

HTG EdgeSeq Oncology Biomarker Panel Gene List

AMPK Pathway

ACACA	AK1	CPT1A	GAPDH	MTOR	PPP2R1A	PRKAG2	SREBF1
ACACB	AK2	CPT1B	GPAM	PDPK1	PPP2R1B	PRKAG3	STK11
ACTB	AK3	CPT1C	GPAT2	PFKFB1	PPP2R2B	PRKAR1A	STRADA
ADIPOR1	AKT1	CPT2	GYS1	PFKFB2	PPP2R4	PRKAR1B	STRADB
ADIPOR2	AKT2	CRTC2	GYS2	PFKFB3	PRKAA1	PRKAR2A	TP53
ADRA1A	AKT3	CRY1	HMGCR	PFKFB4	PRKAA2	PRKAR2B	TSC1
ADRA1B	ATG13	EEF2K	HNF4A	PNPLA2	PRKAB1	RB1CC1	TSC2
ADRA1D	CAMKK1	EIF4EBP1	INSR	PPARGC1A	PRKAB2	RPS6KB1	ULK1
ADRA2A	CAMKK2	ELAVL1	LEPR	PPARGC1B	PRKACA	RPS6KB2	
ADRA2B	CHRNA1	FASN	LIPE	PPP2CA	PRKACB	RPTOR	
ADRA2C	CHRNB1	FOXO3	MLYCD	PPP2CB	PRKAG1	SLC2A4	

Angiogenesis

ACTB	CD59	CXCL9	FLT1	IL17F	NPPB	PTN	THBS2
AGGF1	CDH5	EDIL3	FN1	IL1B	NPR1	RHOB	TIE1
AKT1	CHGA	EDN1	FOXO4	IL6	NRP1	RNH1	TIMP1
AMOT	COL18A1	EFNA1	FST	ITGAV	NRP2	RUNX1	TIMP2
ANG	COL4A3	EFNB2	GAPDH	ITGB3	PDGFA	S1PR1	TIMP3
ANGPT1	CSF3	EGF	GRN	JAG1	PDGFB	SERPINC1	TNF
ANGPT2	CTGF	ENG	GRP	KDR	PDGFD	SERPINE1	TNNI2
ANGPTL1	CXCL1	EPHB4	HGF	KITLG	PECAM1	SERPINF1	TNNI3
ANGPTL4	CXCL10	ERBB2	HIF1A	KLK3	PF4	SPHK1	TYMP
ANPEP	CXCL11	EREG	HPSE	LECT1	PGF	SPINK5	VEGFA
BAI1	CXCL12	F3	ID1	LEP	PLAU	STAB1	VEGFB
BMP2	CXCL13	FGF1	IFNB1	MDK	PLG	TEK	VEGFC
BTG1	CXCL14	FGF13	IFNG	MMP14	PPBP	TGFA	
CCL11	CXCL2	FGF2	IGF1	MMP2	PRL	TGFB1	
CCL15	CXCL3	FGFBP1	IL10	MMP9	PROK1	TGFB2	
CCL2	CXCL5	FGFR3	IL12A	NOS3	PROK2	TGFBR1	
CD55	CXCL6	FIGF	IL12B	NOTCH4	PTGS1	THBS1	

Apoptosis

ACTB	BCL10	BNIP3	CASP4	COMMD4	FAF1	HTT	JPH3
AIFM1	BCL2	BNIP3L	CASP5	CRADD	FAS	IFNG	JUN
AKT1	BCL2A1	BOK	CASP6	CTSB	FASLG	IGF1	KCNIP1
APAF1	BCL2L1	BRAF	CASP7	CTSS	FEM1B	IGF1R	LTA
APP	BCL2L10	C1orf159	CASP8	CYBB	FOXI1	IGF2	LTBR
ATG12	BCL2L11	CAPN1	CASP8AP2	CYCS	FUS	IKBKB	MADD
ATG16L1	BCL2L2	CAPN2	CASP9	CYLD	GAA	IKBKG	MAG
ATG3	BECN1	CAPN3	CCDC103	DAPK1	GADD45A	IL10	MAP1LC3A
ATG5	BFAR	CAPN5	CD27	DEFB1	GALNT5	INS	MAP2K4
ATG7	BID	CAPN6	CD40	DENND4A	GAPDH	IRF1	MAP3K1
ATP6V1G2	BIK	CAPN7	CD40LG	DFFA	GLUD1	IRF2	MAPK10
BAD	BIRC2	CAPNS1	CD70	DIABLO	GLUL	IRF3	MAPK8
BAG1	BIRC3	CASP1	CDKN2A	DPYSL4	GRB2	IRF4	MCL1
BAG3	BIRC5	CASP10	CFLAR	EDA2R	GZMB	IRF5	MDM2
BAK1	BIRC6	CASP14	CHUK	EIF5B	HELLS	IRF6	MGEA5
BAX	BMF	CASP2	CIDEA	ESR1	HRK	IRF7	MYC
BBC3	BNIP2	CASP3	CIDEB	FADD	HSPBAP1	IRGM	MYD88

NAIP	NOL3	PMAIP1	RELA	SP1	TNFRSF10B	TNFRSF8	TP73
NFKB1	NOX1	PPIA	RIPK1	SPATA2	TNFRSF11B	TNFRSF9	TRADD
NFKBIA	NOX4	PPID	RIPK2	SQSTM1	TNFRSF14	TNFSF10	TRAF2
NFKBIE	OR10J3	PRF1	RIPK3	SYCP2	TNFRSF17	TNFSF15	TRAF3
NGF	PARP1	PVR	RPS6KB1	TMEM123	TNFRSF1B	TNFSF8	TXNL4B
NGFR	PARP2	PYCARD	S100A7A	TMEM57	TNFRSF21	TP53	ULK1
NGFRAP1	PIK3C3	PYGL	SLC25A4	TNF	TNFRSF25	TP53BP2	XIAP
NOD1	PIK3R1	RAB25	SNCA	TNFRSF10A	TNFRSF4	TP63	

Cardio Toxicity

ABHD2	BTG2	DUSP8	HSPH1	PLAU	RPS6KB1	TIAM1	VEGFA
ADRA2A	CCL7	EGR1	IGFBP5	PPBP	SERPINE1	TIMP1	WIPI1
AIFM1	CCR1	FOSL1	IL6	PRKAB2	SPP1	TXNIP	
AK3	CD14	GJA1	MCM6	PSMD7	TCF4	UBXN2A	
BCAT1	COL3A1	HSPA2	PLA2G4A	PVR	TGFB2	VCAN	

Cell Cycle

ANAPC2	CCNE1	CDK8	E2F5	MAPK1	NPM1	PTTG1	SMC3
ATM	CCNE2	CDKN1A	EP300	MAPK3	NUF2	RAD1	SMC4
ATR	CCNF	CDKN1B	FBXO5	MAX	NUP62	RAD17	SPC25
AURKA	CCNG1	CDKN2A	FBXW11	MCM2	ORC6	RAD21	STAG2
AURKB	CCNG2	CDKN2B	FEN1	MCM3	PCNA	RAD50	STMN1
BCCIP	CCNH	CDKN2C	FGFR10P	MCM4	PKMYT1	RAD51	SYCP2
BCL2	CCNT1	CDKN2D	GADD45A	MCM5	PLK1	RAD51C	TERF1
BIRC5	CDC14A	CDKN3	GTSE1	MCM6	PLK4	RAD9A	TERF2IP
BLM	CDC16	CENPF	H2AFX	MCM7	POLD1	RB1	TERT
BRCA1	CDC20	CENPN	H3F3A	MDM2	POLD2	RBBP8	TFDP1
BRCA2	CDC25A	CHEK1	HDAC1	MKI67	POLD3	RBL1	TFDP2
BTRC	CDC25B	CHEK2	HDAC8	MLH1	POLD4	RBL2	TINF2
BUB1	CDC25C	CKS1B	HIST1H3H	MLH3	POLE2	RFC1	TOP2A
BUB1B	CDC34	CKS2	HJURP	MNAT1	PPP2CA	RFC3	TOP3A
CASP3	CDC6	CSNK1E	HSP90AA1	MRE11A	PPP2CB	RFC4	TP53
CCNA1	CDC7	CSNK2A1	HSPA2	MSH4	PPP2R1A	RPA1	TYMS
CCNA2	CDK1	CSNK2B	HUS1	MSH5	PPP2R1B	RPA3	UBB
CCNB1	CDK2	CUL2	KIF2C	MYBL2	PRKACA	RRM2	UBE2C
CCNB2	CDK4	CUL3	KNTC1	MYC	PRKAR2B	RUVBL1	UBE2I
CCNC	CDK5R1	DKC1	KPNA2	NBN	PRKCA	SERTAD1	WEE1
CCND1	CDK5RAP1	DMC1	LIG1	NCAPD3	PRKCB	SKP2	
CCND2	CDK6	E2F1	LIN9	NDC80	PSMD2	SMC1A	
CCND3	CDK7	E2F3	MAD2L1	NEK2	PSMD7	SMC1B	

Cluster of Differentiation

ABCG2	CCR3	CD2	CD3D	CD68	CEACAM3	DDR1	FGFR1
ACKR1	CCR4	CD209	CD4	CD70	CEACAM5	ENG	FGFR2
ACKR3	CCR5	CD22	CD40	CD74	CSF1R	ENTPD1	FGFR3
ADAM17	CCR6	CD24	CD40LG	CD79A	CSF3R	EPCAM	FGFR4
ALCAM	CCR7	CD27	CD44	CD80	CTLA4	ERBB2	FLT3
ALK	CCR8	CD274	CD47	CD83	CXCR1	F11R	FZD10
ANPEP	CCR9	CD276	CD5	CD86	CXCR2	F3	FZD4
BMPR1B	CD14	CD28	CD52	CD8A	CXCR3	FAS	FZD9
C5AR1	CD160	CD33	CD55	CDH1	CXCR4	FASLG	ICAM1
CCR1	CD163	CD34	CD59	CDH2	CXCR5	FCER2	ICOS
CCR2	CD19	CD38	CD63	CDH5	CXCR6	FCGR1A	IFNGR1

IGF1R	IL4R	ITGAM	L1CAM	NGFR	PVR	TLR6	TNFRSF21
IGF2R	IL5RA	ITGAV	LAG3	NRP1	S1PR1	TLR8	TNFRSF4
IL10RA	IL6R	ITGB1	LEPR	NT5E	SELE	TLR9	TNFRSF8
IL10RB	IL6ST	ITGB2	LIFR	PDCD1	SLAMF7	TNFRSF10A	TNFRSF9
IL13RA2	IL7R	ITGB3	MME	PDCD1LG2	SLC7A5	TNFRSF10B	TNFSF10
IL1R1	INSR	ITGB4	MPL	PDGFRA	TEK	TNFRSF10C	TNFSF11
IL1R2	ITGA2	JAG1	MS4A1	PDGFRB	THY1	TNFRSF10D	TNFSF13B
IL2RA	ITGA3	KDR	MSR1	PECAM1	TLR1	TNFRSF12A	TNFSF14
IL2RB	ITGA4	KIT	MST1R	PLAUR	TLR2	TNFRSF14	TNFSF8
IL2RG	ITGA5	KLRB1	MUC1	PROM1	TLR3	TNFRSF17	TSPAN7
IL3RA	ITGA6	KLRD1	NCAM1	PTPRC	TLR4	TNFRSF1B	VCAM1

DMPK

ABCA2	ABCC3	CYP1A2	FMO3	SLC19A3	SLC28A3	SLC5A1	SLCO3A1
ABCA3	ABCC4	CYP1B1	FMO5	SLC22A1	SLC29A1	SLC5A4	SLCO4A1
ABCA4	ABCC5	CYP2A6	FYN	SLC22A2	SLC29A2	SLC7A11	SULT1A1
ABCA5	ABCC6	CYP2B6	GSTM1	SLC22A3	SLC2A13	SLC7A5	SULT1B1
ABCA9	ABCD1	CYP2C19	GSTM3	SLC22A6	SLC2A14	SLC7A6	SULT2A1
ABCB11	ABCD3	CYP2C8	SLC10A1	SLC22A7	SLC2A2	SLC7A7	TBP
ABCB4	ABCD4	CYP2C9	SLC10A2	SLC22A8	SLC31A1	SLC7A8	UGT1A1
ABCB6	ABCF1	CYP2D6	SLC15A1	SLC22A9	SLC38A2	SLC7A9	UGT1A4
ABCC1	ABCG8	CYP2U1	SLC15A2	SLC25A13	SLC38A5	SLCO1A2	UGT1A6
ABCC10	AHR	CYP3A4	SLC16A1	SLC25A3	SLC39A6	SLCO1B1	UGT2B7
ABCC11	AHRR	CYP3A5	SLC16A2	SLC26A2	SLC3A1	SLCO1B3	
ABCC12	CYP19A1	CYP4A22	SLC19A1	SLC28A1	SLC3A2	SLCO2A1	
ABCC2	CYP1A1	CYP7A1	SLC19A2	SLC28A2	SLC45A3	SLCO2B1	

DNA Repair

APEX1	DNAJA3	DNAJC11	DNAJC7	MGMT	NTHL1	RAD23B	TOP3B
APEX2	DNAJA4	DNAJC12	DNAJC8	MLH1	OGG1	RAD50	TREX1
ATM	DNAJB1	DNAJC13	DNAJC9	MLH3	PARP1	RAD51	UNG
ATR	DNAJB11	DNAJC14	ERCC1	MMS19	PARP2	RAD51B	XAB2
ATXN3	DNAJB12	DNAJC15	ERCC2	MPG	PARP3	RAD51C	XPA
BRCA1	DNAJB13	DNAJC16	ERCC3	MRE11A	PMS1	RAD51D	XPC
BRCA2	DNAJB14	DNAJC17	ERCC4	MSH2	PMS2	RAD52	XRCC1
BRIP1	DNAJB2	DNAJC18	ERCC5	MSH3	PNKP	RAD54L	XRCC2
CCNH	DNAJB5	DNAJC21	ERCC6	MSH4	POLB	RFC1	XRCC3
CCNO	DNAJB6	DNAJC3	ERCC8	MSH5	POLD3	RPA1	XRCC4
CDK7	DNAJB7	DNAJC4	EXO1	MSH6	POLL	RPA3	XRCC5
DDB2	DNAJB8	DNAJC5	FEN1	MUTYH	PRKDC	SLK	XRCC6
DMC1	DNAJB9	DNAJC5B	LIG1	NEIL1	RAD18	SMUG1	XRCC6BP1
DNAJA1	DNAJC1	DNAJC5G	LIG3	NEIL2	RAD21	TDG	
DNAJA2	DNAJC10	DNAJC6	LIG4	NEIL3	RAD23A	TOP3A	

EGF / PDGF Pathway

ACTR2	BCAR1	COL1A1	EGR1	GAB1	JAK1	MAPK1	NFATC3
AKT1	BCL2	CREB1	EIF4E	GRB2	JUN	MAPK10	NFKB1
AKT2	BRAF	CSNK2A1	ELK1	GSK3A	KRAS	MAPK3	NRAS
AKT3	CASP3	CSNK2B	EPS8	GSK3B	LTA	MAPK8	NUP62
ARAF	CASP9	DUSP1	FASLG	HBEGF	MAP2K1	MAPK9	PDGFA
ATF1	CBL	DUSP6	FN1	HRAS	MAP2K4	MKNK1	PDGFB
ATF2	CCND1	EGF	FOS	IKKBK	MAP2K7	MMP7	PDGFRA
BAD	CHUK	EGFR	FOXO3	IL2	MAP3K2	NCK2	PDPK1

PIK3CA	PLAT	PRKCA	RAP1A	RPS6KA5	SRC	STAT5A
PIK3R1	PLCG1	PTEN	RASA1	RPS6KB1	STAT1	TP53
PIK3R2	PPP2CA	RAF1	RHOA	SHC1	STAT3	

EGFR / HER Pathway

AKT1	EPGN	IGF2R	MAP2K2	MAPK8	PDK1	PLCG1	SHC1
AKT1S1	ERBB2	IGFBP1	MAP2K4	MAPK9	PIK3C2A	PLCG2	SHC2
AKT2	ERBB3	IGFBP2	MAP2K7	MDM2	PIK3C3	PRKCA	SHC3
AKT3	ERBB4	IGFBP3	MAP3K1	MET	PIK3CA	PRKCB	SHC4
ARAF	EREG	IGFBP4	MAP3K2	MTOR	PIK3CB	PRKCD	STAT1
AREG	HBEGF	IGFBP5	MAPK1	NRAS	PIK3CD	PRKCE	STAT2
BRAF	HEY1	IGFBP6	MAPK10	NRG1	PIK3CG	PRKCG	STAT3
BTC	HEY2	IGFBP7	MAPK11	NRG2	PIK3R1	PRKCZ	STAT4
CDH1	HEYL	ITPKB	MAPK12	NRG3	PIK3R2	RAC1	STAT5A
CTNNB1	HGF	JAK1	MAPK13	NRG4	PIK3R3	RAC2	STAT5B
CTNNBIP1	HRAS	JAK2	MAPK14	PAK1	PIK3R5	RAC3	STAT6
CTNND2	IGF1	JAK3	MAPK3	PAK1IP1	PLCB1	RAF1	TGFA
EGF	IGF1R	KRAS	MAPK6	PAK3	PLCB4	RASGRP1	
EGFR	IGF2	MAP2K1	MAPK7	PAK7	PLCE1	RASGRP2	

FGFR Pathway

AKT1	FGF1	FGF4	HEYL	MAP3K1	PAK3	PLCG2	SHC1
AKT1S1	FGF10	FGF5	HRAS	MAPK1	PAK7	PRKCA	SHC2
AKT2	FGF11	FGF6	ITPKB	MAPK10	PIK3C2A	PRKCB	SHC3
AKT3	FGF12	FGF7	JUN	MAPK11	PIK3C3	PRKCD	SHC4
ARAF	FGF13	FGF8	JUNB	MAPK12	PIK3CA	PRKCE	SOS1
BRAF	FGF14	FGF9	JUND	MAPK13	PIK3CB	PRKCG	SOS2
CADM1	FGF16	FGFBP1	KL	MAPK14	PIK3CD	PRKCZ	SPRY1
CBL	FGF17	FGFR1	KLB	MAPK3	PIK3CG	RAC1	SPRY2
CBLC	FGF18	FGFR1OP	KRAS	MAPK6	PIK3R1	RAC2	SPRY4
CDC42	FGF19	FGFR2	MAP2K1	MAPK7	PIK3R2	RAC3	SRC
CDH1	FGF2	FGFR3	MAP2K2	MAPK8	PIK3R3	RAF1	TCF4
CDH13	FGF20	FGFR4	MAP2K3	MAPK9	PIK3R5	RASGRP1	
CDH2	FGF21	GAB1	MAP2K4	MTOR	PLCB1	RASGRP2	
CDH3	FGF22	GRB2	MAP2K5	NRAS	PLCB4	RHOA	
CDH5	FGF23	HEY1	MAP2K6	PAK1	PLCE1	RHOB	
CRK	FGF3	HEY2	MAP2K7	PAK1IP1	PLCG1	RHOV	

Hedgehog Pathway

BCL2	CSNK1E	FOXE1	IHH	OTX2	SHH	WNT11	WNT7B
BMP2	CTNNB1	FRMD6	KCTD11	PRKACA	SMO	WNT16	WNT8A
BMP4	DHH	GAS1	LATS1	PRKACB	STK3	WNT2	WNT8B
BMP5	DISP1	GLI1	LATS2	PTCH1	STK36	WNT2B	WNT9A
BMP6	DISP2	GLI2	LRP2	PTCH2	SUFU	WNT3	WNT9B
BMP7	ERBB4	GLI3	MAPK1	PTCHD1	TP53	WNT3A	ZIC1
BMP8B	FAT4	GREM1	MOB1B	PTCHD2	VEGFA	WNT4	ZIC2
BOC	FBXW11	GSK3B	MTSS1	PTCHD3	WIF1	WNT5A	
BTRC	FGF9	HHAT	NF2	RAB23	WNT1	WNT5B	
CDON	FGFR3	HHIP	NPC1	RUNX2	WNT10A	WNT6	
CSNK1A1	FKBP8	IFT52	NUMB	SFRP1	WNT10B	WNT7A	

Housekeepers

ACTB	DDX5	GAPDH	OAZ1	RPL38	RPS7	SOD1	YWHAZ
ATP5F1	EEF1G	NCL	PPIA	RPL6	SLC25A3	TBP	

Hypoxia

ADM	BLM	EGLN1	FOS	IER3	NAMPT	PFKFB3	SLC2A1
ADORA2B	BNIP3	EGLN2	GBE1	IGFBP3	NCOA1	PFKFB4	SLC2A3
ALDOC	BNIP3L	EGR1	GPI	JMJD6	NDRG1	PFKL	TP53
ANGPTL4	CA9	EIF4EBP1	GYS1	LGALS3	NFKB1	PGF	TPI1
ANKRD37	CCNG2	ENO1	HIF1A	LOX	NOS3	PIM1	TXNIP
ANXA2	COP55	EPO	HIF1AN	MAP3K1	ODC1	PKM	USF2
APEX1	CTSA	ERO1L	HIF3A	MET	P4HA1	PLAU	VDAC1
ARNT	DDIT4	F10	HK2	MIF	P4HB	RBPJ	VEGFA
ATR	DNAJC5	F3	HMOX1	MMP9	PDK1	SERPINE1	
BHLHE40	EDN1	FAM162A	HNF4A	MXI1	PER1	SLC16A3	

Immuno-Oncology

ACKR2	CCL27	CD86	CXCL3	HPGD	IL1RN	IRF6	MBL2
ACKR3	CCL28	CD8A	CXCL5	ICAM1	IL2	IRF7	MIF
ACKR4	CCL3	CEACAM3	CXCL6	ICOS	IL20	IRF8	MMP9
ADIPOQ	CCL4	CEACAM5	CXCL9	ID1	IL20RA	IRF9	MPO
APCS	CCL5	CEACAM7	CXCR1	ID2	IL20RB	ITGAM	MS4A1
APOL3	CCL7	CEBPB	CXCR2	ID3	IL21	ITGB2	MSTN
AREG	CCL8	CEBPD	CXCR3	ID4	IL22	ITM2A	MX1
BCL2	CCR1	CHI3L1	CXCR4	IDO1	IL22RA1	JAK2	MYD88
BCL6	CCR10	CKLF	CXCR5	IFNA2	IL22RA2	KIT	NFAT5
BMP2	CCR2	CKMT1A	CXCR6	IFNAR1	IL23A	KITLG	NFATC1
BMP4	CCR3	CKMT2	CXXC4	IFNB1	IL23R	KNG1	NFATC3
BMP6	CCR4	CMKLR1	DDX58	IFNG	IL24	LAG3	NFATC4
BMP7	CCR5	CMTM1	EDA2R	IFNGR1	IL27	LIF	NFKB1
C3	CCR6	CMTM2	EOMES	IFNL3	IL2RA	LTA	NFKBIA
C3AR1	CCR7	CMTM3	FADD	IL10	IL2RB	LTB	NGFR
C5	CCR8	CMTM4	FAF1	IL10RA	IL2RG	LTBR	NGFRAP1
C5AR1	CCR9	CNTF	FAS	IL10RB	IL3	LY96	NLRP3
CA9	CCRL2	CRLF2	FASLG	IL11	IL33	LYZ	NOD1
CASP1	CCT2	CRP	FGL2	IL11RA	IL3RA	MADCAM1	NOD2
CCL1	CD14	CSF1	FOS	IL12A	IL4	MAF	NODAL
CCL11	CD160	CSF1R	FOXP3	IL12B	IL4R	MAGEA1	NOS2
CCL13	CD19	CSF2	FPR1	IL12RB2	IL5	MAGEA11	NR3C1
CCL14	CD209	CSF3	GATA3	IL13	IL5RA	MAGEA2	OMD
CCL15	CD27	CSF3R	GBP1	IL13RA2	IL6	MAGEA4	OSM
CCL16	CD274	CTLA4	GBP2	IL15	IL6R	MAGEB1	PDCD1
CCL17	CD276	CX3CL1	GNLY	IL16	IL6ST	MAGEB2	PDCD1LG2
CCL18	CD28	CX3CR1	GPI	IL17A	IL7	MAGEB3	PF4V1
CCL19	CD38	CXADR	GPR17	IL17F	IL7R	MAGEC1	PIAS1
CCL2	CD3D	CXCL1	GZMA	IL17RB	IL9	MAGEC2	PIAS2
CCL20	CD4	CXCL10	GZMB	IL18	ILK	MAGED1	PIAS3
CCL21	CD40	CXCL11	GZMH	IL19	IRAK1	MAGED2	PPARG
CCL22	CD40LG	CXCL12	HAVCR2	IL1A	IRF1	MAGEE1	PPBP
CCL23	CD47	CXCL13	HIF1A	IL1B	IRF2	MAGEF1	PRDM1
CCL24	CD68	CXCL14	HLA-A	IL1R1	IRF3	MAGEL2	PRF1
CCL25	CD70	CXCL16	HLA-B	IL1R2	IRF4	MAPK1	PTCRA
CCL26	CD80	CXCL2	HLA-E	IL1RAP	IRF5	MAPK8	PTGS2

RAG1	STAT2	TGFB2	TLR6	TNFRSF11B	TNFSF10	TNNI3	XCL1
RIPK1	STAT3	THPO	TLR7	TNFRSF14	TNFSF11	TOLLIP	XCL2
RIPK2	STAT4	TICAM1	TLR8	TNFRSF17	TNFSF13B	TRADD	XCR1
RORC	STAT5A	TIRAP	TLR9	TNFRSF1B	TNFSF14	TRAF6	
SELE	STAT5B	TLR1	TNF	TNFRSF21	TNFSF15	TSLP	
SLC11A1	STAT6	TLR2	TNFRSF10A	TNFRSF25	TNFSF8	TYK2	
SLIT2	STC2	TLR3	TNFRSF10B	TNFRSF4	TNFSF9	TYMP	
SPP1	TBX21	TLR4	TNFRSF10C	TNFRSF8	TNNC2	VEGFA	
STAT1	TGFB1	TLR5	TNFRSF10D	TNFRSF9	TNNI2	VTCN1	

JAK / STAT Pathway

A2M	EGFR	IFNG	IRF9	NFKB1	PTPN1	SOCS3	STAT5A
AKT1	EPOR	IFNGR1	ISG15	NOS2	PTPN11	SOCS4	STAT5B
BCL2L1	F2	IL10RA	JAK1	NR3C1	PTPRC	SOCS5	STAT6
CCND1	F2R	IL20	JAK2	OAS1	SH2B1	SP1	STUB1
CDKN1A	FAS	IL2RA	JAK3	OSM	SMAD1	SPI1	TYK2
CEBPB	FCER2	IL2RG	JUN	PDGFRA	SMAD2	SRC	USF1
CEBPD	FCGR1A	IL4	JUNB	PIAS1	SMAD3	STAM	YY1
CRK	GATA3	IL4R	LRG1	PIAS2	SMAD4	STAT1	
CRP	GHR	IL6ST	MCL1	PIAS3	SMAD5	STAT2	
CSF1R	GRB2	INSR	MPL	PRL	SOCS1	STAT3	
CXCL9	IFNAR1	IRF1	MYC	PRLR	SOCS2	STAT4	

MAP Kinase Pathway

ARAF	CDC42	CHUK	FOS	MAP2K3	MAPK10	MAPKAPK2	PRDX6
ATF2	CDK2	COL1A1	GRB2	MAP2K4	MAPK11	MAPKAPK3	RAC1
BRAF	CDK4	CREB1	HRAS	MAP2K5	MAPK12	MAX	RAF1
CCNA1	CDK6	CREBBP	HSPA5	MAP2K6	MAPK13	MEF2C	RB1
CCNA2	CDKN1A	DLK1	HSPB1	MAP2K7	MAPK14	MKNK1	SFN
CCNB1	CDKN1B	E2F1	JUN	MAP3K1	MAPK3	MOS	SMAD4
CCNB2	CDKN1C	EGFR	KRAS	MAP3K2	MAPK6	MST1	TP53
CCND1	CDKN2A	EGR1	KSR1	MAP3K3	MAPK7	MYC	
CCND2	CDKN2B	ELK1	LAMTOR3	MAP3K4	MAPK8	NFATC4	
CCND3	CDKN2C	ETS1	MAP2K1	MAP4K1	MAPK8IP2	NRAS	
CCNE1	CDKN2D	ETS2	MAP2K2	MAPK1	MAPK9	PAK1	

NFkB Pathway

AGT	CCL2	CXCL3	IKBKG	MALT1	RELA	TLR2	TRADD
AKT1	CCL20	EGFR	IL10	MAP3K1	RELB	TLR3	TRAF2
ATF1	CCL5	EGR1	IL1A	MYD88	RHOA	TLR4	TRAF3
BCL2A1	CD40	ELK1	IL1B	NFKB1	RIPK1	TLR6	TRAF6
BCL2L1	CD83	FADD	IL1R1	NFKB2	STAT1	TLR9	
BCL3	CFLAR	FASLG	IRAK1	NFKBIA	STX11	TNF	
BIRC2	CHUK	FOS	IRAK2	NFKBIE	TBK1	TNFAIP2	
BIRC3	CSF1	HMOX1	IRF1	NOD1	TICAM1	TNFAIP3	
CARD11	CSF2	ICAM1	JUN	PSIP1	TIFA	TNFRSF10A	
CASP1	CSF3	IFNG	LTA	RAF1	TIMP1	TNFRSF10B	
CASP8	CXCL2	IKKBK	LTBR	REL	TLR1	TNFSF10	

Other

ACADS	ACVR1B	ADAM23	ADORA2A	AHNAK	AKR1C3	ALKBH2	AMFR
ACLY	ACVR1C	ADAMTS1	AFF1	AHNAK2	ALDH2	ALKBH3	AMH
ACTR1B	ACVR2A	ADCK3	AGFG1	AIMP2	ALDH4A1	AMER1	ANLN

ANXA1	CACNG6	COL6A6	EML4	GBP7	HSPA1L	LAMP5	MMP3
ANXA3	CACYBP	COL9A3	ENDOD1	GDAP1	HSPA8	LAT	MRPL13
ANXA8	CAD	COMP	ENDOG	GDF6	HSPB2	LCN1	MSI1
AP2B1	CALD1	COX7B	EPHA2	GEMIN2	HSPB3	LCN2	MT1X
APBB1	CALML3	CREB3L1	ERG	GFRA1	HSPB6	LETMD1	MT2A
APPBP2	CALML6	CRLS1	ESM1	GLIS3	HSPB8	LGALS1	MTA1
AR	CAMK2B	CRTAC1	ESR2	GM2A	IDH1	LINC00886	MTDH
ARHGAP44	CARM1	CRYAB	ETV4	GML	IDO2	LMO2	MTMR2
ARHGEF16	CASP12	CTNNA1	ETV5	GMPS	IFI27	LOXL1	MVP
ARID1B	CAV1	CTPS1	ETV7	GNAI3	IFNA5	LPL	MYBL1
ARMC1	CBX5	CTSC	EVL	GNAQ	IFNW1	LRP12	MYCL
ARNT2	CCBL2	CTSD	EXOC3	GNAZ	INFA Family	LRP1B	NAB2
ASB13	CCNB3	CTSH	EXT1	GNG11	INHBA	LRRFIP2	NAP1L1
ASB16-AS1	CCS	CTSL	EYA1	GNG12	INHBB	LTF	NASP
ASB9	CCT3	CTSV	EZR	GNG4	INPP5J	LTN1	NAT1
ASNS	CCT4	CXCL8	F8	GNG7	INTS7	LYVE1	NAT2
ASPM	CCT5	CYR61	FABP4	GNGT1	IRAK3	MACC1	NAT8L
ASXL1	CCT6A	DAPL1	FAM105A	GNL3	IRS2	MAFF	NCOA3
ATP5G1	CCT7	DAXX	FAM133A	GPC4	ITGA7	MAGEA10-	NCOR1
ATP7A	CDC14B	DBI	FAM213A	GPD2	ITGA9	MAGEA5	NCOR2
ATP7B	CDC42BPA	DDX17	FAM64A	GPER1	ITGB6	MAML2	NF1
ATRX	CDH15	DDX39B	FAM83B	GPNMB	ITGB8	MAOA	NFE2L2
AURKC	CDK5	DDX59	FANCA	GPR160	ITLN2	MAOB	NFE2L3
B3GNT8	CDK9	DEPDC1	FANCB	GPR180	JAG2	MAP1B	NFKBIZ
BAG4	CDKL5	DESI1	FANCC	GPSM2	KAT2B	MAP3K13	NKX2-1
BAG5	CDX2	DHCR24	FANCE	GRIN1	KATNBL1	MAP3K14	NME1
BAIAP3	CEBPE	DHX58	FANCF	GRIN2B	KCNK5	MAP3K8	NME7
BAP1	CECR6	DIAPH3	FANCG	GSN	KDM1A	MAP7D1	NMU
BATF	CELSR2	DICER1	FANCL	GSTA2	KDM3A	MAPKAPK5	NNMT
BBS4	CEP55	DKK2	FBN1	GTF2H3	KDM3B	MAPKAPK5-	NOG
BCOR	CHI3L2	DKK4	FCGR1B	GUCY1A3	KDM5B	AS1	NOLC1
BDNF	CHMP4B	DMD	FES	H3F3C	KDM5C	MAPRE2	NPM2
BIRC7	CIC	DNAJC22	FGFRL1	HDAC10	KDM6A	MAPT	NR0B2
BLVRA	CIRBP	DSC2	FHIT	HDAC11	KDM7A	MAT2A	NR1H3
BMP8A	CITED2	DTX1	FKBP5	HDAC3	KEAP1	MAZ	NR1H4
BTG3	CKB	DTX3	FLJ10474	HDAC4	KIF3A	MCCC1	NR1I2
C17orf53	CLCF1	DUSP2	FLNA	HDAC5	KIF3B	MDC1	NR4A1
C19orf40	CLDN3	DUSP4	FLNC	HECTD4	KIF5B	MECOM	NRIP1
C1orf106	CLIC1	DUSP5	FLRT1	HERC3	KLF12	MED1	NSD1
C1orf86	CMC2	EAF2	FLRT2	HIC1	KLHDC10	MED12	NTF3
C1QA	CNIH4	EBAG9	FOXC2	HMGA2	KLK4	MED23	NTN3
C5orf55	CNPY1	EBF4	FOXD3	HMGXB3	KMT2B	MED24	NTRK1
CA12	CNPY2	ECl2	FOXRED1	HNF1A	KMT2C	MELK	NTRK2
CACNA1C	CNPY4	EFNA2	FRS2	HNRNPA1	KMT2D	MEN1	NUDT13
CACNA1D	CNTFR	EFNA3	FRS3	HNRNPU	KRT18	METM	NUMBL
CACNA1E	COL11A2	EFNA5	FUT8	HOXA10	KRT19	MGA	NUPR1
CACNA1H	COL17A1	EFNB1	GABBR2	HOXD1	KRT6A	MGAT4A	OASL
CACNA2D1	COL1A2	EGR3	GAL	HSD17B12	KRT7	MGST1	OCLN
CACNA2D3	COL4A2	EI24	GALNT3	HSF1	KRT8	MIA	OPCML
CACNA2D4	COL4A4	EIF4A1	GAMT	HSF2	LAMA1	MLLT3	ORM2
CACNB2	COL4A5	EIF6	GAS6	HSF4	LAMA5	MLLT4	PA2G4
CACNB4	COL5A1	ELL2	GATA4	HSPA1A	LAMB4	MLPH	PAG1
CACNG1	COL5A2	ELMO1	GATA5	HSPA1B	LAMC3	MMP11	PALB2

PALM2-	PINX1	PRMT1	RND2	SERPINA9	SPEF1	TK1	UTY
AKAP2	PIR	PRR15L	RNF43	SERPINB2	SPOP	TMEFF1	VAMP8
PARK7	PITRM1	PTDSS1	ROS1	SERPINB5	SRM	TMEM132A	VAPA
PARP4	PLA2G10	PTHLH	RPL13	SERPINH1	SSX1	TMEM74B	VASH1
PAX3	PLA2G2A	PTP4A1	RPL35	SETBP1	STEAP4	TMSB10	VDAC2
PAX5	PLA2G3	PTPRR	RPRM	SETD2	STK32A	TNKS	VDR
PBRM1	PLA2G4C	PTTG2	RPS4X	SF3A1	STK39	TNKS2	VHL
PBX3	PLA2G4E	PUS1	RPS6KA6	SF3B5	SUSD3	TNN	VIPR1
PCK1	PLA2G4F	QDPR	RRAS2	SFRP2	SUV39H2	TNR	VPS13A
PCNX	PLD1	QSOX2	RRM2B	SGK1	SWAP70	TNXB	WWOX
PCOLCE	PLEK2	RAB27B	RSPO2	SGK2	SYNCRIP	TOMM40	XBP1
PCSK6	PLK2	RALA	RTN1	SH3PXD2A	SYP	TOR1A	YBX3
PDGFC	PLK3	RAMP2	RTN4RL1	SIL1	TADA3	TP53I3	ZAK
PDIA4	PMEPA1	RAMP3	RUNDC1	SIN3A	TAP1	TPD52	ZBTB10
PDLIM7	PMS2P3	RARB	RXRG	SIN3B	TAP2	TRAF7	ZBTB16
PDPN	POLR2H	RASA4	S100A4	SIRT2	TBL1X	TRIB1	ZBTB32
PELP1	POLR2J	RASAL1	S100A6	SIRT3	TBL1XR1	TRIM72	ZFP36L1
PEX12	PPAP2B	RASD1	S100A8	SIRT4	TBL1Y	TRIP13	ZHX2
PFDN1	PPAT	RASGRF1	S100B	SIX1	TCL1B	TRIP4	ZNF189
PFDN2	PPIB	RASSF1	SACS	SMAD7	TEP1	TSC22D3	ZNF385B
PGR	PPM1D	RASSF7	SAFB	SMAD9	TESC	TSPYL5	ZNF420
PHB	PPP1R15A	RBM10	SAP30	SMARCB1	TET2	TTC9	ZNF502
PHB2	PPP2R2C	RBX1	SCAPER	SNAI2	TFF3	TTF1	ZNF552
PHF6	PPP3CB	RECQL5	SCN3A	SNAI3	TGFB3	TUBB3	ZNF589
PHGDH	PPP3CC	REST	SCUBE1	SORT1	TGFBI	U2AF1	ZNF805
PIAS4	PPP3R2	RET	SEC22C	SOST	TGFBR2	UBE2Z	
PIDD1	PRAME	RGS2	SEC61G	SOX10	THBS4	UBE3A	
PIM3	PRKACG	RIN1	SELM	SOX9	THEM4	UQCRFS1	
PIN1	PRKX	RIT1	SERPINA3	SPARC	TIPARP	USMG5	

PI3K / AKT Pathway

ADAR	CDKN1B	FKBP1A	IGF1R	MTCP1	PIK3CA	RAF1	TIRAP
AKT1	CHUK	FOS	ILK	MTOR	PIK3CG	RASA1	TLR4
AKT2	CSNK2A1	FOXO1	IRAK1	MYD88	PIK3R1	RBL2	TOLLIP
AKT3	CTNNB1	FOXO3	IRS1	NFKB1	PIK3R2	RHEB	TSC1
APC	EIF2AK2	GJA1	ITGB1	NFKBIA	PRKCA	RHOA	TSC2
BAD	EIF4B	GRB10	JUN	PABPC1	PRKCB	RPS6KA1	WASL
BTK	EIF4E	GRB2	MAP2K1	PAK1	PRKCZ	RPS6KB1	YWHAH
CASP9	EIF4EBP1	GSK3B	MAPK1	PDGFRA	PTEN	SHC1	
CCND1	EIF4G1	HRAS	MAPK14	PDK1	PTK2	SOS1	
CD14	ELK1	HSPB1	MAPK3	PDK2	PTPN11	SRF	
CDC42	FASLG	IGF1	MAPK8	PDPK1	RAC1	TCL1A	

Receptors, Ligands and Cell Signalling

ACSL3	ARNT	BMP2	CDKN1A	FABP1	GCLM	HRAS	LFNG
ACSL4	ATF4	BMP4	CDKN1B	FAS	GSR	ICAM1	LRG1
ACSL5	AXIN2	BRAF	CEBPD	FCER2	HERPUD1	ID1	MAP2K1
ADM	BAX	BTG2	CPT2	FOSL1	HES1	IFNG	MAP2K2
AKT1	BBC3	CA9	CSF1	FTH1	HES5	IFRD1	MAP2K4
AKT1S1	BCL2	CCL5	DAB2	GADD45A	HEY1	IRF1	MAP2K7
AKT2	BCL2A1	CCND1	EGFR	GADD45B	HEY2	ITPKB	MAP3K1
AKT3	BCL2L1	CCND2	EMP1	GATA3	HEYL	JAG1	MAPK1
ARAF	BIRC3	CDH1	EPO	GCLC	HMOX1	KRAS	MAPK10

MAPK11	MMP7	PAK7	PIK3R3	PRKCD	RASGRP2	SORBS1	WNT2B
MAPK12	MTOR	PCNA	PIK3R5	PRKCE	RB1	SQSTM1	WNT3A
MAPK13	MYC	PIK3C2A	PLCB1	PRKCG	SERPINE1	STAT1	WNT5A
MAPK14	NOTCH1	PIK3C3	PLCB4	PRKCZ	SHC1	TNF	WNT6
MAPK3	NQO1	PIK3CA	PLCE1	PTCH1	SHC2	TNFSF10	
MAPK6	NRAS	PIK3CB	PLCG1	RAC1	SHC3	TXN	
MAPK7	OLR1	PIK3CD	PLCG2	RAC2	SHC4	TXNRD1	
MAPK8	PAK1	PIK3CG	PPARD	RAC3	SLC27A4	VEGFA	
MAPK9	PAK1IP1	PIK3R1	PRKCA	RAF1	SLC2A1	WISP1	
MCL1	PAK3	PIK3R2	PRKCB	RASGRP1	SOCS3	WNT1	

Stem Cells

ABCB5	CHD1	ESRRB	HDAC1	MAML1	NR5A2	SMAD1	TEK
ABCG2	CHD7	ETFA	HNF4A	MEIS1	NR6A1	SMAD2	TERT
ACTA2	CHEK1	ETV2	HSPA9	MERTK	NT5E	SMAD3	TGFBR1
AICDA	CNOT3	FGF2	ID1	MESP1	OLIG2	SMO	THAP11
ALB	DACH1	FGF5	IKBKB	MIXL1	OTX2	SNAI1	THY1
ALCAM	DDR1	FGFR2	ISL1	MS4A1	PAF1	SOX15	TRIM28
ALDH1A1	DES	FLII	ITGA2	MUC1	PAX6	SOX17	TWIST1
ALPL	DKK1	FLOT2	ITGA4	MYBL2	PECAM1	SOX2	TWIST2
ATM	DLL1	FOXA2	ITGA6	MYC	PLAT	SOX3	UTF1
ATXN1	DLL4	FOXP1	ITGB1	MYCN	PLAUR	SOX7	WEE1
AXL	DNMT1	FZD7	JAG1	MYOD1	POU5F1	STAT3	WNT1
BMI1	DPPA2	GATA1	JAK2	NANOG	PRDM14	T	WWC1
BMP7	DPPA3	GATA2	KAT5	NCAM1	PROM1	TAGLN	YAP1
CCNA2	DPPA4	GATA3	KIT	NES	PTCH1	TAL1	ZEB1
CD24	DPPA5	GATA6	KITLG	NFKB1	PTPRC	TAT	ZEB2
CD34	EGF	GDF3	KLF17	NKX2-5	RIF1	TAZ	ZFP42
CD38	EN2	GFAP	KLF4	NOS2	SALL4	TBX3	ZFX
CD44	ENG	GSC	LATS1	NOTCH1	SAV1	TCF3	
CDC42	EPCAM	GSK3B	LIN28A	NOTCH2	SCN1A	TCL1A	
CDK1	ERBB2	HAND1	LIN28B	NROB1	SIRT1	TDGF1	

Stress Toxicity

ADM	ATG5	CASP1	DNAJC3	GSR	IL1A	PVR	TNF
AKR1B1	ATG7	CCL2	EDN1	GSTP1	IL1B	RAD17	TNFRSF10A
AQP1	ATM	CD40LG	EPO	HMOX1	IL6	RAD51	TNFRSF10B
AQP2	ATR	CDKN1A	FAS	HSP90AA1	MCL1	RAD9A	TP53
AQP4	BBC3	CFTR	FTH1	HSP90B1	MMP9	RIPK1	TXN
ARNT	BECN1	CHEK1	GADD45A	HSPA4	MRE11A	SERPINE1	TXNL4B
ATF4	BID	CHEK2	GADD45G	HSPA4L	NBN	SLC2A1	TXNRD1
ATF6	BNIP3L	CRP	GCLC	HSPA5	NFAT5	SLC5A3	ULK1
ATF6B	CA9	DDB2	GCLM	HUS1	NQO1	SQSTM1	VEGFA
ATG12	CALR	DDIT3	GRB2	IFNG	PARP1	TLR4	XPC

Tissue Specific Genes

ABCA3	ABHD2	ADIPOR1	AKT1	APEX1	ARID1A	BAG1	BIRC2
ABCB11	ACACB	ADRA1D	ALAS1	APH1B	ARID2	BAG2	BIRC5
ABCB4	ACSL3	ADRA2A	ALB	APOC2	ATAD2	BAMBI	BMF
ABCC4	ACSL5	AGER	ALDH1A3	APOC4	ATP5A1	BCL2L1	BMP1
ABCC6	ACTR3B	AIFM1	ALPL	AQP7	ATP5F1	BCL6	BNIP3
ABCD3	ADAR	AKAP1	ANG	AQP9	ATP6V0C	BCR	BNIP3L
ABCG8	ADIPOQ	AKR1B1	APCS	AREG	ATP6V1G2	BID	BTG1

BUB1B	CD40LG	CREB5	DNMT3A	FOXE1	HOXA9	JAK3	MAP4K1
C1S	CD52	CRP	DNTT	FOXL2	HOXB13	JMJD1C	MAPK1
C5	CD55	CRYAA	DPPA4	FOXO3	HPN	KCND2	MAPK10
C5AR1	CD8A	CSDE1	DSG3	FPR1	HSD17B4	KCNIP1	MAPK14
CA9	CDC25A	CSF1R	DSP	FRZB	HSPA12A	KDM4B	MAPK9
CACNA1G	CDC25B	CSF3	DST	FUBP1	HSPA14	KIF14	MAPKAPK2
CACNA2D2	CDC34	CSF3R	DTX4	FZD4	HSPA6	KIF2C	MAPKAPK3
CACNB3	CDCA7	CST6	DUSP10	GAB1	HSPB7	KIT	MAX
CACNG4	CDH2	CSTB	E2F3	GAS1	HSPD1	KL	MBL2
CALML5	CDH3	CTSB	ECT2	GATA1	HSPE1	KLB	MCL1
CALR	CDH5	CTSS	EGFR	GATA2	IBSP	KLK1	MCM2
CAMK2N1	CDK1	CX3CR1	EGLN2	GCLC	ICAM1	KLK2	MCM3
CAMKK2	CDK16	CXCL1	EIF4B	GCLM	ICOS	KLK3	MCM4
CAPN1	CDK4	CXCL12	EIF4EBP1	GGH	ID2	KLK5	MCM6
CAPN6	CDK6	CXCL13	EIF5B	GHR	IDH2	KLRB1	MCM7
CASP1	CDKN2C	CXCL14	EMP3	GNA11	IFIT2	KLRD1	MDM4
CASP2	CDKN2D	CXCL16	EN2	GNAS	IFNGR1	KLRG1	MFNG
CASP8	CDKN3	CXCL6	ENO1	GNGT2	IGF2R	KNG1	MGEA5
CASP8AP2	CDON	CXCR1	EOMES	GPLY	IGFBP1	KPNA2	MGMT
CASP9	CEBPA	CXCR2	ERO1L	GPAM	IGFBP3	KRT13	MKI67
CAV2	CENPF	CXCR4	ERRFI1	GPI	IGFBP5	KRT14	MKNK1
CBL	CENPN	CXXC5	ETV1	GPR126	IL10RA	KRT16	MLF1
CBX3	CES1	CYBA	EXOSC8	GRB10	IL10RB	KRT17	MLYCD
CCL16	CES2	CYBB	EZH2	GRB2	IL17RB	KRT5	MME
CCL19	CFLAR	CYP19A1	F10	GRIA3	IL17RD	LAMA3	MMP9
CCL2	CFTR	CYP1A1	F2	GRIN2A	IL1A	LAMB3	MPO
CCL20	CHAD	CYP1A2	FABP1	GSTM1	IL1B	LAMC2	MS4A1
CCL22	CHD1	CYP2A6	FABP7	GSTP1	IL1RAP	LEFTY1	MSH2
CCL25	CHD7	CYP2C19	FAM117B	GUK1	IL1RN	LEFTY2	MSH6
CCL28	CHDH	CYP2C8	FASN	GYS2	IL20RB	LEP	MSL2
CCL5	CHEK1	CYP2C9	FBP1	GZMA	IL22RA1	LEPR	MSN
CCNA2	CHPT1	CYP2D6	FBXO5	GZMB	IL2RB	LFNG	MTHFD1
CCNB1	CIDEB	CYP2U1	FBXW7	GZMH	IL2RG	LIG4	MUC1
CCNB2	CKLF	CYP4A22	FCER2	H2AFX	IL3RA	LIPA	MUTYH
CCNC	CKMT2	CYP4V2	FEN1	HDAC2	IL6	LPCAT1	MXI1
CCND3	CKS1B	DAB2	FGF14	HDAC6	IL6R	LRG1	MYB
CCR1	CKS2	DAB2IP	FGF18	HDAC7	IL7R	LRIG1	MYD88
CCR2	CLCA2	DAPK1	FGF19	HELLS	INS	LRMP	MYLIP
CCR3	CLIC3	DCK	FGFBP1	HGF	INSR	LRP2	NAMPT
CCR7	CMTM1	DDX10	FGFR4	HHEX	IRF1	LRRK2	NANOG
CCR9	CMTM2	DDX5	FGL2	HJURP	IRF2	LTA	NCAPD3
CCT2	CNPY3	DEGS1	FIGF	HLA-E	IRF3	LTA4H	NCOA2
CCT6B	COL11A1	DISP2	FKBP1A	HMGA1	IRF4	LTB	NCOA4
CD160	COL18A1	DKK1	FKBP8	HMGB1	IRF7	LTBP1	NEIL3
CD19	COL1A1	DKK3	FLOT2	HMGB2	IRF8	LYN	NFATC3
CD2	COL27A1	DLC1	FLRT3	HMGB3	IRF9	MAD2L1	NKX3-1
CD22	COL2A1	DLGAP5	FLT1	HMGCR	ITGA4	MADD	NLK
CD27	COL4A6	DLK1	FLT3LG	HMGCS2	ITGA8	MAGED2	NOV
CD28	COX5A	DLL3	FLT4	HMOX1	ITGAM	MAP2K3	NOX4
CD33	CP	DNAJB13	FMO3	HNF1B	ITGB2	MAP3K12	NPM1
CD3D	CRADD	DNAJC12	FMO5	HNF4A	ITGB7	MAP3K2	NPPB
CD4	CREB3L3	DNAJC9	FOXA1	HNRNPA2B1	ITM2A	MAP3K3	NQO1
CD40	CREB3L4	DNMT1	FOXC1	HOXA11	JAK1	MAP3K5	NR4A3

NUSAP1	PLG	PTPN5	RRM2	SLC2A2	SPINK1	THBS1	TSC22D1
OAZ1	PLK1	PTPRC	RSP01	SLC31A1	SPINK5	THPO	TSHR
OLR1	PLK4	PYCARD	RUNX1T1	SLC38A5	SRA1	TIAM1	TSPAN13
ORM1	PML	PYCR1	RUNX3	SLC39A6	SRSF1	TINF2	TSPAN14
P4HB	POLL	PYGL	S100A2	SLC3A1	SRSF2	TLR1	TSPAN7
PAICS	POLR2D	RAB4A	SALL4	SLC3A2	STAB1	TLR2	TTK
PAK1	PORCN	RAB6B	SCUBE2	SLC45A3	STAG2	TLR5	TXNL1
PAK1IP1	PPAP2A	RAC2	SEC14L2	SLC5A1	STAT4	TLR8	TXNRD1
PAX6	PPBP	RACGAP1	SENP1	SLC5A3	STAT5B	TLX1	TYK2
PAX8	PPID	RAD23A	SERPINC1	SLC7A6	STAT6	TMEM116	TYMP
PBX1	PPP2R1B	RAD54L	SERPINE1	SLC7A7	STC1	TMEM45A	TYMS
PCNA	PPP3CA	RAD9A	SF3B1	SLC7A8	STC2	TMEM45B	UBB
PDGFRA	PPP3R1	RAF1	SFN	SLC7A9	STEAP1	TMPRSS2	UBE2C
PDGFRB	PRC1	RAG1	SHC3	SLCO1B1	STK36	TNC	UBE2I
PDPK1	PRDM2	RAMP1	SHMT1	SLCO1B3	STMN1	TNFAIP2	UBE2T
PDZK1	PRF1	RARA	SHAH1	SLCO2A1	STRADB	TNFRSF10C	ULK1
PECAM1	PRKAG2	RASA1	SLA	SLCO2B1	STX1A	TNFRSF11B	UNG
PFKFB4	PRKAR1B	RASGRF2	SLC10A1	SMARCA4	SULT2A1	TNFRSF1B	VCAM1
PGC	PRKCA	RASGRP1	SLC10A2	SMC3	SUMO1	TNFSF13B	VEGFC
PGF	PRKCG	RASGRP2	SLC11A1	SMC4	SYK	TNFSF14	VGLL4
PIAS1	PRKG1	RBP1	SLC15A1	SMPDL3B	T	TNNC2	VSNL1
PIAS2	PRL	RBPMS2	SLC16A3	SMS	TAL1	TNNI2	VTCN1
PIK3CD	PRMT8	RELN	SLC19A1	SNCA	TAT	TNNI3	WHSC1
PIK3R3	PROK1	RFC3	SLC22A1	SNRPB	TBK1	TOLLIP	WHSC1L1
PIK3R5	PROK2	RFC4	SLC22A2	SOC5	TBX21	TOP1	WISP2
PIM1	PSG2	RNF149	SLC22A6	SOD1	TCF4	TOP2A	WNT6
PIM2	PSIP1	RNF4	SLC22A7	SOD2	TCF7	TOP2B	WT1
PKP1	PSMD7	RPA1	SLC22A8	SORD	TCL1A	TP53AIP1	WWC1
PLA1A	PSMG1	RPA3	SLC22A9	SOS1	TCP1	TP63	XCL1
PLA2G5	PSRC1	RPL5	SLC25A13	SOX15	TDG	TPO	XRCC5
PLAUR	PTCRA	RPS6KA1	SLC25A3	SOX3	TFDP2	TPX2	YWHAH
PLCB1	PTEN	RPS6KA5	SLC27A4	SP1	TFF1	TREX1	YY1
PLCG1	PTGR1	RPS7	SLC28A2	SPDEF	TFPI2	TRIM28	ZIC2
PLCG2	PTGS1	RRM1	SLC2A13	SPI1	TGFB1	TRRAP	

WNT Pathway

APC	CTNNBIP1	FGF4	FZD9	MTFP1	PRMT6	WISP1	WNT6
AXIN1	CXADR	FOSL1	GSK3B	MTSS1	RHOA	WNT1	WNT7A
AXIN2	CYP4V2	FRZB	HSPA12A	MYC	RUVBL1	WNT10A	WNT7B
BOD1	DAAM1	FZD1	JUN	NAV2	SFRP1	WNT11	WNT8A
BTRC	DAB2	FZD2	KREMEN1	NFATC1	SFRP4	WNT2	WNT
CALM1	DKK1	FZD3	LEF1	NKD1	SKP2	WNT2B	
CCND1	DKK3	FZD4	LRP5	NLK	SOX17	WNT3	
CCND2	DVL1	FZD5	LRP6	PITX2	TCF7	WNT3A	
CHSY1	DVL2	FZD6	MAPK8	PORCN	TCF7L1	WNT4	
CSNK1A1	EP300	FZD7	MMP7	PPARD	VANGL2	WNT5A	
CTNNB1	FBXW11	FZD8	MT1A	PRICKLE1	WIF1	WNT5B	