

Supplementary Table 5. *Clusters of co-regulated genes identified by clust.* Columns are: A, the genes of the “V” cluster; B, the genes of the “A” cluster.

"V" (308 genes)	"A" (312 genes)
Genes	Genes
ABCB10	ACAA1
ACBD3	ACTR1A
ADD3	ADAP1
AFF4	ADAT3
AGL	AGPAT2
AGPAT5	AKAP7
AKAP11	AKAP8L
ALG10	ALAS1
ANKIB1	ALPL
ANKRD40	AMBRA1
AP1AR	AMN
ARAP2	ANKH
ARHGAP5	ANO10
ARL13B	ANXA3
ARL6	ANXA9
ARNTL2	APC
ATMIN	APOO
ATXN7	ARF5
B3GALT2	ARID3B
B4GALT6	ARID5A
BAG5	ARID5B
BBS10	ASPRV1
BCLAF1	ASPSCR1
BDP1	ATAD3A
BIRC3	ATG4B
BLOC1S6	ATG4D
BRIP1	ATP5F1D
BTAF1	ATP6V0B
BTBD1	ATP6V0D1
C2CD5	AXIN1
C2orf69	B3GALT4
C6orf120	B3GAT3
CASP8AP2	B9D2
CBLL1	BANP
CCDC170	BASP1
CCDC85B	BBC3
CCNL1	BBX
CCNT1	BCL2L12
CCNT2	BCL3

CD164	BLOC1S3
CD2AP	BLVRA
CD302	BRMS1
CD38	BTBD2
CD47	CAPG
CD84	CARS1
CEP120	CCDC61
CEP78	CCNJL
CFAP97	CCS
CLN5	CD59
CMTR2	CDA
CNOT6L	CDK5
CNTRL	CERS6
CPEB4	CHRNA10
CPNE1	CLCN5
CSGALNACT2	COL5A3
CTSO	COL9A3
CUL4A	COPE
DCAF17	CPTP
DDX21	CRB2
DDX3Y	CST7
DENND4C	CTDP1
DFFB	CUEDC2
DIP2A	CXCR1
DIS3	CYSTM1
DNAJB14	DAPK3
DTHD1	DAXX
EDEM3	DBN1
EDRF1	DCP1A
EEA1	DDA1
ELK4	DDAH2
ENPP4	DENND1A
ERBIN	DGAT2
ESYT2	DHR SX
ETNK1	DOCK4
EXOC8	DOK4
FAM91A1	DPYD
FBXL3	DTNBP1
FEM1B	DTX2
FGFR1OP2	DVL2
FIBCD1	ECH1
FMR1	ECHS1
FOXN2	EFNA1
GABPA	EHMT1
GBP3	EPHA1
GEN1	EPHB6

GLCE	ERF
GMFB	ESR1
GNA13	ESR2
GNPTAB	FAAP20
GOPC	FAM161B
GPR15	FAM50A
GPR180	FBXL19
GSAP	FER
GSTCD	FFAR2
GTF2H3	FHOD1
GTF3C3	FKBP4
HACE1	FKBPL
HAUS6	FLOT1
HIPK3	FLOT2
HMGXB4	FLYWCH2
HOOK1	FUT7
HP1BP3	FXR2
HSPA13	GALE
HUS1	GALK1
IL6ST	GCNT1
IL7R	GLIPR2
IREB2	GNA15
ITGA4	GPD2
ITGAV	GPM6B
ITGB8	GPR35
JRKL	GPSM3
KBTBD6	GRAMD1A
KCNA3	GSDMD
KIAA1586	GSS
KLF3	H2AX
KLHL24	HCAR2
KLHL42	HCK
KLHL9	HDAC5
KLRF1	HEYL
KMT2C	HLX
KRAS	HMG20B
LATS1	HMGA1
LGSN	HSF1
LIG4	HSPA1B
LMAN1	HSPA1L
LNPEP	IDE
LTN1	IFITM2
LYSMD3	IL12RB2
LYST	IL4R
MAF	IMPDH1
MAP3K2	INTS5

MAP9	ITPKC
MARCHF6	ITPR2
MATR3	KCND1
MBLAC2	KCNJ15
MBNL1	KCNQ1
MBNL2	KLF16
MBTPS2	KLHL22
MED23	KREMEN1
MEX3C	KRT23
MIER3	LEPR
MOB1B	LIMK2
MTHFD2	LRP3
MYBL1	LRSAM1
N4BP2	LYPLA2
NAP1L2	MAD2L2
NCAPG2	MAML3
NCOA2	MAP1LC3A
NCR3LG1	MARK4
NHLRC3	MED16
NIN	MFSD10
NIPSNAP2	MICU1
NKTR	MIF4GD
NRAS	MLLT1
NRP2	MOB2
NUDT21	MPV17L2
NUS1	MRPL28
NXT2	MSRA
OGT	MSRB1
OSBPL8	MSRB2
OTUD3	MVB12A
OTUD4	MVD
OTUD6B	MXD3
PANK3	MYO5A
PAPOLG	MYO7B
PCMTD2	MYPOP
PCNP	NFE2
PDE12	NFKBIE
PDIK1L	NFKBIL1
PHF6	NIBAN2
PHIP	NLRX1
PHLDB2	NPC1
PIGF	NR1H2
PIK3C2A	NR2F6
PIKFYVE	NUBP2
PLCXD2	NUDC
PNRC2	OPHN1

POLR2M	OPRL1
PPIP5K2	ORM2
PPM1A	OTX1
PPP1CB	PACSIN2
PPP1R12A	PAF1
PRORSD1P	PANK4
PRPF38B	PANX2
PRPF4B	PDZD7
PTGER4	PEF1
PURA	PFKFB3
RAB11FIP2	PGM1
RAB12	PHF23
RAB39A	PLCD1
RAB6C	PLD3
RANBP6	PLEKHN1
RAP1B	PLIN3
RAP2A	POR
RBAK	PPARD
RBM25	PPME1
REEP3	PPP2R5D
RELCH	PPP4C
RHOA	PRCC
RP2	PRELID1
SACS	PRICKLE3
SEPSECS	PRR14
SH3RF1	PRXL2B
SHPRH	PTDSS2
SKIL	RAB11FIP4
SLC16A6	RAB36
SLC25A36	RAB3A
SLC25A46	RAB43
SLC30A1	RABGAP1
SLC30A7	RALY
SLC35B3	RFLNA
SLC38A1	RFX2
SLFN11	RHOG
SLFN5	RILPL1
SMAD5	RNASEK
SMARCA5	RNF5
SMARCA1	RPS27L
SMARCE1	RPS28
SMC4	RPTOR
SMCHD1	RUVBL2
SMG1	RXRB
SP4	S100A11
SPRTN	S1PR4

SREK1	SAC3D1
SRSF10	SAFB
SRSF6	SCYL1
STK26	SELENOM
SUCO	SERTAD1
SYNCRIP	SESN2
TAB3	SETBP1
TAF10	SGTA
TASOR	SH2B2
TDG	SH3GL1
TGFBR1	SHISA8
TGFBR3	SIGLEC7
THAP12	SIPA1L1
THAP5	SIRT6
TMED5	SLC25A1
TMED7	SLC27A1
TMEM123	SLC29A2
TMEM245	SLC50A1
TMEM30A	SNAI3
TMEM64	SOX6
TMTC3	SPHK1
TMX1	SPINK8
TMX3	SPNS2
TOB1	SPRYD3
TOGARAM1	SPTLC1
TP53INP1	SQOR
TPP2	ST3GAL4
TPT1	STARD3
TRAPPC10	STK11
TRAPPC11	SULT1A1
TRIM59	TADA3
TRMT112	TALDO1
TRMT6	TBC1D10B
TTC30B	TBC1D3L
TXK	TBKBP1
U2SURP	TFEB
UBE4A	TMEM187
UBXN4	TMUB1
UFL1	TNFAIP8L2
UFM1	TNFRSF10C
UHMK1	TNFRSF12A
UPF3A	TNIP2
USP1	TNRC6A
VCPIP1	TOP3B
VPS36	TP53I11
WASHC4	TPM2

WDR36	TPRA1
WSB1	TPRN
XPO1	TRAF2
XRN1	TRAPPC6A
YOD1	TRIM39
YTHDC2	TRIOBP
YTHDF3	TRPS1
ZBTB11	TSEN34
ZBTB33	TSG101
ZBTB41	TSPAN33
ZBTB6	TSPO
ZDHHC21	TUBA4A
ZFY	UBAC1
ZKSCAN1	UBAP1
ZKSCAN8	UBASH3B
ZNF12	UBE2M
ZNF189	USF1
ZNF23	UTF1
ZNF236	VAV1
ZNF24	VPS37C
ZNF28	WDR46
ZNF280D	WNK2
ZNF292	XPR1
ZNF326	XRCC3
ZNF354C	YIPF1
ZNF468	ZBTB45
ZNF518A	ZC3H3
ZNF614	ZFP2
ZNF623	ZNF219
ZNF644	ZNF282
ZNF655	ZNF408
ZNF677	ZNF438
ZNF684	ZNF444
ZNF699	ZNF467
ZNF700	ZNF524
ZNF736	ZNF574
ZNF770	ZNF609
ZNF772	ZNF622
ZXDB	ZNF672
	ZNF775
	ZNF787
	ZNF821
	ZYG11B
