

Table S3. List of leading edge genes for each biological module from gene set enrichment analysis.

Ion Channel Module	Development Module	ECM Module	Metabolism Module
GNG5	MAPK14	ITIH4	PPP2CB
OAZ3	MYO1C	BDNF	GPI
KCNB2	EGR3	EGF	ENO2
PDE6G	GNG5	SEMA6C	PGK1
SLC12A2	HSPB1	MST1L	ALDOA
SLC24A2	PLXNA4	THPO	ENO3
SLC22A1	DCT	TNF	PGAM1
CPEB4	PRKD2	LMAN1	ALDOC
STIM1	FLT3	MAPK1	HK1
GRM8	NOTCH2	GPC4	HK2
SLC6A16	ALCAM	FREM2	LDHB
HVCN1	ELL3	TYMP	QPRT
B2M	NOTCH4	WT1	NADSYN1
SLC6A15	GATA2	NFKB2	PNP
PDE11A	WNT9A	ITGB4	AFMID
SLC9A2	GNAT2	LGALS1	GPD1
SIX4	KNDC1	FOXC2	GPD1L
NTRK2	NLGN2	PLXNB1	PFKM
FAM26E	PGAP1	SEMA4A	OGDHL
SYT9	ERN1	SH3PXD2B	HOGA1
ATP6V0E1	CDX2	ONECUT2	PDHB
BDNF	HOXA3	SOSTDC1	DLAT
CLSTN3	TLX3	CDON	PGAM4
ATP6V1B1	LRP5L	ELF3	ACSS1
SLITRK3	BRSK1	ANXA6	ALDH3A1
HOMER3	SPTBN5	MYH11	ALDH7A1
CELSR2	WEE1	CFP	ALDH9A1
TRPV3	HOXA6	PAK1	
ANO1	ZSWIM6	GPI	
FLRT3	SHROOM2	PTGES	
DAGLA	SEMA6C	SEMA6A	
PRKX	AKIP1	DBI	
ATP5S	MLLT3	MME	
SLC23A2	FAM20C	SEMA6D	
NNT	TUFT1	MGST1	
LMAN1	INSR	ICAM4	
EGR2	MSLN	LRP1	
VAMP1	UBB	RASL11B	
NTRK3	TFEB	PDGFRA	
AMHR2	BARHL2	CHST15	
MAP2K1	HPSE	ATP7A	

SLC22A18	ZNF281	GPM6B
RASD1	RCC2	KDR
NIPSNAP1	SIGLEC1	CSGALNACT1
COL4A1	ACTL6A	IL32
SIX1	PAK6	HSP90B1
HSPA1A	MIXL1	SEMA3F
PRIMA1	FREM2	CTSL
PHKG2	CMTM7	F3
PPP2R5E	ESRRB	FZD8
PPIB	TYMP	ZMPSTE24
FSD1	TFAP2C	P3H1
EPOR	L3MBTL3	ELFN1
VEGFA	CSNK2A1	MAGEE1
HSPA4	DHX36	CHST11
ATG5	AMBN	FAM20C
AMIGO2	PPAT	HYAL1
COL9A1	PDLIM7	SULF1
MRAP2	AP1G1	CBS
EPHA5	BCAN	HAS3
IRS1	SEZ6L	ADAM32
IL11	ATG5	SEMA6B
CD19	AEBP1	ZEB1
PLA2G4B	IFITM1	ADAMTSL5
CDON	KDM1A	P4HA2
MASP2	HMGCS1	PLAT
CDK5R2	ONECUT2	GSTM2
EFEMP2	DUSP2	GSTM4
SLC25A3	NPY	TPM2
DLK2	DOCK1	AMBN
FSTL4	NSDHL	PPIB
EGFLAM	CYP24A1	MYO1E
GGT7	ERCC3	PEBP1
PDIA4	SCN4A	ELFN2
PRKCSH	PSAP	MANF
ATP6V1G2	GPI	NOD2
PAK1	PLCD1	PRRX1
GCNT4	DNAI1	KIF9
LRRC8C	MID1	BAMBI
PSME2	ALOX15	NTNG1
IL17RB	CRELD1	ONECUT1
S100A2	DNM1	MASP2
ROBO3	DAAM2	SEMA7A
CD274	PRKCH	ID2
IRS2	MYO10	VWA7

SMAD2	APOLD1	ITGB8
KLF15	DLL4	ICAM5
NXPH4	ALDH9A1	NKX2-1
CRELD1	ADAMTS4	ECEL1
SEMA6A	G6PD	S100A2
BOC	MME	HPX
AANAT	MTPN	RAMP2
CLDND1	MGST1	SMAD2
WDR73	COL6A2	TMEM184A
PEX12	LRP1	CRELD1
MATN1	POLR2A	TBX20
EFNA1	S1PR3	PHOSPHO1
EHD3	VWA2	PLXNA2
LTBP1	LYPD3	ALPL
ALDH9A1	COL7A1	CALU
FOXD1	ST8SIA4	DACT1
HOXB2	ENPP2	CREB3L1
ATL1	CXCL2	OTOG
NCAN	IPMK	FOXD1
EFNB1	HRH1	HPSE
EGFL8	HRH2	LGALS1
GDPD5	HIF1A	GPC1
NECAB2	LAMC3	HSP90AB1
RAB26	GPM6B	GAL3ST4
S100A3	NEK3	EGFL8
KATNB1	EPDR1	SSPO
VWA2	ARHGEF26	MUC1
CTF1	PDE4B	MST1
GTF2I	CDKN1A	S100A3
COL7A1	MN1	CTF1
COL3A1	MDGA1	LYPD3
TP53	DFNA5	TGM1
AMH	FGFR4	CXCL2
TCHH	CDKL5	SGCB
SCUBE2	UNCX	TCHH
HCST	PLP2	FRZB
KCNK5	BTK	SEMA3G
TAP1	FOXL1	SCUBE2
PTP4A3	ESR2	ATP1A3
NEK3	COLQ	SYNJ2BP
EPDR1	CLSTN3	NELL1
TRPM4	POLR2K	S100A1
SYNJ2BP	AQP6	VWA3A
NELL1	IL1R1	LGALS3BP

PLCH2	DMRTA1	AEBP1
LRP10	LDB1	CNTF
LGMM	LTB4R2	VWCE
EFHD1	CACNA1G	IL11
DAB2	NFIA	C1QL4
LRP6	ARF4	MYLK
SLC41A1	CGN	MRC2
VWCE	PREX1	PCSK5
EXOC3L1	SNCA	ZNF423
HSP90B1	THBS4	PLXNC1
TRPC3	PABPC1L	MUC3A
TMEM100	CCR10	PMP22
MICA	CACNA1I	OGDHL
COL24A1	FGF13	MEGF10
FOXL1	ADRA2C	RNF165
EHD2	ARNTL	ITGA7
FEZ1	MEIS1	TGFB1I1
AXL	PLA2G6	RECK
SHROOM2	SULF1	HSPA5
F3	USP2	SV2A
CAPN12	AQP3	CDKN1C
ATP2A2	ACTG2	C17orf58
NFIA	TNF	C1QTNF6
FGF8	PTCH2	NOG
ELFN1	SHC1	CITED1
STMN3	ZFYVE9	PLXNB3
DACH1	SGCE	HTRA3
COL25A1	CXCL1	BRINP2
PPP2R5A	AMHR2	CBLN1
NCOA1	RAP1GAP	CITED2
MYOD1	TTPA	SNED1
COL16A1	EXTL1	LOXL3
TNS1	MSH4	CSPG4
VAMP2	CHGA	WNT10B
STAB1	TGM2	GATA6
PRKG2	TTYH1	AMH
OPA1	GFRA2	SNAI2
RAB6A	EXT2	SOX9
BARX1	IGFBP4	MAP1A
TIMM17A	RPS6KA2	LGI3
PSMB9	OTOF	CRLF1
ADAMTS2	PPIB	DKK3
AQP3	SPOCK1	FNDC1
RPH3AL	HPCA	SCUBE3

PTCH2	SNED1	FGFR4
MAPK1	DGAT2	ANGPTL6
ITGB1BP2	CCDC151	ITGA11
ADAMTS14	ALOX15B	GDNF
KIF1A	MBNL1	CRIP2
PADI3	ARC	CEL
ABCG1	MYO1G	VWA5A
BMP6	AMIGO2	FGF8
ERBB3	BAMBI	FLRT1
CASP10	DDIT4	ITGB7
COL9A2	SCN3B	NTNG2
MICB	SYNGAP1	FGF13
RAP1GAP	DUSP15	SCUBE1
SYNRG	CNTFR	IGFBP5
PLEKHG2	ONECUT1	LAYN
LIF	SOSTDC1	IGFBPL1
TGM2	ADRB2	PBLD
ATP6AP1	ABLIM3	NRP1
ITGB4	HBEGF	ACVRL1
SERPINH1	EIF2B4	WNT6
TMEM145	CDK5R2	LIF
RSPO2	CBL	IGFBP4
SNED1	REC8	COL4A1
CHST4	ASXL1	SVEP1
ETV1	HAPLN3	MEGF11
BCAN	DOCK4	PODNL1
ADAM21	ACTL6B	BCAN
GUCY1A3	IL6R	ADAM21
COL5A1	MYH11	MMP25
CSPG4	SYNDIG1	MSX2
PDE1C	GCNT4	EMILIN1
PLXNB1	SLIT1	GPC3
ALOX15B	KCNIP2	CILP2
ADD2	TPBG	EFEMP2
NOD2	ITGA10	ADAMTS18
TCN2	ITGA9	TGFBR3
NIPAL3	LTK	SNCA
MMP25	ITGA11	GPC2
CPT1C	FBXO38	ADAMTS10
NPNT	ACAN	ITGA9
CISH	SIX4	MMP24
ESPN	SF3A2	CTSV
SDC1	FGF12	MMP14
GATA6	ITGA7	CHRD1

EFCAB10	TGFB1I1	PLAU
SEMA7A	EGF	ITGB3
AAAS	CTNNA1	WNT3A
MEX3B	HYAL1	COL9A1
PDPN	AVIL	MMP16
AOC3	DACT1	DNAJB6
RGS4	ID3	CXCL1
KDM5B	NAP1L2	TGM2
PLCD4	BTG1	MATN1
HMCN2	IST1	BMPER
FKBP7	NCAN	EMILIN2
SLC47A1	ADRA2B	EGFLAM
PSAP	FLT4	LTBP1
MYH11	OPRD1	DAB2
REPS2	LFNG	DPYSL3
ECEL1	SORBS1	ADAMTS4
ABCB6	CNTNAP2	CPAMD8
ADAMTS1	CACNA1C	CRTAC1
GPI	FGF5	RELL2
PLCD1	FOXE1	CRISPLD2
NID1	SLC17A7	VEGFA
KCNF1	SGCB	ITGA3
TPBG	PDE3A	VWA2
BMP1	EXOC4	FGF5
ITGA9	METRNL	INHAA
SPOCK3	BECN1	SDC1
MMP24	LINGO1	ADAM11
FBLN2	FKBP1A	MMP11
NOTCH3	IGSF9	CXCL12
PRKAA2	SLC24A4	FKBP1A
INHBB	C3AR1	INHBE
COL15A1	PAPSS2	HMCN2
MMP14	MTF2	ADAM12
KCNAB2	FBLN5	LAMA2
RASGRP3	SCN2A	SHH
ITGA11	SRCIN1	HMMR
AQP4	EPOR	SSC5D
BMP3	RPS6KB1	ITGA10
PDIA3	ZFP36L1	MFAP2
RDH11	BCOR	PDGFB
INHAA	YWHAB	SUSD5
MXRA8	SLC39A5	NCAN
COMP	SND1	NRP2
MMP11	SH3PXD2B	NPNT

PRKCH	CNTF	TLL2
PITX3	SYT3	ADAMTS17
HPCAL4	ECM1	SERPING1
ESAM	LRP6	ADAMTS5
CALML6	RASIP1	SULF2
FLRT1	ITPKA	CCDC80
NTNG2	DLX3	RSPO2
ADAMTS9	BCAR3	WNT5A
SLC26A10	NTNG1	LOX
IGFBP5	MYLK	PXDN
CALU	FANCF	TIMP3
HOXA1	KIAA1217	IGF2
GNRHR2	DDX21	ADAMTSL3
NDFIP2	EHD2	COLEC12
NGEF	PIP5K1A	TGFB3
ALDH5A1	ASPH	OLFML2A
DPYSL3	RIMS2	COLQ
CD44	DACH1	SPON1
NIPAL4	SLITRK3	SPOCK3
CD24	CCND1	SPOCK1
SCG3	CELSR2	LAMC3
GNRH2	SPINT1	FST
LAYN	KDM6A	MMP17
ADAMTS18	BARX1	ADAMTS9
MTPN	PRKX	NAV2
KDM4A	PRKCI	BMP6
TMEM30A	TYRO3	KCP
ADAM9	NR4A2	MDK
GPR157	LAMA1	COL24A1
CD1D	INHA	HBEGF
GAL3ST4	TCF7L2	TFPI2
PPP2CB	HSPA5	PTCH1
PDZRN3	CTR9	ENG
NIPA1	COL9A2	COL25A1
COL6A2	PTGER4	ADAMTS7
CAPN5	HOXD1	ADAMTSL4
RENBP	PITX3	BMP1
ADAMTS7	TRIM45	ADAMTS20
FKBP10	CAMK1D	GDF11
SLC5A5	FERMT3	SPOCK2
FGF5	TMEM107	ADAM19
LHX1	PLK5	ADAMTS2
PALMD	ITGB4	ITGA8
ENPP2	NTRK2	FBN3

CELF4	ATL1	FGF12
SLC12A9	NDEL1	ADAMTS14
THRA	PAK2	CHRD
FBXO2	PREX2	APLP1
FBN3	BDNF	HAPLN3
ATP6AP1L	MAP6	CD44
RTN2	MMD	SERPINH1
ZIC1	COL9A1	ADAM9
FRZB	GTPBP4	COL6A6
SVEP1	PAX3	COL6A2
PGF	KATNB1	FBLN2
CCDC47	NES	INHBB
RPS6KA2	WASF3	BMP3
ARHGEF9	PLAG1	COL16A1
COL27A1	PLD6	ADAMTS16
SLIT3	BRSK2	PGF
GRIP2	CCNE1	WNT2B
FBLN5	DCLK1	SERPINE2
BEST3	CREB3L2	COL7A1
TBX3	ITGB8	LAMB1
ARHGAP32	MMD2	COL9A2
COX6B2	CRLF1	ACAN
PCOLCE2	LRRN2	SFRP1
TM2D1	RGS20	CRIM1
HMMR	RASAL1	GDF7
EPHB1	CUX1	CCBE1
SLC44A1	POLR2C	FBLN5
YWHAB	GFRA1	COL3A1
LSAMP	KDR	ECM1
MYBPC2	TBC1D7	ACHE
MMP16	SRGAP2	GDF6
ATP6V1C2	INHBB	DAG1
WNT10B	DAB2	ADAMTS1
FADS1	LMO4	THBS4
TLL2	HAP1	SLIT3
VCAN	PLAU	EFEMP1
COL11A2	SPNS2	BMP2
PLS3	CPNE5	NID1
WNK4	CD72	SLIT2
SFXN1	THRA	COL15A1
RNF6	NID2	COL6A1
AQP6	KLF15	PCOLCE2
AHNAK	DISC1	SPARC
ITGB8	HES7	COL13A1

ACTN1
TAP2
CCDC78
TGFB3
BTG2
ADRA2C
EFEMP1
LAG3
CAD
NDRG4
CCBE1
DBN1
NKD1
TAL1
FBN1
FN1
APOL1
AHNAK2
SLC27A6
DGKD
HSPA1B
MAP3K12
TNF
RORB
USP14
MERTK
PROCR
ITGA7
ARHGEF17
MYOM2
MDK
VN1R1
MYO15A
DNAJC6
SMAD5
CADM2
APLP1
ARHGEF6
ABCA1
MCAM
OLFM1
CRTAC1
GCLC
CAMKK2

ACTN1
POU4F2
SMARCC2
SBDS
ETV1
BTG2
ITGB7
MYOD1
OLIG1
ATP6V1B1
IGFBP5
PTH1R
KCND3
CREB3L1
OPA1
FLRT3
SSBP3
EPHA5
WNT10B
ADAM9
CUX2
HSP90AB1
CAPN5
ROCK2
PCDH8
SHCBP1
RGMB
UNC5B
TUBB3
FOXB1
MAP2K1
KCNC1
RAB3A
LAMA2
VAX1
AMH
SYP
TMIE
COL4A1
KIF5C
CCDC47
ZC4H2
HHEX
CBLN1

VCAN
COL27A1
COMP
FBN1
MMP2
COL5A1
LAMA1
TNC
COL11A2
NID2
FN1
COL2A1
COL14A1

DDN	PLEKHA1
BAK1	CHRNA10
PRKD1	BOC
LRP12	OTX1
TRHDE	GPC1
NGFR	EGR2
COL6A1	ACHE
CD8A	MRC2
SEZ6L	SS18L1
AP3B2	WNK4
ACVRL1	LRRC17
ARHGEF2	PTPN5
GLI1	TGFBR3
RGS11	EFNB3
LDLR	KDM5B
CDH7	PRKD1
TMEM206	S1PR1
NEFH	DPYSL4
PACSIN1	COL25A1
COL2A1	CA2
TPRG1L	NID1
WASF3	NKD1
PDGFRA	BMP1
HLA-A	IGF2
MMP17	ROBO3
CNTFR	NPTN
APC	COL3A1
NFATC4	DNAAF1
CBL	CHRD1
OXGR1	FNDC3A
GPR3	RYR1
ANO8	SEMA6B
PAX5	RAMP2
GPM6B	CORO1A
RASL10B	SCN5A
BEST2	SLC9A6
UNC13D	ERBB3
SLC30A10	LHX6
POU4F1	PRKCQ
IL6R	NTRK3
ABCB4	USH1G
RDX	ATP7A
HLA-DOA	ATOX8
RGS7	CNTNAP1

ITGA10	NTNG2
CD33	INSM1
STRA6	BMPER
EN1	NAV2
SLC39A5	ZIC1
SLC39A6	LGR5
SCUBE3	MAN2A1
TBX2	SHANK3
TTYH2	ACTN2
DCHS2	TP53INP2
PLAU	CLSTN1
SPNS2	MYO1E
CD55	TMEM30A
MMP2	PAK1
NID2	TSHZ1
SLC4A11	GPRC5B
DISC1	LOXL3
ANO4	COL5A1
PPFIA4	MICAL2
EPHA7	COL6A1
GPRC5A	ITGA3
PCDHA10	EEF2K
NEFM	SDK2
GPR83	GDPD5
PCSK5	ETS2
CABP4	NEFH
RTN3	PACSIN1
PREX1	ETV4
KCNB1	NCOA1
THBS4	KLF7
PCDH10	APC
SCUBE1	FZD4
PREX2	CABP4
ATP7B	MSN
GM2A	NFATC4
LGR5	SLC9A3R1
HOMER2	CCDC40
OTOG	MAPK8IP2
ITPKA	RORB
SNAP91	SLC11A2
DGKA	HOXA7
TNFRSF21	RECK
USP2	LAMB1
LRP2	FUZ

TGFB3	MFAP2
CUX2	EN1
ITGB3	PTF1A
GPR50	CUL7
TUBB4A	SEMA6D
NPY1R	RAB10
NPTX1	CDKN1C
RIN1	PKDCC
LRP1	CDK5R1
SPARC	SGK1
NRP1	DRD2
SNTB2	VCAN
FOXN4	COL11A2
RASGRP1	SCARF1
RAB21	LRP8
ZNRF2	PLS3
COL13A1	AXL
EPHX2	RERE
MAP1B	PCSK5
PCDH18	CITED2
SLC5A6	AMOT
ANXA6	LRIG3
LAMA2	MATN1
SYNDIG1	TSPAN12
TPM2	ROM1
ATP6V1B2	ALPL
PCDHGA11	SEMA4A
PIK3R5	RASSF2
ZC4H2	PAX5
KALRN	FOXJ1
NOL3	PDZD7
FAT3	EPHA8
RGS20	CHD5
SLC2A4	PTPRM
SRCIN1	EFNB1
SPOCK2	ZMYND8
PDE1A	UNC13A
SLC10A4	OLIG2
ADORA1	ITGB3
RRH	PTPRD
SYNGAP1	SYT17
SERPING1	NPTX1
CEL	EPHA7
EEF2K	ACVRL1

ITSN1	SERPINE2
JPH1	MYO15A
SLC9A3R1	PITX2
SDK2	DAB1
IL1R1	MAGED1
ATP8A2	SEMA3G
LGI3	NOTCH3
KCNK7	MKS1
ARF4	NGFR
EFNB3	WDR19
DLL1	MMP16
DOCK4	FLRT1
SHANK3	MAPK1
TNFRSF10B	NPNT
COL14A1	HOXC11
ADIPOR2	PHOSPHO1
HLA-DRB5	SDC1
ADAMTS16	LATS2
WNT6	FOXC1
DNER	PAX1
SORCS1	FGFR1
MR1	DLX6
NEFL	SUFU
SLC31A1	DPYSL3
CXCL2	CD44
PDE3A	NLGN3
PMP22	BAK1
NPTX2	INSIG1
SGCE	LHX9
TMEM63C	SPARC
CDK5R1	NDRG4
PCDH1	VLDLR
PCDHGA7	SERPINH1
PRKCQ	CSGALNACT1
ATP7A	CDON
STIM2	KIDINS220
ITGB7	DMRTA2
TBX20	RNF165
SH2D5	SEMA6A
SLIT2	SPTBN4
GBX1	FEZ1
DLGAP3	MEGF11
SLC18A3	BCL2L11
NKAIN1	DNAJB6

NSF	ADCYAP1R1
MME	POU4F1
RASD2	LIF
CDH15	SMAD5
HPCA	HOXC4
CHD7	CRABP2
SHH	SNX3
SCAMP5	PROX1
CLCN5	FRZB
CDH22	ADAMTS1
GRID1	PBX3
ITGA3	RDH10
ARC	PLXNB1
KCNH3	ADAMTS7
SORBS1	BMP3
HLA-B	EFNA1
TPCN1	LHX2
TRO	RAB21
MAGEE1	HOXA1
FGF13	CHST11
L1CAM	PDGFB
DGKG	RIPPLY2
UBASH3B	HOXB5
PCDHGC4	HOXD13
HOPX	COMP
SLC13A3	TGFB3
HSPA2	NEFL
P2RY4	MED12
ENG	MERTK
RASA3	RDX
RHOA	GPC3
DPP4	HOXB6
RET	CD24
C3AR1	HOXB2
MAOA	HOXB4
KCTD16	MMP14
PTGFR	NKX3-2
LRRC4	NKX6-2
SNCAIP	GATA6
NKX2-1	MAF
SHC1	SMAD2
PDE4C	ZIC3
ROCK2	GDF6
SLC4A5	CXCL12

RPS6KB1	MAP1B
VLDLR	SYT2
CXCL1	SOX2
MPDZ	HOXB9
SLC4A9	PTPRO
SYT3	COL27A1
THBD	TMEM100
KCTD12	GLI1
COLQ	TAL1
HLA-DPB1	KCNA2
GPHN	CYP26B1
RASGRP2	ATP8A2
FZD8	GBX1
P2RX6	TBC1D20
AMOT	RARB
BAIAP3	NTRK1
NTRK1	RBFOX2
TNNI3	EOMES
TNNC1	WT1
NAV2	CHD7
PTH1R	WNT6
ADORA2B	PDGFRA
PTGER2	LHX3
SYPL2	EDNRB
IGF2	EPHB1
SFRP1	NKX2-2
ATP2A3	SHANK1
DSP	SOX4
APLN	TBX2
HBEGF	OSR1
CABP1	SEMA3F
FXYD6	FOXC2
HOXD9	RSP02
PTPN5	GDF11
HSPA5	HAND1
DES	CHRD
DNM3	HOXB3
THRB	DLX1
DSC2	COL13A1
SGCB	L1CAM
DAB1	HOXD11
AKAP9	SULF2
SYNGR1	NFASC
PRKCG	SLIT3

SLC39A11	VEGFA
YWHAG	OLFM1
IGSF9	MMP2
AVPR1A	STRA6
SSTR1	ZEB1
SPOCK1	TFAP2A
PLCB2	FN1
CORO1A	ITGA8
TNC	FOXN4
CACNA1C	FOXD1
DNM1	DAG1
C2CD4C	TNC
PTPRO	SEMA7A
AMPH	ID2
NAAA	ENG
ATP5F1	HOXD9
MC1R	CITED1
PLCL1	PLXNA2
S100A1	PRRX1
PPFIA3	DMRT3
RIMS2	SPTBN1
CDHR1	EFEMP1
SYTL4	HOXB8
HOXB8	NRP2
S1PR3	NRXN3
NMUR2	FBN1
CNGA4	SIX1
PCDHB2	RARG
PCDH19	PGF
UCN2	BMP6
PCDHGC3	HOXA2
HTR6	PLXNC1
CALCB	ADAMTS16
TTYH1	NKX2-1
HOXD10	DLL1
GPRC5B	PAX7
CCR10	SCN1B
HSP90AB1	LRP4
GABRE	MYC
WNT5A	CRMP1
LPAR2	RHOA
CLCN1	RET
PROKR1	SHOX2
NPR1	WNT3A

CBLN1	HEY1
GRIK3	SALL1
GIPR	DLX5
CANX	PLXNB3
BMP2	TBX3
CHRNA10	GDNF
PDE2A	GDF7
NPY	SFRP1
ZMYND8	TBX20
PGM5	SLIT2
WNT3A	HOXA11
GRIK4	VANGL2
TBXA2R	SHH
LTB4R2	PAX6
GNG2	HOXD10
C2CD4A	SOX8
SLC9A5	NRP1
ID2	EZR
DCHS1	WNT5A
GSTM2	WNT2B
SLC6A17	SIX2
SYT14	FGF8
DMRT3	COL2A1
FZD10	SNAI2
AUTS2	MSX2
SLC11A2	NOG
VDAC2	PTCH1
PTGER4	DCHS1
SULF2	LHX1
ADCY5	BMP2
CACNG6	PAX2
P2RY11	SATB2
SHISA7	SOX9
SLC9A6	
HTR2C	
SYTL2	
PDGFB	
GNB3	
CA2	
PVALB	
GRIK5	
GRM2	
FKBP1A	
WNT2B	

RYR1
PTPRD
HLA-DMB
PCDH8
ATP2B3
ATP4A
SYNGR4
PPP3CA
NOS2
KCNV1
IGF2BP1
SLC30A3
FZD4
LRP8
SERPINE2
SYT11
HERPUD1
PBX3
SYN1
SYT16
LTB4R
SHANK2
PLCG2
DYSF
CALCRL
OTOF
CNGA1
PLA2G6
VDAC1
RAB3A
ADRA2B
ITGA8
GABRD
KCNA3
GCGR
ACTN2
HRH1
ARL6IP1
ADCY7
RAMP2
SLC6A1
CCKBR
MAPK8IP2
SYT5

CHGA
SCN4A
TRPV4
BSN
HRH2
ADRA1B
MYLK
GDNF
KCNN3
CPLX1
SGK1
NFASC
PTCH1
SV2A
NMUR1
S1PR1
RAB3B
KCNC4
SYT12
HLA-DMA
PDE1B
EZR
UNC13A
SPTBN1
HAP1
SYN3
NPY5R
ACHE
PDE4B
SPTBN4
SLC8A3
LRP4
CHRM4
GABRQ
NPTN
STX1B
SLC8A2
DAG1
DOC2A
SLC24A4
ATP2A1
NRXN2
CNTNAP1
KCNN2

YWHAE
HLA-DRB1
CACNA2D2
GRIN3B
NLGN3
SLC17A7
CLSTN1
SYT6
DGKI
CNTNAP2
OPRL1
GRM4
CACNA1I
TRPM5
SYT7
SHANK1
ADRB1
CXCL12
SYT17
GABBR2
SLC38A3
RASGRF1
FGF12
KCNA7
GNAO1
ANK2
CAMK2D
KCNJ12
KCNH2
KCNAB3
SNCA
CACNA2D1
CACNA1G
CACNG8
ASPH
GNG4
SCN4B
CACNG7
SYP
HMOX1
KCNJ10
SNAP25
P2RX2
EDNRB

GPD1L
SLC13A4
OPRD1
SSTR2
CHRNA4
KCNIP3
KCND1
DRD2
KCNIP2
NRXN3
CHRNA3
KCNC3
HCN4
ADRB2
KCND3
ABCC8
SCN3B
ATP1A3
SCN2A
KCNMA1
SYT2
ATP1B2
ADCYAP1R1
ABAT
KCNC1
SCN5A
KCNA1
SCN1B
CACNA1B
KCNA2

