

Cluster A

Cluster A SAM analysis FDR less than 5%								
NAME	UNIQID	chr location	Fold change		NAME	UNIQID	chr location	Fold change
WIF1	7964722	chr12	130.61		SEMA3A	8140668	chr7	0.02
DKK2	8102200	chr4	56.66		LOC138046	8147065	chr8	0.03
DKK4	8150529	chr8	54.91		ZNF804A	8046815	chr2	0.03
LGR5	7957140	chr12	41.44		CTTNBP2	8142497	chr7	0.03
ADAMTSL1	8154491	chr9	35.08		LOC645323	8113037	chr5	0.03
DKK1	7927631	chr10	28.09		KHDRBS2	8127370	chr6	0.03
GAD1	8046283	chr2	26.81		LOC727966	8127399	chr6	0.04
ZNF804B	8134018	chr7	25.46		NRN1	8123739	chr6	0.04
TNC	8163637	chr9	25.10		EGFL11	8127408	chr6	0.04
C14orf29	7974288	chr14	24.72		TMTC2	7957417	chr12	0.05
SHOX2	8091698	chr3	18.89		NA	8127393	chr6	0.05
TMEM132C	7959827	chr12	18.01		NOL4	8022856	chr18	0.06
NKD1	7995525	chr16	17.47		ENC1	8112615	chr5	0.06
CCDC68	8023401	chr18	16.55		CACNA2D1	8140579	chr7	0.07
C20orf103	8060940	chr20	16.06		C6orf32	8124280	chr6	0.07
GPR64	8171624	chrX	15.90		RELN	8141950	chr7	0.07
PDE11A	8057004	chr2	15.69		ZNF679	8133042	chr7	0.07
PGM5	8155665	chr9	15.60		GLRA2	8166127	chrX	0.08
WNT16	8135763	chr7	15.11		EOMES	8085946	chr3	0.08
ENPP3	8122071	chr6	15.06		SLC6A15	7965206	chr12	0.08
PAX3	8059301	chr2	14.78		CDH18	8111220	chr5	0.08
LOC645188	8170257	chrX	13.87		DCX	8174543	chrX	0.08
EMB	8112007	chr5	13.60		ERBB4	8058627	chr2	0.09
NA	8102210	chr4	13.34		PRL	8124185	chr6	0.09
EPHA7	8128284	chr6	13.10		LHX4	7907849	chr1	0.09
EMX2	7930857	chr10	12.49		TOX	8150962	chr8	0.09
RASL11B	8095043	chr4	12.29		MAB21L1	7970949	chr13	0.09
TNFRSF19	7968015	chr13	11.72		MPP3	8015846	chr17	0.09
GABRE	8175666	chrX	11.40		SNCAIP	8107594	chr5	0.10
TMEM51	7898115	chr1	11.29		CNTN1	7954899	chr12	0.10
ASCL4	7958396	chr12	10.97		MYT1L	8050031	chr2	0.10
C9orf94	8154512	chr9	10.92		NID2	7979133	chr14	0.11
AMHR2	7955797	chr12	10.53		GABRG2	8109677	chr5	0.11
GALNT12	8156770	chr9	10.37		UNC5D	8145799	chr8	0.11
GALNT14	8051298	chr2	10.20		LRRN6C	8160546	chr9	0.11
ZMAT4	8150419	chr8	9.53		ISLR2	7984802	chr15	0.12
GLT25D2	7922807	chr1	9.44		LHX1	8006681	chr17	0.12
BAMBI	7926875	chr10	9.12		KCNB2	8146908	chr8	0.12
GDF8	8057713	chr2	8.78		EDIL3	8112980	chr5	0.12
TNFRSF11B	8152512	chr8	8.72		LEMD1	7923772	chr1	0.13
HORMAD1	7919787	chr1	8.65		ELAVL4	7901342	chr1	0.13
NA	8134024	chr7	8.59		NFIB	8160138	chr9	0.13
KCNH5	7979529	chr14	8.51		RGS7BP	8105596	chr5	0.13
TGFA	8052872	chr2	8.36		HDAC9	8131631	chr7	0.13
ALK	8051241	chr2	8.08		TES	8135576	chr7	0.13
CNGA3	8043782	chr2	8.04		ST18	8150722	chr8	0.14
TMEM84	7984511	chr15	8.00		BNC2	8160260	chr9	0.14
CLYBL	7969815	chr13	7.92		SGK	8129677	chr6	0.14

Cluster A

MSX2	8110084	chr5	7.78
NA	8081107	chr3	7.77
GABRG3	7982117	chr15	7.69
PLCB1	8060854	chr20	7.66
EPHA3	8081081	chr3	7.60
IFT57	8089314	chr3	7.55
PGM5P2	8161520	chr9	7.36
TMEM2	8161701	chr9	7.29
P4HA2	8113981	chr5	7.28
SLITRK6	7972239	chr13	7.20
DOK5	8063458	chr20	7.05
COLEC12	8021946	chr18	6.98
PRPH	7955184	chr12	6.84
LRIG3	7964602	chr12	6.82
SP5	8046276	chr2	6.73
FMOD	7923578	chr1	6.72
MGC21644	8114845	chr5	6.68
ALCAM	8081431	chr3	6.57
ESM1	8112045	chr5	6.37
CHRM4	7947649	chr11	6.36
NA	8147687	chr8	6.35
C9orf3	8156569	chr9	6.28
FGF20	8149465	chr8	6.14
CRABP2	7921099	chr1	6.11
PIWIL4	7943240	chr11	6.05
CRYZ	7917037	chr1	6.04
MYOT	8108256	chr5	6.03
LEF1	8102232	chr4	5.99
PCDH21	7928770	chr10	5.92
CLDN11	8083887	chr3	5.92
INADL	7901804	chr1	5.87
COL6A3	8059905	chr2	5.86
LOC129293	8053379	chr2	5.83
C14orf161	7980891	chr14	5.74
NA	8014158	chr17	5.73
ADAM19	8115490	chr5	5.68
CYB5R2	7946292	chr11	5.65
DSP	8116780	chr6	5.63
LGI2	8099685	chr4	5.62
KCNIP1	8109912	chr5	5.59
RNF43	8016994	chr17	5.49
AXIN2	8017718	chr17	5.48
RGL1	7908125	chr1	5.47
TTC6	7974029	chr14	5.40
LOC126147	8038139	chr19	5.36
OCA2	7986838	chr15	5.35
C14orf25	7974008	chr14	5.31
MMP2	7995681	chr16	5.28
FREM2	7968678	chr13	5.27
LRP4	7947744	chr11	5.23
ATP8A1	8100026	chr4	5.15
C1orf126	7912638	chr1	5.14

FSTL5	8103466	chr4	0.14
SORBS2	8104035	chr4	0.14
AFF2	8170364	chrX	0.15
NA	8173621	chrX	0.15
BAI3	8120468	chr6	0.15
BARHL1	8158912	chr9	0.15
LPHN3	8095303	chr4	0.15
SLC17A6	7938975	chr11	0.16
SLITRK1	7972231	chr13	0.16
IFIH1	8056303	chr2	0.16
CDH6	8104663	chr5	0.16
C14orf39	7979483	chr14	0.16
CXorf57	8169158	chrX	0.17
KIAA1713	8020844	chr18	0.17
PALMD	7903227	chr1	0.18
RPIB9	8133961	chr7	0.18
GRIA2	8098021	chr4	0.18
NO145	8116874	chr6	0.18
KIAA1239	8094542	chr4	0.18
PRKG2	8101284	chr4	0.18
SV2C	8106336	chr5	0.18
FAM49A	8050427	chr2	0.18
CLGN	8102877	chr4	0.18
CD200	8081657	chr3	0.19
ATRNL1	7930714	chr10	0.19
NA	8180376	---	0.19
FOXP2	8135544	chr7	0.19
KLF12	7972003	chr13	0.19
PRSS12	8102468	chr4	0.19
RGMB	8107100	chr5	0.20
NA	8144569	chr8	0.20
ZNF154	8039674	chr19	0.20
AKR1C2	7931832	chr10	0.20
GCNT4	8112668	chr5	0.20
LOC653653	8017210	chr17	0.20
PRKCB1	7994131	chr16	0.20
CD24	8177222	chrY	0.20
KCNJ2	8009502	chr17	0.20
DPP6	8137485	chr7	0.21
PAPPA2	7907572	chr1	0.21
FRMD4B	8088745	chr3	0.21
MEIS2	7987385	chr15	0.21
MYRIP	8078933	chr3	0.21
ELAVL2	8160459	chr9	0.21
RP1-303F19.1	8127391	chr6	0.21
NPY1R	8103494	chr4	0.21
RGS5	7921916	chr1	0.22
CNTNAP5	8044976	chr2	0.22
SLC16A7	7956658	chr12	0.22
RGS7	7925457	chr1	0.22
ZNF238	7911038	chr1	0.22
B4GALT6	8022747	chr18	0.22

Cluster A

NA	8079742	chr3	5.13
RUNX2	8120043	chr6	5.09
ASB13	7931863	chr10	5.08
OSR2	8147573	chr8	5.07
CCDC36	8079719	chr3	5.02
HECW1	8132465	chr7	5.02
PYGL	7979085	chr14	4.99
EPHA4	8059279	chr2	4.98
ITGA8	7932254	chr10	4.95
SLC35D3	8122256	chr6	4.94
MOBK12B	8160521	chr9	4.89
RTTN	8023766	chr18	4.87
NBLA00301	8098344	chr4	4.87
KCNJ13	8059776	chr2	4.81
BMP4	7979241	chr14	4.79
KREMEN1	8072170	chr22	4.78
VSTM2	8132851	chr7	4.77
CNTNAP2	8137010	chr7	4.74
PLEKHF2	8147439	chr8	4.64
GALNTL2	8078155	chr3	4.60
NA	8056730	chr2	4.59
CNTN6	8077299	chr3	4.56
MYO3B	8046238	chr2	4.56
TMEM45A	8081288	chr3	4.52
GLT8D2	7965941	chr12	4.49
SLC7A8	7977933	chr14	4.48
LHX8	7902353	chr1	4.48
MGC45800	8103853	chr4	4.46
SLIT2	8094301	chr4	4.44
ROR2	8162283	chr9	4.42
PCDH8	7971850	chr13	4.41
MAGEC3	8170260	chrX	4.41
MPP1	8176174	chrX	4.40
SELENBP1	7919984	chr1	4.39
ARMC4	7932744	chr10	4.38
FBXL7	8104592	chr5	4.37
NA	8060895	chr20	4.37
SLC16A4	7918426	chr1	4.35
LOC130940	8056022	chr2	4.34
SGCD	8109490	chr5	4.32
WNT11	7950534	chr11	4.32
HK2	8042942	chr2	4.31
NRCAM	8142270	chr7	4.24
USP41	8074606	chr22	4.22
KCNJ5	7945146	chr11	4.22
GPC6	7969613	chr13	4.21
PART1	8105495	chr5	4.21
CNTN5	7943319	chr11	4.20
MAF	8002969	chr16	4.19
STGC3	8079740	chr3	4.18
DMRT2	8154047	chr9	4.14
RSPO1	7915032	chr1	4.14

PLCXD3	8111887	chr5	0.22
SLCO5A1	8151223	chr8	0.22
PTCHD2	7897691	chr1	0.23
EBF1	8115543	chr5	0.23
FREM1	8160168	chr9	0.23
LMX1A	7921936	chr1	0.23
MAPT	8007828	chr17	0.23
UCHL1	8094778	chr4	0.23
PDE10A	8130674	chr6	0.23
TMEM108	8082767	chr3	0.23
ABCC9	7961710	chr12	0.23
PTPN5	7947076	chr11	0.24
HMGCLL1	8127180	chr6	0.24
SPOCK1	8114287	chr5	0.24
NA	8027348	chr19	0.24
ENPEP	8096875	chr4	0.24
RNF180	8105585	chr5	0.24
SYT6	7918716	chr1	0.24
NA	7939237	chr11	0.25
SEPT3	8073548	chr22	0.25
FAM111B	7940147	chr11	0.25
NA	8035793	chr19	0.25
CACNG3	7994152	chr16	0.25
LIN28B	8121251	chr6	0.25
DDX31	8164742	chr9	0.26
SH3GL3	7985507	chr15	0.26
CACNA1E	7907911	chr1	0.26
KCND3	7918558	chr1	0.26
ZNF578	8030944	chr19	0.26
ANK3	7933772	chr10	0.26
B3GALT2	7923034	chr1	0.26
GUCY1B3	8097973	chr4	0.26
SLC16A6	8017843	chr17	0.26
HERC3	8096385	chr4	0.26
MYT1	8064277	chr20	0.26
MDGA1	8126102	chr6	0.26
NA	8078956	chr3	0.26
NA	8022761	chr18	0.26
TMSL8	8174189	chrX	0.26
MARK1	7909841	chr1	0.26
AKR1CL2	7925904	chr10	0.26
MED12L	8083360	chr3	0.27
AHI1	8129728	chr6	0.27
C6orf173	8121911	chr6	0.27
GHR	8105121	chr5	0.27
PHLDA1	7965040	chr12	0.27
ZNF681	8035855	chr19	0.27
RNF152	8023598	chr18	0.27
TEK	8154692	chr9	0.27
SH3GL2	8154476	chr9	0.27
PCLO	8140620	chr7	0.27
PCDHB18	8108749	chr5	0.27

Cluster A

PTGS1	8157650	chr9	4.13
CCBE1	8023575	chr18	4.10
KIAA1199	7985317	chr15	4.10
NAV2	7938834	chr11	4.10
TSPAN9	7953166	chr12	4.09
APCDD1	8020141	chr18	4.07
CCDC80	8089544	chr3	4.04
CUBN	7932326	chr10	4.03
NA	7917050	chr1	4.02
NPNT	8096704	chr4	4.01
NA	8132493	chr7	3.99
GALNT10	8109407	chr5	3.96
SPRY2	7972217	chr13	3.93
ACTC1	7987315	chr15	3.93
LRRN3	8135488	chr7	3.87
CD82	7939546	chr11	3.87
PKP2	7962212	chr12	3.86
ALPL	7898693	chr1	3.86
NA	7901854	chr1	3.85
NET1	7925954	chr10	3.83
ABCD2	7962312	chr12	3.80
SLC1A3	8104930	chr5	3.80
SERPINF1	8003667	chr17	3.79
FZD10	7959850	chr12	3.79
FAM26B	7936100	chr10	3.76
CA10	8016808	chr17	3.74
ST6GAL2	8054439	chr2	3.74
FRMD6	7974316	chr14	3.73
AK5	7902452	chr1	3.70
RAB11FIP2	7936567	chr10	3.70
NA	8051273	chr2	3.70
GSN	8157582	chr9	3.70
NXPH3	8008208	chr17	3.70
PLXDC1	8014768	chr17	3.69
HOXD13	8046524	chr2	3.68
NA	8060893	chr20	3.68
HSD17B14	8038213	chr19	3.68
PLCD4	8048350	chr2	3.67
NA	7954653	chr12	3.63
KCNK17	8126163	chr6	3.62
FLJ20920	8008321	chr17	3.61
NA	7974335	chr14	3.61
CYP4F12	8026468	chr19	3.60
PPFIBP2	7938231	chr11	3.59
ADAM12	7936968	chr10	3.59
MEIS1	8042356	chr2	3.58
SART2	8121588	chr6	3.56
ODZ2	8109752	chr5	3.56
DDR2	7906878	chr1	3.56
MAP2K6	8009476	chr17	3.56
LRRN1	8077366	chr3	3.55
DSG2	8020779	chr18	3.54

SNAP91	8127872	chr6	0.27
FGF13	8175444	chrX	0.28
KCNK2	7909730	chr1	0.28
TLE2	8032553	chr19	0.28
VIL2	8130505	chr6	0.28
CORO2B	7984475	chr15	0.28
NAALAD2	7943051	chr11	0.28
PDE1C	8138888	chr7	0.28
DPYSL5	8040725	chr2	0.28
TBC1D8	8054308	chr2	0.29
FLJ44894	8035789	chr19	0.29
SH3BP5	8085556	chr3	0.29
EPS8	7961546	chr12	0.29
SYN2	8077879	chr3	0.29
PTP4A1	8120431	chr6	0.29
MBOAT2	8050160	chr2	0.29
FAM19A2	7964631	chr12	0.29
EML1	7976698	chr14	0.29
KBTBD9	8040490	chr2	0.29
STX7	8129590	chr6	0.30
NOX4	7950933	chr11	0.30
NPY5R	8098146	chr4	0.30
C11orf41	7939215	chr11	0.30
RIMS1	8120613	chr6	0.30
GPR137C	7974372	chr14	0.30
RAI14	8104788	chr5	0.31
NA	7987403	chr15	0.31
CNKSR2	8166355	chrX	0.31
SLIT1	7935361	chr10	0.31
AMPH	8139131	chr7	0.31
TSHZ1	8021768	chr18	0.31
MGC42105	8105146	chr5	0.31
RREB1	8116740	chr6	0.31
NEDD4L	8021376	chr18	0.31
KPNA5	8121632	chr6	0.31
CEP170	7925525	chr1	0.32
C10orf30	7932118	chr10	0.32
ARRDC3	8113073	chr5	0.32
DDX3Y	8176624	chrY	0.32
COCH	7973797	chr14	0.32
MYB	8122202	chr6	0.32
SPECC1	8005661	chr17	0.32
COL4A1	7972750	chr13	0.32
ZIM2	8039607	chr19	0.32
NPTX2	8134463	chr7	0.32
LOC653483	8130817	chr6	0.32
TCEAL2	8168892	chrX	0.32
TGFBR3	7917649	chr1	0.32
ADRBK2	8072015	chr22	0.33
ST6GAL1	8084717	chr3	0.33
ZNF702	8039025	chr19	0.33
PTPLA	7932420	chr10	0.33

Cluster A

CBLN2	8023822	chr18	3.53
APOL4	8075709	chr22	3.53
SCYE1	8096718	chr4	3.50
TMEFF2	8057803	chr2	3.50
CPNE9	8077572	chr3	3.48
NA	8121142	chr6	3.48
NA	8102212	chr4	3.44
PDIA5	8082133	chr3	3.43
AKAP6	7973850	chr14	3.43
PCGF5	7929132	chr10	3.42
ODZ3	8098441	chr4	3.41
MID1	8171297	chrX	3.39
NA	8137040	chr7	3.38
PDLIM4	8107897	chr5	3.38
DLX3	8016609	chr17	3.37
ZNRF3	8072160	chr22	3.37
KIAA0746	8099721	chr4	3.36
CACHD1	7901993	chr1	3.36
C20orf82	8061013	chr20	3.36
CES1	8001457	chr16	3.33
STK33	7946365	chr11	3.33
PAPSS1	8102214	chr4	3.31
FRMPD2	7933446	chr10	3.30
NA	8047159	chr2	3.30
CROT	8133938	chr7	3.29
PERP	8129880	chr6	3.28
MYO7A	7942717	chr11	3.28
PMAIP1	8021470	chr18	3.27
SERPIND1	8071420	chr22	3.27
NA	7957735	chr12	3.27
NA	7906900	chr1	3.26
CXCR7	8049471	chr2	3.23
KIAA0984	7956826	chr12	3.23
SOCS2	7957551	chr12	3.23
P2RXL1	8071489	chr22	3.23
PRMT8	7953181	chr12	3.22
VIM	7926368	chr10	3.20
FZD7	8047487	chr2	3.18
TH	7945712	chr11	3.17
CA11	8038126	chr19	3.14
ADRB3	8150249	chr8	3.14
PINX1	8149296	chr8	3.13
MGC16169	8102171	chr4	3.12
LOC165186	8041172	chr2	3.11
S100A11	7920128	chr1	3.10
ATP8A2	7968154	chr13	3.09
SIPA1L2	7925062	chr1	3.08
CACNA1A	8034643	chr19	3.08
PCSK1	8113234	chr5	3.07
IL11RA	8154934	chr9	3.07
GRIK1	8069770	chr21	2.99
OPN3	7925492	chr1	2.98

DLGAP1	8022085	chr18	0.33
PCDHB16	8108716	chr5	0.33
TANC2	8009075	chr17	0.33
PCDHB15	8108753	chr5	0.33
NA	8058660	chr2	0.33
ZNF96	8124574	chr6	0.33
PLCL1	8047248	chr2	0.34
MAGI3	7904106	chr1	0.34
HINT3	8121886	chr6	0.34
GNAO1	7995739	chr16	0.34
MGC26356	8093332	chr4	0.34
RANBP17	8109938	chr5	0.34
ARID5B	7927732	chr10	0.34
APBB2	8099982	chr4	0.34
INSR	8033362	chr19	0.34
AOF1	8117081	chr6	0.34
ZNF138	8133057	chr7	0.34
SOX11	8040070	chr2	0.34
DPF3	7979963	chr14	0.35
C21orf34	8067932	chr21	0.35
NA	7957431	chr12	0.35
MLLT4	8123407	chr6	0.35
AKR1C1	7925918	chr10	0.35
MAP2	8047926	chr2	0.35
C6orf168	8128371	chr6	0.35
NA	8039672	chr19	0.35
NA	7892683	---	0.35
LRRC4	8142765	chr7	0.35
HOOK1	7901765	chr1	0.35
C6orf62	8124273	chr6	0.35
NA	8058662	chr2	0.36
MSRA	8144557	chr8	0.36
CDK5R1	8006409	chr17	0.36
MYBL1	8151101	chr8	0.36
ZNF91	8035842	chr19	0.36
C6orf60	8129231	chr6	0.36
DOPEY1	8120883	chr6	0.36
PPM1L	8083749	chr3	0.36
EML5	7980636	chr14	0.36
B3GNT5	8084206	chr3	0.36
CITED2	8129937	chr6	0.36
DOCK11	8169541	chrX	0.36
TSPAN2	7918857	chr1	0.36
C14orf37	7979400	chr14	0.36
SYTL4	8173955	chrX	0.36
HYDIN	8002492	chr16	0.36
NTN4	7965573	chr12	0.36
NCOA7	8121861	chr6	0.36
SLC16A9	7933750	chr10	0.36
CUGBP2	7926127	chr10	0.36
SYDE2	7917322	chr1	0.36
KIAA1324L	8140709	chr7	0.36

Cluster A

SUSD1	8163383	chr9	2.98
SLC45A2	8111417	chr5	2.97
FANCC	8162514	chr9	2.97
CPNE6	7973510	chr14	2.95
PDGFRA	8095080	chr4	2.95
IMPG2	8089185	chr3	2.95
CCDC109B	8096808	chr4	2.95
NA	8094340	chr4	2.94
ROD1	8163402	chr9	2.93
KCTD14	7950641	chr11	2.93
GREM2	7925452	chr1	2.92
PTPRT	8066347	chr20	2.91
CX36	7987310	chr15	2.91
SEMA3B	8079966	chr3	2.91
EGFLAM	8105013	chr5	2.90
VLDLR	8154100	chr9	2.90
FKBP10	8007154	chr17	2.89
EBF2	8149865	chr8	2.89
PMP22	8012896	chr17	2.89
GPR98	8106827	chr5	2.88
PKP4	8045860	chr2	2.88
FSTL4	8114119	chr5	2.88
REG1B	8053330	chr2	2.87
FAT3	7943075	chr11	2.87
TSPAN17	8110224	chr5	2.87
ZIC3	8170200	chrX	2.86
LDLRAP1	7899023	chr1	2.85
SNORA65	8164215	chr9	2.85
FLJ35776	8019954	chr18	2.85
CD226	8023757	chr18	2.84
NA	7895933	---	2.83
COL5A1	8159142	chr9	2.83
TPH1	7946946	chr11	2.81
GALNT7	8098328	chr4	2.81
NA	7896705	---	2.81
CHST11	7958202	chr12	2.81
RGN	8167027	chrX	2.80
NA	8171758	chrX	2.79
HS3ST3B1	8005097	chr17	2.79
LRRTM1	8053349	chr2	2.79
GLCE	7984517	chr15	2.78
AQP3	8160670	chr9	2.78
FLJ45455	8004948	chr17	2.77
RGR	7928789	chr10	2.77
PLS3	8169473	chrX	2.77
ZIC2	7969830	chr13	2.76
TGFBI	8108217	chr5	2.75
DNHD3	8004580	chr17	2.75
ATOH8	8043244	chr2	2.74
S100A16	7920291	chr1	2.74
CACNA2D4	7960283	chr12	2.73
C1orf57	7910591	chr1	2.73

RPL39L	8092654	chr3	0.36
PCDHB4	8108693	chr5	0.37
C20orf26	8061272	chr20	0.37
ZNF781	8036430	chr19	0.37
E2F3	8117128	chr6	0.37
TUBB2B	8123651	chr6	0.37
PPM1E	8008768	chr17	0.37
NA	7895331	---	0.37
NUDT4P1	7919193	chr1	0.37
FAM77C	7914326	chr1	0.37
LOC653698	7948088	chr11	0.37
ZNF92	8133089	chr7	0.37
NA	8180257	---	0.37
TRMT11	8121895	chr6	0.37
CACNA2D2	8087691	chr3	0.37
JPH3	7997746	chr16	0.37
KITLG	7965322	chr12	0.37
FLJ14959	8025984	chr19	0.38
SYNE2	7974920	chr14	0.38
ELOVL4	8127767	chr6	0.38
MAGI2	8140504	chr7	0.38
ZNF229	8037467	chr19	0.38
LPHN1	8034783	chr19	0.38
SMPDL3A	8121794	chr6	0.38
C6orf85	8123658	chr6	0.38
ZNF540	8028266	chr19	0.38
NA	7894208	---	0.38
ZNF418	8039698	chr19	0.38
GABARAPL1	7953943	chr12	0.38
LOC220594	8005689	chr17	0.38
RGS2	7908409	chr1	0.38
ZNF208	8035819	chr19	0.38
TTK	8120838	chr6	0.38
ASF1A	8121734	chr6	0.38
GDPD1	8008802	chr17	0.38
REPS1	8129901	chr6	0.38
TBPL1	8122182	chr6	0.38
NA	8104607	chr5	0.38
FRMD5	7988260	chr15	0.38
WASF1	8128818	chr6	0.38
SLC25A33	7897460	chr1	0.39
ZNF441	8025945	chr19	0.39
DAAM1	7974697	chr14	0.39
ZNF678	7910190	chr1	0.39
LMO4	7902810	chr1	0.39
MTSS1	8152764	chr8	0.39
DCBLD2	8089082	chr3	0.39
RAPH1	8058390	chr2	0.39
C6orf174	8129392	chr6	0.39
LGR4	7947199	chr11	0.39
ZNF117	8139832	chr7	0.39
TMOD2	7983734	chr15	0.39

Cluster A

RGNEF	8106210	chr5	2.73
NA	7973873	chr14	2.72
GPR143	8171284	chrX	2.70
HUNK	8068180	chr21	2.69
LOC653677	8030092	chr19	2.69
TRPM3	8161654	chr9	2.69
F10	7970241	chr13	2.68
CCDC3	7932082	chr10	2.67
RBP1	8091078	chr3	2.67
PCOLCE	8134869	chr7	2.67
NA	8180234	---	2.67
PDZK1	7904843	chr1	2.67
ASAM	7952341	chr11	2.67
LRRC55	7940002	chr11	2.66
FGFR1	8150318	chr8	2.66
MYO1B	8047127	chr2	2.66
TOM1L1	8008547	chr17	2.65
RAVER2	7902023	chr1	2.65
TRIM25	8016847	chr17	2.65
TST	8075857	chr22	2.62
TSPAN11	7954645	chr12	2.62
MYH15	8089329	chr3	2.61
TPBG	8120880	chr6	2.60
PCSK9	7901696	chr1	2.60
TFAP2A	8123864	chr6	2.59
LOC201181	8015503	chr17	2.59
DDIT4L	8101952	chr4	2.58
HAND2	8103745	chr4	2.58
SLC13A3	8066757	chr20	2.58
NA	7892876	---	2.57
SORCS3	7930341	chr10	2.57
PLEKHB1	7942453	chr11	2.57
FLJ42562	8042040	chr2	2.56
LPIN1	8040340	chr2	2.55
ITGA9	8078619	chr3	2.55
LRRC21	7934783	chr10	2.55
ENO3	8004043	chr17	2.55
FRMPD1	8155284	chr9	2.54
HOXD8	8046546	chr2	2.54
NA	7896689	---	2.54
CAMK1D	7926223	chr10	2.54
PARP12	8143327	chr7	2.53
HSPB1	8133721	chr7	2.53
LRTM1	8088174	chr3	2.52
RHOA	7910387	chr1	2.52
STIM2	8094501	chr4	2.52
USH2A	7924233	chr1	2.52
SYK	8156321	chr9	2.50
SNORD60	7998722	chr16	2.49
CCDC46	8017736	chr17	2.49
EPHX2	8145532	chr8	2.48
NA	8162490	chr9	2.48

TUBB2A	8123644	chr6	0.39
IQCK	7993713	chr16	0.39
ERC2	8088192	chr3	0.40
SLC16A14	8059642	chr2	0.40
PELI2	7974533	chr14	0.40
ALDH5A1	8117207	chr6	0.40
SSX2IP	7917255	chr1	0.40
LOC730924	7903414	chr1	0.40
NA	7893325	---	0.40
KIAA1586	8120378	chr6	0.40
ZNF99	8035836	chr19	0.40
NA	7893245	---	0.40
NA	8180238	---	0.40
ZNF528	8030931	chr19	0.40
NRXN1	8052091	chr2	0.40
C6orf134	8117965	chr6	0.41
SSH2	8013965	chr17	0.41
NA	7914878	chr1	0.41
LRRIQ1	7957433	chr12	0.41
KRAS	7961865	chr12	0.41
C6orf115	8122336	chr6	0.41
MLLT11	7905329	chr1	0.41
ANKRD44	8057990	chr2	0.41
RP11-393H10	8171725	chrX	0.41
PLCL2	8078187	chr3	0.41
DPY19L2	8138988	chr7	0.41
ZNF711	8168589	chrX	0.41
SMAD9	7971015	chr13	0.41
ZNF292	8120992	chr6	0.41
CRY1	7966052	chr12	0.41
PDE9A	8068833	chr21	0.41
RAB23	8127346	chr6	0.41
MGC24039	7962151	chr12	0.41
C12orf51	7966517	chr12	0.41
BRIP1	8017262	chr17	0.41
PCDHB8	8108713	chr5	0.41
LOC730167	7922523	chr1	0.41
SH3RF1	8103630	chr4	0.42
NUDT3	8125825	chr6	0.42
C6orf162	8121002	chr6	0.42
TRIM59	8091757	chr3	0.42
C6orf182	8121392	chr6	0.42
NPAS2	8043909	chr2	0.42
PPM1D	8008922	chr17	0.42
NOVA1	7978391	chr14	0.42
OR2L2	7911252	chr1	0.42
RNGTT	8128052	chr6	0.42
HOMER1	8112841	chr5	0.42
ZNF404	8037430	chr19	0.42
PTBP2	7903188	chr1	0.42
GCLC	8127158	chr6	0.42
FLJ20160	8047078	chr2	0.42

Cluster A

RSRC1	8083605	chr3	2.48
SNORD49B	8005200	chr17	2.47
SV2A	7919645	chr1	2.46
TNNC1	8087925	chr3	2.46
MTMR11	7919669	chr1	2.45
USP18	8071155	chr22	2.45
PLTP	8066619	chr20	2.45
PSAT1	8156043	chr9	2.44
SNORD49A	8005202	chr17	2.43
NA	7966068	chr12	2.43
RTKN	8053142	chr2	2.42
CLU	8149927	chr8	2.42
LOC283174	7952805	chr11	2.40
NA	8180318	---	2.39
FOXA1	7978706	chr14	2.39
C14orf101	7974542	chr14	2.39
BSG	8023955	chr19	2.38
CDC14A	7903334	chr1	2.38
STK17A	8132503	chr7	2.37
TMEM123	7951207	chr11	2.37
NA	8180316	---	2.37
NA	8180317	---	2.37
STK3	8151967	chr8	2.36
CGI-38	8002020	chr16	2.35
SVEP1	8163202	chr9	2.35
MKX	7932733	chr10	2.35
NA	8180319	---	2.35
MFAP4	8013341	chr17	2.34
YAP1	7943398	chr11	2.34
C1orf95	7910142	chr1	2.33
NA	8012906	chr17	2.33
LGALS3BP	8018975	chr17	2.32
NKD2	8104253	chr5	2.32
ZC3HAV1	8143279	chr7	2.31
NENF	7909603	chr1	2.31
NOTUM	8019334	chr17	2.31
NA	8161693	chr9	2.30
NA	7893091	---	2.30
NEFH	8072229	chr22	2.30
LOC284964	8044640	chr2	2.30
KIAA1509	7980828	chr14	2.30
C8orf37	8151898	chr8	2.29
CLCN2	8092473	chr3	2.29
SLC20A2	8150537	chr8	2.29
BHLHB2	8077441	chr3	2.29
NA	8154510	chr9	2.29
P4HA1	7934278	chr10	2.29
REEP5	8113542	chr5	2.28
M6PRBP1	8032909	chr19	2.28
CMTM5	7973403	chr14	2.28
EFNA4	7905909	chr1	2.28
NA	8159848	chr9	2.28

KIAA1467	7954077	chr12	0.42
ZNF273	8133062	chr7	0.42
NA	7896441	---	0.42
AP1S2	8171481	chrX	0.42
KLRD1	7953949	chr12	0.42
ZNF462	8157105	chr9	0.42
SH3BGRL2	8120833	chr6	0.42
PCDHB13	8108737	chr5	0.42
GRM2	8080128	chr3	0.43
TUBE1	8128977	chr6	0.43
KIAA1450	8098103	chr4	0.43
C14orf132	7976556	chr14	0.43
NA	7956269	chr12	0.43
SOX4	8117165	chr6	0.43
SNN	7993259	chr16	0.43
ZNF583	8031640	chr19	0.43
PAK7	8064952	chr20	0.43
GSTM1	7903765	chr1	0.43
B4GALNT1	7964484	chr12	0.43
NA	7991562	chr15	0.43
GPLD1	8124211	chr6	0.43
ACSL3	8048733	chr2	0.43
IGF1R	7986383	chr15	0.43
APOLD1	7954055	chr12	0.43
NCAM1	7943892	chr11	0.43
ADAM22	8133983	chr7	0.43
ZNF43	8035813	chr19	0.43
ZNF763	8025978	chr19	0.43
ST7	8135638	chr7	0.43
HACE1	8128522	chr6	0.43
DCBLD1	8121685	chr6	0.43
NR4A2	8055952	chr2	0.43
TCP11L2	7958262	chr12	0.43
TRIM24	8136473	chr7	0.44
AGBL4	7915971	chr1	0.44
KIAA1718	8143341	chr7	0.44
NAP1L3	8173917	chrX	0.44
PCDH11X	8168657	chrX	0.44
NUP153	8124059	chr6	0.44
TMEM30A	8127637	chr6	0.44
BTBD9	8126121	chr6	0.44
PRPH2	8126436	chr6	0.44
TFRC	8093053	chr3	0.44
NA	8017096	chr17	0.44
KIAA1543	8025237	chr19	0.44
ANKRD45	7922382	chr1	0.44
BRPF3	8119034	chr6	0.44
ZNF215	7938183	chr11	0.44
NGFRAP1L1	8174141	chrX	0.44
MXD1	8042503	chr2	0.44
TFCP2	7963244	chr12	0.44
KCNH1	7924071	chr1	0.44

Cluster A

ABCA1	8162940	chr9	2.27
DHRS4	7973448	chr14	2.27
NA	7951140	chr11	2.26
EDN3	8063729	chr20	2.26
MAML2	7951133	chr11	2.26
ZNF503	7934553	chr10	2.25
FBN1	7988467	chr15	2.24
SERPINH1	7942596	chr11	2.24
SOCS6	8021707	chr18	2.24
EMP2	7999387	chr16	2.23
SCARA3	8145555	chr8	2.23
SHROOM3	8095834	chr4	2.23
NA	7896011	---	2.22
CACNA1F	8172580	chrX	2.22
KIAA0644	8138799	chr7	2.22
MGC40499	8134730	chr7	2.21
CDK6	8140955	chr7	2.21
ABCC8	7946860	chr11	2.21
GGH	8151032	chr8	2.20
SCHIP1	8083677	chr3	2.19
ADAM11	8007675	chr17	2.19
ACPP	8082673	chr3	2.19
NA	7896137	---	2.17
RASSF3	7956819	chr12	2.17
MGC70870	8019563	chr17_ranc	2.17
SNORA71C	8066260	chr20	2.17
KCNH6	8009145	chr17	2.16
GSS	8065817	chr20	2.16
TMEM169	8048141	chr2	2.16
TPCN1	7958960	chr12	2.15
COTL1	8003171	chr16	2.15
FBXO17	8036676	chr19	2.15
VRK2	8042086	chr2	2.14
C20orf39	8061406	chr20	2.14
SGPP2	8048717	chr2	2.14
AHNAK	7948667	chr11	2.14
LOC388177	7991453	chr15	2.14
TRIB2	8040365	chr2	2.13
NMT2	7932227	chr10	2.13
B3GAT3	7948741	chr11	2.13
ELSPBP1	8029988	chr19	2.12
NFATC4	7973709	chr14	2.12
GPR56	7996081	chr16	2.12
EMP3	8030007	chr19	2.12
EMID1	8072189	chr22	2.12
THBS3	7920664	chr1	2.11
FLJ20152	8111136	chr5	2.11
ZIC5	7972567	chr13	2.11
SPCS3	8098414	chr4	2.11
FZD6	8147766	chr8	2.11
FJX1	7939365	chr11	2.11
FLJ21736	7996361	chr16	2.11

NA	8180198	---	0.44
NSBP1	8173812	chrX	0.44
STXBP5	8122600	chr6	0.44
C17orf41	8006187	chr17	0.44
THSD7B	8045470	chr2	0.44
KIAA1344	7979158	chr14	0.44
HYDIN2	8002481	chr16	0.44
ZNF680	8139820	chr7	0.44
ZNF724P	8035838	chr19	0.44
KCNJ8	7961702	chr12	0.44
OGFRL1	8120602	chr6	0.45
KLHL2	8098177	chr4	0.45
AMY2B	7903425	chr1	0.45
ALDH8A1	8129706	chr6	0.45
C6orf55	8122348	chr6	0.45
ZNF66	8027268	chr19	0.45
SGEF	8083471	chr3	0.45
SNORD113-3	7976810	chr14	0.45
NA	8127107	chr6	0.45
ZNF682	8035782	chr19	0.45
CDC40	8121461	chr6	0.45
FLJ30092	7966488	chr12	0.45
CHODL	8067969	chr21	0.45
ZNF493	8027304	chr19	0.45
MGC15634	7910198	chr1	0.45
RNF175	8103244	chr4	0.45
OPHN1	8173310	chrX	0.45
CCDC28A	8122327	chr6	0.45
SLC37A1	8068810	chr21	0.45
HDAC2	8129045	chr6	0.45
JARID1D	8177232	chrY	0.45
PTPRS	8032926	chr19	0.45
SLC19A2	7922162	chr1	0.46
TXNIP	7904726	chr1	0.46
USP44	7965565	chr12	0.46
C6orf167	8128329	chr6	0.46
CASP8AP2	8121118	chr6	0.46
C9orf72	8160531	chr9	0.46
ZNF626	8035795	chr19	0.46
ZNF675	8035847	chr19	0.46
WDR47	7918275	chr1	0.46
SERINC1	8129317	chr6	0.46
GPHN	7975167	chr14	0.46
EFCAB5	8006085	chr17	0.46
WBP11	7961489	chr12	0.46
MAPK9	8116402	chr5	0.46
ZNF435	8117640	chr6	0.46
DKFZP564J10	8098620	chr4	0.46
AES	8032576	chr19	0.46
NA	7892724	---	0.46
C6orf170	8129273	chr6	0.47
ODF2L	7917433	chr1	0.47

Cluster A

EMILIN3	8066294	chr20	2.11
AHCY	8065738	chr20	2.11
SLC39A8	8101992	chr4	2.10
GALM	8041542	chr2	2.10
TPK1	8143643	chr7	2.10
CAPN13	8051275	chr2	2.09
IL1RAPL1	8166593	chrX	2.09
STRA6	7990309	chr15	2.09
CREB3L2	8143188	chr7	2.09
JPH1	8151423	chr8	2.08
NA	8079744	chr3	2.08
LOC375295	8056968	chr2	2.08
FAH	7985268	chr15	2.08
ZHX2	8148149	chr8	2.07
PCBD1	7934178	chr10	2.07
PRRX1	7907222	chr1	2.07
IL20RA	8129837	chr6	2.06
TMEM19	7957167	chr12	2.06
MGC16703	8074695	chr22	2.06
S100A6	7920258	chr1	2.05
FLJ45950	7952673	chr11	2.05
TMBIM1	8058927	chr2	2.04
TMEM63A	7924636	chr1	2.04
KIAA0523	8004152	chr17	2.04
NA	8009241	chr17	2.04
ACCN1	8014144	chr17	2.04
CD9	7953291	chr12	2.04
SNORD74	7922418	chr1	2.04
ZFP36L1	7979813	chr14	2.03
RD3	7924085	chr1	2.03
MFNG	8075924	chr22	2.03
TCF7	8108050	chr5	2.03
COLQ	8085581	chr3	2.03
SNORA64	7998666	chr16	2.03
ZFPM2	8147837	chr8	2.03
ACOX2	8088397	chr3	2.02
SNORA71A	8066258	chr20	2.02
MRC2	8009040	chr17	2.02
CCNJL	8115584	chr5	2.02
NA	7933008	chr10	2.02
FKBP14	8138834	chr7	2.01
MFHAS1	8149258	chr8	2.01
NA	7894764	---	2.01
LRP8	7916282	chr1	2.01
CHRNA1	8004416	chr17	2.01
MEST	8136248	chr7	2.01
SRPX	8172043	chrX	2.01
NKX6-1	8101507	chr4	2.00
SLC25A37	8145281	chr8	2.00
CABLES1	8020495	chr18	2.00
NQO1	8002303	chr16	1.99
CAMKK1	8011480	chr17	1.99

FAM33A	8157691	chr9	0.47
ZNF569	8036395	chr19	0.47
SNRK	8079140	chr3	0.47
DMC1	8076094	chr22	0.47
GTF3C4	8158918	chr9	0.47
SNX14	8127943	chr6	0.47
IBTK	8127787	chr6	0.47
AFAP	8099259	chr4	0.47
CUTL2	7958726	chr12	0.47
ACY1L2	8121087	chr6	0.47
LOC619208	8121547	chr6	0.47
EPB41L2	8129497	chr6	0.47
ARHGAP21	7932554	chr10	0.47
EIF2AK3	8053668	chr2	0.47
NA	7894405	---	0.47
C7orf13	8144082	chr7	0.47
USP49	8126347	chr6	0.47
CAMTA1	7897339	chr1	0.47
TCEAL7	8169015	chrX	0.47
LBR	7924603	chr1	0.47
ZNF793	8028254	chr19	0.47
DEK	8124144	chr6	0.47
FLJ42177	8128795	chr6	0.47
FAM54A	8129763	chr6	0.47
KCNN1	8026900	chr19	0.47
MYCBP2	7972069	chr13	0.47
C6orf65	8120362	chr6	0.48
WSB2	7966829	chr12	0.48
NA	7893445	---	0.48
C6orf166	8128034	chr6	0.48
ATXN1	8124040	chr6	0.48
RASAL2	7907611	chr1	0.48
PRKACB	7902594	chr1	0.48
ROS1	8129181	chr6	0.48
KIAA1370	7988970	chr15	0.48
FLJ36166	8141882	chr7	0.48
HN1	8018305	chr17	0.48
NA	7919591	chr1	0.48
TBC1D23	8081256	chr3	0.48
HSF2	8121757	chr6	0.48
SHPRH	8130038	chr6	0.48
PHIP	8127698	chr6	0.48
KIDINS220	8050128	chr2	0.48
CYorf15B	8176709	chrY	0.48
GMNN	8117225	chr6	0.48
ARNTL2	7954527	chr12	0.48
DNAJB5	8154962	chr9	0.48
C6orf152	8127756	chr6	0.48
OSBPL8	7965064	chr12	0.48
SOD2	8130556	chr6	0.48
HECA	8122343	chr6	0.48
RNF146	8121927	chr6	0.48

Cluster A

NGLY1	8085852	chr3	1.99
STAT4	8057771	chr2	1.99
MYC	8148317	chr8	1.99
DCPS	7945101	chr11	1.99
JAM2	8068024	chr21	1.99
SNORA68	8026875	chr19	1.99
JUB	7977854	chr14	1.99
ATBF1	8002692	chr16	1.98
LOC400055	7965152	chr12	1.98
SNORA73A	7899480	chr1	1.98
NUPR1	8000574	chr16	1.98
SNORD32A	8030360	chr19	1.98
RBBP9	8065230	chr20	1.98
MAGEL2	7986755	chr15	1.98
ZNF179	8005586	chr17	1.98
EFCBP2	7997542	chr16	1.97
NA	7896133	---	1.97
NA	7895026	---	1.97
MIPOL1	7973985	chr14	1.97
LDLRAD3	7939376	chr11	1.96
IL28RA	7913776	chr1	1.96
FAM14A	7981046	chr14	1.96
SORCS1	7936249	chr10	1.96
LBH	8041206	chr2	1.96
RPLP0-like	8109750	chr5	1.96
APP	8069644	chr21	1.96
NA	7904572	chr1	1.96
LOC727970	7984008	chr15	1.95
BIRC3	7943413	chr11	1.95
PECR	8058837	chr2	1.95
ACY1	8080168	chr3	1.95
NA	8021043	chr18	1.95
ERN1	8017555	chr17	1.94
MGC34761	7997010	chr16	1.94
LY6E	8148572	chr8	1.94
RAI2	8171539	chrX	1.94
ASMTL	8171119	chrX	1.94
NA	7894935	---	1.93
CD47	8089299	chr3	1.93
PHACS	7939507	chr11	1.93
SLC9A5	7996498	chr16	1.93
SNORD35A	8030366	chr19	1.93
SFN	7899265	chr1	1.93
NA	7892657	---	1.92
PLEKHA7	7946781	chr11	1.92
ARHGAP24	8096160	chr4	1.92
NA	7895121	---	1.92
FBLN1	8073775	chr22	1.92
ZDHHC2	8144758	chr8	1.91
AMPD2	7903719	chr1	1.91
NA	8180284	---	1.91
SNORD15B	7942594	chr11	1.91

C6orf107	8118833	chr6	0.48
NA	8123463	chr6	0.49
ATP1B1	7907160	chr1	0.49
INTS7	7924119	chr1	0.49
ARHGEF7	7970111	chr13	0.49
KIF1B	7897561	chr1	0.49
YWHAH	8072577	chr22	0.49
FBXO30	8130032	chr6	0.49
TBX15	7919028	chr1	0.49
MASTL	7926821	chr10	0.49
CYB5R4	8120943	chr6	0.49
AKAP9	8134122	chr7	0.49
SYNJ1	8070010	chr21	0.49
SPIRE1	8022356	chr18	0.49
LOC342892	8036351	chr19	0.49
THRAP2	7966706	chr12	0.49
TSPYL4	8129089	chr6	0.49
CASD1	8134318	chr7	0.49
C6orf113	8129108	chr6	0.49
TMEFF1	8156905	chr9	0.49
CDKAL1	8117140	chr6	0.49
KIF3A	8114030	chr5	0.49
SLC44A2	8025672	chr19	0.49
ZNF233	8029423	chr19	0.49
RBM9	8075673	chr22	0.49
ZNF433	8034320	chr19	0.49
NA	7892749	---	0.50
EIF1AY	8176719	chrY	0.50
EZH2	8143663	chr7	0.50
RASGEF1C	8116384	chr5	0.50
PASK	8060205	chr2	0.50
KIAA1009	8127903	chr6	0.50
C4orf33	8097435	chr4	0.50
NAP1L5	8101723	chr4	0.50
SESTD1	8057394	chr2	0.50
NA	7895339	---	0.50
FBXO28	7909992	chr1	0.50
EXOC2	8123524	chr6	0.50
C6orf165	8121015	chr6	0.50
TMEM161B	8113023	chr5	0.50
LOC652737	8002470	chr16	0.50
ZNF671	8039680	chr19	0.50
SYT16	7974882	chr14	0.50
HDDC2	8129363	chr6	0.50
GPD2	8045816	chr2	0.50
DSCR1	8070182	chr21	0.50
AKAP5	7975066	chr14	0.50
KLHL24	8084219	chr3	0.50
ACPL2	8083075	chr3	0.50
OLFM2	8033818	chr19	0.50
SPTBN2	7949679	chr11	0.50
ACACA	8014487	chr17	0.50

Cluster A

NA	7922408	chr1	1.91
MYOZ1	7934434	chr10	1.90
CD72	8161004	chr9	1.90
CILP	7989750	chr15	1.90
ANXA6	8115234	chr5	1.90
LHFPL3	8135262	chr7	1.90
NA	7893750	---	1.90
RASIP1	8038163	chr19	1.90
PRKCD	8080487	chr3	1.90
GALT	8154916	chr9	1.90
EPHA2	7912706	chr1	1.89
CAPS	8025004	chr19	1.89
CLUAP1	7992917	chr16	1.89
NTRK1	7906244	chr1	1.89
FLRT3	8065071	chr20	1.89
CRB2	8157731	chr9	1.89
LOC284988	8045289	chr2	1.89
PCK2	7973530	chr14	1.88
SNORD44	7922410	chr1	1.88
C1orf114	7922152	chr1	1.88
REEP6	8024323	chr19	1.88
C14orf122	7978114	chr14	1.87
BRD7	8001350	chr16	1.87
CCDC8	8037762	chr19	1.87
NA	8010078	chr17	1.87
RP11-217H1.1	8173713	chrX	1.87
PNPLA4	8171229	chrX	1.87
TSC22D2	8083324	chr3	1.87
NA	8162529	chr9	1.87
STEAP3	8044793	chr2	1.87
MCTP2	7986293	chr15	1.87
NFYB	7965956	chr12	1.86
HOXD4	8046555	chr2	1.86
NA	8180283	---	1.86
ATP6V1C2	8040249	chr2	1.86
OLFM1	8159220	chr9	1.86
RPL36A	8138361	chr7	1.85
MAN1C1	7899029	chr1	1.85
DC2	8096771	chr4	1.85
NA	7893638	---	1.85
LSR	8027793	chr19	1.85
NA	7922416	chr1	1.84
NA	7951347	chr11	1.84
CKM	8037525	chr19	1.84
XBP1	8075182	chr22	1.84
DDX25	7945045	chr11	1.84
HMGCL	7913682	chr1	1.83
BRUNOL6	7990191	chr15	1.83
NA	8163424	chr9	1.83
HOMER2	7991034	chr15	1.83
HSPA5	8164165	chr9	1.83
TRAPPC6A	8037505	chr19	1.83

ZNF570	8028248	chr19	0.50
MARCKS	8121563	chr6	0.50
C6orf89	8119109	chr6	0.51
LATS1	8130116	chr6	0.51
LOC653820	7904452	chr1	0.51
TMCO7	7996860	chr16	0.51
C10orf12	7929609	chr10	0.51
BTN2A1	8117485	chr6	0.51
BAIAP2	8010562	chr17	0.51
STX12	7899361	chr1	0.51
CITED1	8173524	chrX	0.51
CCNC	8128429	chr6	0.51
APAF1	7957759	chr12	0.51
ZNF451	8120382	chr6	0.51
FAM72A	7909146	chr1	0.51
CMPK	7901299	chr1	0.51
LOC340260	8131087	chr7	0.51
LOC729863	8020377	chr18	0.51
RAB9B	8174271	chrX	0.51
FBN3	8033487	chr19	0.51
ZNF193	8117655	chr6	0.51
LOC347273	8156919	chr9	0.51
SRrp35	8128079	chr6	0.51
SATB1	8085716	chr3	0.51
CDKN1B	7954029	chr12	0.51
RMI1	8156126	chr9	0.51
FLJ37464	7996377	chr16	0.51
RGL2	8125687	chr6	0.51
MEGF9	8163775	chr9	0.51
RTN4IP1	8128606	chr6	0.51
KLHL3	8114300	chr5	0.52
BRP44L	8130732	chr6	0.52
RAB3A	8035398	chr19	0.52
PPP2R5D	8119627	chr6	0.52
ARL6	8081158	chr3	0.52
KIAA1949	8124798	chr6	0.52
NA	8034326	chr19	0.52
FIGNL1	8139632	chr7	0.52
NA	7893122	---	0.52
ZNF713	8132917	chr7	0.52
LYRM4	8123728	chr6	0.52
ZNF442	8034379	chr19	0.52
LOC400721	8039692	chr19	0.52
PPIL4	8130087	chr6	0.52
EVL	7976726	chr14	0.52
NA	7893181	---	0.52
RPS4Y1	8176375	chrY	0.52
SPAST	8041236	chr2	0.52
CXorf43	8173848	chrX	0.52
SENP6	8120758	chr6	0.52
NA	7894681	---	0.52
ZNF322A	8124459	chr6	0.52

Cluster A

SNORD96A	8116530	chr5	1.82
HOXD11	8046530	chr2	1.82
STC2	8115851	chr5	1.82
EVC	8093878	chr4	1.82
NA	8142536	chr7	1.82
ZMYND12	7915425	chr1	1.82
CPOX	8089072	chr3	1.82
FUT3	8033054	chr19	1.82
RPL7A	8022972	chr18	1.82
ILVBL	8034920	chr19	1.82
ONECUT2	8021357	chr18	1.81
FSD1	8024816	chr19	1.81
GDNF	8111670	chr5	1.81
FUT10	8150165	chr8	1.81
NA	7973865	chr14	1.81
ARSD	8171148	chrX	1.81
CTSZ	8067279	chr20	1.81
LAMB1	8142194	chr7	1.81
RPL26	8012469	chr17	1.80
C17orf45	8005191	chr17	1.80
DCTD	8103859	chr4	1.80
PITPNM2	7967358	chr12	1.80
CMTM4	8001830	chr16	1.80
NXN	8010967	chr17	1.80
GMPPA	8048595	chr2	1.80
TMED9	8110392	chr5	1.80
ARHGAP6	8171313	chrX	1.80
SLC16A2	8168424	chrX	1.79
PFKM	7955078	chr12	1.79
ECHDC2	7916229	chr1	1.79
MARVELD1	7929689	chr10	1.79
NA	8166349	chrX	1.79
ELK3	7957665	chr12	1.79
LAMA5	8067409	chr20	1.79
NA	7958207	chr12	1.78
NA	7979031	chr14	1.78
C14orf121	7973468	chr14	1.78
EHHADH	8092523	chr3	1.78
RENBP	8175933	chrX	1.78
GSTO1	7930304	chr10	1.77
SLC2A10	8063177	chr20	1.77
TOP1MT	8153390	chr8	1.77
SLC25A10	8010673	chr17	1.77
FLJ32447	8048707	chr2	1.77
DAP	8110982	chr5	1.77
BMP1	8145055	chr8	1.77
NA	7894722	---	1.77
CD63	7963911	chr12	1.77
FLJ11286	8025551	chr19	1.77
TMEM9	7923319	chr1	1.77
FGF8	7935892	chr10	1.77
IGSF9B	7952813	chr11	1.76

FARP1	7969736	chr13	0.52
CRIP3	8126542	chr6	0.52
NA	8122701	chr6	0.52
NA	8180224	---	0.52
MLL3	8143988	chr7	0.53
FZD4	7950885	chr11	0.53
LRAT	8097920	chr4	0.53
KIAA0999	7951873	chr11	0.53
ZNF35	8079217	chr3	0.53
SNORA29	8130580	chr6	0.53
RNASEH2B	7969179	chr13	0.53
C1orf165	7915982	chr1	0.53
ZNF439	8025964	chr19	0.53
PHF3	8120441	chr6	0.53
REV3L	8128894	chr6	0.53
CDC2L6	8128867	chr6	0.53
MAP1B	8106098	chr5	0.53
ZNF714	8027285	chr19	0.53
NDUFA5	8142663	chr7	0.53
SMAP1	8120585	chr6	0.53
PIK3CA	8084016	chr3	0.53
LMBRD1	8127425	chr6	0.53
ENAH	7924619	chr1	0.53
ZADH2	8023871	chr18	0.53
NA	8180262	---	0.53
KIFC1	8179564	chr6_qbl_h	0.53
C9orf39	8154449	chr9	0.53
B3GALNT1	8091780	chr3	0.53
ZNF192	8117646	chr6	0.53
ASCC3	8128472	chr6	0.53
FBXO9	8120251	chr6	0.53
UBR2	8119529	chr6	0.54
NA	7894525	---	0.54
TCF8	7926916	chr10	0.54
NA	7895726	---	0.54
MRS2L	8117194	chr6	0.54
LOC730571	8025933	chr19	0.54
NA	8058509	chr2	0.54
MDN1	8128138	chr6	0.54
FANCE	8118963	chr6	0.54
HIVEP1	8116910	chr6	0.54
SEMA7A	7990345	chr15	0.54
PCMT1	8122705	chr6	0.54
NA	7895445	---	0.54
RICTOR	8111698	chr5	0.54
ZNF266	8033754	chr19	0.54
SFT2D1	8130720	chr6	0.54
NA	8180308	---	0.54
RANBP9	8123989	chr6	0.54
RASA2	8083094	chr3	0.54
ZNF294	8069711	chr21	0.54
KIAA1549	8143247	chr7	0.54

Cluster A

AMPD3	7938396	chr11	1.76
ADORA1	7908907	chr1	1.76
PLEKHQ1	7984217	chr15	1.76
ANG	7973084	chr14	1.76
FAM78B	7922001	chr1	1.76
TRIP6	8134981	chr7	1.76
CAMK2G	7934477	chr10	1.76
C7orf10	8132439	chr7	1.75
LRRN6A	7990643	chr15	1.75
NA	7894627	---	1.75
UNQ501	8034210	chr19	1.75
APBA2BP	8065693	chr20	1.75
NUDT9P1	7934993	chr10	1.75
NA	7940667	chr11	1.75
GABRQ	8170538	chrX	1.75
HMG20B	8024660	chr19	1.74
QPRT	7994609	chr16	1.74
S100A2	7920285	chr1	1.74
NA	7937007	chr10	1.74
FLJ10916	8043393	chr2	1.74
NUCB1	8030133	chr19	1.74
OBSL1	8059249	chr2	1.74
RAB13	7963986	chr12	1.74
NA	7896222	---	1.74
MLPH	8049487	chr2	1.74
NA	7894267	---	1.74
PRDX4	8166455	chrX	1.73
SNORA21	8014755	chr17	1.73
HYAL1	8087611	chr3	1.73
AVIL	7964555	chr12	1.73
NA	8161695	chr9	1.73
CMTM3	7996318	chr16	1.73
AFMID	8010248	chr17	1.73
RPL35	8164100	chr9	1.73
LOC339803	8052438	chr2	1.73
SNORA16A	7914216	chr1	1.73
NIBP	8153175	chr8	1.73
FHOD1	8001981	chr16	1.73
ADRA2A	7930482	chr10	1.72
NA	8159004	chr9	1.72
ETFB	8038792	chr19	1.72
NDUFA11	8033069	chr19	1.72
NA	7922400	chr1	1.72
SPTLC3	8116831	chr6	1.72
COL2A1	7962703	chr12	1.72
HOXD9	8046542	chr2	1.72
NA	7895609	---	1.72
NA	7896525	---	1.72
NA	7894376	---	1.72
CTSF	7949650	chr11	1.72
QTRT1	8025728	chr19	1.71
BHMT	8106504	chr5	1.71

OR2L13	7911237	chr1	0.54
ZNF187	8117667	chr6	0.55
TRIO	8104506	chr5	0.55
RBM16	8122909	chr6	0.55
PPM1K	8101701	chr4	0.55
RSBN1	7918681	chr1	0.55
TBC1D22B	8119169	chr6	0.55
SLC43A2	8011093	chr17	0.55
TSC1	8164781	chr9	0.55
PRPF4B	8116664	chr6	0.55
IFNGR1	8129861	chr6	0.55
ICK	8127094	chr6	0.55
CDC5L	8120022	chr6	0.55
NA	8180200	---	0.55
NA	7895247	---	0.55
ZBTB24	8128767	chr6	0.55
FBXO45	8084947	chr3	0.55
CBX1	8173206	chrX	0.55
AGTPBP1	8162086	chr9	0.55
BRAF	8143417	chr7	0.55
NA	8180275	---	0.55
HBEGF	8114572	chr5	0.55
STK38	8126018	chr6	0.55
ARRDC4	7986350	chr15	0.55
NA	7895069	---	0.55
ORC3L	8121043	chr6	0.55
SYNCRIP	8127977	chr6	0.55
ZNF184	8124502	chr6	0.55
ALS2	8058258	chr2	0.55
RIOK1	8116760	chr6	0.55
FAM120B	8123494	chr6	0.55
RARSL	8128013	chr6	0.55
THRAP1	8017312	chr17	0.55
PAK1IP1	8116848	chr6	0.55
NA	7895675	---	0.55
TCP1	8130567	chr6	0.55
CEP110	8157534	chr9	0.55
SLC35A1	8121031	chr6	0.55
CRSP3	8129522	chr6	0.55
ACO1	8154733	chr9	0.55
NA	7896294	---	0.55
XPO5	8126588	chr6	0.56
NA	8174664	chrX	0.56
MUT	8126860	chr6	0.56
NA	7893664	---	0.56
RNF138	8020814	chr18	0.56
MAP3K7	8128260	chr6	0.56
WDR68	8009164	chr17	0.56
FLJ10159	8121319	chr6	0.56
NA	8116651	chr6	0.56
PEX3	8122409	chr6	0.56
C6orf72	8122689	chr6	0.56

Cluster A

MEGF11	7989887	chr15	1.71
KRT83	7963359	chr12	1.71
C9orf11	8160511	chr9	1.71
GSDMDC1	8148642	chr8	1.71
NA	7893656	---	1.71
TK2	8001818	chr16	1.71
WDR54	8042843	chr2	1.71
NA	7896454	---	1.71
PRMT3	7938890	chr11	1.70
SLC41A1	7923824	chr1	1.70
ERBB2	8006906	chr17	1.70
SORCS2	8093997	chr4	1.70
LOC440973	8089459	chr3	1.70
RHBDP2	8018731	chr17	1.70
NA	8180300	---	1.70
SURF4	8164883	chr9	1.70
NA	7913249	chr1	1.70
SIL1	8114476	chr5	1.70
NA	8106017	chr5	1.70
GPR137B	7910680	chr1	1.69
EFEMP2	7949503	chr11	1.69
NA	8180346	---	1.69
NA	7893344	---	1.69
THYN1	7952869	chr11	1.69
CDC34	8023968	chr19	1.69
DAK	7940451	chr11	1.69
ST3GAL4	7945110	chr11	1.69
ZNF648	7922686	chr1	1.69
MYO15B	8009873	chr17	1.69
RAMP3	8132660	chr7	1.69
LGALS1	8072876	chr22	1.69
NA	8020453	chr18	1.69
GABRD	7897034	chr1	1.69
REEP4	8149673	chr8	1.69
NA	7894774	---	1.68
C10orf114	7932495	chr10	1.68
NA	7929711	chr10	1.68
NA	7896459	---	1.68
LOXL1	7984771	chr15	1.68
RPLP0	7966996	chr12	1.68
PARD3B	8047709	chr2	1.68
LRRC3B	8078305	chr3	1.68
SNORA50	8001748	chr16	1.68
NA	7912629	chr1	1.68
RP11-151A6	7972570	chr13	1.68
NES	7921088	chr1	1.68
PSME1	7973564	chr14	1.68
SNORD45B	7902400	chr1	1.68
APOBEC3F	8073081	chr22	1.68
RXFP3	8104781	chr5	1.68
RPS24	7928551	chr10	1.68
AP1G2	7978066	chr14	1.68

NA	7896646	---	0.56
PREP	8128572	chr6	0.56
CNOT6	8110589	chr5	0.56
BMI1	7926609	chr10	0.56
TTRAP	8124262	chr6	0.56
COQ3	8128383	chr6	0.56
FBXL10	7967175	chr12	0.56
APC	8107330	chr5	0.56
SGCZ	8149438	chr8	0.56
KCTD20	8119067	chr6	0.56
FGFR1OP	8123342	chr6	0.56
ZNF85	8027272	chr19	0.56
TULP4	8123044	chr6	0.56
NCAPG2	8144153	chr7	0.57
LOC149837	8064866	chr20	0.57
FBXO5	8130374	chr6	0.57
AMD1	8121489	chr6	0.57
LOC91431	8102371	chr4	0.57
ZNF253	8027241	chr19	0.57
FOXO3A	8013307	chr17	0.57
DNAH7	8057821	chr2	0.57
NT5DC1	8121578	chr6	0.57
C6orf12	8178324	chr6_cox_1	0.57
ZNF440	8025958	chr19	0.57
ATG5	8128592	chr6	0.57
PGBD1	8117675	chr6	0.57
EFNB1	8168045	chrX	0.57
CCNH	8113010	chr5	0.57
ZNF28	8038993	chr19	0.57
C6orf111	8128394	chr6	0.57
STX2	7967685	chr12	0.57
RGS17	8130383	chr6	0.57
NA	8177460	chrY	0.57
NA	8176865	chrY	0.57
SRPK1	8125941	chr6	0.57
PPP1R12B	7908841	chr1	0.57
SP4	8131709	chr7	0.57
PHF19	8163807	chr9	0.57
NA	8180285	---	0.57
MAN1A2	7904340	chr1	0.57
NA	8036302	chr19	0.57
KIAA1853	7959087	chr12	0.57
BCLAF1	8129773	chr6	0.57
RNF5	8178188	chr6_cox_1	0.57
FARS2	8116724	chr6	0.57
NA	8106278	chr5	0.57
C6orf203	8121312	chr6	0.57
PARP16	7989759	chr15	0.57
SMS	8166402	chrX	0.57
KIAA1411	8120552	chr6	0.57
TEKT2	7900076	chr1	0.57
HIST1H2BE	8117389	chr6	0.57

Cluster A

SNORA10	7998664	chr16	1.68
FKBP2	7940914	chr11	1.67
SNORD32B	8117746	chr6	1.67
SPINK4	8154779	chr9	1.67
KLHDC8B	8079733	chr3	1.67
TMED3	7985240	chr15	1.67
FLJ10357	7973158	chr14	1.67
MYH7B	8062064	chr20	1.67
RPS7	8040036	chr2	1.67
HINT2	8161147	chr9	1.67
TRPV4	7966259	chr12	1.67
LTBR	7953321	chr12	1.67
KCNK3	8040695	chr2	1.67
SAT2	8012247	chr17	1.67
RPL29	8087830	chr3	1.67
FZD2	8007637	chr17	1.67
CALU	8135955	chr7	1.66
NA	7919303	chr1	1.66
TGIF	8019939	chr18	1.66
PLCB3	7940924	chr11	1.66
BLVRA	8132515	chr7	1.66
PLAC1	8175263	chrX	1.66
SNORD36B	8159006	chr9	1.66
SLC29A2	7949619	chr11	1.65
KIAA1026	7898084	chr1	1.65
STT3A	7944991	chr11	1.65
BDH1	8093219	chr3	1.65
PYCR1	8019316	chr17	1.65
RPS3	7942586	chr11	1.65
NA	7896373	---	1.65
PDIA4	8143684	chr7	1.65
SHC1	7920600	chr1	1.65
AMFR	8001477	chr16	1.64
LOC126075	8025868	chr19	1.64
SYT9	7938213	chr11	1.64
NA	7895646	---	1.64
XYLT2	8008297	chr17	1.64
GNAI2	8079950	chr3	1.64
RPL3L	7998643	chr16	1.64
NA	8056039	chr2	1.64
SC65	8015432	chr17	1.64
RPS14	8115158	chr5	1.64
ARMET	8080084	chr3	1.64
CKLF	7996290	chr16	1.64
ACP6	7919326	chr1	1.63
CABP4	7941917	chr11	1.63
NA	7892554	---	1.63
EVC2	8099144	chr4	1.63
FRAG1	7937892	chr11	1.63
RANGRF	8004832	chr17	1.63
KCNQ2	8067626	chr20	1.63
ARSI	8115144	chr5	1.63

CEACAM21	8029076	chr19	0.57
ITGA1	8105229	chr5	0.58
GPSM2	7903565	chr1	0.58
LOC730110	8027345	chr19	0.58
GMDS	8123562	chr6	0.58
TBP	8123507	chr6	0.58
KLHDC3	8119648	chr6	0.58
ELOVL5	8127145	chr6	0.58
ZNF542	8031632	chr19	0.58
NA	8058664	chr2	0.58
MAP1LC3A	8062023	chr20	0.58
RWDD1	8121613	chr6	0.58
CACNA1H	7992147	chr16	0.58
SLC2A13	7962327	chr12	0.58
PDIK1L	7899087	chr1	0.58
BLM	7986068	chr15	0.58
MYO5A	7988921	chr15	0.58
SERAC1	8130474	chr6	0.58
TAF5L	7924969	chr1	0.58
NA	8085052	chr3	0.58
FAM81A	7983991	chr15	0.58
NA	8116653	chr6	0.58
NA	8116649	chr6	0.58
MAP4K4	8043945	chr2	0.58
NA	7895145	---	0.58
LAMA1	8022176	chr18	0.58
LANCL2	8132897	chr7	0.58
NA	8135585	chr7	0.58
ARMC2	8121370	chr6	0.58
NA	7894873	---	0.58
EXOC8	7925043	chr1	0.58
ZNF595	8093320	chr4	0.58
DUSP3	8015835	chr17	0.58
NA	7896599	---	0.58
NA	8047262	chr2	0.58
SOS2	7978932	chr14	0.58
FCHSD2	7950248	chr11	0.58
ATP11B	8084173	chr3	0.58
C6orf61	8129214	chr6	0.59
NA	8180326	---	0.59
ZNF588	8133049	chr7	0.59
MORC3	8068460	chr21	0.59
NFYA	8119408	chr6	0.59
CLIC4	7898988	chr1	0.59
C6orf163	8121009	chr6	0.59
ZNF211	8031792	chr19	0.59
BAT2	8118174	chr6	0.59
DCTN3	8160839	chr9	0.59
PARD3	7933010	chr10	0.59
RABGAP1L	7907492	chr1	0.59
MTO1	8120698	chr6	0.59
CCDC100	8113733	chr5	0.59

Cluster A

RPL8	8153903	chr8	1.63
AGXT2L2	8116177	chr5	1.63
BCAT2	8038202	chr19	1.63
NA	7968798	chr13	1.62
PEMT	8013120	chr17	1.62
TMEM134	7949798	chr11	1.62
ALG8	7950654	chr11	1.62
FYCO1	8086572	chr3	1.62
TRMT1	8034615	chr19	1.62
PLSCR3	8012197	chr17	1.62
NA	7951341	chr11	1.61
PXMP3	8151436	chr8	1.61
C10orf11	7928534	chr10	1.61
CYB5D2	8003850	chr17	1.61
C11orf54	7943162	chr11	1.61
PITX2	8102352	chr4	1.61
RAG1AP1	7905938	chr1	1.61
SPAG7	8011765	chr17	1.61
NA	7900192	chr1	1.61
JAM3	7945262	chr11	1.61
KIAA1305	7973727	chr14	1.61
AKR7A2	7913156	chr1	1.61
NA	8010082	chr17	1.61
LOC729969	8135172	chr7	1.60
PLEKHG4	7996516	chr16	1.60
C17orf76	8013022	chr17	1.60
FLJ35024	8159850	chr9	1.60
DNMBP	7935660	chr10	1.60
LOC646875	8119159	chr6	1.60
NA	8148325	chr8	1.60
NTN1	8004880	chr17	1.60
LOC401911	8086148	chr3	1.60
TSPAN31	7956613	chr12	1.60
C20orf3	8065433	chr20	1.60
CRTAP	8078450	chr3	1.60
PODNL1	8034712	chr19	1.60
CTSD	7945666	chr11	1.60
THSD1	7971813	chr13	1.60
CABP5	8037962	chr19	1.59
PSME2	7978123	chr14	1.59
FAM109B	8073573	chr22	1.59
SNORD15A	7942592	chr11	1.59
CDC25B	8060675	chr20	1.59
AHSA2	8042195	chr2	1.59
RFXANK	8027139	chr19	1.59
NA	7895317	---	1.59
NA	7895054	---	1.59
TEAD1	7938544	chr11	1.59
TUBB2C	8159642	chr9	1.58
FIBP	7949518	chr11	1.58
NA	7894531	---	1.58
LASS2	7919856	chr1	1.58

RWDD2	8120927	chr6	0.59
ZNF93	8035779	chr19	0.59
PHF20	8062213	chr20	0.59
NA	8180217	---	0.59
ZNF436	7913582	chr1	0.59
ZBED4	8073943	chr22	0.59
MOBK1A	8095566	chr4	0.59
NA	8015796	chr17	0.59
NA	7894450	---	0.59
ZNF295	8070557	chr21	0.59
RNF165	8021120	chr18	0.59
BAT3	8178526	chr6_cox_1	0.59
GSPT2	8167654	chrX	0.59
IRAK1BP1	8120826	chr6	0.59
NA	7893195	---	0.59
KIAA0586	7974653	chr14	0.60
ADAM21	7979904	chr14	0.60
NA	7895325	---	0.60
CACNA1B	8159734	chr9	0.60
OSTM1	8128669	chr6	0.60
NA	8180328	---	0.60
KIAA2026	8160011	chr9	0.60
VPS52	8125649	chr6	0.60
ZNF644	7917604	chr1	0.60
ANKRD26	7932637	chr10	0.60
RPS6KL1	7980219	chr14	0.60
CD163L1	7960771	chr12	0.60
NA	8117653	chr6	0.60
DIRAS1	8032518	chr19	0.60
NUP43	8130129	chr6	0.60
PNPLA8	8142307	chr7	0.60
GK	8174103	chrX	0.60
NFIL3	8162276	chr9	0.60
ANKS1A	8118863	chr6	0.60
VPS45	7905099	chr1	0.60
SCLT1	8102751	chr4	0.60
ECHDC1	8129379	chr6	0.60
KPNA3	7971620	chr13	0.60
SLC12A6	7987192	chr15	0.60
HEBP2	8122317	chr6	0.60
ZNF420	8028219	chr19	0.60
NA	8028279	chr19	0.60
ELF2	8102817	chr4	0.60
AHDC1	7914103	chr1	0.60
ZNF177	8025488	chr19	0.60
BBS7	8102655	chr4	0.60
NA	7896130	---	0.60
KIAA0274	8121429	chr6	0.60
FRYL	8100251	chr4	0.60
C6orf151	8116807	chr6	0.60
POLH	8119858	chr6	0.60
ZNF329	8039740	chr19	0.60

Cluster A

PNCK	8175815	chrX	1.58
CHST8	8027574	chr19	1.58
DHRS1	7978260	chr14	1.58
QSCN6L1	8165094	chr9	1.58
TM9SF1	7978166	chr14	1.58
CDKL1	7978970	chr14	1.58
CTNNA1	8108378	chr5	1.58
MVP	7994659	chr16	1.58
CATSPER2	7988208	chr15	1.58
CHD1L	7904883	chr1	1.58
SMO	8136080	chr7	1.58
GRASP	7955578	chr12	1.58
C9orf68	8159919	chr9	1.58
C1orf188	7897263	chr1	1.58
TXN	8163185	chr9	1.58
FCGRT	8030374	chr19	1.58
SRD5A2	8051361	chr2	1.58
ATPBD4	7987369	chr15	1.58
SFXN2	7930148	chr10	1.57
CEP164	7944113	chr11	1.57
FLJ38773	8065758	chr20	1.57
ERCC1	8037579	chr19	1.57
AGA	8103834	chr4	1.57
STAP2	8032789	chr19	1.57
ANKRD16	7931888	chr10	1.57
HRASLS5	7948973	chr11	1.57
CCDC25	8149942	chr8	1.57
LIMD1	8079334	chr3	1.57
C1orf19	7908147	chr1	1.57
NA	7893194	---	1.57
SENP3	8004485	chr17	1.57
SNORD46	7901048	chr1	1.56
PCFT	8013616	chr17	1.56
SNORA71B	8066256	chr20	1.56
LY6G6D	8178070	chr6_cox_1	1.56
KCNAB3	8012285	chr17	1.56
LOC729742	8063473	chr20	1.56
ALG3	8092457	chr3	1.56
S100A13	7920303	chr1	1.56
CACNA1S	7923271	chr1	1.56
FLJ36070	8038150	chr19	1.56
DERL1	8152628	chr8	1.56
NA	7892811	---	1.56
ORMDL2	7956031	chr12	1.55
NA	7894858	---	1.55
CRLS1	8060839	chr20	1.55
FAM62A	7956166	chr12	1.55
TMEM141	8159379	chr9	1.55
C2orf28	8040831	chr2	1.55
MAPKAPK3	8080013	chr3	1.55
CLUL1	8019831	chr18	1.55
HFE	8117343	chr6	1.55

SLITRK4	8175574	chrX	0.60
NA	7894374	---	0.60
DDEF2	8040113	chr2	0.60
MGC33657	8044818	chr2	0.60
NMNAT3	8091087	chr3	0.60
DYRK1A	8068551	chr21	0.60
RAP2A	7969693	chr13	0.60
WTAP	8126952	chr6	0.60
KIAA0701	7965723	chr12	0.60
KLHL7	8131815	chr7	0.60
DKFZp686L18	8101411	chr4	0.61
NA	8180415	---	0.61
NA	7894279	---	0.61
TCF19	8118086	chr6	0.61
ZNF221	8029331	chr19	0.61
ZNF642	7900446	chr1	0.61
DIP2C	7931683	chr10	0.61
ZNF306	8117685	chr6	0.61
SMTN	8072413	chr22	0.61
SLC10A4	8094960	chr4	0.61
GBA2	8161114	chr9	0.61
NA	8180327	---	0.61
QRSL1	8121300	chr6	0.61
RANBP6	8160016	chr9	0.61
HERC1	7989516	chr15	0.61
EEF1E1	8123819	chr6	0.61
HMGCR	8106280	chr5	0.61
KATNA1	8130102	chr6	0.61
CLK1	8058127	chr2	0.61
KIAA0195	8009796	chr17	0.61
NA	7895177	---	0.61
NA	8072582	chr22	0.61
CEP350	7907790	chr1	0.61
CLASP1	8054888	chr2	0.61
SNORA9	8139456	chr7	0.61
CEBPG	8027566	chr19	0.61
TPST1	8133155	chr7	0.61
PIK3R3	7915787	chr1	0.61
PARK2	8130645	chr6	0.61
NA	8180279	---	0.61
CCNT2	8045381	chr2	0.61
RPL7L1	8119595	chr6	0.62
PHF10	8130916	chr6	0.62
CDK8	7968199	chr13	0.62
ZNF625	8034342	chr19	0.62
PIM1	8119161	chr6	0.62
TRIM26	8124726	chr6	0.62
RNF12	8173615	chrX	0.62
DHX16	8124775	chr6	0.62
SGTB	8112409	chr5	0.62
TTC3	8068522	chr21	0.62
C6orf51	8121502	chr6	0.62

Cluster A

FLJ43806	7898102	chr1	1.55
RPL12	8047635	chr2	1.55
NPM3	7935903	chr10	1.55
LOC645161	8065254	chr20	1.54
SIAE	7952408	chr11	1.54
NA	7895937	---	1.54
PRMT1	8030437	chr19	1.54
SNORA74A	8108420	chr5	1.54
NA	7895840	---	1.54
DERA	7954185	chr12	1.54
JPH4	7978093	chr14	1.54
RPL36	8157139	chr9	1.54
NA	7894123	---	1.54
FMO4	7907297	chr1	1.54
RASL10B	8006562	chr17	1.53
ARHGEF10	8144281	chr8	1.53
TXNDC4	8162833	chr9	1.53
WFS1	8093906	chr4	1.53
RARRES2	8143772	chr7	1.53
LOC401397	8142431	chr7	1.53
SDK1	8131205	chr7	1.53
CD81	7937802	chr11	1.53
PLA2G6	8076025	chr22	1.53
CORO2A	8162744	chr9	1.53
NA	7896280	---	1.52
NHS	8166266	chrX	1.52
YIF1A	7949577	chr11	1.52
LEFTY2	7924669	chr1	1.52
SLC35C2	8066697	chr20	1.52
DPAGT1	7952185	chr11	1.52
PPP1CA	7949765	chr11	1.52
NA	7913665	chr1	1.52
LOC283412	8111989	chr5	1.52
HM13	8061542	chr20	1.52
SNAPAP	7905598	chr1	1.52
AIFM2	7934101	chr10	1.52
SUHW1	8074853	chr22	1.52
CCT7	8042720	chr2	1.52
RAD51L1	7975292	chr14	1.52
NA	8047286	chr2	1.52
ARL1	7965789	chr12	1.52
GAL3ST4	8141459	chr7	1.52
SNHG8	8080416	chr3	1.52
NFKB2	7930074	chr10	1.51
NA	7974337	chr14	1.51
TERC	8092000	chr3	1.51
KCTD17	8072784	chr22	1.51
NA	7925434	chr1	1.51
FGFR4	8110265	chr5	1.51
PPT1	7915286	chr1	1.51
CA13	8147112	chr8	1.51
NA	7989313	chr15	1.50

NA	8121130	chr6	0.62
IFNAR1	8068266	chr21	0.62
UBE2J1	8128111	chr6	0.62
KIAA1414	8051464	chr2	0.62
ZNF486	8027260	chr19	0.62
LOC152573	8094870	chr4	0.62
KIAA0240	8119582	chr6	0.62
FLJ25439	8104812	chr5	0.62
ZNF527	8028241	chr19	0.62
LRRC40	7916910	chr1	0.62
RUSC2	8155048	chr9	0.62
C18orf25	8021113	chr18	0.62
PPM1A	7974781	chr14	0.62
LRRC8B	7902861	chr1	0.62
ZFAND3	8119227	chr6	0.62
RBL1	8066136	chr20	0.62
KIAA0528	7961767	chr12	0.62
PARC	8119722	chr6	0.62
RNF8	8119184	chr6	0.62
LSM8	8135688	chr7	0.62
PHACTR2	8122440	chr6	0.62
WDR37	7925851	chr10	0.62
TMPO	7957737	chr12	0.62
NA	8180277	---	0.62
DMXL2	7988789	chr15	0.62
TIPARP	8083569	chr3	0.63
C6orf64	8126147	chr6	0.63
NA	8056993	chr2	0.63
NA	7893476	---	0.63
NA	8097468	chr4	0.63
C6orf211	8122818	chr6	0.63
LOC400713	8030925	chr19	0.63
FAM8A1	8117071	chr6	0.63
PB1	8087951	chr3	0.63
YWHAG	8140398	chr7	0.63
KIAA1468	8021496	chr18	0.63
MDC1	8124813	chr6	0.63
NA	7895134	---	0.63
LINS1	7991566	chr15	0.63
PDSS2	8128626	chr6	0.63
STARD3NL	8132376	chr7	0.63
LTV1	8122452	chr6	0.63
RAPGEF1	8164665	chr9	0.63
COX7A2	8127629	chr6	0.63
ZNF323	8124562	chr6	0.63
SLC6A6	8078014	chr3	0.63
LRRIQ2	8081362	chr3	0.63
HMG3	8127743	chr6	0.63
BRD2	8179504	chr6_qbl_h	0.63
ZNF800	8142730	chr7	0.63
NA	7895544	---	0.63
BACH1	8068105	chr21	0.63

Cluster A

FAM89A	7925028	chr1	1.50
TACC2	7931031	chr10	1.50
LOC731487	8093256	chr3	1.50
LRP5	7942007	chr11	1.50
TMEM161A	8035600	chr19	1.50
SEMA4F	8042925	chr2	1.50
LOC219854	7952484	chr11	1.50
RNF7	8083119	chr3	1.50
KCNQ1	7937823	chr11	1.50
HEMK1	8080001	chr3	1.50
TCF7L1	8043114	chr2	1.50
NA	7901856	chr1	1.50
MDP-1	7978192	chr14	1.49
PIGU	8065762	chr20	1.49
ARMCX6	8174086	chrX	1.49
NA	7895860	---	1.49
SULT1A1	8000590	chr16	1.49
RANBP3	8033075	chr19	1.49
CACNG5	8009326	chr17	1.49
NA	7893514	---	1.49
NOP17	8038382	chr19	1.49
IL17RC	8077688	chr3	1.49
C5orf14	8108166	chr5	1.49
SNORD55	7901046	chr1	1.48
NA	8001371	chr16	1.48
ARSA	8077160	chr22	1.48
NA	7892558	---	1.48
SSR4	8170775	chrX	1.48
WNK4	8007363	chr17	1.48
MGC4655	8001932	chr16	1.48
FLJ20294	7947652	chr11	1.48
HCG4	8124689	chr6	1.48
F8	8176193	chrX	1.48
C19orf10	8032863	chr19	1.48
TRAM1	8151281	chr8	1.48
STARD3	8006877	chr17	1.47
SCARNA12	7960728	chr12	1.47
SMARCD2	8017460	chr17	1.47
PCBD2	8108174	chr5	1.47
FMN1	7987145	chr15	1.47
RPS15	8024299	chr19	1.47
IL15RA	7931899	chr10	1.47
GPR175	8090420	chr3	1.47
PPP2R2A	8145440	chr8	1.47
NA	8075691	chr22	1.47
NSMCE1	8000413	chr16	1.47
NA	7895112	---	1.47
NA	7896062	---	1.47
RNF135	8006229	chr17	1.47
C2orf32	8052735	chr2	1.46
SNORD43	8076223	chr22	1.46
HCN2	8023984	chr19	1.46

DCUN1D1	8092321	chr3	0.63
RNF38	8161192	chr9	0.63
RPS6KB1	8008887	chr17	0.63
CEP76	8022380	chr18	0.63
NA	7893343	---	0.63
LOC392516	8169233	chrX	0.63
GALNT2	7910427	chr1	0.63
NA	7965675	chr12	0.63
RING1	8178244	chr6_cox_1	0.63
ABCF1	8117929	chr6	0.63
EHMT2	8125172	chr6	0.63
SLC35B3	8123825	chr6	0.63
ZNF470	8031669	chr19	0.63
TMEM181	8123062	chr6	0.63
NA	7895737	---	0.63
SLC25A12	8056766	chr2	0.63
SNX30	8157253	chr9	0.63
NA	8121884	chr6	0.64
MRPL18	8123148	chr6	0.64
DAXX	8178991	chr6_cox_1	0.64
DOCK7	7916669	chr1	0.64
ACVR2B	8078805	chr3	0.64
C6orf35	8130464	chr6	0.64
TAF11	8125859	chr6	0.64
ZNF24	8022882	chr18	0.64
ZNF277P	8135497	chr7	0.64
BCR	8071691	chr22	0.64
KIAA0427	8021154	chr18	0.64
C5orf13	8113504	chr5	0.64
CASP2	8136869	chr7	0.64
CLCN5	8167603	chrX	0.64
ARID1B	8122971	chr6	0.64
SLAIN2	8094948	chr4	0.64
IGF2R	8123181	chr6	0.64
SCYL2	7957806	chr12	0.64
C22orf30	8075542	chr22	0.64
RSBN1L	8133809	chr7	0.64
ZNF256	8039706	chr19	0.64
ALS2CR16	8047596	chr2	0.64
PHLPP	8021565	chr18	0.64
ANKRD32	8106931	chr5	0.64
ZNF44	8034349	chr19	0.64
NA	8180325	---	0.64
C17orf58	8017831	chr17	0.64
GYPE	8102988	chr4	0.64
PC	7949719	chr11	0.64
NA	7895643	---	0.64
SNX9	8122986	chr6	0.64
NA	8119196	chr6	0.64
OPA1	8084844	chr3	0.64
KIAA0317	7980189	chr14	0.65
SPEN	7898278	chr1	0.65

Cluster A

CHDH	8088142	chr3	1.46
C9orf18	8157632	chr9	1.46
ACAA2	8023261	chr18	1.46
NA	8115164	chr5	1.46
NA	8061364	chr20	1.46
FAM14B	7976436	chr14	1.46
COMT	8071289	chr22	1.46
ST3GAL2	8002370	chr16	1.46
CHAC1	8148467	chr8	1.46
NA	8105432	chr5	1.46
NA	7928556	chr10	1.46
USP5	7953483	chr12	1.46
SPPL2B	8024446	chr19	1.45
TMED10	7980296	chr14	1.45
RDH5	7956018	chr12	1.45
CEECAM1	8158250	chr9	1.45
MTX2	8046573	chr2	1.45
KDELRL1	8038078	chr19	1.45
CHPF	8059244	chr2	1.45
CUEDC2	7936011	chr10	1.45
RPS4X	8173513	chrX	1.45
PIGV	7899244	chr1	1.45
C21orf6	8069744	chr21	1.45
NA	8162462	chr9	1.45
EDARADD	7910694	chr1	1.45
YIPF2	8034108	chr19	1.45
GM2A	8109344	chr5	1.44
IRF3	8038416	chr19	1.44
ESPNL	8049598	chr2	1.44
LMAN2	8116020	chr5	1.44
WBSCR27	8140144	chr7	1.44
PNKP	8038458	chr19	1.44
ACRBP	7960642	chr12	1.44
NA	8174933	chrX	1.44
NA	7952626	chr11	1.44
LOC389541	8134740	chr7	1.44
TEX11	8173381	chrX	1.43
DDOST	7913256	chr1	1.43
COL13A1	7928069	chr10	1.43
TRADD	8001938	chr16	1.43
KRTCAP2	7920659	chr1	1.43
MOBK1B	8053064	chr2	1.43
GLT25D1	8026806	chr19	1.43
LOC440934	8048712	chr2	1.43
NA	7896377	---	1.43
ZNHIT4	8042859	chr2	1.43
SP6	8016382	chr17	1.43
NA	7893406	---	1.42
TRIM14	8162729	chr9	1.42
GANAB	7948744	chr11	1.42
TMED4	8139411	chr7	1.42
NUDT13	7928342	chr10	1.42

NA	7893628	---	0.65
CAPZA2	8135625	chr7	0.65
NA	8136179	chr7	0.65
FBXL3	7972062	chr13	0.65
KLF7	8058477	chr2	0.65
NA	8180306	---	0.65
NUS1	8121704	chr6	0.65
USP15	7956670	chr12	0.65
LOC643280	8101224	chr4	0.65
IPMK	7933723	chr10	0.65
FBXO34	7974473	chr14	0.65
MEF2A	7986411	chr15	0.65
MARCH7	8045919	chr2	0.65
ZNF17	8031744	chr19	0.65
CTTNBP2NL	7904018	chr1	0.65
SREBF2	8073522	chr22	0.65
SLC37A3	8143367	chr7	0.65
DICER1	7981111	chr14	0.65
MAPK14	8119000	chr6	0.65
IDI1	7931754	chr10	0.65
PGM3	8127841	chr6	0.65
GNL1	8178346	chr6_cox_1	0.65
ASTE1	8090664	chr3	0.65
AGPAT1	8125328	chr6	0.65
ZNF577	8038904	chr19	0.65
LOC284412	8028190	chr19	0.66
FLJ90013	8099506	chr4	0.66
LRFN2	8126244	chr6	0.66
CSNK2B	8178050	chr6_cox_1	0.66
PLEKHG2	8028656	chr19	0.66
ZNF654	8081069	chr3	0.66
CTHRC1	8147777	chr8	0.66
NA	7896185	---	0.66
RSF1	7950606	chr11	0.66
TCF20	8076436	chr22	0.66
BAHD1	7982738	chr15	0.66
NA	7894183	---	0.66
TCEB3	7898881	chr1	0.66
C6orf106	8125850	chr6	0.66
LOC91664	8030978	chr19	0.66
ZNF461	8036341	chr19	0.66
MIDN	8024228	chr19	0.66
LOC552889	7957242	chr12	0.66
CNOT4	8143088	chr7	0.66
ATAD2B	8050658	chr2	0.66
NA	7893304	---	0.66
FLJ16287	8038962	chr19	0.66
TNRC6A	7994187	chr16	0.66
NCOR2	7967493	chr12	0.66
ZNF700	8025973	chr19	0.66
NA	7893785	---	0.66
GNA13	8017711	chr17	0.66

Cluster A

TMEM138	7940473	chr11	1.42
NA	8036363	chr19	1.42
MPI	7984922	chr15	1.42
BP75	8121725	chr6	1.42
NA	7894740	---	1.42
CHST3	7928291	chr10	1.42
NA	8014787	chr17	1.42
NA	8012000	chr17	1.42
AGBL2	7947947	chr11	1.42
NA	7980889	chr14	1.42
MGAT1	8116484	chr5	1.42
COL23A1	8116195	chr5	1.42
CES4	7995729	chr16	1.42
RABAC1	8037071	chr19	1.42
GLB1L	8059158	chr2	1.42
CYP4F11	8035095	chr19	1.42
NA	7894974	---	1.41
CGREF1	8051001	chr2	1.41
MYL5	8093386	chr4	1.41
ECHS1	7937217	chr10	1.41
PGC	8126324	chr6	1.41
DUS2L	7996725	chr16	1.41
LFNG	8131143	chr7	1.41
CCNDBP1	7983173	chr15	1.41
C14orf43	7980051	chr14	1.41
HSPC152	7949075	chr11	1.41
XKR5	8149086	chr8	1.41
NRTN	8024995	chr19	1.41
UROD	7901073	chr1	1.41
HHAT	7909510	chr1	1.41
H6PD	7897441	chr1	1.41
MTCP1	8176219	chrX	1.41
LOC150383	8076749	chr22	1.41
FUK	7997072	chr16	1.40
CST2	8065416	chr20	1.40
COL16A1	7914361	chr1	1.40
ECE2	8084397	chr3	1.40
IL17D	7967969	chr13	1.40
PCOTH	7968029	chr13	1.40
TRDN	8129330	chr6	1.40
NA	7892746	---	1.39
C9orf119	8158204	chr9	1.39
NA	8072733	chr22	1.39
GRHPR	8155250	chr9	1.39
C5orf35	8105456	chr5	1.39
OSBPL5	7945831	chr11	1.39
GNPDA1	8114787	chr5	1.39
C1QTNF6	8075897	chr22	1.39
C9orf23	8160835	chr9	1.39
PBXIP1	7920575	chr1	1.39
NA	8075198	chr22	1.39
C1orf145	7924863	chr1	1.39

LOC652426	7939897	chr11	0.66
NA	7896605	---	0.66
SPATA2	8066953	chr20	0.67
PCDHAC1	8108633	chr5	0.67
TNPO1	8106122	chr5	0.67
SNRPC	8118826	chr6	0.67
NA	8052119	chr2	0.67
ZNF445	8086482	chr3	0.67
MTRF1L	8098705	chr4	0.67
DUSP22	8116548	chr6	0.67
ZNF776	8031815	chr19	0.67
FLOT1	8124828	chr6	0.67
TFB1M	8130438	chr6	0.67
ZNF234	8029392	chr19	0.67
DHX36	8091562	chr3	0.67
C14orf32	7974455	chr14	0.67
LMLN	8085033	chr3	0.67
IER2	8026163	chr19	0.67
ZNF514	8027352	chr19	0.67
C14orf103	7981192	chr14	0.67
ZSWIM6	8105506	chr5	0.67
PFDN6	8118661	chr6	0.67
USP12	7970696	chr13	0.67
ZNF652	8016546	chr17	0.67
ZNF585A	8036373	chr19	0.67
TMEM135	7942964	chr11	0.67
NA	8180356	---	0.68
NA	7892981	---	0.68
KIAA1919	8121525	chr6	0.68
DOM3Z	8179926	chr6_qbl_h	0.68
ESX1	8174291	chrX	0.68
MAP3K7IP2	8122672	chr6	0.68
NA	7896427	---	0.68
PDHX	7939329	chr11	0.68
RAB22A	8063607	chr20	0.68
CCDC93	8054804	chr2	0.68
KIAA2018	8089647	chr3	0.68
PTDSR	8018793	chr17	0.68
ALS2CR13	8047565	chr2	0.68
FLJ23588	8076612	chr22	0.68
PPTC7	7966345	chr12	0.68
CNOT6L	7989128	chr15	0.68
KIAA1143	7978542	chr14	0.68
NA	8028277	chr19	0.68
HEBP1	7961390	chr12	0.68
MAD2L1BP	8119874	chr6	0.68
LYRM2	8128133	chr6	0.68
HMG1	8176191	chrX	0.68
GGA3	8018324	chr17	0.68
PER2	8059996	chr2	0.68
NA	8180375	---	0.68
SLC17A5	8127549	chr6	0.68

Cluster A

C1orf97	7909561	chr1	1.39
NA	8124606	chr6	1.39
LOC387825	7960357	chr12	1.39
OR7D2	8025470	chr19	1.39
RETSAT	8053406	chr2	1.38
NA	7975987	chr14	1.38
LOC388963	8053139	chr2	1.38
MRPL17	7946267	chr11	1.38
NDUFA1	8169659	chrX	1.38
C20orf59	8064014	chr20	1.38
LRP16	7949033	chr11	1.38
LOC391655	7902448	chr1	1.38
GJA3	7970439	chr13	1.38
PDDC1	7945521	chr11	1.38
APEX2	8167854	chrX	1.38
TRIM47	8018494	chr17	1.38
TXNDC12	7916120	chr1	1.38
MPV17	8051066	chr2	1.38
WBP1	8042867	chr2	1.38
NA	7929812	chr10	1.38
ACOT11	7901613	chr1	1.38
NMNAT1	7897509	chr1	1.38
FAM11B	8054862	chr2	1.38
GALNS	8003410	chr16	1.37
GGCX	8053429	chr2	1.37
ARHGAP4	8175900	chrX	1.37
SNORD83A	8076221	chr22	1.37
NA	8147683	chr8	1.37
TMEM150	8053449	chr2	1.36
IZUMO1	8038177	chr19	1.36
PEX10	7911720	chr1	1.36
NA	7894143	---	1.36
TSPO	8073612	chr22	1.36
SPAG1	8147661	chr8	1.36
MUTYH	7915695	chr1	1.36
RPL23	8014749	chr17	1.36
NA	8163426	chr9	1.36
GAA	8010354	chr17	1.36
PTDSS2	7937378	chr11	1.36
LOC728521	8101616	chr4	1.36
SDC1	8050557	chr2	1.36
GADD45GIP	8034605	chr19	1.35
HSPC171	7996490	chr16	1.35
CIAPIN1	8001552	chr16	1.35
PEF1	7914354	chr1	1.35
NA	8000614	chr16	1.35
NA	7896363	---	1.35
NA	7893134	---	1.35
TMEM112	7998381	chr16	1.35
LOC492303	7917593	chr1	1.35
HHLA3	7902282	chr1	1.35
C12orf44	7955606	chr12	1.35

NA	7894667	---	0.68
TRIM39	8117869	chr6	0.68
PSMB1	8130952	chr6	0.68
ZNF407	8021756	chr18	0.68
HSPC049	8143070	chr7	0.68
SUMO2	8174636	chrX	0.68
ZNF307	8124553	chr6	0.68
YPEL4	7948282	chr11	0.68
ATF7IP	7954104	chr12	0.69
SNX3	8128683	chr6	0.69
FAM76B	7951093	chr11	0.69
RC3H1	7922432	chr1	0.69
STAM2	8055890	chr2	0.69
NA	8180323	---	0.69
DIP2B	7955376	chr12	0.69
DAZ2	8176832	chrY	0.69
DAZ1	8177354	chrY	0.69
NCOA6	8065776	chr20	0.69
CENPQ	8120165	chr6	0.69
NA	7892954	---	0.69
PEX6	8126452	chr6	0.69
NA	7894802	---	0.69
NA	8123714	chr6	0.69
KIAA0947	8104350	chr5	0.69
NA	7896240	---	0.69
NA	7896565	---	0.69
TROVE2	7908421	chr1	0.69
C21orf66	8070046	chr21	0.69
RAB3GAP2	7924405	chr1	0.69
KLHL15	8171837	chrX	0.69
RSHL2	8130528	chr6	0.69
KIAA0241	8132188	chr7	0.69
DDX5	8017634	chr17	0.69
ITGB1BP1	8050176	chr2	0.69
SUMO4	8122684	chr6	0.70
ATP2C1	8082607	chr3	0.70
ADAMTS7	7990736	chr15	0.70
DNM1L	7954752	chr12	0.70
FAM44A	8099410	chr4	0.70
NA	7896684	---	0.70
ZBTB9	8118721	chr6	0.70
BDP1	8177560	chr5_h2_h	0.70
C9orf25	8160805	chr9	0.70
USP37	8058940	chr2	0.70
CENPP	8156341	chr9	0.70
TTC21B	8056426	chr2	0.70
PCDH7	8094520	chr4	0.70
DCK	8095574	chr4	0.70
ATG16L1	8049271	chr2	0.70
ALAS1	8080184	chr3	0.70
LOC389072	8058512	chr2	0.70
NUP50	8117237	chr6	0.70

Cluster A

GCSH	8114778	chr5	1.35
CPA1	8136235	chr7	1.35
NA	7892537	---	1.35
C20orf30	8064833	chr20	1.35
CYBA	8003322	chr16	1.34
OSGEP	7977571	chr14	1.34
TMEM101	8015900	chr17	1.34
PRKCSH	8025895	chr19	1.34
APH1A	7919729	chr1	1.34
MEGF6	7911799	chr1	1.34
LOC284361	8030706	chr19	1.34
MGC42367	8054154	chr2	1.34
NOSIP	8038395	chr19	1.34
LOC150223	8074773	chr22	1.34
TMC5	7993638	chr16	1.33
SIX5	8037651	chr19	1.33
KIF7	7991296	chr15	1.33
MECR	7914245	chr1	1.33
TRA@	7973221	chr14	1.33
ZBTB47	8079099	chr3	1.33
ZNF511	7931561	chr10	1.32
NA	8131324	chr7	1.32
AGTRAP	7897745	chr1	1.32
SNORA7B	8090565	chr3	1.32
NA	8083994	chr3	1.32
NA	7906898	chr1	1.32
NA	8050363	chr2	1.32
NA	8145566	chr8	1.32
PLXNB3	8170716	chrX	1.32
NA	7893151	---	1.32
NAGLU	8007250	chr17	1.32
TNIP2	8099029	chr4	1.32
TP53I13	8006052	chr17	1.32
EEF1G	7948679	chr11	1.32
SPIN1	7994518	chr16	1.32
NA	8158057	chr9	1.31
VMAC	8025000	chr19	1.31
PSMB10	8002133	chr16	1.31
ABHD14B	8087825	chr3	1.31
TBL2	8140070	chr7	1.31
SGK2	8062728	chr20	1.31
MMAB	7966213	chr12	1.31
LOC729135	7919598	chr1	1.31
GPR92	7960637	chr12	1.31
RIN3	7976292	chr14	1.31
ADPRH	8081880	chr3	1.31
GCS1	8053158	chr2	1.31
PIGP	8070257	chr21	1.30
NA	8025584	chr19	1.30
DBP	8038117	chr19	1.30
TSEN34	8031145	chr19	1.30
C14orf119	7973371	chr14	1.30

GLO1	8126135	chr6	0.70
KIAA0082	8119198	chr6	0.70
TM2D3	7991630	chr15	0.71
MSL2L1	8090893	chr3	0.71
XPO1	8052526	chr2	0.71
VCPIP1	8151118	chr8	0.71
APOM	8118209	chr6	0.71
CNNM1	7929732	chr10	0.71
PDPK1	7992670	chr16	0.71
NA	8052004	chr2	0.71
FAM100B	8010050	chr17	0.71
HDAC5	8015914	chr17	0.71
ZNF547	8031732	chr19	0.71
NA	7894666	---	0.71
ZBTB2	8130185	chr6	0.71
ZNF529	8036333	chr19	0.71
NEK4	8088001	chr3	0.71
YIPF7	8100076	chr4	0.71
RPGR	8172056	chrX	0.72
GSK3B	8089801	chr3	0.72
ING3	8135718	chr7	0.72
ARL13B	8081115	chr3	0.72
KBTBD2	8138922	chr7	0.72
ZNF331	8030999	chr19	0.72
ZNF101	8027233	chr19	0.72
HMG2L1	8072645	chr22	0.72
CDH1	7996837	chr16	0.72
CCDC50	8084818	chr3	0.72
NA	8081233	chr3	0.72
LOC653390	7994565	chr16	0.72
TMEM81	7923707	chr1	0.72
NA	7894604	---	0.72
BOLA1	7905092	chr1	0.72
GTPBP2	8126629	chr6	0.72
DNAJC16	7898192	chr1	0.72
PGBD4	7982504	chr15	0.72
KRTAP26-1	8069804	chr21	0.72
RALA	8132406	chr7	0.72
LOC284371	8038949	chr19	0.72
YEATS2	8084232	chr3	0.72
FLJ39575	8135532	chr7	0.72
NA	8130565	chr6	0.72
NEK10	8085867	chr3	0.73
NA	8069517	chr21	0.73
NA	7961569	chr12	0.73
WASL	8142671	chr7	0.73
RBMX2	8169920	chrX	0.73
BCL10	7917338	chr1	0.73
MTRR	8104422	chr5	0.73
MGC40405	8055978	chr2	0.73
TAF3	7926096	chr10	0.73
SFRS3	8119080	chr6	0.73

Cluster A

UNC45A	7986160	chr15	1.30
OXA1L	7973314	chr14	1.30
C20orf29	8060698	chr20	1.30
NA	8106477	chr5	1.30
NA	7892703	---	1.30
FAM113A	8064557	chr20	1.30
LZTR1	8071466	chr22	1.30
CDKN1C	7945767	chr11	1.30
KIAA1522	7899821	chr1	1.30
NA	8112014	chr5	1.29
APOBEC4	7922804	chr1	1.29
NA	8022974	chr18	1.29
MORN1	7911701	chr1	1.29
EDA	8168062	chrX	1.29
HSP90B3P	7902930	chr1	1.29
SPRYD4	7956257	chr12	1.29
FAM3A	8176117	chrX	1.29
KIAA1443	7977955	chr14	1.29
ASCL2	7945730	chr11	1.29
CLDN2	8169210	chrX	1.29
NA	8124086	chr6	1.28
TMED1	8034101	chr19	1.28
TCHH	7920141	chr1	1.28
ZNF576	8029311	chr19	1.28
IDUA	8093425	chr4	1.28
PEX11A	7991323	chr15	1.28
LZTS2	7929911	chr10	1.28
MAGEB3	8166613	chrX	1.27
C20orf119	8062890	chr20	1.26
NA	8094741	chr4	1.26
NA	8108192	chr5	1.26
CLN3	8000543	chr16	1.26
NA	8138668	chr7	1.25
C6orf81	8118981	chr6	1.25
COMMD4	7984989	chr15	1.25
NA	7956739	chr12	1.25
GLT8D1	8087985	chr3	1.25
CENPB	8064762	chr20	1.25
HDDC3	7991401	chr15	1.24
C21orf57	8069340	chr21	1.24
ZC3H7B	8073397	chr22	1.24
PRR13	7955810	chr12	1.24
AMDHD2	7992656	chr16	1.24
ALG12	8076851	chr22	1.24
CCDC134	8073513	chr22	1.24
NA	7954697	chr12	1.24
C3orf21	8092922	chr3	1.23
SCAMP4	8024347	chr19	1.23
NA	8014435	chr17	1.22
NA	8006744	chr17	1.22
NA	8019647	chr17_rand	1.22
NA	8014648	chr17	1.22

HPS1	7935588	chr10	0.73
TUBGCP3	7972840	chr13	0.73
CUTA	8125752	chr6	0.73
NA	7893187	---	0.73
NA	7893591	---	0.73
NA	7896310	---	0.73
NA	8104725	chr5	0.73
PNRC1	8121076	chr6	0.73
RERE	7912166	chr1	0.74
ZNF582	8039586	chr19	0.74
SDCCAG10	8105612	chr5	0.74
CCDC75	8041487	chr2	0.74
MNAB	8163972	chr9	0.74
GRSF1	8100834	chr4	0.74
MCMDC1	8129218	chr6	0.74
DCLRE1B	7904131	chr1	0.74
NA	8144685	chr8	0.74
LEMD2	8125788	chr6	0.74
YIPF3	8126574	chr6	0.74
PPP1R11	8117834	chr6	0.74
FLJ42289	7991542	chr15	0.74
HMGCS1	8111941	chr5	0.74
DLD	8135464	chr7	0.74
IL27RA	8026272	chr19	0.74
NA	8180206	---	0.74
LOC441818	8020842	chr18	0.74
ZBTB46	8067743	chr20	0.74
C6orf157	8127824	chr6	0.74
BNIP2	7989323	chr15	0.75
C18orf37	8022902	chr18	0.75
GPR153	7912004	chr1	0.75
CDYL	8116710	chr6	0.75
TAS2R40	8136846	chr7	0.75
RBM33	8137542	chr7	0.75
NA	7893574	---	0.75
NA	7893239	---	0.75
NA	8131942	chr7	0.75
ACOX3	8099304	chr4	0.75
NA	7895616	---	0.75
NOL7	8116969	chr6	0.75
CDKN2D	8034075	chr19	0.75
USP3	7984132	chr15	0.75
NA	7894552	---	0.75
NA	7970388	chr13	0.75
NA	7893002	---	0.76
POU6F1	7963265	chr12	0.76
ZNF417	8039695	chr19	0.76
SEPT5	8071234	chr22	0.76
C1orf178	7918694	chr1	0.76
NA	7895014	---	0.76
WRNIP1	8116595	chr6	0.76
ZNF613	8030871	chr19	0.77

Cluster A

TEX264	8080121	chr3	1.22
GALK1	8018428	chr17	1.21
LOC200312	8075365	chr22	1.21
LOC390006	7936492	chr10	1.21
NA	7909813	chr1	1.21
NA	8040270	chr2	1.20
SLC18A3	7927502	chr10	1.18

BAT1	8179750	chr6_qbl_h	0.77
C10orf93	7937135	chr10	0.77
HUS1	8139592	chr7	0.77
NA	8082570	chr3	0.77
RP11-506K6.3	8116655	chr6	0.77
FBXW2	8163784	chr9	0.77
C6orf47	8124994	chr6	0.77
NA	8004219	chr17	0.77
MTCH1	8126066	chr6	0.77
NA	7900212	chr1	0.77
PHEX	8166408	chrX	0.77
STARD7	8053890	chr2	0.77
LRRC8A	8158424	chr9	0.78
ZNF592	7985605	chr15	0.78
NA	7898673	chr1	0.78
NA	7895226	---	0.78
GTPBP1	8073039	chr22	0.78
NA	7912527	chr1	0.78
TBX19	7907146	chr1	0.78
ARPC1A	8134581	chr7	0.78
NRAS	7918825	chr1	0.78
RGS21	7908382	chr1	0.79
B3GNT8	8037032	chr19	0.79
NA	8121553	chr6	0.79
LOC441601	7948092	chr11	0.79
FCHO1	8026830	chr19	0.79
RAP2C	8175169	chrX	0.79
RXRB	8178903	chr6_cox_	0.80
ARG1	8122058	chr6	0.80
NA	7952390	chr11	0.80
NA	7895778	---	0.81

Cluster B

Cluster B SAM Analysis FDR less than 5%								
NAME	UNIQUID	chr location	Fold change		NAME	UNIQUID	chr location	Fold change
HHIP	8097628	chr4	47.02		TBR1	8045962	chr2	0.02
EYA1	8151310	chr8	31.74		LPPR4	7903214	chr1	0.04
ATOH1	8096461	chr4	27.08		OTX2	7979357	chr14	0.05
PDLIM3	8104022	chr4	19.85		MAL2	8148040	chr8	0.06
NA	8180369	---	18.15		NEUROG	8114245	chr5	0.07
OR4N4	7981783	chr15	15.62		PEX5L	8092277	chr3	0.08
OR4M2	7973008	chr14	13.89		IGSF21	7898521	chr1	0.08
ALDH1A3	7986446	chr15	13.31		PTPRR	7964907	chr12	0.08
MYCN	8040419	chr2	11.45		CHRM3	7910915	chr1	0.09
SFRP5	7935528	chr10	10.88		GLRA1	8115355	chr5	0.10
PRLR	8111490	chr5	10.87		ZFH4	8147000	chr8	0.10
BCHE	8091867	chr3	10.80		RPGRIP1	7973185	chr14	0.10
GRIK3	7914974	chr1	10.52		ZNF204	8124498	chr6	0.12
TEX15	8150138	chr8	10.01		CHN2	8132013	chr7	0.12
SATB2	8058091	chr2	9.85		DAB1	7916541	chr1	0.13
C4orf18	8103415	chr4	9.83		GRAMD1	7944769	chr11	0.13
MYCNOS	8050423	chr2	9.79		ST8SIA2	7986229	chr15	0.13
SOX2	8084165	chr3	9.66		TSPAN9	7953166	chr12	0.14
LOC4411	8123405	chr6	9.61		PLXNA2	7923991	chr1	0.14
NA	7977438	chr14	9.58		ESRRG	7924309	chr1	0.15
ADAMTS6	8112342	chr5	9.11		ATP1B2	8004545	chr17	0.16
NDST3	8097038	chr4	8.44		CLCN4	8165974	chrX	0.16
PPP2R2C	8099218	chr4	8.41		SLC17A7	8038367	chr19	0.16
KIAA0922	8097867	chr4	8.27		KIF21B	7923233	chr1	0.16
PTX3	8083594	chr3	7.99		NA	8161693	chr9	0.17
RP6-213H	8169949	chrX	7.76		L1CAM	8175871	chrX	0.18
DSC3	8022692	chr18	7.17		TMEM16E	7960438	chr12	0.18
L3MBTL4	8022145	chr18	7.15		CADPS	8088491	chr3	0.18
BCAT1	7961829	chr12	7.03		RGN	8167027	chrX	0.18
GAB1	8097586	chr4	7.02		CACNA2L	8080578	chr3	0.20
TGFB2	7909789	chr1	6.89		PSMD5	8163795	chr9	0.20
NDP	8172220	chrX	6.79		DNAPTP6	8047272	chr2	0.20
WDR72	7988990	chr15	6.58		UNC119	8013633	chr17	0.20
NA	8120961	chr6	6.56		STX3	7940191	chr11	0.20
CRB1	7908508	chr1	6.36		CA4	8008900	chr17	0.21
CYYR1	8069668	chr21	6.31		ZNF311	8124622	chr6	0.21
BOC	8081686	chr3	6.13		NAPB	8065372	chr20	0.23
PCNT	8069348	chr21	6.06		ELOVL2	8123920	chr6	0.23
NA	7896715	---	5.69		STK17A	8132503	chr7	0.24
ADCYAP1	8019851	chr18	5.56		ARHGAP2	8019964	chr18	0.25
PDPN	7898057	chr1	5.47		RALGPS2	7907657	chr1	0.26
NRIP2	7960331	chr12	5.46		PDZD4	8175860	chrX	0.26
KCNT2	7923043	chr1	5.26		CXADR	8067955	chr21	0.27
GNG3	7940673	chr11	5.23		ABHD14A	8080162	chr3	0.27
GLYATL2	7948354	chr11	4.97		CSPG5	8086799	chr3	0.27
IRAK3	7956878	chr12	4.93		DAPK1	8156199	chr9	0.27
LOC6441	8012837	chr17	4.91		CAMK2B	8139330	chr7	0.27
PTCH1	8162533	chr9	4.83		CABLES1	8020495	chr18	0.28

Cluster B

MET	8135601	chr7	4.58
NA	7896697	---	4.50
KCNA3	7918457	chr1	4.48
SYT7	7948588	chr11	4.44
SOHLH2	7970989	chr13	4.43
PGM1	7901951	chr1	4.41
PABPC5	8168650	chrX	4.27
GLI2	8044933	chr2	4.25
GPR85	8142424	chr7	4.25
ATP2A3	8011516	chr17	4.21
KCNG1	8067029	chr20	4.11
PAWR	7965112	chr12	4.09
MLSTD1	7954631	chr12	4.08
DRD2	7951703	chr11	4.00
COL25A1	8102263	chr4	3.91
NA	7987135	chr15	3.88
HSD11B2	7996563	chr16	3.77
DNTT	7929574	chr10	3.73
NETO1	8023828	chr18	3.59
SRGAP1	7956759	chr12	3.57
SCN5A	8086222	chr3	3.55
FLNC	8135990	chr7	3.32
SPHK1	8010061	chr17	3.29
ULBP1	8122724	chr6	3.24
LNX2	7970716	chr13	3.14
ATF5	8030557	chr19	3.13
PREX1	8066848	chr20	3.12
MAP2K3	8005707	chr17	3.10
KIF26A	7977216	chr14	3.06
MID1IP1	8166797	chrX	3.04
NA	8022168	chr18	3.00
NA	7982269	chr15	2.99
NA	7987025	chr15	2.99
ZC3H12C	7943715	chr11	2.97
CMIP	7997427	chr16	2.91
PCDH11X	8168657	chrX	2.91
GCNT2	8116835	chr6	2.91
DLX1	8046373	chr2	2.86
OR4Q3	7973004	chr14	2.79
POLR1E	8155268	chr9	2.77
NA	7982290	chr15	2.77
CTH	7902290	chr1	2.77
SEPT10	8054467	chr2	2.76
SLC44A3	7903144	chr1	2.67
CPLX1	8098782	chr4	2.66
SNF1LK	8070665	chr21	2.62
NA	8005659	chr17	2.58
C20orf108	8063478	chr20	2.56
BARD1	8058695	chr2	2.54
TEX9	7983828	chr15	2.49
CABC1	7910164	chr1	2.48

MYO10	8111153	chr5	0.28
PRNP	8060758	chr20	0.28
CACNA1C	7953040	chr12	0.30
DNM1	8158183	chr9	0.31
HSPC159	8042283	chr2	0.31
TSPAN15	7928046	chr10	0.31
NA	8144705	chr8	0.32
NUAK1	7966026	chr12	0.32
LRP8	7916282	chr1	0.33
DSCAML1	7951928	chr11	0.33
ASS1	8158671	chr9	0.33
RASSF8	7954469	chr12	0.34
HTRA1	7931097	chr10	0.34
ST3GAL5	8053484	chr2	0.35
CAMK2G	7934477	chr10	0.35
SYP	8172573	chrX	0.35
TMEM38E	8157092	chr9	0.36
SPATA20	8008388	chr17	0.36
HIP1	8140319	chr7	0.36
OSBP2	8072382	chr22	0.37
CSRP2	7965090	chr12	0.37
EPHX1	7910111	chr1	0.38
ACVR1	8056005	chr2	0.38
DLG3	8168179	chrX	0.39
SAT2	8012247	chr17	0.39
CHD3	8004699	chr17	0.39
DUSP5	7930413	chr10	0.40
FGD4	7954729	chr12	0.40
GTF2IRD1	8133477	chr7	0.43
NA	7895768	---	0.44
C20orf7	8061019	chr20	0.44
SLC23A2	8064808	chr20	0.44
ILVBL	8034920	chr19	0.44
HPCAL1	8040238	chr2	0.44
SPFH1	7935692	chr10	0.44
MMD2	8137931	chr7	0.44
C20orf112	8065612	chr20	0.44
GRINA	8148694	chr8	0.44
LASP1	8006820	chr17	0.45
NRBP2	8153550	chr8	0.45
TRAF3	7977018	chr14	0.45
PACS1	7941537	chr11	0.46
ZHX1	8152656	chr8	0.46
NA	8180377	---	0.46
ATP6V1B	8144931	chr8	0.46
ST5	7946401	chr11	0.46
RAGE	7981346	chr14	0.46
MIF4GD	8018343	chr17	0.47
PPFIA3	8030220	chr19	0.47
PHF15	8108080	chr5	0.47
PNMA3	8170622	chrX	0.47

Cluster B

DYNC2H1	7943442	chr11	2.46
FAM46A	8127778	chr6	2.45
PALLD	8098263	chr4	2.43
OBFC2A	8047161	chr2	2.43
ZNF516	8023882	chr18	2.40
LOC65288	7973006	chr14	2.38
ANKRD57	8044301	chr2	2.34
LAP3	8094259	chr4	2.31
CYFIP1	7981824	chr15	2.29
DCUN1D2	7972912	chr13	2.28
LOC6499	7977435	chr14	2.25
TFDP2	8091103	chr3	2.24
RLN2	8159977	chr9	2.20
PPM1H	7964646	chr12	2.17
HELB	7956894	chr12	2.16
ULBP3	8130176	chr6	2.16
OR4N2	7973010	chr14	2.13
KIAA1772	8020384	chr18	2.13
NXPH2	8055478	chr2	2.07
CPZ	8094101	chr4	2.07
COL21A1	8127201	chr6	2.06
RAB33A	8169898	chrX	2.05
CCDC4	8100015	chr4	2.04
NA	8091627	chr3	2.02
NFKB1	8096635	chr4	2.00
ABCB9	7967337	chr12	2.00
NA	8052141	chr2	1.94
C6orf59	8130641	chr6	1.93
BID	8074261	chr22	1.90
KIAA1602	7963121	chr12	1.89
NA	7956908	chr12	1.88
GYPA	8102998	chr4	1.88
KIAA0859	7907353	chr1	1.88
C7orf31	8138647	chr7	1.87
LRPPRC	8051882	chr2	1.86
LOC55423	8038577	chr19	1.86
C22orf5	8076046	chr22	1.85
GPR78	8094093	chr4	1.85
C1orf183	7918552	chr1	1.84
DNAH5	8111019	chr5	1.84
PNPLA2	7937485	chr11	1.82
EP400	7959995	chr12	1.78
SNAPC1	7974870	chr14	1.77
NA	7982375	chr15	1.74
RG9MTD2	8101916	chr4	1.73
LRP5L	8075052	chr22	1.71
MAFF	8073007	chr22	1.71
ESR2	7979583	chr14	1.69
GOLGA8C	7991668	chr15_rand	1.69
CHRNA7	7982341	chr15	1.68
STK25	8060257	chr2	1.68

NA	8180379	---	0.49
BCAP31	8175835	chrX	0.49
KCTD2	8009737	chr17	0.49
NDUFC2	7950644	chr11	0.50
NA	7894257	---	0.50
KIAA0247	7975361	chr14	0.50
PAR6G	8023926	chr18	0.50
DCAKD	8016159	chr17	0.51
SLC22A5	8107920	chr5	0.53
PFKL	8069057	chr21	0.54
POLR3GL	7919197	chr1	0.54
PPP1R13	7981460	chr14	0.54
KCTD21	7950669	chr11	0.54
STAT5A	8007212	chr17	0.55
C2orf30	8041967	chr2	0.56
C3orf62	8087374	chr3	0.56
TMSB4X	8101774	chr4	0.56
STARD3	8006877	chr17	0.57
PRKACA	8034762	chr19	0.58
MGAT3	8073129	chr22	0.58
PTMS	7953409	chr12	0.58
HDHD3	8163505	chr9	0.59
LOC72780	8165492	chr9	0.59
USP35	7942798	chr11	0.60
ABCD1	8170704	chrX	0.60
VEGFB	7940904	chr11	0.60
OSBPL5	7945831	chr11	0.60
UBL4A	8176098	chrX	0.61
EPB41L5	8044882	chr2	0.61
SLC27A4	8158224	chr9	0.61
DAB2IP	8157610	chr9	0.63
COPS6	8134699	chr7	0.64
F8A3	8176245	chrX	0.64
PHF7	8080306	chr3	0.65
FLJ20489	7955055	chr12	0.66
FLJ37078	8133704	chr7	0.67
GDF11	7956026	chr12	0.69
KIAA0649	8159243	chr9	0.69
LRFN3	8028112	chr19	0.69

Cluster B

RHBDD1	8048772	chr2	1.67
GOLGA8E	7991695	chr15_rand	1.67
CCT8	8069753	chr21	1.63
C2orf25	8055672	chr2	1.53
SOX1	7970146	chr13	1.48
NA	7943709	chr11	1.43

Cluster C

cluster C SAM analysis Fold change (more than 1.2 fold)								
NAME	UNIQID	Chr location	Fold change		NAME	UNIQID	chr location	Fold change
TTR	8020795	chr18	39.92		ODZ3	8098441	chr4	0.04
ACADL	8058591	chr2	13.59		CHL1	8077270	chr3	0.04
SLC13A4	8143110	chr7	13.19		STXBP5L	8081959	chr3	0.06
ART3	8095806	chr4	12.42		VSTM2	8132851	chr7	0.06
GABRA5	7982102	chr15	10.92		TRPM3	8161654	chr9	0.07
TAC1	8134420	chr7	10.72		KCNIP1	8109912	chr5	0.07
DCT	7972259	chr13	10.42		CACNA1A	8034643	chr19	0.08
RGS6	7975482	chr14	9.95		ZNF521	8022612	chr18	0.08
PDE6H	7954136	chr12	9.41		KLHL13	8174654	chrX	0.08
C6orf191	8129476	chr6	9.30		DCC	8021245	chr18	0.09
SLC17A8	7957819	chr12	9.27		PAK3	8169389	chrX	0.09
PCDH10	8097449	chr4	9.05		DOK5	8063458	chr20	0.09
PCSK2	8061094	chr20	8.39		SEMA6A	8113666	chr5	0.10
GLDN	7983704	chr15	8.32		PSD3	8149551	chr8	0.10
GNGT1	8134252	chr7	7.83		KIT	8095110	chr4	0.10
LOC440894	8054517	chr2	7.54		COLEC12	8021946	chr18	0.10
MCF2L2	8092358	chr3	7.43		LONRF2	8054281	chr2	0.10
PALMD	7903227	chr1	7.38		GPR56	7996081	chr16	0.11
NA	7937988	chr11	6.66		APCDD1	8020141	chr18	0.11
FCER2	8033420	chr19	6.64		ETV5	8092578	chr3	0.11
ZFHX4	8147000	chr8	6.54		FXD6	7951977	chr11	0.11
TTC29	8103064	chr4	6.39		ATP1A2	7906501	chr1	0.11
ACTBL1	8045257	chr2	6.32		NLGN1	8083968	chr3	0.12
GMPT	8117034	chr6	6.22		RTN1	7979455	chr14	0.12
FSIP2	8046824	chr2	6.13		CAP2	8117054	chr6	0.12
C9orf19	8155192	chr9	6.06		CHN1	8056890	chr2	0.12
CDH8	8001784	chr16	5.97		CAMK2N1	7913237	chr1	0.12
MAK	8123893	chr6	5.93		PTPRK	8129418	chr6	0.12
ARL4D	8007493	chr17	5.81		FAM49A	8050427	chr2	0.12
TPD52	8151475	chr8	5.53		DSC2	8022711	chr18	0.12
GDA	8155802	chr9	5.49		SV2B	7986195	chr15	0.12
CSAG2	8175710	chrX	5.46		RBP1	8091078	chr3	0.12
SLC1A7	7916248	chr1	5.41		BOC	8081686	chr3	0.13
LOC727966	8127399	chr6	5.40		EIF4E3	8088803	chr3	0.13
GSG1	7961399	chr12	5.36		CLU	8149927	chr8	0.13
FLJ38359	8044346	chr2	5.27		CTNNA2	8042993	chr2	0.14
ROBO3	7944882	chr11	5.17		ABLIM1	7936463	chr10	0.14
EML1	7976698	chr14	5.09		NMNAT2	7922756	chr1	0.14
WFIKKN2	8008511	chr17	5.05		SLC24A2	8160321	chr9	0.14
DMD	8171921	chrX	5.02		TMEM2	8161701	chr9	0.14
PAGE2B	8167862	chrX	5.01		FAT4	8097288	chr4	0.14
NA	8114898	chr5	4.99		KIAA0984	7956826	chr12	0.14
DDO	8128837	chr6	4.97		EFHA2	8144742	chr8	0.14
PAPPA2	7907572	chr1	4.96		SLIT2	8094301	chr4	0.14
NA	7895159	---	4.90		ZCCHC12	8169598	chrX	0.15
TGFBR3	7917649	chr1	4.84		FGF9	7967993	chr13	0.15
CNKSR3	8130422	chr6	4.79		NETO2	8001197	chr16	0.15

Cluster C

NA	8174263	chrX	4.77
TFPI2	8141016	chr7	4.73
MC4R	8023593	chr18	4.73
NA	8104758	chr5	4.71
NPTX1	8019074	chr17	4.69
NA	8127393	chr6	4.67
LOC387978	7973748	chr14	4.63
NPR3	8104746	chr5	4.56
ARHGAP18	8129458	chr6	4.52
NA	7895505	---	4.52
SORBS2	8104035	chr4	4.44
NA	8058201	chr2	4.44
NA	8084213	chr3	4.44
IRX6	7995674	chr16	4.35
RASGRF2	8106660	chr5	4.30
OR52J3	7937986	chr11	4.19
RPRM	8055941	chr2	4.19
PPP2R2B	8114900	chr5	4.19
NA	7893626	---	4.15
PSTPIP2	8023043	chr18	4.12
LOC402117	8048112	chr2	4.10
C2orf14	8055214	chr2	4.09
TRIP10	8025058	chr19	4.08
FOXG1B	7973745	chr14	4.05
EGFL11	8127408	chr6	4.01
GNB3	7953469	chr12	3.97
ZFPM2	8147837	chr8	3.94
NA	8063534	chr20	3.93
LAPTM4B	8147503	chr8	3.92
NA	7896460	---	3.92
NA	7896081	---	3.87
FLJ44048	8046836	chr2	3.82
IRS4	8174444	chrX	3.80
NA	7892854	---	3.79
SV2C	8106336	chr5	3.76
IMPG2	8089185	chr3	3.74
NA	7896357	---	3.72
NA	7896012	---	3.69
POTE2	7977456	chr14	3.69
NA	8139792	chr7	3.69
NRL	7978107	chr14	3.68
LRP2	8056611	chr2	3.68
USP2	7952249	chr11	3.68
TCEA3	7913593	chr1	3.68
ALS2CR12	8058203	chr2	3.61
CRX	8029978	chr19	3.61
ATOH7	7933978	chr10	3.57
NA	8139776	chr7	3.57
NA	8180348	---	3.56
SAMD11	7896761	chr1	3.53
CSAG1	8170576	chrX	3.48

SLC16A4	7918426	chr1	0.15
MAPK10	8101587	chr4	0.15
EFNA5	8113433	chr5	0.15
HLA-DQA1	8178199	chr6_cox_1	0.15
CLDN11	8083887	chr3	0.15
MAOB	8172204	chrX	0.16
RGL1	7908125	chr1	0.16
ANKS1B	7965686	chr12	0.16
SEPT3	8073548	chr22	0.16
PARP9	8090018	chr3	0.16
KIF5A	7956522	chr12	0.16
PRKCB1	7994131	chr16	0.16
CACHD1	7901993	chr1	0.16
TSPAN5	8101828	chr4	0.16
DFNA5	8138602	chr7	0.16
SV2A	7919645	chr1	0.16
EXPH5	7951545	chr11	0.17
GPR177	7916862	chr1	0.17
STK31	8098439	chr4	0.17
AFF3	8054254	chr2	0.17
FGF14	7972650	chr13	0.17
RBMS1	8056201	chr2	0.17
STMN4	8149898	chr8	0.17
ELAVL3	8034263	chr19	0.17
DCAMKL1	7970954	chr13	0.18
SLC38A1	7962516	chr12	0.18
KIAA1199	7985317	chr15	0.18
FAIM2	7963142	chr12	0.18
NTRK3	7991186	chr15	0.18
HLA-DRA	8178193	chr6_cox_1	0.18
NA	7906900	chr1	0.18
PLCB4	8060897	chr20	0.18
LRCH2	8174610	chrX	0.18
SLC4A8	7955469	chr12	0.18
PLXNC1	7957570	chr12	0.18
NA	7895300	---	0.18
PFTK1	8134098	chr7	0.18
RUNX1T1	8151768	chr8	0.18
C9orf4	8163109	chr9	0.18
LPL	8144917	chr8	0.19
LYZ	7957023	chr12	0.19
NA	8161693	chr9	0.19
GNG2	7974341	chr14	0.19
ST6GAL2	8054439	chr2	0.20
C6orf213	8121803	chr6	0.20
ZNF659	8085774	chr3	0.20
ATP8A2	7968154	chr13	0.20
PHGDH	7904433	chr1	0.20
TRERF1	8126428	chr6	0.20
SERPINE2	8059376	chr2	0.20
SNCA	8101762	chr4	0.20

Cluster C

GK5	8091120	chr3	3.48
DGKI	8143154	chr7	3.46
MAGEA12	8175724	chrX	3.46
ZIM2	8039607	chr19	3.43
KCNQ3	8152946	chr8	3.41
LOC440173	8162183	chr9	3.40
C18orf1	8020308	chr18	3.38
NA	8164006	chr9	3.31
TULP1	8125903	chr6	3.23
NA	8090662	chr3	3.22
SLITRK3	8091863	chr3	3.22
NA	7893760	---	3.16
TPTE	8069472	chr21	3.15
SLCO1A2	7961626	chr12	3.13
B4GALT6	8022747	chr18	3.13
BCMO1	7997401	chr16	3.11
CSMD3	8152376	chr8	3.10
NA	7896016	---	2.99
NA	7915074	chr1	2.98
NA	7893492	---	2.97
XCL1	7907156	chr1	2.97
DEPDC6	8148059	chr8	2.97
PAGE2	8167866	chrX	2.96
POTE14	7972983	chr14	2.95
HLX1	7909890	chr1	2.95
SPINK5	8109001	chr5	2.95
TBC1D8	8054308	chr2	2.94
NA	7895245	---	2.92
POU4F1	7972177	chr13	2.91
PTPRU	7899562	chr1	2.90
NA	8020321	chr18	2.90
PDZD2	8104693	chr5	2.87
CACNA1G	8008409	chr17	2.85
C14orf58	7975799	chr14	2.85
F13A1	8123744	chr6	2.85
NA	7894857	---	2.85
CCDC81	7942941	chr11	2.84
KIRREL2	8028058	chr19	2.82
PCOLCE2	8091243	chr3	2.80
NA	8055171	chr2	2.79
LRRC2	8086615	chr3	2.79
NA	8139790	chr7	2.78
CPNE6	7973510	chr14	2.77
LOC646467	8155451	chr9	2.77
LOC647507	8043489	chr2	2.77
NA	8072139	chr22	2.77
SGK3	8146717	chr8	2.77
NA	7895378	---	2.76
DOK6	8021695	chr18	2.75
CCIN	8155200	chr9	2.75
MAGEA6	8170553	chrX	2.73

TRPS1	8152453	chr8	0.20
MAPT	8007828	chr17	0.20
SH3D19	8103166	chr4	0.20
SH3GL2	8154476	chr9	0.20
RNF182	8116980	chr6	0.20
SCHIP1	8083677	chr3	0.20
CD74	8115147	chr5	0.21
DACT1	7974689	chr14	0.21
ZFH1B	8055624	chr2	0.21
GNG12	7916843	chr1	0.21
ZIC3	8170200	chrX	0.21
FGFR1	8150318	chr8	0.21
SPOCK2	7934215	chr10	0.21
TAGLN3	8081620	chr3	0.22
ZIC4	8091342	chr3	0.22
NA	7894238	---	0.22
NA	7893894	---	0.22
C11orf41	7939215	chr11	0.22
MTMR7	8149485	chr8	0.22
DSCR1L2	7898957	chr1	0.22
PCGF5	7929132	chr10	0.22
FLRT2	7976073	chr14	0.22
LRRC55	7940002	chr11	0.22
IFIT5	7929072	chr10	0.22
SYT11	7906061	chr1	0.22
FUT8	7975136	chr14	0.22
PARP14	8082100	chr3	0.23
NA	7894664	---	0.23
CPT1C	8030448	chr19	0.23
SULF2	8066822	chr20	0.23
PABPC5	8168650	chrX	0.23
PDGFC	8103399	chr4	0.23
STAMBPL1	7929012	chr10	0.23
SLC4A4	8095585	chr4	0.24
KIAA1377	7943376	chr11	0.24
KIF5C	8045637	chr2	0.24
APP	8069644	chr21	0.24
THSD7A	8138231	chr7	0.24
IGFBPL1	8161265	chr9	0.24
VLDLR	8154100	chr9	0.24
NA	7895114	---	0.24
ZNF483	8157193	chr9	0.24
KIAA1456	8144712	chr8	0.25
SORBS1	7935188	chr10	0.25
RASSF4	7927186	chr10	0.25
NA	7895255	---	0.25
UGT8	8097017	chr4	0.25
NA	7894280	---	0.25
FABP7	8121784	chr6	0.25
HLA-DPA1	8180100	chr6_qbl_h	0.25
SPECC1	8005661	chr17	0.26

Cluster C

NA	7892725	---	2.73
DOCK9	7972487	chr13	2.72
MPPED2	7947274	chr11	2.72
NA	8084215	chr3	2.71
NA	7894660	---	2.71
NA	7893617	---	2.69
WASF1	8128818	chr6	2.69
MTRF1	8146649	chr8	2.68
POSTN	7971077	chr13	2.68
MANEA	8121144	chr6	2.68
LOC392617	8131096	chr7	2.67
OLFM2	8033818	chr19	2.66
SDC2	8147461	chr8	2.66
PNPLA3	8073633	chr22	2.65
NA	7923440	chr1	2.65
PAQR9	8091255	chr3	2.65
LOC441154	8155525	chr9	2.62
NA	7971640	chr13	2.61
GPR126	8122365	chr6	2.60
LOC391648	8100095	chr4	2.59
NTS	7957458	chr12	2.59
HPGD	8103769	chr4	2.58
SSX2IP	7917255	chr1	2.58
SLC35F3	7910618	chr1	2.56
NA	8132986	chr7	2.56
REEP1	8053551	chr2	2.55
NA	7894793	---	2.55
GLCCI1	8131496	chr7	2.55
NPAL1	8094938	chr4	2.55
NA	8145778	chr8	2.54
NA	7895454	---	2.54
TMEM91	8029056	chr19	2.52
NA	7892609	---	2.52
NA	7893864	---	2.52
EYA2	8063187	chr20	2.52
NA	7896124	---	2.51
RALGPS2	7907657	chr1	2.50
NA	7895565	---	2.50
TBX18	8127932	chr6	2.49
RBMV2EP	8177277	chrY	2.49
GCLC	8127158	chr6	2.49
PCK2	7973530	chr14	2.48
C1orf168	7916506	chr1	2.48
NA	7894081	---	2.48
SLC27A6	8107798	chr5	2.47
NA	7893719	---	2.46
RP1-303F19	8127391	chr6	2.46
EPHA8	7898773	chr1	2.45
C6orf60	8129231	chr6	2.45
MAP3K13	8084589	chr3	2.44
ARFGEF1	8151149	chr8	2.43

NFIA	7901788	chr1	0.26
NA	7893168	---	0.26
TLE1	8161919	chr9	0.26
IL17RD	8088264	chr3	0.26
NA	7896392	---	0.26
CYFIP2	8109528	chr5	0.26
NA	7893056	---	0.26
PCYT1B	8171848	chrX	0.27
CNIH2	7941587	chr11	0.27
GLCE	7984517	chr15	0.27
DPYSL5	8040725	chr2	0.27
TMEM55A	8151756	chr8	0.27
ZDHHC2	8144758	chr8	0.27
KIF1A	8060134	chr2	0.27
GATM	7988414	chr15	0.27
DOCK4	8142345	chr7	0.27
SORL1	7944667	chr11	0.27
RASSF2	8064790	chr20	0.27
TSC22D3	8174361	chrX	0.27
RNF144	8040090	chr2	0.27
TCF4	8023415	chr18	0.28
HLA-DPB1	8118594	chr6	0.28
FGL2	8140463	chr7	0.28
KCNJ6	8070279	chr21	0.28
PLTP	8066619	chr20	0.28
NA	7895301	---	0.28
GPM6B	8171359	chrX	0.28
NA	7894895	---	0.28
AKAP12	8122807	chr6	0.28
HLA-DRB1	8178811	chr6_cox_1	0.28
KLHL5	8094625	chr4	0.29
LOC127602	7910047	chr1	0.29
VGCNL1	7972601	chr13	0.29
NA	8074789	chr22	0.29
NA	8117170	chr6	0.29
NA	7895470	---	0.29
IDS	8175593	chrX	0.29
C18orf17	8020630	chr18	0.29
SPG20	7970999	chr13	0.29
TIAM1	8069880	chr21	0.29
NLGN4X	8171205	chrX	0.29
C10orf118	7936419	chr10	0.30
NA	7892553	---	0.30
NA	7895458	---	0.30
PTPRG	8080810	chr3	0.30
APBA2	7982187	chr15	0.30
TNRC9	8001394	chr16	0.30
SESN3	7951077	chr11	0.30
ARHGAP26	8108873	chr5	0.30
ZDHHC13	7938816	chr11	0.30
C2orf27	7968577	chr13	0.31

Cluster C

NA	8095339	chr4	2.43
SMARCD3	8143919	chr7	2.43
NA	8139788	chr7	2.42
PKNOX2	7944955	chr11	2.42
NA	7896215	---	2.42
GABRB3	7986822	chr15	2.42
CPLX4	8023554	chr18	2.42
CTSL2	8162652	chr9	2.41
OSTN	8084814	chr3	2.40
FIGN	8056323	chr2	2.40
NA	7893161	---	2.40
C7	8105084	chr5	2.40
CYorf15A	8176698	chrY	2.39
GAS2	7938989	chr11	2.38
LOC554201	8045857	chr2	2.38
MYLIP	8117020	chr6	2.38
NA	8129309	chr6	2.37
GNG5	8174509	chrX	2.37
RRS1	8146685	chr8	2.37
TSHZ3	8035896	chr19	2.37
LRRC6	8152962	chr8	2.36
MCM4	8146357	chr8	2.36
NA	7895151	---	2.35
NA	7895653	---	2.34
NA	7892799	---	2.34
NA	7893389	---	2.34
LOC392005	8155503	chr9	2.33
NA	7892578	---	2.33
DAND5	8026133	chr19	2.32
NA	7927704	chr10	2.32
NA	7893318	---	2.32
NA	7974687	chr14	2.31
C8orf34	8146839	chr8	2.31
NA	8139778	chr7	2.31
NA	7894785	---	2.31
NA	8022761	chr18	2.31
NA	7895901	---	2.30
NA	7895800	---	2.30
NA	7908861	chr1	2.29
LOC93349	8048926	chr2	2.29
NA	7893995	---	2.29
NA	7896027	---	2.29
ISOC1	8107814	chr5	2.28
NA	7919560	chr1	2.28
NA	7919556	chr1	2.27
NA	7893417	---	2.27
ARHGAP9	7964436	chr12	2.27
NA	8074192	chr22	2.26
NA	7895049	---	2.26
PYY	8015890	chr17	2.26
HOXD3	8046560	chr2	2.26

C18orf4	8023727	chr18	0.31
EGFR	8132860	chr7	0.31
C7orf41	8132055	chr7	0.31
MMP16	8151686	chr8	0.31
ZHX2	8148149	chr8	0.31
NA	7893527	---	0.31
MGAT5	8045349	chr2	0.31
DKK3	7946661	chr11	0.31
ASTN1	7922525	chr1	0.31
CD47	8089299	chr3	0.31
NA	7896262	---	0.31
CLIPR-59	8036252	chr19	0.31
NA	7895321	---	0.32
MAP1A	7983228	chr15	0.32
P2RY5	7971565	chr13	0.32
NA	7894508	---	0.32
RCBTB2	7971573	chr13	0.32
CACNA1D	8080511	chr3	0.32
FCGR3B	7921873	chr1	0.32
PTN	8143144	chr7	0.32
ANTXR1	8042439	chr2	0.32
FBLN1	8073775	chr22	0.32
SYT14	7909494	chr1	0.32
C5orf4	8115397	chr5	0.32
NA	7896630	---	0.33
DUSP4	8150076	chr8	0.33
STOX2	8098549	chr4	0.33
TSPAN13	8131600	chr7	0.33
NA	7893576	---	0.33
LBH	8041206	chr2	0.33
NA	7892596	---	0.33
PRKCA	8009301	chr17	0.33
NA	7896291	---	0.33
CMIP	7997427	chr16	0.33
NDRG4	7996219	chr16	0.33
SLC7A3	8173414	chrX	0.33
ZFP36L1	7979813	chr14	0.33
SLAIN1	7969533	chr13	0.33
FCGR3A	7921868	chr1	0.33
NA	7892508	---	0.33
RP11-301117	7971311	chr13	0.33
NA	7896203	---	0.33
NA	7893484	---	0.33
ARG2	7975268	chr14	0.33
RPS6KA6	8173825	chrX	0.34
NA	7979131	chr14	0.34
NA	7892810	---	0.34
TSPAN7	8166784	chrX	0.34
SERPING1	7940028	chr11	0.34
CYLN2	8133459	chr7	0.34
FRMPD3	8169235	chrX	0.34

Cluster C

NA	7894959	---	2.25
NA	8046822	chr2	2.25
TGFB1	8037005	chr19	2.25
FLJ34931	8051238	chr2	2.24
PBX1	7906954	chr1	2.24
ACSL3	8048733	chr2	2.23
COL27A1	8157383	chr9	2.23
NA	8081951	chr3	2.23
CLC	8036755	chr19	2.23
NA	7894828	---	2.22
AIPL1	8011912	chr17	2.22
CDC20	7900699	chr1	2.22
EEF2K	7993946	chr16	2.22
NA	8045319	chr2	2.21
NA	8055234	chr2	2.21
NA	7892790	---	2.21
PRSS12	8102468	chr4	2.21
FOXQ1	8116579	chr6	2.21
XAGE1	8167701	chrX	2.21
NA	8180269	---	2.19
ALS2CR2	8047443	chr2	2.18
CRY1	7966052	chr12	2.17
COL4A6	8174389	chrX	2.17
NA	7893175	---	2.17
NA	7893899	---	2.17
POP1	8147548	chr8	2.16
NSBP1	8173812	chrX	2.16
NA	7896604	---	2.16
EIF4EBP1	8145889	chr8	2.16
PRICKLE2	8088550	chr3	2.16
NA	7892593	---	2.16
NA	7894332	---	2.16
ARHGDIG	7991809	chr16	2.16
NA	7896489	---	2.15
NA	8040483	chr2	2.15
NA	7896079	---	2.15
NA	8030731	chr19	2.15
NA	7894743	---	2.15
FKBP5	8125919	chr6	2.15
NA	7893887	---	2.14
SLCO1B1	7954356	chr12	2.13
NA	8090660	chr3	2.13
SMYD3	7925589	chr1	2.13
NA	7896257	---	2.12
NA	7893959	---	2.12
LOC652388	7993371	chr16	2.11
LOC653190	7999591	chr16	2.11
NPAS1	8029870	chr19	2.11
HIST1H4L	8124534	chr6	2.10
FAM54A	8129763	chr6	2.10
NA	7896255	---	2.09

LAPTM5	7914270	chr1	0.34
SIPA1L1	7975459	chr14	0.34
PHACTR1	8116932	chr6	0.34
FHL1	8170119	chrX	0.35
PCNXL2	7925089	chr1	0.35
IL13RA1	8169580	chrX	0.35
NA	7893267	---	0.35
DPYSL4	7931439	chr10	0.35
C1orf114	7922152	chr1	0.35
LOC727852	8099817	chr4	0.35
SFMBT2	7931951	chr10	0.35
ME3	7950864	chr11	0.35
CTSS	7919800	chr1	0.35
ARL4C	8059854	chr2	0.36
MMP14	7973336	chr14	0.36
C1orf67	7910030	chr1	0.36
BTN3A2	8117435	chr6	0.36
GPR161	7922108	chr1	0.36
NFASC	7909027	chr1	0.36
PXDN	8050007	chr2	0.36
TMEM35	8168790	chrX	0.36
NAV1	7908694	chr1	0.36
KLF3	8094599	chr4	0.36
ST7	8135638	chr7	0.36
NA	7895750	---	0.37
TPCN1	7958960	chr12	0.37
C20orf23	8065089	chr20	0.37
LCP1	7971461	chr13	0.37
KIAA1244	8122279	chr6	0.37
KCNQ2	8067626	chr20	0.37
PEA15	7906564	chr1	0.37
NA	7892727	---	0.37
TNFRSF21	8126839	chr6	0.37
SEC24D	8102482	chr4	0.37
TRPC1	8083166	chr3	0.37
B4GALNT1	7964484	chr12	0.37
ELK3	7957665	chr12	0.37
NA	8111201	chr5	0.38
NA	7896295	---	0.38
DPYSL2	8145470	chr8	0.38
WDR17	8098379	chr4	0.38
CYP2C8	7935169	chr10	0.38
NA	7894210	---	0.38
FJX1	7939365	chr11	0.38
FKBP14	8138834	chr7	0.38
CTSO	8103389	chr4	0.38
NA	8173522	chrX	0.38
NA	7892980	---	0.38
NA	7894628	---	0.38
NA	7892740	---	0.38
AMOT	8174576	chrX	0.38

Cluster C

NA	8152900	chr8	2.09
FZD5	8058498	chr2	2.09
NA	8154447	chr9	2.09
NA	7894686	---	2.09
NA	7895102	---	2.08
LRRC16	8117243	chr6	2.08
C10orf96	7930750	chr10	2.08
NA	7999404	chr16	2.07
NA	8097459	chr4	2.06
POTE15	8022428	chr18	2.06
KIAA0101	7989647	chr15	2.06
NA	7893350	---	2.06
NA	7977801	chr14	2.05
C8orf32	8148198	chr8	2.05
NA	7896451	---	2.05
STAU2	8151384	chr8	2.04
HYPE	7958410	chr12	2.04
NA	7892659	---	2.04
TATDN1	8152759	chr8	2.04
WDSOF1	8147785	chr8	2.04
HIST1H3J	8124537	chr6	2.03
BMPER	8132250	chr7	2.03
RSNL2	8041179	chr2	2.03
NA	7892691	---	2.03
NA	7895711	---	2.03
NA	7896401	---	2.02
NA	7895839	---	2.02
NA	7893548	---	2.02
NA	7892562	---	2.01
ETFA	7990566	chr15	2.01
RIMBP2	7967660	chr12	2.01
NA	7894317	---	2.01
NA	8055263	chr2	2.01
MAP7	8129783	chr6	2.00
NA	7895838	---	2.00
ZNRD1	8179055	chr6_qbl_h	2.00
NA	8013987	chr17	2.00
NA	7895108	---	2.00
NA	7895753	---	2.00
NA	8059953	chr2	1.99
NA	7894735	---	1.99
NA	7893141	---	1.99
NA	7893136	---	1.98
STS	8165866	chrX	1.98
DYRK2	7956930	chr12	1.97
NXT2	8169352	chrX	1.97
PHYHD1	8158431	chr9	1.97
NA	7944970	chr11	1.97
NA	7975813	chr14	1.97
NA	7893877	---	1.97
EGLN3	7978544	chr14	1.97

KIAA1826	7951422	chr11	0.39
CDH2	8022674	chr18	0.39
PTPRN2	8144121	chr7	0.39
AOAH	8139033	chr7	0.39
NA	7895612	---	0.39
NA	7959482	chr12	0.39
SLC2A3	7960865	chr12	0.39
HSPA12A	7936516	chr10	0.39
ZNF608	8113761	chr5	0.39
PLEKHA6	7923635	chr1	0.39
NA	7919749	chr1	0.39
NA	7894807	---	0.39
SC5DL	7944656	chr11	0.39
LOC648124	8089011	chr3	0.39
STON2	7980537	chr14	0.39
GCNT2	8116835	chr6	0.39
ZNF487	7927169	chr10	0.39
NA	7895611	---	0.39
CACNG4	8009334	chr17	0.39
FLJ34470	7957673	chr12	0.39
LGALS3BP	8018975	chr17	0.39
SPRED1	7982564	chr15	0.40
NA	7894760	---	0.40
TUSC3	8144726	chr8	0.40
NMT2	7932227	chr10	0.40
NA	7894818	---	0.40
PRRT2	7994647	chr16	0.40
NA	7894285	---	0.40
RAB39B	8176230	chrX	0.40
NELL2	7962455	chr12	0.40
ZNF75	8175319	chrX	0.40
MR1	7907893	chr1	0.41
NA	7893296	---	0.41
NA	7893945	---	0.41
MAN1C1	7899029	chr1	0.41
ELOVL6	8102342	chr4	0.41
GTDC1	8055606	chr2	0.41
CHML	7925500	chr1	0.41
LIPA	7934920	chr10	0.41
ANTXR2	8101260	chr4	0.41
CHES1	7980680	chr14	0.41
NA	7895607	---	0.41
CPNE2	7995976	chr16	0.41
NA	7896035	---	0.41
GPR162	7953442	chr12	0.41
SLC22A17	7977965	chr14	0.41
MGC16703	8074695	chr22	0.41
PTGDS	8159521	chr9	0.41
LRP1	7956301	chr12	0.41
LRIG1	8088642	chr3	0.41
MS4A6A	7948455	chr11	0.41

Cluster C

NA	7895181	---	1.96
NA	7894525	---	1.96
NA	8057561	chr2	1.96
FAM58A	8175811	chrX	1.95
PPFIA2	7965166	chr12	1.95
NA	8058388	chr2	1.95
NA	7893275	---	1.95
NA	8150976	chr8	1.95
NA	8151207	chr8	1.95
NA	8176947	chrY	1.95
NA	8177387	chrY	1.95
NA	7899502	chr1	1.95
NA	7892615	---	1.95
OR2W3	7911218	chr1	1.95
NA	7896260	---	1.94
RP1	8146468	chr8	1.94
MGC39584	8104131	chr4_rand	1.94
NA	7892892	---	1.94
NA	8058256	chr2	1.94
NA	7894657	---	1.94
BMF	7987454	chr15	1.94
EDG1	7903393	chr1	1.94
SEMA3D	8140686	chr7	1.93
DTX2	8133736	chr7	1.93
NA	8154213	chr9	1.93
NA	7971864	chr13	1.93
NA	7893440	---	1.93
NA	8151508	chr8	1.93
MRPL15	8146448	chr8	1.93
NA	7895131	---	1.92
NA	7893596	---	1.92
NA	7893806	---	1.92
NA	7894566	---	1.92
NA	7895706	---	1.92
SRG	7912343	chr1	1.92
IFT122	8082523	chr3	1.91
SSX2	8172399	chrX	1.91
NA	7970840	chr13	1.91
NA	8044743	chr2	1.91
PRO1073	7949410	chr11	1.91
NA	7948502	chr11	1.91
NUDCD1	8152340	chr8	1.91
NA	7896390	---	1.91
BRMS1L	7973948	chr14	1.91
C13orf25	7969576	chr13	1.91
SHC2	8032037	chr19	1.91
NA	7892638	---	1.91
FBXO43	8152031	chr8	1.90
NA	7895888	---	1.90
HRSP12	8151942	chr8	1.90
NA	7896329	---	1.90

NA	8019649	chr17_rand	0.41
NA	8014664	chr17	0.41
HRASLS	8084838	chr3	0.41
NA	7896718	---	0.42
LPIN1	8040340	chr2	0.42
NA	7893212	---	0.42
LPXN	7948332	chr11	0.42
FAM114A1	8094609	chr4	0.42
TMEM130	8141228	chr7	0.42
APOC1	8029536	chr19	0.42
PDE1B	7955943	chr12	0.42
ITGB8	8131666	chr7	0.42
DTX1	7958931	chr12	0.42
HECW2	8057898	chr2	0.42
NA	7895905	---	0.42
PDE4D	8112220	chr5	0.42
ARHGAP1	7947681	chr11	0.42
FTHL2	7910385	chr1	0.42
SERPINB6	8123621	chr6	0.42
DLG4	8012054	chr17	0.42
C9orf58	8158771	chr9	0.42
LRRC49	7984569	chr15	0.42
NA	7896487	---	0.42
PLEKHA2	8145977	chr8	0.42
DOK4	8001564	chr16	0.42
MAP3K12	7963670	chr12	0.42
NA	7893014	---	0.43
LDLRAD3	7939376	chr11	0.43
CPEB4	8110055	chr5	0.43
TMEM63C	7975932	chr14	0.43
CDC42EP3	8051573	chr2	0.43
ZMAT1	8174119	chrX	0.43
NCK2	8044133	chr2	0.43
NA	7892978	---	0.43
NA	7895453	---	0.43
SERPINB1	8123598	chr6	0.43
C1orf21	7908161	chr1	0.43
NCF2	7922773	chr1	0.43
NA	8166607	chrX	0.43
TMEM63A	7924636	chr1	0.43
ARNTL	7938563	chr11	0.43
C1QB	7898805	chr1	0.43
LOC727913	8170390	chrX	0.44
MYO1E	7989277	chr15	0.44
EFNA3	7905918	chr1	0.44
NA	7893771	---	0.44
NA	7892632	---	0.44
FAM82A	8041519	chr2	0.44
PCK2	7965652	chr12	0.44
GNB4	8092251	chr3	0.44
CRMP1	8099172	chr4	0.44

Cluster C

DKFZp667G	8081171	chr3	1.90
NA	8139780	chr7	1.90
NA	7895479	---	1.90
NA	7896319	---	1.90
NA	8176648	chrY	1.90
EBNA1BP2	7915485	chr1	1.90
NA	8180308	---	1.90
NA	7895527	---	1.89
NA	7895810	---	1.89
NA	8147992	chr8	1.89
SMPD2	8121418	chr6	1.89
NA	8151211	chr8	1.89
PBK	8149955	chr8	1.89
IRS1	8059470	chr2	1.89
NA	7896590	---	1.89
NA	7894749	---	1.88
DRD5	8053728	chr2	1.88
NA	8148309	chr8	1.88
CEACAM21	8029076	chr19	1.88
B3GALTL	7968370	chr13	1.88
NA	7894409	---	1.88
NA	7892805	---	1.87
NA	7892959	---	1.87
NA	7895859	---	1.87
CDC40	8121461	chr6	1.87
NA	7979959	chr14	1.87
NA	7962916	chr12	1.87
NA	7996943	chr16	1.87
DPY19L1	8138977	chr7	1.87
NA	7895707	---	1.86
NA	8045153	chr2	1.86
ZNF217	8067113	chr20	1.86
ZHX1	8152656	chr8	1.86
NA	7958842	chr12	1.86
NA	7895664	---	1.86
FOXP4	8119444	chr6	1.86
HIST1H2BD	8117382	chr6	1.86
NA	7894855	---	1.85
NA	7894248	---	1.85
LYPLA1	8150830	chr8	1.85
GADD45A	7902227	chr1	1.85
NA	8139794	chr7	1.85
NA	8047557	chr2	1.85
BOP1	8153678	chr8	1.85
NA	8064029	chr20	1.85
NA	7893953	---	1.85
TGFBR1	8156826	chr9	1.85
NA	8152131	chr8	1.84
NA	7999999	chr16	1.84
MGC26647	8140852	chr7	1.84
NA	7946695	chr11	1.84

ABLIM3	8109093	chr5	0.44
WIPF1	8056860	chr2	0.44
MAGED4	8167673	chrX	0.44
CSMD2	7914667	chr1	0.44
RUFY2	7933999	chr10	0.44
SLC41A1	7923824	chr1	0.44
NA	7894352	---	0.44
TRIM2	8097841	chr4	0.45
ICA1L	8058350	chr2	0.45
CXCL16	8011713	chr17	0.45
NA	7896166	---	0.45
FLJ37357	8043043	chr2	0.45
MCF2L	7970194	chr13	0.45
NFIX	8026139	chr19	0.45
ELF1	7971197	chr13	0.45
LOC390940	8029306	chr19	0.45
ITPKB	7924760	chr1	0.45
NAG6	8135969	chr7	0.45
KIAA0773	8143564	chr7	0.46
USP46	8100328	chr4	0.46
NA	7895099	---	0.46
RNASET2	8130739	chr6	0.46
CASP6	8102311	chr4	0.46
NA	7896058	---	0.46
SDC3	7914282	chr1	0.46
NA	7893156	---	0.46
OAT	7936871	chr10	0.46
SLC24A6	7966600	chr12	0.46
CBR1	8068401	chr21	0.46
NA	7894341	---	0.46
SLC4A7	8085914	chr3	0.46
FTHL12	8170360	chrX	0.46
C3orf15	8081903	chr3	0.46
ABHD6	8080762	chr3	0.46
MAML3	8102862	chr4	0.46
TEAD2	8038347	chr19	0.46
ARNT2	7985285	chr15	0.46
NA	7892626	---	0.46
PTPLB	8090091	chr3	0.46
SLC26A10	7956551	chr12	0.46
NA	7984620	chr15	0.47
NA	7895240	---	0.47
NA	7895950	---	0.47
ARMCX2	8174092	chrX	0.47
HK1	7928019	chr10	0.47
NA	7919747	chr1	0.47
ASAH1	8149534	chr8	0.47
NA	7895695	---	0.47
LRRC4C	7947553	chr11	0.47
ALDH1L2	7965979	chr12	0.47
SMPD3	8002249	chr16	0.47

Cluster C

TRAK2	8058221	chr2	1.84
NA	7895237	---	1.84
NANOS1	7930872	chr10	1.84
NA	7895689	---	1.84
NA	8133010	chr7	1.84
NA	7894072	---	1.84
PMCHL1	8104627	chr5	1.83
NA	7914992	chr1	1.83
LYPD1	8055314	chr2	1.83
NA	8108433	chr5	1.83
NA	7893757	---	1.83
NA	7894629	---	1.83
ASB9	8171392	chrX	1.83
NA	7895585	---	1.83
BMP2	8060850	chr20	1.83
NA	7950282	chr11	1.83
NA	7934777	chr10	1.83
BCL11B	7981242	chr14	1.83
STAP2	8032789	chr19	1.82
NA	7894705	---	1.82
NA	8116589	chr6	1.82
NA	7982593	chr15	1.82
NA	7893844	---	1.82
NA	7947421	chr11	1.82
NA	8084605	chr3	1.82
NA	7893699	---	1.82
GRK1	7970325	chr13	1.82
NA	8163731	chr9	1.82
GPR61	7903694	chr1	1.81
NA	8123714	chr6	1.81
NA	7895861	---	1.81
NA	7893706	---	1.81
RNY5	8028117	chr19	1.81
LOC441233	8139796	chr7	1.81
NA	8139784	chr7	1.81
OR1Q1	8157679	chr9	1.81
NA	8101063	chr4	1.81
OR6C70	7963878	chr12	1.81
NA	8099717	chr4	1.81
NA	7895278	---	1.81
NA	7917180	chr1	1.81
RAD54B	8151824	chr8	1.81
C6orf48	8178090	chr6_cox_	1.80
NA	7894386	---	1.80
HSPE1	8047223	chr2	1.80
NA	8092763	chr3	1.80
RHCE	7913835	chr1	1.80
LASS4	8025382	chr19	1.80
NA	7896524	---	1.80
NA	7894018	---	1.80
NA	7894773	---	1.80

AGPAT5	8144378	chr8	0.47
MANBA	8102006	chr4	0.47
NA	7892840	---	0.47
NA	7895081	---	0.48
NA	7894358	---	0.48
NA	7895698	---	0.48
ACSL4	8174474	chrX	0.48
ABHD4	7973306	chr14	0.48
NPAL3	7898939	chr1	0.48
XPR1	7907861	chr1	0.48
C10orf83	7935510	chr10	0.48
FYB	8111739	chr5	0.48
TMTC4	7972579	chr13	0.48
NA	7895006	---	0.48
ARHGEF9	8173217	chrX	0.48
C5	8163839	chr9	0.48
NA	7894729	---	0.48
NA	7895129	---	0.48
NA	7896270	---	0.48
TLR6	8099841	chr4	0.48
RGAG4	8173503	chrX	0.48
SLC9A7	8172280	chrX	0.48
FGF2	8097256	chr4	0.48
PURG	8150143	chr8	0.48
TUBG2	8007312	chr17	0.48
FAM27E1	8155514	chr9	0.49
NA	7894679	---	0.49
GDAP1L1	8062796	chr20	0.49
NA	7896688	---	0.49
SERPINB8	8021653	chr18	0.49
PDK2	8008263	chr17	0.49
NA	8161446	chr9	0.49
NA	8161499	chr9	0.49
PRAF2	8172531	chrX	0.49
CYP2U1	8096744	chr4	0.49
FRMD4A	7932132	chr10	0.49
NA	7893726	---	0.49
KCNMB4	7957126	chr12	0.49
NRIP1	8069553	chr21	0.49
UBE2L6	7948274	chr11	0.49
GALNTL1	7975324	chr14	0.49
LHFPL3	8135262	chr7	0.49
PRPS2	8166049	chrX	0.49
NLGN3	8168264	chrX	0.49
CDRT1	8012951	chr17	0.49
ZBTB41	7923119	chr1	0.49
NELF	8165552	chr9	0.49
NA	7896518	---	0.50
PLXDC2	7926545	chr10	0.50
APBB1	7946149	chr11	0.50
NA	7893590	---	0.50

Cluster C

NA	8121085	chr6	1.79
TESC	7966749	chr12	1.79
LOC387763	7939492	chr11	1.79
NA	7895726	---	1.79
NA	8150584	chr8	1.79
NA	7895688	---	1.79
C8orf42	8148973	chr8	1.79
NA	7955987	chr12	1.79
LSM1	8150266	chr8	1.79
LOC255177	7909125	chr1	1.79
LOC646643	8039520	chr19	1.78
THRSP	7942793	chr11	1.78
HNF4G	8146986	chr8	1.78
CBLB	8089261	chr3	1.78
NA	7895897	---	1.78
WDR62	8028119	chr19	1.78
FAM38A	8003357	chr16	1.78
NA	8150210	chr8	1.78
NA	8124604	chr6	1.78
NA	7893373	---	1.78
NA	8125445	chr6	1.78
NA	7892885	---	1.77
SORCS2	8093997	chr4	1.77
NA	8094391	chr4	1.77
NA	7893553	---	1.77
NA	8117118	chr6	1.77
LPA	8130608	chr6	1.77
NA	7895460	---	1.77
KCNJ8	7961702	chr12	1.77
NA	7895109	---	1.77
NA	8034332	chr19	1.77
LTB4DH	8163328	chr9	1.77
NA	7964627	chr12	1.77
FNTA	8146268	chr8	1.77
TMEM83	7985752	chr15	1.77
NA	7893840	---	1.77
AKAP5	7975066	chr14	1.77
NA	8047459	chr2	1.76
C12orf48	7958031	chr12	1.76
LOC400856	8055294	chr2	1.76
NA	8147742	chr8	1.76
NA	7894874	---	1.76
NA	7894932	---	1.76
NA	8083592	chr3	1.76
SEMA6B	8032839	chr19	1.76
MRE11A	7951046	chr11	1.76
BRDG1	8095343	chr4	1.76
NA	8054794	chr2	1.76
NA	7896473	---	1.75
NA	7893962	---	1.75
NA	8108629	chr5	1.75

ABHD2	7985809	chr15	0.50
EMR2	8034873	chr19	0.50
CYP4V2	8098637	chr4	0.50
HLA-DMA	8178884	chr6_cox_1	0.50
PITPNM2	7967358	chr12	0.50
GOLPH2	8162117	chr9	0.50
PTPRE	7931353	chr10	0.50
NA	7893556	---	0.50
SH3PXD2B	8115814	chr5	0.50
SC4MOL	8098195	chr4	0.50
TSPYL2	8167763	chrX	0.51
CHMP2B	8081055	chr3	0.51
NA	8079613	chr3	0.51
NA	7893884	---	0.51
SHF	7988400	chr15	0.51
CREG1	7922051	chr1	0.51
LOC400590	8006237	chr17	0.51
BCAR3	7917754	chr1	0.51
TMEM98	8006415	chr17	0.51
RUFY3	8095545	chr4	0.51
NA	7895743	---	0.51
HLA-DMB	8125530	chr6	0.51
PHF21A	7947624	chr11	0.51
NA	7893594	---	0.51
QSCN6	7907830	chr1	0.51
NA	7896678	---	0.52
ZSWIM5	7915682	chr1	0.52
MARCH8	7933228	chr10	0.52
TIFA	8102362	chr4	0.52
ZNF512	8040985	chr2	0.52
CTGLF10P	7927353	chr10	0.52
FLJ27365	8073816	chr22	0.52
SLC3A2	7940717	chr11	0.52
CD81	7937802	chr11	0.52
C7orf46	8131881	chr7	0.52
NRXN2	7949080	chr11	0.52
NA	7894565	---	0.52
NA	8095214	chr4	0.52
NA	7895232	---	0.52
NA	7896567	---	0.52
ASCC1	7934228	chr10	0.52
NA	8050350	chr2	0.52
NA	7895178	---	0.52
DCUN1D4	8095009	chr4	0.52
NA	8122198	chr6	0.52
CCT6B	8014172	chr17	0.52
PNMA2	8149877	chr8	0.53
HIVEP3	7915392	chr1	0.53
NA	8008868	chr17	0.53
NA	7894299	---	0.53
NA	7894680	---	0.53

Cluster C

NA	7893312	---	1.75
NA	8003066	chr16	1.75
LOXL4	7935553	chr10	1.75
NA	8168016	chrX	1.75
NA	8115675	chr5	1.75
NA	7892863	---	1.75
NA	8049237	chr2	1.75
MAP3K4	8123274	chr6	1.75
NA	7895202	---	1.75
HIST1H2BJ	8124484	chr6	1.75
NA	8157229	chr9	1.74
NA	7977450	chr14	1.74
NA	7921119	chr1	1.74
NA	8088634	chr3	1.74
IL31	7967226	chr12	1.74
NA	7894410	---	1.74
PTPRF	7900792	chr1	1.74
LOC649137	8031629	chr19	1.74
NA	7893595	---	1.74
NA	7895190	---	1.74
MAGEC2	8175562	chrX	1.74
NA	8031646	chr19	1.74
NA	8100576	chr4	1.74
DEADC1	8129963	chr6	1.74
ELOVL1	7915504	chr1	1.74
NA	7953761	chr12	1.74
IDH1	8058552	chr2	1.74
PRDX1	7915733	chr1	1.74
ADCY9	7999079	chr16	1.74
C14orf147	7978553	chr14	1.73
OTUD6B	8147262	chr8	1.73
NA	7896317	---	1.73
NA	8180307	---	1.73
EIF3S3	8152465	chr8	1.73
NA	8099504	chr4	1.73
NA	8025982	chr19	1.73
NA	7893874	---	1.73
NA	7896424	---	1.73
NA	7893003	---	1.73
NDUFB3	8047372	chr2	1.73
NA	7983775	chr15	1.73
NA	7894676	---	1.73
CALCB	7938646	chr11	1.73
NA	7894583	---	1.73
NA	8045559	chr2	1.73
MRPS28	8151471	chr8	1.73
NA	7894335	---	1.73
NA	7986501	chr15	1.73
NA	8104068	chr4	1.73
NA	7951205	chr11	1.72
SLC25A32	8152255	chr8	1.72

NA	7896224	---	0.53
NA	8180351	---	0.53
CTDSPL	8078650	chr3	0.53
PLXNB2	8076998	chr22	0.53
NBPF1	7912808	chr1	0.53
NA	7893076	---	0.53
LOC440973	8089459	chr3	0.53
CTSD	7945666	chr11	0.53
CAMSAP1L1	7908614	chr1	0.53
NA	7894111	---	0.53
CENTG1	7964499	chr12	0.53
NA	7893511	---	0.53
NA	7893686	---	0.53
SLC2A14	7960850	chr12	0.53
FTH1	7948656	chr11	0.53
PPFIA4	7908879	chr1	0.53
NA	7894391	---	0.53
B4GALT4	8089743	chr3	0.53
TMEM16K	8086467	chr3	0.53
NA	7892540	---	0.53
NA	7892960	---	0.53
APC2	8024306	chr19	0.53
NA	7894180	---	0.53
BRPF1	8077612	chr3	0.53
SMARCA5	8097600	chr4	0.54
NA	7895089	---	0.54
ARL15	8112033	chr5	0.54
CNTNAP1	8007323	chr17	0.54
HIVEP2	8129953	chr6	0.54
GRIA3	8169717	chrX	0.54
NA	7893523	---	0.54
TRO	8167835	chrX	0.54
NA	7896315	---	0.54
NA	7895812	---	0.54
TMEM9B	7946439	chr11	0.54
CAPN2	7909967	chr1	0.54
RAB33A	8169898	chrX	0.54
NA	7894058	---	0.54
ATP6V0E2	8137208	chr7	0.54
FLJ25715	8023910	chr18	0.54
RP11-56A21.1	7927560	chr10	0.54
NDST1	8109283	chr5	0.54
NA	7947423	chr11	0.54
PCYOX1L	8109149	chr5	0.54
NA	7893811	---	0.54
NA	7893704	---	0.54
B3GAT3	7948741	chr11	0.54
PTPN9	7990511	chr15	0.55
NA	7893535	---	0.55
NA	7893087	---	0.55
SLC36A4	7950990	chr11	0.55

Cluster C

NA	8119896	chr6	1.72
NA	8104392	chr5	1.72
ABCA7	8024120	chr19	1.72
KIAA1545	7960088	chr12	1.72
NA	8047463	chr2	1.72
NA	7894003	---	1.72
NA	8151888	chr8	1.72
METTL1	7964548	chr12	1.72
NA	7966225	chr12	1.72
SLC25A26	8080896	chr3	1.72
C8orf22	8146393	chr8	1.72
BXDC5	7902634	chr1	1.72
ABCC6	7999727	chr16	1.72
PAK1IP1	8116848	chr6	1.71
TTF2	7904314	chr1	1.71
NA	8013572	chr17	1.71
FLJ32742	8166585	chrX	1.71
NA	7972367	chr13	1.71
GLULD1	8127380	chr6	1.71
NA	8130011	chr6	1.71
NA	8037298	chr19	1.71
LILRP2	8031253	chr19	1.71
UGT2B17	8100734	chr4	1.71
NA	8096459	chr4	1.70
NA	7896174	---	1.70
ACVR1C	8055992	chr2	1.70
POLR2K	8147654	chr8	1.70
IL5	8114023	chr5	1.70
NA	7974912	chr14	1.70
COPS5	8151136	chr8	1.70
NA	7896304	---	1.70
NA	8090801	chr3	1.70
MAGEA4	8170531	chrX	1.70
NA	7919578	chr1	1.70
NA	8168555	chrX	1.70
NA	8099719	chr4	1.70
NA	7934097	chr10	1.70
C21orf90	8069135	chr21	1.70
C14orf129	7976571	chr14	1.69
RBMV2FP	8176789	chrY	1.69
NA	8041957	chr2	1.69
NA	7895394	---	1.69
NA	7892672	---	1.69
NA	7892646	---	1.69
NA	7956419	chr12	1.69
LOC729583	8117707	chr6	1.69
NA	8113703	chr5	1.69
NA	7936994	chr10	1.69
NA	7895493	---	1.69
NA	7892997	---	1.69
COX6C	8151993	chr8	1.69

CLCN3	8098291	chr4	0.55
PSAP	7934196	chr10	0.55
NA	7893422	---	0.55
DNAJC18	8114526	chr5	0.55
GDI1	8170891	chrX	0.55
SCN8A	7955502	chr12	0.55
AKAP10	8013431	chr17	0.55
AP4S1	7973813	chr14	0.55
MGC16385	8003553	chr16	0.56
NA	7894831	---	0.56
FAM21C	7927233	chr10	0.56
TTC23	7991485	chr15	0.56
FADS2	7940565	chr11	0.56
GAS2L3	7957850	chr12	0.56
NA	8180349	---	0.56
SGCB	8100318	chr4	0.56
ADD2	8052882	chr2	0.56
KIF13B	8150036	chr8	0.56
SQSTM1	8110569	chr5	0.56
C2orf38	8055697	chr2	0.56
NA	7892718	---	0.56
NA	7892794	---	0.56
DCTD	8103859	chr4	0.56
NA	7896071	---	0.56
ZNF431	8027292	chr19	0.56
ARHGEF10	8144281	chr8	0.56
P2RX4	7959267	chr12	0.56
CD180	8112428	chr5	0.56
NA	7898732	chr1	0.56
PIK3AP1	7935337	chr10	0.57
FUCA2	8129974	chr6	0.57
NA	7893537	---	0.57
HPS5	7946988	chr11	0.57
C1orf80	7917148	chr1	0.57
NA	7895801	---	0.57
LAMP2	8174779	chrX	0.57
NA	7894337	---	0.57
NA	8160258	chr9	0.57
TMEM25	7944275	chr11	0.57
AADAT	8103706	chr4	0.57
MAFB	8066266	chr20	0.57
NA	7894044	---	0.57
PKD2	8096314	chr4	0.57
EFHA1	7970546	chr13	0.57
ADAMTS4	7921821	chr1	0.57
NA	7919761	chr1	0.57
NA	8056566	chr2	0.57
UNC84B	8076137	chr22	0.57
NA	7893205	---	0.57
NA	7893807	---	0.57
NA	7892605	---	0.57

Cluster C

INHBB	8044927	chr2	1.68
TCF19	8118086	chr6	1.68
SLC29A4	8131326	chr7	1.68
NA	7892917	---	1.68
NA	7895438	---	1.68
SLCO1B3	7954330	chr12	1.68
TTN	8057056	chr2	1.68
SPR	8042696	chr2	1.68
NA	8180205	---	1.68
NA	7896041	---	1.68
NA	8141843	chr7	1.68
NA	7893248	---	1.68
NA	8042970	chr2	1.68
LOC390345	7965036	chr12	1.68
XDH	8051322	chr2	1.68
CASZ1	7912316	chr1	1.68
NA	7893019	---	1.68
NBN	8151711	chr8	1.68
FZD4	7950885	chr11	1.67
ATXN7	8080878	chr3	1.67
NA	7989617	chr15	1.67
NA	8074886	chr22	1.67
NA	7928328	chr10	1.67
NA	7893509	---	1.67
NA	8109303	chr5	1.67
NA	8116571	chr6	1.67
TRGV7	8139113	chr7	1.67
C8orf14	8144639	chr8	1.67
CCDC28A	8122327	chr6	1.67
NA	8008991	chr17	1.67
NA	8013784	chr17	1.67
NA	8152734	chr8	1.67
SLC22A16	8128850	chr6	1.67
NA	8138308	chr7	1.67
PRDM12	8158708	chr9	1.67
NA	7893053	---	1.67
NA	7895633	---	1.66
SART3	7966098	chr12	1.66
NA	7988258	chr15	1.66
NA	8154361	chr9	1.66
VPS13A	8155946	chr9	1.66
NA	8151432	chr8	1.66
TIAM2	8122933	chr6	1.66
NA	7893442	---	1.66
NA	8121943	chr6	1.66
MGC5457	7908966	chr1	1.66
NA	7895569	---	1.66
NA	8088636	chr3	1.66
NA	7896233	---	1.65
NA	7893025	---	1.65
NA	7917790	chr1	1.65

NA	7896274	---	0.57
NA	7893543	---	0.57
TMEM66	8150089	chr8	0.58
TCP11L1	7939184	chr11	0.58
NA	7892903	---	0.58
ACP2	7947815	chr11	0.58
NA	7895377	---	0.58
NA	7896019	---	0.58
CLOCK	8100428	chr4	0.58
IVNS1ABP	7922889	chr1	0.58
NA	7896433	---	0.58
ZNF594	8011823	chr17	0.58
KIAA1211	8095216	chr4	0.58
SNORD59B	7964246	chr12	0.58
NA	8138822	chr7	0.58
EXOC7	8018620	chr17	0.58
SPAG9	8016745	chr17	0.58
MIB1	8020423	chr18	0.58
CHKA	7949916	chr11	0.58
NA	7896578	---	0.58
LOC390418	7969574	chr13	0.58
C10orf61	7935251	chr10	0.58
LOC643976	8174193	chrX	0.58
TOR1AIP1	7907773	chr1	0.58
NA	7895913	---	0.58
CCDC111	8098556	chr4	0.58
ECOP	7904969	chr1	0.58
NBPF8	7904976	chr1	0.58
CORO1A	7994769	chr16	0.58
CHDH	8088142	chr3	0.58
NA	7930915	chr10	0.58
DTX4	7940160	chr11	0.59
ZNF160	8039034	chr19	0.59
SLC15A3	7948493	chr11	0.59
TBC1D1	8094574	chr4	0.59
RNF141	7946569	chr11	0.59
PLRG1	8103289	chr4	0.59
CTNNB1	8079021	chr3	0.59
CDC42EP4	8018107	chr17	0.59
NEK1	8103646	chr4	0.59
NA	7895858	---	0.59
NA	7896266	---	0.59
OBFC2B	7956220	chr12	0.59
NA	7894484	---	0.59
NA	7896298	---	0.59
LRP10	7973352	chr14	0.59
GRN	8007620	chr17	0.59
NA	7895200	---	0.59
NA	7893759	---	0.59
PLA2G4B	7983021	chr15	0.59
NA	7895193	---	0.59

Cluster C

NA	7906233	chr1	1.65
CFLAR	8047381	chr2	1.65
NA	7896068	---	1.65
C18orf16	8020717	chr18	1.65
NA	8081079	chr3	1.65
NA	7893917	---	1.65
NA	7893301	---	1.65
DEFB115	8061504	chr20	1.65
NPW	7992460	chr16	1.65
NA	7894945	---	1.65
NA	8097036	chr4	1.65
VCX-C	8165890	chrX	1.65
NA	8109572	chr5	1.65
OR4F17	7896740	chr1	1.65
NA	7894681	---	1.65
NA	7893398	---	1.65
NA	7894924	---	1.64
NA	8120059	chr6	1.64
NA	7895835	---	1.64
IL15	8097553	chr4	1.64
NA	7998965	chr16	1.64
NA	8058912	chr2	1.64
NA	7896130	---	1.64
NA	8148261	chr8	1.64
PNMA3	8170622	chrX	1.64
NA	7894567	---	1.64
NA	8067834	chr21	1.64
IDI2	7931748	chr10	1.64
IAPP	7954377	chr12	1.64
NA	8149281	chr8	1.64
KATNA1	8130102	chr6	1.64
NA	8113124	chr5	1.64
PSMB5	7977879	chr14	1.64
NA	8078527	chr3	1.63
NA	8105583	chr5	1.63
COX17	8089795	chr3	1.63
NA	8101810	chr4	1.63
NA	8054393	chr2	1.63
NA	7894174	---	1.63
NA	8180298	---	1.63
NA	8094163	chr4	1.63
NA	7941170	chr11	1.63
BDKRB1	7976567	chr14	1.63
SLCO6A1	8113385	chr5	1.63
NA	8175330	chrX	1.63
POLR1C	8119842	chr6	1.63
P2RX5	8011415	chr17	1.63
NA	7893664	---	1.63
NA	8000930	chr16	1.63
KIAA1688	8153876	chr8	1.63
KCNS2	8147566	chr8	1.63

NA	7895704	---	0.59
MGAT4B	8116316	chr5	0.59
NEDD1	7957715	chr12	0.59
IBRDC1	8121825	chr6	0.59
GAL3ST4	8141459	chr7	0.59
ILK	7938154	chr11	0.59
DTX3	7956539	chr12	0.59
C11orf49	7939723	chr11	0.60
C20orf121	8062844	chr20	0.60
PTTG1IP	8070819	chr21	0.60
NA	7894302	---	0.60
PDDC1	7945521	chr11	0.60
TDRKH	7920057	chr1	0.60
LILRB4	8031238	chr19	0.60
ZBTB8	7899797	chr1	0.60
PRKCBP1	8066786	chr20	0.60
TLR2	8097903	chr4	0.60
RIC8A	7937275	chr11	0.60
UXS1	8054395	chr2	0.60
NA	7894329	---	0.60
STK39	8056545	chr2	0.60
NCOA4	7927536	chr10	0.60
SCN1B	8027719	chr19	0.60
NA	7896614	---	0.60
FBXW11	8115765	chr5	0.60
MGC21675	8093456	chr4	0.60
LDB1	7935968	chr10	0.61
MPDZ	8160088	chr9	0.61
C14orf153	7977119	chr14	0.61
PTPN3	8163149	chr9	0.61
PPID	8103437	chr4	0.61
PCTP	8008598	chr17	0.61
GPR137B	7910680	chr1	0.61
NA	7894445	---	0.61
NA	8016261	chr17	0.61
C10orf58	7928695	chr10	0.61
CRSP9	8115476	chr5	0.61
ERBB2IP	8105681	chr5	0.61
GPR173	8167758	chrX	0.61
KIAA1191	8115895	chr5	0.61
NA	7893861	---	0.61
CD99L2	8175647	chrX	0.61
GNA12	8137865	chr7	0.61
TRAPPC2	8171352	chrX	0.61
NA	8007848	chr17	0.61
B4GALNT4	7937341	chr11	0.61
REC8L1	7973629	chr14	0.62
RNUXA	8107691	chr5	0.62
NA	7895979	---	0.62
LMBR1	8144089	chr7	0.62
LOC283970	8002322	chr16	0.62

Cluster C

NA	7894997	---	1.63
NA	7981523	chr14	1.63
C14orf2	7981481	chr14	1.63
SSX1	8167251	chrX	1.63
C8orf33	8148955	chr8	1.63
NA	8020419	chr18	1.63
JMY	8106516	chr5	1.62
NA	7892895	---	1.62
NA	8045497	chr2	1.62
NA	8124608	chr6	1.62
NOPE	7989785	chr15	1.62
PDCL	8163964	chr9	1.62
WDR65	7900639	chr1	1.62
NA	8080853	chr3	1.62
NA	8143268	chr7	1.62
NA	7894023	---	1.62
NA	7895675	---	1.62
NA	7993337	chr16	1.62
NA	7997502	chr16	1.62
HSF1	8148824	chr8	1.62
NA	8117286	chr6	1.62
PPYR1	7927280	chr10	1.62
NA	8068660	chr21	1.62
NA	8121683	chr6	1.62
CPSF1	8153727	chr8	1.62
NA	8111812	chr5	1.62
NA	7896572	---	1.62
NA	8041420	chr2	1.61
NA	7893616	---	1.61
NA	7892961	---	1.61
NA	8102785	chr4	1.61
TG	8148385	chr8	1.61
NA	8081820	chr3	1.61
NA	8130372	chr6	1.61
NA	7914665	chr1	1.61
NA	7948141	chr11	1.61
NA	7893879	---	1.61
OR51B6	7937996	chr11	1.61
SLC3A1	8041727	chr2	1.61
NA	8120247	chr6	1.61
PFDN6	8118661	chr6	1.61
POLE4	8042953	chr2	1.61
GNB5	7988859	chr15	1.61
GGA2	8000284	chr16	1.61
LOC399898	7940116	chr11	1.61
NA	8023061	chr18	1.61
NA	7893691	---	1.61
NA	8045167	chr2	1.60
NA	7894969	---	1.60
ZNF7	8148941	chr8	1.60
OR10A7	7955983	chr12	1.60

TMEM43	8077993	chr3	0.62
KCTD1	8022646	chr18	0.62
FAM107B	7932160	chr10	0.62
NA	8094739	chr4	0.62
ZNF565	8036291	chr19	0.62
NA	7892561	---	0.62
NA	8180400	---	0.62
SEMA4D	8162236	chr9	0.62
RWDD4A	8139198	chr7	0.62
TGOLN2	8053388	chr2	0.62
CSAD	7963590	chr12	0.62
NA	7894507	---	0.62
HSD17B12	7939465	chr11	0.62
PSCD4	8072798	chr22	0.62
TBC1D14	8093976	chr4	0.63
C7orf25	8139228	chr7	0.63
TMEM182	8044094	chr2	0.63
NA	8074958	chr22	0.63
NA	7895886	---	0.63
RTN4	8052204	chr2	0.63
NA	7896067	---	0.63
NA	7907349	chr1	0.63
UEVLD	7947027	chr11	0.63
LOC200383	8043071	chr2	0.63
SS18	8022625	chr18	0.63
TMEM34	8097704	chr4	0.63
DBN1	8116051	chr5	0.63
WDR51B	7965343	chr12	0.63
PFN2	8091446	chr3	0.63
MTMR4	8017019	chr17	0.63
NA	8180336	---	0.63
REV1	8054227	chr2	0.63
NA	7896664	---	0.63
NA	8003769	chr17	0.63
FTO	7995655	chr16	0.63
NA	7895641	---	0.63
SH3GLB2	8164521	chr9	0.63
CNNM2	7930194	chr10	0.63
EIF4EBP2	7928119	chr10	0.63
EIF5	7977058	chr14	0.63
ETFDH	8098084	chr4	0.63
SLC26A2	8109194	chr5	0.63
NA	7896481	---	0.63
CDC14B	8162610	chr9	0.63
NA	7896199	---	0.63
BRSK1	8031441	chr19	0.64
KIAA0194	8109201	chr5	0.64
EIF4G2	7946610	chr11	0.64
ERGIC1	8109999	chr5	0.64
NA	7894605	---	0.64
NA	8180237	---	0.64

Cluster C

BXDC1	8062211	chr20	1.60
OR6C76	7955997	chr12	1.60
NA	8151927	chr8	1.60
NA	7894040	---	1.60
NA	8166945	chrX	1.60
OR3A3	8003812	chr17	1.60
NA	7945728	chr11	1.60
NA	7976069	chr14	1.60
OTOP1	8099093	chr4	1.60
DNAJB2	8048523	chr2	1.60
NA	8082605	chr3	1.60
TFB1M	8130438	chr6	1.60
MRPL13	8152597	chr8	1.60
FLJ21767	8139270	chr7	1.60
GALP	8031622	chr19	1.60
NA	7948042	chr11	1.60
NA	8171195	chrX	1.60
NA	7898856	chr1	1.60
OR52K3P	7937940	chr11	1.60
OR4C12	7948103	chr11	1.59
NA	7892635	---	1.59
NA	7892807	---	1.59
ZC3H3	8153411	chr8	1.59
NA	7919151	chr1	1.59
NA	7919392	chr1	1.59
HIST1H3C	8117339	chr6	1.59
KIAA1751	7911659	chr1	1.59
B3GALNT2	7925229	chr1	1.59
NA	8103360	chr4	1.59
NA	8108566	chr5	1.59
RTBDN	8034555	chr19	1.59
NA	8146647	chr8	1.59
NA	7954465	chr12	1.59
NA	7894287	---	1.59
NA	7893707	---	1.59
LOC554226	8055297	chr2	1.59
NA	8144582	chr8	1.58
NAT8	8053025	chr2	1.58
NA	8065323	chr20	1.58
TTY7	8176435	chrY	1.58
MAMDC1	7978801	chr14	1.58
NA	7895542	---	1.58
FLJ41649	8126240	chr6	1.58
NA	8157677	chr9	1.58
ASNSD1	8046997	chr2	1.58
CNIH	7979250	chr14	1.58
NA	8133874	chr7	1.58
WDR12	8058373	chr2	1.58
APIP	7947490	chr11	1.58
NA	8174373	chrX	1.58
NA	8165858	chrX	1.58

TRIM52	8116534	chr5	0.64
GBAP	7920687	chr1	0.64
NA	7895777	---	0.64
NA	8180294	---	0.64
NA	7896670	---	0.64
NA	8088476	chr3	0.64
SH2D3C	8164252	chr9	0.64
NA	7916926	chr1	0.64
NA	7893231	---	0.64
ADD1	8093643	chr4	0.64
CREB3	8155096	chr9	0.64
NA	7894765	---	0.64
INTS3	7905631	chr1	0.64
PPP2R2A	8145440	chr8	0.64
LZIC	7912292	chr1	0.64
MPZL1	7907092	chr1	0.64
NA	8132909	chr7	0.64
PPP2R2D	7931405	chr10	0.64
NA	7895113	---	0.65
CSNK1A1	8115022	chr5	0.65
LOC728131	8101357	chr4	0.65
MSI2	8008682	chr17	0.65
TRIM46	7905951	chr1	0.65
LOC441711	7986739	chr15	0.65
LOC401805	7986601	chr15	0.65
TSPAN14	7928705	chr10	0.65
COPB1	7946703	chr11	0.65
DIP	8073890	chr22	0.65
PHKG2	7994928	chr16	0.65
NA	7895824	---	0.65
APOBEC3G	8073088	chr22	0.65
KCTD15	8027584	chr19	0.65
NA	7895015	---	0.65
NA	8098101	chr4	0.65
HCG9	8117809	chr6	0.65
NA	7894320	---	0.66
NA	7896324	---	0.66
VAT1	8015759	chr17	0.66
C1QTNF3	8111430	chr5	0.66
NA	7893139	---	0.66
RNF4	8093590	chr4	0.66
SPRED2	8052689	chr2	0.66
DGKZ	7968890	chr13	0.66
ALDH6A1	7980098	chr14	0.66
NCSTN	7906576	chr1	0.66
USP38	8097570	chr4	0.66
FUT11	7928395	chr10	0.66
LOC440456	8017675	chr17	0.66
NA	7892665	---	0.66
ZNF346	8110253	chr5	0.66
TRIM41	8110649	chr5	0.66

Cluster C

NA	8144949	chr8	1.58
IFIT1L	7929061	chr10	1.58
NA	8171881	chrX	1.58
NA	8156086	chr9	1.58
FLJ32790	7999550	chr16	1.58
NA	7948951	chr11	1.58
NA	8073332	chr22	1.58
VCIPI1	8151118	chr8	1.58
NA	7893062	---	1.58
JAM3	7945262	chr11	1.58
NA	8170230	chrX	1.58
NA	7942985	chr11	1.58
NA	7947184	chr11	1.58
BTG4	7951604	chr11	1.58
TYW3	7902345	chr1	1.58
NA	7946123	chr11	1.58
NA	7979127	chr14	1.58
NA	8104461	chr5	1.58
DHRS7C	8012591	chr17	1.57
C5orf17	8104643	chr5	1.57
TMEM14B	8116867	chr6	1.57
NA	8114209	chr5	1.57
PLA2G12B	7934271	chr10	1.57
NA	7894334	---	1.57
NA	8114812	chr5	1.57
NA	7895655	---	1.57
UBE2F	8049574	chr2	1.57
NA	7893221	---	1.57
C6orf21	8118235	chr6	1.57
NA	8146790	chr8	1.57
NA	7895425	---	1.57
C2orf19	8059965	chr2	1.57
NA	8150153	chr8	1.57
PPP2R5E	7979551	chr14	1.57
NA	7969567	chr13	1.57
NA	7918048	chr1	1.56
NA	7922458	chr1	1.56
NA	8005753	chr17	1.56
DUSP21	8166950	chrX	1.56
NA	7998929	chr16	1.56
COX7A2	8127629	chr6	1.56
OR8B4	7952402	chr11	1.56
WNT10A	8048452	chr2	1.56
NA	7896617	---	1.56
MUC15	7947156	chr11	1.56
XAGE5	8167742	chrX	1.56
SLC4A2	8137352	chr7	1.56
NA	8127752	chr6	1.56
NA	7896495	---	1.56
NA	7948397	chr11	1.56
NA	7893950	---	1.56

PIK3C2A	7946815	chr11	0.66
PRKRIP1	8135162	chr7	0.66
UIMC1	8115978	chr5	0.66
GCAT	8072931	chr22	0.66
NUDCD2	8115666	chr5	0.66
ZKSCAN1	8134680	chr7	0.67
TAPBP	8180166	chr6_qbl_h	0.67
ZNF557	8025132	chr19	0.67
NA	7893394	---	0.67
FADS3	7948630	chr11	0.67
RNF34	7959282	chr12	0.67
USP47	7938448	chr11	0.67
RNPEP	7908779	chr1	0.67
NA	7892782	---	0.67
LRPAP1	8099073	chr4	0.67
NA	7896346	---	0.67
NA	7895862	---	0.67
SUOX	7956097	chr12	0.67
NA	7895588	---	0.67
AP3B1	8112772	chr5	0.67
NA	7894661	---	0.67
WDR42A	7921552	chr1	0.67
KNS2	7977127	chr14	0.67
TMEM29	8172813	chrX	0.67
NA	8151991	chr8	0.67
NA	7895306	---	0.67
NA	7894904	---	0.67
GIT1	8013923	chr17	0.67
NA	7895173	---	0.67
TBC1D9B	8116348	chr5	0.67
BCAP29	8135422	chr7	0.67
TMEM106B	8131539	chr7	0.67
ARL9	8095246	chr4	0.67
NA	7893475	---	0.67
CNOT8	8109462	chr5	0.67
C1orf91	7914500	chr1	0.68
RER1	7897078	chr1	0.68
SAP30L	8109428	chr5	0.68
PURB	8139430	chr7	0.68
OGDH	8132592	chr7	0.68
NSUN5C	8139947	chr7	0.68
ADAM17	8050190	chr2	0.68
PIGG	8093343	chr4	0.68
GRK6	8110362	chr5	0.68
NA	7893593	---	0.68
PSMD13	7937287	chr11	0.68
NOVA2	8037737	chr19	0.68
C1orf160	7899310	chr1	0.68
GALNACT-2	7927146	chr10	0.68
NA	7915202	chr1	0.68
CCDC40	8010328	chr17	0.68

Cluster C

NA	7893909	---	1.55
NR5A1	8164077	chr9	1.55
ZSCAN4	8031799	chr19	1.55
HIST1H2AK	8124524	chr6	1.55
NA	7910414	chr1	1.55
ATP5F1	7903972	chr1	1.55
GOLGA7	8146122	chr8	1.55
NA	8155847	chr9	1.55
OR1D5	8003806	chr17	1.55
CDK5R2	8048460	chr2	1.55
FERD3L	8138450	chr7	1.55
NA	8121298	chr6	1.55
NA	7894620	---	1.55
LMO1	7946354	chr11	1.55
NA	8060255	chr2	1.55
NA	8043098	chr2	1.55
NA	8150866	chr8	1.55
NA	7918951	chr1	1.55
NA	7894822	---	1.55
MRGPRX2	7947096	chr11	1.55
NA	8124455	chr6	1.55
TTLL5	7975815	chr14	1.55
OR2A5	8136967	chr7	1.55
NA	8136161	chr7	1.55
NA	8030826	chr19	1.55
ITGB3BP	7916727	chr1	1.55
NTN2L	7992632	chr16	1.55
NA	8045341	chr2	1.55
BCAS2	7918759	chr1	1.55
NA	7973114	chr14	1.55
NA	8128892	chr6	1.55
NA	7894720	---	1.54
NA	7892801	---	1.54
NA	8083939	chr3	1.54
NA	7895605	---	1.54
NA	8046281	chr2	1.54
NA	8091560	chr3	1.54
NA	8129456	chr6	1.54
NA	7892893	---	1.54
NA	7982527	chr15	1.54
SNORD52	8118322	chr6	1.54
NA	7892728	---	1.54
RPUSD2	7982753	chr15	1.54
NA	7954206	chr12	1.54
SLC25A5	8169640	chrX	1.54
NA	7895152	---	1.54
LOC145853	7984405	chr15	1.54
C4orf7	8095467	chr4	1.54
NA	8022570	chr18	1.54
TMEM38A	8026579	chr19	1.54
OR52I2	7937948	chr11	1.54

NA	8023939	chr19	0.68
ZNF394	8141305	chr7	0.68
RYK	8090840	chr3	0.68
NA	7893828	---	0.68
GPR27	8080958	chr3	0.68
NA	7892836	---	0.68
PEBP4	8149725	chr8	0.68
NA	7893836	---	0.68
FOLR2	7942372	chr11	0.69
MAP3K14	8016194	chr17	0.69
SNX6	7978570	chr14	0.69
NA	8133165	chr7	0.69
SCARNA4	7920875	chr1	0.69
ARHGEF10L	7898483	chr1	0.69
TTC17	7939434	chr11	0.69
DDX41	8116096	chr5	0.69
NA	7893948	---	0.69
TAF6	8141425	chr7	0.69
SH3GLB1	7902771	chr1	0.69
LOC51149	8116335	chr5	0.69
SEC22C	8086406	chr3	0.69
NAP1L4	7945786	chr11	0.69
NA	7894392	---	0.69
NA	7893786	---	0.69
NUDT6	8102713	chr4	0.69
C21orf33	8069026	chr21	0.69
CHID1	7945579	chr11	0.69
NA	8061483	chr20	0.70
HAPLN3	7991224	chr15	0.70
PEX10	7911720	chr1	0.70
TRIP11	7980923	chr14	0.70
USP4	8087380	chr3	0.70
OMG	8014057	chr17	0.70
FBXO38	8109062	chr5	0.70
POMGNT1	7915801	chr1	0.70
CYP4Z2P	7901287	chr1	0.70
NA	7913154	chr1	0.70
FXC1	7938111	chr11	0.70
C2	8178095	chr6_cox_1	0.70
LOC162427	8015655	chr17	0.70
FLJ31951	8115562	chr5	0.70
NDUFS2	7906703	chr1	0.71
NA	7895680	---	0.71
COPA	7921583	chr1	0.71
KIAA1975	7928890	chr10	0.71
NA	7895717	---	0.71
NA	8066072	chr20	0.71
PERQ1	8141595	chr7	0.71
RAB11A	7984289	chr15	0.71
NA	7895693	---	0.71
RDH11	7979743	chr14	0.71

Cluster C

GML	8148565	chr8	1.54
NA	7923698	chr1	1.54
NA	8136938	chr7	1.54
NA	8143599	chr7	1.54
RABEPK	8157843	chr9	1.54
NA	7925902	chr10	1.54
NA	7896070	---	1.54
NA	7983379	chr15	1.54
NA	8153041	chr8	1.54
LOC344887	8084630	chr3	1.54
NA	7982100	chr15	1.54
NA	7925607	chr1	1.54
TAAR8	8122129	chr6	1.54
NA	7894582	---	1.54
SPRR2D	7920196	chr1	1.54
PDHB	8088384	chr3	1.54
SPINK1	8114964	chr5	1.54
NA	8151445	chr8	1.54
NA	7959772	chr12	1.54
NA	7895763	---	1.54
NA	7895138	---	1.53
NHEJ1	8059071	chr2	1.53
NA	7924205	chr1	1.53
NA	8151279	chr8	1.53
NA	7971933	chr13	1.53
NA	7982935	chr15	1.53
NA	7892576	---	1.53
NA	8015735	chr17	1.53
NA	7893502	---	1.53
NA	7900144	chr1	1.53
SBEM	7955963	chr12	1.53
LOC284757	8063793	chr20	1.53
FAM121A	8168580	chrX	1.53
NA	7922328	chr1	1.53
NA	8106350	chr5	1.53
ARL6IP1	7999834	chr16	1.53
NA	7939934	chr11	1.53
NA	8177081	chrY	1.53
NA	8092065	chr3	1.53
NA	7958017	chr12	1.53
NA	8097474	chr4	1.53
NA	7929952	chr10	1.53
NA	7893395	---	1.53
OR2A12	8136971	chr7	1.52
RHD	7898998	chr1	1.52
CDK7	8105862	chr5	1.52
NA	8150974	chr8	1.52
OR6B3	8060084	chr2	1.52
NA	7892918	---	1.52
OR2A25	8136969	chr7	1.52
ZC3HAV1L	8143270	chr7	1.52

NA	7963210	chr12	0.71
NA	7966266	chr12	0.71
ARFIP1	8097813	chr4	0.71
TBC1D10B	8000856	chr16	0.71
RNF149	8054329	chr2	0.72
SLC39A13	7939805	chr11	0.72
NA	8013507	chr17	0.72
NA	7896142	---	0.72
PPIE	7900354	chr1	0.72
NA	7894757	---	0.72
PLEKHM2	7898227	chr1	0.72
ZDHHC5	7940051	chr11	0.72
TMEM132A	7940377	chr11	0.72
TPM4	8026513	chr19	0.72
NA	8041281	chr2	0.72
RAB6C	7950284	chr11	0.73
NA	7894640	---	0.73
NA	8040338	chr2	0.73
MYO1G	8139433	chr7	0.73
NA	7893077	---	0.73
NA	8175332	chrX	0.73
NADSYN1	7942232	chr11	0.73
RIPK5	7923731	chr1	0.73
TRIM73	8133625	chr7	0.73
NA	7895149	---	0.73
SAMM50	8073645	chr22	0.73
ORAOV1	7950016	chr11	0.74
ZNF773	8031759	chr19	0.74
TXNDC14	7940066	chr11	0.74
NS3BP	7937474	chr11	0.74
NA	7940491	chr11	0.74
ARFIP2	7946201	chr11	0.74
SUGT1L1	7971191	chr13	0.74
WNT7B	8076734	chr22	0.74
RASGEF1A	7933149	chr10	0.74
NA	8032922	chr19	0.74
ZNF576	8029311	chr19	0.74
MGC70924	8029214	chr19	0.75
MXD4	8098995	chr4	0.75
NA	7893354	---	0.75
KIAA0652	7939676	chr11	0.75
RUFY1	8110499	chr5	0.75
ZNF585B	8036389	chr19	0.75
NA	7893641	---	0.75
UPF1	8027074	chr19	0.75
NA	8069444	chr21	0.75
NA	7895165	---	0.76
TOLLIP	7945620	chr11	0.76
CDC73	7908437	chr1	0.76
NA	7950751	chr11	0.76
TRIM3	7946180	chr11	0.76

Cluster C

NA	8173360	chrX	1.52
NA	8038343	chr19	1.52
PKD2L2	8108267	chr5	1.52
NA	7944720	chr11	1.52
CHRM5	7982497	chr15	1.52
FEZ2	8051427	chr2	1.52
OR2F1	8136963	chr7	1.52
RASA4	8141803	chr7	1.52
NA	8138795	chr7	1.52
SLC15A4	7967624	chr12	1.52
NA	8150582	chr8	1.52
OR1J4	8157671	chr9	1.52
KRTAP13-1	8068130	chr21	1.52
NA	7957495	chr12	1.52
NA	8170280	chrX	1.52
SSBP3	7916403	chr1	1.52
NA	7925087	chr1	1.52
NA	8120878	chr6	1.52
NA	7951552	chr11	1.52
NA	7988442	chr15	1.52
NA	7896072	---	1.52
NA	8173581	chrX	1.52
C6orf12	8178324	chr6_cox_	1.52
NA	8180249	---	1.51
IRX4	8110865	chr5	1.51
NA	8107574	chr5	1.51
NA	7927056	chr10	1.51
NA	8048761	chr2	1.51
NA	8017102	chr17	1.51
NA	8068350	chr21	1.51
NA	8118861	chr6	1.51
CTXN3	8107764	chr5	1.51
NA	8103620	chr4	1.51
CLDN18	8082928	chr3	1.51
NA	8070871	chr21	1.51
FKSG83	8117567	chr6	1.51
NA	7966686	chr12	1.51
NA	8136578	chr7	1.51
NA	8030840	chr19	1.51
NA	8140850	chr7	1.51
NA	7893052	---	1.51
DGAT2	7942613	chr11	1.51
NA	8180418	---	1.51
NA	8097124	chr4	1.51
EXOSC5	8037023	chr19	1.51
NA	8042530	chr2	1.51
NA	7912207	chr1	1.51
NA	8112018	chr5	1.51
ERVWE1	8140909	chr7	1.51
NA	8144042	chr7	1.51
ABT1	8117522	chr6	1.51

USP19	8087308	chr3	0.76
SNAPC4	8165131	chr9	0.76
ELK4	7923778	chr1	0.76
NA	7895819	---	0.77
NA	7946565	chr11	0.77
NA	8112916	chr5	0.77
NA	8174970	chrX	0.77
LOC554223	8179028	chr6_qbl_h	0.77
NA	7966070	chr12	0.77
LOC643499	7967089	chr12	0.77
KRT82	7963386	chr12	0.78
LOC442431	8009253	chr17	0.78
UNC13D	8018449	chr17	0.78
NA	8175254	chrX	0.78
FAM73B	8158492	chr9	0.78
NA	7894909	---	0.79
DVL3	8084323	chr3	0.79
SFTPD	7934719	chr10	0.79
C10orf65	7929664	chr10	0.80
SSTR5	7992145	chr16	0.81
SFI1	8072494	chr22	0.81
PIK3R5	8012558	chr17	0.82
NA	8175589	chrX	0.82

Cluster C

SCLY	8049582	chr2	1.51
NA	8072775	chr22	1.51
NA	8159838	chr9	1.51
MUSK	8157173	chr9	1.51
NA	8166351	chrX	1.51
NA	8081943	chr3	1.51
GFI1	7917697	chr1	1.51
NA	7925446	chr1	1.51
MLZE	8152828	chr8	1.51
WNT8A	8108287	chr5	1.51
DUSP2	8053882	chr2	1.51
NA	7910909	chr1	1.51
NA	8069559	chr21	1.50
NA	8043038	chr2	1.50
POLR2J	8141768	chr7	1.50
CYP27B1	7964535	chr12	1.50
NA	8157191	chr9	1.50
NA	8045800	chr2	1.50
NA	8139909	chr7	1.50
NA	7912882	chr1	1.50
NA	8148156	chr8	1.50
NA	8005751	chr17	1.50
FAM55A	7951789	chr11	1.50
NA	8042219	chr2	1.50
NA	8176469	chrY	1.50
C6orf151	8116807	chr6	1.50
NA	7896354	---	1.50
NFKBIA	7978644	chr14	1.50
NA	8081456	chr3	1.50
NA	7896579	---	1.50
NA	8104632	chr5	1.50
DHODH	7997179	chr16	1.50
C6orf128	8126086	chr6	1.50
NA	7988465	chr15	1.50
NA	8026418	chr19	1.50
NA	7896195	---	1.50
NA	7957534	chr12	1.50
NA	8090416	chr3	1.50
NA	7894462	---	1.50
PDE6B	8093360	chr4	1.50
CCBP2	8079117	chr3	1.50
IL18R1	8044035	chr2	1.50
GAD2	7926766	chr10	1.50
MATK	8032682	chr19	1.49
SLC7A13	8151637	chr8	1.49
NA	8117529	chr6	1.49
NA	8105434	chr5	1.49
WIBG	7963965	chr12	1.49
NA	8115066	chr5	1.49
NA	8167947	chrX	1.49
NA	8084941	chr3	1.49

Cluster C

NA	8044733	chr2	1.49
NA	8042113	chr2	1.49
NA	8180378	---	1.49
NA	7896666	---	1.49
CHCHD7	8146517	chr8	1.49
NA	8122858	chr6	1.49
DEFB125	8060303	chr20	1.49
CCRL1	8122334	chr6	1.49
XKR3	8074204	chr22	1.49
NA	8130462	chr6	1.49
SLFN14	8014259	chr17	1.49
SCEL	7969493	chr13	1.49
PNO1	8042381	chr2	1.49
OR51M1	7938000	chr11	1.49
NA	8132811	chr7	1.49
NA	8145685	chr8	1.49
CPA6	8151191	chr8	1.49
KIAA0087	8138686	chr7	1.49
GFRAL	8120350	chr6	1.48
MAD2L1BP	8119874	chr6	1.48
NA	8023078	chr18	1.48
NA	7982388	chr15	1.48
RNF8	8119184	chr6	1.48
SNORD53	8041168	chr2	1.48
OR13C4	8162929	chr9	1.48
NA	8126369	chr6	1.48
NA	8132990	chr7	1.48
NA	8002216	chr16	1.48
NA	8013919	chr17	1.48
NA	8076382	chr22	1.48
NA	8122881	chr6	1.48
NA	7906015	chr1	1.48
NA	7940185	chr11	1.48
NA	8058658	chr2	1.48
NA	7894841	---	1.48
NA	8058199	chr2	1.48
RTN4RL1	8011214	chr17	1.48
TAAR9	8122127	chr6	1.48
BFSP2	8082774	chr3	1.48
NA	7964868	chr12	1.48
NA	8104854	chr5	1.48
NUP205	8136401	chr7	1.48
NA	7979804	chr14	1.48
NA	8028789	chr19	1.48
C1orf31	7910630	chr1	1.48
IGHV7-81	7981745	chr14	1.47
NA	7892828	---	1.47
NA	7942822	chr11	1.47
CD200R2	8089559	chr3	1.47
MED31	8011968	chr17	1.47
NA	8116908	chr6	1.47

Cluster C

IFNA17	8160394	chr9	1.47
NA	8161915	chr9	1.47
NA	7930378	chr10	1.47
LY6G6E	8125038	chr6	1.47
NA	7895422	---	1.47
NA	7894519	---	1.47
OR6K2	7921420	chr1	1.47
NA	7939422	chr11	1.47
MEP1A	8120088	chr6	1.47
EXOSC4	8148710	chr8	1.47
NA	8169808	chrX	1.47
NA	8049655	chr2	1.47
NA	7991467	chr15	1.47
NA	7993181	chr16	1.47
NA	8112855	chr5	1.47
TRHR	8147877	chr8	1.47
KCTD18	8058118	chr2	1.47
HKR1	8028233	chr19	1.47
NA	7971124	chr13	1.47
NA	7917670	chr1	1.47
NA	7896245	---	1.47
GJB3	7899932	chr1	1.47
NA	8091885	chr3	1.47
NA	8103559	chr4	1.47
TRPV3	8011354	chr17	1.47
KAAG1	8117189	chr6	1.47
NA	8027266	chr19	1.47
NA	7981385	chr14	1.47
NA	7976576	chr14	1.47
NA	7894894	---	1.47
NA	8152642	chr8	1.47
NA	7998392	chr16	1.47
NA	7982339	chr15	1.47
LOC143188	7930533	chr10	1.47
NA	8062842	chr20	1.47
NA	8117565	chr6	1.47
LOC158830	8173437	chrX	1.47
NA	8143457	chr7	1.47
NA	7917431	chr1	1.47
MARCH9	7956623	chr12	1.47
NA	7901563	chr1	1.47
NA	8154758	chr9	1.47
NA	8152742	chr8	1.47
DENND2C	7918749	chr1	1.47
OR10A5	7938172	chr11	1.46
LOC730249	7969482	chr13	1.46
NA	7942542	chr11	1.46
NA	8112329	chr5	1.46
NA	7942987	chr11	1.46
TM7SF3	7961983	chr12	1.46
TREML3	8126296	chr6	1.46

Cluster C

C20orf42	8064904	chr20	1.46
NA	7947361	chr11	1.46
TBX21	8008029	chr17	1.46
LOC127099	7922324	chr1	1.46
NA	8053560	chr2	1.46
NA	7974619	chr14	1.46
C18orf26	8021297	chr18	1.46
EIF2B3	7915640	chr1	1.46
NA	8147828	chr8	1.46
NA	7973020	chr14	1.46
NA	7925432	chr1	1.46
NA	8117563	chr6	1.46
IL20	7909261	chr1	1.46
PHOX2B	8100007	chr4	1.46
VKORC1	8000998	chr16	1.46
NA	7905569	chr1	1.46
NA	8133854	chr7	1.46
NA	8114489	chr5	1.46
SLC5A1	8072587	chr22	1.46
TAT	8002556	chr16	1.46
NA	7927106	chr10	1.46
OR5K1	8081212	chr3	1.46
OR2T8	7925739	chr1	1.46
JRK	8153328	chr8	1.46
LOC340900	7932528	chr10	1.46
OR4K14	7977476	chr14	1.46
NA	8160555	chr9	1.46
HAO2	7904396	chr1	1.46
NA	7894581	---	1.46
NA	8168733	chrX	1.46
NA	8003226	chr16	1.46
NA	8143205	chr7	1.46
ATXN3L	8171348	chrX	1.46
CCR8	8078888	chr3	1.45
C1orf141	7916822	chr1	1.45
NA	7999356	chr16	1.45
FLJ32569	7923837	chr1	1.45
C20orf85	8063601	chr20	1.45
MAPK15	8148674	chr8	1.45
OPLAH	8153625	chr8	1.45
NA	7928543	chr10	1.45
NA	8170198	chrX	1.45
NA	7972016	chr13	1.45
REG4	7919067	chr1	1.45
NA	8095161	chr4	1.45
NA	8000407	chr16	1.45
PSMD6	8088535	chr3	1.45
NA	7956279	chr12	1.45
MAGEB2	8166611	chrX	1.45
OR4S1	7939871	chr11	1.45
HERV-FRD	8123929	chr6	1.45

Cluster C

NA	7954695	chr12	1.45
ABCD1	8170704	chrX	1.45
HIST1H2AC	8117372	chr6	1.45
NA	8150918	chr8	1.45
NA	7939998	chr11	1.45
NA	7926805	chr10	1.45
LOC392352	8161863	chr9	1.45
TMUB1	8143879	chr7	1.45
NA	7896040	---	1.45
LRP16	7949033	chr11	1.45
ASB17	7917082	chr1	1.45
TIPIN	7989915	chr15	1.45
NA	8014167	chr17	1.45
OR6T1	7952382	chr11	1.45
NA	8103538	chr4	1.45
NA	8083455	chr3	1.45
NA	8113232	chr5	1.45
KCNH2	8143825	chr7	1.45
NA	8121947	chr6	1.45
NANP	8065510	chr20	1.45
NA	7893463	---	1.45
SNORA18	8106512	chr5	1.45
NMS	8043890	chr2	1.44
CAV3	8077503	chr3	1.44
NA	7896300	---	1.44
NA	8069983	chr21	1.44
NA	8112435	chr5	1.44
NA	8042464	chr2	1.44
HORMAD2	8072304	chr22	1.44
NA	8156519	chr9	1.44
AMTN	8095508	chr4	1.44
NA	7973444	chr14	1.44
NA	8095802	chr4	1.44
NA	7894942	---	1.44
NAT2	8144866	chr8	1.44
NA	7931403	chr10	1.44
NA	8142079	chr7	1.44
BET1	8141024	chr7	1.44
NA	8104661	chr5	1.44
NA	8113354	chr5	1.44
THOC7	8088526	chr3	1.44
B4GALNT3	7952927	chr12	1.44
C3orf36	8090817	chr3	1.44
LOC731568	8177280	chrY	1.44
NA	8108979	chr5	1.44
IL2RG	8173444	chrX	1.44
FBXO10	8161229	chr9	1.44
NA	8154719	chr9	1.44
NA	8168203	chrX	1.44
NA	8158928	chr9	1.44
SPZ1	8106597	chr5	1.44

Cluster C

TGM5	7988050	chr15	1.44
MRPS18B	8117955	chr6	1.44
NA	8101203	chr4	1.44
CLEC4M	8025303	chr19	1.44
NA	7916841	chr1	1.44
NA	8027437	chr19	1.44
OR1L1	8157681	chr9	1.44
NA	7896635	---	1.44
NA	7989659	chr15	1.44
NA	8104599	chr5	1.44
COL19A1	8120501	chr6	1.44
HEBP1	7961390	chr12	1.44
NA	8141138	chr7	1.44
NA	8067358	chr20	1.44
OR2A7	8143633	chr7	1.44
NPHS2	7922627	chr1	1.44
RNF39	8124695	chr6	1.44
NPAS4	7941599	chr11	1.44
TCTB	7930487	chr10	1.44
NA	8177079	chrY	1.44
NA	7893970	---	1.44
NA	8136786	chr7	1.44
SCGB3A2	8108995	chr5	1.44
NA	8070716	chr21	1.44
KCNJ1	7952617	chr11	1.44
NA	8170228	chrX	1.44
RCOR1	7977003	chr14	1.44
CLDN16	8084788	chr3	1.43
NA	7980574	chr14	1.43
NA	8099756	chr4	1.43
RP11-191L9	8076819	chr22	1.43
NA	8086876	chr3	1.43
NA	7947394	chr11	1.43
C19orf21	8024013	chr19	1.43
NA	8119107	chr6	1.43
NA	8104117	chr4	1.43
HMGA1	8118794	chr6	1.43
TCHHL1	7920135	chr1	1.43
NA	8147650	chr8	1.43
C12orf40	7954794	chr12	1.43
NA	8023216	chr18	1.43
LRP11	8130142	chr6	1.43
VCX2	8171216	chrX	1.43
NA	8152117	chr8	1.43
NA	8081105	chr3	1.43
LBP	8062461	chr20	1.43
NA	8091556	chr3	1.43
KIFC3	8001587	chr16	1.43
NA	8058693	chr2	1.43
NA	7933217	chr10	1.43
NA	8160782	chr9	1.43

Cluster C

LOC642721	8055946	chr2	1.43
OR51G1	7946013	chr11	1.43
NA	8044107	chr2	1.43
NA	8055492	chr2	1.43
SLC30A8	8148003	chr8	1.43
C6orf58	8121936	chr6	1.43
LOC541469	8036479	chr19	1.43
NA	8022174	chr18	1.43
NA	7931079	chr10	1.43
WDR46	8125671	chr6	1.43
NA	7895526	---	1.43
LOC645280	8022608	chr18	1.43
OR6C68	7956001	chr12	1.43
NA	8050495	chr2	1.43
NA	8115344	chr5	1.43
NA	8067199	chr20	1.43
LOC729862	8104656	chr5	1.43
PRAMEF16	7912601	chr1	1.43
U2AF1	8070655	chr21	1.43
DEFB1	8149097	chr8	1.43
PQBP1	8167412	chrX	1.43
PIM3	8073960	chr22	1.43
NA	8081460	chr3	1.43
LOC642452	7997861	chr16	1.43
LOC644030	7965976	chr12	1.43
NA	7964598	chr12	1.43
PMCH	7965867	chr12	1.42
SNTB2	7996908	chr16	1.42
TRPA1	8151341	chr8	1.42
BAPX1	8099406	chr4	1.42
PTPN7	7923406	chr1	1.42
NA	8162823	chr9	1.42
NA	8117533	chr6	1.42
NA	7980452	chr14	1.42
FXD3	8027748	chr19	1.42
LOC136306	8143209	chr7	1.42
NA	7943373	chr11	1.42
TTC22	7916425	chr1	1.42
NA	7928298	chr10	1.42
NA	7895685	---	1.42
ARR3	8168117	chrX	1.42
HBLD1	7975705	chr14	1.42
OR4C16	7939926	chr11	1.42
MRPS24	8139250	chr7	1.42
PSMA6	7973936	chr14	1.42
FLOT1	8124828	chr6	1.42
NA	8139798	chr7	1.42
CR1L	7909390	chr1	1.42
NA	7892667	---	1.42
INDOL1	8146105	chr8	1.42
NA	8010057	chr17	1.42

Cluster C

NA	8169804	chrX	1.42
TNMD	8168737	chrX	1.42
NA	8116593	chr6	1.42
PRSS1	8136795	chr7	1.42
PLAG1	8150881	chr8	1.42
NA	7934883	chr10	1.42
PXT1	8126007	chr6	1.42
CCDC110	8104014	chr4	1.42
TYR	7948085	chr11	1.42
PRH2	7953967	chr12	1.42
NA	8180248	---	1.42
OVOL2	8065185	chr20	1.42
NA	7895041	---	1.42
KRTAP13-3	8069818	chr21	1.42
NA	8044698	chr2	1.42
NA	8044737	chr2	1.42
FLJ43763	8116545	chr6	1.42
NKX2-3	7929744	chr10	1.42
NA	7895179	---	1.42
ZBTB9	8118721	chr6	1.42
FLJ23556	7930559	chr10	1.42
NA	8085813	chr3	1.42
NA	7967032	chr12	1.42
PYY2	8005833	chr17	1.42
NA	8013068	chr17	1.42
KRT75	7963396	chr12	1.42
NA	7947551	chr11	1.42
MGC4093	8037018	chr19	1.42
NA	8047172	chr2	1.42
NA	7959012	chr12	1.42
THSD3	7980425	chr14	1.41
FLJ32784	7898627	chr1	1.41
NA	7895991	---	1.41
NA	8147481	chr8	1.41
NA	8092390	chr3	1.41
OR5D14	7939942	chr11	1.41
NA	8060803	chr20	1.41
ULBP2	8122720	chr6	1.41
NA	7976838	chr14	1.41
GPBAR1	8048249	chr2	1.41
TEDDM1	7922703	chr1	1.41
SMR3A	8095488	chr4	1.41
CX62	8121132	chr6	1.41
OR51S1	7946004	chr11	1.41
LOC728606	8022653	chr18	1.41
NISCH	8080320	chr3	1.41
NA	8173362	chrX	1.41
NA	8016431	chr17	1.41
NA	8089289	chr3	1.41
NA	8083590	chr3	1.41
GLRX5	7976515	chr14	1.41

Cluster C

TCEB1	8151413	chr8	1.41
LOC254028	7973080	chr14	1.41
NA	7893649	---	1.41
EPGN	8095723	chr4	1.41
HDGFL1	8117172	chr6	1.41
NA	8136788	chr7	1.41
NA	8021963	chr18	1.41
NA	8050654	chr2	1.41
NA	7895111	---	1.41
NA	8121269	chr6	1.41
NA	8159969	chr9	1.41
MRPL14	8126653	chr6	1.41
NA	8049071	chr2	1.41
IMPG1	8127666	chr6	1.41
FLJ27243	8001816	chr16	1.41
NA	8081333	chr3	1.41
NA	7896240	---	1.41
NA	8151434	chr8	1.41
DDX20	7904000	chr1	1.41
NA	7966666	chr12	1.41
NA	8148194	chr8	1.41
NA	8025990	chr19	1.41
SPINT4	8063019	chr20	1.41
NA	7917591	chr1	1.41
NA	7931850	chr10	1.41
HNRPCL1	7912580	chr1	1.41
NA	8121116	chr6	1.41
ATAD4	8016387	chr17	1.41
AARSL	8126681	chr6	1.41
NA	8150588	chr8	1.41
RBP7	7897522	chr1	1.41
NA	8168888	chrX	1.40
OR1G1	8011324	chr17	1.40
CXorf55	8169463	chrX	1.40
NCK1	8082911	chr3	1.40
DAZL	8085676	chr3	1.40
NA	8168373	chrX	1.40
SH2D6	8043157	chr2	1.40
ALG14	7917896	chr1	1.40
MRPL18	8123148	chr6	1.40
NA	8151707	chr8	1.40
C4orf35	8095484	chr4	1.40
MAPK11	8076978	chr22	1.40
NA	7953128	chr12	1.40
NA	8149069	chr8	1.40
NA	8112609	chr5	1.40
NA	8086515	chr3	1.40
PER1	8012349	chr17	1.40
C14orf155	7978756	chr14	1.40
NA	8029299	chr19	1.40
OR4A5	7948099	chr11	1.40

Cluster C

HMGB3	8170468	chrX	1.40
LUZP4	8169467	chrX	1.40
NA	7905744	chr1	1.40
NA	8123959	chr6	1.40
LOC441237	8139769	chr7	1.40
NA	8073511	chr22	1.40
NA	8081501	chr3	1.40
NA	8023373	chr18	1.40
NA	8061068	chr20	1.40
NA	8157729	chr9	1.40
NA	8150590	chr8	1.40
AP1M2	8034084	chr19	1.40
HDGF	7921133	chr1	1.40
COLEC10	8148029	chr8	1.40
ATP4B	7972923	chr13	1.40
FZD8	7933075	chr10	1.40
NA	8180267	---	1.40
INHA	8048639	chr2	1.40
HIST1H4E	8117402	chr6	1.40
NA	8091281	chr3	1.40
NA	8124038	chr6	1.40
DEFB110	8126939	chr6	1.40
PRSS35	8120932	chr6	1.40
NA	8180357	---	1.40
NA	8177273	chrY	1.40
NA	8038314	chr19	1.40
NA	8061507	chr20	1.40
NA	8004532	chr17	1.40
NA	7967622	chr12	1.39
NA	7892741	---	1.39
C20orf75	8064894	chr20	1.39
MEP1B	8020827	chr18	1.39
NA	7894721	---	1.39
VTN	8013606	chr17	1.39
HRK	7966746	chr12	1.39
FLJ43859	8156098	chr9	1.39
PDE6A	8115041	chr5	1.39
ZNF649	8038913	chr19	1.39
LRRC57	7987916	chr15	1.39
ACTL6A	8084067	chr3	1.39
ABCB5	8131682	chr7	1.39
ANKRD38	7916654	chr1	1.39
NA	8115863	chr5	1.39
KLK9	8038716	chr19	1.39
COX7C	8106776	chr5	1.39
PRAMEF12	7897974	chr1	1.39
TGM3	8060432	chr20	1.39
NA	8104729	chr5	1.39
ZPBP2	8006958	chr17	1.39
NA	8074556	chr22	1.39
TSPY2	8176517	chrY	1.39

Cluster C

LOC388335	8012830	chr17	1.39
LOC644943	7938559	chr11	1.39
NA	7892686	---	1.39
NA	7971417	chr13	1.39
C6orf106	8125850	chr6	1.39
PRO2900	8049825	chr2	1.39
LRR14	8148923	chr8	1.39
FLJ42220	7973970	chr14	1.39
NA	7952737	chr11	1.39
GLIS1	7916304	chr1	1.39
NA	7931214	chr10	1.39
LOC283129	7949327	chr11	1.39
NA	8180210	---	1.39
NA	7975386	chr14	1.39
NA	8055198	chr2	1.39
TCP10L2	8123374	chr6	1.39
OR52W1	7938076	chr11	1.39
CIDEA	8020211	chr18	1.39
XK	8166723	chrX	1.39
TAF9	8112458	chr5	1.39
NA	7932610	chr10	1.39
OR5M11	7948144	chr11	1.39
NA	7985236	chr15	1.39
NA	8089232	chr3	1.39
DUOX2	7988350	chr15	1.39
NA	8136291	chr7	1.39
FLJ43826	8006836	chr17	1.39
MPN2	7910211	chr1	1.39
NA	8020209	chr18	1.38
LOC342443	7986629	chr15	1.38
NA	8133014	chr7	1.38
NA	7909525	chr1	1.38
NA	8055305	chr2	1.38
NA	8012852	chr17	1.38
NA	7906952	chr1	1.38
NA	8130497	chr6	1.38
IFNA7	8160377	chr9	1.38
DEFB113	8126937	chr6	1.38
NA	8146943	chr8	1.38
NA	8151332	chr8	1.38
HSD17B1	8007263	chr17	1.38
NA	7981288	chr14	1.38
MGC88374	7975154	chr14	1.38
SRP19	8107350	chr5	1.38
BCMP11	8138392	chr7	1.38
OR4P4	7939928	chr11	1.38
NA	8048118	chr2	1.38
IHH	8059067	chr2	1.38
C6	8111864	chr5	1.38
CD1B	7921346	chr1	1.38
NA	7926819	chr10	1.38

Cluster C

NA	8083935	chr3	1.38
AANAT	8010071	chr17	1.38
SH2D1B	7921900	chr1	1.38
LOC645263	7988410	chr15	1.38
NA	8098554	chr4	1.38
NA	8132838	chr7	1.38
NA	7978401	chr14	1.38
ASB15	8135804	chr7	1.38
TRAF3IP1	8049635	chr2	1.38
MDH1	8042259	chr2	1.38
NA	7934365	chr10	1.38
SCO2	8077099	chr22	1.38
NA	8107092	chr5	1.38
TMEM64	8151747	chr8	1.38
OR7A17	8034901	chr19	1.38
NA	8175706	chrX	1.38
NA	7993754	chr16	1.38
NA	8005104	chr17	1.38
ZFP41	8148597	chr8	1.38
WDR69	8048870	chr2	1.37
NA	7964736	chr12	1.37
NA	8113707	chr5	1.37
IL1R2	8043981	chr2	1.37
OR2A2	8136973	chr7	1.37
NA	7987468	chr15	1.37
APOL5	8072721	chr22	1.37
NA	7995322	chr16	1.37
GYS2	7961673	chr12	1.37
PRY	8176806	chrY	1.37
NA	8006502	chr17	1.37
NA	8146401	chr8	1.37
PPY	8015884	chr17	1.37
NA	8106929	chr5	1.37
NA	7910490	chr1	1.37
NA	8103372	chr4	1.37
FAM79B	8084757	chr3	1.37
FOXD2	7901311	chr1	1.37
C15orf15	7989013	chr15	1.37
NA	8065392	chr20	1.37
WFDC5	8066482	chr20	1.37
NA	8120466	chr6	1.37
GPR172A	8148841	chr8	1.37
PARL	8092409	chr3	1.37
NA	7894471	---	1.37
FOSL1	7949532	chr11	1.37
NA	8084012	chr3	1.37
C1QTNF5	7952243	chr11	1.37
NA	7986338	chr15	1.37
C1orf68	7905512	chr1	1.37
NA	8140855	chr7	1.37
NA	7935690	chr10	1.37

Cluster C

AHSG	8084648	chr3	1.37
RFK	8161857	chr9	1.37
NA	7976067	chr14	1.37
C3orf44	8091469	chr3	1.37
OR4D10	7940177	chr11	1.37
GRTP1	7972890	chr13	1.37
SLC34A2	8094441	chr4	1.37
ELF5	7947481	chr11	1.37
NA	8071390	chr22	1.37
BOLA3	8053059	chr2	1.37
LIPI	8069521	chr21	1.37
EDN2	7915385	chr1	1.37
NA	8022500	chr18	1.36
FOXC2	7997733	chr16	1.36
TTY9A	8176692	chrY	1.36
NA	8124192	chr6	1.36
NMB	7991138	chr15	1.36
PITX1	8114215	chr5	1.36
FCRL1	7921319	chr1	1.36
F7	7970232	chr13	1.36
PANX3	7944845	chr11	1.36
NA	8142882	chr7	1.36
DNHD2	8088299	chr3	1.36
SERPINA4	7976481	chr14	1.36
NA	7925730	chr1	1.36
NA	7910903	chr1	1.36
VCX3A	8171240	chrX	1.36
SYCN	8036699	chr19	1.36
RPRML	8016320	chr17	1.36
NA	8146857	chr8	1.36
NA	8129043	chr6	1.36
NA	8061112	chr20	1.36
OR5T2	7948125	chr11	1.36
NA	8171334	chrX	1.36
NA	8055482	chr2	1.36
NA	8111385	chr5	1.36
NA	8100549	chr4	1.36
NA	8065122	chr20	1.36
CAPZA3	7954240	chr12	1.36
FLJ40411	8049552	chr2	1.36
CALCR	8140995	chr7	1.36
NA	7993179	chr16	1.36
KRT77	7963502	chr12	1.36
NA	8067981	chr21	1.36
SPAR	8097690	chr4	1.36
PIP5KL1	8164328	chr9	1.36
NA	8130472	chr6	1.36
DEFB108B	7942284	chr11	1.36
LOC285193	8049684	chr2	1.36
NA	8143294	chr7	1.36
FLJ11171	8002523	chr16	1.36

Cluster C

OR6C74	7955985	chr12	1.36
NA	7938590	chr11	1.36
NA	8175708	chrX	1.36
ADCK5	8148850	chr8	1.36
ANGPTL3	7901883	chr1	1.36
ABRA	8152291	chr8	1.36
NA	7914350	chr1	1.36
NA	7894842	---	1.36
FCRLA	7906786	chr1	1.36
NA	8009491	chr17	1.36
NA	8177269	chrY	1.36
NA	7974212	chr14	1.36
CASR	8082046	chr3	1.36
SSTR3	8075906	chr22	1.36
DEFA4	8149109	chr8	1.36
OR8D2	7952394	chr11	1.36
NPHS1	8036176	chr19	1.36
NA	7973972	chr14	1.35
LOC644051	8123800	chr6	1.35
FLJ41484	7972932	chr13	1.35
ALX4	7947563	chr11	1.35
NA	7970622	chr13	1.35
KRTAP13-2	8069813	chr21	1.35
NA	8092883	chr3	1.35
NA	7927167	chr10	1.35
UNC93A	8123388	chr6	1.35
NA	7904872	chr1	1.35
NA	7904951	chr1	1.35
TMEM40	8085393	chr3	1.35
NA	8109746	chr5	1.35
C20orf185	8061815	chr20	1.35
C14orf50	7975081	chr14	1.35
NA	8051744	chr2	1.35
NA	8139917	chr7	1.35
NA	8111017	chr5	1.35
NA	8042960	chr2	1.35
KIAA1913	8122038	chr6	1.35
SOX12	8060334	chr20	1.35
C8orf51	8153405	chr8	1.35
NA	8100389	chr4	1.35
SMAD6	7984353	chr15	1.35
GHRH	8066189	chr20	1.35
TAC4	8016600	chr17	1.35
PAX4	8142747	chr7	1.35
C6orf15	8124859	chr6	1.35
NA	8068391	chr21	1.35
NA	8091043	chr3	1.35
OR8G2	7944834	chr11	1.35
OR2T6	7911276	chr1	1.35
NA	7926636	chr10	1.35
VN1R5	7911174	chr1	1.35

Cluster C

NA	8151213	chr8	1.35
NA	8083229	chr3	1.35
NA	7934099	chr10	1.35
NA	8083848	chr3	1.35
HCRT	8015572	chr17	1.35
NA	7896414	---	1.35
OR52N4	7938053	chr11	1.35
CCBL1	8164496	chr9	1.35
MAGEB6	8166571	chrX	1.35
NA	8052303	chr2	1.35
LOC728690	7911643	chr1	1.35
PTPDC1	8156506	chr9	1.35
NA	8174311	chrX	1.35
ZP4	7925419	chr1	1.34
NA	7908775	chr1	1.34
NA	8098877	chr4	1.34
MYCBP	7915170	chr1	1.34
RECQL4	8153838	chr8	1.34
NA	7932608	chr10	1.34
NA	8071817	chr22	1.34
APCS	7906458	chr1	1.34
NA	8048110	chr2	1.34
FGF23	7960397	chr12	1.34
KRT10	8015104	chr17	1.34
NA	7997738	chr16	1.34
NA	8146525	chr8	1.34
NA	7997372	chr16	1.34
NA	8173338	chrX	1.34
NA	8003848	chr17	1.34
NA	8055200	chr2	1.34
TMPRSS11F	8100688	chr4	1.34
NA	8058348	chr2	1.34
NA	8173166	chrX	1.34
NA	8139915	chr7	1.34
FKBP3	7978766	chr14	1.34
C19orf47	8036867	chr19	1.34
NA	7933176	chr10	1.34
NA	8121727	chr6	1.34
MYF6	7957373	chr12	1.34
OR4C11	7948105	chr11	1.34
NA	8153835	chr8	1.34
CYP11B1	8153363	chr8	1.34
NA	8045163	chr2	1.34
NA	7969366	chr13	1.34
ZNF165	8117630	chr6	1.34
NA	7926543	chr10	1.34
OR10H2	8026483	chr19	1.34
NA	8117720	chr6	1.34
DPCR1	8179221	chr6_qbl_h	1.34
DUSP7	8087833	chr3	1.34
NA	8111885	chr5	1.34

Cluster C

NA	8109503	chr5	1.34
DHH	7963020	chr12	1.34
COMTD1	7934544	chr10	1.34
NA	7993335	chr16	1.34
LOC728403	8176494	chrY	1.34
ADH4	8101852	chr4	1.34
NA	8048317	chr2	1.34
NA	8097034	chr4	1.34
NA	7893274	---	1.34
NA	7905742	chr1	1.34
OTUD6A	8168083	chrX	1.34
OR51I2	7938006	chr11	1.34
ATG4D	8025659	chr19	1.34
NA	8102513	chr4	1.34
NA	8166353	chrX	1.34
F13B	7923073	chr1	1.34
NA	7951420	chr11	1.34
NA	8102608	chr4	1.34
FBXL22	7984152	chr15	1.34
TMEM14C	8116859	chr6	1.34
NA	8008049	chr17	1.34
NA	7961873	chr12	1.34
KIAA1754L	8043597	chr2	1.33
FAM55D	7951796	chr11	1.33
NA	7969565	chr13	1.33
CCDC88	7941004	chr11	1.33
NA	8060368	chr20	1.33
NA	8104648	chr5	1.33
NA	7958209	chr12	1.33
CCHCR1	8124868	chr6	1.33
GJB7	8128007	chr6	1.33
FAM83B	8120335	chr6	1.33
SLC28A1	7985636	chr15	1.33
C9orf70	8154132	chr9	1.33
KIF2B	8008544	chr17	1.33
NA	7996252	chr16	1.33
NA	8010778	chr17	1.33
OR10Q1	7948314	chr11	1.33
NA	7990377	chr15	1.33
C9orf140	8165430	chr9	1.33
SAA3P	7946972	chr11	1.33
NA	8072141	chr22	1.33
NA	8096312	chr4	1.33
NR2E3	7984606	chr15	1.33
NA	8144878	chr8	1.33
NA	8177176	chrY	1.33
NA	8176663	chrY	1.33
LOC619207	7931623	chr10	1.33
NA	8062117	chr20	1.33
NA	7917972	chr1	1.33
NA	7964640	chr12	1.33

Cluster C

NA	7965384	chr12	1.33
NA	8052932	chr2	1.33
CRISP2	8126891	chr6	1.33
LDHAL6B	7983985	chr15	1.33
HOXB7	8016468	chr17	1.33
NA	8172084	chrX	1.33
NA	8088546	chr3	1.33
NA	7979961	chr14	1.33
NA	8180203	---	1.33
ZNF705A	7953733	chr12	1.33
NA	7976261	chr14	1.33
DDI1	7943521	chr11	1.33
SOX10	8075992	chr22	1.33
OR10H3	8026486	chr19	1.33
NA	8014861	chr17	1.33
NA	8071504	chr22	1.33
NA	8116906	chr6	1.33
FGL1	8149521	chr8	1.33
NA	7912164	chr1	1.33
NA	8174977	chrX	1.33
NA	8122405	chr6	1.33
BMX	8166157	chrX	1.33
NMUR1	8059720	chr2	1.33
FLJ41327	8049959	chr2	1.33
FLJ30719	7952488	chr11	1.33
ABCB6	8059139	chr2	1.33
LOC646891	7922472	chr1	1.33
NA	8105731	chr5	1.33
NA	8154130	chr9	1.33
NA	7972018	chr13	1.33
C9orf121	8156274	chr9	1.33
OR1B1	8163962	chr9	1.33
NA	7954291	chr12	1.33
TSPY1	8176524	chrY	1.33
NA	7979902	chr14	1.33
NA	8140498	chr7	1.32
NA	8066275	chr20	1.32
NA	7940018	chr11	1.32
LOC440419	8005777	chr17	1.32
PRB1	7961306	chr12	1.32
C17orf73	8016735	chr17	1.32
SLC13A1	8142628	chr7	1.32
NA	8051234	chr2	1.32
OR52A5	7946023	chr11	1.32
NA	8056972	chr2	1.32
SH3BGR	8068620	chr21	1.32
NA	7901911	chr1	1.32
NA	7966684	chr12	1.32
CYP2C18	7929466	chr10	1.32
NA	8148047	chr8	1.32
NA	8019910	chr18	1.32

Cluster C

NA	7892821	---	1.32
NA	8130406	chr6	1.32
HCRP1	8119525	chr6	1.32
NA	7948123	chr11	1.32
RTP2	8092686	chr3	1.32
LOC339809	8047505	chr2	1.32
CST8	8061389	chr20	1.32
NA	8064864	chr20	1.32
CTF8	8002266	chr16	1.32
WT1	7947363	chr11	1.32
NA	8114579	chr5	1.32
LOC389895	8170237	chrX	1.32
DKFZp564N	8132840	chr7	1.32
LOC728450	8065013	chr20	1.32
SAA1	7946986	chr11	1.32
NR1H4	7957835	chr12	1.32
ANKZF1	8048489	chr2	1.32
TMEM8	7998233	chr16	1.32
LOC728437	7970806	chr13	1.32
NA	8175250	chrX	1.32
NA	8180208	---	1.32
ISG20	7985777	chr15	1.32
MYL7	8139307	chr7	1.32
NA	7892611	---	1.32
EGFL9	8126556	chr6	1.32
OR5AC2	8081192	chr3	1.32
PPARG	8077899	chr3	1.32
WFDC10A	8063011	chr20	1.32
ATP6V0D2	8147145	chr8	1.32
NA	7976126	chr14	1.32
SCGB1D4	7948662	chr11	1.32
LOC387885	7958942	chr12	1.32
NA	8097505	chr4	1.32
LOC648794	8122277	chr6	1.32
NA	8131942	chr7	1.32
LRRC19	8160504	chr9	1.32
FLJ14082	8043570	chr2	1.32
NA	7964685	chr12	1.32
ZPLD1	8081407	chr3	1.32
LOC642631	8176419	chrY	1.32
NA	7969563	chr13	1.32
FAM117A	8016590	chr17	1.32
ITGAE	8011430	chr17	1.31
C1orf137	7904281	chr1	1.31
EIF4E2	8049180	chr2	1.31
UBQLNL	7946082	chr11	1.31
NA	8147744	chr8	1.31
NA	8146709	chr8	1.31
HMGA2	7956867	chr12	1.31
FAM71C	7957790	chr12	1.31
NA	7926817	chr10	1.31

Cluster C

C8orf55	8148559	chr8	1.31
DNAJC5B	8146660	chr8	1.31
NA	7996391	chr16	1.31
NA	8150274	chr8	1.31
TSSK3	7899790	chr1	1.31
CSN1S2A	8095441	chr4	1.31
RHPN1	8148621	chr8	1.31
NA	8161697	chr9	1.31
LOC646317	8124636	chr6	1.31
CDH17	8151795	chr8	1.31
BMP3	8096070	chr4	1.31
HFE2	7904717	chr1	1.31
AK7	7976578	chr14	1.31
NA	8163381	chr9	1.31
SLC5A12	7947165	chr11	1.31
NA	8029435	chr19	1.31
NA	7939952	chr11	1.31
NA	7970388	chr13	1.31
NKPD1	8037502	chr19	1.31
SCML4	8128638	chr6	1.31
NA	7936966	chr10	1.31
MRPL51	7960553	chr12	1.31
LOC728910	8028546	chr19	1.31
NA	8157151	chr9	1.31
ARC	8153322	chr8	1.31
LOC731797	8027744	chr19	1.31
LOC339766	8049375	chr2	1.31
NA	8154914	chr9	1.31
NA	7901359	chr1	1.31
OR111	8026405	chr19	1.31
NA	7927647	chr10	1.31
OR5P2	7946323	chr11	1.31
CALML3	7925972	chr10	1.31
NA	7973350	chr14	1.31
NA	8039584	chr19	1.31
NA	8089007	chr3	1.31
NA	8147564	chr8	1.31
SLC25A31	8097327	chr4	1.31
PRB2	7961320	chr12	1.31
ADAM18	8146069	chr8	1.31
A4GNT	8090955	chr3	1.31
NA	8069206	chr21	1.31
NA	8139903	chr7	1.31
TSHB	7904203	chr1	1.31
C16orf65	8000229	chr16	1.31
C10orf122	7936918	chr10	1.30
ZNF696	8148615	chr8	1.30
LOC392364	8162191	chr9	1.30
NA	8065752	chr20	1.30
OR7G3	8033738	chr19	1.30
FCRL5	7921237	chr1	1.30

Cluster C

NA	7969774	chr13	1.30
PADI1	7898413	chr1	1.30
LALBA	7962804	chr12	1.30
GSTO2	7930311	chr10	1.30
ALX3	7918416	chr1	1.30
NA	8016455	chr17	1.30
SLC10A1	7979878	chr14	1.30
NA	8072727	chr22	1.30
CDCP2	7916384	chr1	1.30
NA	7927745	chr10	1.30
NA	8180211	---	1.30
OR51B5	7946071	chr11	1.30
NA	7989832	chr15	1.30
NA	7910188	chr1	1.30
OR6F1	7925728	chr1	1.30
CD79A	8029136	chr19	1.30
HPSE2	7935613	chr10	1.30
NA	8040171	chr2	1.30
NA	7939420	chr11	1.30
IFNG	7964787	chr12	1.30
NA	8120464	chr6	1.30
SCN10A	8086255	chr3	1.30
SOAT2	7955702	chr12	1.30
CFHR2	7908496	chr1	1.30
ZPBP	8139622	chr7	1.30
NA	8100474	chr4	1.30
LOC285943	8131967	chr7	1.30
NA	8174668	chrX	1.30
NA	7899348	chr1	1.30
UNQ846	8092735	chr3	1.30
NA	7930680	chr10	1.30
AAA1	8138958	chr7	1.30
NA	8081429	chr3	1.30
NA	8075707	chr22	1.30
NA	8138287	chr7	1.30
NA	8133223	chr7	1.30
NA	7967868	chr12	1.30
NA	8180241	---	1.30
ARL5A	8055862	chr2	1.30
C1orf118	7917151	chr1	1.30
MESP2	7985920	chr15	1.30
LOC348840	8093272	chr3	1.30
NA	8107847	chr5	1.29
ATP5A1	8023063	chr18	1.29
NA	8081458	chr3	1.29
NA	8119076	chr6	1.29
NA	7942814	chr11	1.29
CCDC105	8026390	chr19	1.29
NA	8055909	chr2	1.29
FLJ40243	8111821	chr5	1.29
FLJ43339	7987511	chr15	1.29

Cluster C

NA	7910946	chr1	1.29
IRGC	8029318	chr19	1.29
NA	7910138	chr1	1.29
MS4A6E	7940253	chr11	1.29
NA	8055277	chr2	1.29
NA	8122877	chr6	1.29
C8orf47	8147543	chr8	1.29
NCR1	8031387	chr19	1.29
NA	8047559	chr2	1.29
NA	7937936	chr11	1.29
SERPINA2	7981065	chr14	1.29
RNASE11	7977598	chr14	1.29
HSPC105	8003060	chr16	1.29
NA	7961602	chr12	1.29
NA	8135321	chr7	1.29
GBA3	8094361	chr4	1.29
SYT10	7962226	chr12	1.29
NA	8023908	chr18	1.29
LOC644101	7939070	chr11	1.29
NA	7913976	chr1	1.29
NA	8100013	chr4	1.29
LOC441016	8095072	chr4	1.29
NA	8152289	chr8	1.29
NA	7945177	chr11	1.29
CPB2	7971444	chr13	1.29
NUDT18	8149646	chr8	1.29
ZNF628	8031489	chr19	1.29
ELF3	7908793	chr1	1.29
C16orf55	7997976	chr16	1.29
OR6A2	7946280	chr11	1.29
NA	8173039	chrX	1.29
TAS2R42	7961298	chr12	1.29
PRKAG3	8058997	chr2	1.29
NA	8161240	chr9	1.29
FLJ38723	7989476	chr15	1.29
NA	8150868	chr8	1.29
C14orf54	7975191	chr14	1.29
NA	8065009	chr20	1.29
LOC375196	8051668	chr2	1.29
NA	7953685	chr12	1.28
NA	7903292	chr1	1.28
NA	8049665	chr2	1.28
DEC1	8157477	chr9	1.28
PNLIPRP2	7930804	chr10	1.28
MYH2	8012753	chr17	1.28
NA	7913801	chr1	1.28
NXF3	8174207	chrX	1.28
NA	7936902	chr10	1.28
NA	7950532	chr11	1.28
NA	8164438	chr9	1.28
PSMC6	7974380	chr14	1.28

Cluster C

NA	7942983	chr11	1.28
NA	7932447	chr10	1.28
NA	7965673	chr12	1.28
C16orf24	7992043	chr16	1.28
CXCL3	8100984	chr4	1.28
GDF3	7960828	chr12	1.28
NA	7937959	chr11	1.28
NA	8127128	chr6	1.28
LOC652374	7939920	chr11	1.28
P2RY2	7942400	chr11	1.28
NA	7953871	chr12	1.28
CCDC78	7998307	chr16	1.28
ABHD9	8034974	chr19	1.28
MN1	8075126	chr22	1.28
SLC23A1	8114491	chr5	1.28
NA	7987534	chr15	1.28
CLDN8	8069795	chr21	1.28
SLC25A43	8169624	chrX	1.28
NA	7951715	chr11	1.28
NA	7919572	chr1	1.28
NA	8147691	chr8	1.28
TTY6	8176782	chrY	1.28
NA	7977780	chr14	1.28
NA	8122969	chr6	1.28
SPATA4	8103802	chr4	1.28
C1orf92	7906284	chr1	1.28
CLEC2A	7961091	chr12	1.28
KRTAP20-1	8068154	chr21	1.28
NA	7897066	chr1	1.28
GGT6	8011671	chr17	1.28
NA	8048993	chr2	1.28
C1orf81	7908639	chr1	1.28
NA	7953695	chr12	1.28
KEAP1	8034034	chr19	1.28
NA	8150576	chr8	1.28
TNNI1	7923360	chr1	1.28
CSF2	8107887	chr5	1.28
NUDT16P	8082663	chr3	1.28
CNGB3	8151659	chr8	1.28
UGT2A3	8100760	chr4	1.28
NA	7974402	chr14	1.28
NA	8103358	chr4	1.28
NA	8049950	chr2	1.28
NA	8151989	chr8	1.28
FTMT	8107576	chr5	1.28
SLURP1	8153336	chr8	1.27
NA	7989491	chr15	1.27
NA	8080674	chr3	1.27
C9orf135	8155747	chr9	1.27
BATF	7975793	chr14	1.27
NA	7956044	chr12	1.27

Cluster C

NA	8022504	chr18	1.27
FLJ44379	8080863	chr3	1.27
NA	7991577	chr15	1.27
FIGLA	8052902	chr2	1.27
NA	8079375	chr3	1.27
WISP2	8062864	chr20	1.27
SLC2A7	7912211	chr1	1.27
CAPNS2	7995712	chr16	1.27
EHF	7939314	chr11	1.27
NA	8055269	chr2	1.27
NA	8079151	chr3	1.27
NA	7979876	chr14	1.27
TCP11	8125870	chr6	1.27
MMP27	7951235	chr11	1.27
MS4A2	7940226	chr11	1.27
PKHD1L1	8147891	chr8	1.27
C12orf54	7955119	chr12	1.27
NA	8081053	chr3	1.27
NA	7934093	chr10	1.27
NA	8045537	chr2	1.27
PPHLN1	7954940	chr12	1.27
NA	8084921	chr3	1.27
NA	8100574	chr4	1.27
PEX7	8122242	chr6	1.27
METT11D1	7973116	chr14	1.27
SLC17A4	8117304	chr6	1.27
NA	8023437	chr18	1.27
MYF5	7957379	chr12	1.27
NA	7976724	chr14	1.27
KIAA1822	7976669	chr14	1.26
NA	8174302	chrX	1.26
JSRP1	8032465	chr19	1.26
NA	8162996	chr9	1.26
GNLY	8043236	chr2	1.26
C14orf105	7979378	chr14	1.26
NA	8044739	chr2	1.26
NA	8156844	chr9	1.26
NA	7911094	chr1	1.26
LOC643997	8038668	chr19	1.26
NA	7904252	chr1	1.26
EFCAB3	8008995	chr17	1.26
NA	7997827	chr16	1.26
H2BFWT	8174283	chrX	1.26
KRTAP21-2	8069855	chr21	1.26
OTOP2	8009705	chr17	1.26
NA	8104115	chr4	1.26
NA	8106514	chr5	1.26
TMIGD1	8014025	chr17	1.26
NA	8102726	chr4	1.26
HAT1	8046346	chr2	1.26
NA	8086315	chr3	1.26

Cluster C

NA	7936280	chr10	1.26
RP11-114G1	7972247	chr13	1.26
NA	7988175	chr15	1.26
NA	7988206	chr15	1.26
LDB3	7928838	chr10	1.26
NA	8084014	chr3	1.26
NA	8126705	chr6	1.26
NA	8101226	chr4	1.26
NA	7964720	chr12	1.26
NA	8152595	chr8	1.26
NA	8050365	chr2	1.26
FABP2	8102523	chr4	1.26
DEFB114	8126934	chr6	1.26
NA	7895596	---	1.26
SLC6A14	8169504	chrX	1.26
NA	8120360	chr6	1.26
ARHGEF16	7897154	chr1	1.26
GLI4	8148607	chr8	1.26
C1orf172	7914003	chr1	1.26
NA	7950117	chr11	1.26
ZNF787	8039569	chr19	1.26
HTR3B	7943958	chr11	1.26
NA	8065363	chr20	1.26
PRB4	7961269	chr12	1.26
NA	7896216	---	1.26
MAFA	8153409	chr8	1.26
NA	8120208	chr6	1.26
LOC90925	7981742	chr14	1.26
NA	7900977	chr1	1.26
NA	8086370	chr3	1.26
LOC729781	8030848	chr19	1.26
NA	8125443	chr6	1.26
NA	8129315	chr6	1.26
NA	7901036	chr1	1.26
OR11G2	7973028	chr14	1.26
NA	8021416	chr18	1.26
NA	8172272	chrX	1.26
C8ORFK36	8152715	chr8	1.26
NA	8043129	chr2	1.26
NA	8016733	chr17	1.25
NA	8122261	chr6	1.25
RGS19	8067802	chr20	1.25
ABCA12	8058708	chr2	1.25
NA	8145827	chr8	1.25
G30	7972699	chr13	1.25
NA	8060416	chr20	1.25
LHX3	8165083	chr9	1.25
IQCH	7984380	chr15	1.25
FGA	8103311	chr4	1.25
NA	8039210	chr19	1.25
LOC401565	8165498	chr9	1.25

Cluster C

NKX6-3	8150433	chr8	1.25
C3orf49	8080868	chr3	1.25
CMA1	7978343	chr14	1.25
LOC728299	8069876	chr21	1.25
NA	7985553	chr15	1.25
NA	7991770	chr16	1.25
DEFB121	8065563	chr20	1.25
MYL1	8058604	chr2	1.25
NA	8106960	chr5	1.25
NA	8047337	chr2	1.25
LOC57399	8112306	chr5	1.25
OR5B17	7948322	chr11	1.25
NA	8145687	chr8	1.25
NA	8035868	chr19	1.25
CD300LB	8018169	chr17	1.25
CTAGE1	8022508	chr18	1.25
USP29	8031686	chr19	1.25
NA	8108401	chr5	1.25
WISP3	8121532	chr6	1.25
C1orf90	7899750	chr1	1.25
H1FNT	7955112	chr12	1.25
NA	7920045	chr1	1.25
NA	8020804	chr18	1.25
NA	8107985	chr5	1.25
NA	8060101	chr2	1.25
ZSWIM2	8057563	chr2	1.25
IL21R	7994292	chr16	1.24
MICA	8118100	chr6	1.24
UCKL1	8067756	chr20	1.24
SYCP3	7965800	chr12	1.24
NA	8111415	chr5	1.24
NA	8172193	chrX	1.24
NA	8017310	chr17	1.24
NA	8131801	chr7	1.24
ZNF80	8089694	chr3	1.24
SUNC1	8139606	chr7	1.24
OR4D5	7944795	chr11	1.24
NA	8140532	chr7	1.24
LOC339344	8037728	chr19	1.24
NA	8042462	chr2	1.24
ABCG5	8051866	chr2	1.24
NA	7990031	chr15	1.24
KRBA1	8137133	chr7	1.24
SERPINA12	7981098	chr14	1.24
STAR	8150253	chr8	1.24
GC	8100853	chr4	1.24
NA	8053347	chr2	1.24
NA	8170464	chrX	1.24
SRD5A2L2	8100557	chr4	1.24
NA	8085770	chr3	1.24
KRT36	8015312	chr17	1.24

Cluster C

C1orf211	7897277	chr1	1.24
NA	8175297	chrX	1.24
NA	7994343	chr16	1.24
NA	8146754	chr8	1.23
NA	8122805	chr6	1.23
NA	7917904	chr1	1.23
NA	8088917	chr3	1.23
ENDOG	8158418	chr9	1.23
NA	8067165	chr20	1.23
NA	8139196	chr7	1.23
NA	8002264	chr16	1.23
NA	8037043	chr19	1.23
NA	8159917	chr9	1.23
NA	8115836	chr5	1.23
NA	8170466	chrX	1.23
NA	7898294	chr1	1.23
LOC284067	8007530	chr17	1.23
NA	8031684	chr19	1.23
LGALS4	8036591	chr19	1.23
NA	8173922	chrX	1.23
NA	8169461	chrX	1.23
NA	8021013	chr18	1.23
NA	7913803	chr1	1.23
CNBD1	8147194	chr8	1.23
NA	8142975	chr7	1.23
NA	8120333	chr6	1.23
NA	7996256	chr16	1.23
NA	7998444	chr16	1.23
CUEDC1	8016878	chr17	1.23
NA	7969770	chr13	1.23
NA	8146792	chr8	1.23
NA	8095337	chr4	1.23
TBX22	8168534	chrX	1.23
SLC5A7	8044191	chr2	1.23
ATXN7L2	7903676	chr1	1.23
UPB1	8071907	chr22	1.22
NA	8072187	chr22	1.22
NA	8134405	chr7	1.22
NA	8152246	chr8	1.22
NA	8057711	chr2	1.22
NA	7908595	chr1	1.22
NA	8161646	chr9	1.22
NA	8154379	chr9	1.22
NA	8036589	chr19	1.22
NA	8107348	chr5	1.22
CEACAM16	8029458	chr19	1.22
NA	7951161	chr11	1.22
NA	8114352	chr5	1.22
NA	7901712	chr1	1.22
NA	8157189	chr9	1.22
NA	8134316	chr7	1.22

Cluster C

NA	8134345	chr7	1.22
NA	8159549	chr9	1.22
NA	8062687	chr20	1.22
NA	7984622	chr15	1.22
OR5J2	7939971	chr11	1.22
NA	8052945	chr2	1.22
LOC554248	8133752	chr7	1.22
GGN	8036494	chr19	1.22
NA	7991184	chr15	1.22
NA	8115838	chr5	1.22
RAET1E	8130151	chr6	1.21
NA	8095624	chr4	1.21
NA	8055670	chr2	1.21
NA	7982080	chr15	1.21
NA	7903026	chr1	1.21
NA	7973752	chr14	1.21
PARP15	8082086	chr3	1.21
LOC389257	8104163	chr5	1.21
OR9G4	7948157	chr11	1.21
NA	7948306	chr11	1.21
NA	8065351	chr20	1.21
LOC152586	8102894	chr4	1.21
NA	8098004	chr4	1.21
DKFZp779B	8020197	chr18	1.20
NA	8165862	chrX	1.20
NA	8058460	chr2	1.20
NA	8097945	chr4	1.20

Cluster D

Cluster D SAM analysis FDR less than 5%								
NAME	UNIQID	chr location	Fold change		NAME	UNIQID	chr location	Fold change
CTTNBP2	8142497	chr7	31.88		WIF1	7964722	chr12	0.01
RP13-102H20	8169931	chrX	29.84		SHOX2	8091698	chr3	0.03
LOC138046	8147065	chr8	21.97		DKK2	8102200	chr4	0.03
RSPO3	8121916	chr6	16.35		TNC	8163637	chr9	0.04
CDH18	8111220	chr5	15.50		LGR5	7957140	chr12	0.04
SNCAIP	8107594	chr5	15.32		ADAMTSL1	8154491	chr9	0.05
UNC5D	8145799	chr8	14.35		ZNF804B	8134018	chr7	0.07
MPP3	8015846	chr17	13.98		C14orf29	7974288	chr14	0.07
RBM24	8117045	chr6	13.69		PAX3	8059301	chr2	0.07
C6orf32	8124280	chr6	12.75		SLITRK6	7972239	chr13	0.07
EPHA6	8081138	chr3	12.63		EPHA7	8128284	chr6	0.08
TMTC2	7957417	chr12	12.44		RASL11B	8095043	chr4	0.08
EOMES	8085946	chr3	11.66		MFAP4	8013341	chr17	0.08
NID2	7979133	chr14	10.92		LRIG3	7964602	chr12	0.10
GLRA2	8166127	chrX	10.86		GABRG3	7982117	chr15	0.10
DIRAS3	7916853	chr1	10.73		NKD1	7995525	chr16	0.10
ZNF804A	8046815	chr2	10.47		PDE11A	8057004	chr2	0.10
GRM8	8142718	chr7	10.44		EMX2	7930857	chr10	0.10
KIAA1727	8097829	chr4	10.12		PCDH21	7928770	chr10	0.11
LOC645323	8113037	chr5	10.01		GPR64	8171624	chrX	0.11
SLC6A3	8110821	chr5	9.62		MGC21644	8114845	chr5	0.11
GPR12	7970691	chr13	9.14		SOSTDC1	8138363	chr7	0.12
KCNA1	7953274	chr12	9.11		SERPINF1	8003667	chr17	0.12
TRPC5	8174556	chrX	9.00		NA	8102210	chr4	0.12
RGS7BP	8105596	chr5	8.99		ROBO2	8081001	chr3	0.13
ISLR2	7984802	chr15	8.70		ALK	8051241	chr2	0.14
CNTN1	7954899	chr12	8.65		GALNT14	8051298	chr2	0.14
KRT222P	8015049	chr17	7.89		APOL4	8075709	chr22	0.14
CHL1	8077270	chr3	7.68		GALNT12	8156770	chr9	0.14
PAR4	7982052	chr15	7.67		C9orf94	8154512	chr9	0.14
CAP2	8117054	chr6	7.59		CNGA3	8043782	chr2	0.14
KIAA1239	8094542	chr4	7.46		MEIS1	8042356	chr2	0.15
LEMD1	7923772	chr1	7.46		TNFRSF19	7968015	chr13	0.15
CPNE4	8090690	chr3	7.27		GLT25D2	7922807	chr1	0.15
DYNC111	8134384	chr7	7.18		AMHR2	7955797	chr12	0.15
C14orf39	7979483	chr14	7.18		TMEM51	7898115	chr1	0.16
FAM70A	8174767	chrX	7.09		NA	8081107	chr3	0.16
GRM1	8122537	chr6	7.09		TNFRSF11B	8152512	chr8	0.17
TES	8135576	chr7	6.99		CLYBL	7969815	chr13	0.17
OAS1	7958860	chr12	6.94		BOC	8081686	chr3	0.18
KHDRBS2	8127370	chr6	6.87		NBLA00301	8098344	chr4	0.18
TMEM132B	7959807	chr12	6.58		CRYZ	7917037	chr1	0.19
PROKR2	8064859	chr20	6.58		PRPH	7955184	chr12	0.19
EPHB1	8082846	chr3	6.57		LEF1	8102232	chr4	0.19
LRRN6C	8160546	chr9	6.57		MGC45800	8103853	chr4	0.19
KCNA5	7953278	chr12	6.54		NA	8147687	chr8	0.20
ARPP-21	8078497	chr3	6.50		C9orf3	8156569	chr9	0.20
FBXL21	8108205	chr5	6.46		ANGPTL2	8164200	chr9	0.20

Cluster D

BNC2	8160260	chr9	6.42
TFAP2D	8120184	chr6	6.21
PTHLH	7962000	chr12	6.19
NA	7982094	chr15	6.18
CDH6	8104663	chr5	6.18
KCNC2	7964987	chr12	6.14
PTCHD2	7897691	chr1	6.13
MAB21L1	7970949	chr13	6.05
CADPS2	8142585	chr7	6.02
PTPN5	7947076	chr11	5.97
FLJ30594	8040073	chr2	5.84
RSPO2	8152314	chr8	5.75
NA	7982072	chr15	5.73
ST18	8150722	chr8	5.68
ERBB4	8058627	chr2	5.63
PCDH17	7969330	chr13	5.54
CYSLTR2	7969050	chr13	5.46
CART1	7957452	chr12	5.43
NXPH1	8131506	chr7	5.41
ZNF238	7911038	chr1	5.33
EDIL3	8112980	chr5	5.31
NA	7982070	chr15	5.30
KIAA1598	7936529	chr10	5.26
ABCG2	8101675	chr4	5.26
P2RY14	8091511	chr3	5.18
RGS5	7921916	chr1	5.17
LHX5	7966631	chr12	5.16
KLHL13	8174654	chrX	5.16
LHX4	7907849	chr1	5.14
D4S234E	8093839	chr4	5.12
SH3GL3	7985507	chr15	5.09
BARHL1	8158912	chr9	5.06
ASPN	8162394	chr9	5.03
CD200	8081657	chr3	5.02
AKR1C2	7931832	chr10	4.91
ASTN2	8163678	chr9	4.88
PTPRO	7954143	chr12	4.84
NA	7982056	chr15	4.83
ZNF679	8133042	chr7	4.80
CHN2	8132013	chr7	4.79
NA	8180376	---	4.78
SYCP1	7904168	chr1	4.77
NNAT	8062395	chr20	4.72
LGI1	7929373	chr10	4.70
C12orf5	7953211	chr12	4.70
NA	8174594	chrX	4.65
ARHGAP15	8045563	chr2	4.60
RASGRP1	7987405	chr15	4.58
ENC1	8112615	chr5	4.58
ZBTB38	8083090	chr3	4.57
DIPAS	8163672	chr9	4.56

AKAP6	7973850	chr14	0.20
MMP2	7995681	chr16	0.20
HK2	8042942	chr2	0.20
GPC6	7969613	chr13	0.21
ARMC4	7932744	chr10	0.21
CCDC109B	8096808	chr4	0.21
TFAP2A	8123864	chr6	0.21
FSTL4	8114119	chr5	0.21
TOM1L1	8008547	chr17	0.21
ROR2	8162283	chr9	0.22
TMEM45A	8081288	chr3	0.22
IFT57	8089314	chr3	0.22
NRCAM	8142270	chr7	0.23
SP5	8046276	chr2	0.23
RNF43	8016994	chr17	0.23
CPNE6	7973510	chr14	0.23
LHX8	7902353	chr1	0.24
NAV2	7938834	chr11	0.24
GPR56	7996081	chr16	0.24
CPS1	8048026	chr2	0.25
NA	7917050	chr1	0.25
PMAIP1	8021470	chr18	0.25
PCSK1	8113234	chr5	0.26
LOC126147	8038139	chr19	0.26
OCA2	7986838	chr15	0.27
OSR2	8147573	chr8	0.27
MAP2K6	8009476	chr17	0.27
CXCR4	8055465	chr2	0.27
ADAM19	8115490	chr5	0.27
NA	8014158	chr17	0.27
PDIA5	8082133	chr3	0.28
FLJ14712	8138258	chr7	0.28
SNORD49B	8005200	chr17	0.28
EPHA4	8059279	chr2	0.28
TSPAN18	7939559	chr11	0.28
GLDC	8160024	chr9	0.28
ATP8A1	8100026	chr4	0.28
NA	8056730	chr2	0.29
KREMEN1	8072170	chr22	0.29
MYO7A	7942717	chr11	0.29
FZD7	8047487	chr2	0.29
FLNC	8135990	chr7	0.29
GRIK2	8121225	chr6	0.30
NA	7896137	---	0.30
C1orf126	7912638	chr1	0.30
ROR1	7901969	chr1	0.30
NA	7896705	---	0.30
SLC35D3	8122256	chr6	0.30
MYO3B	8046238	chr2	0.30
TMEM176A	8137264	chr7	0.31
NA	7973873	chr14	0.31

Cluster D

PDE4B	7902104	chr1	4.54
FRY	7968417	chr13	4.47
LMX1A	7921936	chr1	4.47
MAPT	8007828	chr17	4.45
SEMA3A	8140668	chr7	4.43
CACNA2D1	8140579	chr7	4.42
TBR1	8045962	chr2	4.42
HBII-52	7982084	chr15	4.41
NRN1	8123739	chr6	4.40
RNF152	8023598	chr18	4.36
MYT1L	8050031	chr2	4.35
HDAC9	8131631	chr7	4.35
HTR2C	8169447	chrX	4.34
DDX31	8164742	chr9	4.32
RPIB9	8133961	chr7	4.31
TM4SF18	8091402	chr3	4.28
FREM3	8102986	chr4	4.26
SH3BP5	8085556	chr3	4.26
RNF180	8105585	chr5	4.26
TNIK	8092095	chr3	4.25
NA	7982090	chr15	4.24
TLL1	8098214	chr4	4.23
DBC1	8163716	chr9	4.21
GPR116	8126798	chr6	4.21
MEIS2	7987385	chr15	4.19
GRIA2	8098021	chr4	4.18
SPOCK1	8114287	chr5	4.17
TOX	8150962	chr8	4.16
SEMA3C	8140534	chr7	4.14
ANGPT2	8149071	chr8	4.13
PLXNA2	7923991	chr1	4.12
ENPEP	8096875	chr4	4.10
ELMOD1	7943562	chr11	4.08
ANKS1B	7965686	chr12	4.06
NA	7982082	chr15	4.01
MYRIP	8078933	chr3	4.00
ITM2A	8173755	chrX	3.99
ESRRG	7924309	chr1	3.98
HPCA	7899841	chr1	3.97
RGS7	7925457	chr1	3.97
SLC8A1	8051762	chr2	3.96
NRXN3	7976012	chr14	3.96
LPL	8144917	chr8	3.95
CLGN	8102877	chr4	3.92
FAM19A2	7964631	chr12	3.92
HLF	8008588	chr17	3.92
DPYSL5	8040725	chr2	3.91
NA	8144569	chr8	3.90
NETO2	8001197	chr16	3.89
DPP6	8137485	chr7	3.88
KCNK1	7910611	chr1	3.88

MAF	8002969	chr16	0.31
RUNX2	8120043	chr6	0.31
VRK2	8042086	chr2	0.31
PDZRN3	8088848	chr3	0.31
POU3F2	8121209	chr6	0.32
NA	7893657	---	0.32
FBXO17	8036676	chr19	0.32
C11orf70	7943387	chr11	0.32
CGI-38	8002020	chr16	0.32
MFNG	8075924	chr22	0.33
SNORA71C	8066260	chr20	0.33
STK33	7946365	chr11	0.33
DMRT2	8154047	chr9	0.33
ZIC2	7969830	chr13	0.33
NA	7896689	---	0.34
GLI2	8044933	chr2	0.34
DLL3	8028719	chr19	0.34
PDGFRA	8095080	chr4	0.34
FBXL7	8104592	chr5	0.34
CCBE1	8023575	chr18	0.34
LOC729890	8138277	chr7	0.34
TMEM123	7951207	chr11	0.34
DKFZp686O2	7938702	chr11	0.34
NA	8060895	chr20	0.34
PCK2	7973530	chr14	0.34
RPLP0-like	8109750	chr5	0.34
CYP39A1	8126770	chr6	0.34
SERPIND1	8071420	chr22	0.35
KCNJ5	7945146	chr11	0.35
GALNT7	8098328	chr4	0.35
SYK	8156321	chr9	0.35
IGSF11	8089729	chr3	0.35
RSPO1	7915032	chr1	0.36
MTHFD2	8042830	chr2	0.36
NA	7893091	---	0.36
NA	8180318	---	0.36
NA	8180317	---	0.36
HSD17B14	8038213	chr19	0.36
NA	8180319	---	0.36
FKBP10	8007154	chr17	0.36
MIPOL1	7973985	chr14	0.36
CDCA7L	8138489	chr7	0.36
NA	8180316	---	0.37
LAPTM4B	8147503	chr8	0.37
RAVER2	7902023	chr1	0.37
FZD10	7959850	chr12	0.37
PDIA2	7991815	chr16	0.37
NA	7895808	---	0.37
EBF2	8149865	chr8	0.37
TOP1MT	8153390	chr8	0.37
KCTD14	7950641	chr11	0.37

Cluster D

NA	8078956	chr3	3.88
LHX1	8006681	chr17	3.86
RPGRIP1	7973185	chr14	3.85
FHL5	8121181	chr6	3.84
PSD3	8149551	chr8	3.84
NA	8173621	chrX	3.82
NOSTRIN	8046099	chr2	3.81
GCNT4	8112668	chr5	3.81
ABCB1	8140782	chr7	3.81
DNM3	7907370	chr1	3.81
ABCC9	7961710	chr12	3.80
GFRA2	8149629	chr8	3.79
DFNA5	8138602	chr7	3.76
TMEM108	8082767	chr3	3.73
PTGER2	7974366	chr14	3.73
SYT13	7947590	chr11	3.72
NA	7982020	chr15	3.70
MYT1	8064277	chr20	3.70
SCN3B	7952350	chr11	3.69
EVI1	8091972	chr3	3.69
GUCY1B3	8097973	chr4	3.67
B3GAT1	7952884	chr11	3.67
TRPC3	8102678	chr4	3.66
SGIP1	7902127	chr1	3.66
TSPAN2	7918857	chr1	3.64
NA	8092765	chr3	3.59
POTE8	8146307	chr8	3.57
LHX2	8157751	chr9	3.57
C8orf72	8146533	chr8	3.57
PDE1C	8138888	chr7	3.56
MTSS1	8152764	chr8	3.56
MEPE	8096290	chr4	3.54
PKIA	8147012	chr8	3.54
LOC653653	8017210	chr17	3.52
FABP7	8121784	chr6	3.51
NUDT4	7957536	chr12	3.48
AGTR1	8083240	chr3	3.48
LOC728505	8089036	chr3	3.45
NA	7982068	chr15	3.45
MGC42105	8105146	chr5	3.45
SGK	8129677	chr6	3.44
NA	7982040	chr15	3.43
NA	7982042	chr15	3.43
NA	7982044	chr15	3.43
PDE2A	7950162	chr11	3.43
TMEM16D	7957861	chr12	3.41
PRL	8124185	chr6	3.40
GRM3	8133904	chr7	3.40
CACNG2	8075820	chr22	3.39
H2AFJ	7954124	chr12	3.39
MID2	8169249	chrX	3.38

HSD11B2	7996563	chr16	0.37
ABCC4	7972297	chr13	0.38
NA	7896133	---	0.38
ACTC1	7987315	chr15	0.38
TMEM176B	8143790	chr7	0.38
CCDC98	8101489	chr4	0.38
GLI3	8139212	chr7	0.38
GPR63	8128316	chr6	0.38
FAM26B	7936100	chr10	0.38
DHRS4	7973448	chr14	0.38
NA	8171758	chrX	0.39
SCYE1	8096718	chr4	0.39
NA	7996569	chr16	0.39
LRRTM1	8053349	chr2	0.39
GRIN2A	7999364	chr16	0.39
HAND2	8103745	chr4	0.39
NA	7894978	---	0.39
NA	7894119	---	0.39
NA	8180284	---	0.39
CECR2	8071086	chr22	0.39
RPL22L1	8092067	chr3	0.40
CACNA2D4	7960283	chr12	0.40
CXCR7	8049471	chr2	0.40
FLJ35776	8019954	chr18	0.40
PAICS	8095221	chr4	0.40
NA	8121142	chr6	0.40
NEFH	8072229	chr22	0.40
SNORA71A	8066258	chr20	0.40
NA	7892643	---	0.40
PAPSS1	8102214	chr4	0.41
NA	8102212	chr4	0.41
GALM	8041542	chr2	0.41
TP53	8012257	chr17	0.41
PDGFA	8137670	chr7	0.41
P2RXL1	8071489	chr22	0.41
TGIF2	8062319	chr20	0.41
SIPA1L2	7925062	chr1	0.41
NA	7892778	---	0.41
ZNRF3	8072160	chr22	0.41
NA	8180283	---	0.41
C6orf123	8130811	chr6	0.42
NA	7894376	---	0.42
DC2	8096771	chr4	0.42
NA	7894732	---	0.42
SNORD60	7998722	chr16	0.42
RGR	7928789	chr10	0.42
ZIC5	7972567	chr13	0.43
VIM	7926368	chr10	0.43
ARHGAP24	8096160	chr4	0.43
GALNT13	8045776	chr2	0.43
NA	7894513	---	0.43

Cluster D

ZNF154	8039674	chr19	3.35
AMPH	8139131	chr7	3.34
DCX	8174543	chrX	3.33
PDE8B	8106448	chr5	3.32
NUDT4P1	7919193	chr1	3.32
ODZ4	7950701	chr11	3.31
PCDHB15	8108753	chr5	3.31
EPAS1	8041781	chr2	3.31
TNR	7922482	chr1	3.30
PFTK1	8134098	chr7	3.30
CPEB3	7935011	chr10	3.30
TANC2	8009075	chr17	3.30
EBF1	8115543	chr5	3.29
C1orf187	7897737	chr1	3.29
AKR1C3	7925929	chr10	3.28
GFPT2	8116418	chr5	3.28
MAOA	8166925	chrX	3.28
NA	7957431	chr12	3.26
SMPDL3A	8121794	chr6	3.26
CRHR1	8007808	chr17	3.25
ELTD1	7917182	chr1	3.24
GRK5	7930894	chr10	3.24
TEK	8154692	chr9	3.24
DCAMKL1	7970954	chr13	3.24
PYGM	7949124	chr11	3.23
AFF2	8170364	chrX	3.22
PDE7B	8122222	chr6	3.22
ELOVL7	8112274	chr5	3.22
NA	7982066	chr15	3.22
KIAA1713	8020844	chr18	3.21
GNG12	7916843	chr1	3.20
PLCE1	7929388	chr10	3.20
STX7	8129590	chr6	3.19
INPP5F	7930927	chr10	3.18
C14orf108	7974566	chr14	3.18
H-plk	8027332	chr19	3.18
KCNQ5	8120654	chr6	3.17
C8orf46	8146703	chr8	3.16
CDK5R1	8006409	chr17	3.16
NA	8027348	chr19	3.16
CAB39L	7971590	chr13	3.15
SNCA	8101762	chr4	3.15
NA	7907964	chr1	3.15
PTPRZ1	8135774	chr7	3.14
MGAT5	8045349	chr2	3.13
NTF3	7953284	chr12	3.13
AKR1CL2	7925904	chr10	3.12
MAPRE3	8040742	chr2	3.10
HOOK1	7901765	chr1	3.09
FREM1	8160168	chr9	3.08
FSTL5	8103466	chr4	3.08

NA	8009241	chr17	0.43
LOC165186	8041172	chr2	0.43
ATOH8	8043244	chr2	0.43
RPS5	8031933	chr19	0.43
TSPAN17	8110224	chr5	0.43
TAF4B	8020702	chr18	0.43
USP18	8071155	chr22	0.44
DLX3	8016609	chr17	0.44
SHROOM2	8165934	chrX	0.44
AHCY	8065738	chr20	0.44
LOC391539	7939068	chr11	0.44
NA	7895001	---	0.44
FSD1	8024816	chr19	0.44
CAMKK1	8011480	chr17	0.44
KCNH6	8009145	chr17	0.44
C13orf25	7969576	chr13	0.44
NA	7896582	---	0.44
C17orf45	8005191	chr17	0.45
EMILIN3	8066294	chr20	0.45
LIMK1	8133372	chr7	0.45
LOC653677	8030092	chr19	0.45
RPS7	8040036	chr2	0.45
NA	7892530	---	0.45
RPL39	8127526	chr6	0.45
PINX1	8149296	chr8	0.45
NA	7892835	---	0.45
MTMR11	7919669	chr1	0.45
FBL	8036777	chr19	0.45
RD3	7924085	chr1	0.45
RPLP0	7966996	chr12	0.45
ROBO1	8088919	chr3	0.46
SLC25A21	7978692	chr14	0.46
NA	8180234	---	0.46
COL4A5	8169294	chrX	0.46
NA	7895026	---	0.46
NOB1	8002312	chr16	0.46
NA	7895121	---	0.46
CCNB1IP1	7977497	chr14	0.47
IL11RA	8154934	chr9	0.47
LOC130678	8040415	chr2	0.47
LOC400055	7965152	chr12	0.47
SORCS2	8093997	chr4	0.47
PCBP3	8069252	chr21	0.47
NA	8010078	chr17	0.47
RPS19	8029129	chr19	0.47
NA	7892579	---	0.47
AOX1	8047300	chr2	0.47
C20orf199	8063337	chr20	0.47
NA	7896446	---	0.47
SNORA64	7998666	chr16	0.47
SNORA73A	7899480	chr1	0.47

Cluster D

PAP2D	7917946	chr1	3.08
SLC16A7	7956658	chr12	3.07
GPR23	8168517	chrX	3.07
KIAA0319	8124240	chr6	3.06
GEM	8151816	chr8	3.06
EML5	7980636	chr14	3.06
C3orf58	8083223	chr3	3.04
KCNK2	7909730	chr1	3.04
RASGRP3	8041422	chr2	3.04
KCNJ2	8009502	chr17	3.03
YPEL2	8008819	chr17	3.03
FAM101A	7959761	chr12	3.03
DPYSL3	8114920	chr5	3.02
SYT6	7918716	chr1	3.02
PDZD4	8175860	chrX	3.02
RND2	8007454	chr17	3.00
ACCN2	7955317	chr12	3.00
MARK1	7909841	chr1	3.00
ARID5B	7927732	chr10	2.99
NCAM2	8067985	chr21	2.99
NAP1L2	8173600	chrX	2.99
SNX16	8151572	chr8	2.99
ANKRD30B	8020357	chr18	2.97
SVOP	7966172	chr12	2.97
CEP170	7925525	chr1	2.97
GDPD1	8008802	chr17	2.96
ZNF91	8035842	chr19	2.96
TMEM163	8055350	chr2	2.96
NA	7895103	---	2.96
LRRC4	8142765	chr7	2.95
CPEB2	8094169	chr4	2.95
ANKRD44	8057990	chr2	2.94
LRCH2	8174610	chrX	2.93
HERC3	8096385	chr4	2.93
CHGB	8060805	chr20	2.92
LRRC38	7912622	chr1	2.92
SKAP2	8138689	chr7	2.92
BLCAP	8066195	chr20	2.91
IGSF1	8175121	chrX	2.91
TCEAL2	8168892	chrX	2.91
SNORD114-3	7976816	chr14	2.91
LPHN3	8095303	chr4	2.91
RP3-402H5.2	8126853	chr6	2.90
NA	7982088	chr15	2.90
SLC24A2	8160321	chr9	2.90
ZNF659	8085774	chr3	2.89
SEPT3	8073548	chr22	2.89
ZNF117	8139832	chr7	2.89
GNAO1	7995739	chr16	2.89
FLT1	7970763	chr13	2.88
RP11-393H10	8171725	chrX	2.88

TMEM169	8048141	chr2	0.47
NA	7892720	---	0.47
C7orf10	8132439	chr7	0.47
RPL7A	8022972	chr18	0.47
RPL36A	8138361	chr7	0.47
NA	7894722	---	0.48
NA	7894599	---	0.48
SKP2	8104912	chr5	0.48
STEAP3	8044793	chr2	0.48
RPS2	7998655	chr16	0.48
RHOBTB3	8106986	chr5	0.48
STC2	8115851	chr5	0.48
IMPDH2	8087254	chr3	0.48
SNORA68	8026875	chr19	0.48
M6PRBP1	8032909	chr19	0.48
SLC25A37	8145281	chr8	0.48
RHOJ	7910387	chr1	0.48
NA	7892688	---	0.48
THBS3	7920664	chr1	0.49
EPHB4	8141625	chr7	0.49
NOTCH2NL	7904702	chr1	0.49
C1orf57	7910591	chr1	0.49
LOC728015	8005877	chr17	0.49
NA	7894267	---	0.49
NA	7983525	chr15	0.49
NA	7894813	---	0.49
ATIC	8048120	chr2	0.49
GPR180	7969626	chr13	0.49
FLJ38379	8049957	chr2	0.49
JPH1	8151423	chr8	0.49
LOC201181	8015503	chr17	0.49
TST	8075857	chr22	0.49
NA	7896094	---	0.49
KIAA1509	7980828	chr14	0.49
NA	7895787	---	0.49
EEF1B2	8171865	chrX	0.49
NENF	7909603	chr1	0.49
NA	7893420	---	0.49
TNNC1	8087925	chr3	0.49
NA	8180256	---	0.50
SEPT10	8054467	chr2	0.50
NA	7896378	---	0.50
STK3	8151967	chr8	0.50
LOC441632	7954063	chr12	0.50
LRRC21	7934783	chr10	0.50
ADAMTS20	7962384	chr12	0.50
HIST1H4H	8124448	chr6	0.50
RPL29	8087830	chr3	0.50
EFNA4	7905909	chr1	0.50
RPL18A	7958197	chr12	0.50
FOXA1	7978706	chr14	0.51

Cluster D

NA	8039672	chr19	2.88
PPAPDC1A	7930980	chr10	2.87
RREB1	8116740	chr6	2.87
ARRB1	7950473	chr11	2.86
SPAG6	7926622	chr10	2.86
RIMS1	8120613	chr6	2.86
HIP1R	7959500	chr12	2.84
NA	7982010	chr15	2.84
KIAA1576	7997336	chr16	2.84
DACH1	7971950	chr13	2.84
NA	8067944	chr21	2.84
NA	8035793	chr19	2.83
NA	8058662	chr2	2.83
CNTNAP5	8044976	chr2	2.83
HIST1H4F	8117422	chr6	2.83
COVA1	8175102	chrX	2.83
WNK3	8173059	chrX	2.82
NPAS2	8043909	chr2	2.81
PCAF	8078227	chr3	2.81
ADCY1	8132667	chr7	2.81
SLC16A6	8017843	chr17	2.80
FNBP1	8164607	chr9	2.80
FAM62B	8144184	chr7	2.80
RELN	8141950	chr7	2.78
ZNF681	8035855	chr19	2.78
NA	8162998	chr9	2.78
ZNF540	8028266	chr19	2.78
TSHZ1	8021768	chr18	2.77
NSF	8007885	chr17	2.77
C21orf34	8067932	chr21	2.77
ZNF441	8025945	chr19	2.77
ELAVL4	7901342	chr1	2.76
MTUS1	8149500	chr8	2.76
NA	7987403	chr15	2.76
MSRA	8144557	chr8	2.76
NAALAD2	7943051	chr11	2.76
PRKCH	7974835	chr14	2.76
NA	7939237	chr11	2.76
SLC9A6	8170097	chrX	2.76
RAPGEFL1	8007043	chr17	2.75
GABRG2	8109677	chr5	2.75
NA	8180257	---	2.75
PGAP1	8057959	chr2	2.75
FRMD4B	8088745	chr3	2.74
ZFH1B	8055624	chr2	2.73
SEZ6	8013833	chr17	2.73
CERKL	8057480	chr2	2.73
MED12L	8083360	chr3	2.73
PLCL2	8078187	chr3	2.73
BRUNOL4	8022952	chr18	2.73
DPYSL4	7931439	chr10	2.73

NA	7895509	---	0.51
NA	8012906	chr17	0.51
SNORD35A	8030366	chr19	0.51
NA	7922408	chr1	0.51
CREB3L2	8143188	chr7	0.51
SNORD74	7922418	chr1	0.51
ENO3	8004043	chr17	0.51
NA	7892610	---	0.51
NA	7893194	---	0.51
PRDX4	8166455	chrX	0.51
NA	7894774	---	0.51
NA	7893201	---	0.52
RPL10A	8118974	chr6	0.52
OR4Q3	7973004	chr14	0.52
RPS21	8063903	chr20	0.52
RRS1	8146685	chr8	0.52
SPTLC3	8116831	chr6	0.52
RPL26	8012469	chr17	0.52
NA	7895472	---	0.52
SNORA10	7998664	chr16	0.52
YAP1	7943398	chr11	0.52
NFATC4	7973709	chr14	0.52
NA	7895518	---	0.52
CLCN2	8092473	chr3	0.52
DDC	8139640	chr7	0.52
AFMID	8010248	chr17	0.52
EIF3S6	8152323	chr8	0.52
RPL35	8164100	chr9	0.52
EBPL	7971615	chr13	0.52
NA	7894919	---	0.52
NA	7951347	chr11	0.52
NA	7896369	---	0.53
TRIB2	8040365	chr2	0.53
NA	7892919	---	0.53
PRKAR1B	8137675	chr7	0.53
NA	7902787	chr1	0.53
CKS1B	8112327	chr5	0.53
EMP3	8030007	chr19	0.53
RSRC1	8083605	chr3	0.53
BMP2	8060850	chr20	0.53
C14orf121	7973468	chr14	0.53
S100A6	7920258	chr1	0.53
RPS14	8115158	chr5	0.53
NA	7895317	---	0.53
NOTUM	8019334	chr17	0.53
SERPINH1	7942596	chr11	0.53
FAM60A	7962146	chr12	0.53
NA	7893571	---	0.53
GSTP1	7941936	chr11	0.53
HIST1H3H	8117583	chr6	0.53
NA	7895256	---	0.53

Cluster D

TUBB4	8033233	chr19	2.73
VASH2	7909642	chr1	2.73
NR3C2	8103094	chr4	2.72
RIT2	8022976	chr18	2.72
KLRD1	7953949	chr12	2.70
NA	7895331	---	2.70
GRIN3A	8162908	chr9	2.70
NA	7909990	chr1	2.70
TUBB2A	8123644	chr6	2.70
MYCT1	8122860	chr6	2.70
ENTPD1	7929511	chr10	2.69
TRIM48	7939879	chr11	2.68
FLJ44894	8035789	chr19	2.68
CACNB3	7955142	chr12	2.68
SPTAN1	8158317	chr9	2.68
PIP3-E	8130408	chr6	2.68
SHC4	7988563	chr15	2.68
C6orf173	8121911	chr6	2.67
KL	7968556	chr13	2.67
NA	7896754	chr1	2.67
AP1S2	8171481	chrX	2.67
SMOC1	7975390	chr14	2.66
GABARAPL1	7953943	chr12	2.66
PODXL	8142981	chr7	2.66
NPY5R	8098146	chr4	2.66
EGFL11	8127408	chr6	2.64
FRMD5	7988260	chr15	2.64
DLGAP1	8022085	chr18	2.63
NUP93	7995843	chr16	2.63
ZCCHC12	8169598	chrX	2.63
ZNF208	8035819	chr19	2.63
GNG2	7974341	chr14	2.62
NEDD4L	8021376	chr18	2.62
SNN	7993259	chr16	2.61
OGFRL1	8120602	chr6	2.61
APBB2	8099982	chr4	2.61
NA	7893013	---	2.61
FLI1	7945132	chr11	2.61
CNPY1	8144072	chr7	2.60
SYNJ2	8123006	chr6	2.60
HINT3	8121886	chr6	2.60
FNDC5	7914580	chr1	2.60
CACNA1E	7907911	chr1	2.59
ATRNL1	7930714	chr10	2.59
KCNB2	8146908	chr8	2.59
ZNF138	8133057	chr7	2.59
TMEM132E	8006466	chr17	2.58
SNAP91	8127872	chr6	2.58
TMEM35	8168790	chrX	2.58
SOX11	8040070	chr2	2.58
ZNF215	7938183	chr11	2.57

DSCR2	8070330	chr21	0.54
NA	7893340	---	0.54
SNORD45B	7902400	chr1	0.54
SPCS3	8098414	chr4	0.54
NA	7895918	---	0.54
IPO4	7978132	chr14	0.54
NA	7922416	chr1	0.54
PFKM	7955078	chr12	0.54
TGIF	8019939	chr18	0.54
AMPD2	7903719	chr1	0.54
NA	8148325	chr8	0.54
RPS3	7942586	chr11	0.54
NOTCH2	7919095	chr1	0.54
JAM3	7945262	chr11	0.54
SLC25A6	8171111	chrX	0.54
COTL1	8003171	chr16	0.54
NA	7893050	---	0.54
LOC646875	8119159	chr6	0.54
NA	7893344	---	0.54
ALG3	8092457	chr3	0.54
SDC2	8147461	chr8	0.54
SNORA74A	8108420	chr5	0.54
LOC440585	7900635	chr1	0.54
DLEU1	7969171	chr13	0.54
NA	7895776	---	0.54
LOC731487	8093256	chr3	0.54
XBP1	8075182	chr22	0.54
DERA	7954185	chr12	0.54
RPL13	8013109	chr17	0.55
NA	7896434	---	0.55
NA	7893208	---	0.55
GLCCI1	8131496	chr7	0.55
NA	7947421	chr11	0.55
LOC138412	8154727	chr9	0.55
BBX	8081465	chr3	0.55
NA	7895190	---	0.55
HIST1H4B	8124385	chr6	0.55
PECR	8058837	chr2	0.55
CCNJL	8115584	chr5	0.55
CAPN13	8051275	chr2	0.55
RPS18	8089230	chr3	0.55
ZNF90	8027258	chr19	0.55
RPLP1	7984562	chr15	0.55
SUCLG2	8088664	chr3	0.55
GMPPA	8048595	chr2	0.55
NA	7895538	---	0.55
ZNF485	7927173	chr10	0.55
NA	7904572	chr1	0.55
EMID1	8072189	chr22	0.55
LOC283412	8111989	chr5	0.55
NA	7896339	---	0.55

Cluster D

CA4	8008900	chr17	2.57
EPS8	7961546	chr12	2.57
PCDHB7	8108708	chr5	2.57
SSH2	8013965	chr17	2.57
GABRB1	8094901	chr4	2.57
SYN2	8077879	chr3	2.56
NA	7979131	chr14	2.55
ELAVL2	8160459	chr9	2.55
NA	7991562	chr15	2.54
ERC2	8088192	chr3	2.54
ZNF578	8030944	chr19	2.54
DOK6	8021695	chr18	2.54
POU2F1	7907058	chr1	2.54
NQO2	8116610	chr6	2.53
ZNF92	8133089	chr7	2.53
SFXN3	7929919	chr10	2.53
PCLO	8140620	chr7	2.53
SOX4	8117165	chr6	2.52
ZNF678	7910190	chr1	2.52
RND1	7962884	chr12	2.52
CITED2	8129937	chr6	2.51
DOCK4	8142345	chr7	2.51
SAMD3	8129482	chr6	2.51
SLC44A2	8025672	chr19	2.51
TMOD2	7983734	chr15	2.51
RSN	7967255	chr12	2.51
CIB2	7990674	chr15	2.51
DCBLD2	8089082	chr3	2.50
NA	8180238	---	2.50
LIN28B	8121251	chr6	2.50
CD24	8177222	chrY	2.49
ITSN1	8068305	chr21	2.49
MAPK9	8116402	chr5	2.49
KLHL5	8094625	chr4	2.49
EGFR	8132860	chr7	2.49
RNF157	8018652	chr17	2.48
ZNF462	8157105	chr9	2.48
NA	7894949	---	2.48
NA	7982026	chr15	2.48
SLC16A14	8059642	chr2	2.48
NAP1L3	8173917	chrX	2.48
SNRK	8079140	chr3	2.48
NTRK2	8156134	chr9	2.48
MGC34829	8016033	chr17	2.48
MGC26356	8093332	chr4	2.48
TRIM9	7979108	chr14	2.48
RALGPS1	8157949	chr9	2.47
MAGI3	7904106	chr1	2.47
PHLDA1	7965040	chr12	2.47
AHI1	8129728	chr6	2.47
A2M	7960947	chr12	2.47

EVC	8093878	chr4	0.55
NA	7894858	---	0.55
C9orf123	8160036	chr9	0.55
LAP3	8094259	chr4	0.55
UBE2E2	8078252	chr3	0.55
NA	7894076	---	0.55
NA	7893133	---	0.55
NA	7892953	---	0.55
NA	8180398	---	0.55
NA	8180287	---	0.55
E2F7	7965094	chr12	0.55
NA	7894306	---	0.56
TRIP6	8134981	chr7	0.56
NA	8142536	chr7	0.56
SNRPD2	8037642	chr19	0.56
NA	7895677	---	0.56
THG1L	8109576	chr5	0.56
GLTSCR2	7986323	chr15	0.56
NA	7896349	---	0.56
CD63	7963911	chr12	0.56
REXO2	7944011	chr11	0.56
RPL7	8109222	chr5	0.56
NA	7895419	---	0.56
WDR12	8058373	chr2	0.56
IL20RA	8129837	chr6	0.56
NA	7893792	---	0.56
NA	8173613	chrX	0.56
MTAP	8154635	chr9	0.56
KIAA1754	7936242	chr10	0.56
CKS2	8156290	chr9	0.56
LOX	8113709	chr5	0.56
SNORD44	7922410	chr1	0.56
ACP6	7919326	chr1	0.56
LOC401397	8142431	chr7	0.57
HSPC111	8115907	chr5	0.57
CLN6	7989975	chr15	0.57
TCERG1L	7937059	chr10	0.57
NA	7895349	---	0.57
LOC729742	8063473	chr20	0.57
DBI	8044804	chr2	0.57
NA	7893298	---	0.57
RPL12	8047635	chr2	0.57
HEATR2	8131000	chr7	0.57
ECEL1	8059748	chr2	0.57
TYW3	7902345	chr1	0.57
CRTAP	8078450	chr3	0.57
QARS	8087283	chr3	0.57
TEAD1	7938544	chr11	0.57
COL2A1	7962703	chr12	0.57
NA	8180355	---	0.57
RPL8	8153903	chr8	0.57

Cluster D

PPM1D	8008922	chr17	2.47
SLAIN1	7969533	chr13	2.47
CACNA2D2	8087691	chr3	2.47
THRA	8007008	chr17	2.47
PCDHB8	8108713	chr5	2.46
KLHL2	8098177	chr4	2.46
NA	7895211	---	2.45
KCNE4	8048749	chr2	2.45
MAGI2	8140504	chr7	2.45
FBXO28	7909992	chr1	2.45
ANKRD22	7934898	chr10	2.45
DLG5	7934615	chr10	2.44
COCH	7973797	chr14	2.44
LOC619208	8121547	chr6	2.43
NAPB	8065372	chr20	2.43
APLP1	8028084	chr19	2.43
KRAS	7961865	chr12	2.43
GPR137C	7974372	chr14	2.42
RNF182	8116980	chr6	2.42
MAPRE2	8020878	chr18	2.42
PPM1L	8083749	chr3	2.42
SCRN1	8138824	chr7	2.42
MFSD2	7900365	chr1	2.42
NA	8040077	chr2	2.41
HN1	8018305	chr17	2.41
SLC37A1	8068810	chr21	2.41
MCC	8113551	chr5	2.41
SIX6	7974793	chr14	2.41
PTBP2	7903188	chr1	2.41
OR2L2	7911252	chr1	2.41
ZNF96	8124574	chr6	2.40
CHST1	7947599	chr11	2.40
MGC24039	7962151	chr12	2.40
SPARCL1	8101659	chr4	2.40
LOC220594	8005689	chr17	2.40
DNM1	8158183	chr9	2.40
RNF144	8040090	chr2	2.40
CACNG3	7994152	chr16	2.39
NAB1	8047086	chr2	2.39
DGKE	8008629	chr17	2.39
JPH3	7997746	chr16	2.39
AKR1C1	7925918	chr10	2.39
SYNE1	8130211	chr6	2.39
AKT3	7925531	chr1	2.39
EFCAB5	8006085	chr17	2.38
USP32	8017212	chr17	2.38
WSB2	7966829	chr12	2.38
GPRASP1	8168968	chrX	2.38
NA	7895300	---	2.38
C6orf62	8124273	chr6	2.37
NAP5	8055323	chr2	2.37

NA	7895937	---	0.57
NA	7895947	---	0.57
BDH1	8093219	chr3	0.57
NA	7894982	---	0.57
NTN1	8004880	chr17	0.57
RAB13	7963986	chr12	0.57
DYRK3	7909225	chr1	0.57
LOC731362	7916022	chr1	0.58
NA	7896174	---	0.58
RPS27A	7908407	chr1	0.58
ASMTL	8171119	chrX	0.58
RP11-535K18	8175369	chrX	0.58
LOC645161	8065254	chr20	0.58
NA	7896604	---	0.58
STAP2	8032789	chr19	0.58
RPL36	8157139	chr9	0.58
NIP7	7996934	chr16	0.58
NA	8180407	---	0.58
NA	8157800	chr9	0.58
NA	7951349	chr11	0.58
SRD5A2L	8095139	chr4	0.58
NA	7895921	---	0.58
NA	7894496	---	0.58
SNHG3-RCC	7899462	chr1	0.58
LOC133308	8102050	chr4	0.58
SNORD45C	7902396	chr1	0.58
FLJ30934	7941408	chr11	0.58
SLC25A22	7945539	chr11	0.58
EVC2	8099144	chr4	0.58
LOC126235	8036029	chr19	0.58
NA	8180404	---	0.58
CDC34	8023968	chr19	0.58
NA	7896054	---	0.58
NA	7895682	---	0.58
SNORD96A	8116530	chr5	0.58
KIAA1305	7973727	chr14	0.58
LOC728509	8061184	chr20	0.58
RCL1	8154163	chr9	0.58
SLC16A1	7918622	chr1	0.58
FLJ10916	8043393	chr2	0.59
LOC401911	8086148	chr3	0.59
TRAPPC6A	8037505	chr19	0.59
DMRTA1	8154656	chr9	0.59
NA	8180408	---	0.59
NTRK1	7906244	chr1	0.59
FAM13A1	8101728	chr4	0.59
RPS6P1	7954061	chr12	0.59
NA	7895225	---	0.59
RPS17	7990916	chr15	0.59
NA	7895996	---	0.59
LOC389435	8130403	chr6	0.59

Cluster D

NA	8146326	chr8	2.37
SASH1	8122637	chr6	2.37
ZNF204	8124498	chr6	2.36
TEX2	8017582	chr17	2.36
GRAMD3	8107673	chr5	2.36
RAB23	8127346	chr6	2.36
GPR155	8056837	chr2	2.36
NFIB	8160138	chr9	2.35
NA	7895301	---	2.35
SLIT1	7935361	chr10	2.35
SNX14	8127943	chr6	2.34
FLJ35379	7969472	chr13	2.34
FAM5B	7907601	chr1	2.34
GABBR2	8162777	chr9	2.34
PRPH2	8126436	chr6	2.33
GUCY1A3	8097957	chr4	2.33
ERC1	7952988	chr12	2.33
JAG1	8064978	chr20	2.32
KCNIP2	7935930	chr10	2.32
MLLT11	7905329	chr1	2.32
MLLT3	8160332	chr9	2.32
NA	7896727	---	2.32
ZCCHC16	8169432	chrX	2.31
ULK2	8013399	chr17	2.31
CYP4X1	7901272	chr1	2.31
DLG2	7950764	chr11	2.31
NTN4	7965573	chr12	2.31
NA	7893325	---	2.31
NA	7893594	---	2.31
SESN3	7951077	chr11	2.31
TCP11L2	7958262	chr12	2.31
SYT16	7974882	chr14	2.31
ARHGAP23	8006779	chr17	2.30
NA	7894341	---	2.30
APOLD1	7954055	chr12	2.30
LSAMP	8089714	chr3	2.30
PTPRG	8080810	chr3	2.30
NCOA7	8121861	chr6	2.30
LONRF2	8054281	chr2	2.30
C15orf51	7986527	chr15	2.29
LOC729197	7986509	chr15	2.29
KCNA6	7953264	chr12	2.29
TUBB2B	8123651	chr6	2.29
RP1-303F19.1	8127391	chr6	2.28
CDYL2	8002975	chr16	2.28
C21orf109	8068100	chr21	2.28
NA	7956269	chr12	2.28
B4GALNT1	7964484	chr12	2.28
PRKCB1	7994131	chr16	2.28
GADD45G	8156309	chr9	2.28
CACNA2D3	8080578	chr3	2.27

NA	8002379	chr16	0.59
PNMT	8006900	chr17	0.59
CRB2	8157731	chr9	0.59
MGC26647	8140852	chr7	0.59
RXRA	8159127	chr9	0.59
NA	7895780	---	0.59
NA	7957530	chr12	0.59
SNORA5A	8139482	chr7	0.59
NA	7892776	---	0.59
DNPEP	8059222	chr2	0.59
HTATIP2	7938880	chr11	0.59
NA	7895376	---	0.60
RXFP3	8104781	chr5	0.60
OBSL1	8059249	chr2	0.60
CKM	8037525	chr19	0.60
NA	7892687	---	0.60
FLJ38773	8065758	chr20	0.60
SLC29A2	7949619	chr11	0.60
FRAG1	7937892	chr11	0.60
SNORA25	7951008	chr11	0.60
NA	8002027	chr16	0.60
FYCO1	8086572	chr3	0.60
RIMBP2	7967660	chr12	0.60
NA	7895656	---	0.60
RPL3L	7998643	chr16	0.60
GABRQ	8170538	chrX	0.60
RPL27A	7938286	chr11	0.60
MYOZ1	7934434	chr10	0.60
LOC731365	8126450	chr6	0.60
NA	7892576	---	0.60
GPX7	7901460	chr1	0.60
TRMT1	8034615	chr19	0.60
LOC643981	7988031	chr15	0.60
NA	7895221	---	0.60
MARVELD1	7929689	chr10	0.60
LOC441876	7898276	chr1	0.60
SDK1	8131205	chr7	0.60
CDCA3	7960702	chr12	0.60
TLK1	8056734	chr2	0.60
THYN1	7952869	chr11	0.60
NA	7892680	---	0.60
C6orf108	8126524	chr6	0.60
JUB	7977854	chr14	0.61
PROK1	7903884	chr1	0.61
HMG20B	8024660	chr19	0.61
NA	8180409	---	0.61
NA	7894744	---	0.61
NA	7892831	---	0.61
C19orf48	8038624	chr19	0.61
CCDC8	8037762	chr19	0.61
NUP210L	7920422	chr1	0.61

Cluster D

FLRT1	7940851	chr11	2.27
MAP2	8047926	chr2	2.27
NOL4	8022856	chr18	2.27
FLJ20160	8047078	chr2	2.27
PPM1E	8008768	chr17	2.27
HOMER1	8112841	chr5	2.27
WBP11	7961489	chr12	2.27
AKAP9	8134122	chr7	2.26
CAMK2N1	7913237	chr1	2.26
GPR21	8157727	chr9	2.26
KCNN1	8026900	chr19	2.26
ANKRD13A	7958600	chr12	2.25
SYNE2	7974920	chr14	2.25
PDE10A	8130674	chr6	2.25
SLC12A5	8063129	chr20	2.25
NGFRAP1L1	8174141	chrX	2.24
TSPAN13	8131600	chr7	2.24
NA	8058660	chr2	2.24
GNPTAB	7965812	chr12	2.24
C6orf65	8120362	chr6	2.24
SERINC1	8129317	chr6	2.24
DTX1	7958931	chr12	2.24
DKFZP686A07	8094789	chr4	2.23
STX12	7899361	chr1	2.23
NA	7893776	---	2.23
OR2L8	7911241	chr1	2.23
ZNF311	8124622	chr6	2.23
SCN1A	8056457	chr2	2.23
NA	7982054	chr15	2.23
PRKY	8171182	chrX	2.23
C6orf85	8123658	chr6	2.23
C8orf70	8147019	chr8	2.23
KALRN	8082165	chr3	2.22
TP53BP2	7924526	chr1	2.22
PCDHB18	8108749	chr5	2.22
NA	8058668	chr2	2.22
AACS	7959786	chr12	2.22
ZNF99	8035836	chr19	2.22
RPIP8	8007607	chr17	2.22
ZNF682	8035782	chr19	2.22
LOC51136	8017162	chr17	2.22
NA	7892529	---	2.21
TMEFF1	8156905	chr9	2.21
RTN1	7979455	chr14	2.21
NA	7982022	chr15	2.21
C6orf168	8128371	chr6	2.21
WDR47	7918275	chr1	2.21
SYTL4	8173955	chrX	2.21
NR4A2	8055952	chr2	2.21
ARHGAP26	8108873	chr5	2.20
ZNF763	8025978	chr19	2.20

TGDS	7972269	chr13	0.61
LDHB	7961693	chr12	0.61
APRT	8003401	chr16	0.61
ST3GAL4	7945110	chr11	0.61
NA	7894536	---	0.61
LOC391655	7902448	chr1	0.61
RPS25	7952129	chr11	0.61
LOC440733	7925128	chr1	0.61
NA	7895112	---	0.61
NA	7894971	---	0.61
CABP5	8037962	chr19	0.61
GNB2L1	8116520	chr5	0.61
NA	8020453	chr18	0.61
NA	7981976	chr15	0.61
NA	7896554	---	0.61
GRASP	7955578	chr12	0.61
SNORD21	7903022	chr1	0.61
NA	7895674	---	0.61
RPS12	8122136	chr6	0.61
TIMM50	8028705	chr19	0.61
LOC646903	8083318	chr3	0.62
RPSA	8078905	chr3	0.62
GOLPH4	8091954	chr3	0.62
NA	7894990	---	0.62
RPS8	7901038	chr1	0.62
IL28RA	7913776	chr1	0.62
RPL24	8089249	chr3	0.62
NA	7896663	---	0.62
CDC25B	8060675	chr20	0.62
LOC730722	7901357	chr1	0.62
RPS6	8160308	chr9	0.62
QTRTD1	8081786	chr3	0.62
C9orf11	8160511	chr9	0.62
NA	7896236	---	0.62
SNORD46	7901048	chr1	0.62
RFXANK	8027139	chr19	0.62
ADI1	8050071	chr2	0.62
NA	7892868	---	0.62
STT3A	7944991	chr11	0.62
HSPC152	7949075	chr11	0.62
PRMT1	8030437	chr19	0.62
RPS15	8024299	chr19	0.62
PVR	8029437	chr19	0.62
MKRN3	7981911	chr15	0.62
NA	7895939	---	0.62
TMEM39A	8089759	chr3	0.63
BCAT2	8038202	chr19	0.63
HDLBP	8060225	chr2	0.63
CMTM3	7996318	chr16	0.63
SCARNA12	7960728	chr12	0.63
ETFB	8038792	chr19	0.63

Cluster D

RAPGEF4	8046428	chr2	2.20
GPHN	7975167	chr14	2.20
DSCAML1	7951928	chr11	2.20
RASAL2	7907611	chr1	2.20
KIF3A	8114030	chr5	2.20
DLC1	8149413	chr8	2.20
MEG3	7976795	chr14	2.20
MYB	8122202	chr6	2.19
DAPK1	8156199	chr9	2.19
DLL1	8130939	chr6	2.19
NA	8104607	chr5	2.19
TMOD1	8156706	chr9	2.19
SNORD114-2	7976814	chr14	2.19
BRUNOL5	8024605	chr19	2.19
C20orf194	8064637	chr20	2.18
ZNF273	8133062	chr7	2.18
NA	8089723	chr3	2.18
ANKRD12	8020068	chr18	2.18
KIAA0513	7997662	chr16	2.18
FLJ37464	7996377	chr16	2.18
LRRC37B	8006336	chr17	2.18
C11orf41	7939215	chr11	2.18
ATP1B1	7907160	chr1	2.17
PTP4A1	8120431	chr6	2.17
RASSF8	7954469	chr12	2.17
RAB3IP	7957072	chr12	2.17
STMN2	8147030	chr8	2.17
ADD3	7930380	chr10	2.17
LPHN1	8034783	chr19	2.17
USP49	8126347	chr6	2.17
PCDHB4	8108693	chr5	2.17
FAM36A	7911085	chr1	2.17
FAM33A	8157691	chr9	2.16
MMP24	8062123	chr20	2.16
C14orf37	7979400	chr14	2.16
KIDINS220	8050128	chr2	2.16
GNAL	8020164	chr18	2.16
ARHGEF12	7944560	chr11	2.16
NA	7896406	---	2.16
ST6GAL1	8084717	chr3	2.16
NA	8137050	chr7	2.16
NA	7894156	---	2.16
ASRGL1	7940643	chr11	2.16
DNAJA4	7985147	chr15	2.16
TRIM59	8091757	chr3	2.16
RYBP	8088820	chr3	2.15
ABC1	8017186	chr17	2.15
WDR60	8137639	chr7	2.15
CASD1	8134318	chr7	2.15
ZNF680	8139820	chr7	2.15
SDCCAG8	7911017	chr1	2.15

NA	7894634	---	0.63
NA	7896561	---	0.63
CHD1L	7904883	chr1	0.63
MVP	7994659	chr16	0.63
NA	7895119	---	0.63
RPL17	7903582	chr1	0.63
SNORA56	8170992	chrX	0.63
PTBP1	8024019	chr19	0.63
C1orf88	7903959	chr1	0.63
ALKBH2	7966183	chr12	0.63
LOC387825	7960357	chr12	0.63
HSPD1	8058052	chr2	0.63
GRIN2C	8018220	chr17	0.63
REEP4	8149673	chr8	0.63
ARMET	8080084	chr3	0.63
NA	7894897	---	0.63
TIMM13	8032484	chr19	0.63
RPS29	8084945	chr3	0.64
SNORD15A	7942592	chr11	0.64
NA	8052141	chr2	0.64
RPL30	8151935	chr8	0.64
FAM62A	7956166	chr12	0.64
RPL18	8038086	chr19	0.64
NA	7895770	---	0.64
NA	7893738	---	0.64
EXOSC5	8037023	chr19	0.64
ANKDD1A	7984227	chr15	0.64
HIBADH	8138776	chr7	0.64
NA	7895170	---	0.64
SLC2A10	8063177	chr20	0.64
NA	7895964	---	0.64
KDELRL1	8038078	chr19	0.64
NA	7894737	---	0.64
SHC1	7920600	chr1	0.64
NA	8170013	chrX	0.64
TXNRD1	7958174	chr12	0.64
METTL1	7964548	chr12	0.64
RPS28	7942824	chr11	0.64
LOC401974	8024001	chr19	0.64
C14orf65	7981266	chr14	0.64
NA	7896371	---	0.64
RPSAP10	8173912	chrX	0.64
RPL11	7898875	chr1	0.64
HADH	8096753	chr4	0.64
RABGGTB	7902382	chr1	0.64
RPS15A	7999827	chr16	0.64
MGC27348	8131869	chr7	0.64
NA	7896025	---	0.64
KARS	8002919	chr16	0.64
ADSL	8073242	chr22	0.65
PLEKHG4	7996516	chr16	0.65

Cluster D

ZNF493	8027304	chr19	2.15
ACTL6B	8141580	chr7	2.15
FBNP1L	7903092	chr1	2.15
PEX5L	8092277	chr3	2.14
CLSTN2	8083034	chr3	2.14
UCHL1	8094778	chr4	2.14
NA	7894670	---	2.14
C1orf215	7913864	chr1	2.14
NA	8055639	chr2	2.14
NA	8127393	chr6	2.14
NA	7982012	chr15	2.14
WDR44	8169519	chrX	2.14
EPHA5	8100578	chr4	2.13
C21orf55	8070097	chr21	2.13
NA	8034326	chr19	2.13
NLK	8005814	chr17	2.13
NA	8174596	chrX	2.13
NA	8114006	chr5	2.13
GTF3C4	8158918	chr9	2.12
C6orf192	8129649	chr6	2.12
RAB9B	8174271	chrX	2.12
ANKRD45	7922382	chr1	2.12
NDRG2	7977621	chr14	2.12
BAI3	8120468	chr6	2.12
APBA1	8161618	chr9	2.12
TM6SF1	7985493	chr15	2.12
PRKG2	8101284	chr4	2.11
KIAA1737	7975926	chr14	2.11
PRKAR2B	8135378	chr7	2.11
IFIH1	8056303	chr2	2.11
C14orf4	7980338	chr14	2.11
CAMK2B	8139330	chr7	2.11
LOC347273	8156919	chr9	2.11
DUSP1	8115831	chr5	2.11
AP1GBP1	8014551	chr17	2.10
INPP1	8047069	chr2	2.10
DMC1	8076094	chr22	2.10
FAM80B	7953765	chr12	2.10
EXOC6B	8052956	chr2	2.10
GOLGA8A	7987248	chr15	2.10
LOC653483	8130817	chr6	2.10
MYO6	8120783	chr6	2.10
NA	7892647	---	2.10
ZNF43	8035813	chr19	2.10
TBC1D9	8102912	chr4	2.10
PLSCR4	8091306	chr3	2.09
SOCS7	8006768	chr17	2.09
KIAA1543	8025237	chr19	2.09
B4GALT6	8022747	chr18	2.09
NA	8062284	chr20	2.09
MYBL1	8151101	chr8	2.09

C10orf41	7928531	chr10	0.65
NA	7896621	---	0.65
ERF	8037166	chr19	0.65
ARSI	8115144	chr5	0.65
QTRT1	8025728	chr19	0.65
SNORA5C	8139484	chr7	0.65
NA	7893248	---	0.65
DPAGT1	7952185	chr11	0.65
UGDH	8099897	chr4	0.65
TTLL12	8076569	chr22	0.65
MLPH	8049487	chr2	0.65
NA	7893958	---	0.65
SCLY	8049582	chr2	0.65
GNL2	7915015	chr1	0.65
SNORD55	7901046	chr1	0.65
FANCG	8160968	chr9	0.65
NA	7895038	---	0.65
NA	7895264	---	0.65
NA	7894125	---	0.65
NA	8061364	chr20	0.65
SSR4	8170775	chrX	0.65
TMEM18	8049998	chr2	0.65
RPL15	8116929	chr6	0.65
NA	7894289	---	0.65
NA	7894019	---	0.65
NA	8165888	chrX	0.65
NA	8075691	chr22	0.66
DPP7	8165438	chr9	0.66
RPL35A	8085026	chr3	0.66
NA	7893769	---	0.66
GSDMDC1	8148642	chr8	0.66
NA	8112666	chr5	0.66
C7orf24	8138857	chr7	0.66
NA	7918900	chr1	0.66
NA	7894740	---	0.66
BCL2L12	8030429	chr19	0.66
NA	7894485	---	0.66
NA	7896170	---	0.66
MRPL11	7949637	chr11	0.66
NA	8105432	chr5	0.66
SNORD43	8076223	chr22	0.66
C11orf10	7948606	chr11	0.66
LRP16	7949033	chr11	0.66
LRP5	7942007	chr11	0.66
DPH2	7900911	chr1	0.66
DHODH	7997179	chr16	0.66
ZNF581	8031522	chr19	0.66
LOC389203	8094456	chr4	0.66
NA	7893299	---	0.66
TFAP4	7999102	chr16	0.66
MIPEP	7970577	chr13	0.66

Cluster D

LGR4	7947199	chr11	2.09
RPL39L	8092654	chr3	2.09
MAPK8	7927389	chr10	2.09
GPR30	8131069	chr7	2.08
EDN1	8116921	chr6	2.08
RASSF4	7927186	chr10	2.08
NA	7895255	---	2.08
VIPR2	8144213	chr7	2.08
ROGDI	7999217	chr16	2.08
PSCD3	8138067	chr7	2.08
PELI2	7974533	chr14	2.08
C4orf34	8099912	chr4	2.08
NA	8016412	chr17	2.08
SPTBN2	7949679	chr11	2.08
NA	8127107	chr6	2.08
NA	7895611	---	2.07
KIF13A	8124088	chr6	2.07
C6orf134	8117965	chr6	2.07
NA	7892590	---	2.07
DOPEY1	8120883	chr6	2.07
C12orf51	7966517	chr12	2.07
KIF1B	7897561	chr1	2.07
TNNI3K	7902317	chr1	2.06
GOLGA8B	7987279	chr15	2.06
EPB41L1	8062251	chr20	2.06
NA	7914878	chr1	2.06
SPOCK2	7934215	chr10	2.06
KLF12	7972003	chr13	2.06
ANK3	7933772	chr10	2.06
CXorf6	8170420	chrX	2.06
ATP2B3	8170671	chrX	2.06
CDH12	8111234	chr5	2.06
SPIRE1	8022356	chr18	2.06
C9orf52	8160213	chr9	2.05
FGF13	8175444	chrX	2.05
RAB6B	8090803	chr3	2.05
NA	7895452	---	2.05
SPON1	7938608	chr11	2.05
C6orf165	8121015	chr6	2.05
LOC644353	8169083	chrX	2.05
STXBP1	8158059	chr9	2.05
ZNF435	8117640	chr6	2.05
FBXL10	7967175	chr12	2.05
GPD2	8045816	chr2	2.05
KIAA1450	8098103	chr4	2.04
ELOVL2	8123920	chr6	2.04
OXR1	8147848	chr8	2.04
NA	7894815	---	2.04
LOC134466	8115205	chr5	2.04
NA	7896167	---	2.04
RAPH1	8058390	chr2	2.04

ADRA2A	7930482	chr10	0.66
EIF3S9	8131111	chr7	0.66
NA	7893382	---	0.66
C7orf44	8139244	chr7	0.66
RPS16	8036737	chr19	0.66
ALG8	7950654	chr11	0.66
LOC391462	8046500	chr2	0.66
CDCP1	8086517	chr3	0.66
SMO	8136080	chr7	0.67
HIBCH	8057719	chr2	0.67
KLF16	8032365	chr19	0.67
PLEKHQ1	7984217	chr15	0.67
PITX2	8102352	chr4	0.67
GNL3	8080419	chr3	0.67
MAPKAPK2	7909236	chr1	0.67
NFKB2	7930074	chr10	0.67
NA	7896276	---	0.67
C19orf10	8032863	chr19	0.67
NA	7892941	---	0.67
MPST	8072777	chr22	0.67
NA	7956908	chr12	0.67
NTSR1	8063942	chr20	0.67
CACNG5	8009326	chr17	0.67
CCDC86	7940349	chr11	0.67
NA	7894974	---	0.67
RPL21	7968226	chr13	0.67
SARS2	8036656	chr19	0.67
NA	7894174	---	0.67
NA	7976061	chr14	0.67
PUS1	7959986	chr12	0.67
FLJ36070	8038150	chr19	0.67
GOLPH3L	7919780	chr1	0.67
NOP17	8038382	chr19	0.67
AGA	8103834	chr4	0.67
HM13	8061542	chr20	0.67
DKC1	8170971	chrX	0.67
NA	7892650	---	0.67
TSPO	8073612	chr22	0.67
NT5DC3	7965918	chr12	0.67
EIF2S3	8166493	chrX	0.68
NA	7892853	---	0.68
NA	8157802	chr9	0.68
LOC119358	7929114	chr10	0.68
RARS	8109802	chr5	0.68
LECT1	7971838	chr13	0.68
ZAK	8046461	chr2	0.68
AVEN	7987165	chr15	0.68
LGTN	7923889	chr1	0.68
LOC391698	8097443	chr4	0.68
SYNGR4	8030015	chr19	0.68
NA	7901856	chr1	0.68

Cluster D

TMEM23	7933619	chr10	2.04
PRKACB	7902594	chr1	2.04
VAMP4	7922309	chr1	2.04
ZNF675	8035847	chr19	2.03
CXXC5	8108447	chr5	2.03
ELMO2	8066716	chr20	2.03
TUBE1	8128977	chr6	2.03
MMD	8016832	chr17	2.03
NA	7893690	---	2.03
TSPYL5	8151931	chr8	2.03
P2RY12	8091530	chr3	2.03
MBOAT5	7960730	chr12	2.02
ZNF583	8031640	chr19	2.02
ZNF442	8034379	chr19	2.02
FLJ23834	8135341	chr7	2.02
EEA1	7965436	chr12	2.02
SMAD1	8097657	chr4	2.02
HRASLS	8084838	chr3	2.02
SMAP1L	7900426	chr1	2.02
FLJ30092	7966488	chr12	2.01
ODZ1	8174937	chrX	2.01
ACHE	8141648	chr7	2.01
CUGBP2	7926127	chr10	2.01
PUNC	7989770	chr15	2.01
SPAST	8041236	chr2	2.01
LPPR2	8025877	chr19	2.01
ZNF714	8027285	chr19	2.01
IFNGR1	8129861	chr6	2.01
NA	7896191	---	2.01
ME3	7950864	chr11	2.00
DCBLD1	8121685	chr6	2.00
IGSF4B	7906417	chr1	2.00
LOC401778	7974895	chr14	2.00
ADAMTSL3	7985522	chr15	2.00
NA	8180344	---	2.00
ATXN1	8124040	chr6	2.00
CBX1	8173206	chrX	2.00
NA	8180264	---	2.00
LOC201229	8013567	chr17	2.00
SEPT6	8174692	chrX	2.00
C6orf89	8119109	chr6	2.00
FHOD3	8020973	chr18	2.00
TJP2	8155707	chr9	1.99
NA	7993110	chr16	1.99
TMSL8	8174189	chrX	1.99
MBL1P1	7928661	chr10	1.99
LOC126917	7912994	chr1	1.99
NA	8131441	chr7	1.99
TMEM30A	8127637	chr6	1.99
VIL2	8130505	chr6	1.99
NA	8180253	---	1.99

LOC127545	7899849	chr1	0.68
NA	8153041	chr8	0.68
WBSCR27	8140144	chr7	0.68
NPM3	7935903	chr10	0.68
DDOST	7913256	chr1	0.68
NA	7928556	chr10	0.68
TRIM14	8162729	chr9	0.68
IRF3	8038416	chr19	0.68
FBP2	8162492	chr9	0.68
PCOTH	7968029	chr13	0.68
RPL13A	8030351	chr19	0.68
PCID1	7939137	chr11	0.68
NA	8056039	chr2	0.68
CKLF	7996290	chr16	0.68
NA	7893100	---	0.69
RNF7	8083119	chr3	0.69
NA	8139242	chr7	0.69
CDK4	7964522	chr12	0.69
APEX2	8167854	chrX	0.69
DNALI1	7900157	chr1	0.69
TCF3	8032290	chr19	0.69
CABP4	7941917	chr11	0.69
GRWD1	8030035	chr19	0.69
POLR3D	8145085	chr8	0.69
NA	7978710	chr14	0.69
EIF3S5	8042107	chr2	0.69
TPI1	7953508	chr12	0.69
NASP	7901110	chr1	0.69
WDR74	7948881	chr11	0.69
ACAA2	8023261	chr18	0.69
RHBDF2	8018731	chr17	0.69
AKR7A2	7913156	chr1	0.69
KCNK12	8052018	chr2	0.69
RPL3	8076209	chr22	0.69
MGC4655	8001932	chr16	0.69
LOC146439	7998910	chr16	0.69
IL17RC	8077688	chr3	0.69
TMEM161A	8035600	chr19	0.69
NA	7895663	---	0.69
CHRAC1	8148467	chr8	0.69
LASS2	7919856	chr1	0.69
C21orf56	8070953	chr21	0.69
NA	7909525	chr1	0.69
LOC133748	8106530	chr5	0.69
NA	7895254	---	0.70
NA	7895845	---	0.70
ERCC1	8037579	chr19	0.70
RASL10B	8006562	chr17	0.70
NA	7893259	---	0.70
LOC648771	8062681	chr20	0.70
NA	7893413	---	0.70

Cluster D

NA	7893752	---	1.99
SYNJ1	8070010	chr21	1.99
NA	7894313	---	1.99
NAP1L5	8101723	chr4	1.99
HAPLN1	8112971	chr5	1.99
NA	8163710	chr9	1.98
TBC1D12	7929424	chr10	1.98
NA	7893784	---	1.98
DYX1C1	7989037	chr15	1.98
BTBD9	8126121	chr6	1.98
CNKSR2	8166355	chrX	1.98
ZNF415	8039044	chr19	1.98
NA	7906433	chr1	1.98
GRM2	8080128	chr3	1.98
ZNF443	8034393	chr19	1.98
ABHD2	7985809	chr15	1.98
FTS	8001410	chr16	1.98
ZYG11B	7901479	chr1	1.97
CAMTA1	7897339	chr1	1.97
TIAM1	8069880	chr21	1.97
CD59	7947425	chr11	1.97
C2orf27	7968577	chr13	1.97
ZNF433	8034320	chr19	1.97
NA	8104723	chr5	1.97
STARD13	7970924	chr13	1.97
SNORD113-4	7976812	chr14	1.97
ALDH5A1	8117207	chr6	1.97
RASGRP2	7949104	chr11	1.97
MYO5A	7988921	chr15	1.96
NA	8067942	chr21	1.96
ZNF429	8027312	chr19	1.96
THY1	7952268	chr11	1.96
TEX14	8017061	chr17	1.96
IDS	8175593	chrX	1.96
ITFG1	8001211	chr16	1.96
MGC61571	8078312	chr3	1.96
KIF3C	8050894	chr2	1.96
KIAA0195	8009796	chr17	1.96
NIPSNAP3B	8157027	chr9	1.95
KIF21B	7923233	chr1	1.95
GPLD1	8124211	chr6	1.95
DCAMKL3	8086120	chr3	1.95
ZNF25	7933105	chr10	1.95
SYDE2	7917322	chr1	1.95
NA	8111201	chr5	1.95
EIF4E3	8088803	chr3	1.95
H3F3B	8018439	chr17	1.95
SEC14L1	8010139	chr17	1.95
RAB3A	8035398	chr19	1.95
PTEN	7928959	chr10	1.94
XKR4	8146475	chr8	1.94

CCDC58	8089988	chr3	0.70
C9orf23	8160835	chr9	0.70
METTTL7B	7956009	chr12	0.70
SERTAD3	8036908	chr19	0.70
PHB2	7960716	chr12	0.70
MATN3	8050507	chr2	0.70
PODNL1	8034712	chr19	0.70
NA	7892900	---	0.70
NA	7894526	---	0.70
RPL37A	8048195	chr2	0.70
SEC11A	7991143	chr15	0.70
FUT4	7943236	chr11	0.70
NA	7963739	chr12	0.70
C11orf67	7942783	chr11	0.70
RPS4X	8173513	chrX	0.70
NA	8121559	chr6	0.70
RPA4	8168723	chrX	0.70
APEX1	7973056	chr14	0.70
NA	7893707	---	0.71
NA	7945728	chr11	0.71
NA	7892574	---	0.71
NA	7893603	---	0.71
LOC645412	8037535	chr19	0.71
NA	8102743	chr4	0.71
C5orf35	8105456	chr5	0.71
NA	7980889	chr14	0.71
NA	8161476	chr9	0.71
TP53I13	8006052	chr17	0.71
CHPF	8059244	chr2	0.71
NA	7995308	chr16	0.71
FLJ42393	8084739	chr3	0.71
LOC440567	7912670	chr1	0.71
NA	7896036	---	0.71
NA	7919160	chr1	0.71
NA	7919166	chr1	0.71
EIF3S4	8033899	chr19	0.71
RPL14	7956743	chr12	0.71
NA	7893773	---	0.71
NA	7892820	---	0.71
DIMT1L	8112312	chr5	0.71
MRPL32	8132458	chr7	0.71
VIL1	8048304	chr2	0.71
NA	7893262	---	0.71
TMEM148	7997676	chr16	0.71
PSMA2	8139232	chr7	0.71
RPL9	8171834	chrX	0.71
NA	7959249	chr12	0.71
NA	7969975	chr13	0.72
AMMECR1	8174496	chrX	0.72
NA	8013919	chr17	0.72
HHAT	7909510	chr1	0.72

Cluster D

SEMA4G	7929882	chr10	1.94
DUSP3	8015835	chr17	1.94
STX1B2	8000963	chr16	1.94
EPB41L2	8129497	chr6	1.94
SHD	8024808	chr19	1.94
TTC13	7925003	chr1	1.94
KBTBD9	8040490	chr2	1.93
C3orf34	8093145	chr3	1.93
RP5-1022P6.2	8064868	chr20	1.93
RGS2	7908409	chr1	1.93
NA	7896372	---	1.93
DSCR1L1	8126760	chr6	1.93
BASP1	8104601	chr5	1.93
KIAA1279	7927955	chr10	1.93
C16orf45	7993458	chr16	1.93
TNRC4	7920027	chr1	1.93
NA	7892837	---	1.93
DPY19L2	8138988	chr7	1.93
MAST1	8026063	chr19	1.93
NA	7893703	---	1.93
IBTK	8127787	chr6	1.93
RAPGEF2	8098121	chr4	1.92
C15orf27	7985066	chr15	1.92
CCND2	7953200	chr12	1.92
MAPK13	8119016	chr6	1.92
CORO2B	7984475	chr15	1.92
NA	7893822	---	1.92
FCHSD2	7950248	chr11	1.92
NFIX	8026139	chr19	1.92
FBN3	8033487	chr19	1.92
ATP2B2	8085311	chr3	1.92
EXPH5	7951545	chr11	1.91
TTYH2	8009568	chr17	1.91
KIAA1841	8042168	chr2	1.91
SBK1	7994345	chr16	1.91
KIAA0773	8143564	chr7	1.91
PIP5K2B	8014723	chr17	1.91
NA	7894873	---	1.91
RBM9	8075673	chr22	1.91
C12orf60	7954132	chr12	1.91
TJP1	7986977	chr15	1.91
BTN2A1	8117485	chr6	1.91
RUFY2	7933999	chr10	1.91
CHD5	7911941	chr1	1.91
WDR7	8021312	chr18	1.91
CBARA1	7934255	chr10	1.91
BAIAP2	8010562	chr17	1.91
GNAQ	8161906	chr9	1.91
TLE2	8032553	chr19	1.90
RNF146	8121927	chr6	1.90
SMAP1	8120585	chr6	1.90

MTX2	8046573	chr2	0.72
RPL34	7908635	chr1	0.72
HESX1	8088285	chr3	0.72
LOC644338	7951660	chr11	0.72
RPS27	8079019	chr3	0.72
RNF183	8163485	chr9	0.72
NA	7892977	---	0.72
MDFIC	8135568	chr7	0.72
NA	8142466	chr7	0.72
ONECUT1	7988987	chr15	0.72
RPS9	8031152	chr19	0.72
NA	7892935	---	0.72
FAM20C	8130993	chr7	0.72
KCNH2	8143825	chr7	0.72
NA	7894114	---	0.72
NA	7934838	chr10	0.72
MYOD1	7938730	chr11	0.72
NA	7905054	chr1	0.72
FAM119B	7956631	chr12	0.72
GCSH	8114778	chr5	0.72
DPM3	7920633	chr1	0.72
LOC442426	7908591	chr1	0.72
NA	7976156	chr14	0.72
SSR2	7920903	chr1	0.72
ZNF511	7931561	chr10	0.72
CLNS1A	7950597	chr11	0.72
RPL32	8085407	chr3	0.72
NA	7896362	---	0.72
SNX5	8065165	chr20	0.73
HMBS	7944401	chr11	0.73
ATPBD3	8038782	chr19	0.73
DDX28	8002211	chr16	0.73
NA	8149705	chr8	0.73
SLC19A1	8070912	chr21	0.73
C16orf46	8002992	chr16	0.73
C20orf27	8064739	chr20	0.73
MGC40574	8041640	chr2	0.73
NA	7893058	---	0.73
PPA2	8102141	chr4	0.73
HSPC171	7996490	chr16	0.73
NA	7892907	---	0.73
POLR2I	8036276	chr19	0.73
NUDT13	7928342	chr10	0.73
NA	7894043	---	0.73
TNIP2	8099029	chr4	0.73
MMACHC	7901102	chr1	0.73
SIX5	8037651	chr19	0.73
NA	8057613	chr2	0.73
CD320	8033554	chr19	0.73
CSNK2A2	8001666	chr16	0.73
NA	7894849	---	0.73

Cluster D

LRRC62	8075921	chr22	1.90
SPTBN1	8041995	chr2	1.90
TGFB3	7980316	chr14	1.90
FLJ36166	8141882	chr7	1.90
RGL2	8125687	chr6	1.90
PLCD1	8086185	chr3	1.90
FHL1	8170119	chrX	1.89
EIF2C4	7900009	chr1	1.89
OR2L13	7911237	chr1	1.89
SESTD1	8057394	chr2	1.89
NA	7895453	---	1.89
ZFP14	8036304	chr19	1.89
TSPYL4	8129089	chr6	1.89
ERV3	8139840	chr7	1.89
MACF1	7900235	chr1	1.89
TAOK1	8006030	chr17	1.89
FBXL20	8014825	chr17	1.89
NA	7894208	---	1.89
NA	8083227	chr3	1.88
NA	7896206	---	1.88
WBP2	8018482	chr17	1.88
GPR34	8166906	chrX	1.88
USP22	8013486	chr17	1.88
GNAZ	8071671	chr22	1.88
SPRY3	8171034	chrX	1.88
HECA	8122343	chr6	1.88
TRIM37	8017106	chr17	1.88
LOC727966	8127399	chr6	1.88
PPP3CB	7934393	chr10	1.88
LOC730924	7903414	chr1	1.88
AMN1	7962185	chr12	1.88
NA	8135585	chr7	1.88
LOC643837	7896759	chr1	1.88
SGCZ	8149438	chr8	1.88
STOX2	8098549	chr4	1.87
ZNF528	8030931	chr19	1.87
RFTN1	8085665	chr3	1.87
HDGFRP3	7991070	chr15	1.87
NA	7892620	---	1.87
NA	7894608	---	1.87
C1orf201	7913787	chr1	1.87
RNGTT	8128052	chr6	1.87
C6orf55	8122348	chr6	1.87
FLJ14959	8025984	chr19	1.87
H2AFY2	7928107	chr10	1.87
NA	8102936	chr4	1.87
NA	7895069	---	1.87
EFNB1	8168045	chrX	1.87
NA	7907960	chr1	1.87
NA	7895913	---	1.87
MPPED1	8073623	chr22	1.87

NA	7893564	---	0.73
GENX-3414	8095826	chr4	0.73
LOC646294	7980140	chr14	0.73
TSEN34	8031145	chr19	0.74
HINT1	8113873	chr5	0.74
LOC728453	8133273	chr7	0.74
KIF7	7991296	chr15	0.74
COL9A3	8063970	chr20	0.74
LOC440934	8048712	chr2	0.74
NA	7961889	chr12	0.74
NA	8159531	chr9	0.74
XKR5	8149086	chr8	0.74
SCUBE1	8076586	chr22	0.74
ESPNL	8049598	chr2	0.74
NA	8091043	chr3	0.74
CCT8	8069753	chr21	0.74
RIN1	7949592	chr11	0.74
TFF3	8070567	chr21	0.74
METRNL	7992038	chr16	0.74
NA	7906753	chr1	0.74
KLHDC4	8003283	chr16	0.74
NA	7975987	chr14	0.74
NOLA1	8096821	chr4	0.74
FXYD3	8027748	chr19	0.75
MUCDHL	7945475	chr11	0.75
PABPC4	7915207	chr1	0.75
GALNT4	7965357	chr12	0.75
AKT1S1	8038477	chr19	0.75
LOC344462	8013042	chr17	0.75
YARS2	7962203	chr12	0.75
QPCTL	8029744	chr19	0.75
NA	7906898	chr1	0.75
LOC729662	7912762	chr1	0.75
LOC492303	7917593	chr1	0.75
LMO1	7946354	chr11	0.75
NFKBIB	8028552	chr19	0.75
ZC3H12A	7900146	chr1	0.75
CCDC9	8029894	chr19	0.75
MRPL51	7960553	chr12	0.75
NA	7978831	chr14	0.75
HNRPA1L-2	7951589	chr11	0.75
NA	7957611	chr12	0.75
GREB1	8040292	chr2	0.75
AURKAIP1	8039923	chr1_randd	0.75
NA	8072796	chr22	0.76
NA	7895481	---	0.76
CDKN1C	7945767	chr11	0.76
SRCRB4D	8140403	chr7	0.76
HBXIP	7918437	chr1	0.76
NA	7895393	---	0.76
NA	7895626	---	0.76

Cluster D

PAK3	8169389	chrX	1.87
TLE1	8161919	chr9	1.87
C14orf132	7976556	chr14	1.87
PCTK2	7965652	chr12	1.87
C9orf72	8160531	chr9	1.87
NA	7893445	---	1.87
ZNF570	8028248	chr19	1.86
LIN7C	7947221	chr11	1.86
MAP1LC3A	8062023	chr20	1.86
NA	8180310	---	1.86
LOC727913	8170390	chrX	1.86
NA	7895930	---	1.86
C14orf24	7973918	chr14	1.86
FGF12	8092750	chr3	1.86
GIT2	7966268	chr12	1.86
C9orf58	8158771	chr9	1.86
IL13RA2	8174598	chrX	1.86
NA	7912884	chr1	1.86
NA	7898350	chr1	1.86
UNQ9217	8106626	chr5	1.86
TMEM63C	7975932	chr14	1.86
NA	8013622	chr17	1.86
ZNF709	8034395	chr19	1.86
KLF11	8040211	chr2	1.86
YPEL1	8074780	chr22	1.86
ZNF724P	8035838	chr19	1.85
SEC61A2	7926189	chr10	1.85
GNAI1	8133860	chr7	1.85
LOC728029	8022424	chr18	1.85
SLIT3	8115691	chr5	1.85
RABEP1	8004111	chr17	1.85
NA	7982060	chr15	1.85
FXYD6	7951977	chr11	1.85
AES	8032576	chr19	1.85
ATXN7L3	8015955	chr17	1.85
PCDHB13	8108737	chr5	1.85
ACOX1	8018558	chr17	1.84
LONRF1	8149399	chr8	1.84
NA	7893296	---	1.84
TSC22D3	8174361	chrX	1.84
WNK2	8156415	chr9	1.84
RANBP17	8109938	chr5	1.84
NPY1R	8103494	chr4	1.84
PKNOX1	8068866	chr21	1.84
DCHS1	7946245	chr11	1.84
LMBRD1	8127425	chr6	1.84
NDRG3	8066051	chr20	1.84
ICK	8127094	chr6	1.84
SCG3	7983718	chr15	1.84
CLIC2	8176234	chrX	1.84
NA	8180224	---	1.84

IFRD2	8087576	chr3	0.76
AGTRAP	7897745	chr1	0.76
NA	8081105	chr3	0.76
FGF18	8109981	chr5	0.76
GPR150	8106976	chr5	0.76
PHGDHL1	7969776	chr13	0.76
MGC99813	8048628	chr2	0.76
C21orf70	8069174	chr21	0.76
EMG1	7953594	chr12	0.76
C20orf59	8064014	chr20	0.76
C1QL4	7963061	chr12	0.76
NA	7893238	---	0.76
SNORD83A	8076221	chr22	0.76
LOC348180	7997810	chr16	0.76
COL23A1	8116195	chr5	0.76
NA	8137802	chr7	0.76
NA	7896148	---	0.76
NA	8083144	chr3	0.76
NA	8112178	chr5	0.77
NA	7894469	---	0.77
NA	7997372	chr16	0.77
NA	8124606	chr6	0.77
LOC645231	8054477	chr2	0.77
NA	7896227	---	0.77
LOC400214	7979351	chr14	0.77
SCT	7945498	chr11	0.77
UNG2	8112072	chr5	0.77
CLDND2	8038804	chr19	0.77
GALNS	8003410	chr16	0.77
FLT3LG	8030339	chr19	0.77
LOC388796	8066247	chr20	0.77
WVOX	7997352	chr16	0.77
C21orf84	8070681	chr21	0.77
MLNR	7969093	chr13	0.77
SNX8	8137833	chr7	0.78
NA	8030846	chr19	0.78
SSB	8046201	chr2	0.78
SALL4	8067087	chr20	0.78
NA	8151707	chr8	0.78
AFARP1	7904084	chr1	0.78
NA	7906969	chr1	0.78
BTF3	8106181	chr5	0.78
NKPD1	8037502	chr19	0.78
D21S2056E	8068938	chr21	0.78
NA	7892773	---	0.78
MORN1	7911701	chr1	0.78
NA	8152117	chr8	0.78
HSCB	8072143	chr22	0.78
DLX4	8008228	chr17	0.78
OTOF	8050942	chr2	0.78
NA	7907051	chr1	0.78

Cluster D

C17orf41	8006187	chr17	1.84
NA	7895081	---	1.84
NA	8117663	chr6	1.84
NA	7982086	chr15	1.84
MMP15	7996185	chr16	1.84
MEIS3P1	8005132	chr17	1.83
GPC2	8141466	chr7	1.83
C6orf162	8121002	chr6	1.83
STK17B	8057887	chr2	1.83
NECAP1	7953715	chr12	1.83
LRRCC1	8147079	chr8	1.83
CKB	7981427	chr14	1.83
TAOK3	7966851	chr12	1.83
NA	8131867	chr7	1.83
RASA2	8083094	chr3	1.83
APRIN	7968516	chr13	1.83
ZNF300	8115196	chr5	1.83
PHCA	7942679	chr11	1.83
SNIP	8014679	chr17	1.83
KCTD13	8000738	chr16	1.83
NA	8180265	---	1.83
NA	8180236	---	1.83
KIAA1324L	8140709	chr7	1.83
CPE	8098204	chr4	1.83
ST3GAL6	8081219	chr3	1.83
YWHAH	8072577	chr22	1.83
NUDT3	8125825	chr6	1.83
ZNF713	8132917	chr7	1.83
PLEKHM1	8016245	chr17	1.83
IDH3A	7985134	chr15	1.83
STRBP	8164013	chr9	1.83
LOC401720	7963328	chr12	1.83
NA	8007990	chr17	1.83
VAMP2	8012376	chr17	1.83
ADCY5	8090070	chr3	1.83
CDH13	7997504	chr16	1.82
C4orf33	8097435	chr4	1.82
NA	7895247	---	1.82
KIAA1344	7979158	chr14	1.82
ATP1A1	7904254	chr1	1.82
KPNA5	8121632	chr6	1.82
NA	7893171	---	1.82
PHACTR1	8116932	chr6	1.82
MLLT4	8123407	chr6	1.82
NA	7982074	chr15	1.82
PSD2	8108453	chr5	1.82
AGTPBP1	8162086	chr9	1.82
TRIO	8104506	chr5	1.82
ATP9A	8067055	chr20	1.82
LOC730571	8025933	chr19	1.82
C6orf182	8121392	chr6	1.82

NA	8132209	chr7	0.78
NA	8019177	chr17	0.78
AVPR1B	7909155	chr1	0.78
CD3EAP	8029688	chr19	0.78
LOC391358	8050906	chr2	0.79
NA	8161745	chr9	0.79
C1orf93	7897119	chr1	0.79
C16orf74	8003210	chr16	0.79
COL8A2	7914880	chr1	0.79
SPRYD4	7956257	chr12	0.79
NA	8055305	chr2	0.79
NA	8112437	chr5	0.79
NYX	8166899	chrX	0.79
RAB11FIP1	8150225	chr8	0.79
SLC25A3	7957746	chr12	0.79
NA	7916743	chr1	0.79
TNMD	8168737	chrX	0.79
ADAM8	7937150	chr10	0.79
NA	8122742	chr6	0.79
NA	8041638	chr2	0.79
NA	8169465	chrX	0.80
THAP8	8036270	chr19	0.80
F7	7970232	chr13	0.80
UNQ830	8049239	chr2	0.80
LOC729842	8014485	chr17	0.80
CXorf9	8169859	chrX	0.80
SNFT	7924166	chr1	0.80
NA	7894324	---	0.80
VWA1	7896929	chr1	0.80
NA	7916341	chr1	0.80
AMPD1	7918794	chr1	0.80
NA	7893090	---	0.81
PSMA1	7946728	chr11	0.81
NA	7954697	chr12	0.81
SMAD6	7984353	chr15	0.81
C21orf57	8069340	chr21	0.81
OR6Q1	7940108	chr11	0.81
PARS2	7916422	chr1	0.81
LIME1	8064168	chr20	0.82
MRGPRE	7945859	chr11	0.82
MSX2P	8008716	chr17	0.82
NA	7909813	chr1	0.82
NA	8159917	chr9	0.82
BCDIN3	8134821	chr7	0.82
P2RY11	8025563	chr19	0.83
SOLH	7991877	chr16	0.83
NA	7992067	chr16	0.83
PLA2G2F	7898616	chr1	0.83
LOC643275	7963203	chr12	0.84
LOC554248	8133752	chr7	0.84
C12orf59	7953936	chr12	0.84

Cluster D

ANKIB1	8134180	chr7	1.82
BCAS3	8008933	chr17	1.81
EPHA8	7898773	chr1	1.81
LRRK2	7954810	chr12	1.81
FBXO9	8120251	chr6	1.81
NA	8180262	---	1.81
ZNF35	8079217	chr3	1.81
EXOC6	7929288	chr10	1.81
ARRDC3	8113073	chr5	1.81
NA	7893143	---	1.81
PDE9A	8068833	chr21	1.81
C12orf35	7954711	chr12	1.81
NA	7930917	chr10	1.81
FMN2	7910923	chr1	1.81
RWDD2	8120927	chr6	1.81
CPNE2	7995976	chr16	1.81
DCD	7963826	chr12	1.80
GLT1D1	7959834	chr12	1.80
NRXN1	8052091	chr2	1.80
MYCBP2	7972069	chr13	1.80
FLJ10120	8007919	chr17	1.80
SLC35A1	8121031	chr6	1.80
RSHL3	8121622	chr6	1.80
RAB18	7926836	chr10	1.80
FBXO2	7912473	chr1	1.80
TBC1D22B	8119169	chr6	1.80
PHF12	8013812	chr17	1.80
KIAA0701	7965723	chr12	1.80
STXBP5	8122600	chr6	1.80
HSF2	8121757	chr6	1.80
DSCR1	8070182	chr21	1.80
NA	7893523	---	1.80
MRAS	8082965	chr3	1.80
C12orf22	7963235	chr12	1.79
KIAA1467	7954077	chr12	1.79
NFIL3	8162276	chr9	1.79
DTNB	8050846	chr2	1.79
C21orf51	8068375	chr21	1.79
TIAF1	8013860	chr17	1.79
DNAJB5	8154962	chr9	1.79
NA	8025301	chr19	1.79
USP33	7917120	chr1	1.79
NA	7981317	chr14	1.79
PARD3	7933010	chr10	1.79
IL33	8154295	chr9	1.79
ZNF595	8093320	chr4	1.79
TRIM2	8097841	chr4	1.79
DDAH2	8178590	chr6_cox	1.79
SYNC1	7914557	chr1	1.79
NA	8106278	chr5	1.79
CCDC23	7915468	chr1	1.79

LRRK8E	8025347	chr19	0.86
--------	---------	-------	------

Cluster D

ZNF184	8124502	chr6	1.79
NF1	8006239	chr17	1.79
TMEM178	8041570	chr2	1.79
PPP2R3A	8082869	chr3	1.78
SPIN	8156263	chr9	1.78
ARL8A	7923394	chr1	1.78
NA	7990269	chr15	1.78
PLEKHK1	7933855	chr10	1.78
THRAP1	8017312	chr17	1.78
MEIS3	8005695	chr17	1.78
NA	8014664	chr17	1.78
NA	8019649	chr17_ran	1.78
NA	8015037	chr17	1.78
TSPAN7	8166784	chrX	1.78
AK1	8164293	chr9	1.78
DHRS13	8013804	chr17	1.78
SDC3	7914282	chr1	1.78
TULP4	8123044	chr6	1.78
SYN1	8172317	chrX	1.78
RPS6KC1	7909661	chr1	1.78
PAG1	8151512	chr8	1.77
HECW2	8057898	chr2	1.77
ROCK2	8050302	chr2	1.77
TP53BP1	7988093	chr15	1.77
ATP6V0A1	8007228	chr17	1.77
MGC15634	7910198	chr1	1.77
SMC3	7930422	chr10	1.77
PITPNC1	8009353	chr17	1.77
SV2C	8106336	chr5	1.77
CLSTN3	7953626	chr12	1.77
SRp35	8128079	chr6	1.77
FLJ42177	8128795	chr6	1.77
ZNF28	8038993	chr19	1.77
ZNF85	8027272	chr19	1.77
NARF	8010804	chr17	1.77
ZNF708	8035803	chr19	1.77
ODF2L	7917433	chr1	1.77
NRIP3	7946446	chr11	1.77
STAT5B	8015590	chr17	1.77
REV3L	8128894	chr6	1.77
NA	7895850	---	1.77
MKL2	7993310	chr16	1.76
RGS22	8151999	chr8	1.76
ALDH2	7958784	chr12	1.76
SOS2	7978932	chr14	1.76
ETNK2	7923596	chr1	1.76
CAMSAP1	8165046	chr9	1.76
NA	7892565	---	1.76
GJA7	8016094	chr17	1.76
NA	7893122	---	1.76
LOC730167	7922523	chr1	1.76

Cluster D

NA	7896553	---	1.76
LRR1Q1	7957433	chr12	1.76
AFAP	8099259	chr4	1.75
ZFP2	8110472	chr5	1.75
ATF7IP2	7993167	chr16	1.75
NKIRAS1	8085788	chr3	1.75
TMTC4	7972579	chr13	1.75
NA	7896327	---	1.75
NA	7892749	---	1.75
BRPF3	8119034	chr6	1.75
C17orf65	8015946	chr17	1.75
ATP1A3	8037079	chr19	1.75
RAB5C	8015545	chr17	1.75
XKR9	8146900	chr8	1.75
TXNIP	7904726	chr1	1.75
PDXK	8068919	chr21	1.75
NA	7896247	---	1.75
GRHL1	8040190	chr2	1.75
RNF11	7901376	chr1	1.75
RPS6KL1	7980219	chr14	1.75
CLK4	8116227	chr5	1.74
DDEF2	8040113	chr2	1.74
TCEAL6	8174134	chrX	1.74
NA	7949717	chr11	1.74
DEGS1	7910001	chr1	1.74
ZNF564	8034401	chr19	1.74
ZNF291	7990582	chr15	1.74
ENO2	7953532	chr12	1.74
CCDC7	7926936	chr10	1.74
PSMD14	8045946	chr2	1.74
ZNF711	8168589	chrX	1.74
CDKL5	8166289	chrX	1.74
PNPLA8	8142307	chr7	1.74
SCOC	8097521	chr4	1.74
SGTB	8112409	chr5	1.74
CAMKK2	7967127	chr12	1.74
FREQ	8158627	chr9	1.74
CASP8AP2	8121118	chr6	1.74
BRI3BP	7959777	chr12	1.74
KIAA1900	8121193	chr6	1.74
KIAA0953	8040587	chr2	1.74
NA	8140356	chr7	1.74
SEPT8	8114050	chr5	1.74
CLSPN	7914847	chr1	1.74
NA	7996239	chr16	1.74
ACTR1A	7936028	chr10	1.74
PDE1B	7955943	chr12	1.74
HK1	7928019	chr10	1.74
C6orf174	8129392	chr6	1.74
KIAA1468	8021496	chr18	1.74
AOAH	8139033	chr7	1.73

Cluster D

HSZFP36	8034315	chr19	1.73
SMURF2	8017651	chr17	1.73
RUSC2	8155048	chr9	1.73
VPS45	7905099	chr1	1.73
ADAM22	8133983	chr7	1.73
NA	7894055	---	1.73
NEUROD2	8014865	chr17	1.73
CACNB1	8014794	chr17	1.73
FYN	8128956	chr6	1.73
MAP3K13	8084589	chr3	1.73
NA	7896444	---	1.73
TXNDC13	8064939	chr20	1.73
MGEA5	7935910	chr10	1.73
RSBN1	7918681	chr1	1.73
B3GALNT1	8091780	chr3	1.73
FLJ43080	8113483	chr5	1.73
C20orf112	8065612	chr20	1.73
SHOC2	7930470	chr10	1.73
CAMK1G	7909425	chr1	1.73
TBC1D8	8054308	chr2	1.73
CAMSAP1L1	7908614	chr1	1.73
PTPRS	8032926	chr19	1.73
KLHL3	8114300	chr5	1.72
TRIM24	8136473	chr7	1.72
SH3BGRL2	8120833	chr6	1.72
ARMC2	8121370	chr6	1.72
BPTF	8009382	chr17	1.72
NA	7981945	chr15	1.72
TCEAL5	8174235	chrX	1.72
JUP	8015412	chr17	1.72
NA	7916016	chr1	1.72
PREPL	8051928	chr2	1.72
C11orf63	7944751	chr11	1.72
THAP2	7957161	chr12	1.72
ANUBL1	7933237	chr10	1.72
MARCH8	7933228	chr10	1.72
RANBP9	8123989	chr6	1.72
NA	7895683	---	1.72
TNFAIP1	8005847	chr17	1.72
CNP	8007188	chr17	1.72
CUTL2	7958726	chr12	1.72
SRGAP3	8085164	chr3	1.72
NA	7896169	---	1.72
AMY2B	7903425	chr1	1.72
EVL	7976726	chr14	1.72
NA	7893873	---	1.72
SNX30	8157253	chr9	1.71
CAPS2	7964997	chr12	1.71
NA	7892788	---	1.71
KLHL8	8101624	chr4	1.71
FAM82A	8041519	chr2	1.71

Cluster D

PDIK1L	7899087	chr1	1.71
SEMA6C	7919898	chr1	1.71
PAPPA	8157487	chr9	1.71
SULT4A1	8076644	chr22	1.71
PCDHB14	8108744	chr5	1.71
GPRASP2	8168976	chrX	1.71
GPR162	7953442	chr12	1.71
BPHL	8116635	chr6	1.71
C12orf49	7966738	chr12	1.71
TBPL1	8122182	chr6	1.71
NA	8117170	chr6	1.71
EXOC8	7925043	chr1	1.71
GRK4	8093665	chr4	1.71
ZFP37	8163444	chr9	1.71
PPP1R14C	8122734	chr6	1.71
ACVR1	8056005	chr2	1.71
NA	7895517	---	1.71
ANKMY2	8138370	chr7	1.71
RRAGB	8167897	chrX	1.71
PRKAR1A	8009457	chr17	1.71
C5orf13	8113504	chr5	1.71
TFCP2	7963244	chr12	1.71
ICA1L	8058350	chr2	1.71
CCDC132	8134219	chr7	1.70
C10orf30	7932118	chr10	1.70
LOC285498	8098856	chr4	1.70
NA	7892685	---	1.70
SERAC1	8130474	chr6	1.70
SRPK2	8142036	chr7	1.70
HIPK2	8143307	chr7	1.70
NA	7896002	---	1.70
UBE2Q2	7985044	chr15	1.70
LPIN2	8022022	chr18	1.70
EZH2	8143663	chr7	1.70
NA	7982036	chr15	1.70
NA	7957549	chr12	1.70
NRG4	7990555	chr15	1.70
YWHAG	8140398	chr7	1.70
IFIT5	7929072	chr10	1.70
ATCAY	8024712	chr19	1.70
ATP6V1A	8081740	chr3	1.70
NA	8136159	chr7	1.70
SMAD7	8023220	chr18	1.70
NCOA1	8040552	chr2	1.70
KLHL7	8131815	chr7	1.70
CHD3	8004699	chr17	1.70
EXOC5	7979367	chr14	1.69
HERC1	7989516	chr15	1.69
PODN	7901535	chr1	1.69
PAK1	7950578	chr11	1.69
SPTB	7979615	chr14	1.69

Cluster D

ZNF491	8025951	chr19	1.69
NA	8180200	---	1.69
REEP1	8053551	chr2	1.69
IGSF3	7918913	chr1	1.69
CTTNBP2NL	7904018	chr1	1.69
AXUD1	8086330	chr3	1.69
SCD5	8101366	chr4	1.69
CMPK	7901299	chr1	1.69
FAM81A	7983991	chr15	1.69
DCUN1D4	8095009	chr4	1.69
LOC149837	8064866	chr20	1.69
TMEM16H	8035278	chr19	1.69
ZNF642	7900446	chr1	1.69
FRMPD4	8166028	chrX	1.69
LOC196549	7968411	chr13	1.69
NA	7896487	---	1.69
PPM1A	7974781	chr14	1.69
ZNF468	8038998	chr19	1.69
PCDHB12	8108733	chr5	1.69
ZNF597	7998978	chr16	1.69
LOC730008	8027239	chr19	1.69
OSBPL8	7965064	chr12	1.69
EN2	8137537	chr7	1.69
LOC651250	8017840	chr17	1.69
KSR1	8005785	chr17	1.69
LRRC28	7986394	chr15	1.69
MAML3	8102862	chr4	1.69
EZH1	8015685	chr17	1.68
NA	7894780	---	1.68
CCDC66	8080621	chr3	1.68
DIP2C	7931683	chr10	1.68
HVCN1	7966356	chr12	1.68
PIK3CA	8084016	chr3	1.68
PAFAH1B1	8003758	chr17	1.68
SLC43A2	8011093	chr17	1.68
ZNF439	8025964	chr19	1.68
KPNA1	8089999	chr3	1.68
KIAA2026	8160011	chr9	1.68
C22orf9	8076690	chr22	1.68
NBR1	8007471	chr17	1.68
ALDH8A1	8129706	chr6	1.68
KIAA1409	7976350	chr14	1.68
CSRP2	7965090	chr12	1.68
NA	7895445	---	1.68
AOF1	8117081	chr6	1.68
TRIM67	7910503	chr1	1.68
ZNF569	8036395	chr19	1.68
MOSC2	7909866	chr1	1.68
TBX15	7919028	chr1	1.68
PECI	8123695	chr6	1.67
FCHO2	8106141	chr5	1.67

Cluster D

MXRA7	8056217	chr2	1.67
SMURF1	8141241	chr7	1.67
PPM1K	8101701	chr4	1.67
APPBP2	8017235	chr17	1.67
GTF2IRD2	8140170	chr7	1.67
NA	7982048	chr15	1.67
ZNF100	8035808	chr19	1.67
WDR37	7925851	chr10	1.67
KIAA1045	8154953	chr9	1.67
ZNF440	8025958	chr19	1.67
PSMC3IP	8015642	chr17	1.67
MSL-1	8007023	chr17	1.67
HBEGF	8114572	chr5	1.67
ZMYND11	7925792	chr10	1.67
SRXN1	8064375	chr20	1.67
ZNF626	8035795	chr19	1.67
PCDHB11	8108729	chr5	1.67
GTF2IRD2B	8133549	chr7	1.67
SCYL2	7957806	chr12	1.67
APAF1	7957759	chr12	1.67
ZNF641	7962794	chr12	1.67
NPEPPS	8007976	chr17	1.67
SERPING1	7940028	chr11	1.67
KIAA0999	7951873	chr11	1.67
ZNF187	8117667	chr6	1.67
MLL3	8143988	chr7	1.67
SPATA7	7976084	chr14	1.67
FBXO30	8130032	chr6	1.67
CCDC128	8041913	chr2	1.66
SSFA2	8046726	chr2	1.66
SESN1	8128698	chr6	1.66
ACADSB	7931168	chr10	1.66
PXDN	8050007	chr2	1.66
NA	7893685	---	1.66
LMTK2	8134435	chr7	1.66
MAP3K9	7979943	chr14	1.66
NA	7894738	---	1.66
GNA11	8024557	chr19	1.66
ARL3	7936041	chr10	1.66
ZADH2	8023871	chr18	1.66
ZBTB8	7899797	chr1	1.66
KIAA0240	8119582	chr6	1.66
OSTM1	8128669	chr6	1.66
TMEM50B	8070083	chr21	1.66
CACNA1H	7992147	chr16	1.66
KCNMB4	7957126	chr12	1.66
MRS2L	8117194	chr6	1.66
GPR176	7987439	chr15	1.66
NA	7893488	---	1.66
C9orf103	8156116	chr9	1.66
ZNF799	8034390	chr19	1.65

Cluster D

SLC9A3R2	7992463	chr16	1.65
C10orf12	7929609	chr10	1.65
BMI1	7926609	chr10	1.65
ACACA	8014487	chr17	1.65
IQCG	8093258	chr3	1.65
ZNF214	7946288	chr11	1.65
WDR48	8078834	chr3	1.65
MAPK6	7983763	chr15	1.65
NDUFA5	8142663	chr7	1.65
ZNF716	8133018	chr7	1.65
UBTF	8015969	chr17	1.65
LARP2	8097388	chr4	1.65
CRIP3	8126542	chr6	1.65
FSIP1	7987426	chr15	1.65
ATAD1	7934870	chr10	1.65
TESK2	7915718	chr1	1.65
FAM120B	8123494	chr6	1.65
IFT20	8013581	chr17	1.65
CDC2L6	8128867	chr6	1.65
SUZ12	8006325	chr17	1.65
USP27X	8167601	chrX	1.65
ZNF193	8117655	chr6	1.65
CAPZA2	8135625	chr7	1.65
AMOTL2	8090852	chr3	1.65
HACE1	8128522	chr6	1.65
NR4A3	8156848	chr9	1.65
NA	7893087	---	1.65
LOC730145	7991120	chr15	1.65
ITGA1	8105229	chr5	1.65
PHF1	8118682	chr6	1.64
NA	8074789	chr22	1.64
NLGN3	8168264	chrX	1.64
PLEKHG2	8028656	chr19	1.64
KIAA0256	7988581	chr15	1.64
PAK7	8064952	chr20	1.64
CRTC3	7986049	chr15	1.64
NA	7896185	---	1.64
DENND2A	8143397	chr7	1.64
WASF3	7968212	chr13	1.64
NA	8180285	---	1.64
KIAA1586	8120378	chr6	1.64
NA	7893111	---	1.64
GPR83	7951040	chr11	1.64
DYNLL2	8008706	chr17	1.64
PPP2R5D	8119627	chr6	1.64
NA	7893759	---	1.64
UBTD2	8115806	chr5	1.64
SLC10A4	8094960	chr4	1.64
ARHGAP21	7932554	chr10	1.64
SEC63D1	7917612	chr1	1.64
FLJ37673	8102247	chr4	1.64

Cluster D

C1orf165	7915982	chr1	1.64
TANK	8045933	chr2	1.64
YWHAB	8062880	chr20	1.64
ZNF486	8027260	chr19	1.64
KIFAP3	7922268	chr1	1.64
FH	7925480	chr1	1.64
LOC55565	8002618	chr16	1.64
ABL1	8158725	chr9	1.63
RASGEF1C	8116384	chr5	1.63
ANKRD26	7932637	chr10	1.63
HIP1	8140319	chr7	1.63
PGS1	8010271	chr17	1.63
BPGM	8136341	chr7	1.63
NA	7893407	---	1.63
NA	7894231	---	1.63
TMEM113	8087874	chr3	1.63
TRMT11	8121895	chr6	1.63
SLC12A6	7987192	chr15	1.63
TTC3	8068522	chr21	1.63
THRAP2	7966706	chr12	1.63
CCNH	8113010	chr5	1.63
REPS1	8129901	chr6	1.63
BLOC1S2	7935746	chr10	1.63
STOX1	7927915	chr10	1.63
CXorf23	8171708	chrX	1.63
FAM129B	8164217	chr9	1.63
CNOT6	8110589	chr5	1.63
ZNF292	8120992	chr6	1.63
SOS1	8051670	chr2	1.63
SLC30A4	7988426	chr15	1.63
SSH1	7966150	chr12	1.63
CLTC	8008834	chr17	1.63
LRP1	7956301	chr12	1.63
CCDC112	8113602	chr5	1.63
HDDC2	8129363	chr6	1.63
IBRDC3	7914603	chr1	1.63
PROCA1	8013747	chr17	1.63
NHLRC1	8124129	chr6	1.63
ZNF430	8027279	chr19	1.62
UBE2D1	7927658	chr10	1.62
TYRO3	7982938	chr15	1.62
LMBRD2	8111533	chr5	1.62
DDX5	8017634	chr17	1.62
DKFZP564J10	8098620	chr4	1.62
NA	7894026	---	1.62
LTV1	8122452	chr6	1.62
C6orf72	8122689	chr6	1.62
LOC81691	7993776	chr16	1.62
CEP76	8022380	chr18	1.62
NA	7894450	---	1.62
LOC729863	8020377	chr18	1.62

Cluster D

NA	7924549	chr1	1.62
NRXN2	7949080	chr11	1.62
GTDC1	8055606	chr2	1.62
NA	8056361	chr2	1.62
NA	7896427	---	1.62
GORASP1	8086317	chr3	1.62
RAB8B	7984112	chr15	1.62
FLJ11827	8091097	chr3	1.62
GTF2IRD1	8133477	chr7	1.62
SLC24A3	8061227	chr20	1.62
USP31	8000244	chr16	1.62
ZNF66	8027268	chr19	1.62
HYLS1	7945040	chr11	1.62
UBE2L6	7948274	chr11	1.62
THRAP4	8014925	chr17	1.62
IFNAR1	8068266	chr21	1.62
NA	7893343	---	1.61
EFCAB2	7911096	chr1	1.61
AFF3	8054254	chr2	1.61
ATG4A	8169272	chrX	1.61
C17orf69	8007803	chr17	1.61
PGBD5	7924977	chr1	1.61
NA	7894896	---	1.61
GPATCH8	8016077	chr17	1.61
NA	7894096	---	1.61
SLC25A12	8056766	chr2	1.61
CDC27	8016324	chr17	1.61
KIAA1411	8120552	chr6	1.61
IGSF4C	8037363	chr19	1.61
HEXIM1	8007745	chr17	1.61
NA	7894685	---	1.61
MGC12966	8138088	chr7	1.61
PPM1B	8041713	chr2	1.61
NA	7893422	---	1.61
IPMK	7933723	chr10	1.61
GOSR2	8007904	chr17	1.61
TMCO7	7996860	chr16	1.61
PEX12	8014264	chr17	1.61
KLHDC6	8082400	chr3	1.61
PITPNM3	8011924	chr17	1.60
RPS6KB1	8008887	chr17	1.60
PCSK5	8155898	chr9	1.60
NEUROD6	8138882	chr7	1.60
NA	7895963	---	1.60
ACPL2	8083075	chr3	1.60
NA	8011112	chr17	1.60
PLEKHA5	7954245	chr12	1.60
ZHX3	8066279	chr20	1.60
TERF2IP	7997281	chr16	1.60
PTDSR	8018793	chr17	1.60
ZNF671	8039680	chr19	1.60

Cluster D

SCAMP1	8106479	chr5	1.60
TP53INP2	8062034	chr20	1.60
C9orf45	8164008	chr9	1.60
PTPN11	7958846	chr12	1.60
FLJ90757	8019083	chr17	1.60
NA	7982062	chr15	1.60
NA	7895248	---	1.60
TAF5L	7924969	chr1	1.60
NA	7893205	---	1.60
ZNF322A	8124459	chr6	1.60
VAPA	8020129	chr18	1.60
TSGA14	8142930	chr7	1.60
AHDC1	7914103	chr1	1.60
KIAA0232	8093961	chr4	1.60
CDH24	7977888	chr14	1.60
FBXO11	8052024	chr2	1.60
NA	8158684	chr9	1.60
PLEKHB2	8045247	chr2	1.59
CUL1	8137054	chr7	1.59
NA	7893582	---	1.59
LOC641705	7903404	chr1	1.59
LETM2	8145942	chr8	1.59
NA	7894886	---	1.59
NA	7892829	---	1.59
IFT81	7958620	chr12	1.59
DUSP19	8046792	chr2	1.59
ZNF44	8034349	chr19	1.59
NA	7895089	---	1.59
RALB	8044919	chr2	1.59
MAP3K7IP3	8171901	chrX	1.59
RP4-692D3.1	7900555	chr1	1.59
PPFIA3	8030220	chr19	1.59
DCTN5	7994102	chr16	1.59
NA	7895704	---	1.59
BRAF	8143417	chr7	1.59
NA	8143937	chr7	1.59
ASS1	8158671	chr9	1.59
C20orf133	8061035	chr20	1.59
KIAA1949	8124798	chr6	1.59
CASC3	8007028	chr17	1.59
NA	8008868	chr17	1.59
NA	8139975	chr7	1.59
NA	8133623	chr7	1.59
DKFZp667M24	8006170	chr17	1.59
CAB39	8048980	chr2	1.59
KIAA1166	8173261	chrX	1.59
NPLOC4	8019211	chr17	1.59
SENP6	8120758	chr6	1.59
NA	7893530	---	1.59
C6orf203	8121312	chr6	1.59
NA	7896683	---	1.59

Cluster D

MALT1	8021418	chr18	1.59
FLJ32065	8017704	chr17	1.59
PARP6	7990165	chr15	1.59
PCGF2	8014706	chr17	1.59
C18orf8	8020527	chr18	1.59
APC	8107330	chr5	1.59
AP2B1	8006542	chr17	1.59
ZNF20	8034334	chr19	1.59
MPP7	7932765	chr10	1.59
ZBTB41	7923119	chr1	1.58
RAPGEF1	8164665	chr9	1.58
NA	8018935	chr17	1.58
NA	8121130	chr6	1.58
LATS1	8130116	chr6	1.58
ALDH9A1	7921970	chr1	1.58
SHPRH	8130038	chr6	1.58
VPS26A	7927972	chr10	1.58
C6orf152	8127756	chr6	1.58
MRM1	8006655	chr17	1.58
AKAP10	8013431	chr17	1.58
NA	8017096	chr17	1.58
TSNAX	7910550	chr1	1.58
NA	7895886	---	1.58
NA	7892857	---	1.58
TADA2L	8006715	chr17	1.58
SAMD8	7928516	chr10	1.58
TNRC6C	8010188	chr17	1.58
MIA3	7909898	chr1	1.58
KIAA1212	8052269	chr2	1.58
SORBS2	8104035	chr4	1.58
CPEB4	8110055	chr5	1.58
ADSS	7925550	chr1	1.58
MTMR3	8072279	chr22	1.58
KIAA0100	8013696	chr17	1.58
MGC33657	8044818	chr2	1.58
MARCH3	8113790	chr5	1.58
NR1D1	8014956	chr17	1.58
PLD5	7925511	chr1	1.58
RUNDC1	8007435	chr17	1.58
NA	7894866	---	1.58
NA	7893104	---	1.58
RHOT1	8006345	chr17	1.58
TRIM23	8112388	chr5	1.58
RTN3	8097655	chr4	1.58
ANKRA2	8112596	chr5	1.57
NA	8180403	---	1.57
XKR8	8131286	chr7	1.57
KIF2A	8105523	chr5	1.57
DCUN1D1	8092321	chr3	1.57
DHX8	8007505	chr17	1.57
SCRT1	8153937	chr8_random	1.57

Cluster D

NA	7894302	---	1.57
ARID4A	7974621	chr14	1.57
KIAA1799	7901931	chr1	1.57
AGBL4	7915971	chr1	1.57
FBXW7	8103206	chr4	1.57
MAGED4	8167673	chrX	1.57
ZRSR2	8107353	chr5	1.57
LCMT2	7988077	chr15	1.57
YTHDC2	8107375	chr5	1.57
ASAH1	8149534	chr8	1.57
ZNF253	8027241	chr19	1.57
FAM8A1	8117071	chr6	1.57
EIF4EBP2	7928119	chr10	1.57
COQ10B	8047217	chr2	1.57
RABGAP1	8157700	chr9	1.57
NAG6	8135969	chr7	1.57
NA	7893466	---	1.57
KIAA0427	8021154	chr18	1.57
MMD2	8137931	chr7	1.57
DEK	8124144	chr6	1.57
ZNF652	8016546	chr17	1.57
RAB14	8163882	chr9	1.57
NA	7894343	---	1.56
SRC	8062377	chr20	1.56
ARNT2	7985285	chr15	1.56
PINK1	7898663	chr1	1.56
NA	7894098	---	1.56
ZMIZ1	7928558	chr10	1.56
OR2L1P	7911248	chr1	1.56
C6orf166	8128034	chr6	1.56
CELSR2	7903632	chr1	1.56
ZNF30	8027692	chr19	1.56
C17orf71	8008795	chr17	1.56
ZNF398	8137091	chr7	1.56
CLASP2	8086077	chr3	1.56
NA	8180306	---	1.56
PARP16	7989759	chr15	1.56
GOLGA1	8164105	chr9	1.56
TMSB10	8043100	chr2	1.56
SMTN	8072413	chr22	1.56
LOC401622	8171024	chrX	1.56
ZNF510	8162631	chr9	1.56
NA	7896039	---	1.56
C10orf83	7935510	chr10	1.56
KIAA1383	7910589	chr1	1.56
FLJ90013	8099506	chr4	1.56
TEKT2	7900076	chr1	1.56
NA	8136179	chr7	1.56
NA	7893869	---	1.55
ARL6IP5	8080926	chr3	1.55
TMCC1	8090630	chr3	1.55

Cluster D

SLC22A17	7977965	chr14	1.55
ENAH	7924619	chr1	1.55
GOSR1	8006148	chr17	1.55
MLL5	8135277	chr7	1.55
APBB1	7946149	chr11	1.55
HIVEP3	7915392	chr1	1.55
NA	8036865	chr19	1.55
BHLHB9	8168984	chrX	1.55
SMARCE1	8015039	chr17	1.55
TMEM49	8008870	chr17	1.55
KIAA1370	7988970	chr15	1.55
PHF2	8156476	chr9	1.55
PHKB	7995382	chr16	1.55
ZNF506	8035773	chr19	1.55
TRIM8	7930139	chr10	1.55
RIPK1	8116622	chr6	1.55
WDR68	8009164	chr17	1.55
UBE2Z	8008139	chr17	1.55
ZFYVE20	8085537	chr3	1.55
PPIL4	8130087	chr6	1.55
GGA3	8018324	chr17	1.55
ZFAND3	8119227	chr6	1.55
CLTB	8115918	chr5	1.55
SLC6A6	8078014	chr3	1.55
DAGLBETA	8138091	chr7	1.55
ZNF445	8086482	chr3	1.55
C17orf75	8014100	chr17	1.55
RTF1	7982904	chr15	1.55
CDKN1B	7954029	chr12	1.55
PDK2	8008263	chr17	1.55
DYNC1LI1	8086008	chr3	1.55
ZC3H6	8044450	chr2	1.55
USP30	7958439	chr12	1.55
KIAA0274	8121429	chr6	1.55
C12orf4	7960411	chr12	1.55
LOC646851	8076113	chr22	1.54
ANKRD53	8042558	chr2	1.54
C17orf32	8005857	chr17	1.54
ZNF527	8028241	chr19	1.54
LRRC1	8120279	chr6	1.54
PGRMC2	8102745	chr4	1.54
UGP2	8042270	chr2	1.54
ADD2	8052882	chr2	1.54
C6orf113	8129108	chr6	1.54
CCDC65	7955156	chr12	1.54
ATP6V0A2	7959657	chr12	1.54
ZNF382	8028194	chr19	1.54
C6orf145	8123678	chr6	1.54
ARVCF	8074522	chr22	1.54
DLG3	8168179	chrX	1.54
NDFIP1	8108861	chr5	1.54

Cluster D

LOC729055	8097064	chr4	1.54
LYSMD1	7919923	chr1	1.54
AMOT	8174576	chrX	1.54
EIF4G2	7946610	chr11	1.54
NA	7894546	---	1.54
NA	8042501	chr2	1.54
NA	7894058	---	1.54
DKFZP434B20	7945342	chr11	1.54
NA	7896742	chr1	1.54
LOC729754	8110670	chr5	1.54
LOC728534	7911347	chr1	1.54
NA	7911045	chr1	1.54
FBXO3	7947434	chr11	1.54
PAK2	8084963	chr3	1.54
ZSWIM5	7915682	chr1	1.54
ZSWIM6	8105506	chr5	1.54
RAB35	7966929	chr12	1.54
CHAF1B	8068478	chr21	1.54
SLC25A16	7934050	chr10	1.54
NBEAL1	8047606	chr2	1.54
ZNF677	8039070	chr19	1.54
RSBN1L	8133809	chr7	1.54
SERPINB1	8123598	chr6	1.54
ZNF738	8027297	chr19	1.54
NA	7896178	---	1.54
NMNAT3	8091087	chr3	1.54
GYG2	8165817	chrX	1.54
SPOP	8016562	chr17	1.54
JAK2	8154178	chr9	1.53
ITM2B	7969003	chr13	1.53
NA	8050869	chr2	1.53
SH3GL2	8154476	chr9	1.53
ARID4B	7925201	chr1	1.53
DOCK7	7916669	chr1	1.53
ANK1	8150439	chr8	1.53
CLTCL1	8074399	chr22	1.53
ATXN7L4	8142096	chr7	1.53
C10orf88	7936817	chr10	1.53
TMEM54	7914592	chr1	1.53
NA	7893516	---	1.53
LOC652041	7998825	chr16	1.53
TMEM63B	8119926	chr6	1.53
LOC338651	7937696	chr11	1.53
TTF1	8164729	chr9	1.53
TRPC1	8083166	chr3	1.53
NA	7894666	---	1.53
HIPK1	7904137	chr1	1.53
SHC3	8162216	chr9	1.53
NA	7896463	---	1.53
PHYH	7932094	chr10	1.53
RAB15	7979663	chr14	1.53

Cluster D

ZNF514	8027352	chr19	1.53
ZNF254	8027368	chr19	1.53
NA	7894605	---	1.53
NA	7895824	---	1.53
KIAA0317	7980189	chr14	1.53
NA	8116651	chr6	1.53
SECISBP2	8156295	chr9	1.53
SLAIN2	8094948	chr4	1.53
EPN2	8005557	chr17	1.53
FLJ38482	8103524	chr4	1.53
GLIPR1L2	7957253	chr12	1.53
GBA2	8161114	chr9	1.53
PBLD	7933982	chr10	1.53
NCOA4	7927536	chr10	1.53
SCP2	7901513	chr1	1.53
TUBA3	7963054	chr12	1.53
MAST2	7901140	chr1	1.53
GAB2	7950671	chr11	1.52
MEGF9	8163775	chr9	1.52
SNORA2A	7962827	chr12	1.52
NA	7896559	---	1.52
ZNF611	8038981	chr19	1.52
NA	8072302	chr22	1.52
NA	7892762	---	1.52
C18orf25	8021113	chr18	1.52
C6orf70	8123467	chr6	1.52
DCAMKL2	8097753	chr4	1.52
GATS	8141477	chr7	1.52
RHEB	8143957	chr7	1.52
ZNF354B	8110463	chr5	1.52
TIPRL	7907124	chr1	1.52
CDRT1	8012951	chr17	1.52
TOP2B	8085815	chr3	1.52
PHTF2	8133818	chr7	1.52
SH3PXD2A	7936115	chr10	1.52
RBM6	8079842	chr3	1.52
GNA13	8017711	chr17	1.52
ACSL4	8174474	chrX	1.52
VPS13D	7897890	chr1	1.52
ZNF700	8025973	chr19	1.52
MARCKS	8121563	chr6	1.52
DCTN4	8115181	chr5	1.52
PHLPP	8021565	chr18	1.52
MKRN1	8143387	chr7	1.52
PGBD1	8117675	chr6	1.52
SEPT7	8132292	chr7	1.52
LOC400713	8030925	chr19	1.52
USP15	7956670	chr12	1.52
NA	7893686	---	1.52
NA	8180377	---	1.52
PKIB	8121768	chr6	1.52

Cluster D

GSPT2	8167654	chrX	1.52
OAZ2	7989661	chr15	1.52
LOC646992	8091550	chr3	1.52
ZNF627	8025927	chr19	1.52
MAGED1	8167656	chrX	1.52
PARC	8119722	chr6	1.52
RP11-291L22	7933115	chr10	1.52
NA	7894440	---	1.52
C17orf80	8009552	chr17	1.52
PICALM	7950838	chr11	1.52
PAXIP1	8144047	chr7	1.52
KIAA1414	8051464	chr2	1.52
LRRFIP2	8086150	chr3	1.51
GPM6A	8103789	chr4	1.51
NA	7894118	---	1.51
TNRC6A	7994187	chr16	1.51
FMR1	8170326	chrX	1.51
CXorf43	8173848	chrX	1.51
AAK1	8052803	chr2	1.51
WDR26	7924582	chr1	1.51
NA	7911329	chr1	1.51
MTMR6	7970655	chr13	1.51
TNKS2	7929168	chr10	1.51
HECTD2	7929145	chr10	1.51
ZNF501	8079229	chr3	1.51
ATXN2	7966397	chr12	1.51
SUPT7L	8051204	chr2	1.51
MOBKL1A	8095566	chr4	1.51
HDHD2	8023165	chr18	1.51
TRIM26	8124726	chr6	1.51
LSM8	8135688	chr7	1.51
TRIM68	7945979	chr11	1.51
UBR2	8119529	chr6	1.51
FMNL2	8045736	chr2	1.51
ATP6AP2	8166805	chrX	1.51
YAF2	7962358	chr12	1.51
SBF2	7946516	chr11	1.51
CELSR3	8087145	chr3	1.51
ELOVL5	8127145	chr6	1.51
NA	7894574	---	1.51
SNX4	8090256	chr3	1.51
EPC2	8045619	chr2	1.51
LOC284412	8028190	chr19	1.51
OTUD1	7926677	chr10	1.51
MECP2	8175998	chrX	1.51
LASS6	8046086	chr2	1.51
UBQLN4	7920912	chr1	1.51
ET	8010092	chr17	1.51
GDI1	8170891	chrX	1.51
ELF2	8102817	chr4	1.51
NA	7893139	---	1.51

Cluster D

EVI5L	8025328	chr19	1.50
CCDC92	7967486	chr12	1.50
NA	7895769	---	1.50
ZNF271	8020898	chr18	1.50
BBS7	8102655	chr4	1.50
MADD	7939767	chr11	1.50
INTS2	8017283	chr17	1.50
BCL7B	8140061	chr7	1.50
NUFIP2	8013908	chr17	1.50
FBXO34	7974473	chr14	1.50
CHRD	8084496	chr3	1.50
CCDC126	8131871	chr7	1.50
RNF165	8021120	chr18	1.50
GDF9	8114080	chr5	1.50
DNAL1	7975616	chr14	1.50
HDAC2	8129045	chr6	1.50
TMEM175	8093413	chr4	1.50
C13orf1	7971644	chr13	1.50
ZFP95	8134621	chr7	1.50
MAP3K3	8009183	chr17	1.50
LYRM4	8123728	chr6	1.50
NA	7894635	---	1.50
METTL2B	8135922	chr7	1.50
NA	8129693	chr6	1.50
NA	7894044	---	1.50
SPECC1	8005661	chr17	1.50
C6orf35	8130464	chr6	1.50
NA	8122701	chr6	1.50
LUZP1	7913558	chr1	1.50
PPP3CA	8101971	chr4	1.50
ZNF588	8133049	chr7	1.50
STMN1	7913869	chr1	1.50
FRS2	7957043	chr12	1.50
ZCD1	7927649	chr10	1.50
SENP7	8089203	chr3	1.50
LOC652260	8133540	chr7	1.50
MAK10	8156167	chr9	1.50
FLJ13231	8111584	chr5	1.50
HSDL1	8003116	chr16	1.50
LANCL2	8132897	chr7	1.50
PCMT1	8122705	chr6	1.50
HSPC049	8143070	chr7	1.50
SS18L1	8063839	chr20	1.50
DKFZp761P04	8149250	chr8	1.50
SALL2	7977761	chr14	1.50
MYOM1	8022045	chr18	1.50
TWF1	7962441	chr12	1.50
LYST	7925257	chr1	1.50
CDC42BPB	7981387	chr14	1.50
DARC	7906435	chr1	1.50
ZNF470	8031669	chr19	1.50

Cluster D

DUSP18	8075423	chr22	1.49
MAD2L2	7912481	chr1	1.49
KLHL11	8015456	chr17	1.49
NA	7959292	chr12	1.49
FLJ10781	8037767	chr19	1.49
NA	8116649	chr6	1.49
NA	8116653	chr6	1.49
TARBP1	7925130	chr1	1.49
DYRK1A	8068551	chr21	1.49
LOC649061	7979925	chr14	1.49
NEK1	8103646	chr4	1.49
ZNF396	8022892	chr18	1.49
LOC441728	7990894	chr15	1.49
MAGEE1	8168458	chrX	1.49
C5orf22	8104680	chr5	1.49
NA	7895087	---	1.49
FLJ16287	8038962	chr19	1.49
GRM4	8125805	chr6	1.49
NA	7895528	---	1.49
DOK4	8001564	chr16	1.49
LOC340260	8131087	chr7	1.49
KIAA0672	8005064	chr17	1.49
VPS26B	7945275	chr11	1.49
SP4	8131709	chr7	1.49
RNUXA	8107691	chr5	1.49
PCMTD2	8064302	chr20	1.49
SYT5	8039378	chr19	1.49
SH3PXD2B	8115814	chr5	1.49
MSRB2	7926661	chr10	1.49
BNIP1	7905299	chr1	1.49
PEX3	8122409	chr6	1.49
MFN2	7897824	chr1	1.49
MTO1	8120698	chr6	1.49
CCDC93	8054804	chr2	1.49
CENTB5	7911458	chr1	1.49
CEP350	7907790	chr1	1.49
NA	7896342	---	1.49
NA	8047262	chr2	1.49
FAM102B	7903507	chr1	1.49
OCRL	8169811	chrX	1.49
FAM40B	8136115	chr7	1.49
CNOT6L	7989128	chr15	1.48
MAP4K3	8051707	chr2	1.48
RUTBC1	8003733	chr17	1.48
NA	8067946	chr21	1.48
GRLF1	8029856	chr19	1.48
DDX52	8014574	chr17	1.48
NA	8050844	chr2	1.48
PLA2G4B	7983021	chr15	1.48
POLR3F	8061171	chr20	1.48
ZNF329	8039740	chr19	1.48

Cluster D

TBC1D23	8081256	chr3	1.48
TLOC1	8083826	chr3	1.48
CRLF3	8014037	chr17	1.48
SCRN3	8046502	chr2	1.48
BIRC4	8169742	chrX	1.48
DNM1L	7954752	chr12	1.48
CHMP1B	8020179	chr18	1.48
FANCM	7974166	chr14	1.48
KIAA0226	8093230	chr3	1.48
SETX	8164701	chr9	1.48
NA	8123463	chr6	1.48
ZCCHC8	7967287	chr12	1.48
USP20	8158568	chr9	1.48
NR2C2	8078091	chr3	1.48
PSCD1	8018922	chr17	1.48
KIAA0430	7999642	chr16	1.48
TPST1	8133155	chr7	1.48
NA	7943890	chr11	1.48
RNF38	8161192	chr9	1.48
STK38	8126018	chr6	1.48
DKFZp686E24	8110486	chr5	1.48
VTI1A	7930524	chr10	1.48
FLJ23588	8076612	chr22	1.48
ZNF532	8021442	chr18	1.48
LIPL1	7928967	chr10	1.48
NA	7894551	---	1.48
ZDHHC17	7957277	chr12	1.48
ARSB	8112807	chr5	1.48
DYNLT1	8130499	chr6	1.48
DOPEY2	8068422	chr21	1.48
NA	7907962	chr1	1.48
OR2AK2	7911243	chr1	1.48
ZNF654	8081069	chr3	1.47
PRDM2	7898070	chr1	1.47
ARL17P1	8016285	chr17	1.47
TOM1L2	8013159	chr17	1.47
RING1	8178244	chr6_cox_1	1.47
RAB10	8040618	chr2	1.47
PTPLB	8090091	chr3	1.47
FLJ25439	8104812	chr5	1.47
WTAP	8126952	chr6	1.47
PEX1	8140915	chr7	1.47
CCDC43	8016088	chr17	1.47
LOC440434	8014650	chr17	1.47
ZNF354A	8116247	chr5	1.47
TBCD	8010848	chr17	1.47
ZNF555	8024518	chr19	1.47
STAT3	8015607	chr17	1.47
ADD1	8093643	chr4	1.47
FLJ34047	8111203	chr5	1.47
SLC35A5	8081667	chr3	1.47

Cluster D

NA	7919747	chr1	1.47
NDST1	8109283	chr5	1.47
NA	7894411	---	1.47
ITGB1BP1	8050176	chr2	1.47
SLITRK4	8175574	chrX	1.47
CTNNB1	8079021	chr3	1.47
FN3K	8010841	chr17	1.47
IQCK	7993713	chr16	1.47
EXOC1	8095163	chr4	1.47
GATAD2B	7920341	chr1	1.47
ZNF266	8033754	chr19	1.47
NA	8057557	chr2	1.47
COG1	8009533	chr17	1.47
MORC2	8075430	chr22	1.47
STAT5A	8007212	chr17	1.47
HP1BP3	7913300	chr1	1.47
PPP1R12B	7908841	chr1	1.47
CNOT4	8143088	chr7	1.47
PCNX	7975416	chr14	1.47
FBXL5	8099449	chr4	1.46
ZSCAN2	7985577	chr15	1.46
PHIP	8127698	chr6	1.46
SFT2D1	8130720	chr6	1.46
NA	7982096	chr15	1.46
CERK	8076792	chr22	1.46
KIAA1147	8143441	chr7	1.46
ZNF542	8031632	chr19	1.46
ZNF451	8120382	chr6	1.46
DKFZp686L18	8101411	chr4	1.46
SUPT6H	8005903	chr17	1.46
SLC4A1AP	8041015	chr2	1.46
NA	8126855	chr6	1.46
VPS52	8125649	chr6	1.46
NA	8112918	chr5	1.46
OPTN	7926239	chr10	1.46
ISYNA1	8035465	chr19	1.46
ZNF643	7900438	chr1	1.46
TUB	7938269	chr11	1.46
NA	8059648	chr2	1.46
RTN4IP1	8128606	chr6	1.46
VPS39	7987840	chr15	1.46
TRAFD1	7958828	chr12	1.46
ZCCHC6	8162147	chr9	1.46
C1orf58	7909931	chr1	1.46
ZBTB6	8163999	chr9	1.46
ZNF720	7995252	chr16	1.46
G3BP2	8101043	chr4	1.46
GTF2I	8133504	chr7	1.46
ACSL3	8048733	chr2	1.46
CYB5R4	8120943	chr6	1.46
TBP	8123507	chr6	1.46

Cluster D

UNQ1887	7967091	chr12	1.46
NA	8176865	chrY	1.46
NA	8177460	chrY	1.46
MFAP3	8109403	chr5	1.46
USP11	8167125	chrX	1.46
ATRX	8173673	chrX	1.46
NA	7892979	---	1.46
DNAJA2	8001185	chr16	1.46
C14orf106	7978776	chr14	1.46
NA	7893845	---	1.46
SMS	8166402	chrX	1.46
PB1	8087951	chr3	1.46
MXD1	8042503	chr2	1.46
N-PAC	7999233	chr16	1.46
PSMD11	8006392	chr17	1.46
ANGEL2	7924190	chr1	1.46
YWHAQ	8050215	chr2	1.46
LOC440297	7985416	chr15	1.46
PIGK	7917088	chr1	1.46
C18orf43	8020226	chr18	1.46
ASF1A	8121734	chr6	1.46
TRAF4	8005978	chr17	1.46
TXNDC10	8023735	chr18	1.46
ATP11B	8084173	chr3	1.46
LRRC40	7916910	chr1	1.45
BTBD10	7946680	chr11	1.45
STXBP4	8008566	chr17	1.45
ZNF420	8028219	chr19	1.45
ARL6IP2	8051589	chr2	1.45
RNF5	8178188	chr6_cox_1	1.45
ZNFX1	8066905	chr20	1.45
LOC653441	7953812	chr12	1.45
ZNF275	8170635	chrX	1.45
CSK	7984871	chr15	1.45
PIK4CA	8074748	chr22	1.45
C10orf79	7936201	chr10	1.45
HCN3	7905974	chr1	1.45
DHX29	8112081	chr5	1.45
MGC29891	7905339	chr1	1.45
MTERF	8140859	chr7	1.45
DDX6	7952103	chr11	1.45
CDS2	8060772	chr20	1.45
RFWD2	7922504	chr1	1.45
NA	7894183	---	1.45
MAN2A2	7986132	chr15	1.45
MARK3	7977077	chr14	1.45
KPNA3	7971620	chr13	1.45
GBF1	7930031	chr10	1.45
KIAA1632	8022996	chr18	1.45
NA	8015706	chr17	1.45
HEBP2	8122317	chr6	1.45

Cluster D

CCDC90A	8124008	chr6	1.45
ZZEF1	8011542	chr17	1.45
RALBP1	8020100	chr18	1.45
UBXD4	8040503	chr2	1.45
LCOR	7929596	chr10	1.45
MRLC2	8019930	chr18	1.45
AKAP11	7968835	chr13	1.45
MAP9	8103341	chr4	1.45
PPP1R10	8124756	chr6	1.45
ITGA2B	8016044	chr17	1.45
C14orf32	7974455	chr14	1.45
KIAA0515	8158829	chr9	1.45
ZMYM2	7967900	chr13	1.45
HIVEP1	8116910	chr6	1.45
GNA12	8137865	chr7	1.45
VPS72	7919940	chr1	1.45
CROP	8008493	chr17	1.44
ATP2A2	7958644	chr12	1.44
TOB1	8016739	chr17	1.44
ALS2CR13	8047565	chr2	1.44
FN3KRP	8010832	chr17	1.44
C6orf111	8128394	chr6	1.44
LRRC6	8152962	chr8	1.44
KIF3B	8061715	chr20	1.44
VAT1	8015759	chr17	1.44
MRPL42P5	7987526	chr15	1.44
ZNF333	8026365	chr19	1.44
NBR2	8007794	chr17	1.44
NA	8023868	chr18	1.44
BAT2	8118174	chr6	1.44
NA	8173627	chrX	1.44
GTPBP10	8134079	chr7	1.44
NA	7993112	chr16	1.44
TPMT	8124134	chr6	1.44
KIAA0528	7961767	chr12	1.44
KCTD10	7966202	chr12	1.44
MORC3	8068460	chr21	1.44
SLC25A40	8140814	chr7	1.44
FRAT1	7929616	chr10	1.44
MOSPD2	8166140	chrX	1.44
ARHGEF11	7921179	chr1	1.44
NA	7893131	---	1.44
C18orf23	8021129	chr18	1.44
ARF3	7962904	chr12	1.44
CCDC64	7959131	chr12	1.44
TMEM57	7899018	chr1	1.44
YPEL3	8000791	chr16	1.44
GAPVD1	8157858	chr9	1.44
RC3H1	7922432	chr1	1.44
CD163L1	7960771	chr12	1.44
ARRDC4	7986350	chr15	1.44

Cluster D

IDI1	7931754	chr10	1.44
TRH	8082574	chr3	1.44
KIAA1009	8127903	chr6	1.44
NA	8165508	chr9	1.44
NA	8180364	---	1.44
NA	8180365	---	1.44
TAOK2	7994692	chr16	1.44
CORO1A	7994769	chr16	1.44
USP42	8131387	chr7	1.44
NR2C1	7965523	chr12	1.44
PCGF3	8093398	chr4	1.44
DPYSL2	8145470	chr8	1.44
LOC152485	8103025	chr4	1.44
ZNF83	8038967	chr19	1.44
TOR1B	8158560	chr9	1.43
ZNF454	8110478	chr5	1.43
MAN1A2	7904340	chr1	1.43
TTYH3	8131179	chr7	1.43
INTS4	8133074	chr7	1.43
SCLT1	8102751	chr4	1.43
ZNF674	8172274	chrX	1.43
ZNF490	8034408	chr19	1.43
TTRAP	8124262	chr6	1.43
ZNF672	7911289	chr1	1.43
ING2	8098508	chr4	1.43
CCDC109A	7928318	chr10	1.43
LASP1	8006820	chr17	1.43
NA	8092520	chr3	1.43
ASH1L	7920766	chr1	1.43
RFFL	8014189	chr17	1.43
SPATA20	8008388	chr17	1.43
MAP3K7IP2	8122672	chr6	1.43
CDC5L	8120022	chr6	1.43
TMF1	8088700	chr3	1.43
GALNT1	8020903	chr18	1.43
SYBL1	8171041	chrX	1.43
BACH1	8068105	chr21	1.43
SEC63	8128650	chr6	1.43
NCOA6	8065776	chr20	1.43
HCFC2	7958158	chr12	1.43
LRRC27	7931455	chr10	1.43
LOC441891	7917647	chr1	1.43
FGFR1OP	8123342	chr6	1.43
UBE2N	7965471	chr12	1.43
CCDC16	8006477	chr17	1.43
NA	8165644	chrM	1.43
PIGX	8084955	chr3	1.43
ZNF211	8031792	chr19	1.43
RBM18	8163948	chr9	1.43
LINS1	7991566	chr15	1.43
KCTD20	8119067	chr6	1.43

Cluster D

KIAA1012	8022767	chr18	1.43
SORT1	7918323	chr1	1.42
NA	8180379	---	1.42
NA	7976840	chr14	1.42
KIAA1109	8097148	chr4	1.42
BAG5	7981439	chr14	1.42
GARNL1	7978653	chr14	1.42
FAM65A	7996571	chr16	1.42
NA	7894675	---	1.42
C1orf115	7909862	chr1	1.42
POLDIP2	8013588	chr17	1.42
PAPOLG	8042119	chr2	1.42
TUBB1	8063716	chr20	1.42
ANKRD49	7943231	chr11	1.42
NA	7893543	---	1.42
ZNF625	8034342	chr19	1.42
COQ7	7993608	chr16	1.42
KIAA1600	7930682	chr10	1.42
ZBTB40	7898750	chr1	1.42
SLC9A7	8172280	chrX	1.42
DKFZP586P01	7950336	chr11	1.42
DIP2B	7955376	chr12	1.42
CCDC50	8084818	chr3	1.42
FAM44A	8099410	chr4	1.42
LOC171220	7953518	chr12	1.42
PHLPPL	8002571	chr16	1.42
NCOR2	7967493	chr12	1.42
EXOC7	8018620	chr17	1.42
ERCC6	7933509	chr10	1.42
PRRG1	8166705	chrX	1.42
KIAA0241	8132188	chr7	1.42
SUMO2	8174636	chrX	1.42
ZNF436	7913582	chr1	1.42
SP2	8008052	chr17	1.42
USP6NL	7932023	chr10	1.42
ASB8	7962783	chr12	1.42
COX11	8016825	chr17	1.42
GK	8174103	chrX	1.42
GMDS	8123562	chr6	1.42
KLHDC3	8119648	chr6	1.42
UBE2H	8142886	chr7	1.42
CBLL1	8135458	chr7	1.42
C5orf5	8114326	chr5	1.42
MGC21675	8093456	chr4	1.42
PUM2	8050565	chr2	1.42
LRR4B	8038584	chr19	1.42
CDKN2AIP	8098500	chr4	1.42
UBE2J1	8128111	chr6	1.42
PRPSAP1	8018694	chr17	1.41
USP25	8067903	chr21	1.41
C9orf30	8156897	chr9	1.41

Cluster D

FASTKD5	8064581	chr20	1.41
LDB1	7935968	chr10	1.41
TTLL13	7985983	chr15	1.41
CASC4	7983321	chr15	1.41
UBE2NL	8170298	chrX	1.41
NA	7895101	---	1.41
RNF10	7959173	chr12	1.41
LRRIQ2	8081362	chr3	1.41
CRKRS	8006850	chr17	1.41
ABL2	7922610	chr1	1.41
LPGAT1	7924107	chr1	1.41
ZNF782	8162639	chr9	1.41
RSF1	7950606	chr11	1.41
SHANK1	8038598	chr19	1.41
ATG5	8128592	chr6	1.41
COQ3	8128383	chr6	1.41
PPP4R1	8022251	chr18	1.41
MGC17403	8166096	chrX	1.41
PAPOLB	8137927	chr7	1.41
SCAMP5	7984932	chr15	1.41
PPP1R12A	7965123	chr12	1.41
ANKRD54	8075971	chr22	1.41
PJA2	8113469	chr5	1.41
ZNF93	8035779	chr19	1.41
NA	7922456	chr1	1.41
C20orf132	8066161	chr20	1.41
KIAA0350	7993223	chr16	1.41
STAM2	8055890	chr2	1.41
CLOCK	8100428	chr4	1.41
NAPG	8020149	chr18	1.41
DIRC2	8082120	chr3	1.41
PHACTR4	7899455	chr1	1.41
ZNF306	8117685	chr6	1.41
ZNF618	8157362	chr9	1.41
NA	8180217	---	1.41
NA	8180341	---	1.41
GON4L	7920810	chr1	1.41
C6orf61	8129214	chr6	1.41
VN1R1	8039642	chr19	1.41
ATP7B	7971731	chr13	1.41
EVI5	7917707	chr1	1.41
SDCCAG1	7978866	chr14	1.41
VBP1	8171013	chrX	1.41
BCR	8071691	chr22	1.41
NA	7893602	---	1.41
MAPK8IP1	7939613	chr11	1.41
SNORD7	8006540	chr17	1.41
VEZT	7957613	chr12	1.41
NA	8065537	chr20	1.41
DIRAS1	8032518	chr19	1.41
TRIM33	7918725	chr1	1.41

Cluster D

FLJ25476	7899870	chr1	1.41
C11orf30	7942650	chr11	1.41
NODAL	7934156	chr10	1.41
UBE1C	8088718	chr3	1.41
NA	8180237	---	1.40
ZDHHC3	8086505	chr3	1.40
PACS1	7941537	chr11	1.40
NA	8180342	---	1.40
NA	8003619	chr17	1.40
FANCE	8118963	chr6	1.40
LOC401431	8143759	chr7	1.40
FAM45A	7930882	chr10	1.40
RFXAP	7968653	chr13	1.40
NA	7916926	chr1	1.40
NA	7896076	---	1.40
CYP27A1	8048432	chr2	1.40
CTHRC1	8147777	chr8	1.40
NA	8007848	chr17	1.40
TSC1	8164781	chr9	1.40
NEK10	8085867	chr3	1.40
CRSP3	8129522	chr6	1.40
FAM46C	7904361	chr1	1.40
NA	8180417	---	1.40
ATAD2B	8050658	chr2	1.40
RBM16	8122909	chr6	1.40
MIF4GD	8018343	chr17	1.40
ATRN	8060627	chr20	1.40
ADRBK1	7941797	chr11	1.40
MARCH2	8025421	chr19	1.40
TNPO1	8106122	chr5	1.40
LOC283970	8002322	chr16	1.40
GTF2A1	7980523	chr14	1.40
USP37	8058940	chr2	1.40
NA	7984213	chr15	1.40
PRPF3	7905185	chr1	1.40
STAG1	8090898	chr3	1.40
KRIT1	8140878	chr7	1.40
EXOC2	8123524	chr6	1.40
BRWD3	8173766	chrX	1.40
NA	7895082	---	1.40
NA	7938812	chr11	1.40
CCNT2	8045381	chr2	1.40
NA	8180343	---	1.40
FLJ23861	8058570	chr2	1.40
SURB7	7954503	chr12	1.40
KIF27	8162019	chr9	1.40
KCNRG	7969153	chr13	1.40
CNN3	7917885	chr1	1.40
NA	8080960	chr3	1.40
ZNF585A	8036373	chr19	1.40
RINT1	8135323	chr7	1.40

Cluster D

HMGN3	8127743	chr6	1.40
HTATSF1	8170166	chrX	1.40
PRMT2	8069450	chr21	1.40
RLF	7900395	chr1	1.40
DDHD1	7979223	chr14	1.40
PTPN12	8133788	chr7	1.40
CDK8	7968199	chr13	1.40
TPRXL	8077989	chr3	1.40
BIVM	7969916	chr13	1.40
C14orf46	7975687	chr14	1.40
NCKAP1	8057517	chr2	1.40
KLHL20	7907445	chr1	1.40
SLC23A2	8064808	chr20	1.40
TATDN2	8077804	chr3	1.40
RABGEF1	8133176	chr7	1.40
HIF1A	7974851	chr14	1.40
C3orf62	8087374	chr3	1.39
COG6	7968711	chr13	1.39
DYNC1I2	8046340	chr2	1.39
TROVE2	7908421	chr1	1.39
GPS1	8010747	chr17	1.39
GOT1	7935627	chr10	1.39
RAC1	8100125	chr4	1.39
TLK2	8009014	chr17	1.39
SLC30A9	8094848	chr4	1.39
NA	8180416	---	1.39
SRP68	8018600	chr17	1.39
SAP30BP	8009932	chr17	1.39
C9orf80	8163428	chr9	1.39
MAP4	8086842	chr3	1.39
MAP3K2	8054997	chr2	1.39
EIF4ENIF1	8075507	chr22	1.39
ZDHHC14	8122982	chr6	1.39
C14orf44	7980069	chr14	1.39
CBX7	8076185	chr22	1.39
SLC8A3	7979888	chr14	1.39
NA	8138862	chr7	1.39
POPDC2	8089785	chr3	1.39
NA	7893196	---	1.39
LMBR1	8144089	chr7	1.39
PTPN4	8044849	chr2	1.39
SLC17A5	8127549	chr6	1.39
NA	7911110	chr1	1.39
CDC42BPA	7924773	chr1	1.39
NA	7892814	---	1.39
TMEM34	8097704	chr4	1.39
ZFAND5	8161747	chr9	1.39
FBXW11	8115765	chr5	1.39
MAPKBP1	7982985	chr15	1.39
LOC92154	8002403	chr16	1.39
SCUBE2	7946454	chr11	1.39

Cluster D

OSBPL2	8063873	chr20	1.39
PIP5K2C	7956524	chr12	1.39
C19orf57	8034700	chr19	1.39
MLX	8007290	chr17	1.38
SCRT2	8064384	chr20	1.38
BCLAF1	8129773	chr6	1.38
PGPEP1	8026991	chr19	1.38
KIAA0355	8027604	chr19	1.38
RECQL	7961654	chr12	1.38
OSBPL11	8090277	chr3	1.38
VPS4B	8023672	chr18	1.38
PPP2R5B	7941087	chr11	1.38
SMARCC2	7963988	chr12	1.38
RARSL	8128013	chr6	1.38
ABHD5	8079153	chr3	1.38
XRRA1	7950447	chr11	1.38
ZC3H5	8009995	chr17	1.38
ARMC8	8082940	chr3	1.38
RNASEL	7922707	chr1	1.38
MTMR4	8017019	chr17	1.38
LOC152573	8094870	chr4	1.38
NA	7895382	---	1.38
DBN1	8116051	chr5	1.38
C14orf45	7975676	chr14	1.38
ZNF390	8124583	chr6	1.38
UBC	7967563	chr12	1.38
CHUK	7935707	chr10	1.38
NSD1	8110289	chr5	1.38
VHL	8077781	chr3	1.38
CCNC	8128429	chr6	1.38
ZNF24	8022882	chr18	1.38
C1orf27	7908330	chr1	1.38
ZBTB11	8089234	chr3	1.38
MAG11	8088602	chr3	1.38
CEP192	8020267	chr18	1.38
PACS2	7977344	chr14	1.38
ERBB2IP	8105681	chr5	1.38
MGAT5B	8010113	chr17	1.38
CCDC40	8010328	chr17	1.38
DCK	8095574	chr4	1.38
CLASP1	8054888	chr2	1.38
PRPF18	7926283	chr10	1.38
C10orf35	7928064	chr10	1.38
PSMC5	8009227	chr17	1.38
MGAT3	8073129	chr22	1.37
C17orf63	8013776	chr17	1.37
SLC12A8	8090237	chr3	1.37
ZFR	8111360	chr5	1.37
MAP4K2	7949172	chr11	1.37
NA	7896112	---	1.37
NA	8016261	chr17	1.37

Cluster D

NEK4	8088001	chr3	1.37
BAT3	8178526	chr6_cox_1	1.37
PTP4A2	7914489	chr1	1.37
ZNRF1	7997247	chr16	1.37
ATP6V0C	7992646	chr16	1.37
NA	8180375	---	1.37
CHD2	7986250	chr15	1.37
MCF2	8175457	chrX	1.37
OPA1	8084844	chr3	1.37
GALNT11	8137448	chr7	1.37
NA	7894802	---	1.37
ZNF409	7978059	chr14	1.37
TBC1D10A	8075332	chr22	1.37
LOC729891	8123520	chr6	1.37
RB1	7969017	chr13	1.37
YY1AP1	7920799	chr1	1.37
NA	7892947	---	1.37
TPM3	8142468	chr7	1.37
SH2D3C	8164252	chr9	1.37
PPTC7	7966345	chr12	1.37
SAFB2	8032974	chr19	1.37
MAP3K7	8128260	chr6	1.37
SNORA35	8169459	chrX	1.37
CDC42SE1	7919888	chr1	1.37
CDC37L1	8154153	chr9	1.37
MIDN	8024228	chr19	1.37
RNF12	8173615	chrX	1.37
CALM1	7976200	chr14	1.37
ZNF800	8142730	chr7	1.37
DIP13B	7966003	chr12	1.37
LYK5	8017402	chr17	1.37
SLC25A4	8098576	chr4	1.37
IPPK	8162421	chr9	1.37
PAIP1	8111974	chr5	1.37
LOC92017	7993281	chr16	1.37
CCDC49	8014738	chr17	1.37
PREP	8128572	chr6	1.37
FBXO42	7912750	chr1	1.37
KBTBD2	8138922	chr7	1.37
PPP2R5C	7976863	chr14	1.37
RAB43	8001147	chr16	1.37
NA	7895544	---	1.37
CDH3	7996819	chr16	1.37
KPNA4	8091764	chr3	1.36
BECN1	8015715	chr17	1.36
RABL2B	8044669	chr2	1.36
PPARBP	8014841	chr17	1.36
NA	7896483	---	1.36
FVT1	8023656	chr18	1.36
MARCH7	8045919	chr2	1.36
EIF2B1	7967473	chr12	1.36

Cluster D

PSD	7935990	chr10	1.36
INPP4A	8043791	chr2	1.36
ZNF471	8031650	chr19	1.36
STYX	7974387	chr14	1.36
VPS29	7966332	chr12	1.36
YLPM1	7975725	chr14	1.36
RNF111	7983953	chr15	1.36
SNX27	7905444	chr1	1.36
BCL10	7917338	chr1	1.36
MEF2A	7986411	chr15	1.36
FRS3	8126337	chr6	1.36
PPP2CA	8114158	chr5	1.36
STH	8007846	chr17	1.36
GNB1	7911619	chr1	1.36
CCDC45	8009255	chr17	1.36
MAK	8123893	chr6	1.36
FLJ16423	8170400	chrX	1.36
HAGH	7998604	chr16	1.36
FARS2	8116724	chr6	1.36
PPME1	7942503	chr11	1.35
C6orf136	8117987	chr6	1.35
MSI1	7967039	chr12	1.35
SNX22	7984174	chr15	1.35
C14orf103	7981192	chr14	1.35
DPP8	7989806	chr15	1.35
CHST10	8054297	chr2	1.35
SPATS1	8120004	chr6	1.35
ADAMTS7	7990736	chr15	1.35
ZFP161	8022110	chr18	1.35
GSK3B	8089801	chr3	1.35
CABLES2	8067495	chr20	1.35
ZNF331	8030999	chr19	1.35
NME6	8086899	chr3	1.35
TP53I11	7947570	chr11	1.35
NA	7928545	chr10	1.35
PHF17	8097417	chr4	1.35
CAMTA2	8011774	chr17	1.35
PMS2L1	8139896	chr7	1.35
SNX13	8138401	chr7	1.35
FLJ11021	7967304	chr12	1.35
POU6F1	7963265	chr12	1.35
PIK3R3	7915787	chr1	1.35
UGCGL2	7972369	chr13	1.35
RCOR3	7909529	chr1	1.35
C4orf29	8097373	chr4	1.35
BAHD1	7982738	chr15	1.35
ARHGEF4	8045229	chr2	1.35
RAB5A	8078214	chr3	1.35
NA	7955419	chr12	1.35
CDH1	7996837	chr16	1.35
KIAA1328	8021001	chr18	1.35

Cluster D

CCDC91	7954613	chr12	1.35
DONSON	8070129	chr21	1.35
OCIAD1	8094974	chr4	1.35
NA	8104725	chr5	1.35
KIAA1539	8160981	chr9	1.35
ADCK2	8136591	chr7	1.34
C6orf52	8123884	chr6	1.34
FAM125B	8157905	chr9	1.34
LMLN	8085033	chr3	1.34
NA	8141669	chr7	1.34
SAR1B	8114193	chr5	1.34
NA	7894404	---	1.34
KIAA0284	7977299	chr14	1.34
MICALL1	8072962	chr22	1.34
FLJ25791	8128777	chr6	1.34
SNORD62A	8158862	chr9	1.34
CREBBP	7999044	chr16	1.34
ZNF76	8118915	chr6	1.34
DHDDS	7899173	chr1	1.34
C6orf163	8121009	chr6	1.34
PC	7949719	chr11	1.34
LOC401387	8140869	chr7	1.34
BRSK1	8031441	chr19	1.34
RGS12	8093764	chr4	1.34
ZNF600	8038989	chr19	1.34
RBM41	8174340	chrX	1.34
TTLL9	8061620	chr20	1.34
GNL1	8178346	chr6_cox_1	1.34
TBK1	7956795	chr12	1.34
STOML1	7990273	chr15	1.34
C17orf58	8017831	chr17	1.34
GPR153	7912004	chr1	1.34
SFRS14	8035581	chr19	1.34
KIAA0265	8136163	chr7	1.34
NA	7894397	---	1.34
DNAJB6	8137627	chr7	1.34
KNS2	7977127	chr14	1.34
UVRAG	7942626	chr11	1.34
ZNF638	8042601	chr2	1.34
BRAP	7966427	chr12	1.34
ERO1L	7979179	chr14	1.34
WDR45L	8019523	chr17	1.34
H3F3A	8169740	chrX	1.34
SETD2	8086706	chr3	1.34
C1orf149	7914996	chr1	1.33
ZFYVE9	7901426	chr1	1.33
B3GNT1	7949615	chr11	1.33
PARP2	7973036	chr14	1.33
MAPK8IP3	7992347	chr16	1.33
CD99L2	8175647	chrX	1.33
TM2D3	7991630	chr15	1.33

Cluster D

DKFZP434B03	8141180	chr7	1.33
SMPD1	7938100	chr11	1.33
LOC440926	8102860	chr4	1.33
CHFR	7967841	chr12	1.33
AKAP14	8169665	chrX	1.33
AKAP8L	8035023	chr19	1.33
DSTN	8061114	chr20	1.33
LSM12	8015908	chr17	1.33
MICALL2	8137715	chr7	1.33
GSTK1	8136849	chr7	1.33
RCN2	7985089	chr15	1.33
RAP1A	7903988	chr1	1.33
KIAA0280	7950271	chr11	1.33
LOC648153	8143766	chr7	1.33
ZYG11BL	8164464	chr9	1.33
CREB1	8047839	chr2	1.33
CCAR1	7927889	chr10	1.33
C9orf102	8156604	chr9	1.33
GPR107	8158597	chr9	1.33
PTPN9	7990511	chr15	1.33
AP2M1	8084345	chr3	1.33
SNAP29	8071426	chr22	1.33
DISP1	7909954	chr1	1.33
BMPR2	8047538	chr2	1.33
C9orf78	8164596	chr9	1.33
ATF7IP	7954104	chr12	1.33
RAB6A	8055261	chr2	1.33
TAF6	8141425	chr7	1.33
CALM3	8029831	chr19	1.33
ZNF407	8021756	chr18	1.33
YIPF7	8100076	chr4	1.33
LOC643126	8043574	chr2	1.33
SLC35B3	8123825	chr6	1.33
BCAP29	8135422	chr7	1.32
BRP44	7922095	chr1	1.32
FLJ10769	7970084	chr13	1.32
TAF3	7926096	chr10	1.32
FBXL3	7972062	chr13	1.32
DDX42	8009205	chr17	1.32
KIAA0251	7993433	chr16	1.32
POMT1	8158866	chr9	1.32
ARFIP1	8097813	chr4	1.32
STARD3NL	8132376	chr7	1.32
DGCR5	8071185	chr22	1.32
GTF2H5	8123038	chr6	1.32
LACE1	8121349	chr6	1.32
KLHL25	7991173	chr15	1.32
TRIM39	8117869	chr6	1.32
NA	7893561	---	1.32
RALA	8132406	chr7	1.32
MEA1	8126474	chr6	1.32

Cluster D

RAB11B	8025414	chr19	1.32
NA	8031843	chr19	1.32
SLC9A11	7922353	chr1	1.32
SLBP	8098904	chr4	1.32
FBXO38	8109062	chr5	1.32
SCAND2	7985587	chr15	1.32
ZFHX2	7978056	chr14	1.32
ZNF557	8025132	chr19	1.32
ATP6V1E1	8074251	chr22	1.32
FAM53B	7936884	chr10	1.32
CCDC75	8041487	chr2	1.32
PRG2	8032094	chr19	1.32
C9orf126	8164131	chr9	1.32
RP11-93B10.1	8173208	chrX	1.32
KCNC1	7938738	chr11	1.32
YPEL5	8041197	chr2	1.31
WNT3	8016311	chr17	1.31
PDPK1	7992670	chr16	1.31
CHD8	7977693	chr14	1.31
NA	8180393	---	1.31
NA	7895737	---	1.31
NA	8180394	---	1.31
BFSP1	8065124	chr20	1.31
RNF14	8108847	chr5	1.31
KIAA1856	8137942	chr7	1.31
C3orf51	8088212	chr3	1.31
UBE2E3	8046685	chr2	1.31
MOAP1	7980983	chr14	1.31
ZNF438	7932867	chr10	1.31
SLC9A10	8089489	chr3	1.31
SIRT4	7959148	chr12	1.31
ZBTB2	8130185	chr6	1.31
ZNF101	8027233	chr19	1.31
GRB2	8018364	chr17	1.31
HGS	8010638	chr17	1.31
ZBTB44	7952739	chr11	1.31
MAST3	8026926	chr19	1.31
GLS2	7964183	chr12	1.31
DHRS7B	8005699	chr17	1.31
NA	8020088	chr18	1.31
ZNF563	8034370	chr19	1.31
LOC402643	8030991	chr19	1.31
SAP130	8055104	chr2	1.31
PICK1	8072989	chr22	1.31
UBQLN1	8161988	chr9	1.31
RAD51L3	8014199	chr17	1.31
NA	7981964	chr15	1.30
ACBD3	7924701	chr1	1.30
NA	7907462	chr1	1.30
ZNF610	8039010	chr19	1.30
PNMA1	7980044	chr14	1.30

Cluster D

C17orf62	8019507	chr17	1.30
WAC	7926851	chr10	1.30
TTBK2	7987960	chr15	1.30
KLHL9	8160405	chr9	1.30
RBM5	8079869	chr3	1.30
DLGAP4	8062293	chr20	1.30
ZNF428	8037355	chr19	1.30
RAF1	8085374	chr3	1.30
AGPAT1	8125328	chr6	1.30
C6orf64	8126147	chr6	1.30
SMCHD1	8019877	chr18	1.30
QRICH1	8087271	chr3	1.30
FOXK2	8010820	chr17	1.30
NA	8019521	chr17	1.30
NA	7894484	---	1.30
SH2B2	8135149	chr7	1.30
LEMD3	7956842	chr12	1.30
ARIH2	8079662	chr3	1.29
UROS	7936937	chr10	1.29
NA	7896605	---	1.29
FAM100B	8010050	chr17	1.29
SEPT5	8071234	chr22	1.29
CDK9	8158112	chr9	1.29
EIF1	8007141	chr17	1.29
GRIPAP1	8172504	chrX	1.29
SLC11A2	7963212	chr12	1.29
PIK3CD	7897482	chr1	1.29
DEPDC5	8072529	chr22	1.29
ST3GAL3	7900857	chr1	1.29
PPFIA1	7942174	chr11	1.29
PPP2CB	8150126	chr8	1.29
NA	7894796	---	1.29
GZF1	8061373	chr20	1.29
NA	7892745	---	1.29
NA	8041281	chr2	1.29
FLJ10324	8137906	chr7	1.29
PLCXD2	8081582	chr3	1.29
BAZ1B	8140037	chr7	1.29
SPATS2	7955217	chr12	1.29
C7orf28A	8138128	chr7	1.29
BNIP2	7989323	chr15	1.29
NA	7893550	---	1.29
TXNDC6	8090972	chr3	1.29
TRIAD3	8137986	chr7	1.29
ALG11	7969228	chr13	1.29
LOC441818	8020842	chr18	1.29
NA	7893374	---	1.29
GALNT8	7953252	chr12	1.29
NUDCD3	8139356	chr7	1.28
LYRM2	8128133	chr6	1.28
CREBL1	8125295	chr6	1.28

Cluster D

IQCE	8131155	chr7	1.28
PGBD4	7982504	chr15	1.28
LOC440456	8017675	chr17	1.28
HDAC7A	7962659	chr12	1.28
TEGT	7955277	chr12	1.28
DYNC1H1	7976876	chr14	1.28
RAB4B	8028930	chr19	1.28
ZBTB46	8067743	chr20	1.28
MBD1	8023323	chr18	1.28
LOC392510	8174026	chrX	1.28
LOC222967	8138009	chr7	1.28
WDR22	7979849	chr14	1.28
NA	8157520	chr9	1.28
CARD10	8075934	chr22	1.28
TMEM81	7923707	chr1	1.28
UBE2A	8169645	chrX	1.28
AP4S1	7973813	chr14	1.28
GTPBP2	8126629	chr6	1.28
KIAA0329	7976976	chr14	1.28
RNASEN	8111286	chr5	1.28
MORF4	7985226	chr15	1.27
NA	7990755	chr15	1.27
NA	8001233	chr16	1.27
CLK3	7984846	chr15	1.27
NA	8061645	chr20	1.27
TAF11	8125859	chr6	1.27
MATR3	8108403	chr5	1.27
MGC40405	8055978	chr2	1.27
PRDM10	7952707	chr11	1.27
MTIF3	7970704	chr13	1.27
PAFAH1B2	7944042	chr11	1.27
S100PBP	7899829	chr1	1.27
RNPC3	8088770	chr3	1.27
RERE	7912166	chr1	1.27
SPPL2A	7988753	chr15	1.27
TMEM24	7944418	chr11	1.27
LYSMD2	7988833	chr15	1.27
NA	8018097	chr17	1.27
BRD3	8164995	chr9	1.27
PORCN	8167287	chrX	1.27
SETD3	7981249	chr14	1.27
FLOT1	8124828	chr6	1.27
LOC441150	8126446	chr6	1.27
CASKIN2	8018379	chr17	1.27
PRKRIP1	8135162	chr7	1.27
SNX3	8128683	chr6	1.27
CDKN2D	8034075	chr19	1.27
PBX2	8083221	chr3	1.26
MARK2	7940798	chr11	1.26
ACTR2	8042337	chr2	1.26
RAB5B	7956088	chr12	1.26

Cluster D

RPRC1	7900095	chr1	1.26
ATG3	8089527	chr3	1.26
HPS1	7935588	chr10	1.26
WDTC1	7899289	chr1	1.26
2'-PDE	8080676	chr3	1.26
KIAA0319L	7914809	chr1	1.26
CDC42	8099631	chr4	1.26
MBD4	8090577	chr3	1.26
NA	7895560	---	1.26
FBXW2	8163784	chr9	1.26
WASL	8142671	chr7	1.26
BTBD12	7999008	chr16	1.26
NA	8121159	chr6	1.26
GALE	7913667	chr1	1.26
SOCS5	8041820	chr2	1.26
KIAA1219	8062492	chr20	1.26
SNX26	8028030	chr19	1.26
B3GALT4	8118655	chr6	1.26
IK	8108568	chr5	1.25
DAG1	8079753	chr3	1.25
BSN	8079759	chr3	1.25
C1orf50	7900597	chr1	1.25
POGZ	7920000	chr1	1.25
DDX4	8105384	chr5	1.25
JMJD2B	8024909	chr19	1.25
CTNNBIP1	7912283	chr1	1.25
ZNF592	7985605	chr15	1.25
PPP1R9B	8016628	chr17	1.25
RIT1	7920839	chr1	1.25
PLA2G1B	7967034	chr12	1.25
NA	8089106	chr3	1.25
RAB6C	7950284	chr11	1.25
NA	7974479	chr14	1.25
MAPK1	8074791	chr22	1.25
GDF11	7956026	chr12	1.25
C1orf178	7918694	chr1	1.25
RAB11A	7984289	chr15	1.25
UBE2B	8108066	chr5	1.24
VKORC1L1	8133114	chr7	1.24
FLJ20489	7955055	chr12	1.24
CRY2	7939595	chr11	1.24
FLJ39575	8135532	chr7	1.24
C17orf37	8014882	chr17	1.24
PRR14	7994858	chr16	1.24
ZNF79	8158022	chr9	1.24
TMEM127	8053901	chr2	1.23
AMIGO1	7918359	chr1	1.23
GTPBP1	8073039	chr22	1.23
NA	7963588	chr12	1.23
KIAA0774	7968307	chr13	1.23
SH3BP5L	7925763	chr1	1.23

Cluster D

RBM33	8137542	chr7	1.23
SLCO5A1	8151223	chr8	1.23
TBC1D10B	8000856	chr16	1.23
ZMIZ2	8132617	chr7	1.23
C6orf47	8124994	chr6	1.23
NA	7894535	---	1.23
NA	7896713	---	1.23
CANT1	8018982	chr17	1.23
NA	7895057	---	1.22
NA	8121569	chr6	1.22
NA	8031865	chr19	1.22
NA	7895067	---	1.22
TBC1D20	8064336	chr20	1.22
RABL4	8075828	chr22	1.22
BICD2	8162438	chr9	1.21
NA	8127822	chr6	1.21
NA	7896696	---	1.21
PTPRA	8060539	chr20	1.21
PPP1R3F	8167476	chrX	1.21
TMEM132A	7940377	chr11	1.21
C22orf25	8071301	chr22	1.21
PAIP2	8108424	chr5	1.21
NFKBIE	8126666	chr6	1.21
NA	8034297	chr19	1.21
LOC441601	7948092	chr11	1.21
ATPAF1	7915870	chr1	1.21
TFE3	8172520	chrX	1.21
NANOS3	8026214	chr19	1.21
ZDHHC20	7970524	chr13	1.20
NRF1	8136140	chr7	1.20
MLLT1	8033118	chr19	1.20
CC2D1B	7916135	chr1	1.20
MGC21874	8093993	chr4	1.20
FLJ10404	8116113	chr5	1.20
TRIM3	7946180	chr11	1.20
RAP2C	8175169	chrX	1.20
RTDR1	8074869	chr22	1.20
ARPC1A	8134581	chr7	1.20
TNRC18	8137953	chr7	1.19
NA	8127991	chr6	1.19
SETD1B	7959314	chr12	1.19
NA	7947932	chr11	1.19
WRNIP1	8116595	chr6	1.19
MKL1	8076241	chr22	1.19
OSBPL7	8016336	chr17	1.18
PRDM11	7939569	chr11	1.18
RHOF	7967202	chr12	1.18
PIP5K1C	8032650	chr19	1.18
NA	7911681	chr1	1.18
FLYWCH1	7992744	chr16	1.18
FOXJ2	7953699	chr12	1.17

Cluster D

NA	7894909	---	1.16
----	---------	-----	------

Cluster D2 vs D1

Cluster D2 vs D1 SAM fold analysis			
NAME	UNIQID	chr location	Fold change
LUM	7965403	chr12	16.57
FOS	7975779	chr14	13.72
ASPN	8162394	chr9	12.03
P2RY14	8091511	chr3	11.71
CFH	7908459	chr1	10.53
EGR1	8108370	chr5	10.27
FRZB	8057506	chr2	10.21
EMCN	8101957	chr4	10.16
DCN	7965410	chr12	9.79
ITIH2	7926061	chr10	9.66
C7	8105084	chr5	9.41
PDGFRB	8115099	chr5	9.16
OGN	8162373	chr9	9.09
ANXA1	8155849	chr9	8.58
EDNRA	8097692	chr4	8.33
GPR116	8126798	chr6	8.23
RGS5	7921916	chr1	8.02
TNFSF10	8092169	chr3	7.97
GNG11	8134257	chr7	7.84
EVI1	8091972	chr3	7.70
BGN	8170648	chrX	7.68
TNS1	8058869	chr2	7.63
FOSB	8029693	chr19	7.61
FHL5	8121181	chr6	7.59
PRELP	7908924	chr1	7.58
ENPEP	8096875	chr4	7.57
FLJ22655	7961595	chr12	7.48
CMKLR1	7966089	chr12	7.44
OLFML3	7904158	chr1	7.41
SFRP4	8139087	chr7	7.37
RGS4	7906919	chr1	7.36
NID1	7925320	chr1	7.33
PDE7B	8122222	chr6	7.14
ABCA8	8017885	chr17	7.03
CTGF	8129562	chr6	6.98
PLXDC1	8014768	chr17	6.92
CYP1B1	8051583	chr2	6.90
SYNPO2	8097080	chr4	6.87
APOD	8092970	chr3	6.83
IL1R1	8043995	chr2	6.77
OLFML1	7938225	chr11	6.76
MFGE8	7991234	chr15	6.76
UACA	7990054	chr15	6.71
C1S	7953603	chr12	6.70
ITIH5	7931977	chr10	6.66
FBN1	7988467	chr15	6.56
LAMA2	8121949	chr6	6.54
GIMAP7	8137240	chr7	6.50

Cluster D2 vs D1

IGFBP5	8058857	chr2	6.39
JUNB	8026047	chr19	6.39
TAGLN	7944082	chr11	6.19
CYBRD1	8046333	chr2	6.16
ETS1	7952601	chr11	6.12
C6orf188	8121601	chr6	6.12
CYR61	7902687	chr1	6.11
CLEC1A	7961111	chr12	6.00
RHOJ	7974902	chr14	5.95
ITM2A	8173755	chrX	5.94
PLS3	8169473	chrX	5.93
CRISPLD2	7997642	chr16	5.92
ARHGAP29	7917850	chr1	5.89
FMOD	7923578	chr1	5.89
IFITM1	7937335	chr11	5.88
TMEM16A	7942135	chr11	5.88
TFPI	8057599	chr2	5.87
LHFP	7971150	chr13	5.86
GGTLA1	8074991	chr22	5.85
GBP4	7917561	chr1	5.81
IL7R	8104901	chr5	5.80
ARHGDIB	7961532	chr12	5.79
ACTA2	7934906	chr10	5.77
IGFBP7	8100541	chr4	5.70
PECAM1	8017599	chr17	5.69
VWF	7960464	chr12	5.67
SMOC2	8123446	chr6	5.67
ERG	8070297	chr21	5.62
CD248	7949588	chr11	5.62
KLF4	8163002	chr9	5.60
CD34	7923978	chr1	5.59
CDH5	7996264	chr16	5.59
FLI1	7945132	chr11	5.58
FER1L3	7935058	chr10	5.55
GIMAP6	8143781	chr7	5.51
ABCC9	7961710	chr12	5.49
LAMB2	8087337	chr3	5.48
COL12A1	8127563	chr6	5.46
LAMA4	8128991	chr6	5.41
GIMAP5	8137257	chr7	5.38
LAMC3	8158739	chr9	5.37
CXCL12	7933194	chr10	5.36
ENPP1	8122099	chr6	5.35
CASP4	7951372	chr11	5.33
RBMS3	8078330	chr3	5.25
COL14A1	8148070	chr8	5.23
COBLL1	8056343	chr2	5.22
CD226	8023757	chr18	5.21
NA	8075635	chr22	5.17
TM4SF1	8091411	chr3	5.17
LAYN	7943749	chr11	5.14
KCNE4	8048749	chr2	5.14

Cluster D2 vs D1

GMFG	8036710	chr19	5.09
LRRC17	8135218	chr7	5.07
FBLN5	7980908	chr14	5.07
CD302	8056102	chr2	5.02
AHNAK	7948667	chr11	4.99
ENTPD1	7929511	chr10	4.97
SNAI2	8150698	chr8	4.97
PRKCH	7974835	chr14	4.97
TRIM38	8117321	chr6	4.95
VIM	7926368	chr10	4.94
EVA1	7952046	chr11	4.91
PLAT	8150509	chr8	4.90
ECE1	7913357	chr1	4.83
SCPEP1	8008646	chr17	4.83
C20orf103	8060940	chr20	4.82
COL4A1	7972750	chr13	4.82
PCOLCE	8134869	chr7	4.80
LEF1	8102232	chr4	4.80
WWTR1	8091422	chr3	4.79
MYH9	8075728	chr22	4.78
TMEM71	8152976	chr8	4.78
GPR133	7959893	chr12	4.77
CAV2	8135587	chr7	4.71
ISLR	7984813	chr15	4.69
TNFAIP6	8045688	chr2	4.68
SVIL	7932796	chr10	4.67
VCAM1	7903358	chr1	4.65
TMEM16C	7939024	chr11	4.64
ENG	8164269	chr9	4.63
GIMAP4	8137244	chr7	4.62
GIMAP8	8137232	chr7	4.60
HEG1	8090193	chr3	4.60
PAPSS2	7928944	chr10	4.58
HLA-DRB1	8178811	chr6_cox_	4.57
CGNL1	7983867	chr15	4.55
CD93	8065359	chr20	4.55
HLA-DRB3	8178802	chr6_cox_	4.51
CD4	7953428	chr12	4.50
TGFBR2	8078350	chr3	4.48
LTBP2	7980152	chr14	4.45
LOC493869	8105348	chr5	4.44
PPBP	8100971	chr4	4.41
SDPR	8057797	chr2	4.40
TBX18	8127932	chr6	4.40
COL4A2	7970033	chr13	4.39
CALCRL	8057578	chr2	4.39
SRPX2	8168749	chrX	4.35
DUSP6	7965335	chr12	4.32
PRDM1	8121257	chr6	4.31
EFNB2	7972713	chr13	4.31
HLA-E	8177788	chr6_cox_	4.29
ABCA9	8017927	chr17	4.28

Cluster D2 vs D1

ZFP36	8028652	chr19	4.27
WIPI1	8017850	chr17	4.27
GGTA1	8163908	chr9	4.26
LRR32	7950555	chr11	4.24
GRAMD3	8107673	chr5	4.22
ATP8B1	8023497	chr18	4.20
HEYL	7915229	chr1	4.18
JAG1	8064978	chr20	4.18
RBPMS	8145669	chr8	4.16
F3	7917875	chr1	4.16
CDH11	8001800	chr16	4.16
TBX3	7966690	chr12	4.16
PLA2G4A	7908351	chr1	4.15
CFHR1	7908488	chr1	4.13
EMP1	7954090	chr12	4.13
SEMA5A	8110932	chr5	4.11
LOC643034	8176572	chrY	4.07
SLFN5	8006531	chr17	4.07
FN1	8058765	chr2	4.05
ARHGAP10	8097717	chr4	4.04
TIMP3	8072626	chr22	4.01
FAS	7929032	chr10	4.01
PRRX1	7907222	chr1	4.01
KDEL3	8073015	chr22	4.01
TIMP1	8167185	chrX	4.01
A2M	7960947	chr12	3.99
NMI	8055702	chr2	3.98
FLJ21986	8135734	chr7	3.97
ITGB3	8007931	chr17	3.97
C10orf10	7933204	chr10	3.97
NOTCH3	8034940	chr19	3.95
FSTL1	8089835	chr3	3.95
ADAMTS9	8088560	chr3	3.92
GPR30	8131069	chr7	3.90
RANBP3L	8111569	chr5	3.90
SP100	8048940	chr2	3.90
DOCK6	8034151	chr19	3.90
LAMC1	7908041	chr1	3.89
HSPG2	7913450	chr1	3.87
GIMAP2	8137250	chr7	3.87
ITGA8	7932254	chr10	3.87
GSN	8157582	chr9	3.86
COPZ2	8016390	chr17	3.85
GZMK	8105331	chr5	3.85
GUCY1A3	8097957	chr4	3.85
APOL1	8072735	chr22	3.82
TGM2	8066214	chr20	3.82
LCP2	8115734	chr5	3.82
SPARCL1	8101659	chr4	3.80
TNFAIP3	8122265	chr6	3.80
IFI16	7906400	chr1	3.80
HLA-DRA	8178193	chr6_cox	3.80

Cluster D2 vs D1

SPRY1	8097282	chr4	3.79
PLD1	8092134	chr3	3.78
LOC541471	8054611	chr2	3.77
MEF2C	8113039	chr5	3.77
TCN2	8072360	chr22	3.76
ECM2	8162404	chr9	3.75
FGL2	8140463	chr7	3.75
ANKRD25	8034130	chr19	3.74
PGCP	8147469	chr8	3.73
ACTG2	8042788	chr2	3.72
MYH11	7999674	chr16	3.72
P2RY5	7971565	chr13	3.72
PRG1	7927964	chr10	3.69
TACC1	8145954	chr8	3.68
CALD1	8136347	chr7	3.67
PLEKHG1	8122756	chr6	3.66
HTR2B	8059680	chr2	3.65
IL13RA1	8169580	chrX	3.65
S100A11	7920128	chr1	3.65
NA	7896703	---	3.65
THBS2	8130867	chr6	3.64
HLA-C	8179731	chr6_qbl_r	3.63
SLCO2B1	7942569	chr11	3.63
BIRC4BP	8004184	chr17	3.59
NA	7896722	---	3.58
DLC1	8149413	chr8	3.58
TNFRSF19	7968015	chr13	3.58
MMP2	7995681	chr16	3.58
HEPH	8167973	chrX	3.57
SPARC	8115327	chr5	3.56
CYSLTR1	8173745	chrX	3.54
CDGAP	8081838	chr3	3.51
PHLDB2	8081590	chr3	3.50
APOLD1	7954055	chr12	3.50
MYLK	8090098	chr3	3.50
PIK3R1	8105778	chr5	3.49
NA	7896728	---	3.49
MBL1P1	7928661	chr10	3.49
PMP22	8012896	chr17	3.47
COL5A2	8057620	chr2	3.47
PDE8A	7985662	chr15	3.47
PGM5	8155665	chr9	3.46
B2M	7983360	chr15	3.46
ITGB5	8090162	chr3	3.46
CD74	8115147	chr5	3.46
CD69	7961075	chr12	3.45
NA	7896693	---	3.45
MSRB3	7956856	chr12	3.44
LRMP	7954436	chr12	3.44
CAST	8107005	chr5	3.43
SNORA42	7920873	chr1	3.41
NA	8010978	chr17	3.41

Cluster D2 vs D1

HLA-B	8178498	chr6_cox_	3.40
SLFN12	8014241	chr17	3.39
TIE1	7900658	chr1	3.39
CMAH	8124307	chr6	3.39
IFI27	7976443	chr14	3.38
TRIM22	7938035	chr11	3.37
PTRF	8015635	chr17	3.37
MRC2	8009040	chr17	3.35
HLA-F	8177717	chr6_cox_	3.35
LPP	8084742	chr3	3.35
DUSP1	8115831	chr5	3.34
MYADM	8031047	chr19	3.33
SAMD9L	8140971	chr7	3.32
TLR4	8157524	chr9	3.32
SNORA62	8078918	chr3	3.30
EGR2	7933872	chr10	3.30
TPM2	8161044	chr9	3.28
CARD6	8105077	chr5	3.28
ID3	7913655	chr1	3.27
VAMP5	8043203	chr2	3.26
HCP5	8118111	chr6	3.22
FLJ21963	7957386	chr12	3.22
OMD	8162388	chr9	3.22
BCAM	8029489	chr19	3.20
IFIT3	7929052	chr10	3.20
ADAMTS1	8069676	chr21	3.19
ARSE	8171161	chrX	3.17
IFITM2	7937330	chr11	3.17
C1QTNF7	8094184	chr4	3.17
CSDA	7961230	chr12	3.17
BHLHB2	8077441	chr3	3.17
IGFBP4	8007100	chr17	3.17
VCL	7928444	chr10	3.16
PTPRC	7908553	chr1	3.15
NR4A1	7955589	chr12	3.15
PODXL	8142981	chr7	3.15
NR3C1	8114814	chr5	3.13
ECM1	7905220	chr1	3.11
ADAMTSL3	7985522	chr15	3.10
HLA-DPB1	8118594	chr6	3.10
TNS3	8139500	chr7	3.09
MGC4677	8043363	chr2	3.09
HCRTR1	7899627	chr1	3.08
COL6A2	8069301	chr21	3.08
C1R	7960744	chr12	3.08
CREB3L2	8143188	chr7	3.06
NA	8167038	chrX	3.05
MX2	8068697	chr21	3.05
CSPG4	7990545	chr15	3.04
GBP1	7917516	chr1	3.03
EVI2B	8014063	chr17	3.03
PDLIM1	7935180	chr10	3.01

Cluster D2 vs D1

LGALS1	8072876	chr22	3.01
LOC442309	7945371	chr11	2.99
MR1	7907893	chr1	2.99
RFTN1	8085665	chr3	2.98
LOC93349	8048926	chr2	2.97
ZFP36L1	7979813	chr14	2.97
SAT1	8166469	chrX	2.97
RCN3	8030383	chr19	2.97
PLTP	8066619	chr20	2.97
FNDC1	8123104	chr6	2.96
RRAS	8038407	chr19	2.96
DUX4C	7931656	chr10	2.96
PLA2R1	8056151	chr2	2.95
TMEM45A	8081288	chr3	2.94
ICAM2	8017547	chr17	2.93
FLJ22662	7961440	chr12	2.93
DUX3	8098730	chr4	2.92
AXL	8029006	chr19	2.91
PLN	8121729	chr6	2.90
LRRC8C	7902874	chr1	2.90
NA	8180366	---	2.89
NA	8180367	---	2.89
PPM1J	7918593	chr1	2.88
GPR124	8145865	chr8	2.88
IL4R	7994280	chr16	2.87
ELF1	7971197	chr13	2.87
GBP2	7917532	chr1	2.87
AGRIN	7896822	chr1	2.86
P2RY13	8091523	chr3	2.86
NA	7893620	---	2.85
CH25H	7934916	chr10	2.84
C16orf30	7992293	chr16	2.84
KIAA2002	7990632	chr15	2.83
SLC29A1	8119974	chr6	2.83
MXRA5	8171172	chrX	2.82
NQO1	8002303	chr16	2.82
KLF6	7931810	chr10	2.82
COL10A1	8129082	chr6	2.81
DIO2	7980485	chr14	2.81
FMO2	7907249	chr1	2.81
BST2	8035304	chr19	2.81
CNN2	8024111	chr19	2.80
RGS18	7908376	chr1	2.79
MIRN21	8008885	chr17	2.79
FRMD6	7974316	chr14	2.78
LOC728888	8000636	chr16	2.78
F2R	8106393	chr5	2.77
SLC9A3R2	7992463	chr16	2.77
CCL5	8014316	chr17	2.76
PRSS23	7942957	chr11	2.76
TMEM109	7940372	chr11	2.75
FCGR3A	7921868	chr1	2.74

Cluster D2 vs D1

NA	8114536	chr5	2.74
COLEC12	8021946	chr18	2.73
OSTF1	8155883	chr9	2.68
DKFZP586H	7947512	chr11	2.68
IGFBP2	8048205	chr2	2.68
AEBP1	8132557	chr7	2.67
EHD2	8029950	chr19	2.64
LY96	8146934	chr8	2.64
FHOD1	8001981	chr16	2.62
AOAH	8139033	chr7	2.62
F11R	7921713	chr1	2.61
PQLC3	8040278	chr2	2.60
ETS2	8068593	chr21	2.59
COL6A1	8069269	chr21	2.59
C8orf4	8146115	chr8	2.59
NA	7951140	chr11	2.58
TNN	7907549	chr1	2.58
ITGA11	7989985	chr15	2.57
MYO1C	8011027	chr17	2.56
LMCD1	8077490	chr3	2.56
DRAM	7958019	chr12	2.56
AMICA1	7952022	chr11	2.55
HLA-A	8179041	chr6_qbl_r	2.55
NA	8102787	chr4	2.55
INPP5D	8049246	chr2	2.55
KIF1C	8004057	chr17	2.54
CD3G	7944185	chr11	2.52
RXFP1	8098060	chr4	2.52
HES1	8084880	chr3	2.52