	4	0	0.78903486
MIR99AHG	3448.72832	4	0	0.40601248
CDH12	3446.24841	4	0	0.51859269
DYNC1I1	3441.89908	4	0	0.44468981

FNBP1L	3424.08026	4	0 1.18062128
ZFPM2	3422.46811	4	0 0.33407258
GARNL3	3419.26526	4	0 0.49417624
TESPA1	3398.84657	4	0 0.69631841
LINC00276	3369.98894	4	0 0.91339647
HDAC9	3364.1974	4	0 0.52864161
TMTC1	3356.16177	4	0 1.23477751
GALNTL6	3350.92078	4	0 0.47953291
SYN3	3346.9961	4	0 0.51648482
COBLL1	3332.50988	4	0 2.21515445
PAM	3318.21993	4	0 0.40173652
SLC22A10	3304.70224	4	0 0.65290052
HPCAL1	3296.67744	4	0 0.93727649
KCND3	3295.16724	4	0 0.32451479
PRUNE2	3292.28755	4	0 0.63242223
DTNB	3290.91927	4	0 0.40609934
TCF4	3288.68526	4	0 0.33788774
AC019211.1	3272.69075	4	0 0.69855799
NFIB	3261.50878	4	0 1.35096806
RAPGEF5	3233.8797	4	0 0.26276557
DPYD	3222.51278	4	0 0.4163878
GNG2	3213.5622	4	0 0.7216509
SORBS1	3212.74321	4	0 0.28048381
NEBL	3176.4721	4	0 0.24465939
CSMD1	3151.29324	4	0 0.19052845
INPP4B	3141.07388	4	0 0.44091393
SERPINE2	3130.70686	4	0 1.75422167
LINC00507	3118.5944	4	0 1.05421281
CDH18	3115.35601	4	0 0.28401821
KIF16B	3104.73835	4	0 0.3644531
GABRG1	3081.14172	4	0 1.42099324
AC091078.1	3072.11721	4	0 0.92915647
HS3ST2	3047.28484	4	0 0.7584543
RPS6KA2	3036.83597	4	0 0.6226337
TTC6	3022.70129	4	0 0.91004608
IL1RAPL1	3021.41911	4	0 0.2948439
PPP2R2B	3013.99606	4	0 0.23512127
TSHZ3	2996.77252	4	0 0.45996507
AC246817.1	2979.23256	4	0 1.11241707
MAN1A1	2977.29285	4	0 0.395048
RETREG1	2967.94147	4	0 0.47714033
AC005162.3	2966.08101	4	0 0.58238464
BMPER	2960.50604	4	0 0.33755595

ELAVL2	2959.63867	4	0 0.74266125
CTDSPL	2945.73912	4	0 0.33010691
TBC1D1	2932.83777	4	0 0.53304658
SLIT1	2920.55776	4	0 0.45994018
OLFM3	2919.5923	4	0 0.31276115
DLG2	2915.80431	4	0 0.19068565
KIF13A	2911.59599	4	0 0.45994621
SPAG16	2906.82163	4	0 0.3675372
MLLT3	2887.06202	4	0 0.45556422
SLIT2	2878.84892	4	0 0.40041673
SLC24A4	2857.67675	4	0 0.89737226
OPRM1	2853.38694	4	0 1.52336681
MSC-AS1	2850.6313	4	0 0.99194662
ANKRD30BL	2846.02002	4	0 0.38906887
ITGA9	2839.78254	4	0 0.66453454
FOXP1	2827.18688	4	0 0.30563936
TLK1	2808.44781	4	0 0.40305927
ARHGAP26	2783.74302	4	0 0.44152952
DMD	2783.68604	4	0 0.32406614
NETO1	2779.81913	4	0 0.2853881
AC067956.1	2768.6436	4	0 0.62995784
DCAF6	2764.97217	4	0 0.41945268
AC010127.1	2755.88003	4	0 0.7574306
CEMIP	2753.62444	4	0 1.09654099
GULP1	2733.78715	4	0 1.10992629
ZMAT4	2724.32267	4	0 0.46575743
LINC01250	2711.61669	4	0 0.33689925
KHDRBS3	2703.31168	4	0 0.21441648
UNC5D	2699.89195	4	0 0.27431947
RANBP17	2667.00525	4	0 1.13075125
FAM19A2	2662.98429	4	0 0.41073348
DNAJC1	2662.69841	4	0 0.45097064
SLC4A4	2660.04031	4	0 0.88697514
CACNA1E	2636.38879	4	0 0.19879588
ADAMTS3	2633.90582	4	0 1.08794593
CEMIP2	2625.28834	4	0 0.67071807
KCNIP2	2622.75461	4	0 0.69107914
AC073578.2	2622.23447	4	0 1.26469899
COL24A1	2616.64018	4	0 1.66881048
ARHGEF28	2611.32117	4	0 1.22934653
FRAS1	2604.80926	4	0 0.87977643
GRIP1	2601.43725	4	0 0.52476125
GRIK4	2597.59084	4	0 0.80621013

SLC35F3	2597.27596	4	0 0.37011492
CELF2	2593.97881	4	0 0.23788763
MAGI2	2591.13836	4	0 0.2229393
BRINP2	2588.73896	4	0 0.41469181
XYLT1	2586.66079	4	0 0.49456644
ANO3	2585.84838	4	0 0.5816289
PTPRN2	2580.27653	4	0 0.26571557
ITPK1	2565.36881	4	0 0.36637315
TMEM178B	2549.0195	4	0 0.19524698
FAT3	2520.34886	4	0 0.36552176
IL1RAP	2515.15356	4	0 0.87814846
KIAA0319	2514.20899	4	0 0.35851768
PTPN13	2481.57281	4	0 0.93862035
BRINP3	2474.6769	4	0 0.53524514
ITPR1	2472.33441	4	0 0.17882176
SORCS3	2469.40836	4	0 0.86910496
ALDH1A1	2456.95747	4	0 1.42496628
PPP4R4	2456.48022	4	0 0.61048747
CACNG3	2451.64539	4	0 0.34004859
BACH2	2448.49733	4	0 0.55015318
P2RX7	2446.04591	4	0 0.326765
PTK2	2433.98679	4	0 0.20684244
DNAH14	2428.98783	4	0 0.51733757
MIR181A1HG	2412.65404	4	0 0.52198627
RPS6KC1	2412.12527	4	0 0.31017213
COL6A1	2404.38311	4	0 0.75964549
LIMCH1	2403.82588	4	0 0.29026758
PDZRN4	2398.74383	4	0 1.14790208
PAG1	2389.14054	4	0 0.5801969
PARM1	2368.56287	4	0 0.85070954
PDE4B	2368.14506	4	0 0.69707009
CNTN5	2366.57881	4	0 0.64437954
PDE7B	2359.46677	4	0 0.31866757
LAMB1	2358.83212	4	0 0.58340374
KCTD1	2348.00993	4	0 0.39304966
TCERG1L	2347.71492	4	0 0.89828724
PVT1	2334.03915	4	0 0.97674336
PCBP3	2324.02764	4	0 1.98795209
L3MBTL4	2310.48569	4	0 1.80675301
MAPK4	2305.96573	4	0 0.41132593
CDHR3	2304.84862	4	0 0.47065088
DCLK2	2299.70686	4	0 0.3442617
ASIC2	2299.10289	4	0 0.50165081

FARP1	2285.95983	4	0 0.52918125
LINC01202	2280.1002	4	0 0.74704287
LINC02389	2275.02965	4	0 0.48985559
ARHGAP10	2253.31346	4	0 0.68572893
GAREM1	2249.35669	4	0 0.64261716
PTPRB	2242.283	4	0 0.49697722
AC008574.1	2234.23127	4	0 1.68153432
USP25	2231.12413	4	0 0.28410425
KCNB2	2216.81597	4	0 0.39965687
ST6GAL2	2214.41176	4	0 0.7671439
NPAS3	2212.49642	4	0 0.65940717
KCNN2	2212.23531	4	0 0.64323769
NLK	2187.5208	4	0 0.28919772
NCAM2	2167.8006	4	0 0.59073018
MBNL1	2166.73155	4	0 0.22202774
PDZRN3	2162.97491	4	0 0.38848469
PARD3	2154.08628	4	0 1.48242136
SLC5A4-AS1	2147.29679	4	0 0.39624641
MED12L	2145.13018	4	0 0.34944276
EFNA5	2142.34298	4	0 0.32785306
KIAA1958	2133.15571	4	0 0.49910712
NEDD4L	2127.1513	4	0 0.36761647
LAMA2	2120.19706	4	0 1.56416226
LINC01197	2115.32108	4	0 1.14012133
CACNA1A	2112.89429	4	0 0.19738671
NTRK3	2103.8795	4	0 0.22283639
PHYHIPL	2101.15265	4	0 0.51500362
AC090568.2	2098.37989	4	0 0.75258499
NTM	2083.33625	4	0 0.40559013
CAMTA1	2081.48641	4	0 0.20907643
MAN2A1	2076.78811	4	0 0.30559942
LINC02306	2075.62328	4	0 0.9677997
ATP6V1H	2031.1632	4	0 0.35163825
KIAA1211L	2030.68724	4	0 0.22380339
ATP2B1	2020.97877	4	0 0.16158821
LYPD6B	2016.69329	4	0 1.8547628
OSBPL3	2015.9562	4	0 0.67879304
LAMP5	2013.22633	4	0 1.73066294
FAM189A1	2011.78116	4	0 0.51225637
SIDT1	2009.86155	4	0 0.82986865
GRIA2	2009.13054	4	0 0.13010521
CDH22	2006.07907	4	0 0.382736
DLGAP2	2001.97396	4	0 0.21946899

NGEF	1998.07553	4	0	0.3466837
FSHR	1991.76559	4	0	1.27826004
CADPS2	1976.43829	4	0	0.61322139
MEG8	1966.12011	4	0	0.645191
CNTNAP3B	1962.56393	4	0	1.41570204
CDH4	1953.09992	4	0	0.8122375
PLCB1	1936.18785	4	0	0.38337659
HHAT	1932.83528	4	0	0.69663141
RYR2	1930.78571	4	0	0.23187756
DDAH1	1927.21165	4	0	0.47995691
ATXN1	1917.65414	4	0	0.20209048
ANK3	1914.76964	4	0	0.18266802
SEMA3A	1908.89683	4	0	0.8867237
SPOCK3	1904.64729	4	0	1.1235165
THRB	1896.43397	4	0	0.17382535
GLRA3	1895.60298	4	0	0.74712231
VPS41	1889.31485	4	0	0.24619107
AC120193.1	1886.56521	4	0	0.77274737
DKK3	1884.88381	4	0	0.27072138
STK39	1879.32933	4	0	0.53656054
NRXN3	1872.96406	4	0	0.29166138
MBOAT2	1863.23637	4	0	0.5932612
NR3C2	1860.88864	4	0	0.28503421
VLDLR-AS1	1855.55541	4	0	0.62015205
RHOBTB1	1850.04164	4	0	0.8340473
NKAIN3	1848.37714	4	0	1.20343795
DSCAM	1844.09787	4	0	0.18175969
ADCY2	1834.22594	4	0	0.47187956
LMO3	1834.19729	4	0	0.29160712
STMN2	1824.43527	4	0	0.5198095
CNGB1	1812.97779	4	0	1.90376821
NREP	1811.51392	4	0	0.87079747
AGBL4	1800.2399	4	0	0.24836999
PCDH9	1796.255	4	0	0.25306025
GRIA1	1790.82369	4	0	0.35232822
ADCY1	1786.81754	4	0	0.33506962
TMEM65	1785.45838	4	0	0.59646007
SMYD3	1784.2222	4	0	0.25861108
CCBE1	1777.65527	4	0	1.49158891
BICC1	1776.00724	4	0	0.64048753
LARGE1	1770.82631	4	0	0.28374852
EML6	1768.20981	4	0	0.39459395
NIN	1766.69982	4	0	0.24453027

TMEM117	1758.61915	4	0 0.46356833
PTPRS	1756.16715	4	0 0.31769636
KCND2	1754.91315	4	0 0.37213326
NUAK1	1738.73128	4	0 0.19950152
CYP46A1	1738.62176	4	0 0.42828337
CACNA2D1	1731.92283	4	0 0.22963411
HCN1	1729.21724	4	0 0.33519776
CEP126	1729.04298	4	0 0.49039172
CNTNAP5	1727.79222	4	0 0.42258319
AC093607.1	1717.23423	4	0 0.65525541
HECW1	1707.73465	4	0 0.14600748
DLEU2	1707.20251	4	0 0.28132539
GSG1L	1703.57591	4	0 0.87892542
SMAD3	1697.35234	4	0 0.35277468
MAST4	1696.96283	4	0 0.33698889
SLC12A8	1693.6715	4	0 0.55060879
NECTIN3	1672.77611	4	0 0.32158361
VAV3	1671.82362	4	0 1.32503645
RGS7	1670.67973	4	0 0.23057306
SHISA6	1670.4801	4	0 0.83859208
CERS6	1666.58986	4	0 0.29328401
NRG3	1662.91578	4	0 0.1748597
ASPH	1651.95728	4	0 0.27015598
ITGB8	1651.49636	4	0 0.98304926
CDH10	1642.88718	4	0 0.21427063
SEMA6D	1634.94565	4	0 0.53546217
GAB2	1633.99054	4	0 0.54813131
GPR158	1626.42309	4	0 0.23726426
FBXW7	1622.02149	4	0 0.18472893
ALS2	1615.18421	4	0 0.28592217
FIGN	1612.1599	4	0 1.74090692
LRRC8B	1595.78815	4	0 0.22223004
PDE10A	1586.03169	4	0 0.52939473
ZEB1	1583.99622	4	0 0.20031436
ST3GAL6	1582.72149	4	0 0.43229074
PALMD	1581.21729	4	0 1.71844865
AKAP13	1575.13895	4	0 0.4886147
ELAVL4	1572.75406	4	0 0.41842607
MAP7	1567.7116	4	0 0.2122274
WWC2	1560.37134	4	0 0.77969724
HSPA12A	1559.10946	4	0 0.34470806
SLC2A13	1548.94588	4	0 0.26810459
UBE2E3	1545.30953	4	0 0.44218953

EVI5	1542.65077	4	0 0.37177353
RIPOR2	1540.32468	4	0 0.64744259
PCDH11Y	1539.02598	4	0 1.26682589
ATP2B4	1538.31086	4	0 0.32811194
SFMBT2	1537.94949	4	0 0.77122382
KLHL2	1536.80565	4	0 0.28360271
RYR3	1536.05978	4	0 0.79563505
CFAP221	1530.81992	4	0 0.38074823
LINC00937	1530.47414	4	0 0.47879228
KCNN3	1528.99528	4	0 0.63980385
CNIH3	1525.961	4	0 0.46882352
CPLX2	1521.77028	4	0 0.57965036
KLHL32	1518.02198	4	0 0.28416056
RTN4	1515.98361	4	0 0.19380044
LINC01500	1514.17651	4	0 1.86527938
KITLG	1510.17874	4	0 0.78756925
VWC2	1509.63915	4	0 0.91021628
AC016831.7	1503.92564	4	0 0.23221194
NEK11	1493.80961	4	0 0.44134783
CIT	1493.41214	4	0 0.32174179
FHOD3	1482.84759	4	0 0.30017059
FANCL	1480.13737	4	0 0.28379725
PDE4D	1477.94584	4	0 0.22623786
LINC01090	1477.59764	4	0 1.80004443
SCD5	1473.22616	4	0 0.34784722
B3GAT1	1467.73957	4	0 0.35993637
LDLRAD4	1466.76326	4	0 0.32809325
HTR4	1462.94348	4	0 1.66351283
UPP2	1457.39596	4	0 0.31740016
CSGALNACT1	1455.02697	4	0 0.33424839
TMEFF2	1453.5438	4	0 0.45101797
ADAMTS16	1447.07928	4	0 1.846665
KCNT2	1443.81525	4	0 1.06760697
MOXD1	1443.5747	4	0 0.96097315
PKP4	1439.80024	4	0 0.21587627
MTHFD2L	1433.62732	4	0 0.31852889
SCN1A	1429.13303	4	0 0.21671828
IL12A-AS1	1427.26795	4	0 1.02272402
NETO2	1423.06356	4	0 0.76217708
BAIAP2	1421.93562	4	0 0.24780452
BAIAP3	1419.52364	4	0 1.03688988
GAP43	1416.17685	4	0 0.35199538
PTPRG	1414.99219	4	0 0.28763687

SEZ6L	1414.98048	4	0	0.3535607
GPC5	1411.37293	4	0	0.80281043
SLC38A11	1405.83311	4	0	0.34393694
LPP	1400.67996	4	0	0.65045382
USP43	1399.42132	4	0	0.62260393
NAPEPLD	1398.98975	4	0	0.34046782
PID1	1394.85351	4	0	0.74372931
SGK3	1390.36323	4	0	0.26080517
CARMIL1	1388.80005	4	0	0.25897786
CCDC3	1385.88601	4	0	0.31236714
TTC28	1385.75991	4	0	0.35378871
SMAP1	1384.1607	4	0	0.26092368
LINC01331	1383.26291	4	0	1.70938548
GNAS	1378.29003	4	0	0.35135853
NLGN1	1373.77584	4	0	0.20997855
ELL2	1372.66996	4	0	0.27061754
OTOGL	1371.93686	4	0	1.10726969
PRKD1	1369.15499	4	0	1.04501537
AC113383.1	1365.19624	4	0	0.5384104
RHOBTB2	1365.05131	4	0	0.27130172
CAMK2D	1359.19596	4	0	0.3436877
DPF3	1357.99674	4	0	0.59666217
PHACTR2	1349.85063	4	0	0.40048457
NOS1AP	1349.41722	4	0	0.56843173
TMEM163	1348.31723	4	0	0.85415246
STXBP1	1346.58582	4	0	0.18709307
CRYM	1344.62769	4	0	0.70681101
MARCKS	1343.86523	4	0	0.57023636
UNC13C	1342.06987	4	0	0.66832341
KIRREL3	1341.81843	4	0	0.35905248
SCAPER	1341.34176	4	0	0.29194375
LIN7A	1335.90179	4	0	0.30374512
MIR4500HG	1325.18771	4	0	0.70975667
ZNF704	1323.54538	4	0	0.24366629
DOCK10	1321.98238	4	0	0.79920968
SOBP	1313.4886	4	0	0.2487363
DAPK1	1309.38923	4	0	0.26513291
ESRRG	1308.29935	4	0	0.80972379
SLC8A1	1298.45695	4	0	0.19899564
NUP93	1292.27663	4	0	0.42309875
EML1	1291.64373	4	0	0.32806538
FRMD6	1288.87272	4	0	0.65694242
KCNIP4	1285.97381	4	0	0.13648183

ADGRB3	1281.36217	4	0	0.15096744
RASAL2	1280.77567	4	0	0.2053686
NHSL2	1276.23933	4	0	0.4071109
FAM13A	1271.0143	4	0	0.17534199
NEO1	1266.57982	4	0	0.30385906
TMOD1	1265.07377	4	0	0.34587657
CTNNB1	1260.63407	4	0	0.36916708
AGBL1	1259.92072	4	0	1.25729376
AC139491.7	1259.44533	4	0	0.4616885
DPP6	1259.36487	4	0	0.27227018
GRM1	1256.63676	4	0	0.3320112
TRPS1	1256.55638	4	0	0.74783511
SHTN1	1256.36845	4	0	0.31225278
SND1	1251.8394	4	0	0.168355
HOPX	1250.23737	4	0	0.32817171
TRPC6	1247.08776	4	0	1.64493202
STXBP5-AS1	1241.21517	4	0	0.34563284
ANKRD28	1235.34374	4	0	0.23174067
DAAM1	1234.2944	4	0	0.20558948
ACAP2	1234.02582	4	0	0.22886283
CACNB2	1232.30592	4	0	0.22818064
PRICKLE2	1231.89974	4	0	0.28022742
STXBP5	1231.253	4	0	0.16312238
ABHD2	1230.31613	4	0	0.3958569
SNTB2	1229.93658	4	0	0.30823374
SYNJ2	1228.0349	4	0	0.43586703
AC069133.1	1225.8013	4	0	0.59874001
MACF1	1223.98778	4	0	0.14374765
PLCL1	1215.38454	4	0	0.35399599
IPCEF1	1214.3364	4	0	0.28465074
RNF115	1210.39416	4	0	0.21323524
PRAG1	1208.19746	4	0	0.65991721
GHR	1201.67286	4	0	0.58256431
CTNND2	1195.31227	4	0	0.15002166
CDK14	1177.51995	4	0	0.23435088
BICD1	1174.08232	4	0	0.27695256
SPECC1	1167.03788	4	0	0.31338623
TTC3	1166.42464	4	0	0.14383658
NRSN1	1165.40194	4	0	0.3790597
PAK3	1162.31075	4	0	0.16505659
MAPK1	1162.10213	4	0	0.25576259
AC103855.3	1161.25708	4	0	0.49312059
SCHLAP1	1158.12753	4	0	0.58318663

TTC39C	1157.60531	4	0 0.33854424
ZNF609	1157.10358	4	0 0.22338868
LINC02296	1156.53727	4	0 0.84935329
MMP16	1156.42024	4	0 0.39578706
MPP6	1156.21798	4	0 0.30526031
PLPPR4	1145.81549	4	0 0.37980847
CHSY3	1143.03551	4	0 0.22516649
RALYL	1141.07559	4	0 0.09756474
LMO4	1136.47996	4	0 0.1932411
MIR4435-2H	1135.81897	4	0 0.35876126
CELF4	1129.71868	4	0 0.38895674
CHKA	1129.33359	4	0 0.43038876
RAPH1	1126.58608	4	0 0.3155465
PSD3	1125.88026	4	0 0.18863288
FP700111.1	1122.48257	4	0 0.32371095
CHN1	1122.40227	4	0 0.17547068
CDK6	1120.93655	4	0 0.32794014
MB21D2	1120.5985	4	0 0.37342805
ZFHX3	1119.79569	4	0 0.45123176
MAP2	1118.00875	4	0 0.12668206
CCNH	1116.20742	4	0 0.48334764
EPHA5	1112.66791	4	0 0.44876257
LINC01322	1112.57461	4	0 0.58012642
MACROD2	1111.02599	4	0 0.16596662
LY86-AS1	1109.56857	4	0 0.34867581
AL445250.1	1107.90815	4	0 0.36646261
NBAS	1105.2142	4	0 0.22419947
AC073365.1	1104.79024	4	0 0.33214627
AP005328.1	1100.48223	4	0 1.0913544
AC006504.5	1100.23837	4	0 0.3713246
LCORL	1096.54935	4	0 0.68120479
NR2F1-AS1	1095.07886	4	0 0.37644872
TRERF1	1093.47533	4	0 0.27070607
AUTS2	1088.83141	4	0 0.20182951
FCHSD2	1085.97871	4	0 0.47165405
MOB1B	1081.81298	4	0 0.40100354
ADGRL2	1079.90778	4	0 0.33923966
ANO5	1078.84383	4	0 0.27234152
RTN1	1078.00181	4	0 0.18336563
EPHA7	1077.07684	4	0 0.82856637
MEIS3	1075.44955	4	0 0.64628763
SHANK2	1074.79225	4	0 0.1952957
AC007563.2	1074.34832	4	0 0.25908457

HERC1	1074.34606	4	0 0.13038095
NBEA	1073.94133	4	0 0.18385506
AL392023.2	1072.50569	4	0 1.29546195
TIAM1	1070.63627	4	0 0.27400073
FAM155A	1070.51776	4	0 0.1566113
PRKCE	1070.26434	4	0 0.30018914
CACNA1C	1061.99717	4	0 0.1456098
RAB27B	1060.12982	4	0 0.39801826
SAMD5	1057.79901	4	0 0.62599975
GLIS1	1051.92904	4	0 0.29413388
COL26A1	1050.13829	4	0 0.40672699
GUCY1A2	1048.06233	4	0 0.33062434
DENND3	1045.68527	4	0 0.42117881
ADAMTS9-AS1	1041.19649	4	0 1.50558499
CASC15	1041.12062	4	0 0.23445925
PDGFC	1041.09585	4	0 0.53998686
ASXL3	1039.67092	4	0 0.6027394
PUM3	1037.67522	4	0 0.29719301
SORCS1	1037.08428	4	0 0.51742429
ANK2	1035.6794	4	0 0.13176425
FUT8	1035.31438	4	0 0.30896215
AL589740.1	1031.19874	4	0 1.12780061
ASTN2	1027.14943	4	0 0.64680703
PCSK6	1026.48844	4	0 0.93136487
VSNL1	1023.62539	4	0 0.204155
ENOX1	1023.43525	4	0 0.28348826
PDE1A	1023.31597	4	0 0.2911557
NRXN1	1021.27745	4	0 0.11913549
ZNF804B	1018.18363	4	0 1.06873016
AC109779.1	1018.13259	4	0 1.32463905
FLRT2	1017.09023	4	0 0.19077519
CACNA1D	1016.9573	4	0 0.16557288
SHROOM3	1016.93852	4	0 0.46709491
BMPR1B	1016.30253	4	0 0.90718544
NAV2	1013.38449	4	0 0.18283554
SYN2	1011.8765	4	0 0.19193092
SPARCL1	1010.33529	4	0 0.21644674
NFAT5	1008.24959	4	0 0.15002844
PLCB4	1007.2575	4	0 0.3661876
ST6GALNAC3	1007.18531	4	0 0.5219997
WDR17	1005.42847	4	0 0.21496802
ZNF827	996.559377	4	0 0.47361072
FNDC3B	996.325861	4	0 0.63642032

MAPK10	993.934914	4	0 0.15678184
NCDN	989.183367	4	0 0.45588217
ZMYND8	988.210622	4	0 0.14606821
SEC24D	987.864682	4	0 0.5494669
ACACA	986.4009	4	0 0.26564754
ACTN1	986.025116	4	0 0.23927431
ATRNL1	984.461947	4	0 0.25954185
IGSF11	982.748996	4	0 0.30464554
KCNQ1OT1	981.144333	4	0 0.51183596
TRPC5	979.850042	4	0 0.34927949
ST8SIA1	977.12446	4	0 0.33617936
C8orf34	977.119694	4	0 1.06655368
FBXO32	975.977143	4	0 0.25523108
SUSD4	975.453795	4	0 0.42609399
IPO5	973.87058	4	0 0.24275418
KCNK1	970.055125	4	0 0.1458829
AGAP1	968.409318	4	0 0.13210961
ZDHHC14	965.037177	4	0 0.21295298
TJP1	962.978044	4	0 0.18522268
DCLK1	961.920363	4	0 0.1789798
SSBP3	960.626295	4	0 0.21438022
DGKH	960.576742	4	0 0.40214262
ZNF385B	960.095724	4	0 0.16157919
PGBD5	957.388844	4	0 0.29295
SESN1	955.823168	4	0 0.20643531
MAML3	954.881696	4	0 0.61074665
VWA3A	950.155677	4	0 0.57919147
SPATS2L	945.254764	4	0 0.25667494
FNDC3A	941.818159	4	0 0.15533524
SERPINI1	936.761152	4	0 0.30916723
AC124312.1	932.948672	4	0 0.18382254
DOCK9	930.812887	4	0 0.29088988
LY6H	923.316304	4	0 0.7202199
RAP1GDS1	922.618181	4	0 0.32527416
EPB41	922.380101	4	0 0.43118633
PKN2-AS1	921.559496	4	0 0.50654777
MYO6	920.286621	4	0 0.33024043
CDH11	919.17245	4	0 0.42074219
UTRN	915.969611	4	0 1.77657709
EML5	912.912905	4	0 0.17759027
AC100818.1	912.419564	4	0 1.59909217
PPP3CA	911.366728	4	0 0.16460076
CABP1	911.297482	4	0 0.36213981

AC025887.2	909.924342	4	0 0.81698331
JPH1	908.196307	4	0 0.40839009
STARD13	907.939871	4	0 0.6078338
STMN1	905.941572	4	0 0.54252297
MIR137HG	903.903574	4	0 0.27266425
LINGO2	903.801843	4	0 0.20716295
BCL11A	903.536765	4	0 0.35879414
GOLGA8B	900.719131	4	0 0.2688809
KSR2	899.285747	4	0 0.22816603
NIPAL2	899.272632	4	0 0.36667223
KIAA1549	895.945153	4	0 0.32144152
PRKCI	894.423418	4	0 0.24182905
SLF1	894.382986	4	0 0.1860115
RBFOX3	893.217339	4	0 0.24038351
CAMK2N1	891.204297	4	0 0.2768969
KIAA2012	891.143015	4	0 0.71717999
CRIM1	888.039697	4	0 0.35174562
CDH20	883.167702	4	0 0.63686455
PRKAR2B	881.772424	4	0 0.15713256
EPB41L2	881.140622	4	0 0.13627821
PTPRF	879.524813	4	0 0.5341145
UBE3D	879.466595	4	0 0.18644509
SRPK1	878.011935	4	0 0.27054144
RAB3C	877.768738	4	0 0.44796694
OGA	877.629579	4	0 0.20935247
JAZF1	875.9985	4	0 0.23475855
IQCJ-SCHIP1	874.835722	4	0 0.16526126
GDA	874.69087	4	0 0.48720394
NTRK2	873.509403	4	0 0.18837555
VPS13D	872.177635	4	0 0.13271552
AC018697.1	871.744703	4	0 0.74347911
QKI	871.292729	4	0 0.27009948
TENM2	868.380886	4	0 0.1100716
RNF175	868.365596	4	0 0.33523468
SLC25A29	868.130029	4	0 0.36731997
RNF144A	866.23281	4	0 0.27288365
GRM5	864.933241	4	0 0.13451877
GPM6A	864.730554	4	0 0.17472651
PTCHD1-AS	863.987123	4	0 0.41840019
TPK1	862.497778	4	0 0.20974219
COBL	857.820902	4	0 0.17875024
KCTD8	852.275114	4	0 0.3601652
ROCK2	851.949243	4	0 0.13355685

PRKDC	851.890282	4	0 0.24099884
KIAA1328	851.524793	4	0 0.20060919
JAKMIP2	850.593306	4	0 0.11706066
FAIM2	847.158096	4	0 0.2955701
NEGR1	846.517296	4	0 0.14788628
NR2F2-AS1	846.504459	4	0 1.19659269
FHIT	843.124455	4	0 0.2098433
KALRN	842.238236	4	0 0.09032029
CPNE8	841.269674	4	0 0.44406934
CTNNA3	841.200423	4	0 0.48897772
TUBA1B	832.359439	4	0 0.36168225
TSPAN5	832.191971	4	0 0.21021845
ATP11B	832.154057	4	0 0.18861385
CTNNAL1	831.177303	4	0 0.2705645
PRKAG2	830.984909	4	0 0.2654344
KLHL29	830.570216	4	0 0.28251772
CAMK2A	827.395236	4	0 0.22520715
NCOA1	824.202464	4	0 0.15272455
CHD9	819.996713	4	0 0.13259491
PIAS1	817.846735	4	0 0.21011891
ARPP19	816.329058	4	0 0.24545844
AC092683.1	814.762432	4	0 0.45432136
CCDC88A	813.413113	4	0 0.21910383
KCNMB4	812.88476	4	0 0.39799919
MDGA2	810.764815	4	0 0.09608372
ATP9B	809.755268	4	0 0.15178215
11-Sep	809.704643	4	0 0.24451401
SRCIN1	808.824903	4	0 0.2616795
EPB41L3	806.092202	4	0 0.14911661
PARP8	802.285544	4	0 0.25367096
PDE4DIP	799.853753	4	0 0.13490503
IMMP2L	799.493263	4	0 0.17713924
TSPAN7	796.501995	4	0 0.47987696
WNK2	790.552067	4	0 0.23567728
PCED1B	790.394155	4	0 1.35437857
TRPM3	789.58879	4	0 0.75280981
HOMER1	789.266953	4	0 0.1918242
TNIK	786.964706	4	0 0.16770527
MIR222HG	786.630154	4	0 0.39151471
PIP5K1B	785.729839	4	0 0.50468187
ANKRD6	784.951948	4	0 0.60333525
KIF26B	784.40728	4	0 0.37593451
MYO1D	783.063602	4	0 0.35118743

ITPR2	782.821743	4	0 0.88823295
FKBP5	781.986962	4	0 1.47751182
TRIM2	780.86259	4	0 0.18153595
SLC39A11	779.953571	4	0 0.29518237
CDKL1	779.730654	4	0 0.31143817
TYW1B	776.038188	4	0 0.41234554
STIM1	775.548279	4	0 0.25806252
CACNA1B	774.467419	4	0 0.14026246
ILDR2	773.982168	4	0 0.53891612
APP	773.617497	4	0 0.19547576
ERC1	772.61158	4	0 0.11405763
R3HDM1	771.841634	4	0 0.1616972
SSH2	771.758608	4	0 0.19955067
OSBPL10	771.67119	4	0 0.33902566
ANO4	771.483162	4	0 0.99305327
FAM153C	767.826311	4	0 0.23827588
MAP1B	767.00956	4	0 0.14536498
PRELID2	766.870249	4	0 0.39321497
LPGAT1	765.909221	4	0 0.28222348
PHACTR3	763.580955	4	0 0.23503615
SH3BGRL	763.170125	4	0 0.42788575
SYNPO2	763.105698	4	0 0.42000839
SNAP25	761.765283	4	0 0.1364817
RHBDL3	758.998268	4	0 0.64512751
SSBP2	758.874645	4	0 0.26253122
PART1	758.59635	4	0 0.59470509
FTX	758.218674	4	0 0.13472294
NOVA1	756.699387	4	0 0.25366952
LONRF2	755.175192	4	0 0.12937054
GLCE	752.926908	4	0 0.40165409
FGF14	752.372424	4	0 0.12645953
NELL2	751.765172	4	0 0.17083233
MEF2C	750.728041	4	0 0.14911774
STX1A	748.568759	4	0 0.34091341
MIR2052HG	748.3655	4	0 0.67693303
GPHN	747.621615	4	0 0.14007659
SAMD4A	747.329241	4	0 0.5380629
AL117329.1	746.117569	4	0 0.50886536
BABAM2	744.312842	4	0 0.15973584
E2F3	742.529932	4	0 0.2911007
ZSWIM6	740.638587	4	0 0.22074583
PRNP	740.606677	4	0 0.32121387
ZNF385D	740.093073	4	0 0.39652584

MPDZ	738.206955	4	0 0.23588499
SLC44A1	737.473554	4	0 0.15986626
SLCO3A1	735.184698	4	0 0.18828891
DPY19L2	734.297538	4	0 0.22808246
PPFIBP1	731.668902	4	0 0.3543878
FOCAD	727.463849	4	0 0.15906471
STAMBPL1	727.316215	4	0 0.2110064
FAM19A5	726.951586	4	0 0.31473136
JUND	726.859025	4	0 0.41570808
KCNMA1	722.54817	4	0 0.09890615
PHLPP1	718.826011	4	0 0.24816885
HSP90AB1	716.177012	4	0 0.35030784
SKAP2	716.058734	4	0 0.42180361
ANKRD26	716.018706	4	0 0.11009767
STOX2	711.897808	4	0 0.12378456
NEK10	708.263994	4	0 0.1949594
CPSF6	707.60844	4	0 0.29855331
CALM1	705.958621	4	0 0.33873209
PPARG	703.61077	4	0 0.55488486
PAK1	703.090954	4	0 0.19911887
ATF7IP2	702.104125	4	0 0.27051499
NMT2	701.49042	4	0 0.26469118
RIMS1	700.87607	4	0 0.17426504
ZBTB16	698.777446	4	0 0.22745163
EPB41L4B	697.650705	4	0 0.22558556
CAMK2B	697.557159	4	0 0.12656361
FRMD4A	691.249901	4	0 0.10541715
CLU	690.275172	4	0 0.23103969
AC006148.1	690.093505	4	0 0.27412963
NPTX1	689.820767	4	0 0.35867003
LRRFIP1	688.107562	4	0 0.18093863
CCNI	687.622566	4	0 0.24007958
DSCAML1	686.704823	4	0 0.49035377
NAV1	682.485052	4	0 0.21699961
CAMK2G	679.31792	4	0 0.14995546
NFIA	678.657651	4	0 0.47996538
PDK3	677.317477	4	0 0.35363266
UNC13B	677.246934	4	0 0.26391999
LRRC28	677.024972	4	0 0.21290936
SLC38A1	676.746199	4	0 0.26768999
CDC40	675.551501	4	0 0.20132192
KLHL4	675.018487	4	0 0.21187779
ACTN4	674.266558	4	0 0.39141393

SESN3	671.659357	4	0 0.26562532
COP1	671.513852	4	0 0.15611768
CLASP1	668.03613	4	0 0.08307033
FSTL4	666.557783	4	0 0.25541925
AC024901.1	665.92875	4	0 0.47623563
LRMDA	664.44209	4	0 1.19791169
LINC02552	664.151344	4	0 1.21940677
PTMA	664.002285	4	0 0.40710725
INPP5F	662.086178	4	0 0.25454038
SYT14	659.552418	4	0 0.2605524
ZEB2	659.377722	4	0 0.48437037
HRH2	659.364712	4	0 0.40276217
MAG11	658.90526	4	0 0.11715145
ATG7	658.475918	4	0 0.12377709
RGL1	657.133648	4	0 0.23062417
NRCAM	657.092583	4	0 0.14523265
CPNE5	656.896119	4	0 0.34969943
ST8SIA5	655.961125	4	0 0.58409678
CEP112	655.004188	4	0 0.16441994
PLXDC2	654.816188	4	0 0.52460596
PCDH11X	654.385031	4	0 0.30168343
NCAM1	652.783945	4	0 0.10293825
ERICH3	652.369864	4	0 0.30564937
UNC5C	648.924735	4	0 0.27062259
DLGAP4	648.77192	4	0 0.12412559
ADAM23	647.382462	4	0 0.21020643
PI4KA	646.03653	4	0 0.12648741
MARK1	645.88042	4	0 0.2035253
LINC01830	644.914202	4	0 1.0348248
VGLL4	644.724235	4	0 0.19836503
SCN3A	644.418218	4	0 0.3023102
ME1	643.388568	4	0 0.27004163
AL591501.1	642.617262	4	0 0.21741058
MAN1C1	642.18041	4	0 0.18637743
SLC25A27	641.856757	4	0 0.30789941
CDK19	640.193071	4	0 0.12823654
RASGRF1	638.496286	4	0 0.58375403
TESK2	634.468561	4	0 0.71865615
AC007091.1	633.810514	4	0 1.01067381
ZNF483	633.375261	4	0 0.32151661
PXYLP1	631.467267	4	0 0.30890703
GABRA2	631.267449	4	0 0.21753804
ACAP3	630.87311	4	0 0.18417176

KLF12	628.974948	4	0 0.77514066
EPHA3	624.137653	4	0 0.37094793
FOXN3	623.873875	4	0 0.30112856
WASF1	623.564917	4	0 0.12338206
GALNT17	623.081898	4	0 0.22729964
GPR137C	621.747669	4	0 0.37294112
SLITRK5	619.653194	4	0 0.14731812
LRFN2	619.335974	4	0 0.14687884
TYRO3	617.76371	4	0 0.18919409
GDAP1	617.713408	4	0 0.15307189
AC138305.1	617.653105	4	0 0.70175049
UBA6-AS1	616.900059	4	0 0.46040393
RIMBP2	613.998298	4	0 0.13450802
NPTXR	612.429406	4	0 0.43484734
CNTN6	610.826862	4	0 0.76182875
ZFAND3	609.640599	4	0 0.09637919
AGPAT4	609.542255	4	0 0.20139631
SLC22A15	608.320711	4	0 0.2525411
NOL4	608.061766	4	0 0.22717808
FARS2	607.342902	4	0 0.18640589
ARHGEF4	607.078034	4	0 0.3434117
RPH3A	606.012397	4	0 0.65023002
LRRFIP2	605.451593	4	0 0.19807336
AKAP6	603.230183	4	0 0.09004634
CMSS1	601.566876	4	0 0.36348557
WDFY2	600.872374	4	0 0.2160612
ARHGEF7	600.050352	4	0 0.10828019
LRRN1	599.803238	4	0 0.58418723
RGS7BP	596.936378	4	0 0.25613178
AC060765.1	595.85793	4	0 1.54212281
ABI1	593.30723	4	0 0.16040082
HIVEP1	588.122567	4	0 0.37697236
KCNQ5	586.787964	4	0 0.08297519
DNM3	585.120773	4	0 0.22212554
PDS5B	585.097249	4	0 0.1963253
KAT6B	583.922031	4	0 0.18634937
MT-CO3	583.89024	4	0 0.25290361
ZFR	583.884654	4	0 0.13549485
ARHGAP32	583.541763	4	0 0.18430249
ST8SIA3	582.38354	4	0 0.19893974
MCF2L2	581.586019	4	0 0.19535979
7-Sep	581.130348	4	0 0.24370183
CENPC	580.56882	4	0 0.27134938

SLC7A14	577.143473	4	0 0.50204788
HNRNPLL	576.839747	4	0 0.35386798
RAP1GAP2	574.692289	4	0 0.17232267
FAM13C	574.362897	4	0 0.22492551
WVOX	573.580833	4	0 0.1412586
HECW2	572.580367	4	0 0.16148177
MAGI3	572.209265	4	0 0.15868631
PLCL2	570.619439	4	0 0.15409706
CADM2	569.799359	4	0 0.09596263
TSPYL1	568.383163	4	0 0.35376749
CERS4	568.286058	4	0 0.33514799
GRIN2A	568.067798	4	0 0.12960792
EXOC6B	566.980016	4	0 0.08142375
MT-CO1	564.85517	4	0 0.29626296
HECTD2	563.487936	4	0 0.26366522
EXOC4	563.272361	4	0 0.14353541
CAMK4	562.118298	4	0 0.26112012
FYN	562.073016	4	0 0.12076792
OPA1	561.022836	4	0 0.18343621
KIAA0930	560.165595	4	0 0.13229194
TRIO	559.957477	4	0 0.1183035
XKR4	559.634948	4	0 0.27930909
MYH10	557.486784	4	0 0.20506621
MKLN1	553.568861	4	0 0.142167
PTPRE	552.372692	4	0 0.3291979
HDAC4	551.39568	4	0 0.24317722
OSBPL8	549.282178	4	0 0.13966075
FRY	548.352908	4	0 0.1290191
COX7A2L	548.055626	4	0 0.28826161
CDKL5	547.29173	4	0 0.1833186
PTPRM	547.285641	4	0 0.37394949
GALNT18	544.536434	4	0 0.17641963
SLAIN1	541.364041	4	0 0.19832979
AC079385.1	539.221266	4	0 0.37932047
RAP1GAP	538.427362	4	0 0.35908506
LINC00894	536.496194	4	0 0.41468697
TAOK1	536.18505	4	0 0.13784972
BASP1	535.718019	4	0 0.22583898
ENTPD1-AS1	535.056209	4	0 0.39491839
PTH2R	533.070889	4	0 0.52708637
MXI1	532.468057	4	0 0.21387839
MT-ND1	531.831318	4	0 0.31714839
ENSA	531.440579	4	0 0.29888104

C3orf67-AS1	530.563719	4	0 0.37362087
DUBR	530.536413	4	0 0.22908704
FBXL2	527.370338	4	0 0.25441071
SYNE1	526.268951	4	0 0.13356366
SLC16A10	526.067233	4	0 0.42601192
EPHA4	526.043409	4	0 0.12629128
MKL2	525.689977	4	0 0.13588669
AACS	525.212548	4	0 0.30323761
CADM1	525.045852	4	0 0.35825205
IQCA1	524.60476	4	0 0.39917365
HYDIN	523.76272	4	0 0.13920338
AFF1	521.961039	4	0 0.42830775
NEK1	521.586223	4	0 0.29751122
ST7	521.327028	4	0 0.15955255
PHYHIP	520.508751	4	0 0.26740187
SV2B	519.428324	4	0 0.10982153
LINGO1	517.134108	4	0 0.12628701
JAK2	516.649703	4	0 0.20106277
LINC00923	516.331269	4	0 0.39044883
CHL1	515.543223	4	0 0.14801728
VWA8	514.352283	4	0 0.1075438
GRB10	512.938105	4	0 0.20287962
POLN	512.36994	4	0 0.21537258
CAMK1D	510.748237	4	0 0.11918005
KCNJ6	510.644195	4	0 0.23840012
ETV6	510.196167	4	0 0.64936819
DDX10	509.041648	4	0 0.16757068
GPC1	508.959981	4	0 0.27974564
CELF5	506.062658	4	0 0.16341131
TIAM2	504.488229	4	0 0.18753315
MBNL2	504.047281	4	0 0.16588859
GPATCH8	503.933487	4	0 0.07563177
ATP2B2	503.460588	4	0 0.20103308
TLE1	501.60793	4	0 0.36206737
TYW1	501.310587	4	0 0.17946309
MICAL2	499.306862	4	0 0.12646864
DTWD2	498.264397	4	0 0.28313414
PGM2L1	497.739462	4	0 0.43334328
GAB1	497.650249	4	0 0.12170218
TENM4	497.135056	4	0 0.36130459
SLC4A10	495.664274	4	0 0.14114731
IDS	493.361094	4	0 0.27789958
APBB2	492.670284	4	0 0.10548686

LINC02398	491.865055	4	0 0.57824259
NYAP2	490.982563	4	0 0.44170929
DNAH6	489.322125	4	0 0.39792524
GPATCH2	487.846125	4	0 0.27975606
SCN8A	483.569777	4	0 0.16616674
ARID1B	483.191306	4	0 0.15164423
FGF12	481.077315	4	0 0.0936112
VGF	480.603256	4	0 0.61162815
LRCH1	480.575558	4	0 0.44806164
STX8	479.322298	4	0 0.13091534
RPS6KA6	478.915765	4	0 0.15625124
OLFM1	478.835124	4	0 0.24664548
TOMM20	477.179485	4	0 0.35189715
RECK	476.386931	4	0 0.18500789
TNPO1	475.324646	4	0 0.23750598
PPP1R21	474.16305	4	0 0.27368133
MLIP	473.573551	4	0 0.19611549
APLP1	473.398057	4	0 0.30833673
MED13L	472.749898	4	0 0.13702171
MOB3B	471.019082	4	0 0.35437919
CUX1	470.997127	4	0 0.13325266
BCL2	470.169471	4	0 0.29903702
ZNF292	468.298583	4	0 0.11684285
PCSK2	467.552689	4	0 0.28439587
SNRPN	466.956387	4	0 0.78671922
NPTN	464.905519	4	0 0.09631629
AL139260.1	463.465941	4	0 0.20596458
GRID1	463.049204	4	0 0.19115021
ME3	462.341191	4	0 0.18354609
TRIM9	462.198337	4	0 0.07312253
PCSK1N	460.772221	4	0 0.4266483
TARBP1	460.559754	4	0 0.19463114
CFAP299	459.435998	4	0 0.51131308
PEBP1	458.265428	4	0 0.29428798
MRPS30-DT	458.207969	4	0 0.15549115
MKNK1	458.095457	4	0 0.34335164
SYN1	458.029305	4	0 0.3191028
MT-ND2	457.962626	4	0 0.30208634
LINC01252	456.63765	4	0 0.26685013
LNK1	456.157998	4	0 0.14923294
ATF2	455.337336	4	0 0.13068526
RAPGEFL1	455.084475	4	0 0.20966878
ITFG1	453.231802	4	0 0.090469

AGTPBP1	450.23031	4	0	0.11979868
DLGAP1-AS4	449.77594	4	0	0.50445941
AQP4-AS1	448.281564	4	0	0.29132577
RNLS	447.010246	4	0	0.1639509
NRXN2	446.746458	4	0	0.14831821
PCNX1	446.265507	4	0	0.1445641
TCF12	445.991836	4	0	0.28973483
SPEF2	444.744982	4	0	0.25411981
ZBBX	444.347489	4	0	0.47405307
RPS6KA5	442.198271	4	0	0.15395808
SYNDIG1	441.284506	4	0	0.19608558
SERINC1	440.909961	4	0	0.36697703
WAC	440.431449	4	0	0.25960718
GOLGA8A	439.861907	4	0	0.21395679
AC093523.1	439.753536	4	0	0.37856601
FBXO34	439.085447	4	0	0.18278772
ASAP1	438.57427	4	0	0.17765918
EIF1	436.180086	4	0	0.38756762
CCSER1	434.486891	4	0	0.14945312
AL391807.1	434.205576	4	0	0.30927435
RIMS2	434.102945	4	0	0.11966155
MAST3	433.352944	4	0	0.11746363
FAM153A	432.503477	4	0	0.23332458
NDRG4	431.939322	4	0	0.1527634
MYO9A	431.903121	4	0	0.10807121
EFR3A	431.546046	4	0	0.16714328
PCDH19	430.352515	4	0	0.32194236
ATXN7L1	430.247791	4	0	0.12962881
ZNF721	429.702976	4	0	0.18244799
MEF2A	429.525411	4	0	0.16994101
RFTN1	428.690493	4	0	0.22705699
NAV3	428.21702	4	0	0.06899439
TAPT1-AS1	425.308467	4	0	0.23560928
SORT1	424.410922	4	0	0.09914705
RUNX1T1	424.369768	4	0	0.24037271
CTTNBP2	424.138802	4	0	0.11989891
PITPNM2	423.534661	4	0	0.16104675
SH3GL2	423.483997	4	0	0.16004175
FUT9	423.276302	4	0	0.21434244
CDH2	423.169662	4	0	0.23932764
USP22	422.825573	4	0	0.24093756
GAPDH	422.625989	4	0	0.27335714
PRMT8	421.761541	4	0	0.30206799

MEGF9	421.258334	4	0 0.25397352
CNST	420.639375	4	0 0.20178825
MAP2K1	420.500028	4	0 0.17591936
MFSD4A	419.435916	4	0 0.23786509
TMEM59L	416.314042	4	0 0.16906355
ZC3H8	415.904751	4	0 0.24377068
CCDC85A	415.632526	4	0 0.23993358
GABRA3	414.77767	4	0 0.30654089
AL662796.1	414.032645	4	0 0.34098316
SYT11	413.592578	4	0 0.3207691
MYO9B	413.276969	4	0 0.20566981
KCNC1	412.354827	4	0 0.20593669
XKR6	412.304608	4	0 0.08226657
MBP	410.637281	4	0 0.55837767
EFR3B	409.636234	4	0 0.15554865
MGAT5B	409.251664	4	0 0.15587817
PKIG	409.111407	4	0 0.1095791
TM7SF3	408.953271	4	0 0.15663447
NWD2	408.566441	4	0 0.37240163
LINC00632	408.546289	4	0 0.18780419
BRINP1	405.971126	4	0 0.17407446
AKT3	405.335724	4	0 0.09832989
PACRG	405.267233	4	0 0.1853092
ACTB	400.852591	4	0 0.22859481
PIK3R1	400.184327	4	0 0.15245839
GABRB1	397.000126	4	0 0.12346199
PTPN4	396.514271	4	0 0.18242217
MAP2K5	394.549593	4	0 0.13234021
MSI2	394.42836	4	0 0.31827029
ZBTB7C	394.259868	4	0 0.60140974
SAMD12	394.183335	4	0 0.13510234
MPP7	393.468552	4	0 0.24478273
CADM3	393.220656	4	0 0.18562019
AC245297.3	392.268852	4	0 0.2126171
CLIP2	391.54923	4	0 0.20101367
PDE3B	391.483094	4	0 0.2684258
GPM6B	388.536284	4	0 0.17497618
FAM171A1	388.336776	4	0 0.13518114
NFASC	387.16992	4	0 0.12891845
TSPYL2	385.690379	4	0 0.20007149
MIR124-2HG	384.850412	4	0 0.16227674
ABCA10	384.344697	4	0 0.23433552
NCALD	382.295527	4	0 0.107312

FMN2	382.205509	4	0 0.12732626
AP001347.1	380.8239	4	0 0.33589973
SYP	380.314822	4	0 0.19247993
PKNOX2	380.24912	4	0 0.13746157
UNC5A	379.387398	4	0 0.14232061
LIPA	378.663232	4	0 0.27316067
PEA15	378.421186	4	0 0.45016335
BICDL1	378.325531	4	0 0.23211928
SDCCAG8	377.708623	4	0 0.08463829
GMDS	377.477977	4	0 0.22920355
AEBP2	377.114222	4	0 0.20301733
FP236383.1	376.801144	4	0 0.21883015
FP671120.1	375.06898	4	0 0.23533123
LANCL2	373.721941	4	0 0.22372029
VSTM2A	372.937215	4	0 0.26501224
PRKACB	372.874064	4	0 0.12228085
CASC4	372.203482	4	0 0.12553195
BASP1-AS1	370.989326	4	0 0.21686075
USP32	370.761829	4	0 0.17619209
SDK1	370.28171	4	0 0.53392336
TTLL5	370.196061	4	0 0.19622996
ROCK1	370.011139	4	0 0.13534785
SHISA9	369.735059	4	0 0.24934586
AC008014.1	369.607838	4	0 0.35061272
ACADVL	369.58137	4	0 0.24443413
NUCKS1	368.484783	4	0 0.2145975
PEAK1	367.223296	4	0 0.098116
CAPS2	366.757838	4	0 0.28034118
PRB2	365.437746	4	0 0.1581067
NR3C1	364.91307	4	0 0.26333361
RNF165	364.383958	4	0 0.27300892
SYBU	363.8477	4	0 0.09552481
PIK3CA	362.600649	4	0 0.10696812
SRRM2	362.370179	4	0 0.10992964
SGIP1	361.822499	4	0 0.12083814
PKD1	361.774711	4	0 0.11824769
PWAR6	360.803073	4	0 0.20363829
CORO6	358.204572	4	0 0.44529356
ATP2C1	357.811229	4	0 0.18648724
BAALC	357.147159	4	0 0.30175082
DENND1A	356.746882	4	0 0.11022185
TEAD1	356.676285	4	0 0.39482982
RNF19A	356.578433	4	0 0.19737745

PCDH15	356.34683	4	0 0.38154326
CCDC91	355.962657	4	0 0.20422447
IQSEC3	354.981564	4	0 0.11726104
MIR29B2CHC	354.324295	4	0 0.11807988
ZFYVE9	354.073152	4	0 0.09170649
REEP5	353.972092	4	0 0.28740968
MT-CYB	352.852872	4	0 0.24349498
IQSEC1	352.801176	4	0 0.13299649
GABRB3	352.415543	4	0 0.1809458
HERC4	351.967067	4	0 0.1755738
CNTN1	351.775661	4	0 0.09344244
MT-ND3	350.459899	4	0 0.2178271
FRMPD4	349.952675	4	0 0.10867886
AC073050.1	349.43371	4	0 0.22328288
MT-ATP6	347.800531	4	0 0.20923002
MKL1	347.492445	4	0 0.11352971
PREP	346.457744	4	0 0.15967056
ARF1	346.451602	4	0 0.31859499
BTBD8	346.442629	4	0 0.19827002
TRPM7	346.316517	4	0 0.10870163
TLE4	345.592199	4	0 0.21244246
MEG3	345.298434	4	0 0.27331059
AHCYL2	344.53446	4	0 0.14673915
SETBP1	344.48975	4	0 0.13678479
CEP192	344.148019	4	0 0.09175319
CCSER2	343.379822	4	0 0.16815106
RABGAP1L	342.688447	4	0 0.1927613
NCKAP1	342.577965	4	0 0.08807162
CALM3	342.039136	4	0 0.30181639
PCNT	341.021616	4	0 0.1550691
AFF3	340.294668	4	0 0.1433298
KIFC2	339.889729	4	0 0.2109386
USP11	339.680324	4	0 0.34395432
NME7	339.276467	4	0 0.14747971
AKAP12	338.213802	4	0 0.32106302
PSAP	337.474196	4	0 0.22472368
OSBPL1A	335.856597	4	0 0.18362776
AC124854.1	335.601907	4	0 0.37762474
SNCB	335.231057	4	0 0.2367123
MBD5	335.069089	4	0 0.0973412
MCHR2	335.057473	4	0 0.2800959
HTR2A	334.904758	4	0 0.26660847
MTURN	334.630632	4	0 0.20422831

TSGA10	334.054312	4	0 0.26744467
SPATA6L	333.825813	4	0 0.37430483
TMSB4X	333.19836	4	0 0.31273495
EIF4G3	333.191798	4	0 0.10888319
MT-ND5	332.977909	4	0 0.30818576
ABCC5	332.518248	4	0 0.17171239
PLXNA2	331.196276	4	0 0.10979152
HLCS	329.499987	4	0 0.20148776
ENAH	329.250192	4	0 0.29018824
ACVR2A	328.381242	4	0 0.34153841
MT-CO2	328.359105	4	0 0.18897867
CREB5	327.468104	4	0 0.29578193
ASTN1	327.058199	4	0 0.11430312
KIAA1324	326.827632	4	0 0.251661
ARAP2	326.667158	4	0 0.17824505
AC008591.1	326.259773	4	0 0.55566833
COG6	325.930956	4	0 0.17361578
DST	325.680417	4	0 0.07840749
CEP85L	325.43529	4	0 0.14492914
NRGN	325.176971	4	0 0.26916296
DIRC3	325.125115	4	0 0.23443461
TMEM135	325.048597	4	0 0.15669955
FAM81A	324.895657	4	0 0.16837569
AP3S1	324.722084	4	0 0.16987246
ZNRF3	324.125411	4	0 0.1486796
MAP3K4	323.355221	4	0 0.16437694
YWHAB	323.333046	4	0 0.33208725
MT-ND4L	322.533945	4	0 0.30246592
MT-ND4	322.138766	4	0 0.22436637
PLPPR5	321.515024	4	0 0.20838862
IGF1R	320.777168	4	0 0.2001824
SIK3	320.62815	4	0 0.08589145
GRK3	320.46663	4	0 0.23508726
PNMA2	320.386602	4	0 0.24465958
UNC80	319.984123	4	0 0.17125178
NPAS2	319.203283	4	0 0.18737909
YWHAG	318.390595	4	0 0.20943251
ARHGAP21	317.572045	4	0 0.08386847
SYT1	317.047296	4	0 0.04272075
STAT4	317.035742	4	0 0.45266091
MAPK8	316.855375	4	0 0.13771489
TACC1	316.279532	4	0 0.22564413
APBA2	315.660107	4	0 0.09870326

PPIA	314.750608	4	0 0.22368037
CTIF	314.136432	4	0 0.11075349
ANKRD33B	314.050537	4	0 0.14413698
SCN3B	313.794014	4	0 0.32573513
ANKRD10	311.6289	4	0 0.18265143
EIF4A2	311.502169	4	0 0.25018069
WIPF3	311.493114	4	0 0.25871489
LRRC49	311.137825	4	0 0.09816776
ABI2	310.738955	4	0 0.10729627
AC025159.1	310.306007	4	0 0.37270654
6-Mar	310.209952	4	0 0.20232876
PLCG2	310.181226	4	0 0.14413621
TNFRSF25	310.060408	4	0 0.18921278
TRAPPC9	309.28922	4	0 0.16337418
ANKH	308.788563	4	0 0.07765105
AHI1	308.675493	4	0 0.15696797
REPS2	307.944623	4	0 0.11814213
ARHGEF3	307.901203	4	0 0.20154624
CAMKK1	307.52573	4	0 0.16672112
C11orf80	306.704201	4	0 0.17865744
NORAD	306.534367	4	0 0.31883853
MAP4K5	306.425896	4	0 0.14662643
OSBPL6	305.283019	4	0 0.06717183
CXXC4-AS1	304.285207	4	0 0.16816501
ANKRD11	304.045916	4	0 0.09243611
MYT1L	303.674378	4	0 0.06332471
AC008537.1	303.104324	4	0 0.27136745
ANAPC10	302.646132	4	0 0.19600994
SLC12A2	301.953401	4	0 0.34237791
CDYL2	301.75142	4	0 0.20024559
RAPGEF2	301.504964	4	0 0.15216386
LUZP1	301.389812	4	0 0.36591731
HIVEP2	300.5319	4	0 0.11395344
TSPAN3	299.839352	4	0 0.10076505
C14orf132	298.820201	4	0 0.27208062
PDE2A	298.707095	4	0 0.21984644
LINC01811	298.552035	4	0 0.45058127
SYT7	296.305157	4	0 0.17766693
EPHB1	295.626513	4	0 0.27784182
FRMD5	295.616498	4	0 0.12816867
ADAM22	294.791104	4	0 0.08179589
SH3GL3	293.370864	4	0 0.22366248
RNF130	292.979967	4	0 0.15246692

MNAT1	292.028383	4	0 0.13742905
EHBP1	291.602844	4	0 0.12858637
RAB11FIP3	291.288012	4	0 0.15996877
LRRN2	290.789035	4	0 0.26019529
CREG2	290.467002	4	0 0.20406569
PURA	289.869723	4	0 0.20745355
CAMKMT	289.755944	4	0 0.47541512
LINC02223	288.812568	4	0 0.39519356
AAK1	288.594567	4	0 0.0973358
FNIP2	288.555508	4	0 0.11682493
PPM1E	288.353181	4	0 0.16750846
SH3RF3	287.931121	4	0 0.17249443
AKAP8L	287.841682	4	0 0.11338614
DOCK4	287.362824	4	0 0.16720977
PAPSS1	286.282697	4	0 0.19026814
NELL1	286.254518	4	0 0.15472252
CHD6	285.905136	4	0 0.13615937
KCNAB2	285.675352	4	0 0.17162329
PAK5	284.434008	4	0 0.23667449
ATP8A2	283.50049	4	0 0.17395931
STRBP	282.829296	4	0 0.22195276
DIP2B	282.631857	4	0 0.22007737
SGK1	282.50183	4	0 0.34086599
MAP4K4	282.402856	4	0 0.12577076
GALNT1	282.081454	4	0 0.26186726
ZDHHC17	281.516774	4	0 0.09486721
ADD3	281.107194	4	0 0.19550183
PKN2	280.703741	4	0 0.09121676
KIAA1468	280.601641	4	0 0.12839911
SRPK2	280.580096	4	0 0.12016088
MAST1	280.241857	4	0 0.10839745
AC073332.1	278.929801	4	0 0.53394963
BBS9	278.855174	4	0 0.1091653
TNR	278.853386	4	0 0.16060071
DGKI	278.19448	4	0 0.09865014
KIAA1549L	277.090807	4	0 0.12588133
MTRNR2L12	276.636406	4	0 0.26620568
UNC13A	275.944613	4	0 0.12400274
CMTM4	275.360195	4	0 0.1272866
UPF3A	275.188282	4	0 0.15115628
CKB	274.898539	4	0 0.1218435
SLC17A7	274.027702	4	0 0.27871135
BCAS3	272.492857	4	0 0.12259481

AF117829.1	271.807755	4	0	0.3893428
ATP1B1	271.550595	4	0	0.16134151
LUC7L3	271.523578	4	0	0.21610118
TBL1XR1	271.14027	4	0	0.15083046
LYST	270.770872	4	0	0.14403397
LRRC7	270.180369	4	0	0.14786816
VEZT	269.282925	4	0	0.16271618
NALCN	269.08606	4	0	0.07610237
CDC14B	268.552843	4	0	0.34212978
PABPN1	267.667355	4	0	0.13790656
PCNX4	266.41357	4	0	0.1047331
DTWD1	266.30649	4	0	0.11140324
ICA1	265.951292	4	0	0.07505561
MMP17	265.483945	4	0	0.39313309
BTRC	264.747615	4	0	0.06989504
SRRM4	263.988759	4	0	0.12904664
NMNAT2	262.77494	4	0	0.13838629
LRRK2	262.700481	4	0	0.11489783
ASCC3	262.627963	4	0	0.13538216
ATRX	262.592927	4	0	0.11388204
HSD17B4	262.523149	4	0	0.158157
SLC23A2	261.44175	4	0	0.14519515
SNAP91	261.243817	4	0	0.12194012
UBE4B	260.83627	4	0	0.08770777
RIF1	260.826319	4	0	0.17519405
PBX1	260.799317	4	0	0.10223536
ANKRD34C-A	260.478495	4	0	0.12231961
BICRAL	259.450604	4	0	0.09218666
FOXO3	259.40656	4	0	0.1926239
R3HDM2	258.975646	4	0	0.13731143
DPH6-DT	258.930937	4	0	0.23486903
COG5	258.88023	4	0	0.1914884
AC239809.3	258.853879	4	0	0.12308094
TUT4	258.852758	4	0	0.18284009
INTS10	258.471748	4	0	0.14941279
GAS2	257.938547	4	0	0.37275762
ANKS1B	257.639481	4	0	0.11154372
PPP2R2C	257.066893	4	0	0.11169071
MAPRE2	256.907812	4	0	0.15598334
LINC00461	256.569996	4	0	0.14595548
OGT	256.435442	4	0	0.25071612
WNK1	256.311429	4	0	0.10785794
MAP4K3	255.930399	4	0	0.19690624

CCNY	255.823012	4	0 0.14913378
TTC7B	255.505684	4	0 0.14444849
RIC8B	255.490367	4	0 0.17364401
GLCCI1	254.785681	4	0 0.22737282
CPEB4	254.388987	4	0 0.08335988
SPATS2	253.503291	4	0 0.16778652
AC013652.1	253.417386	4	0 0.25785541
CHCHD6	253.258506	4	0 0.22053231
FMNL2	253.07258	4	0 0.16117916
IQSEC2	252.582288	4	0 0.17983462
BRWD1	252.123269	4	0 0.06682644
THY1	251.849488	4	0 0.16057043
GABRG2	251.408693	4	0 0.12191595
TTC8	250.923557	4	0 0.19229002
LINC00882	250.719055	4	0 0.06374735
PPP6R2	249.81357	4	0 0.15267842
MTERF1	249.524669	4	0 0.24715826
ENO2	249.292953	4	0 0.1564161
BSG	249.208511	4	0 0.29027646
KIF9-AS1	249.200186	4	0 0.20572789
NUMB	248.854784	4	0 0.18129111
MTMR7	248.828486	4	0 0.17745988
CALY	248.474692	4	0 0.24314523
SBF2	248.297694	4	0 0.11667719
DHFR	248.249085	4	0 0.1988958
ACTR3B	246.059067	4	0 0.09732473
ZNF438	246.045694	4	0 0.23344901
PPP2R5C	246.037622	4	0 0.14382452
SV2A	245.47731	4	0 0.14960858
YEATS2	244.473025	4	0 0.155331
ATP8A1	244.410318	4	0 0.13528662
ERCC6L2	242.798383	4	0 0.10669386
SMARCA2	242.448844	4	0 0.16670219
FCHO2	242.279755	4	0 0.21519989
AMPH	242.066805	4	0 0.11557613
CD47	241.083517	4	0 0.23227915
VPS13A	241.073293	4	0 0.21259575
TMSB10	240.733341	4	0 0.46765695
ZBTB20	240.393436	4	0 0.19209111
FAM69A	240.233896	4	0 0.15774479
LGI4	240.203505	4	0 0.21767743
TMEM181	239.937468	4	0 0.14984535
RASA1	239.791838	4	0 0.16197343

SPATA7	239.710353	4	0 0.21997585
UBE2E2	239.655989	4	0 0.08688196
BEX1	239.301609	4	0 0.31557829
GLRB	238.984033	4	0 0.08396421
PTPN9	238.904337	4	0 0.24884577
TSC22D1	238.7072	4	0 0.13374216
HIVEP3	237.955843	4	0 0.1576594
ARMC2	237.760578	4	0 0.14521441
TBC1D32	237.285033	4	0 0.12240178
FAM78B	237.224711	4	0 0.18290844
TRAF3	236.996768	4	0 0.25204641
ADAMTSL1	236.742431	4	0 0.54610509
RNF150	236.411181	4	0 0.12074043
SVOP	236.314786	4	0 0.17505897
LARP1	236.275272	4	0 0.09609658
HTT	236.084398	4	0 0.07401401
KCNH3	235.295531	4	0 0.17082663
NELFA	234.729103	4	0 0.20523345
LINC02055	234.512805	4	0 0.85605124
RBM6	234.344905	4	0 0.11294691
PATJ	234.137916	4	0 0.15144411
ABCA3	233.242344	4	0 0.20922982
AIG1	233.117726	4	0 0.13438306
AC034195.1	233.108426	4	0 0.73124249
SCFD2	232.869131	4	0 0.15550369
PPM1H	232.600325	4	0 0.142876
FAM120A	232.537662	4	0 0.15548468
GALNT7	232.356081	4	0 0.1989259
C16orf45	232.137467	4	0 0.14658641
JAKMIP1	232.135135	4	0 0.1578334
CAMKK2	232.039702	4	0 0.09043756
SGCZ	231.841355	4	0 0.7480693
LINC01184	230.669556	4	0 0.21931227
EXOC6	230.633787	4	0 0.15097879
CDK5R1	230.590874	4	0 0.30990532
PCNX2	230.46886	4	0 0.10691423
MPPED2	230.414221	4	0 0.25714849
MSH3	230.398503	4	0 0.14547374
MBTPS1	230.346038	4	0 0.21799544
TRIM37	229.001703	4	0 0.1111733
CYTH3	228.394507	4	0 0.16643335
TTBK2	228.137834	4	0 0.20165256
SIPA1L3	227.388601	4	0 0.13921582

CAMKV	227.222292	4	0 0.20965526
MTUS2	227.208484	4	0 0.14737342
RSRP1	227.168575	4	0 0.14529263
ADD2	223.859178	4	0 0.14239513
TRAF3IP2-AS	223.457166	4	0 0.08869732
KLHL7	223.336953	4	0 0.08766926
ARID5B	222.683595	4	0 0.12949331
BCKDHB	222.475115	4	0 0.23007144
MED27	221.90192	4	0 0.153676
ATP2A2	220.757388	4	0 0.09055059
ADGRV1	220.320653	4	0 0.21721311
SERINC3	220.266947	4	0 0.20614253
SECISBP2L	220.24703	4	0 0.21192561
REV1	218.753144	4	0 0.16743996
GNPTAB	218.584062	4	0 0.11233294
CUL3	218.31376	4	0 0.15547062
ATR	218.202117	4	0 0.15233087
DDX24	218.153484	4	0 0.14809902
ITM2B	218.018086	4	0 0.1882916
CACNG2	218.008998	4	0 0.09139048
MAP3K13	217.068359	4	0 0.07612731
CDC42SE2	216.822458	4	0 0.13851993
SREBF2	216.548414	4	0 0.18502693
CCDC171	216.116969	4	0 0.13009837
SHC3	214.786057	4	0 0.20786332
DNAH7	214.425212	4	0 0.20648659
KMT2C	214.269652	4	0 0.05592883
USP47	214.189151	4	0 0.07542029
SUPT3H	213.48038	4	0 0.15169943
YPEL3	213.369015	4	0 0.14976797
HSP90AA1	213.126542	4	0 0.23390029
SRRM3	211.744681	4	0 0.16485052
UBAC2	211.619703	4	0 0.15220266
ZC3H14	211.524532	4	0 0.153018
PACS1	211.510839	4	0 0.14392307
FAM126B	211.02774	4	0 0.1013238
SEC62	209.929973	4	0 0.27414325
OXCT1	209.868823	4	0 0.1461087
CRADD	209.808725	4	0 0.19450417
LINC00970	209.535326	4	0 0.16462426
NSG2	209.292108	4	0 0.3157922
PPM1L	208.996058	4	0 0.07032375
FRRS1L	208.723378	4	0 0.14504913

ACTG1	208.239034	4	0 0.38686255
SMG6	208.228814	4	0 0.09002166
ARHGEF11	207.739452	4	0 0.1752621
LINC01505	207.57768	4	0 0.47371335
GABPB1-AS1	207.310607	4	0 0.22048449
SLC8A2	207.028727	4	0 0.28044254
REPS1	206.826902	4	0 0.15205559
KCNT1	206.556769	4	0 0.30298786
PRKAA2	206.109498	4	0 0.16234491
TTLL11	206.102965	4	0 0.09777411
GNAQ	205.721753	4	0 0.09645314
MPRIIP	205.52444	4	0 0.08331483
RASA2	205.09256	4	0 0.16603029
GALNT11	204.407296	4	0 0.12565623
SH3BGRL2	203.965927	4	0 0.13692278
LYRM4	203.749186	4	0 0.21789316
UMAD1	203.579228	4	0 0.10408958
NUBPL	203.188761	4	0 0.2359365
BCAP29	203.093621	4	0 0.21459581
PTEN	203.090347	4	0 0.11030043
KLC1	203.084643	4	0 0.24736137
NFIX	202.834554	4	0 0.23267333
YWHAZ	202.742608	4	0 0.13733509
EXT1	202.698613	4	0 0.10389774
SNX29	202.410172	4	0 0.35462485
AC096711.2	201.564335	4	0 0.1469209
SFXN1	201.239474	4	0 0.10359851
PHTF1	201.112293	4	0 0.15074607
CHST11	200.458319	4	0 0.25988184
HMGCLL1	199.515336	4	0 0.13500739
SLC22A23	199.401078	4	0 0.12876388
CCK	199.381935	4	0 0.17539626
FZD3	199.096872	4	0 0.16861995
ELOVL6	199.034973	4	0 0.16732962
MIAT	198.731089	4	0 0.07418901
SIRPA	198.676759	4	0 0.15664969
SOS1	198.418036	4	0 0.14438112
NIM1K	197.842837	4	0 0.12033471
GRIN1	197.082783	4	0 0.12700022
TMBIM6	196.752001	4	0 0.21189608
CATSPER2	196.473416	4	0 0.08583365
LMO7	196.367956	4	0 0.17677907
TMEM161B-	196.303729	4	0 0.10378397

SPRED1	196.086379	4	0 0.14429442
NR6A1	196.011035	4	0 0.14282538
CFL1	195.939087	4	0 0.30753071
DZIP3	195.721873	4	0 0.12687341
SGSM1	195.685892	4	0 0.13886728
BBX	195.585272	4	0 0.13427742
RB1	195.429803	4	0 0.1828056
G3BP2	195.123938	4	0 0.16448982
FER	195.046772	4	0 0.09969117
TTC21B	193.703089	4	0 0.0940459
PPA2	193.524846	4	0 0.08183893
TFDP2	193.291976	4	0 0.18511179
NLGN4X	192.275168	4	0 0.10117639
FAM49B	192.067779	4	0 0.14416441
UNC79	191.834947	4	0 0.07120281
CLIP3	190.521268	4	0 0.2152924
CHCHD3	190.116395	4	0 0.06705895
AC008691.1	190.099128	4	0 0.56469176
LUZP2	190.010382	4	0 0.28640636
SELENOW	189.976235	4	0 0.23560863
METTL15	189.810279	4	0 0.11831951
ATP1B3	189.661524	4	0 0.215991
XPR1	189.426655	4	0 0.0759231
RALGPS1	189.381852	4	0 0.12314059
PKM	189.228534	4	0 0.16960821
AC105402.3	188.766086	4	0 0.22001733
ERBB4	188.425948	4	0 0.1597817
SLC39A10	188.285518	4	0 0.2259615
NAALADL2	187.481404	4	0 0.33977275
DENND5B	186.18742	4	0 0.11666686
ATP6V1B2	185.042175	4	0 0.16396307
ERBIN	184.82887	4	0 0.20578412
ZNF518A	184.64946	4	0 0.18343513
MAP1A	184.544784	4	0 0.21459649
SH3KBP1	184.495548	4	0 0.11799797
PDXK	184.463801	4	0 0.09068295
NISCH	184.060726	4	0 0.17324097
UVRAG	183.893558	4	0 0.12808326
PRKAR1B	183.703393	4	0 0.12382947
KIAA0825	183.351382	4	0 0.0813654
SLC16A7	182.558148	4	0 0.09597863
SPTBN4	181.638113	4	0 0.08915787
AGFG1	180.938871	4	0 0.14573162

ANO10	180.815286	4	0 0.18508451
MEF2C-AS1	180.386742	4	0 0.19131709
CDON	180.247312	4	0 0.25033905
CLVS2	180.104189	4	0 0.1545994
MCF2L	180.050859	4	0 0.08905081
PKIA	179.86967	4	0 0.11882145
TTC14	179.482378	4	0 0.11333179
NSD2	178.939785	4	0 0.13994647
PJA2	178.841814	4	0 0.147908
SH3PXD2A	178.76848	4	0 0.14230374
PREPL	178.637686	4	0 0.11422635
FAM172A	178.382535	4	0 0.09665029
TRIM33	178.292055	4	0 0.09130748
ELMOD1	178.191596	4	0 0.07179054
PPARGC1A	178.064137	4	0 0.29698594
CACNG8	177.613212	4	0 0.14417384
SNED1	176.698145	4	0 0.16529686
CDR2	176.217918	4	0 0.23220483
SCAI	175.712793	4	0 0.11118808
AKAP11	175.662657	4	0 0.13592329
PCMTD1	175.541125	4	0 0.10027991
RNPC3	175.293466	4	0 0.20165646
DLGAP3	175.214354	4	0 0.12684443
KIF5C	175.103908	4	0 0.07142709
MROH1	174.994108	4	0 0.17647488
C1orf21	174.495408	4	0 0.12249514
STAG1	174.479021	4	0 0.12465894
ADCY9	174.38623	4	0 0.17706835
ULK2	173.837496	4	0 0.13227068
TNKS	173.650424	4	0 0.10848576
RSPO2	173.524072	4	0 0.38582627
ABR	173.107808	4	0 0.07192309
SATB2	172.221205	4	0 0.18635764
ANKS1A	172.164696	4	0 0.25927698
CASK	171.526518	4	0 0.13706129
CRELD1	171.519501	4	0 0.08758262
CHD2	170.555046	4	0 0.16009105
DOCK7	170.380565	4	0 0.16498205
NNT	170.339624	4	0 0.12429501
KCNB1	170.075923	4	0 0.10094015
MPHOSPH8	169.938779	4	0 0.09061633
HNRNPU	169.484523	4	0 0.11013026
ZDHHC11B	169.44822	4	0 0.17039729

HGSNAT	169.131655	4	0 0.12930593
GRAMD1B	169.087533	4	0 0.07993445
GPR155	168.797622	4	0 0.12773026
PPP1R9A	168.154484	4	0 0.1429964
ZNF365	168.106954	4	0 0.10944297
TCF20	168.079287	4	0 0.15341241
TPST1	168.015007	4	0 0.17343327
REEP1	167.681056	4	0 0.1096628
MTX2	167.126423	4	0 0.1262186
NCOA2	166.634855	4	0 0.08656429
PNISR	166.293377	4	0 0.10472584
ARFGEF2	166.21005	4	0 0.14603513
NCEH1	165.929925	4	0 0.11852528
SLC25A36	165.854309	4	0 0.20443351
SLC38A6	164.937854	4	0 0.20283574
SNX32	164.912771	4	0 0.12637008
ARPP21	164.811095	4	0 0.08005108
CLSTN3	164.080547	4	0 0.10633837
BIN1	163.589863	4	0 0.13335877
GTDC1	163.584515	4	0 0.14781586
ATG5	163.407066	4	0 0.16527159
SACS	162.881377	4	0 0.11294242
MAN1A2	162.875003	4	0 0.06076676
NDUFS1	162.842679	4	0 0.13224588
SORL1	162.639894	4	0 0.08155399
MGAT5	161.919393	4	0 0.14854862
PHTF2	161.91612	4	0 0.09546314
ZNF407	161.852782	4	0 0.16177724
HIC2	161.659363	4	0 0.13265347
SNCA	161.159269	4	0 0.17803457
UGGT2	161.126349	4	0 0.05838155
GFOD1	161.077208	4	0 0.05688536
MIR646HG	161.07038	4	0 0.36597582
DDX17	161.067646	4	0 0.11077691
OPTN	160.605944	4	0 0.17652651
FRYL	160.40457	4	0 0.15080588
SLC16A1-AS1	160.303093	4	0 0.13933168
PLEKHA6	159.96251	4	0 0.11419206
MAP3K7	159.758241	4	0 0.11937414
CSMD2	159.306968	4	0 0.12045359
PRR16	159.286626	4	0 0.14303308
ECPAS	159.228321	4	0 0.0982297
FAM222B	158.932576	4	0 0.15617563

BAZ2B	158.636645	4	0 0.11115202
SH3D19	158.502279	4	0 0.09611878
ABHD18	158.450174	4	0 0.12558302
PRKCB	158.409673	4	0 0.05618568
FGFR1OP2	158.002142	4	0 0.08688695
FAM66D	157.773636	4	0 0.13246289
NSF	157.344136	4	0 0.08460212
RBM26	157.331612	4	0 0.06880805
DLG1	157.314008	4	0 0.1356947
BEX3	156.761466	4	0 0.20238624
HSP90B1	156.658589	4	0 0.23219414
FXVD7	156.573519	4	0 0.1795394
PPP1R12B	156.092008	4	0 0.13137959
KDM6A	155.718858	4	0 0.16522977
NDFIP2	155.368474	4	0 0.20582948
PRICKLE1	155.18196	4	0 0.07314232
RPS6KA3	155.043782	4	0 0.15849497
FBN1	155.007175	4	0 0.13491621
ISPD	154.926992	4	0 0.11747418
GPI	154.843526	4	0 0.16452715
MTMR12	154.560876	4	0 0.13484306
TNRC6C	154.502127	4	0 0.08139888
TCAF1	153.776583	4	0 0.11152151
BRAF	153.479867	4	0 0.06971414
LMTK2	153.258218	4	0 0.14309958
TTC37	153.118915	4	0 0.12178088
AP2M1	152.983256	4	0 0.21653631
SIL1	152.37669	4	0 0.13746478
NLGN4Y	152.296954	4	0 0.15701909
AGAP3	151.758429	4	0 0.06800198
FBXO16	151.705408	4	0 0.14591192
CA11	151.551395	4	0 0.13418894
CSNK1A1	151.031917	4	0 0.10609345
SMG1	150.856003	4	0 0.11768168
GABRB2	150.641969	4	0 0.06400776
NLN	150.240111	4	0 0.1642958
MAPK14	150.127307	4	0 0.07501708
LDB2	150.126188	4	0 0.08166316
TUBB4A	150.086064	4	0 0.2753724
UBR3	149.949338	4	0 0.07420753
FAM182B	149.737253	4	0 0.08241357
ARHGAP5	149.584205	4	0 0.08217659
MTCH1	149.474441	4	0 0.31053965

GUCY1B1	149.089793	4	0 0.25311749
PIK3CB	148.690904	4	0 0.08832302
PTPN2	148.56586	4	0 0.10555438
RBM25	148.436403	4	0 0.0856401
PHIP	148.264425	4	0 0.16930354
SFXN5	148.011901	4	0 0.08857688
NBEAL1	147.856104	4	0 0.09371982
LIPE-AS1	147.650688	4	0 0.1239524
AC087280.2	147.436291	4	0 0.39626092
4-Mar	147.071578	4	0 0.21982175
SYT16	147.048223	4	0 0.0893864
SARAF	146.479749	4	0 0.25833591
FTL	146.295636	4	0 0.29412758
C20orf194	145.774717	4	0 0.06973914
C9orf3	145.635705	4	0 0.10670783
GABRA4	145.599657	4	0 0.14875175
ZNF532	145.501313	4	0 0.09179425
PTBP2	145.321776	4	0 0.13897158
CLIP1	144.788678	4	0 0.1187107
DDHD1	144.739037	4	0 0.0937389
CAP2	144.61867	4	0 0.12790978
SCRN1	144.565254	4	0 0.09508841
MVB12B	144.486682	4	0 0.13989779
ICE1	144.460816	4	0 0.13743065
AMMECR1	144.295841	4	0 0.14743588
SCN2A	144.139283	4	0 0.09166817
PHKB	143.710525	4	0 0.20234222
MYSM1	143.458569	4	0 0.10258513
N4BP2L1	142.919706	4	0 0.20943151
AFDN	142.816476	4	0 0.14614017
PHF21A	142.672272	4	0 0.15816886
EXOC2	142.520806	4	0 0.12768016
MAP6	142.246382	4	0 0.1398138
KLHL3	142.041643	4	0 0.11015629
ADARB1	141.878027	4	0 0.23684275
SLC4A8	141.726514	4	0 0.23964746
CCDC92	140.848939	4	0 0.09418938
BTA1F1	140.328233	4	0 0.14247654
TNK2	139.822085	4	0 0.18300836
SCFD1	139.300499	4	0 0.11709573
EPB41L1	138.765815	4	0 0.07143623
FAM171B	138.265385	4	0 0.21441429
MSH2	138.206755	4	0 0.1764249

PRKCZ	138.188143	4	0	0.079785
ARID4A	138.180914	4	0	0.14151881
UBE2O	137.667735	4	0	0.1927701
FBXL17	137.592989	4	0	0.08215216
RNF24	137.30448	4	0	0.12279598
CNNM1	137.025959	4	0	0.08092706
DMTF1	136.996166	4	0	0.12108539
MINDY3	136.62185	4	0	0.09288179
SPTBN1	136.422586	4	0	0.07351448
USP24	135.895741	4	0	0.11383646
JPH4	135.823602	4	0	0.12775913
KATNAL1	135.636414	4	0	0.15853186
ATXN10	135.233896	4	0	0.06669755
ADAM10	134.997848	4	0	0.27303884
ATP1A1	134.731713	4	0	0.11170526
CCPG1	134.549728	4	0	0.08402941
AL359710.1	134.270474	4	0	0.22995122
ARGLU1	134.256651	4	0	0.15676004
RAD9A	133.380248	4	0	0.10366632
SPIDR	133.084977	4	0	0.09343409
JPX	132.923682	4	0	0.20936225
DYNLL1	132.571758	4	0	0.2691725
NDUFA4	132.360693	4	0	0.21156118
ZRANB3	132.340981	4	0	0.14764456
VPS53	132.32078	4	0	0.08634608
GDI1	132.128746	4	0	0.14477977
NOL10	131.799558	4	0	0.12732013
LENG8	131.735476	4	0	0.13130393
B4GALNT3	131.480964	4	0	0.17800724
AC092378.1	131.354669	4	0	0.13267858
WDPCP	131.172242	4	0	0.14917053
CASTOR3	131.095836	4	0	0.10128985
SLC13A3	130.945248	4	0	0.15622369
LINC00513	130.492223	4	0	0.27054092
INTU	130.404803	4	0	0.11372865
UTY	130.374875	4	0	0.22728612
SLC12A5	130.336456	4	0	0.16148258
CELF1	129.866193	4	0	0.04507136
KMT2A	129.840512	4	0	0.10628765
MDH1	129.701716	4	0	0.17527493
CENPP	129.503832	4	0	0.12604296
RGS4	129.336567	4	0	0.18260822
C3orf58	129.016067	4	0	0.17115607

STPG2	128.627536	4	0 0.26541194
RTN3	128.397699	4	0 0.10342349
UBR1	127.887473	4	0 0.07635873
ELMO1	127.84676	4	0 0.11516398
MICU3	127.752878	4	0 0.05319453
KIF5A	127.407088	4	0 0.13981365
ZNF91	127.352245	4	0 0.12337643
CLASP2	127.069156	4	0 0.09160776
JMJD1C	126.922385	4	0 0.05820901
GLS	126.855684	4	0 0.0472454
ARHGAP44	126.781743	4	0 0.09223449
GABRA1	126.746129	4	0 0.11945778
KCNC2	126.03444	4	0 0.1235339
ABCC8	125.674627	4	0 0.165252
C11orf49	125.550968	4	0 0.08795412
SMAP2	125.009292	4	0 0.21315752
OCIAD1	124.945749	4	0 0.13107655
ATG2B	124.716017	4	0 0.11696017
SLC25A12	124.584998	4	0 0.0850159
ZNF706	124.516658	4	0 0.17195992
NUDCD3	124.310707	4	0 0.12966217
AL357153.2	124.150633	4	0 0.14995844
PTPN5	124.11938	4	0 0.15836021
HOOK3	123.744278	4	0 0.10486193
YLPM1	123.458759	4	0 0.10811617
SNRNP70	123.254598	4	0 0.05660526
OPHN1	123.19658	4	0 0.15946166
ADK	122.84533	4	0 0.07951774
INPP4A	122.460443	4	0 0.08543479
CSPP1	122.356367	4	0 0.12589023
DYNC1H1	122.243684	4	0 0.05331571
LCOR	121.881165	4	0 0.10033857
INSR	121.49064	4	0 0.09159444
SGMS1	121.349574	4	0 0.07015485
TOM1L2	121.161452	4	0 0.06123927
ARMC9	120.998951	4	0 0.14001326
LUC7L	120.478279	4	0 0.09325547
HSPH1	120.400759	4	0 0.17773705
ZBTB38	120.375275	4	0 0.09729717
TERF2IP	119.889968	4	0 0.22737302
ELP4	119.735898	4	0 0.10882809
TRANK1	119.343958	4	0 0.2015688
BCLAF1	119.29182	4	0 0.12547548

MTCL1	119.027681	4	0 0.13278411
CSMD3	118.836577	4	0 0.09662215
ZER1	118.734333	4	0 0.07184542
ANTXR1	118.31789	4	0 0.16237331
LPIN1	117.520757	4	0 0.13910796
CBFA2T2	117.122301	4	0 0.09466034
NAA25	116.852165	4	0 0.10048271
SHPRH	116.667001	4	0 0.09227146
SPG7	116.530194	4	0 0.12339904
VPS13C	116.393193	4	0 0.07622228
NT5C2	116.286122	4	0 0.11145991
RTN4RL1	116.095578	4	0 0.13282927
TNKS2	116.008577	4	0 0.15860179
PHLPP2	115.916063	4	0 0.14805421
CAPZB	115.655218	4	0 0.09229033
2-Sep	115.089263	4	0 0.11386894
SESTD1	114.781237	4	0 0.122202
CRMP1	114.5195	4	0 0.12224565
FAM168A	114.461008	4	0 0.08438364
RAB28	114.455266	4	0 0.10796016
TUSC3	114.381451	4	0 0.17092389
SFSWAP	114.005736	4	0 0.05770807
RANBP9	113.789969	4	0 0.10815843
CCDC102B	113.680571	4	0 0.12090787
RASGEF1B	113.656563	4	0 0.06779271
CNKSR2	113.633782	4	0 0.08377088
ZBTB8OS	113.141837	4	0 0.13212892
FTH1	113.132072	4	0 0.23848714
VSTM2B	113.090662	4	0 0.25543474
VTI1A	113.055198	4	0 0.06772315
TOP2B	113.048368	4	0 0.21263627
RBFOX2	112.907321	4	0 0.05159816
BMPR1A	112.872332	4	0 0.09553558
KIDINS220	112.862822	4	0 0.10680227
BTBD10	112.541717	4	0 0.07833117
UBE2B	112.052509	4	0 0.1539834
TDRD3	111.723643	4	0 0.12841326
ZDHHC21	111.559922	4	0 0.08563654
DMTN	110.566461	4	0 0.10327353
SCG5	110.372758	4	0 0.19690381
HLF	110.215236	4	0 0.06369626
YWHAH	109.889981	4	0 0.24150991
KLHL24	109.440333	4	0 0.14316207

CLEC16A	108.779343	4	0 0.22285819
UCHL1	108.659821	4	0 0.1379085
CCDC146	108.470762	4	0 0.20739722
DSTN	108.378972	4	0 0.2027748
JARID2	108.261063	4	0 0.14441777
ZNF519	107.912126	4	0 0.15593536
CLCN3	107.906078	4	0 0.07015085
NUTM2A-AS	107.606318	4	0 0.10628282
RYK	107.552404	4	0 0.22643266
DNMT3A	107.350157	4	0 0.0834859
MTDH	107.07619	4	0 0.10171612
EEF1A2	107.07407	4	0 0.13851832
HIBCH	106.968415	4	0 0.10021549
PDE8A	106.855737	4	0 0.29793919
DYNC2LI1	106.692027	4	0 0.13197866
DPYSL2	106.670187	4	0 0.09342057
TBC1D5	106.64793	4	0 0.06893458
ESYT2	106.550788	4	0 0.11908236
GMDS-DT	106.371693	4	0 0.12644513
ADGRB1	106.364123	4	0 0.13422042
TMEM232	106.285213	4	0 0.08960644
BMPR2	106.19133	4	0 0.10446013
IGSF9B	105.981496	4	0 0.07393445
NEFL	105.904552	4	0 0.20017849
TNRC18	105.645533	4	0 0.19655365
AFF4	105.62828	4	0 0.07668152
PRRC2C	105.332529	4	0 0.08916901
TMEM130	105.010354	4	0 0.22262286
POU2F1	104.807192	4	0 0.088655
MCPH1	104.764331	4	0 0.1934111
RNF13	104.412229	4	0 0.10901122
CBR4	104.346137	4	0 0.14894934
SH3YL1	104.256814	4	0 0.09391739
FAM169A	104.094235	4	0 0.116284
GPALPP1	104.02928	4	0 0.07367815
GABBR2	103.893325	4	0 0.05208168
ZNF273	103.667913	4	0 0.13029406
ZMYM2	103.319989	4	0 0.04841953
FAR2	103.148537	4	0 0.22480365
PLEKHM3	102.834913	4	0 0.08935367
DYNC1I2	102.43438	4	0 0.1097486
PNCK	102.261479	4	0 0.19101332
IGSF21	102.202714	4	0 0.25005156

CLSTN1	101.926609	4	0 0.09542673
UBE2H	101.747869	4	0 0.06103927
COA1	101.588277	4	0 0.10557149
INTS6	101.4626	4	0 0.1312834
CDK17	101.053907	4	0 0.16056135
NCOR2	101.041056	4	0 0.11103558
ELF2	100.954005	4	0 0.09015842
CLVS1	100.745252	4	0 0.14893736
HNRNPC	100.665373	4	0 0.14493723
ANKRD36	100.62431	4	0 0.06299177
LARP1B	100.468027	4	0 0.09161669
KCNH1	100.336731	4	0 0.09105837
TMCC1	99.9938835	4	0 0.08351672
KCNQ2	99.6336956	4	0 0.07246369
MAPT	99.1344561	4	0 0.05023818
FUS	98.2653939	4	0 0.12911017
TMEM178A	98.2607489	4	0 0.10534102
MLLT10	98.2295914	4	0 0.06622711
ABLIM2	97.4841903	4	0 0.080975
MALAT1	97.4839676	4	0 0.07737141
RABGAP1	97.3259125	4	0 0.07846626
ICA1L	97.2926125	4	0 0.08132412
MGST3	97.2340163	4	0 0.1096522
GNB5	96.4731725	4	0 0.08836503
CTTN	96.3349677	4	0 0.09831244
GAS7	96.0614368	4	0 0.12362794
LZTS3	96.0269663	4	0 0.14539465
HTR1E	95.9699383	4	0 0.1205958
AC118549.1	95.9391579	4	0 0.11225035
TRIM44	95.2352237	4	0 0.15498473
MYCBP2	95.0560914	4	0 0.07767631
ZNF148	94.8284491	4	0 0.05841207
MAP2K4	94.1946482	4	0 0.04042002
PLEKHA1	94.1644257	4	0 0.09018969
ATL1	93.9674469	4	0 0.10880264
CYFIP2	93.5146116	4	0 0.09613449
FAM135A	93.4906185	4	0 0.09526796
BSN	93.2180317	4	0 0.13829567
PPFIA4	92.9585387	4	0 0.08172649
FAR1	92.538195	4	0 0.10253851
ZFYVE28	92.4667036	4	0 0.13444545
SRGAP3	92.271364	4	0 0.0878236
RALGAPA2	92.0757411	4	0 0.10129572

WDR7	91.9022422	4	0 0.05723846
CDK8	91.5400917	4	0 0.12190966
NQO2	91.3718362	4	0 0.1061132
LRP4	91.2921627	4	0 0.24450947
SPTAN1	91.2586247	4	0 0.04800711
LINC00662	91.2038663	4	0 0.15871007
PIK3C3	91.1567368	4	0 0.13595326
OTUD7A	91.0474794	4	0 0.03270653
HNRNPA2B1	90.9905695	4	0 0.13033773
SNX10	90.9844723	4	0 0.11353786
ARNTL2	90.9481857	4	0 0.17211322
ATCAY	90.853591	4	0 0.09966896
AJAP1	90.7833882	4	0 0.08471031
RBM5	90.5760628	4	0 0.16872654
BNIP3L	90.2169067	4	0 0.11082435
TBC1D19	90.2030884	4	0 0.11281741
PPP1R12A	90.0672917	4	0 0.07357803
ZDBF2	90.0565812	4	0 0.09816156
CHD5	90.0230559	4	0 0.07693139
SCAMP5	90.0119534	4	0 0.10662182
TTLL7	89.5694261	4	0 0.0716672
DNM1	89.5263699	4	0 0.05556636
MRPL41	89.3487879	4	0 0.07708664
UBE2D3	89.3272134	4	0 0.08139888
ZCCHC7	89.1326931	4	0 0.08139871
N4BP2L2	89.0042025	4	0 0.13284428
TAGLN3	88.9679345	4	0 0.15277303
FNBP1	88.866001	4	0 0.07235114
MOSMO	88.5929989	4	0 0.09775965
ZHX3	88.4635715	4	0 0.08507455
RERE	88.0750469	4	0 0.0542483
SPRED2	88.0719684	4	0 0.11307498
ZSWIM5	87.9486429	4	0 0.10966371
SSX2IP	87.9387385	4	0 0.10077387
HMGB1	87.3491673	4	0 0.07906846
IBTK	87.1824083	4	0 0.09128096
TTN-AS1	87.0201686	4	0 0.05917233
RPTOR	87.0169774	4	0 0.08831099
SLC22A17	86.2939955	4	0 0.12217099
KDM4B	86.1579301	4	0 0.09545856
CIRBP	85.953664	4	0 0.18430107
MTHFD1L	85.7844168	4	0 0.16963327
AC079447.1	85.3845728	4	0 0.09088535

TASP1	85.0567097	4	0	0.0890324
IFT43	85.0199732	4	0	0.14118364
RNF180	84.5508513	4	0	0.10170703
RUFY3	84.5466634	4	0	0.05843847
CCNT2-AS1	84.5042842	4	0	0.10950017
AP1G2	84.2917558	4	0	0.10324818
DIP2C	83.9365449	4	0	0.03011144
LRRC37A3	83.7664786	4	0	0.08483092
THADA	83.2939211	4	0	0.06826215
ABL2	83.2142364	4	0	0.05621852
FAM49A	83.1772939	4	0	0.08126011
TBRG1	83.0965507	4	0	0.06169963
EVL	82.6172813	4	0	0.05127896
SGCE	82.3069683	4	1.11E-16	0.15808916
ETNK1	82.2598077	4	1.11E-16	0.08698769
EPC2	81.6382469	4	1.11E-16	0.10095053
CPE	81.3856986	4	1.11E-16	0.09025323
ZNF248	81.3658498	4	1.11E-16	0.12368801
WDR33	81.3218629	4	1.11E-16	0.12431261
KDM2A	81.1571734	4	1.11E-16	0.04304696
GNAO1	81.1360262	4	1.11E-16	0.10235472
ARID4B	80.9535092	4	1.11E-16	0.03577654
VAPA	80.8783191	4	1.11E-16	0.13098773
CABIN1	80.8117605	4	1.11E-16	0.07202316
NUTM2B-AS	80.6382348	4	1.11E-16	0.06556042
HDGFL3	80.4932552	4	1.11E-16	0.17343167
HERC2	80.4415144	4	1.11E-16	0.07615033
PCCA	80.3211436	4	1.11E-16	0.15884941
TBC1D22A	79.9787761	4	2.22E-16	0.12149783
TFCP2	79.5594126	4	2.22E-16	0.09494062
ANKRD36C	79.3520797	4	2.22E-16	0.05516571
PTPRN	79.1529724	4	2.22E-16	0.1012255
SRSF11	78.9137132	4	3.33E-16	0.05874269
ADGRB2	78.81027	4	3.33E-16	0.17118276
NAP1L1	78.7162123	4	3.33E-16	0.05756247
WIPF2	78.1783947	4	4.44E-16	0.07851617
NRDC	78.1392985	4	4.44E-16	0.09255774
DZIP1	78.1020891	4	4.44E-16	0.04927695
MICU1	77.8205888	4	5.55E-16	0.06229428
FAM184A	77.3181173	4	6.66E-16	0.24964901
RNGTT	76.9899744	4	7.77E-16	0.10775576
C2CD5	76.911989	4	7.77E-16	0.11976015
KIZ	76.6257033	4	8.88E-16	0.17257638

XRCC5	76.4438292	4	9.99E-16	0.1764413
NSMCE2	76.4354986	4	9.99E-16	0.10292533
TRIP12	76.4317802	4	9.99E-16	0.07046389
KMT2E	76.1361988	4	1.11E-15	0.08825935
TRA2A	75.7544555	4	1.33E-15	0.07095467
PUM1	75.637092	4	1.44E-15	0.14523157
SRSF5	75.5226775	4	1.55E-15	0.08200816
VPS13B	75.5038784	4	1.55E-15	0.04537884
SENP6	75.0808235	4	1.89E-15	0.12995664
STAU2	74.9950108	4	2.00E-15	0.08743008
MOK	74.9467701	4	2.00E-15	0.11524135
AP3B2	74.8796409	4	2.11E-15	0.09176792
ZBTB18	74.5839085	4	2.44E-15	0.25348113
RAB3GAP1	74.5534826	4	2.44E-15	0.08605035
PHF3	74.3712619	4	2.66E-15	0.04729999
ITSN2	74.1399806	4	3.00E-15	0.08426063
TCF25	74.1393028	4	3.00E-15	0.04714527
ZRANB2	74.0470261	4	3.22E-15	0.15368634
TNRC6A	74.0162793	4	3.22E-15	0.06300458
ATRN	73.7825543	4	3.55E-15	0.0689302
WDR70	73.7703908	4	3.66E-15	0.06444794
ARHGEF9	73.6890864	4	3.77E-15	0.14562514
KDM5B	73.5417895	4	4.11E-15	0.09861303
FEZ2	73.5146422	4	4.11E-15	0.08122008
TMEM245	73.4797541	4	4.22E-15	0.15031325
PPM1B	73.444248	4	4.22E-15	0.08839627
PPHLN1	73.2281131	4	4.77E-15	0.09076289
SCLT1	72.9627792	4	5.33E-15	0.06499502
CAMSAP2	72.6456643	4	6.22E-15	0.05207809
SPIRE1	72.6085749	4	6.33E-15	0.08050393
TMOD2	72.51903	4	6.66E-15	0.04266749
ABCA5	72.2933418	4	7.44E-15	0.05078913
YWHAE	71.9895727	4	8.66E-15	0.12776252
SIMC1	71.965414	4	8.77E-15	0.08634377
MAP3K2	71.9343722	4	8.88E-15	0.08639837
ZC3H6	71.8701959	4	9.10E-15	0.12169241
RSF1	71.8435641	4	9.21E-15	0.11921754
PPP1R16B	71.7140062	4	9.88E-15	0.05174555
RUNDC3B	71.6545013	4	1.01E-14	0.07852152
BEND6	71.5035786	4	1.09E-14	0.26622585
CC2D1A	71.1303386	4	1.31E-14	0.11027484
KPNA3	71.1124753	4	1.32E-14	0.11228308
MICAL3	71.1013019	4	1.33E-14	0.03595076

CSTF3	70.9614123	4	1.42E-14	0.18294867
SYTL2	70.7032774	4	1.61E-14	0.12514437
SLC20A2	70.5954924	4	1.70E-14	0.08034648
MYEF2	70.5505289	4	1.73E-14	0.11881023
KPNB1	69.9194468	4	2.36E-14	0.09485434
FAM13B	69.8736192	4	2.41E-14	0.07091582
DNAJC6	69.8505491	4	2.44E-14	0.06535706
HUWE1	69.4007427	4	3.04E-14	0.13815409
FAF1	69.2416812	4	3.29E-14	0.04805414
TRAPPC12	69.1333858	4	3.46E-14	0.14790417
CRTC1	69.093671	4	3.53E-14	0.08792594
TENT2	69.0614119	4	3.59E-14	0.05788789
PCSK7	68.7734173	4	4.12E-14	0.09772873
AUH	68.6211594	4	4.44E-14	0.1159101
PACSLN1	67.4873541	4	7.69E-14	0.13011739
COL19A1	67.4740944	4	7.75E-14	0.06839403
CEP350	67.4508734	4	7.83E-14	0.06730709
PPIP5K1	66.8806783	4	1.03E-13	0.05662433
LRCH3	66.8091935	4	1.07E-13	0.09104464
SFPQ	66.7225552	4	1.12E-13	0.14290805
MYO5A	66.5302981	4	1.22E-13	0.06069779
SCMH1	66.476247	4	1.26E-13	0.05316684
HECTD4	66.3898819	4	1.31E-13	0.04546386
MTA3	65.9683264	4	1.61E-13	0.10271858
ITCH	65.716904	4	1.82E-13	0.07465059
NCOR1	65.6694579	4	1.86E-13	0.08376376
DYNC2H1	65.6661264	4	1.86E-13	0.08962282
LONP2	65.6512127	4	1.88E-13	0.13019632
MAGED1	65.4996579	4	2.02E-13	0.0916016
RB1CC1	65.4077925	4	2.11E-13	0.0674235
FTO	65.3049483	4	2.22E-13	0.05658851
BDH1	65.2927373	4	2.23E-13	0.12513699
NPEPPS	65.2601146	4	2.27E-13	0.06205153
ZNF131	65.1999836	4	2.33E-13	0.04755039
LINC00599	65.1793569	4	2.36E-13	0.10075668
ACSL3	65.1482911	4	2.39E-13	0.09047331
HECTD1	65.096017	4	2.46E-13	0.08858547
PRKRIP1	64.7570551	4	2.90E-13	0.08588912
CHM	64.6875687	4	2.99E-13	0.09175333
PHC3	64.6163528	4	3.10E-13	0.10725368
LINC01266	64.5265013	4	3.24E-13	0.48844352
PCM1	64.4345092	4	3.39E-13	0.06441263
KANSL1	64.4122246	4	3.42E-13	0.06687999

AKAP9	64.3066934	4	3.60E-13	0.06534122
EP400	64.0503003	4	4.08E-13	0.11963141
APBA1	64.0231718	4	4.13E-13	0.10458328
RAB7A	64.0204332	4	4.14E-13	0.10161013
CLOCK	63.9814857	4	4.22E-13	0.04713356
MAPKAP1	63.9534413	4	4.27E-13	0.06750944
FBXO33	63.9455758	4	4.29E-13	0.05218584
AL445433.2	63.9002932	4	4.39E-13	0.12838904
SMCHD1	63.8005611	4	4.60E-13	0.06568551
CCDC6	63.4125208	4	5.56E-13	0.11395551
MAPKBP1	63.1557477	4	6.29E-13	0.08578442
KDM4C	63.1332384	4	6.36E-13	0.0822881
DPH6	63.0980758	4	6.47E-13	0.14794768
RSRC1	62.862247	4	7.25E-13	0.07550106
FAM66C	62.6368064	4	8.09E-13	0.1166253
KPNA1	62.5746507	4	8.34E-13	0.08175591
TBCD	62.3991935	4	9.08E-13	0.07658912
PRKN	62.3152603	4	9.46E-13	0.06326411
GCC2	62.2630792	4	9.70E-13	0.05325998
IRAK1BP1	62.1780075	4	1.01E-12	0.05199461
ATXN2	61.9922021	4	1.11E-12	0.06302292
PICALM	61.599767	4	1.34E-12	0.06930517
TAOK3	60.7615997	4	2.01E-12	0.0783888
REV3L	60.653985	4	2.11E-12	0.05323774
JAM3	59.9887905	4	2.92E-12	0.08392288
ATP6V0A1	59.6763787	4	3.39E-12	0.04107218
DENND4A	59.5342659	4	3.63E-12	0.04862044
SLC41A2	59.4892093	4	3.71E-12	0.08153326
KAT6A	58.9819821	4	4.75E-12	0.07303182
KIAA1109	58.7905212	4	5.21E-12	0.07637195
MFSD6	58.6905127	4	5.47E-12	0.11757821
KLHDC10	58.5059551	4	5.98E-12	0.13169986
LRRTM3	58.4833873	4	6.04E-12	0.06531651
TULP4	57.7757354	4	8.50E-12	0.06753605
TET3	57.745113	4	8.63E-12	0.12427079
HDAC8	57.4995763	4	9.72E-12	0.08859285
ULK4	57.3533247	4	1.04E-11	0.09956246
ELAVL3	57.2899104	4	1.08E-11	0.07486084
NSMAF	57.2015658	4	1.12E-11	0.0656267
VPS45	57.1009032	4	1.18E-11	0.08743157
PTPRA	56.9840129	4	1.25E-11	0.09146394
CMIP	56.8883642	4	1.31E-11	0.06732426
SMARCAD1	56.6825545	4	1.44E-11	0.04005871

MARK3	56.4477887	4	1.62E-11	0.065236
RALGPS2	56.3108215	4	1.73E-11	0.10917612
NAPB	56.235095	4	1.79E-11	0.14377882
SPRY4-AS1	56.1092973	4	1.90E-11	0.22619499
WDR60	55.9015682	4	2.10E-11	0.0703344
PLXNA4	55.5963088	4	2.44E-11	0.10793935
SNX9	55.3834017	4	2.70E-11	0.11397165
GGT7	55.2973239	4	2.81E-11	0.1396195
RUNDC3A	55.2966993	4	2.82E-11	0.0972645
SUZ12	55.2019789	4	2.95E-11	0.0480179
PPP6R3	55.0190387	4	3.22E-11	0.10153854
ITSN1	54.70771	4	3.74E-11	0.07309486
NFKB1	54.6478871	4	3.85E-11	0.10922643
CSRNP3	54.5967571	4	3.95E-11	0.09614684
TAX1BP1	54.4235592	4	4.29E-11	0.06599543
USP15	54.3230034	4	4.50E-11	0.09872228
PRRC2B	54.3004187	4	4.55E-11	0.08590719
KIFAP3	54.266289	4	4.63E-11	0.07122526
FLG-AS1	54.2514544	4	4.66E-11	0.1584394
DYRK1A	54.0865351	4	5.05E-11	0.0912126
ZNF207	54.0829152	4	5.06E-11	0.10117473
FBXO21	53.9876799	4	5.29E-11	0.05917173
ADGRL1	53.2191539	4	7.67E-11	0.03411087
MICU2	52.9184917	4	8.86E-11	0.11214837
MUC20-OT1	52.8982904	4	8.95E-11	0.07111525
RICTOR	52.7868207	4	9.44E-11	0.03148637
ARHGEF12	52.7208464	4	9.75E-11	0.10196282
NDFIP1	52.5980741	4	1.03E-10	0.1052653
LMBRD1	52.5141244	4	1.08E-10	0.14694435
ZNF106	52.0136884	4	1.37E-10	0.08832392
PPP3CB	51.9258577	4	1.43E-10	0.05783644
COMMD10	51.8920643	4	1.45E-10	0.11048875
UBE3C	51.8728362	4	1.47E-10	0.05397326
MGA	51.6863814	4	1.60E-10	0.1389613
NSD1	51.0945348	4	2.13E-10	0.04719815
SYNJ1	50.81309	4	2.44E-10	0.05143412
PSIP1	50.794057	4	2.46E-10	0.10134245
USP9Y	50.3522332	4	3.05E-10	0.18515849
PUM2	50.1771382	4	3.32E-10	0.08472088
TSC22D2	50.1234003	4	3.40E-10	0.07758666
SLMAP	49.9961822	4	3.62E-10	0.09654903
MON2	49.9605577	4	3.68E-10	0.04881298
RAB11FIP4	49.9152318	4	3.76E-10	0.09674963

CNNM2	49.8578632	4	3.87E-10	0.10069189
AP2B1	49.3913753	4	4.84E-10	0.04242592
ACTR2	49.3701953	4	4.89E-10	0.0625135
TP53BP1	49.2321991	4	5.22E-10	0.09872951
IGSF8	48.9927556	4	5.86E-10	0.19720751
EFCAB2	48.6211997	4	7.00E-10	0.05951036
NRG2	48.3470849	4	7.99E-10	0.04842121
GPBP1	48.2949555	4	8.19E-10	0.09531281
PCGF5	48.2800035	4	8.25E-10	0.08525356
CDC42BPA	48.1392896	4	8.83E-10	0.04451242
PPM1K	47.8768588	4	1.00E-09	0.08466644
EHMT1	47.5524901	4	1.17E-09	0.06151004
AP2A2	47.5511995	4	1.17E-09	0.08190527
TRAK2	47.4969291	4	1.20E-09	0.05000083
DGKZ	46.9411136	4	1.57E-09	0.03358425
ANKRD17	46.4953902	4	1.94E-09	0.04113548
POGZ	45.1819782	4	3.64E-09	0.05143035
PBRM1	45.0919478	4	3.80E-09	0.07379578
DANT2	45.0415322	4	3.90E-09	0.06489776
AVL9	44.7155461	4	4.56E-09	0.06355642
RC3H1	44.6610104	4	4.68E-09	0.07843093
LMBR1	44.4658146	4	5.13E-09	0.11281665
PTPRJ	44.1368988	4	6.01E-09	0.05273016
GOLGB1	43.8563701	4	6.87E-09	0.0682089
RBPJ	43.7633661	4	7.18E-09	0.13548115
RANBP2	43.7135188	4	7.36E-09	0.09015883
STX18-AS1	43.6650012	4	7.53E-09	0.04241231
MAP4	43.587014	4	7.82E-09	0.05178167
UBE2K	43.5183398	4	8.08E-09	0.08756965
AMBRA1	43.4064302	4	8.52E-09	0.03493303
INO80D	43.398021	4	8.56E-09	0.06118624
MPHOSPH9	43.3252112	4	8.86E-09	0.08279227
PHF20L1	43.2897519	4	9.01E-09	0.04791385
LRFN5	42.7708549	4	1.15E-08	0.05077663
TAF1D	42.6891791	4	1.20E-08	0.0345168
FAM85B	42.4987355	4	1.31E-08	0.04612091
TOP1	42.078019	4	1.61E-08	0.05704869
AC097103.2	42.0107424	4	1.66E-08	0.10523034
PHF14	41.9810486	4	1.68E-08	0.10069573
PAFAH1B1	41.9457708	4	1.71E-08	0.06421298
IPO9	41.9284081	4	1.73E-08	0.11169196
CRTC3	41.6947937	4	1.93E-08	0.07914812
WASHC1	41.5702464	4	2.05E-08	0.06238685

KIF21A	41.5491056	4	2.07E-08	0.06385265
PAN3	41.4533385	4	2.17E-08	0.07509204
RAB6A	41.3285009	4	2.30E-08	0.04416924
RBM39	41.2218985	4	2.42E-08	0.09274614
CDKAL1	40.6345174	4	3.20E-08	0.05995617
U2SURP	40.4624929	4	3.47E-08	0.11345611
GATAD2B	40.4100883	4	3.56E-08	0.05286785
MSRA	40.3373004	4	3.69E-08	0.03764088
ANKRD12	40.3025779	4	3.75E-08	0.06205511
GNB1	40.3018812	4	3.75E-08	0.05904258
TMEM131	40.2778148	4	3.79E-08	0.04389697
HMBOX1	40.2663928	4	3.81E-08	0.04429099
APLP2	40.2634343	4	3.82E-08	0.05814824
CNOT2	40.234719	4	3.87E-08	0.0765212
ORC4	40.0032718	4	4.32E-08	0.09431994
KIF1A	39.9652174	4	4.40E-08	0.05848474
SNAP25-AS1	39.7182119	4	4.95E-08	0.09577607
HP1BP3	39.6435156	4	5.13E-08	0.10598599
SERGEF	39.3975788	4	5.77E-08	0.05644122
MIB1	39.3408043	4	5.92E-08	0.04567061
FOXJ3	39.3361631	4	5.94E-08	0.04412576
CCDC66	39.3010534	4	6.04E-08	0.07086692
CRYL1	38.6784807	4	8.12E-08	0.06243412
MIPOL1	38.4373913	4	9.10E-08	0.07978807
OLA1	38.4177779	4	9.19E-08	0.06335015
DCAF5	38.2779523	4	9.82E-08	0.06774681
PRDM2	38.1770272	4	1.03E-07	0.10343507
FBXO42	38.1465683	4	1.05E-07	0.06925548
KNDC1	38.0677529	4	1.09E-07	0.06842951
GLG1	37.8981126	4	1.18E-07	0.05084999
GTF2I	37.2247868	4	1.62E-07	0.0378837
ATP6V1A	36.9051749	4	1.88E-07	0.04085425
NRF1	36.8839319	4	1.90E-07	0.04519648
ACBD6	36.6591121	4	2.12E-07	0.05224507
RNF216	36.4141835	4	2.38E-07	0.03313054
ADNP	36.4069797	4	2.39E-07	0.08186274
RCOR3	36.2149538	4	2.61E-07	0.10869757
LARP4B	35.9946759	4	2.90E-07	0.06014055
NMD3	35.8576945	4	3.10E-07	0.13964895
CYFIP1	35.7909098	4	3.19E-07	0.07477732
TSPOAP1	35.6823222	4	3.36E-07	0.10874341
SUGP2	35.5957081	4	3.50E-07	0.06367482
LINC00486	35.5726695	4	3.54E-07	0.19431373

TMEM241	35.1437718	4	4.34E-07	0.06370163
OSBP2	34.9409711	4	4.78E-07	0.05197187
SON	34.6002054	4	5.61E-07	0.06046989
DMXL2	34.3484424	4	6.32E-07	0.03798294
P4HTM	33.796951	4	8.20E-07	0.07274989
CORO2B	33.4868197	4	9.49E-07	0.0302273
HCG17	33.4674866	4	9.58E-07	0.06356714
EPC1	33.3567563	4	1.01E-06	0.08560396
PSPC1	33.2643928	4	1.05E-06	0.04692632
ACYP2	33.2557528	4	1.06E-06	0.09051538
TBCK	33.0836653	4	1.15E-06	0.05099392
WDFY3	33.0202508	4	1.18E-06	0.06804993
NSD3	32.7967077	4	1.31E-06	0.04098346
TRPC1	32.7053605	4	1.37E-06	0.02737996
LINC02210-C	32.6218367	4	1.43E-06	0.06244331
ARNTL	32.3231139	4	1.64E-06	0.11815881
TAB2	32.1929465	4	1.75E-06	0.05129331
HSD17B12	32.1127161	4	1.81E-06	0.05243777
NFX1	32.0044837	4	1.91E-06	0.07042307
TTTY14	31.9387264	4	1.97E-06	0.07031853
MORF4L2	31.7424225	4	2.16E-06	0.09450313
CPLANE1	31.5738215	4	2.34E-06	0.0618212
PDXDC1	31.4876986	4	2.43E-06	0.07493993
VMP1	31.4263207	4	2.51E-06	0.10657282
GPATCH2L	31.222284	4	2.76E-06	0.04213106
GOLGA4	31.0119824	4	3.04E-06	0.06769246
GALK2	30.9603411	4	3.12E-06	0.09516502
SUN1	30.9538013	4	3.13E-06	0.09536363
XIST	30.9004776	4	3.21E-06	0.11435728
BOD1L1	30.8471737	4	3.29E-06	0.03667641
PKD2	30.8208636	4	3.33E-06	0.08103044
CEP290	30.7010357	4	3.52E-06	0.06072338
UBXN4	30.6398796	4	3.63E-06	0.05022719
WSB1	30.6298838	4	3.64E-06	0.10063424
KANTR	30.5611226	4	3.76E-06	0.04182806
DOPEY1	30.3910491	4	4.07E-06	0.04942773
KIF1B	30.3217868	4	4.21E-06	0.03545695
ATP9A	30.3021684	4	4.25E-06	0.04215071
DNAJB14	30.2006607	4	4.45E-06	0.08281737
STRN3	30.0826038	4	4.71E-06	0.06270042
RPRD2	30.0324065	4	4.82E-06	0.04591082
CAB39	30.0243939	4	4.84E-06	0.09669277
UBE3A	29.9444403	4	5.02E-06	0.04386326

RABEP1	29.7165189	4	5.59E-06	0.05308322
RAB6B	29.30961	4	6.76E-06	0.09899772
FBXL20	29.1595432	4	7.26E-06	0.04991432
HNRNPDL	28.9239797	4	8.10E-06	0.09100901
KIAA0232	28.799334	4	8.59E-06	0.05049529
ANKIB1	28.7893592	4	8.63E-06	0.04645861
HPRT1	28.6136947	4	9.36E-06	0.0576764
DOCK3	28.5005018	4	9.87E-06	0.02012818
CDC27	28.3680125	4	1.05E-05	0.05546252
DYM	28.2768061	4	1.10E-05	0.04645364
TAF15	28.1919808	4	1.14E-05	0.02402258
RFX7	28.0494286	4	1.22E-05	0.06796917
PSMD1	28.0235103	4	1.23E-05	0.06122167
RNF149	27.9371587	4	1.28E-05	0.04252037
GIGYF2	27.1944558	4	1.82E-05	0.05171968
FBXO11	26.8183136	4	2.16E-05	0.03430005
ZC3H13	26.8141787	4	2.17E-05	0.07003717
MDN1	26.6673734	4	2.32E-05	0.05818671
SPAG9	26.6380142	4	2.35E-05	0.02760108
ATF6	26.6350464	4	2.36E-05	0.06862034
DDX5	26.4961613	4	2.51E-05	0.1173897
CREBBP	26.373995	4	2.66E-05	0.04721897
FAM185A	26.3006999	4	2.75E-05	0.0907846
XRN1	26.0914224	4	3.03E-05	0.02582001
UBR5	25.9978913	4	3.17E-05	0.02248424
PDE7A	25.8330908	4	3.42E-05	0.09480896
BDP1	25.6786133	4	3.67E-05	0.03945135
DNM1L	25.6295384	4	3.76E-05	0.0400754
7-Mar	25.5696177	4	3.86E-05	0.06680043
KTN1	25.5141309	4	3.96E-05	0.09537153
CCDC57	25.413189	4	4.15E-05	0.04968867
RUFY2	25.3915802	4	4.20E-05	0.06034118
USP34	25.335208	4	4.31E-05	0.03049461
NME5	25.3125969	4	4.35E-05	0.08258605
INVS	25.273097	4	4.43E-05	0.02912704
AGO3	25.0049544	4	5.02E-05	0.03227856
TECPR2	24.927344	4	5.20E-05	0.02677268
LRRC6	24.4329377	4	6.54E-05	0.04453288
LHFPL4	24.3499023	4	6.80E-05	0.02842258
ALMS1	24.3286412	4	6.86E-05	0.05792991
DCUN1D4	24.0614927	4	7.76E-05	0.04881392
APC	23.5799484	4	9.70E-05	0.04958337
AC098829.1	23.3225669	4	0.00010916	0.19428485

PPP1R13B	23.2712901	4	0.00011176	0.02391669
TOGARAM1	23.0556248	4	0.00012343	0.06522982
RPRD1A	22.9267675	4	0.00013096	0.06555209
CCDC7	22.8617536	4	0.00013494	0.07055819
DOC2A	22.4249311	4	0.00016493	0.03213183
MTR	22.2734724	4	0.0001768	0.04776743
TTC17	22.266541	4	0.00017736	0.05754829
PPP2R2A	22.2518939	4	0.00017856	0.04774383
ADD1	22.1073006	4	0.0001908	0.06268263
RALGAPA1	22.0459139	4	0.00019625	0.03664136
ZNF638	22.0176617	4	0.0001988	0.04420265
KDM5A	21.9040818	4	0.00020943	0.03835816
CDK13	21.8383896	4	0.00021582	0.03758373
CLTC	21.8166977	4	0.00021798	0.04565984
DMXL1	21.67763	4	0.00023231	0.02385082
GSK3B	21.6403891	4	0.00023631	0.01869815
DIS3L2	21.4726977	4	0.00025515	0.04078302
PPIG	21.4299452	4	0.00026019	0.05088088
RAB40C	21.428556	4	0.00026035	0.03630751
NF1	20.6581213	4	0.00037012	0.04310934
CHPT1	20.6293452	4	0.000375	0.05793365
FAM208B	20.6288945	4	0.00037508	0.07618147
PLD3	20.5290521	4	0.00039254	0.02993718
ZMYM4	20.4688592	4	0.00040345	0.02202318
PIBF1	20.4230016	4	0.00041197	0.02490229
SPIN1	20.3513655	4	0.00042563	0.03913297
PIAS2	20.3285607	4	0.00043007	0.03057727
PPIP5K2	20.1840201	4	0.00045931	0.04605256
UBR2	19.9341483	4	0.00051457	0.03969934
PDS5A	19.8368818	4	0.00053782	0.0387082
MAPK8IP3	19.8018841	4	0.00054644	0.03636962
FAM193A	19.7982022	4	0.00054735	0.04658342
BRD4	19.6728942	4	0.00057939	0.05083343
RAB10	19.4757567	4	0.00063359	0.04469336
NFE2L2	19.2794873	4	0.00069254	0.10334154
COMMD1	19.1752564	4	0.00072601	0.02778246
CCDC30	19.1362394	4	0.00073895	0.03477823
DICER1	19.0530501	4	0.0007673	0.06788807
NEXMIF	18.8047587	4	0.00085848	0.03854356
LRBA	18.3628321	4	0.00104802	0.01845667
VPS35L	18.1734581	4	0.00114139	0.05095225
COPA	18.0510307	4	0.00120608	0.06915554
CPEB3	17.7380975	4	0.00138834	0.02910145

USP48	17.6581449	4	0.00143911	0.07803101
NKTR	17.3000794	4	0.00168991	0.01677864
BPTF	17.2476392	4	0.0017301	0.02699911
ARL17B	17.1261798	4	0.00182682	0.04997897
TNRC6B	17.0873349	4	0.00185886	0.02276028
COL4A3BP	16.8126367	4	0.00210185	0.02401336
KATNBL1	16.7940347	4	0.00211939	0.07881115
FSD1L	16.5423043	4	0.00237147	0.04921336
RNF111	16.5341096	4	0.00238016	0.06284154
CUL5	16.3823653	4	0.00254675	0.03791368
MACO1	16.3603781	4	0.00257182	0.02682971
RAP2A	16.2385412	4	0.00271522	0.07159818
ARMC8	16.139706	4	0.00283732	0.02395588
PLPP1	16.0478731	4	0.00295559	0.05177245
UBE2R2	15.8122409	4	0.00328174	0.02870951
SETD2	15.7535721	4	0.0033683	0.03026857
SETD5	15.6750634	4	0.00348766	0.03209732
SNX13	15.6462304	4	0.00353253	0.03080084
LMBRD2	15.585745	4	0.00362852	0.04028227
ASH1L	15.5838657	4	0.00363154	0.01791105
RIC3	15.3285155	4	0.00406618	0.05380754
SENP5	15.287638	4	0.00414035	0.04271737
CWC27	15.2876118	4	0.0041404	0.01929273
WDR37	15.0223282	4	0.00465513	0.0330525
MCCC1	14.8922807	4	0.00492993	0.05594369
RBM33	14.7329538	4	0.00528838	0.05629186
PIGN	14.717339	4	0.00532485	0.05983077
MED13	14.6849896	4	0.00540121	0.02522251
YTHDC2	14.5162818	4	0.00581717	0.05828264
TTC19	14.3098508	4	0.00636906	0.02796986
SPPL3	13.7748283	4	0.0080495	0.02954091
RNF145	13.7446155	4	0.00815637	0.02316244
NDUFA10	13.2504491	4	0.01011473	0.03614496
VPS8	13.2170081	4	0.01026272	0.0167236
NIPBL	13.1553047	4	0.01054136	0.05196091
PGP	13.1505106	4	0.01056331	0.02729324
RHOT1	12.9567486	4	0.01148907	0.02696125
BIRC6	12.9138697	4	0.0117044	0.02259269
XPO1	12.8815157	4	0.01186948	0.04391306
FXR1	12.8384526	4	0.01209272	0.07241417
RAPGEF4	12.7780258	4	0.0124129	0.01551674
HACE1	12.5473397	4	0.01371303	0.01946528
MIGA1	12.44279	4	0.0143451	0.04557585

CUL1	12.4295418	4	0.01442719	0.03695493
KCNJ3	12.3427031	4	0.01497673	0.02215375
SCAF8	12.2127644	4	0.01583728	0.05711728
VPS54	12.1779825	4	0.01607567	0.03086042
FNBP4	11.9103773	4	0.01803032	0.02230798
KIAA0319L	11.4651536	4	0.02180494	0.01760916
UBN2	11.1649869	4	0.02477104	0.01947859
RLF	11.0574612	4	0.02592576	0.03405876
FBXW11	10.8425833	4	0.0283913	0.05304465
YAF2	10.8225353	4	0.02863256	0.03460755
ZDHHC20	10.4801243	4	0.03307188	0.02814763
ZNF451	10.4759139	4	0.03313039	0.0404409
ZMYND11	10.3752153	4	0.03455997	0.01474389
VPS50	10.2993037	4	0.03567674	0.01782571
ODF2L	9.9726179	4	0.04089146	0.02278222
USP33	9.62124909	4	0.04731459	0.0235172
ATG10	9.19244395	4	0.05646523	0.04799361
ARFGEF1	9.06998101	4	0.05937389	0.01517245
USP9X	8.94926853	4	0.06238011	0.04327121
ELP2	8.92029087	4	0.063123	0.02885516
SETX	8.88272906	4	0.06409848	0.03051615
NEMF	8.47120145	4	0.07576498	0.01846262
SHOC2	8.17140803	4	0.08549729	0.03165942
ANKRD13C	8.15055211	4	0.08621638	0.03690082
RPAP2	7.94488992	4	0.09361794	0.02743845
RAB2A	7.90668156	4	0.095057	0.02220521
AC007388.1	7.74425055	4	0.10140884	0.02300778
ATE1	7.68663447	4	0.10375558	0.01683732
FAM120B	6.88070302	4	0.14232844	0.01655097
EP300	6.66596872	4	0.15462881	0.01534476
PARG	6.56787047	4	0.16056391	0.0248664
U91319.1	6.50719725	4	0.16433746	0.04350839
CEP170	6.07768187	4	0.19342157	0.01115839
LMTK3	5.94057783	4	0.20363012	0.01707483
AC124319.2	5.8792905	4	0.20834611	0.02720959
HK1	5.53955512	4	0.23627437	0.02230399
GAPVD1	5.39709588	4	0.248924	0.01222347
PIP4K2A	5.32957248	4	0.25512128	0.03581375
ZNF644	4.98078193	4	0.28927508	0.01626452
HELZ	3.67287415	4	0.45208351	0.02256515
ARMH3	3.33713384	4	0.50307032	0.01045104
LRRC37B	2.89108751	4	0.57621394	0.00911932
ARIH1	2.86918397	4	0.57995034	0.00745456

KIF3A	2.2674921	4	0.68669372	0.00847615
SIK2	2.25869884	4	0.68829832	0.01127979
TCERG1	2.20455439	4	0.69819555	0.005782
NCOA7	1.90521819	4	0.75318634	0.00653396
SUMF1	1.88974353	4	0.75602887	0.00768132
ZKSCAN1	1.79798937	4	0.77285019	0.01095419
CNOT4	1.20487528	4	0.87729528	0.00603033
SLC30A9	1.0936808	4	0.89527352	0.00643719
PPP2R5E	0.79805003	4	0.93870929	0.0042767
DCAF10	0.44181034	4	0.97891287	0.00375612
RAB3GAP2	0.38996177	4	0.98329048	0.00368875
PAPOLA	0.07722286	4	0.99927349	0.00157643
AHCTF1	0.0060497	4	0.99999543	0.00037953
KIAA2026	0.00567906	4	0.99999598	0.00033203
AC007319.1	0.00246295	4	0.99999924	0.00021242

Supplementary Table 6. Microglial Marker Genes

	p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster	gene
HSPA1A	2.86E-102	0.98947761	0.867	0.761	5.72E-99	0	HSPA1A
HLA-DRA	3.24E-86	0.77938399	0.949	0.876	6.49E-83	0	HLA-DRA
GPR183	8.64E-84	0.76177894	0.933	0.876	1.73E-80	0	GPR183
SRGN	3.53E-72	0.92642864	0.879	0.81	7.06E-69	0	SRGN
CD74	1.41E-70	0.7026835	0.991	0.958	2.81E-67	0	CD74
RGS1	1.62E-67	0.90877961	0.797	0.7	3.24E-64	0	RGS1
APOE	1.25E-65	0.70573436	0.939	0.878	2.50E-62	0	APOE
HLA-DRB1	4.75E-64	0.57660668	0.931	0.887	9.50E-61	0	HLA-DRB1
HIST1H2AC	1.94E-57	0.57171218	0.951	0.909	3.87E-54	0	HIST1H2AC
DUSP1	1.07E-51	0.75304871	0.9	0.863	2.15E-48	0	DUSP1
AC120193.1	3.66E-44	0.51873775	0.914	0.875	7.31E-41	0	AC120193.1
C1QC	5.10E-41	0.50199755	0.802	0.702	1.02E-37	0	C1QC
AIF1	1.22E-40	0.46800743	0.912	0.879	2.44E-37	0	AIF1
FOS	2.23E-40	0.8014955	0.904	0.876	4.47E-37	0	FOS
CST3	1.41E-35	0.33016383	0.898	0.853	2.82E-32	0	CST3
ZFP36L2	7.00E-35	0.45942204	0.994	0.963	1.40E-31	0	ZFP36L2
RNASET2	1.25E-33	0.35243268	0.988	0.963	2.50E-30	0	RNASET2
CEBPD	2.84E-32	0.63068656	0.8	0.762	5.68E-29	0	CEBPD
CD14	4.28E-32	0.60112869	0.737	0.677	8.56E-29	0	CD14
ADAM28	2.81E-31	0.40051499	0.993	0.976	5.62E-28	0	ADAM28
PADI2	5.16E-30	0.60805998	0.858	0.794	1.03E-26	0	PADI2
CD69	5.26E-30	0.50584133	0.896	0.885	1.05E-26	0	CD69
SPP1	1.15E-29	0.35083893	0.838	0.737	2.31E-26	0	SPP1
ZFP36L1	9.84E-29	0.47220955	0.994	0.972	1.97E-25	0	ZFP36L1
SERPINB9	1.11E-28	0.65764478	0.819	0.793	2.22E-25	0	SERPINB9
C1QA	2.71E-28	0.44063796	0.767	0.701	5.42E-25	0	C1QA
C1QB	2.82E-27	0.43458763	0.83	0.738	5.63E-24	0	C1QB
ABCC4	2.06E-26	0.41072423	0.988	0.954	4.12E-23	0	ABCC4
TMSB10	5.71E-26	0.58406629	0.889	0.85	1.14E-22	0	TMSB10
IL18	1.25E-25	0.35508819	0.925	0.859	2.49E-22	0	IL18
OLR1	1.04E-24	0.54152908	0.856	0.853	2.07E-21	0	OLR1
SAT1	2.01E-24	0.36184615	0.91	0.88	4.03E-21	0	SAT1
C3	2.18E-24	0.30229467	0.963	0.922	4.36E-21	0	C3
NR4A2	3.22E-24	0.25647733	0.729	0.645	6.43E-21	0	NR4A2
CD86	2.36E-23	0.30210494	0.955	0.913	4.71E-20	0	CD86
BLNK	2.06E-22	0.35180837	0.985	0.932	4.11E-19	0	BLNK
SLC2A3	1.54E-20	0.82333864	0.584	0.526	3.09E-17	0	SLC2A3
APOC1	3.57E-18	0.3261214	0.775	0.749	7.13E-15	0	APOC1
CYBB	1.17E-16	0.35589208	0.879	0.81	2.33E-13	0	CYBB
CSF3R	2.00E-16	0.3464512	0.938	0.911	4.00E-13	0	CSF3R
INPP5D	7.57E-15	0.34310876	0.989	0.964	1.51E-11	0	INPP5D
CSF1R	8.57E-15	0.25017612	0.959	0.914	1.71E-11	0	CSF1R
SRGAP2B	1.21E-14	0.32549836	0.956	0.91	2.42E-11	0	SRGAP2B
TNFRSF1B	2.42E-14	0.32686452	0.801	0.775	4.84E-11	0	TNFRSF1B
IRF8	2.72E-14	0.42068032	0.837	0.828	5.43E-11	0	IRF8
CCL4	3.32E-14	0.45770486	0.65	0.605	6.63E-11	0	CCL4
CCDC26	4.02E-14	0.33667383	0.867	0.832	8.04E-11	0	CCDC26
SLC2A5	1.34E-13	0.41146405	0.771	0.743	2.68E-10	0	SLC2A5

CSGALNACT1	1.85E-13	0.38119954	0.981	0.925	3.70E-10	0 CSGALNACT1
ATP8B4	2.99E-13	0.28654387	0.984	0.942	5.98E-10	0 ATP8B4
TMEM163	9.29E-13	0.30493115	0.502	0.38	1.86E-09	0 TMEM163
USP53	1.49E-12	0.30982307	0.944	0.902	2.98E-09	0 USP53
RGS16	3.39E-12	0.3912306	0.477	0.361	6.77E-09	0 RGS16
CCL3	4.00E-12	0.48525688	0.53	0.436	8.00E-09	0 CCL3
PALD1	8.57E-12	0.274098	0.955	0.906	1.71E-08	0 PALD1
PLA2G4A	9.64E-12	0.27664821	0.875	0.85	1.93E-08	0 PLA2G4A
CSF2RA	1.32E-11	0.3371264	0.928	0.892	2.64E-08	0 CSF2RA
GRID2	1.98E-11	0.38941876	0.775	0.729	3.97E-08	0 GRID2
LAPTM5	2.71E-11	0.25244545	0.864	0.803	5.42E-08	0 LAPTM5
HS3ST4	7.49E-11	0.25544518	0.972	0.927	1.50E-07	0 HS3ST4
JUNB	1.29E-10	0.34846548	0.762	0.771	2.57E-07	0 JUNB
ARHGAP15	7.85E-10	0.31407447	0.991	0.948	1.57E-06	0 ARHGAP15
ARHGAP24	5.84E-09	0.27186076	0.998	0.984	1.17E-05	0 ARHGAP24
DDIT4	8.79E-09	0.44573576	0.495	0.413	1.76E-05	0 DDIT4
FCGBP	3.78E-08	0.33330247	0.604	0.534	7.56E-05	0 FCGBP
SLC8A1	8.54E-08	0.29584497	0.998	0.979	0.00017073	0 SLC8A1
CD83	5.67E-07	0.50870053	0.59	0.56	0.00113423	0 CD83
AOAH	5.90E-07	0.27159266	0.989	0.955	0.00117942	0 AOAH
GLUL	7.49E-07	0.44015194	0.712	0.701	0.00149892	0 GLUL
AL034397.3	1.67E-06	0.28426937	0.693	0.685	0.00333803	0 AL034397.3
MAML3	5.02E-05	0.25889946	0.997	0.965	0.10049829	0 MAML3
ANKRD22	9.15E-05	0.25156018	0.434	0.373	0.1829805	0 ANKRD22
CDKN1A	0.00028053	0.37395301	0.476	0.401	0.56106037	0 CDKN1A
FCGR2A	0.00049363	0.33171868	0.607	0.607	0.98726429	0 FCGR2A
VEGFA	0.00106569	0.29065885	0.59	0.602	1	0 VEGFA
HAMP	0.00164615	0.5122486	0.52	0.501	1	0 HAMP
RASGEF1C	1.72E-74	0.47818146	0.986	0.935	3.43E-71	1 RASGEF1C
AC008691.1	1.36E-73	0.50412432	0.967	0.879	2.73E-70	1 AC008691.1
PLXDC2	3.33E-73	0.33047849	1	0.991	6.66E-70	1 PLXDC2
FRMD4A	1.70E-68	0.37811021	0.999	0.995	3.41E-65	1 FRMD4A
ST6GALNAC3	2.96E-65	0.55426079	0.988	0.92	5.93E-62	1 ST6GALNAC3
AC008014.1	2.38E-62	0.39332308	0.901	0.844	4.75E-59	1 AC008014.1
P2RY12	4.25E-60	0.47079125	0.988	0.905	8.50E-57	1 P2RY12
APBB1IP	2.53E-59	0.43371483	0.996	0.969	5.07E-56	1 APBB1IP
DOCK8	4.99E-55	0.35078625	1	0.972	9.97E-52	1 DOCK8
TENM4	7.79E-54	0.36520123	0.99	0.93	1.56E-50	1 TENM4
LINC02232	1.08E-46	0.39039353	0.994	0.965	2.16E-43	1 LINC02232
CACNB4	4.38E-46	0.37502355	0.984	0.94	8.75E-43	1 CACNB4
ITPR2	1.01E-44	0.31679734	0.999	0.987	2.01E-41	1 ITPR2
HS3ST41	1.12E-44	0.43173433	0.991	0.927	2.24E-41	1 HS3ST4
PIP5K1B	1.18E-44	0.28001148	0.893	0.795	2.36E-41	1 PIP5K1B
IPCEF1	1.70E-44	0.315455	0.979	0.917	3.41E-41	1 IPCEF1
BLNK	1.72E-44	0.38335872	0.985	0.936	3.44E-41	1 BLNK
FOXP2	2.87E-43	0.3815024	0.972	0.916	5.73E-40	1 FOXP2
KCNIP1	3.43E-40	0.34265009	0.953	0.882	6.85E-37	1 KCNIP1
SH3RF3	8.18E-39	0.37984905	0.967	0.875	1.64E-35	1 SH3RF3
SRGAP2	9.63E-39	0.27352428	0.999	0.978	1.93E-35	1 SRGAP2
LINC00578	1.10E-38	0.26922582	0.814	0.676	2.20E-35	1 LINC00578

RASSF8	3.72E-38	0.40785261	0.938	0.838	7.44E-35	1 RASSF8
ALOX5	6.77E-38	0.29276518	0.911	0.801	1.35E-34	1 ALOX5
IKZF1	1.31E-37	0.32356005	0.956	0.852	2.61E-34	1 IKZF1
CPED1	1.38E-37	0.31757928	0.971	0.916	2.75E-34	1 CPED1
CARD11	4.28E-36	0.269314	0.933	0.843	8.56E-33	1 CARD11
SDK1	1.14E-35	0.40147566	0.961	0.881	2.28E-32	1 SDK1
ABCC4	4.03E-35	0.28625357	0.994	0.955	8.07E-32	1 ABCC4
FYB1	2.70E-34	0.33315474	0.993	0.953	5.40E-31	1 FYB1
PTCHD4	2.85E-33	0.36257923	0.841	0.757	5.70E-30	1 PTCHD4
PALD1	4.10E-33	0.27620104	0.981	0.905	8.20E-30	1 PALD1
MARCH3	6.96E-33	0.2994801	0.948	0.887	1.39E-29	1 3-Mar
SRGAP2B1	1.25E-32	0.29583736	0.98	0.909	2.50E-29	1 SRGAP2B
LRRK1	7.66E-31	0.32906593	0.982	0.909	1.53E-27	1 LRRK1
SFMBT2	2.46E-30	0.27353056	0.999	0.984	4.91E-27	1 SFMBT2
MIR646HG	3.92E-30	0.28141061	0.984	0.948	7.85E-27	1 MIR646HG
ST6GAL1	4.61E-30	0.29791239	0.998	0.975	9.23E-27	1 ST6GAL1
LHFPL2	7.56E-30	0.27913421	0.985	0.922	1.51E-26	1 LHFPL2
ARHGAP241	9.50E-30	0.28041181	0.999	0.985	1.90E-26	1 ARHGAP24
FLI1	2.76E-29	0.29417939	0.986	0.929	5.52E-26	1 FLI1
ENTPD1	9.63E-29	0.31841246	0.984	0.945	1.93E-25	1 ENTPD1
TNS3	2.18E-28	0.30290898	0.974	0.876	4.35E-25	1 TNS3
DIAPH2	9.67E-28	0.28677252	0.981	0.923	1.93E-24	1 DIAPH2
AC008050.1	5.06E-27	0.26935515	0.778	0.658	1.01E-23	1 AC008050.1
OXR1	5.97E-27	0.31171171	0.994	0.98	1.19E-23	1 OXR1
ADAM281	1.15E-26	0.25909404	0.998	0.976	2.29E-23	1 ADAM28
XACT	3.68E-26	0.26952568	0.848	0.776	7.37E-23	1 XACT
DSCAM	2.25E-25	0.32103403	0.97	0.936	4.50E-22	1 DSCAM
DISC1	1.20E-24	0.25592634	0.997	0.962	2.41E-21	1 DISC1
DISP1	6.85E-24	0.34959638	0.813	0.698	1.37E-20	1 DISP1
MAML2	1.12E-23	0.27882639	0.996	0.967	2.24E-20	1 MAML2
CCDC261	1.00E-15	0.2579485	0.9	0.828	2.00E-12	1 CCDC26
PLXDC21	6.45E-78	0.32759367	1	0.991	1.29E-74	2 PLXDC2
IPCEF11	1.94E-64	0.51288983	0.988	0.915	3.88E-61	2 IPCEF1
P2RY121	2.42E-57	0.28605864	0.991	0.904	4.84E-54	2 P2RY12
APBB1IP1	7.41E-49	0.34336906	0.999	0.969	1.48E-45	2 APBB1IP
DOCK81	9.93E-32	0.25195005	0.998	0.973	1.99E-28	2 DOCK8
ST6GALNAC3	5.25E-30	0.25323337	0.994	0.919	1.05E-26	2 ST6GALNAC3
ANTXR2	2.30E-140	0.26139909	0.773	0.577	4.60E-137	3 ANTXR2
TMEM178B	7.77E-129	0.27435896	0.572	0.833	1.55E-125	3 TMEM178B
SYNPO2	9.07E-109	0.26249937	0.78	0.802	1.81E-105	3 SYNPO2
BASP1-AS1	7.63E-104	0.31728482	0.816	0.791	1.53E-100	3 BASP1-AS1
PAM	2.32E-103	0.65785841	0.801	0.596	4.64E-100	3 PAM
PDE7B	8.76E-94	0.28286572	0.33	0.667	1.75E-90	3 PDE7B
LUZP2	3.83E-90	0.39967003	0.824	0.788	7.66E-87	3 LUZP2
NWD2	1.03E-86	0.34778886	0.78	0.847	2.06E-83	3 NWD2
LINC01322	1.03E-83	0.34135379	0.777	0.727	2.06E-80	3 LINC01322
BANK1	1.61E-83	0.27399446	0.765	0.869	3.22E-80	3 BANK1
NKAIN3	7.71E-78	0.36395112	0.813	0.803	1.54E-74	3 NKAIN3
EFNA5	6.11E-76	0.2714783	0.689	0.877	1.22E-72	3 EFNA5
CDH10	3.28E-71	0.47851285	0.791	0.769	6.57E-68	3 CDH10

CCK	6.23E-68	0.46392977	0.722	0.681	1.25E-64	3 CCK
AQP4	8.99E-63	0.32451741	0.787	0.79	1.80E-59	3 AQP4
TNR	4.89E-60	0.3876401	0.502	0.798	9.77E-57	3 TNR
GPC6	3.03E-59	0.42484427	0.783	0.778	6.06E-56	3 GPC6
CLSTN2	6.31E-59	0.33218014	0.737	0.632	1.26E-55	3 CLSTN2
ELAVL2	1.41E-56	0.25283868	0.744	0.772	2.81E-53	3 ELAVL2
CBLN2	7.83E-53	0.32008531	0.716	0.614	1.57E-49	3 CBLN2
ASTN2	3.50E-52	0.30743438	0.44	0.672	7.00E-49	3 ASTN2
AL117329.1	4.24E-52	0.33729782	0.401	0.652	8.48E-49	3 AL117329.1
NR2F1-AS1	2.36E-51	0.32334116	0.788	0.752	4.73E-48	3 NR2F1-AS1
OLFM3	6.09E-47	0.2768378	0.575	0.799	1.22E-43	3 OLFM3
CDH4	1.24E-45	0.32707711	0.724	0.632	2.47E-42	3 CDH4
RORB	1.98E-44	0.27156031	0.742	0.683	3.96E-41	3 RORB
PCSK2	1.29E-41	0.34939199	0.814	0.829	2.58E-38	3 PCSK2
STXBP5L	1.57E-41	0.88418196	0.863	0.887	3.14E-38	3 STXBP5L
GALNT17	3.05E-40	0.26462286	0.693	0.82	6.10E-37	3 GALNT17
CCSER1	8.82E-40	0.69849043	0.84	0.908	1.76E-36	3 CCSER1
EBF1	2.41E-39	0.34831225	0.641	0.534	4.83E-36	3 EBF1
DAB1	4.17E-38	0.37523384	0.748	0.883	8.34E-35	3 DAB1
FAM155A	6.50E-38	1.1309302	0.883	0.903	1.30E-34	3 FAM155A
RBFOX3	8.75E-37	0.42455799	0.544	0.745	1.75E-33	3 RBFOX3
TRPM3	1.85E-36	0.25489825	0.74	0.829	3.71E-33	3 TRPM3
GRIP1	2.40E-36	0.50442493	0.78	0.748	4.81E-33	3 GRIP1
HS3ST2	1.63E-35	0.31418183	0.64	0.856	3.26E-32	3 HS3ST2
GRM7	3.48E-35	0.53957012	0.733	0.862	6.96E-32	3 GRM7
AC007563.2	6.78E-35	0.27173071	0.631	0.813	1.36E-31	3 AC007563.2
ADAM23	7.12E-35	0.3199857	0.689	0.653	1.42E-31	3 ADAM23
CHN1	1.52E-34	0.73200819	0.758	0.657	3.04E-31	3 CHN1
XACT1	3.75E-34	0.28636127	0.712	0.8	7.50E-31	3 XACT
XKR4	4.77E-34	0.52307632	0.678	0.569	9.54E-31	3 XKR4
PTPRM	1.05E-33	0.25901082	0.552	0.715	2.10E-30	3 PTPRM
GRIK2	6.20E-33	0.6120934	0.872	0.923	1.24E-29	3 GRIK2
PMEPA1	8.09E-33	0.28340909	0.483	0.671	1.62E-29	3 PMEPA1
GALNTL6	1.39E-32	0.40113786	0.571	0.733	2.78E-29	3 GALNTL6
DAPK1	2.07E-32	0.25198064	0.763	0.728	4.15E-29	3 DAPK1
DGKB	1.14E-31	0.5184178	0.805	0.854	2.28E-28	3 DGKB
STAT4	1.59E-31	0.28454434	0.606	0.62	3.19E-28	3 STAT4
PARP14	4.32E-31	0.28847657	0.817	0.89	8.65E-28	3 PARP14
KCNK13	4.78E-31	0.30350484	0.626	0.793	9.56E-28	3 KCNK13
ARPP21	7.38E-31	0.37036377	0.757	0.836	1.48E-27	3 ARPP21
GRM1	1.30E-30	0.40569805	0.787	0.81	2.60E-27	3 GRM1
AQP4-AS1	8.55E-30	0.27295435	0.749	0.759	1.71E-26	3 AQP4-AS1
RYR2	1.05E-29	0.64129569	0.682	0.852	2.09E-26	3 RYR2
KCNH7	1.61E-28	0.37038934	0.688	0.803	3.21E-25	3 KCNH7
LMO3	2.39E-28	0.27766498	0.722	0.861	4.78E-25	3 LMO3
KCNIP4	2.84E-28	1.33003356	0.975	0.982	5.67E-25	3 KCNIP4
WDFY4	8.03E-28	0.28240019	0.813	0.881	1.61E-24	3 WDFY4
PDE8B	1.75E-27	0.29661636	0.686	0.57	3.49E-24	3 PDE8B
GRIN2B	1.87E-27	0.33614589	0.713	0.861	3.74E-24	3 GRIN2B
XYLT1	2.18E-27	0.34685698	0.759	0.831	4.35E-24	3 XYLT1

ADGRV1	1.63E-26	0.40352661	0.845	0.877	3.26E-23	3 ADGRV1
CDH13	2.15E-26	0.2990866	0.553	0.696	4.30E-23	3 CDH13
GRIA3	2.17E-26	0.5577237	0.803	0.783	4.33E-23	3 GRIA3
CNTN3	6.10E-26	0.36273993	0.693	0.864	1.22E-22	3 CNTN3
CDHR3	1.09E-25	0.27036753	0.701	0.588	2.17E-22	3 CDHR3
HCN1	1.39E-25	0.48342547	0.789	0.77	2.78E-22	3 HCN1
UNC13C	2.09E-25	0.34358821	0.81	0.81	4.19E-22	3 UNC13C
TMEM108	2.42E-25	0.41293433	0.696	0.844	4.84E-22	3 TMEM108
RAB3C	4.10E-25	0.34075335	0.57	0.708	8.21E-22	3 RAB3C
SYNPR	4.99E-25	0.38429129	0.72	0.666	9.97E-22	3 SYNPR
CNKS2	6.91E-25	0.51206884	0.733	0.81	1.38E-21	3 CNKS2
RIN3	7.32E-25	0.27108059	0.756	0.881	1.46E-21	3 RIN3
MTUS2	9.60E-25	0.31226401	0.78	0.842	1.92E-21	3 MTUS2
KCTD16	1.57E-24	0.43192333	0.619	0.825	3.14E-21	3 KCTD16
RGS7	2.47E-24	0.57089072	0.815	0.888	4.94E-21	3 RGS7
PHACTR1	4.25E-24	0.48009771	0.822	0.916	8.51E-21	3 PHACTR1
LRRTM4	4.70E-24	1.05186773	0.899	0.924	9.39E-21	3 LRRTM4
SORBS2	5.18E-24	0.54780194	0.826	0.839	1.04E-20	3 SORBS2
KIAA1217	7.06E-24	0.29363647	0.528	0.676	1.41E-20	3 KIAA1217
MGAT4C	3.88E-23	0.41894961	0.65	0.8	7.77E-20	3 MGAT4C
CD83	6.85E-23	0.37373303	0.419	0.59	1.37E-19	3 CD83
AC008050.11	4.05E-22	0.31475192	0.51	0.704	8.11E-19	3 AC008050.1
GUCY1A2	2.25E-21	0.41127641	0.722	0.732	4.50E-18	3 GUCY1A2
SOX5	3.75E-21	0.50385956	0.792	0.843	7.51E-18	3 SOX5
SNTG1	4.01E-21	0.62092924	0.725	0.838	8.02E-18	3 SNTG1
KCTD8	4.51E-21	0.3306618	0.591	0.515	9.02E-18	3 KCTD8
MIR646HG1	6.46E-21	0.30940934	0.9	0.963	1.29E-17	3 MIR646HG
CUX2	7.07E-21	0.33372022	0.674	0.683	1.41E-17	3 CUX2
PTPRG	3.06E-20	0.321893	0.415	0.614	6.12E-17	3 PTPRG
SRRM4	5.16E-20	0.40158068	0.688	0.712	1.03E-16	3 SRRM4
KCTD1	8.37E-20	0.28136509	0.804	0.823	1.67E-16	3 KCTD1
ADGRL2	8.73E-20	0.54792665	0.787	0.753	1.75E-16	3 ADGRL2
LINC01378	1.11E-19	0.30166897	0.812	0.847	2.22E-16	3 LINC01378
CCDC3	1.48E-19	0.33650201	0.652	0.669	2.95E-16	3 CCDC3
RGS16	1.49E-19	0.25331858	0.226	0.413	2.98E-16	3 RGS16
CACNA1B	1.61E-19	0.36092059	0.603	0.732	3.22E-16	3 CACNA1B
ROBO2	1.94E-19	1.08752776	0.863	0.871	3.87E-16	3 ROBO2
RBFOX1	2.63E-19	1.21637226	0.936	0.946	5.26E-16	3 RBFOX1
CABP1	7.14E-19	0.3489595	0.777	0.845	1.43E-15	3 CABP1
KCNMB2	8.73E-19	0.30225228	0.749	0.844	1.75E-15	3 KCNMB2
GABRG3	1.54E-18	0.31664738	0.624	0.792	3.07E-15	3 GABRG3
MEG3	1.80E-18	1.15247603	0.937	0.963	3.61E-15	3 MEG3
PRKAG2	2.86E-18	0.37613907	0.742	0.863	5.72E-15	3 PRKAG2
ZNF385B	2.89E-18	0.46534505	0.793	0.835	5.77E-15	3 ZNF385B
SNAP25	3.65E-18	0.82086576	0.793	0.749	7.29E-15	3 SNAP25
ABLIM1	1.24E-17	0.46765388	0.732	0.809	2.48E-14	3 ABLIM1
CTNNA2	1.55E-17	0.73049475	0.819	0.907	3.11E-14	3 CTNNA2
CNTN4	2.08E-17	0.31652821	0.577	0.747	4.16E-14	3 CNTN4
CDH18	3.11E-17	0.69400458	0.755	0.846	6.23E-14	3 CDH18
NELL2	3.33E-17	0.76679774	0.832	0.798	6.66E-14	3 NELL2

AC084816.1	5.60E-17	0.29557362	0.398	0.304	1.12E-13	3 AC084816.1
KIAA1549L	6.92E-17	0.48552919	0.742	0.788	1.38E-13	3 KIAA1549L
RIPOR2	1.26E-16	0.34472966	0.702	0.665	2.52E-13	3 RIPOR2
GRIN2A	1.34E-16	0.46257352	0.732	0.84	2.68E-13	3 GRIN2A
MCTP1	4.01E-16	0.46339789	0.622	0.726	8.02E-13	3 MCTP1
GABRB3	4.32E-16	0.57188553	0.834	0.836	8.63E-13	3 GABRB3
GFAP	5.37E-16	0.35845335	0.618	0.567	1.07E-12	3 GFAP
PECAM1	6.85E-16	0.25638932	0.797	0.793	1.37E-12	3 PECAM1
PTPRZ1	1.26E-15	0.60189288	0.672	0.672	2.53E-12	3 PTPRZ1
NELL1	2.42E-15	0.50153256	0.79	0.799	4.85E-12	3 NELL1
VSNL1	5.67E-15	0.38559154	0.629	0.718	1.13E-11	3 VSNL1
CDH12	6.65E-15	0.60572667	0.812	0.854	1.33E-11	3 CDH12
SLIT3	6.99E-15	0.25562628	0.773	0.814	1.40E-11	3 SLIT3
FGFR1	7.78E-15	0.27782805	0.419	0.339	1.56E-11	3 FGFR1
SFXN5	4.73E-14	0.37473973	0.699	0.578	9.46E-11	3 SFXN5
ADCY2	7.77E-14	0.51131655	0.765	0.819	1.55E-10	3 ADCY2
GABRA1	1.34E-13	0.39419742	0.67	0.75	2.68E-10	3 GABRA1
MYRIP	1.83E-13	0.2501363	0.552	0.682	3.67E-10	3 MYRIP
ATRN1L	5.15E-13	0.95550624	0.889	0.9	1.03E-09	3 ATRN1L
GRIK1	8.47E-13	0.53233949	0.636	0.565	1.69E-09	3 GRIK1
PDZRN4	1.05E-12	0.30154255	0.542	0.749	2.11E-09	3 PDZRN4
PTGDS	2.18E-12	0.54346568	0.693	0.641	4.36E-09	3 PTGDS
AC011287.1	6.68E-12	0.36780184	0.694	0.816	1.34E-08	3 AC011287.1
OPCML	7.90E-12	1.09488813	0.894	0.908	1.58E-08	3 OPCML
TMEM1631	2.36E-11	0.26151757	0.23	0.435	4.73E-08	3 TMEM163
SYT1	1.28E-10	1.11864452	0.899	0.941	2.56E-07	3 SYT1
NECAB1	1.79E-10	0.25018929	0.751	0.737	3.59E-07	3 NECAB1
SYBU	1.97E-10	0.27364916	0.631	0.756	3.95E-07	3 SYBU
CPM	2.40E-10	0.35252722	0.514	0.655	4.80E-07	3 CPM
PRKG1	4.69E-10	0.43913588	0.768	0.871	9.37E-07	3 PRKG1
TMEM132D	7.22E-10	0.66616035	0.828	0.834	1.44E-06	3 TMEM132D
PDE1A	1.16E-09	0.48724937	0.796	0.849	2.32E-06	3 PDE1A
MICAL2	1.18E-09	0.38000434	0.654	0.606	2.35E-06	3 MICAL2
FAM135B	1.21E-09	0.2571568	0.641	0.732	2.42E-06	3 FAM135B
RGS6	1.27E-09	0.38234301	0.769	0.847	2.53E-06	3 RGS6
OPHN1	1.31E-09	0.46699348	0.595	0.731	2.62E-06	3 OPHN1
MEG8	1.81E-09	0.50388493	0.799	0.826	3.62E-06	3 MEG8
EYA2	2.32E-09	0.32108121	0.612	0.652	4.65E-06	3 EYA2
PVT1	2.50E-09	0.27748507	0.466	0.592	5.00E-06	3 PVT1
IQGAP2	4.29E-09	0.48979404	0.72	0.726	8.59E-06	3 IQGAP2
PCLO	5.72E-09	0.37297614	0.755	0.815	1.14E-05	3 PCLO
CACNA1E	5.77E-09	0.38176989	0.679	0.701	1.15E-05	3 CACNA1E
NCALD	6.34E-09	0.50306312	0.53	0.668	1.27E-05	3 NCALD
SYN2	6.72E-09	0.48731921	0.745	0.763	1.34E-05	3 SYN2
GPM6A	6.94E-09	1.18211221	0.804	0.797	1.39E-05	3 GPM6A
AC092691.1	1.36E-08	0.53067669	0.678	0.773	2.72E-05	3 AC092691.1
MARCKS	2.12E-08	0.36838713	0.767	0.792	4.24E-05	3 MARCKS
HSPB1	2.12E-08	0.36665469	0.656	0.606	4.24E-05	3 HSPB1
FAT3	5.95E-08	0.33997087	0.829	0.871	0.00011891	3 FAT3
RASGRF2	6.39E-08	0.35024464	0.742	0.775	0.00012776	3 RASGRF2

FGF12	9.47E-08	0.79061508	0.786	0.808	0.00018943	3 FGF12
PDE4D	1.39E-07	0.63813275	0.922	0.969	0.00027826	3 PDE4D
ANKRD30BL	1.76E-07	0.3512601	0.581	0.77	0.00035119	3 ANKRD30BL
PCDH7	1.86E-07	0.63900274	0.838	0.861	0.00037192	3 PCDH7
CNTNAP2	2.35E-07	0.95229498	0.887	0.905	0.00046926	3 CNTNAP2
KAZN	3.07E-07	0.68722059	0.68	0.804	0.00061467	3 KAZN
LDB2	3.94E-07	0.52050852	0.843	0.889	0.00078824	3 LDB2
CIT	4.24E-07	0.30438328	0.694	0.79	0.00084872	3 CIT
ATP8A2	6.46E-07	0.56781834	0.707	0.829	0.00129126	3 ATP8A2
DLGAP2	7.23E-07	0.69044807	0.823	0.905	0.00144671	3 DLGAP2
LHFPL3	9.39E-07	0.470367	0.712	0.675	0.00187834	3 LHFPL3
RIMS2	1.43E-06	0.86417744	0.734	0.817	0.00286189	3 RIMS2
MED12L	1.44E-06	0.39953592	0.561	0.632	0.00288187	3 MED12L
EPHA6	2.53E-06	0.58039437	0.595	0.776	0.00505633	3 EPHA6
ZNF385D	2.72E-06	0.45532949	0.432	0.516	0.00544525	3 ZNF385D
LRRC4C	3.41E-06	0.43360218	0.794	0.819	0.00682328	3 LRRC4C
ZMAT4	3.88E-06	0.38775339	0.72	0.736	0.00775769	3 ZMAT4
TOX	4.12E-06	0.32095848	0.636	0.687	0.00823114	3 TOX
PCDH15	6.56E-06	0.39848415	0.654	0.747	0.01311464	3 PCDH15
C31	7.38E-06	0.35979466	0.83	0.947	0.01476396	3 C3
SLC4A4	8.37E-06	0.30524975	0.625	0.661	0.0167471	3 SLC4A4
CHL1	9.15E-06	0.41142283	0.754	0.831	0.01830949	3 CHL1
AC073050.1	9.38E-06	0.41842775	0.803	0.832	0.01875945	3 AC073050.1
NIPAL2	1.52E-05	0.34722482	0.84	0.807	0.03041063	3 NIPAL2
SYN3	2.42E-05	0.56304397	0.725	0.8	0.04841915	3 SYN3
SCN1A	2.74E-05	0.40944193	0.545	0.684	0.05487945	3 SCN1A
MDGA2	4.04E-05	0.74897693	0.853	0.866	0.08075042	3 MDGA2
CLU	5.10E-05	0.90007672	0.735	0.743	0.10204838	3 CLU
ASIC2	5.84E-05	0.5303457	0.732	0.781	0.11689707	3 ASIC2
CDH9	6.72E-05	0.3343378	0.754	0.788	0.13438938	3 CDH9
EPSTI1	7.81E-05	0.26948576	0.772	0.734	0.15629091	3 EPSTI1
SV2B	9.99E-05	0.26883339	0.765	0.834	0.19983392	3 SV2B
HS6ST3	0.00010991	0.61596464	0.805	0.864	0.21981132	3 HS6ST3
GRIA1	0.00018643	0.35294055	0.75	0.817	0.37286901	3 GRIA1
CADPS	0.00023751	0.52136501	0.839	0.884	0.47501069	3 CADPS
NRCAM	0.00024993	0.81085239	0.762	0.782	0.49985812	3 NRCAM
TMEM132B	0.00027172	0.45144495	0.787	0.787	0.54344731	3 TMEM132B
GABBR2	0.00038459	0.46938879	0.692	0.748	0.76918403	3 GABBR2
MMP16	0.00045672	0.36545229	0.65	0.777	0.91344677	3 MMP16
BMPR1B	0.00055884	0.25583195	0.504	0.672	1	3 BMPR1B
CACNA2D3	0.00059895	0.51013888	0.785	0.826	1	3 CACNA2D3
ESRRG	0.00063069	0.25607869	0.455	0.563	1	3 ESRRG
CNTN5	0.00115784	0.63781239	0.821	0.83	1	3 CNTN5
DPP10	0.00145654	0.83412374	0.802	0.884	1	3 DPP10
AFF3	0.00149544	0.49005092	0.786	0.861	1	3 AFF3
BRINP3	0.00153103	0.28955486	0.733	0.775	1	3 BRINP3
PTCHD1-AS	0.00191356	0.29233237	0.71	0.818	1	3 PTCHD1-AS
ERC2	0.00261675	0.53823474	0.705	0.756	1	3 ERC2
PTPRT	0.0027783	0.38473828	0.723	0.792	1	3 PTPRT
RALYL	0.00586741	0.97978982	0.851	0.888	1	3 RALYL

CHRM3	0.00627934	0.61285419	0.73	0.755	1	3 CHRM3
CPE	0.00668355	0.55812982	0.729	0.716	1	3 CPE
ADARB2	0.00733858	0.27406305	0.592	0.626	1	3 ADARB2
SLC35F3	0.00801959	0.36749104	0.792	0.742	1	3 SLC35F3
LINC02306	0.00847136	0.26288405	0.697	0.797	1	3 LINC02306
IQCJ-SCHIP1	0.00910895	0.77582047	0.863	0.897	1	3 IQCJ-SCHIP1
NPL	6.51E-54	0.74531813	0.961	0.915	1.30E-50	4 NPL
NHSL1	1.17E-45	0.79025028	0.875	0.759	2.34E-42	4 NHSL1
CPM1	2.29E-44	0.92657685	0.755	0.618	4.57E-41	4 CPM
MYO1E	2.85E-43	0.9205184	0.741	0.587	5.71E-40	4 MYO1E
MSR1	1.11E-40	0.69328636	0.969	0.968	2.21E-37	4 MSR1
IQGAP21	1.17E-40	0.48219333	0.763	0.72	2.34E-37	4 IQGAP2
PDGFC	2.70E-36	0.49849595	0.913	0.855	5.41E-33	4 PDGFC
ZNF804A	1.87E-32	0.95831012	0.754	0.746	3.74E-29	4 ZNF804A
FMN1	4.62E-32	0.44001084	0.84	0.723	9.23E-29	4 FMN1
RBM47	3.30E-31	0.44524387	0.936	0.857	6.59E-28	4 RBM47
HRH1	5.22E-30	0.2933259	0.715	0.636	1.04E-26	4 HRH1
NEAT1	6.75E-28	0.3088059	0.998	0.977	1.35E-24	4 NEAT1
CD163	6.48E-26	0.64797732	0.599	0.472	1.30E-22	4 CD163
EYA21	2.00E-25	0.59622233	0.686	0.641	3.99E-22	4 EYA2
SAMD4A	1.97E-24	0.50098535	0.878	0.821	3.94E-21	4 SAMD4A
GNPMB	2.14E-24	0.8288887	0.711	0.657	4.29E-21	4 GNPMB
FRMD4B	2.23E-23	0.3758995	0.905	0.833	4.46E-20	4 FRMD4B
MAML21	4.31E-23	0.34178628	0.996	0.968	8.63E-20	4 MAML2
PPARG	5.80E-22	0.62557441	0.631	0.545	1.16E-18	4 PPARG
ITGAX	7.17E-22	0.47364065	0.958	0.913	1.43E-18	4 ITGAX
PIK3R5	1.37E-21	0.39451616	0.869	0.796	2.73E-18	4 PIK3R5
TFEC	7.87E-21	0.3083658	0.892	0.825	1.57E-17	4 TFEC
PCSK5	1.03E-19	0.32900755	0.829	0.742	2.07E-16	4 PCSK5
SLC1A3	7.43E-19	0.25115127	0.986	0.961	1.49E-15	4 SLC1A3
HGF	8.31E-19	0.26639449	0.799	0.768	1.66E-15	4 HGF
BNC2	8.04E-18	0.3587581	0.943	0.877	1.61E-14	4 BNC2
DIRC3	1.07E-16	0.64708878	0.802	0.795	2.13E-13	4 DIRC3
RGS12	2.55E-16	0.37171862	0.957	0.927	5.09E-13	4 RGS12
APOE1	4.54E-16	0.38593947	0.921	0.887	9.09E-13	4 APOE
SAT11	5.70E-16	0.3706051	0.917	0.883	1.14E-12	4 SAT1
MS4A7	7.30E-16	0.421481	0.719	0.649	1.46E-12	4 MS4A7
GNB4	2.34E-15	0.28334208	0.923	0.868	4.68E-12	4 GNB4
TPRG1	3.48E-15	0.97211648	0.52	0.395	6.96E-12	4 TPRG1
PDE3B	1.81E-14	0.38103443	0.952	0.911	3.62E-11	4 PDE3B
PTPRG1	2.87E-14	1.11886943	0.628	0.581	5.73E-11	4 PTPRG
MERTK	1.47E-13	0.31610369	0.836	0.762	2.95E-10	4 MERTK
LINC01374	2.82E-12	0.36304484	0.963	0.927	5.63E-09	4 LINC01374
IFI44L	7.06E-12	0.44821231	0.714	0.677	1.41E-08	4 IFI44L
CD832	8.85E-12	0.28046091	0.639	0.556	1.77E-08	4 CD83
BMP2K	4.94E-11	0.27230424	0.995	0.966	9.89E-08	4 BMP2K
TNS31	9.46E-11	0.28785893	0.942	0.884	1.89E-07	4 TNS3
ARHGAP18	2.86E-10	0.36459583	0.658	0.64	5.72E-07	4 ARHGAP18
MCTP11	1.92E-09	0.28778094	0.725	0.709	3.83E-06	4 MCTP1
GLDN	1.78E-08	0.56214643	0.953	0.929	3.56E-05	4 GLDN

KLHL6	5.30E-08	0.32555723	0.695	0.66	0.00010608	4 KLHL6
RASGEF1B	1.91E-07	0.27333192	0.709	0.664	0.00038144	4 RASGEF1B
PBX3	3.00E-07	0.30858036	0.813	0.787	0.00059935	4 PBX3
OLFML2B	7.69E-06	0.27393378	0.73	0.728	0.0153864	4 OLFML2B
CPNE8	1.39E-05	0.26336342	0.589	0.548	0.02787498	4 CPNE8
CHSY3	2.66E-05	0.26608915	0.671	0.647	0.05314444	4 CHSY3
NAMPT	5.90E-05	0.25285874	0.582	0.526	0.11797164	4 NAMPT
WIPF3	6.98E-05	0.33480515	0.789	0.744	0.13969986	4 WIPF3
CCNG2	0.00057328	0.25250578	0.738	0.71	1	4 CCNG2
MS4A4A	0.00175728	0.3024899	0.547	0.522	1	4 MS4A4A
TENM2	3.05E-16	0.30608011	0.799	0.872	6.10E-13	5 TENM2
ADGRV11	2.24E-14	0.25027423	0.801	0.879	4.47E-11	5 ADGRV1
CHST11	1.20E-11	0.32897013	0.975	0.962	2.41E-08	5 CHST11
KCNQ3	1.74E-10	0.34534893	0.987	0.977	3.49E-07	5 KCNQ3
MAML31	3.34E-10	0.49827435	0.987	0.971	6.69E-07	5 MAML3
LRMDA	1.45E-09	0.25557303	1	0.994	2.91E-06	5 LRMDA
SFXN51	2.70E-09	0.26036029	0.439	0.61	5.40E-06	5 SFXN5
SDK11	1.58E-08	0.59067187	0.894	0.893	3.15E-05	5 SDK1
RUNX1	8.45E-07	0.3593352	0.878	0.906	0.00168967	5 RUNX1
TBXAS1	8.81E-06	0.28001616	0.964	0.967	0.01762478	5 TBXAS1
SRGAP21	8.84E-06	0.33267773	0.997	0.98	0.01767974	5 SRGAP2
RASGEF1C1	1.78E-05	0.57816263	0.93	0.944	0.03563294	5 RASGEF1C
DOCK82	5.80E-05	0.25580075	0.987	0.976	0.11601263	5 DOCK8
LINC022321	9.01E-05	0.51595783	0.962	0.97	0.18011845	5 LINC02232
HS3ST42	0.0001294	0.26214697	0.925	0.938	0.25879017	5 HS3ST4
AOAH1	0.00016045	0.38815022	0.977	0.961	0.32089542	5 AOAH
LINC02057	0.00023303	0.26958217	0.804	0.851	0.46606752	5 LINC02057
RBM471	0.00033953	0.29876326	0.828	0.87	0.67906337	5 RBM47
LHFPL21	0.00041367	0.25201659	0.945	0.931	0.82733682	5 LHFPL2
SFMBT21	0.00069641	0.25375303	1	0.985	1	5 SFMBT2
LINC013741	0.00090392	0.43758817	0.932	0.931	1	5 LINC01374
AC087564.1	0.00111741	0.27389455	0.846	0.878	1	5 AC087564.1
AC012150.1	0.00130844	0.44490279	0.759	0.751	1	5 AC012150.1
PALD12	0.00289142	0.31196844	0.925	0.916	1	5 PALD1
CARD111	0.00323756	0.55053412	0.823	0.86	1	5 CARD11
DOCK2	0.00436948	0.28936809	0.941	0.959	1	5 DOCK2
MSR11	0.00640008	0.39427416	0.958	0.969	1	5 MSR1
DISC11	0.00903939	0.26510922	0.964	0.967	1	5 DISC1
PDE3B1	0.00976594	0.41767927	0.912	0.917	1	5 PDE3B
AC005699.1	0.00993097	0.28489565	0.5	0.589	1	5 AC005699.1
ST18	2.17E-195	3.493259	0.988	0.555	4.34E-192	6 ST18
CTNNA3	1.94E-191	3.37765764	0.991	0.743	3.89E-188	6 CTNNA3
MOBP	8.96E-178	3.14853068	0.962	0.54	1.79E-174	6 MOBP
PLP1	7.77E-174	3.37659052	0.971	0.471	1.55E-170	6 PLP1
RNF220	4.74E-173	3.20565849	0.956	0.479	9.49E-170	6 RNF220
C10orf90	6.00E-167	2.71914768	0.948	0.521	1.20E-163	6 C10orf90
TMEM144	6.37E-166	2.5439205	0.977	0.668	1.27E-162	6 TMEM144
CERCAM	2.40E-164	2.53476318	0.953	0.582	4.81E-161	6 CERCAM
BCAS1	6.54E-162	2.24095919	0.95	0.614	1.31E-158	6 BCAS1
SPOCK3	4.39E-161	2.62983942	0.942	0.372	8.78E-158	6 SPOCK3

LINC01608	4.92E-157	2.58369971	0.93	0.499	9.84E-154	6 LINC01608
PTPRK	9.78E-152	2.58427166	0.956	0.65	1.96E-148	6 PTPRK
AK5	7.82E-149	2.62381999	0.95	0.762	1.56E-145	6 AK5
EPB41L4A	2.41E-147	0.49007517	0.866	0.185	4.81E-144	6 EPB41L4A
PTGDS1	3.31E-146	2.31282557	0.962	0.634	6.62E-143	6 PTGDS
GRM3	3.82E-143	2.46150919	0.921	0.63	7.65E-140	6 GRM3
TF	4.93E-143	2.52608856	0.904	0.299	9.86E-140	6 TF
SLCO1A2	1.33E-141	2.10290945	0.901	0.473	2.66E-138	6 SLCO1A2
ENPP2	1.69E-141	2.29846377	0.91	0.395	3.37E-138	6 ENPP2
COL4A5	1.69E-138	2.11146294	0.913	0.587	3.39E-135	6 COL4A5
KCNH8	2.88E-136	2.45127469	0.892	0.298	5.77E-133	6 KCNH8
CLMN	1.77E-135	2.15023988	0.901	0.519	3.54E-132	6 CLMN
MBP	2.22E-133	1.76277379	0.985	0.792	4.43E-130	6 MBP
LINC00639	1.75E-132	2.13012792	0.895	0.607	3.50E-129	6 LINC00639
AC012494.1	1.99E-129	2.33142072	0.869	0.394	3.98E-126	6 AC012494.1
GALNT13	2.32E-123	1.66810184	0.921	0.754	4.64E-120	6 GALNT13
ZNF536	1.51E-119	2.28242123	0.883	0.566	3.03E-116	6 ZNF536
DLC1	1.81E-119	2.10259805	0.892	0.562	3.63E-116	6 DLC1
PWRN1	1.85E-118	1.63535539	0.895	0.779	3.70E-115	6 PWRN1
KIF6	6.23E-118	1.88353363	0.869	0.58	1.25E-114	6 KIF6
APOD	3.24E-117	1.1673208	0.918	0.62	6.48E-114	6 APOD
PARD3	2.58E-115	0.80038752	0.915	0.661	5.16E-112	6 PARD3
AL359091.1	3.11E-111	1.8942692	0.866	0.649	6.22E-108	6 AL359091.1
UGT8	3.59E-111	1.94338899	0.866	0.563	7.19E-108	6 UGT8
SCD	1.69E-109	1.55449026	0.86	0.453	3.38E-106	6 SCD
CNTNAP4	4.08E-105	2.15477578	0.86	0.659	8.16E-102	6 CNTNAP4
HHIP	1.23E-103	1.95747644	0.851	0.579	2.46E-100	6 HHIP
LINC01170	9.67E-103	1.76579216	0.837	0.477	1.93E-99	6 LINC01170
LINC02073	4.19E-101	0.54664619	0.86	0.746	8.37E-98	6 LINC02073
SLC4A4	1.10E-98	0.36919385	0.913	0.644	2.21E-95	6 SLC4A4
CNP	2.14E-97	1.71398857	0.834	0.33	4.28E-94	6 CNP
TMEM132C	4.72E-97	0.82909787	0.848	0.571	9.43E-94	6 TMEM132C
ERBB4	2.51E-96	1.70632073	0.933	0.788	5.01E-93	6 ERBB4
PLPP3	5.51E-96	0.7487813	0.851	0.707	1.10E-92	6 PLPP3
PCSK6	1.28E-95	1.83335937	0.825	0.402	2.57E-92	6 PCSK6
ZNF462	2.59E-94	1.13892699	0.837	0.626	5.18E-91	6 ZNF462
FAM107B	3.07E-94	1.55135869	0.86	0.591	6.15E-91	6 FAM107B
GPC5	8.96E-93	0.9983406	0.915	0.72	1.79E-89	6 GPC5
SHROOM4	3.63E-91	1.83191045	0.822	0.543	7.25E-88	6 SHROOM4
ABCA8	3.96E-90	1.76642671	0.822	0.508	7.91E-87	6 ABCA8
MOG	3.94E-87	1.54418175	0.799	0.366	7.88E-84	6 MOG
LDLRAD3	1.89E-86	1.10403113	0.819	0.48	3.77E-83	6 LDLRAD3
ADCY21	8.69E-85	0.3386991	0.924	0.807	1.74E-81	6 ADCY2
FBXL7	1.13E-84	2.13490902	0.822	0.657	2.25E-81	6 FBXL7
LMCD1-AS1	6.57E-84	1.5699466	0.904	0.82	1.31E-80	6 LMCD1-AS1
ATP10B	4.14E-82	1.57933026	0.81	0.641	8.27E-79	6 ATP10B
LINC01122	7.45E-82	0.69161402	0.898	0.74	1.49E-78	6 LINC01122
SOX6	1.45E-81	0.35213194	0.872	0.693	2.89E-78	6 SOX6
HS3ST5	5.24E-81	1.74004499	0.831	0.68	1.05E-77	6 HS3ST5
ADARB21	1.67E-80	1.18951191	0.875	0.61	3.34E-77	6 ADARB2

DAAM2	1.83E-80	1.82026286	0.808	0.633	3.67E-77	6 DAAM2
CNDP1	6.11E-80	1.67806473	0.816	0.586	1.22E-76	6 CNDP1
NECAB11	3.48E-79	1.37449381	0.86	0.734	6.97E-76	6 NECAB1
LINC01630	3.60E-79	1.49899667	0.802	0.573	7.20E-76	6 LINC01630
LINC00320	1.17E-78	1.52111868	0.778	0.275	2.35E-75	6 LINC00320
AC113383.1	2.32E-76	0.32833181	0.828	0.692	4.63E-73	6 AC113383.1
OPALIN	1.01E-74	1.32294412	0.773	0.318	2.02E-71	6 OPALIN
PTPRT1	1.22E-72	0.31131772	0.904	0.777	2.44E-69	6 PTPRT
ADAMTS19	3.34E-72	0.30963467	0.845	0.745	6.68E-69	6 ADAMTS19
GRIN2A1	7.37E-72	0.62439135	0.945	0.82	1.47E-68	6 GRIN2A
CHODL	4.43E-70	0.27465976	0.778	0.548	8.85E-67	6 CHODL
TMEM1081	4.52E-70	0.30811701	0.918	0.819	9.04E-67	6 TMEM108
STXBP6	2.24E-63	1.26116723	0.764	0.537	4.49E-60	6 STXBP6
FRMD4B1	2.45E-62	0.97646197	0.971	0.837	4.91E-59	6 FRMD4B
KCNH1	2.80E-60	0.48605082	0.927	0.826	5.61E-57	6 KCNH1
TENM3	2.75E-59	0.5489336	0.878	0.801	5.50E-56	6 TENM3
GREB1L	6.03E-59	0.88808594	0.805	0.803	1.21E-55	6 GREB1L
PIEZO2	4.12E-57	1.66188665	0.761	0.557	8.24E-54	6 PIEZO2
LPAR1	7.06E-56	1.1145249	0.942	0.834	1.41E-52	6 LPAR1
RBMS3	8.28E-56	0.30266642	0.848	0.497	1.66E-52	6 RBMS3
CA2	3.28E-55	1.16241683	0.72	0.379	6.56E-52	6 CA2
CRYAB	5.91E-55	1.06006762	0.717	0.28	1.18E-51	6 CRYAB
ROBO1	1.61E-54	1.32875346	0.813	0.657	3.22E-51	6 ROBO1
SLC6A1	8.28E-54	0.883512	0.796	0.682	1.66E-50	6 SLC6A1
TOX3	9.63E-54	0.30158443	0.752	0.58	1.93E-50	6 TOX3
PDE1A1	1.52E-53	1.24614733	0.848	0.842	3.03E-50	6 PDE1A
LRP1B	2.72E-52	0.99604883	0.953	0.909	5.43E-49	6 LRP1B
PLPP4	5.62E-52	0.31458324	0.72	0.501	1.12E-48	6 PLPP4
CLDN11	7.22E-52	1.24282535	0.749	0.553	1.44E-48	6 CLDN11
RYR3	2.53E-51	0.3046895	0.886	0.728	5.05E-48	6 RYR3
ABTB2	7.36E-51	0.66941719	0.767	0.777	1.47E-47	6 ABTB2
MAG	1.18E-50	1.15294781	0.726	0.493	2.36E-47	6 MAG
ATP8A21	2.99E-50	0.33166238	0.883	0.809	5.98E-47	6 ATP8A2
AL354809.1	1.77E-49	1.09290971	0.767	0.683	3.53E-46	6 AL354809.1
AC007364.1	9.13E-49	0.78235177	0.764	0.6	1.83E-45	6 AC007364.1
AL589740.1	1.27E-48	0.87775976	0.784	0.741	2.55E-45	6 AL589740.1
ITGA2	3.24E-48	1.19749415	0.691	0.343	6.49E-45	6 ITGA2
AL133346.1	2.63E-47	0.3073646	0.831	0.823	5.26E-44	6 AL133346.1
FAT4	5.93E-47	0.58189642	0.711	0.466	1.19E-43	6 FAT4
CNTNAP21	2.42E-46	1.03511352	0.942	0.901	4.84E-43	6 CNTNAP2
IFNG-AS1	2.88E-46	0.33052555	0.758	0.79	5.75E-43	6 IFNG-AS1
SPANXA2-OT	3.25E-46	0.35461338	0.726	0.523	6.51E-43	6 SPANXA2-OT1
SGCD	5.84E-46	0.99697934	0.813	0.802	1.17E-42	6 SGCD
LINC00609	1.20E-45	1.77993545	0.72	0.569	2.39E-42	6 LINC00609
EYA4	6.58E-45	0.33356901	0.697	0.416	1.32E-41	6 EYA4
PLPPR1	2.01E-44	1.34067218	0.708	0.5	4.02E-41	6 PLPPR1
POT1-AS1	2.20E-44	0.54773258	0.875	0.766	4.41E-41	6 POT1-AS1
LRRC4C1	1.52E-42	0.92644957	0.907	0.811	3.05E-39	6 LRRC4C
FOLH1	1.89E-41	1.42224003	0.7	0.536	3.78E-38	6 FOLH1
SLIT2	2.41E-41	0.89681602	0.805	0.663	4.82E-38	6 SLIT2

ANLN	3.18E-41	1.17947442	0.7	0.435	6.36E-38	6 ANLN
RELN	1.28E-40	0.32049566	0.741	0.721	2.56E-37	6 RELN
LURAP1L-AS1	1.79E-40	0.87512863	0.743	0.811	3.59E-37	6 LURAP1L-AS1
AC233296.1	5.61E-40	0.76615557	0.706	0.581	1.12E-36	6 AC233296.1
SEMA3C	1.23E-39	0.81267226	0.732	0.727	2.47E-36	6 SEMA3C
ESRRG1	2.73E-39	1.04236212	0.729	0.54	5.46E-36	6 ESRRG
ZCCHC24	4.57E-39	0.96881881	0.773	0.685	9.14E-36	6 ZCCHC24
LRRC63	4.42E-38	0.72613066	0.717	0.699	8.84E-35	6 LRRC63
LINC01182	7.00E-38	0.28713068	0.723	0.704	1.40E-34	6 LINC01182
NOX4	4.15E-37	0.32611363	0.729	0.867	8.31E-34	6 NOX4
SV2B1	4.70E-37	0.32176718	0.898	0.821	9.40E-34	6 SV2B
ARPP211	3.31E-35	0.56052909	0.84	0.825	6.61E-32	6 ARPP21
LTBP1	9.40E-35	0.77993466	0.708	0.655	1.88E-31	6 LTBP1
EPN2	3.86E-34	0.86412292	0.773	0.627	7.71E-31	6 EPN2
ROR1	8.64E-34	0.73831105	0.711	0.791	1.73E-30	6 ROR1
SELENOP	9.93E-34	0.69295791	0.77	0.658	1.99E-30	6 SELENOP
AC025159.1	2.94E-33	0.53077559	0.851	0.689	5.87E-30	6 AC025159.1
OLIG1	6.61E-33	0.63178932	0.746	0.759	1.32E-29	6 OLIG1
SORCS2	8.07E-33	0.69280956	0.685	0.515	1.61E-29	6 SORCS2
RASGEF1B1	8.76E-33	0.30333472	0.863	0.66	1.75E-29	6 RASGEF1B
LGR5	2.53E-32	0.74913213	0.671	0.454	5.06E-29	6 LGR5
VRK2	3.15E-32	0.8495536	0.822	0.702	6.30E-29	6 VRK2
DCC	3.23E-31	0.62296916	0.787	0.741	6.46E-28	6 DCC
KAZN1	7.36E-31	0.77829311	0.848	0.783	1.47E-27	6 KAZN
NEGR1	2.05E-29	0.6678109	0.927	0.844	4.10E-26	6 NEGR1
DNER	4.74E-29	0.92790047	0.708	0.607	9.48E-26	6 DNER
PDZD2	8.55E-29	0.75135302	0.831	0.835	1.71E-25	6 PDZD2
AC092691.11	7.15E-28	0.56832242	0.831	0.757	1.43E-24	6 AC092691.1
PARD3B	3.66E-27	0.38075913	0.898	0.834	7.33E-24	6 PARD3B
MET	5.80E-27	0.36169219	0.732	0.817	1.16E-23	6 MET
LAMA2	4.60E-26	1.41104258	0.665	0.582	9.21E-23	6 LAMA2
SGCZ	6.28E-26	0.3144224	0.796	0.693	1.26E-22	6 SGCZ
SH3TC2	1.17E-23	1.05091977	0.65	0.596	2.34E-20	6 SH3TC2
GRAMD2B	2.21E-22	0.64375755	0.743	0.74	4.42E-19	6 GRAMD2B
WWTR1	2.85E-22	0.26407994	0.726	0.691	5.71E-19	6 WWTR1
RAB3IP	1.22E-21	0.57552024	0.606	0.359	2.44E-18	6 RAB3IP
LRP2	3.55E-21	1.18754951	0.612	0.278	7.09E-18	6 LRP2
LINC01505	7.48E-21	0.97734137	0.673	0.621	1.50E-17	6 LINC01505
RASGRF21	8.48E-21	0.84791032	0.723	0.773	1.70E-17	6 RASGRF2
CRB1	7.30E-20	0.51632552	0.72	0.8	1.46E-16	6 CRB1
RYR21	1.44E-19	0.38515154	0.825	0.828	2.89E-16	6 RYR2
MYO1E1	5.70E-18	0.3125873	0.776	0.599	1.14E-14	6 MYO1E
MEIS2	7.37E-18	1.06056269	0.703	0.818	1.47E-14	6 MEIS2
ASTN21	7.90E-17	0.85445675	0.676	0.638	1.58E-13	6 ASTN2
GRIK4	8.94E-17	0.28636749	0.379	0.702	1.79E-13	6 GRIK4
IQCJ-SCHIP11	1.55E-16	0.41288715	0.948	0.89	3.10E-13	6 IQCJ-SCHIP1
SLC5A11	1.82E-16	1.15208726	0.618	0.516	3.64E-13	6 SLC5A11
TLE4	1.02E-15	0.28233104	0.845	0.814	2.03E-12	6 TLE4
KAT2B	1.54E-15	0.54186541	0.755	0.723	3.08E-12	6 KAT2B
ACACB	1.90E-15	0.52112426	0.746	0.719	3.80E-12	6 ACACB

GPM6A1	4.51E-15	0.26011669	0.904	0.793	9.02E-12	6 GPM6A
LINC00598	5.08E-15	0.27441424	0.656	0.596	1.02E-11	6 LINC00598
GRIA4	2.93E-14	0.60414854	0.816	0.872	5.85E-11	6 GRIA4
PREX2	8.02E-14	0.62501683	0.72	0.726	1.60E-10	6 PREX2
CDH19	9.04E-14	0.94706288	0.592	0.454	1.81E-10	6 CDH19
SVEP1	3.94E-13	0.71392154	0.571	0.36	7.88E-10	6 SVEP1
LINC01445	7.33E-13	0.28779423	0.566	0.207	1.47E-09	6 LINC01445
LINC00511	1.50E-12	0.26010601	0.691	0.684	2.99E-09	6 LINC00511
EGLN3	8.76E-12	0.42352501	0.569	0.451	1.75E-08	6 EGLN3
CTNNA21	1.22E-11	0.73605321	0.91	0.894	2.44E-08	6 CTNNA2
DGKD	8.19E-11	0.30807172	0.659	0.509	1.64E-07	6 DGKD
SLC1A2	8.88E-11	0.39658244	0.848	0.785	1.78E-07	6 SLC1A2
CDH8	1.14E-10	0.40500556	0.7	0.743	2.27E-07	6 CDH8
PROX1	4.62E-10	0.54649037	0.662	0.691	9.25E-07	6 PROX1
PLEKHH2	1.27E-09	0.307951	0.671	0.751	2.54E-06	6 PLEKHH2
LHFPL6	1.79E-09	0.64666737	0.7	0.803	3.58E-06	6 LHFPL6
PTN	2.68E-09	0.8761594	0.598	0.649	5.37E-06	6 PTN
MID1	4.78E-09	0.25550284	0.778	0.78	9.55E-06	6 MID1
CALN1	6.47E-09	0.2530022	0.379	0.525	1.29E-05	6 CALN1
AL445250.1	8.82E-08	0.55136846	0.606	0.632	0.00017648	6 AL445250.1
AL078590.2	5.88E-07	0.41405931	0.735	0.723	0.00117659	6 AL078590.2
ITPKB	7.07E-07	0.27081957	0.813	0.816	0.00141451	6 ITPKB
ELOVL7	7.83E-07	0.47266853	0.563	0.584	0.00156563	6 ELOVL7
KCTD11	1.15E-06	0.28809581	0.828	0.82	0.00229294	6 KCTD1
KCTD81	2.72E-06	0.96479675	0.551	0.524	0.0054445	6 KCTD8
SMOC1	9.05E-06	0.28562317	0.499	0.732	0.01809435	6 SMOC1
LINC01099	1.49E-05	0.48360215	0.539	0.461	0.02987318	6 LINC01099
APOLD1	0.00090089	0.46267708	0.548	0.544	1	6 APOLD1
ERMN	0.00091866	0.69945822	0.548	0.642	1	6 ERMN
PLD5	0.00362079	0.54392898	0.443	0.63	1	6 PLD5
KCNK1	0.00442647	0.30781788	0.536	0.605	1	6 KCNK1
AL392023.2	0.00550521	0.62173234	0.571	0.734	1	6 AL392023.2
F13A1	4.62E-101	3.63833864	0.956	0.637	9.24E-98	7 F13A1
CD1631	1.25E-86	2.47414701	0.916	0.477	2.50E-83	7 CD163
SELENOP1	1.33E-69	2.76130121	0.901	0.657	2.65E-66	7 SELENOP
ATP10A	9.03E-66	0.56294628	0.887	0.786	1.81E-62	7 ATP10A
MRC1	9.54E-62	2.47999794	0.926	0.767	1.91E-58	7 MRC1
VAV3	3.28E-58	2.05266585	0.852	0.679	6.57E-55	7 VAV3
IQGAP22	3.06E-54	1.97542763	0.887	0.721	6.12E-51	7 IQGAP2
FGF13	8.78E-50	1.87444686	0.842	0.668	1.76E-46	7 FGF13
MS4A4E	5.03E-48	1.38800225	0.847	0.619	1.01E-44	7 MS4A4E
DAPK11	4.16E-47	1.73914233	0.857	0.73	8.32E-44	7 DAPK1
HRH11	2.50E-44	1.03182221	0.808	0.642	5.01E-41	7 HRH1
MDFIC	2.17E-43	0.84774103	0.828	0.779	4.33E-40	7 MDFIC
COLEC12	1.33E-41	2.41303392	0.783	0.513	2.66E-38	7 COLEC12
STAB1	5.60E-40	1.77277827	0.847	0.601	1.12E-36	7 STAB1
MS4A4A1	3.71E-39	1.57487047	0.798	0.518	7.43E-36	7 MS4A4A
DIRC31	9.47E-36	1.88584987	0.877	0.794	1.89E-32	7 DIRC3
FMN11	2.15E-35	1.08386972	0.916	0.733	4.30E-32	7 FMN1
MAN1A1	3.60E-34	1.8141697	0.906	0.773	7.20E-31	7 MAN1A1

ANXA1	8.86E-32	0.56033376	0.759	0.567	1.77E-28	7 ANXA1
LYVE1	2.90E-30	1.81220184	0.749	0.575	5.81E-27	7 LYVE1
ANTXR21	6.39E-29	0.77769706	0.749	0.6	1.28E-25	7 ANTXR2
TSHZ3	1.62E-28	1.20523089	0.749	0.564	3.25E-25	7 TSHZ3
EYA2	2.00E-27	1.35769406	0.749	0.644	4.01E-24	7 EYA2
ALDH1A1	1.09E-26	0.48308859	0.759	0.792	2.19E-23	7 ALDH1A1
COBLL1	6.64E-26	0.30483864	0.724	0.539	1.33E-22	7 COBLL1
CD36	1.45E-24	0.70130817	0.709	0.593	2.91E-21	7 CD36
CDYL2	5.56E-22	0.25461903	0.813	0.715	1.11E-18	7 CDYL2
ABCA9	6.10E-22	0.53336277	0.704	0.507	1.22E-18	7 ABCA9
ARHGAP181	8.09E-22	1.28702619	0.764	0.639	1.62E-18	7 ARHGAP18
MCTP12	8.38E-22	1.34338829	0.759	0.71	1.68E-18	7 MCTP1
GNG12-AS1	1.22E-21	0.37100837	0.182	0.449	2.44E-18	7 GNG12-AS1
CPM2	6.36E-20	0.99072284	0.798	0.631	1.27E-16	7 CPM
NEAT11	2.33E-19	0.537513	0.995	0.979	4.66E-16	7 NEAT1
EDA	3.14E-19	1.27732468	0.857	0.797	6.29E-16	7 EDA
IL12RB2	5.72E-19	0.97441939	0.69	0.64	1.14E-15	7 IL12RB2
PID1	3.68E-17	1.29963127	0.842	0.866	7.35E-14	7 PID1
NAMPT1	8.11E-17	1.3459579	0.69	0.529	1.62E-13	7 NAMPT
FAM198B-AS	8.15E-17	0.49471992	0.739	0.617	1.63E-13	7 FAM198B-AS1
NRP1	8.70E-17	1.38787076	0.773	0.662	1.74E-13	7 NRP1
CPNE81	7.12E-16	0.95533664	0.69	0.55	1.42E-12	7 CPNE8
LDLRAD31	1.50E-15	0.30852825	0.685	0.489	3.01E-12	7 LDLRAD3
RBM472	2.30E-15	0.70248551	0.936	0.865	4.60E-12	7 RBM47
CXCR4	9.28E-15	0.35659975	0.65	0.427	1.86E-11	7 CXCR4
MS4A6A	1.89E-14	0.83855357	0.887	0.826	3.77E-11	7 MS4A6A
HS3ST21	2.87E-14	1.52518282	0.7	0.829	5.75E-11	7 HS3ST2
CEMIP2	2.00E-13	1.04975505	0.586	0.336	4.00E-10	7 CEMIP2
PAM1	3.02E-13	0.27160328	0.773	0.621	6.04E-10	7 PAM
SPON1	3.23E-13	0.30494155	0.409	0.638	6.46E-10	7 SPON1
LINC00278	1.04E-12	0.30980759	0.606	0.386	2.09E-09	7 LINC00278
MS4A71	8.48E-12	0.81741573	0.778	0.654	1.70E-08	7 MS4A7
LRP1B1	4.20E-11	0.31240357	0.941	0.91	8.41E-08	7 LRP1B
MPPED2	4.46E-11	0.81739605	0.67	0.593	8.91E-08	7 MPPED2
MAMDC2	6.11E-11	0.65182376	0.793	0.781	1.22E-07	7 MAMDC2
GNG2	4.05E-10	0.4162299	0.901	0.87	8.10E-07	7 GNG2
CABLES1	9.65E-10	0.30355127	0.892	0.862	1.93E-06	7 CABLES1
SCN9A	1.18E-09	0.873708	0.665	0.709	2.36E-06	7 SCN9A
ADGRG6	1.47E-09	0.96364492	0.685	0.732	2.93E-06	7 ADGRG6
SRGN1	2.02E-09	0.68402742	0.837	0.825	4.04E-06	7 SRGN
ESR1	3.88E-09	0.68163448	0.788	0.785	7.75E-06	7 ESR1
FRMD4B2	6.19E-09	0.62584002	0.887	0.841	1.24E-05	7 FRMD4B
MERTK1	6.79E-09	0.44184484	0.837	0.77	1.36E-05	7 MERTK
PLEK	8.69E-09	0.56031923	0.828	0.755	1.74E-05	7 PLEK
AC021594.2	9.52E-09	0.25368929	0.635	0.51	1.90E-05	7 AC021594.2
RASGEF1B2	1.17E-08	0.69578078	0.719	0.668	2.35E-05	7 RASGEF1B
MCUB	1.58E-08	0.28862193	0.798	0.726	3.16E-05	7 MCUB
PDGFC1	2.30E-08	0.75401784	0.837	0.863	4.60E-05	7 PDGFC
ADGRA3	2.80E-08	0.73520902	0.695	0.76	5.60E-05	7 ADGRA3
EGFL7	7.19E-08	0.42258995	0.626	0.596	0.00014374	7 EGFL7

OPHN11	1.73E-07	0.59929291	0.759	0.711	0.00034661	7 OPHN1
AL356124.1	3.19E-07	0.49951207	0.635	0.63	0.00063711	7 AL356124.1
PARP8	4.74E-07	0.59136334	0.946	0.886	0.00094799	7 PARP8
AP001636.3	5.67E-07	0.39122177	0.645	0.626	0.00113363	7 AP001636.3
AC100849.1	8.80E-07	1.77472563	0.586	0.606	0.00176063	7 AC100849.1
KHDRBS2	1.32E-06	0.45917261	0.872	0.852	0.00264899	7 KHDRBS2
UTRN	1.78E-06	0.63911055	0.916	0.917	0.00355313	7 UTRN
IFI44L1	2.23E-06	0.62128612	0.734	0.68	0.00446722	7 IFI44L
SLC12A7	3.19E-06	0.43968557	0.828	0.771	0.00637464	7 SLC12A7
PVT11	3.35E-06	0.70868003	0.65	0.573	0.00669096	7 PVT1
FCGR2A1	3.61E-06	0.65420523	0.66	0.606	0.00722351	7 FCGR2A
PARD31	7.66E-06	0.37750435	0.69	0.671	0.01532107	7 PARD3
MAF	8.66E-06	0.41847396	0.931	0.896	0.01731928	7 MAF
TRHDE	1.62E-05	0.35976201	0.621	0.675	0.0324053	7 TRHDE
COL5A3	2.22E-05	0.26494271	0.803	0.781	0.04449948	7 COL5A3
GALNTL61	3.23E-05	1.05019769	0.695	0.711	0.06460553	7 GALNTL6
AL160272.1	3.24E-05	0.26381513	0.818	0.792	0.06481625	7 AL160272.1
ZNF804A1	3.44E-05	0.62803897	0.739	0.747	0.06871076	7 ZNF804A
CEBPD1	3.93E-05	0.41872554	0.773	0.77	0.07867482	7 CEBPD
AC083837.1	5.74E-05	0.46932428	0.557	0.467	0.1147546	7 AC083837.1
NHSL11	7.00E-05	0.25763797	0.833	0.772	0.13996084	7 NHSL1
AFF31	7.30E-05	0.52434049	0.842	0.851	0.14601656	7 AFF3
RNF144B	7.55E-05	0.62286948	0.759	0.709	0.15093394	7 RNF144B
WLS	9.91E-05	0.74463566	0.788	0.827	0.19826976	7 WLS
TFEC1	0.00014716	0.29524492	0.862	0.833	0.29432849	7 TFEC
EPSTI11	0.00025909	0.34360099	0.837	0.737	0.51818457	7 EPSTI1
AHNAK	0.00026163	0.68470474	0.616	0.609	0.52325154	7 AHNAK
STON2	0.00027664	0.26923756	0.798	0.796	0.55328995	7 STON2
GAS2L3	0.00029686	0.73079606	0.626	0.676	0.59372586	7 GAS2L3
HTR7	0.00037932	0.283267	0.626	0.687	0.75864902	7 HTR7
PBX31	0.00135622	0.47042874	0.803	0.79	1	7 PBX3
EPS8	0.00188391	0.31259755	0.847	0.854	1	7 EPS8
FAM110B	0.00206971	0.25513728	0.571	0.516	1	7 FAM110B
TTN	0.00905206	1.1557987	0.507	0.502	1	7 TTN
SAMD4A1	0.00971189	0.4011484	0.798	0.829	1	7 SAMD4A
FAM155A1	6.20E-68	2.25472809	0.949	0.899	1.24E-64	8 FAM155A
OPCML1	1.80E-67	2.33572144	0.97	0.905	3.59E-64	8 OPCML
CNTNAP22	2.20E-66	2.47465929	0.965	0.901	4.41E-63	8 CNTNAP2
RBFOX11	3.37E-64	2.39783274	0.98	0.944	6.73E-61	8 RBFOX1
DLGAP1	3.93E-59	2.2225479	0.955	0.903	7.86E-56	8 DLGAP1
SYT11	6.41E-55	1.87606395	0.96	0.935	1.28E-51	8 SYT1
FGF121	4.36E-51	1.87997253	0.894	0.803	8.73E-48	8 FGF12
MEG31	8.53E-51	1.42561638	0.975	0.959	1.71E-47	8 MEG3
LRP1B2	9.80E-50	2.03710679	0.939	0.911	1.96E-46	8 LRP1B
CADPS1	2.44E-48	1.79392671	0.914	0.877	4.89E-45	8 CADPS
STXBP5L1	4.22E-48	1.68265279	0.919	0.882	8.45E-45	8 STXBP5L
SNTG11	5.81E-48	2.03965888	0.919	0.819	1.16E-44	8 SNTG1
RIMS21	8.12E-47	1.76333865	0.904	0.803	1.62E-43	8 RIMS2
KALRN	1.17E-45	1.79076239	0.934	0.874	2.34E-42	8 KALRN
NEGR11	1.95E-45	1.74258989	0.924	0.846	3.90E-42	8 NEGR1

CCSER11	2.16E-45	1.82639981	0.939	0.898	4.32E-42	8 CCSER1
PLCB1	2.33E-45	2.11567746	0.904	0.876	4.66E-42	8 PLCB1
CACNA1C	8.08E-45	1.73923563	0.894	0.844	1.62E-41	8 CACNA1C
KAZN2	2.33E-44	2.19975746	0.879	0.784	4.65E-41	8 KAZN
LRRTM41	3.13E-43	1.68034094	0.944	0.92	6.26E-40	8 LRRTM4
CTNNA22	9.14E-42	1.82191183	0.929	0.894	1.83E-38	8 CTNNA2
GRIK21	1.40E-41	1.89120084	0.924	0.915	2.80E-38	8 GRIK2
ATP8A22	4.32E-38	1.67007992	0.843	0.811	8.64E-35	8 ATP8A2
CNTN51	9.88E-38	2.09014344	0.879	0.827	1.98E-34	8 CNTN5
RYR22	1.94E-37	1.69230495	0.889	0.826	3.89E-34	8 RYR2
ROBO21	5.92E-36	2.42467321	0.904	0.869	1.18E-32	8 ROBO2
CACNA2D31	5.94E-36	1.72679417	0.879	0.819	1.19E-32	8 CACNA2D3
KCNIP41	1.27E-35	1.7758096	0.995	0.981	2.53E-32	8 KCNIP4
RGS71	2.19E-35	1.58103388	0.904	0.877	4.38E-32	8 RGS7
MDGA21	3.91E-35	1.62449936	0.899	0.863	7.81E-32	8 MDGA2
GRM5	9.96E-35	1.51969518	0.869	0.86	1.99E-31	8 GRM5
DAB11	2.90E-34	1.53414248	0.909	0.863	5.81E-31	8 DAB1
DLGAP21	4.32E-34	1.48697256	0.914	0.893	8.64E-31	8 DLGAP2
GRIP11	9.03E-34	1.8182928	0.823	0.751	1.81E-30	8 GRIP1
GRIA11	2.54E-33	1.53951677	0.854	0.806	5.07E-30	8 GRIA1
TMEM178B1	2.66E-33	1.37366121	0.848	0.796	5.33E-30	8 TMEM178B
DPP101	3.29E-33	2.31037883	0.934	0.871	6.57E-30	8 DPP10
MEG81	6.22E-33	1.20120593	0.869	0.821	1.24E-29	8 MEG8
GRIN2B1	1.77E-32	1.43405779	0.859	0.84	3.54E-29	8 GRIN2B
FRMPD4	6.05E-31	1.64167965	0.889	0.813	1.21E-27	8 FRMPD4
AGBL4	1.57E-30	1.6249417	0.859	0.828	3.13E-27	8 AGBL4
TENM21	2.60E-30	1.97546877	0.859	0.866	5.20E-27	8 TENM2
XKR41	3.41E-30	1.77341223	0.732	0.581	6.82E-27	8 XKR4
SYN31	5.03E-30	1.68426421	0.823	0.789	1.01E-26	8 SYN3
AC092691.12	6.02E-30	1.54166625	0.813	0.759	1.20E-26	8 AC092691.1
SNAP251	1.26E-29	1.17382504	0.843	0.753	2.51E-26	8 SNAP25
LINGO2	4.90E-29	1.67031386	0.884	0.905	9.79E-26	8 LINGO2
PDE4D1	2.74E-28	1.16863832	0.975	0.962	5.48E-25	8 PDE4D
GRIA41	6.44E-28	1.29091943	0.889	0.869	1.29E-24	8 GRIA4
MTUS21	7.39E-28	1.65359259	0.848	0.833	1.48E-24	8 MTUS2
TMEM132B1	1.24E-27	1.35409616	0.828	0.786	2.47E-24	8 TMEM132B
KCNQ5	1.27E-27	1.74649071	0.859	0.84	2.54E-24	8 KCNQ5
PCLO1	1.72E-27	1.40480967	0.843	0.806	3.45E-24	8 PCLO
CDH181	2.74E-27	1.2977126	0.869	0.833	5.47E-24	8 CDH18
AFF32	1.69E-26	1.22971855	0.874	0.85	3.37E-23	8 AFF3
GALNT171	2.76E-26	1.44472392	0.833	0.802	5.52E-23	8 GALNT17
MIAT	5.53E-26	1.02082119	0.874	0.869	1.11E-22	8 MIAT
ADGRL21	6.83E-26	1.25977797	0.808	0.756	1.37E-22	8 ADGRL2
GABBR21	1.65E-25	1.24065926	0.773	0.739	3.29E-22	8 GABBR2
CNTN41	2.35E-25	1.53521745	0.788	0.722	4.69E-22	8 CNTN4
GPM6A2	2.86E-25	1.08911624	0.859	0.796	5.71E-22	8 GPM6A
PCDH71	3.70E-25	1.55034145	0.879	0.857	7.40E-22	8 PCDH7
HS6ST31	4.20E-25	1.35706439	0.899	0.855	8.41E-22	8 HS6ST3
RALYL1	5.05E-25	1.72937132	0.884	0.883	1.01E-21	8 RALYL
LRFN5	5.36E-25	1.43068611	0.828	0.827	1.07E-21	8 LRFN5

ERC21	5.53E-25	1.28634592	0.859	0.746	1.11E-21	8 ERC2
ABLIM11	7.39E-25	0.97405098	0.818	0.798	1.48E-21	8 ABLIM1
ADCY22	9.54E-25	1.18898635	0.828	0.811	1.91E-21	8 ADCY2
ATRN11	9.60E-25	1.3170498	0.889	0.899	1.92E-21	8 ATRN1
SCN1A1	1.16E-24	1.05583608	0.773	0.662	2.33E-21	8 SCN1A
KHDRBS21	3.33E-24	1.56271549	0.874	0.851	6.66E-21	8 KHDRBS2
DCLK1	4.75E-24	1.30308666	0.838	0.855	9.51E-21	8 DCLK1
LRR4C2	6.79E-24	1.35765755	0.848	0.815	1.36E-20	8 LRR4C
SYNPR1	1.22E-23	1.42569479	0.773	0.671	2.44E-20	8 SYNPR
PDZRN3	4.05E-23	1.32469104	0.778	0.71	8.11E-20	8 PDZRN3
ASIC21	5.56E-23	1.66757408	0.778	0.774	1.11E-19	8 ASIC2
TNR1	5.87E-23	1.06654354	0.818	0.755	1.17E-19	8 TNR
SYN21	1.53E-22	1.31692751	0.788	0.76	3.07E-19	8 SYN2
CNTNAP5	1.73E-22	1.65735612	0.833	0.858	3.46E-19	8 CNTNAP5
CDH121	2.59E-22	1.47681765	0.854	0.848	5.17E-19	8 CDH12
SLC4A10	3.11E-22	1.22179199	0.859	0.813	6.22E-19	8 SLC4A10
CACNA1B1	3.14E-22	1.28303267	0.773	0.713	6.27E-19	8 CACNA1B
UNC5D	4.53E-22	1.78516508	0.823	0.807	9.05E-19	8 UNC5D
GRM71	7.31E-22	1.65144833	0.848	0.844	1.46E-18	8 GRM7
CDH101	8.83E-22	1.1147519	0.793	0.771	1.77E-18	8 CDH10
ASTN22	9.89E-22	1.27113524	0.742	0.637	1.98E-18	8 ASTN2
MYRIP1	1.14E-21	1.32963589	0.737	0.662	2.29E-18	8 MYRIP
NRCAM1	3.03E-21	1.02692343	0.803	0.779	6.06E-18	8 NRCAM
INPP4B	3.55E-21	1.20100487	0.828	0.741	7.10E-18	8 INPP4B
PHACTR11	3.76E-21	0.94506695	0.909	0.903	7.52E-18	8 PHACTR1
GRIN2A2	1.37E-20	1.47759162	0.808	0.826	2.75E-17	8 GRIN2A
PTPRG2	1.98E-20	0.592861	0.773	0.582	3.95E-17	8 PTPRG
RIMS1	2.98E-20	1.17853155	0.848	0.837	5.95E-17	8 RIMS1
SORBS21	3.19E-20	1.16046694	0.848	0.837	6.38E-17	8 SORBS2
KCNJ3	3.38E-20	1.11126002	0.742	0.696	6.76E-17	8 KCNJ3
RBMS31	3.69E-20	1.33558729	0.677	0.508	7.38E-17	8 RBMS3
PTPRT2	5.08E-20	1.50999905	0.818	0.781	1.02E-16	8 PTPRT
PDE10A	6.89E-20	1.22073198	0.768	0.784	1.38E-16	8 PDE10A
HECW1	1.18E-19	1.20966102	0.813	0.816	2.36E-16	8 HECW1
PDE1A2	1.51E-19	1.08808732	0.894	0.841	3.02E-16	8 PDE1A
IQCJ-SCHIP12	1.69E-19	1.62536577	0.899	0.892	3.39E-16	8 IQCJ-SCHIP1
HCN11	1.85E-19	1.03391336	0.808	0.772	3.70E-16	8 HCN1
GABRB2	1.96E-19	1.29859789	0.737	0.691	3.92E-16	8 GABRB2
SRRM41	6.61E-19	1.09826997	0.747	0.708	1.32E-15	8 SRRM4
CHRM31	1.77E-18	1.47034777	0.783	0.751	3.55E-15	8 CHRM3
KCNC2	2.43E-18	1.36736193	0.768	0.794	4.87E-15	8 KCNC2
PCSK21	2.66E-18	1.0776293	0.803	0.827	5.32E-15	8 PCSK2
SGCZ1	3.56E-18	1.76714638	0.763	0.696	7.11E-15	8 SGCZ
ZNF385B1	4.63E-18	1.33850085	0.808	0.829	9.26E-15	8 ZNF385B
SLC35F1	5.11E-18	0.97489361	0.828	0.862	1.02E-14	8 SLC35F1
ERBB41	9.61E-18	1.99147937	0.828	0.794	1.92E-14	8 ERBB4
CHL11	1.09E-17	0.96116665	0.833	0.82	2.18E-14	8 CHL1
GPC61	1.34E-17	1.13472642	0.773	0.779	2.68E-14	8 GPC6
SLC44A5	3.18E-17	1.0615208	0.793	0.794	6.36E-14	8 SLC44A5
KIAA12171	5.09E-17	1.52896366	0.697	0.654	1.02E-13	8 KIAA1217

SHISA9	5.99E-17	1.2546856	0.793	0.79	1.20E-13	8 SHISA9
TMEM1082	8.77E-17	1.193664	0.823	0.824	1.75E-13	8 TMEM108
TMEM132D1	1.03E-16	1.1465685	0.818	0.834	2.06E-13	8 TMEM132D
GRIA31	2.55E-16	1.18042876	0.753	0.786	5.10E-13	8 GRIA3
KIAA1549L1	2.86E-16	1.04118904	0.813	0.781	5.73E-13	8 KIAA1549L
KCND2	3.15E-16	1.39880625	0.773	0.821	6.30E-13	8 KCND2
SEZ6L	3.65E-16	1.00793947	0.783	0.795	7.31E-13	8 SEZ6L
SLC35F31	4.43E-16	0.93358542	0.747	0.749	8.87E-13	8 SLC35F3
RGS61	5.43E-16	1.5548324	0.803	0.837	1.09E-12	8 RGS6
ROBO11	7.68E-16	1.41662842	0.727	0.662	1.54E-12	8 ROBO1
ADAMTS9-AS2	9.41E-16	1.06660103	0.722	0.716	1.88E-12	8 ADAMTS9-AS2
DCC1	9.45E-16	1.38226426	0.763	0.743	1.89E-12	8 DCC
AC073050.11	1.23E-15	1.2533213	0.803	0.829	2.47E-12	8 AC073050.1
FSTL5	1.49E-15	1.17796675	0.677	0.594	2.99E-12	8 FSTL5
CALN11	1.70E-15	0.98867155	0.601	0.516	3.41E-12	8 CALN1
PAM2	1.82E-15	0.78005764	0.722	0.622	3.64E-12	8 PAM
DAPK12	3.00E-15	0.8548534	0.778	0.732	5.99E-12	8 DAPK1
GALNT18	3.12E-15	0.76725348	0.783	0.819	6.24E-12	8 GALNT18
GPR158	4.66E-15	0.7512188	0.763	0.782	9.31E-12	8 GPR158
RBFOX31	4.90E-15	1.20264918	0.702	0.717	9.81E-12	8 RBFOX3
KCNH11	5.26E-15	1.06277212	0.813	0.831	1.05E-11	8 KCNH1
THSD7A	1.05E-14	1.07864329	0.732	0.754	2.10E-11	8 THSD7A
SPOCK31	1.56E-14	1.02478304	0.556	0.393	3.12E-11	8 SPOCK3
GABRB31	1.64E-14	0.96973917	0.793	0.837	3.28E-11	8 GABRB3
FLRT2	1.79E-14	1.42634188	0.763	0.798	3.57E-11	8 FLRT2
NCALD1	1.82E-14	0.90981934	0.722	0.647	3.64E-11	8 NCALD
MCTP13	1.90E-14	0.81869489	0.788	0.709	3.80E-11	8 MCTP1
EPHA61	2.04E-14	1.45777034	0.763	0.751	4.08E-11	8 EPHA6
SNRPN	2.32E-14	0.87428997	0.763	0.78	4.63E-11	8 SNRPN
PLXNA4	2.51E-14	1.00728341	0.758	0.708	5.02E-11	8 PLXNA4
CAMK4	3.47E-14	0.77354956	0.737	0.762	6.93E-11	8 CAMK4
PDE8B1	4.18E-14	0.68862938	0.652	0.584	8.35E-11	8 PDE8B
CACNB2	4.19E-14	1.16133356	0.813	0.839	8.38E-11	8 CACNB2
CAMK2A	5.05E-14	0.85590731	0.753	0.749	1.01E-10	8 CAMK2A
GUCY1A21	7.48E-14	0.58828432	0.768	0.73	1.50E-10	8 GUCY1A2
CNTNAP41	8.60E-14	0.85290195	0.747	0.666	1.72E-10	8 CNTNAP4
NR2F1-AS11	9.84E-14	0.9022251	0.763	0.757	1.97E-10	8 NR2F1-AS1
CNTN31	2.44E-13	0.83817411	0.838	0.84	4.88E-10	8 CNTN3
KCNH71	3.22E-13	1.28256364	0.783	0.787	6.44E-10	8 KCNH7
KCTD161	3.74E-13	1.10685041	0.783	0.796	7.48E-10	8 KCTD16
GRM11	3.82E-13	1.0108397	0.763	0.808	7.65E-10	8 GRM1
EML6	4.18E-13	0.86015018	0.843	0.845	8.35E-10	8 EML6
KCTD82	6.44E-13	0.76526165	0.626	0.523	1.29E-09	8 KCTD8
MPPED21	7.06E-13	0.59736749	0.641	0.594	1.41E-09	8 MPPED2
FSTL4	8.66E-13	0.89656609	0.753	0.777	1.73E-09	8 FSTL4
NR2F2-AS1	9.30E-13	0.26507041	0.515	0.383	1.86E-09	8 NR2F2-AS1
LDB21	1.06E-12	1.12044003	0.864	0.883	2.13E-09	8 LDB2
ZNF385D1	2.35E-12	1.21611308	0.601	0.502	4.70E-09	8 ZNF385D
TENM31	4.41E-12	1.32292093	0.742	0.806	8.82E-09	8 TENM3
FAM135B1	7.92E-12	0.7521129	0.712	0.72	1.58E-08	8 FAM135B

LINC011221	8.27E-12	1.06089667	0.768	0.746	1.65E-08	8 LINC01122
ST6GALNAC5	8.38E-12	1.18766777	0.778	0.829	1.68E-08	8 ST6GALNAC5
ESRRG2	8.88E-12	0.62035756	0.626	0.546	1.78E-08	8 ESRRG
NELL21	9.19E-12	1.09409751	0.758	0.804	1.84E-08	8 NELL2
PACRG	9.40E-12	0.7643397	0.621	0.566	1.88E-08	8 PACRG
BRINP1	1.29E-11	0.8412064	0.702	0.711	2.58E-08	8 BRINP1
NDST3	2.15E-11	0.71052823	0.773	0.816	4.30E-08	8 NDST3
ANKRD30BL1	2.22E-11	0.81766056	0.697	0.744	4.44E-08	8 ANKRD30BL
AMPH	2.72E-11	0.73404041	0.732	0.69	5.44E-08	8 AMPH
TMTC1	2.97E-11	0.75890732	0.682	0.684	5.93E-08	8 TMTC1
FAM189A1	4.36E-11	0.70631806	0.601	0.594	8.71E-08	8 FAM189A1
DNER1	4.45E-11	0.8148497	0.641	0.611	8.90E-08	8 DNER
FHOD3	5.34E-11	0.58998002	0.742	0.814	1.07E-07	8 FHOD3
SORCS1	6.02E-11	1.16220091	0.747	0.728	1.20E-07	8 SORCS1
KLHL29	6.32E-11	0.87162754	0.525	0.401	1.26E-07	8 KLHL29
KCNB2	1.05E-10	1.02702588	0.763	0.836	2.10E-07	8 KCNB2
GRID21	1.06E-10	0.63111474	0.838	0.736	2.12E-07	8 GRID2
CCDC31	1.08E-10	0.73695813	0.687	0.666	2.16E-07	8 CCDC3
GABRG31	1.36E-10	1.15871181	0.707	0.77	2.73E-07	8 GABRG3
R3HDM1	1.68E-10	0.58506085	0.924	0.899	3.36E-07	8 R3HDM1
DGKB1	1.70E-10	1.07638595	0.793	0.849	3.39E-07	8 DGKB
ZFPM2	1.87E-10	0.71635238	0.727	0.741	3.73E-07	8 ZFPM2
GRIK11	2.98E-10	1.75997993	0.626	0.574	5.96E-07	8 GRIK1
RUNX1T1	4.82E-10	0.83028249	0.702	0.721	9.65E-07	8 RUNX1T1
CHSY31	6.03E-10	0.53018207	0.737	0.648	1.21E-06	8 CHSY3
ZNF5361	6.94E-10	0.83140315	0.657	0.578	1.39E-06	8 ZNF536
GABRA2	7.28E-10	0.53054142	0.707	0.738	1.46E-06	8 GABRA2
KIAA1211	1.34E-09	0.83940773	0.53	0.458	2.67E-06	8 KIAA1211
KCNMB21	1.65E-09	1.01732187	0.808	0.831	3.31E-06	8 KCNMB2
BASP1-AS11	2.10E-09	0.82516944	0.732	0.796	4.19E-06	8 BASP1-AS1
RAB3C1	2.32E-09	0.7834079	0.687	0.689	4.63E-06	8 RAB3C
DTNA	2.37E-09	0.32898477	0.924	0.847	4.74E-06	8 DTNA
OLFM31	4.52E-09	0.94470249	0.727	0.769	9.04E-06	8 OLFM3
SHISA6	4.72E-09	0.73934436	0.672	0.692	9.45E-06	8 SHISA6
OLFM1	5.09E-09	0.41005316	0.692	0.7	1.02E-05	8 OLFM1
CEP112	5.17E-09	0.63347507	0.672	0.66	1.03E-05	8 CEP112
PLD51	5.28E-09	0.78419756	0.662	0.621	1.06E-05	8 PLD5
SOX51	5.85E-09	0.93350427	0.833	0.836	1.17E-05	8 SOX5
GALNTL62	7.02E-09	1.58531729	0.672	0.711	1.40E-05	8 GALNTL6
ARPP212	9.00E-09	1.08777032	0.793	0.826	1.80E-05	8 ARPP21
CDH41	1.03E-08	0.58030798	0.641	0.645	2.05E-05	8 CDH4
PARD32	1.08E-08	0.82265413	0.717	0.671	2.16E-05	8 PARD3
GAD2	1.14E-08	0.59109249	0.545	0.492	2.27E-05	8 GAD2
SH3GL2	1.19E-08	0.75528483	0.702	0.742	2.37E-05	8 SH3GL2
GRM8	1.24E-08	0.92541901	0.616	0.664	2.49E-05	8 GRM8
PWRN11	1.36E-08	0.5772651	0.753	0.785	2.71E-05	8 PWRN1
COL19A1	1.46E-08	0.36931915	0.616	0.593	2.92E-05	8 COL19A1
CHN11	1.67E-08	0.5622007	0.727	0.67	3.33E-05	8 CHN1
PLPPR11	1.68E-08	0.42808417	0.551	0.508	3.37E-05	8 PLPPR1
EPHA7	1.94E-08	0.4978391	0.742	0.804	3.87E-05	8 EPHA7

NXPH2	2.26E-08	0.37259058	0.49	0.425	4.52E-05	8 NXPH2
SGCD1	2.65E-08	0.58223856	0.818	0.803	5.30E-05	8 SGCD
LINC01725	3.01E-08	0.3953051	0.581	0.558	6.02E-05	8 LINC01725
CLSTN21	4.96E-08	1.22785993	0.657	0.647	9.93E-05	8 CLSTN2
SVEP11	5.41E-08	0.25716998	0.465	0.366	0.00010825	8 SVEP1
PDZD21	5.84E-08	0.73113936	0.843	0.835	0.00011672	8 PDZD2
NELL11	7.27E-08	1.03951768	0.737	0.799	0.00014538	8 NELL1
KCNT2	7.85E-08	0.71944773	0.692	0.717	0.00015692	8 KCNT2
CACNA1E1	8.55E-08	0.70792095	0.672	0.698	0.00017108	8 CACNA1E
EFNA51	1.13E-07	1.07979493	0.758	0.854	0.00022514	8 EFNA5
CDH131	1.17E-07	1.06095849	0.682	0.676	0.00023332	8 CDH13
CIT1	1.40E-07	0.66245802	0.768	0.777	0.00027901	8 CIT
NETO2	1.72E-07	0.41375758	0.424	0.316	0.00034324	8 NETO2
ADARB22	1.95E-07	2.34059207	0.631	0.621	0.00039086	8 ADARB2
PTPRR	2.05E-07	0.69838252	0.687	0.778	0.00041015	8 PTPRR
GALNT131	2.15E-07	0.65779328	0.722	0.763	0.00042945	8 GALNT13
MYO16	2.15E-07	0.62094693	0.646	0.672	0.00042977	8 MYO16
PTPRK1	2.77E-07	0.76354646	0.672	0.663	0.00055419	8 PTPRK
STXBP61	2.89E-07	0.55630424	0.581	0.546	0.00057885	8 STXBP6
ADAM231	2.98E-07	0.60098043	0.652	0.658	0.00059559	8 ADAM23
C3orf67-AS1	3.16E-07	0.28385476	0.692	0.828	0.00063166	8 C3orf67-AS1
AC090578.1	3.43E-07	0.63146678	0.742	0.796	0.00068515	8 AC090578.1
CNR1	3.45E-07	0.3419239	0.596	0.608	0.00068919	8 CNR1
MMP161	4.29E-07	1.0092722	0.732	0.76	0.00085787	8 MMP16
POU6F2	6.88E-07	0.98504098	0.712	0.771	0.00137637	8 POU6F2
SLIT1	7.27E-07	0.52170886	0.657	0.636	0.00145433	8 SLIT1
PRICKLE1	7.41E-07	0.67963144	0.722	0.813	0.00148131	8 PRICKLE1
CUX21	9.27E-07	0.47518355	0.641	0.682	0.00185352	8 CUX2
MICAL21	1.08E-06	0.4919783	0.672	0.611	0.00215257	8 MICAL2
KLF12	1.09E-06	0.49841447	0.702	0.674	0.00217659	8 KLF12
ADCY8	1.49E-06	0.47979485	0.596	0.594	0.00298026	8 ADCY8
RANBP17	1.49E-06	0.43515232	0.505	0.48	0.00298733	8 RANBP17
LINC02398	1.58E-06	0.36390692	0.692	0.745	0.00316983	8 LINC02398
ELAVL21	1.66E-06	0.64907914	0.697	0.77	0.00332074	8 ELAVL2
DSCAM1	2.03E-06	0.39726006	0.944	0.941	0.0040686	8 DSCAM
DOK6	2.18E-06	0.80477121	0.722	0.791	0.00436223	8 DOK6
ZMAT41	2.51E-06	0.89497729	0.667	0.735	0.00501147	8 ZMAT4
FAT31	2.63E-06	0.89829435	0.818	0.866	0.0052673	8 FAT3
SEMA5A	2.93E-06	0.29477899	0.48	0.404	0.00585369	8 SEMA5A
PRKG11	3.01E-06	1.11863644	0.778	0.859	0.00602004	8 PRKG1
DLX6-AS1	3.70E-06	0.39476437	0.672	0.687	0.00739557	8 DLX6-AS1
PRKCB	3.89E-06	0.2967236	0.884	0.835	0.00778544	8 PRKCB
UNC13C1	4.01E-06	0.78125892	0.778	0.811	0.00801972	8 UNC13C
TMEM232	4.47E-06	0.65609541	0.778	0.83	0.0089306	8 TMEM232
CCDC85A	4.93E-06	0.93562003	0.712	0.758	0.00986404	8 CCDC85A
TMEM178A	5.11E-06	0.47560191	0.727	0.814	0.01021311	8 TMEM178A
MGAT4C1	5.63E-06	1.01102152	0.697	0.781	0.01126611	8 MGAT4C
LINC013221	5.94E-06	0.8168682	0.641	0.736	0.0118733	8 LINC01322
NETO1	6.15E-06	0.83404341	0.646	0.724	0.01229629	8 NETO1
CPE1	7.48E-06	0.50364236	0.682	0.719	0.01496934	8 CPE

NRG1	8.00E-06	1.47521753	0.742	0.804	0.01600825	8 NRG1
SYT7	8.04E-06	0.39609109	0.652	0.693	0.0160799	8 SYT7
CACNB41	9.08E-06	0.26344254	0.929	0.947	0.0181614	8 CACNB4
CDH91	9.09E-06	0.77541466	0.707	0.786	0.01817329	8 CDH9
SLC6A11	9.36E-06	0.87278081	0.657	0.688	0.01871743	8 SLC6A1
VSNL11	1.34E-05	0.51851699	0.702	0.706	0.02687929	8 VSNL1
NYAP2	1.36E-05	0.61387695	0.677	0.794	0.02722405	8 NYAP2
AC124854.1	1.48E-05	0.27079236	0.444	0.392	0.02967337	8 AC124854.1
TSHZ31	1.82E-05	0.56082286	0.556	0.569	0.03636114	8 TSHZ3
SYBU1	2.05E-05	0.60734664	0.657	0.74	0.04105972	8 SYBU
CA10	2.06E-05	0.5112777	0.808	0.842	0.04128692	8 CA10
THSD7B	2.40E-05	0.38594028	0.535	0.519	0.04800709	8 THSD7B
GDA	2.76E-05	0.25726354	0.737	0.824	0.05521155	8 GDA
ATP2B1	2.92E-05	0.27609992	0.864	0.881	0.05836306	8 ATP2B1
C1orf61	2.96E-05	0.31507651	0.692	0.68	0.05910602	8 C1orf61
AK51	3.09E-05	0.4215121	0.742	0.771	0.06184807	8 AK5
COBLL11	3.77E-05	0.27645806	0.586	0.543	0.07548399	8 COBLL1
CNKS21	4.43E-05	0.74445835	0.763	0.8	0.08862557	8 CNKS2
LINC01250	4.87E-05	0.50492193	0.747	0.807	0.09743377	8 LINC01250
RPH3A	4.88E-05	0.52919646	0.687	0.771	0.0976762	8 RPH3A
SLC17A7	5.17E-05	0.36981103	0.697	0.756	0.10345193	8 SLC17A7
PDE7B1	5.21E-05	0.48325684	0.601	0.621	0.1041008	8 PDE7B
TMEM132C1	5.35E-05	0.51620434	0.561	0.583	0.10705745	8 TMEM132C
ANK1	5.58E-05	0.49044322	0.616	0.68	0.11157919	8 ANK1
CACNG3	5.77E-05	0.68216927	0.662	0.776	0.11545536	8 CACNG3
PCDH11X	7.12E-05	0.92477265	0.621	0.712	0.14232222	8 PCDH11X
PTPRM1	7.30E-05	0.53490028	0.672	0.693	0.14601505	8 PTPRM
TRHDE1	8.56E-05	0.50485583	0.616	0.675	0.17119841	8 TRHDE
AC024901.1	9.85E-05	0.41092584	0.702	0.794	0.19707403	8 AC024901.1
KIAA0319	0.00010289	0.35287012	0.662	0.733	0.20578599	8 KIAA0319
GAD1	0.00013203	0.42922762	0.636	0.676	0.26405397	8 GAD1
EPHA5	0.00013473	0.80419435	0.657	0.705	0.26945494	8 EPHA5
PTPRO	0.00013912	0.42927296	0.813	0.822	0.27824377	8 PTPRO
KCNN3	0.00014477	0.28375578	0.561	0.788	0.28954528	8 KCNN3
BCL11B	0.00015578	0.43854196	0.611	0.663	0.31156207	8 BCL11B
AC007563.21	0.00015692	0.54086585	0.707	0.79	0.31384672	8 AC007563.2
GNG4	0.00015728	0.26108865	0.384	0.348	0.31455863	8 GNG4
ADAMTS191	0.00017277	0.46753487	0.682	0.752	0.34554187	8 ADAMTS19
RELN1	0.00018092	0.65230395	0.641	0.724	0.3618436	8 RELN
LNK1	0.00019997	0.40333378	0.672	0.726	0.39994995	8 LNK1
VWC2	0.00020441	0.5503474	0.581	0.613	0.40881561	8 VWC2
LMO31	0.00021595	0.3945797	0.778	0.843	0.4318974	8 LMO3
BRINP2	0.00022024	0.46444899	0.601	0.639	0.44047524	8 BRINP2
DGKG	0.00024417	0.60377872	0.662	0.731	0.48834442	8 DGKG
HOMER1	0.00025518	0.2742008	0.747	0.75	0.51036047	8 HOMER1
GABRG2	0.00026854	0.56524873	0.692	0.797	0.5370751	8 GABRG2
GABRA11	0.00027529	0.43394511	0.672	0.74	0.55058582	8 GABRA1
U91319.1	0.00030114	0.42664419	0.667	0.759	0.60228375	8 U91319.1
MIR124-2HG	0.0003332	0.47114437	0.641	0.705	0.66640329	8 MIR124-2HG
TOX1	0.00034898	1.04341952	0.606	0.682	0.69795286	8 TOX

STXBP5-AS1	0.00036836	0.62028138	0.571	0.579	0.73672239	8 STXBP5-AS1
RAB27B	0.00039292	0.47668402	0.662	0.774	0.78583539	8 RAB27B
AC025159.11	0.00040004	0.40998327	0.682	0.696	0.80008765	8 AC025159.1
ARHGEF28	0.00045618	0.27701092	0.737	0.819	0.91236636	8 ARHGEF28
EGFR	0.00046802	0.59577358	0.662	0.693	0.93603403	8 EGFR
SPARCL1	0.00048342	0.42562994	0.722	0.799	0.96684837	8 SPARCL1
GULP1	0.00050033	0.25934418	0.682	0.878	1	8 GULP1
CASC15	0.00050344	0.82490727	0.657	0.726	1	8 CASC15
MCC	0.00050823	0.35673914	0.606	0.611	1	8 MCC
BCL11A	0.00051133	0.48095193	0.763	0.802	1	8 BCL11A
LINC02389	0.00052958	0.44157436	0.54	0.535	1	8 LINC02389
LUZP21	0.00053003	0.40143233	0.722	0.795	1	8 LUZP2
FRAS1	0.00061259	0.74888722	0.672	0.756	1	8 FRAS1
DNAH6	0.00061918	0.42483584	0.667	0.754	1	8 DNAH6
BTBD11	0.00062325	0.53940532	0.551	0.603	1	8 BTBD11
NWD21	0.00062606	0.3286881	0.717	0.841	1	8 NWD2
GRIN3A	0.00063995	0.32696604	0.48	0.499	1	8 GRIN3A
TOX2	0.00066941	0.36698384	0.495	0.5	1	8 TOX2
SLC1A21	0.00067413	0.59127559	0.747	0.789	1	8 SLC1A2
AC233296.11	0.00067648	0.39845398	0.545	0.588	1	8 AC233296.1
CLVS2	0.00069952	0.39712491	0.455	0.414	1	8 CLVS2
RASGRF22	0.0007001	0.48767858	0.722	0.772	1	8 RASGRF2
AC132803.1	0.00076873	0.37674294	0.571	0.553	1	8 AC132803.1
LINC013781	0.00085766	0.252322	0.742	0.844	1	8 LINC01378
GNAL	0.00086742	0.38093299	0.636	0.706	1	8 GNAL
SLC24A3	0.00086803	0.85508629	0.53	0.601	1	8 SLC24A3
SEL1L3	0.00091667	0.39731091	0.535	0.569	1	8 SEL1L3
ARHGAP28	0.00096136	0.34420445	0.591	0.635	1	8 ARHGAP28
PRR16	0.00099413	0.51067221	0.591	0.629	1	8 PRR16
AC011995.2	0.00105329	0.34932228	0.692	0.804	1	8 AC011995.2
MLIP	0.00118654	0.51078687	0.737	0.844	1	8 MLIP
EPHA3	0.00135352	0.59956027	0.692	0.796	1	8 EPHA3
GHR	0.00141112	0.59198606	0.722	0.825	1	8 GHR
AL591501.1	0.00141815	0.38925543	0.732	0.847	1	8 AL591501.1
ZNRF3	0.00156905	0.28898191	0.571	0.549	1	8 ZNRF3
OSBPL10	0.00180161	0.49567384	0.636	0.738	1	8 OSBPL10
NHS	0.00182913	0.4810144	0.672	0.746	1	8 NHS
MSC-AS1	0.00184959	0.31384488	0.722	0.829	1	8 MSC-AS1
HTR1E	0.0018525	0.42640855	0.475	0.476	1	8 HTR1E
AL445623.2	0.00199385	0.34454487	0.611	0.648	1	8 AL445623.2
LINC005111	0.00201161	0.45545931	0.591	0.686	1	8 LINC00511
KCTD12	0.00205246	0.4607791	0.712	0.823	1	8 KCTD1
HS3ST51	0.00214	0.26977304	0.657	0.688	1	8 HS3ST5
BAALC-AS1	0.00234406	0.26940387	0.384	0.558	1	8 BAALC-AS1
SLIT21	0.00246767	0.73066175	0.626	0.67	1	8 SLIT2
PID11	0.00294753	0.50054423	0.818	0.866	1	8 PID1
XYLT11	0.00301299	0.37933572	0.783	0.822	1	8 XYLT1
LHFPL31	0.00307112	0.77310518	0.641	0.681	1	8 LHFPL3
NOS1AP	0.00325657	0.38216672	0.843	0.88	1	8 NOS1AP
LY86-AS1	0.00355826	0.44603297	0.758	0.764	1	8 LY86-AS1

LHFPL61	0.00377668	0.6426487	0.732	0.8	1	8 LHFPL6
RIT2	0.00378498	0.37351781	0.601	0.67	1	8 RIT2
CXXC4-AS1	0.00413879	0.34395066	0.636	0.721	1	8 CXXC4-AS1
CDHR31	0.00419555	0.46191091	0.566	0.605	1	8 CDHR3
DLC11	0.00456527	0.31321888	0.556	0.577	1	8 DLC1
SLC4A42	0.00473907	0.37057345	0.616	0.657	1	8 SLC4A4
CADPS2	0.00479379	0.67778082	0.722	0.749	1	8 CADPS2
WASF1	0.00516642	0.48055967	0.692	0.761	1	8 WASF1
TRPC4	0.00526114	0.31229187	0.667	0.742	1	8 TRPC4
CARMIL1	0.00527983	0.44804018	0.652	0.682	1	8 CARMIL1
AC093523.1	0.00551342	0.37439397	0.606	0.688	1	8 AC093523.1
MED12L1	0.00565817	0.28340135	0.631	0.622	1	8 MED12L
ADAMTSL3	0.00607205	0.28597079	0.611	0.669	1	8 ADAMTSL3
ZNF804B	0.00608851	0.49912617	0.47	0.727	1	8 ZNF804B
MPP7	0.00676173	0.35027805	0.631	0.73	1	8 MPP7
PCDH151	0.00695882	1.01883509	0.646	0.736	1	8 PCDH15
DGCR9	0.00714472	0.52090765	0.697	0.796	1	8 DGCR9
AQP4-AS11	0.00766641	0.53480661	0.677	0.76	1	8 AQP4-AS1
AC016687.2	0.0079734	0.80960026	0.485	0.494	1	8 AC016687.2
RIPOR21	0.00827556	0.57043915	0.596	0.672	1	8 RIPOR2
FBXL71	0.00876818	0.37903094	0.626	0.665	1	8 FBXL7
OCA2	0.00886973	0.33178695	0.687	0.775	1	8 OCA2
SLC22A10	0.00929114	0.73963564	0.747	0.848	1	8 SLC22A10
CTNNA31	2.64E-32	1.31311546	0.934	0.751	5.27E-29	9 CTNNA3
RNF2201	1.93E-29	1.21178451	0.861	0.494	3.85E-26	9 RNF220
ST181	1.03E-28	1.36534833	0.869	0.569	2.05E-25	9 ST18
TF1	1.62E-17	0.87673719	0.705	0.319	3.24E-14	9 TF
PTPRK2	1.02E-16	1.09885495	0.811	0.661	2.04E-13	9 PTPRK
ZNF5362	2.58E-15	0.82050872	0.779	0.576	5.16E-12	9 ZNF536
MOBP1	1.40E-14	0.94084888	0.762	0.555	2.79E-11	9 MOBP
TMEM1441	5.13E-14	0.74945395	0.852	0.679	1.03E-10	9 TMEM144
SPOCK32	2.57E-13	1.02831237	0.705	0.392	5.13E-10	9 SPOCK3
CLMN1	1.06E-12	1.17414587	0.713	0.533	2.11E-09	9 CLMN
PLP11	2.69E-12	0.54139907	0.77	0.489	5.39E-09	9 PLP1
BCAS11	1.02E-11	0.78497809	0.762	0.627	2.04E-08	9 BCAS1
GRM31	1.79E-10	0.99002692	0.721	0.641	3.58E-07	9 GRM3
DAAM21	6.50E-10	0.81477585	0.73	0.639	1.30E-06	9 DAAM2
MBP1	4.70E-09	0.32549456	0.959	0.798	9.39E-06	9 MBP
LINC020731	5.58E-09	0.28377205	0.861	0.749	1.12E-05	9 LINC02073
ENPP21	6.37E-09	0.78713792	0.639	0.414	1.27E-05	9 ENPP2
ERBB42	1.34E-08	0.43922899	0.885	0.793	2.68E-05	9 ERBB4
C10orf901	1.85E-08	0.76720878	0.689	0.537	3.71E-05	9 C10orf90
FBXL72	9.25E-08	0.9609174	0.73	0.663	0.00018505	9 FBXL7
KCNH81	1.75E-07	0.93201489	0.598	0.32	0.00034938	9 KCNH8
L3MBTL4	7.92E-07	0.31171441	0.934	0.855	0.00158311	9 L3MBTL4
LINC016081	1.72E-06	0.96915319	0.656	0.516	0.00344942	9 LINC01608
HHIP1	6.07E-06	0.73690772	0.689	0.59	0.01213573	9 HHIP
ROR11	1.53E-05	0.27475477	0.549	0.792	0.03061419	9 ROR1
SHROOM41	4.51E-05	0.6540417	0.639	0.554	0.09019935	9 SHROOM4
PTGDS2	4.68E-05	0.39685448	0.73	0.647	0.09357727	9 PTGDS

FAM107B1	6.05E-05	0.64980947	0.672	0.601	0.12103047	9 FAM107B
CNTNAP23	8.77E-05	0.37065225	0.926	0.902	0.17533951	9 CNTNAP2
LPAR11	0.00012908	0.27332259	0.852	0.839	0.25815556	9 LPAR1
BNC21	0.00017652	0.49022038	0.975	0.884	0.35303756	9 BNC2
LMCD1-AS11	0.00077122	0.56162071	0.82	0.824	1	9 LMCD1-AS1
AK52	0.00120944	0.46986477	0.754	0.771	1	9 AK5
CSF2RA1	0.00207205	0.28342102	0.967	0.899	1	9 CSF2RA
LINC022322	0.00215407	0.26058238	0.992	0.969	1	9 LINC02232
CERCAM1	0.00266145	0.55315384	0.631	0.597	1	9 CERCAM
PTCHD41	0.00271462	0.26171717	0.885	0.768	1	9 PTCHD4
DLC12	0.00358313	0.59395441	0.615	0.576	1	9 DLC1
PIEZO21	0.00359927	0.70857763	0.607	0.565	1	9 PIEZO2
AC012494.11	0.00426089	0.96925703	0.549	0.413	1	9 AC012494.1
LGR51	0.0051206	0.29472219	0.393	0.465	1	9 LGR5
PLA2G4A1	0.00535946	0.27018879	0.91	0.855	1	9 PLA2G4A
MYOF	0.00547535	0.30304223	0.885	0.777	1	9 MYOF
GRID22	0.00552655	0.68404648	0.828	0.737	1	9 GRID2
ENTPD11	0.00568955	0.27110916	0.992	0.951	1	9 ENTPD1