

AAAS	AAGAB	AARS2	ABAT	ABCA12
ABCA3	ABCA7	ABCB7	ABCC6	ABCC8
ABCD1	ABCG5	ABCG8	ABHD12	ABHD5
ABL1	ACADM	ACADVL	ACD	ACO2
ACP5	ACTA2	ACTB	ACTC1	ACTG1
ACTN2	ACVR1	ACVR2B	ACVRL1	ADA
ADA2	ADAM10	ADAM17	ADAMTS10	ADAMTS17
ADAMTS2	ADAMTSL2	ADAR	ADCY5	ADGRV1
AEBP1	AFF4	AFG3L2	AGL	AGPAT2
AHDC1	AHI1	AICDA	AIFM1	AIMP1
AIRE	ALDH18A1	ALDH3A2	ALDOB	ALG6
ALK	ALMS1	ALOX12B	ALOXE3	ALPK1
ALPK3	ALS2	AMPD2	ANG	ANKRD11
ANKS6	ANO10	ANO3	ANXA11	AP1S1
AP3B1	AP3D1	AP4B1	AP4E1	AP4M1
AP4S1	AP5Z1	APC	APOA1	APOA5
APOB	APOC2	APOC3	APOE	APP
APTX	AQP1	AQP5	AR	ARG1
ARHGAP31	ARID1A	ARID2	ARL13B	ARL3
ARL6IP1	ARMC9	ARSA	ARSB	ARSI
ASL	ASNS	ASPH	ASPRV1	ASS1
ATAD3A	ATCAY	ATG5	ATL1	ATL3
ATM	ATOH1	ATP13A2	ATP13A3	ATP1A2
ATP1A3	ATP2B2	ATP2B3	ATP2B4	ATP2C1
ATP6AP2	ATP6V0A2	ATP6V1A	ATP6V1B1	ATP6V1E1
ATP7A	ATP7B	ATP8A2	ATRX	AUH
AXIN2	B2M	B3GALT6	B3GAT3	B4GALNT1
B4GALT7	B9D1	BAG3	BANF1	BAP1
BARD1	BCKDHA	BCKDHB	BCL9	BCOR
BCS1L	BDP1	BGN	BLM	BLOC1S3
BLOC1S5	BLOC1S6	BMPR1A	BMPR1B	BMPR2
BOC	BRAF	BRAT1	BRCA1	BRCA2
BRIP1	BSCL2	BSND	BTD	BTK
C1QA	C1QB	C1QC	C1R	C1S
C2	C9	C9orf72	CA8	CABP2
CACNA1A	CACNA1C	CACNA1D	CACNA1G	CACNA2D1
CACNB4	CALM1	CALM2	CALM3	CAMTA1

CAPN1	CARD11	CARD14	CARS2	CASK
CASP10	CASP14	CASP8	CASQ2	CASR
CAST	CAV1	CBL	CBS	CC2D2A
CCDC39	CCDC40	CCDC50	CCDC6	CCDC88C
CCNO	CCT5	CD151	CD164	CD3D
CD3E	CD3G	CD40	CD40LG	CDC14A
CDH1	CDH2	CDH23	CDH3	CDK13
CDK4	CDKN1C	CDKN2A	CDSN	CEACAM16
CEP104	CEP120	CEP290	CEP41	CEP78
CERS3	CFAP53	CFH	CFI	CFTR
CHCHD10	CHCHD2	CHD3	CHD4	CHD7
CHEK2	CHMP2B	CHP1	CHST14	CHST3
CIB2	CISD2	CITED2	CIZ1	CLCN2
CLDN1	CLDN14	CLDN9	CLN3	CLN5
CLN6	CLN8	CLPP	CLRN1	CNTNAP2
COA7	COASY	COCH	COG5	COL11A1
COL11A2	COL12A1	COL14A1	COL17A1	COL1A1
COL1A2	COL2A1	COL3A1	COL4A1	COL4A2
COL4A3	COL4A4	COL4A5	COL5A1	COL5A2
COL6A3	COL7A1	COL9A1	COL9A2	COL9A3
COPA	COQ2	COQ4	COQ8A	COQ9
COX10	COX14	COX15	COX20	COX6B1
COX8A	CP	CPLANE1	CPT1C	CREB3L3
CREBBP	CRELD1	CSF1R	CSNK1D	CSPP1
CSRP3	CST3	CST6	CSTA	CSTB
CTBP1	CTC1	CTDP1	CTF1	CTLA4
CTNNA3	CTNNB1	CTSC	CTSD	CTSF
CUX2	CWF19L1	CYBA	CYBB	CYLD
CYP21A2	CYP27A1	CYP2C19	CYP2C9	CYP2D6
CYP2U1	CYP4F22	CYP7B1	DAB1	DARS1
DARS2	DBT	DCC	DCHS1	DCT
DCTN1	DDB2	DDHD1	DDHD2	DDX3X
DES	DHCR7	DIAPH1	DICER1	DKC1
DLL4	DMD	DMPK	DNA2	DNAAF1
DNAAF11	DNAAF19	DNAAF2	DNAAF3	DNAAF4
DNAAF5	DNAAF6	DNAH11	DNAH5	DNAH9
DNAI1	DNAI2	DNAJC19	DNAJC3	DNAJC5
DNAJC6	DNAL1	DNMT1	DNMT3A	DOCK6
DOCK8	DOLK	DPM1	DRC1	DRC2
DSC2	DSC3	DSE	DSG1	DSG2
DSG3	DSG4	DSP	DSPP	DST
DSTYK	DTNA	DTNBP1	DUOX2	DUOXA2

DVL1	EARS2	EBF3	ECHS1	EDA
EDAR	EDARADD	EDN1	EDN3	EDNRB
EEF2	EFEMP1	EFEMP2	EFTUD2	EGF
EGFR	EHMT1	EIF2AK4	EIF2B1	EIF2B2
EIF2B3	EIF2B4	EIF2B5	ELANE	ELF4
ELN	ELOVL4	ELOVL5	ELP1	ELP2
EMD	ENG	ENPP1	ENTPD1	EOGT
EP300	EPCAM	EPHA7	EPHB4	EPM2A
EPS8	EPS8L2	ERBB2	ERBB4	ERCC1
ERCC2	ERCC3	ERCC4	ERCC5	ERCC6
ERCC8	ERLIN1	ERLIN2	ETS1	EVC
EVC2	EXOSC3	EXOSC8	EXPH5	EYA1
EYA4	EZH2	F8	F9	FA2H
FAH	FARS2	FAS	FASLG	FASTKD2
FAT2	FAT4	FBL	FBLN5	FBN1
FBN2	FBXL4	FBXO7	FBXW7	FERMT1
FGF12	FGF14	FGF3	FGFR2	FGFR3
FH	FHL1	FHOD3	FIG4	FKBP14
FKTN	FLCN	FLG	FLG2	FLNA
FLNC	FLT4	FLVCR1	FMR1	FOLR1
FOXC1	FOXC2	FOXE3	FOXF1	FOXH1
FOXI1	FOXJ1	FOXL2	FOXO1	FOXP1
FOXP3	FTL	FUS	FXN	G6PC1
G6PD	GAA	GAD1	GALC	GALNS
GALT	GAN	GAS2L2	GATA2	GATA3
GATA4	GATA5	GATA6	GBA1	GBA2
GCDH	GCH1	GDAP2	GDF1	GDF11
GDF2	GFAP	GIPC3	GJA1	GJA5
GJB2	GJB3	GJB4	GJB6	GJC2
GLA	GLB1	GLDC	GLRX5	GM2A
GNAL	GNAO1	GNAQ	GNAS	GNB1
GNB5	GORAB	GOSR2	GPC3	GPD1
GPIHBP1	GPR143	GPSM2	GPT2	GREM1
GRHL2	GRID2	GRIK2	GRIN2A	GRIP1
GRM1	GRM3	GRN	GRXCR1	GRXCR2
GSX2	GTF2H5	HADHA	HAND1	HAND2
HARS1	HAX1	HBA1	HBA2	HBB
HCN4	HES1	HEXA	HEXB	HEY2
HFE	HGF	HIBCH	HMGCL	HNRNPA1
HNRNPA2B1	HNRNPK	HOMER2	HOXA1	HOXA11
HOXC13	HPCA	HPS1	HPS3	HPS4
HPS5	HPS6	HR	HRAS	HSD17B4

HSPD1	HTRA1	HTRA2	HTT	HYCC1
HYDIN	IBA57	IDH1	IDS	IDUA
IFIH1	IFRD1	IK	IKBKG	IL1RN
IL2RG	IL36RN	IL7R	ILDR1	ILK
INPP5E	INVS	IPO8	ITGA3	ITGA6
ITGB4	ITM2B	ITPR1	IVD	JAG1
JAK3	JARID2	JPH2	JUP	KATNIP
KCNA1	KCNA2	KCNA5	KCNC1	KCNC3
KCND3	KCNE1	KCNE4	KCNE5	KCNH2
KCNJ1	KCNJ10	KCNJ16	KCNJ2	KCNJ8
KCNK18	KCNK3	KCNN3	KCNQ1	KCNQ4
KCTD17	KCTD7	KDF1	KDM6A	KDR
KDSR	KIAA0586	KIDINS220	KIF1A	KIF1C
KIF5A	KIT	KITLG	KLC2	KLF2
KLHL24	KMT2B	KMT2C	KMT2D	KNSTRN
KRAS	KREMEN1	KRT1	KRT10	KRT14
KRT16	KRT17	KRT2	KRT25	KRT5
KRT6A	KRT6B	KRT6C	KRT74	KRT81
KRT85	KRT86	KRT9	KYNU	L1CAM
L2HGDH	LAMA1	LAMA3	LAMA4	LAMB3
LAMC2	LAMP2	LARS2	LATS1	LATS2
LDB3	LDLR	LDLRAP1	LEFTY2	LEMD2
LHFPL5	LHX3	LIPA	LIPH	LIPN
LMF1	LMNA	LMNB1	LMNB2	LMX1A
LOX	LOXHD1	LPAR6	LPIN2	LPL
LRBA	LRMDA	LRP1B	LRP4	LRP6
LRRC10	LRRK2	LTBP1	LTBP4	LYST
LZTR1	MAG	MAGT1	MAP2K1	MAP2K2
MAPT	MARS2	MARVELD2	MAT2A	MATR3
MB	MBTPS2	MC1R	MCCC1	MCCC2
MCIDAS	MCOLN1	MECP2	MECR	MED12
MED13L	MEFV	MEGF8	MEIS2	MEN1
MFAP5	MFSD8	MIB1	MITF	MKS1
MLH1	MLPH	MMAA	MMAB	MMACHC
MMADHC	MME	MMP11	MMP21	MMUT
MPLKIP	MPV17	MPZ	MPZL2	MRE11
MSH2	MSH6	MSRB3	MSX1	MTFMT
MTPAP	MTRFR	MTTP	MUTYH	MVK
MYBPC3	MYCN	MYH11	MYH14	MYH6
MYH7	MYH9	MYL2	MYL3	MYL4
MYLK	MYLK2	MYO15A	MYO3A	MYO5A
MYO6	MYO7A	MYORG	MYPN	MYRF

NADK2	NAF1	NAGLU	NALCN	NCF1
NCF2	NCF4	NDUFV1	NEBL	NECTIN1
NECTIN4	NEFH	NEK1	NEK10	NEK8
NEXN	NF1	NF2	NFATC1	NFKBIA
NFKBIE	NGF	NHLRC1	NHP2	NIPA1
NIPAL4	NIPBL	NKX2-1	NKX2-5	NKX2-6
NKX6-2	NLRC4	NLRP12	NLRP3	NNT
NOD2	NODAL	NONO	NOP10	NOS1
NOTCH1	NOTCH2	NOTCH3	NPC1	NPC2
NPHP1	NPHP3	NR1D2	NR2F2	NRAS
NSD1	NT5C2	NTHL1	NTRK1	OBSCN
OCA2	ODAD1	ODAD2	ODAD3	OFD1
OPA1	OPA3	OPHN1	OPTN	OSBPL2
OSMR	OTC	OTOA	OTOF	OTOG
OTOGL	OTULIN	P2RX2	PAH	PALB2
PANK2	PARK7	PARN	PAX3	PAX6
PAX9	PC	PCCA	PCCB	PCDH12
PCDH15	PCDHA9	PCNA	PCSK9	PDE6D
PDGFB	PDGFRB	PDHA1	PDHX	PDLIM3
PDSS2	PDYN	PDZD7	PET100	PEX10
PEX16	PEX6	PEX7	PFN1	PGAP1
PGK1	PHOX2B	PHYH	PIBF1	PIEZO2
PIK3CA	PIK3CD	PIK3R1	PIK3R5	PINK1
PITRM1	PJVK	PKD1L1	PKLR	PKP1
PKP2	PLA2G6	PLCG2	PLD1	PLD3
PLEC	PLEKHG4	PLEKHM2	PLN	PLOD1
PLOD3	PLP1	PMEPA1	PMM2	PMPCA
PMS2	PNKD	PNKP	PNPLA1	PNPLA6
PODXL	POFUT1	POGLUT1	POLD1	POLE
POLG	POLH	POLR1C	POLR3A	POLR3B
POMP	PORCN	POT1	POU3F4	POU4F3
PPA2	PPP1CB	PPP6C	PPT1	PRDM12
PRDM16	PRDM5	PRDM6	PREX2	PRKAG2
PRKCG	PRKD1	PRKG1	PRKN	PRKRA
PRNP	PRPS1	PRRT2	PRRX1	PSAP
PSEN1	PSEN2	PSMB4	PSMB8	PSMB9
PSTPIP1	PTCH1	PTEN	PTPN11	PTPRC
PTPRD	PTPRK	PTPRQ	PTRH2	PTS
PUF60	PUM1	PVR	PYCR1	PYGL
RAB23	RAB27A	RAB39B	RAB7A	RAC1
RAD51C	RAD51D	RAF1	RAG1	RAG2
RASA1	RB1	RBCK1	RBM20	RBPJ

RDX	RECQL4	REEP1	REEP2	RELA
RERE	RET	RETREG1	RFC1	RFX3
RHBDF2	RHOA	RIPK1	RIPOR2	RIT1
RMRP	RNASEH2B	RNF170	RNF216	ROBO4
RPA1	RPGR	RPGRIP1L	RPL10	RRM2B
RSPH1	RSPH3	RSPH4A	RSPH9	RTEL1
RTN2	RUBCN	RYR2	S1PR2	SACS
SALL1	SAMD9L	SARS2	SCARB2	SCN10A
SCN11A	SCN1A	SCN2A	SCN2B	SCN5A
SCN8A	SCN9A	SCNN1A	SCNN1B	SCNN1G
SCO1	SCP2	SCYL1	SDHA	SDHAF2
SDHB	SDHC	SDHD	SDR9C7	SECISBP2
SEPTIN9	SERAC1	SERPINA1	SERPINB6	SERPINB7
SERPINB8	SERPINI1	SETX	SF3B1	SFTPA1
SFTPA2	SFTPB	SFTPC	SGCD	SGCE
SH2D1A	SH3BP2	SI	SIGMAR1	SIL1
SIX1	SIX5	SKI	SLC12A2	SLC16A2
SLC17A5	SLC17A8	SLC1A3	SLC1A4	SLC20A2
SLC22A5	SLC24A5	SLC25A13	SLC25A15	SLC25A46
SLC26A4	SLC26A5	SLC27A4	SLC29A3	SLC2A1
SLC2A10	SLC30A10	SLC30A2	SLC33A1	SLC38A8
SLC39A13	SLC39A14	SLC39A4	SLC45A2	SLC4A4
SLC52A2	SLC52A3	SLC6A1	SLC6A3	SLC9A1
SLC9A6	SLITRK6	SLURP1	SMAD1	SMAD2
SMAD3	SMAD4	SMAD6	SMAD9	SMARCA4
SMARCAD1	SMARCB1	SMC1A	SMC3	SMN1
SMO	SMPX	SNAI2	SNAP25	SNCA
SNX14	SOD1	SORL1	SOS1	SOS2
SOX10	SOX17	SPAG1	SPART	SPAST
SPG11	SPG21	SPG7	SPINK5	SPR
SPRED1	SPTAN1	SPTBN2	SPTLC1	SPTLC2
SQSTM1	ST14	STAG2	STAT1	STAT3
STING1	STK11	STN1	STRA6	STRC
STS	STUB1	STXBP1	SUFU	SULT2B1
SUMF1	SURF1	SYK	SYNE1	SYNE4
SYNJ1	SYT14	TAB2	TACO1	TAF1
TANGO2	TARDBP	TBC1D24	TBCD	TBCE
TBK1	TBX1	TBX20	TBX21	TBX3
TBX4	TBX5	TCOF1	TCTN1	TCTN2
TCTN3	TDP1	TDP2	TECPR2	TECRL
TECTA	TENM4	TERC	TERT	TFAP2A
TFG	TG	TGDS	TGFB2	TGFB3

TGFBR1	TGFBR2	TGM1	TGM5	TGM6
TH	THAP1	THSD4	TIMM8A	TINF2
TLL1	TMC1	TMC2	TMEM138	TMEM216
TMEM231	TMEM237	TMEM240	TMEM43	TMEM67
TMEM70	TMEM94	TMIE	TMPRSS3	TNC
TNFAIP3	TNFRSF1A	TNNC1	TNNI3	TNNI3K
TNNT2	TNXB	TOR1A	TP53	TP63
TPK1	TPM1	TPO	TPP1	TPRN
TRAPPC11	TRDN	TREM2	TREX1	TRIM63
TRIOBP	TRPA1	TRPC3	TRPV3	TSC1
TSC2	TSEN54	TSFM	TSHR	TSPEAR
TTBK2	TTC19	TTN	TPPA	TTR
TUBA4A	TUBB4A	TUBB4B	TWIST1	TWNK
TYMS	TYR	TYROBP	TYRP1	UBA1
UBA5	UBQLN2	UCHL1	UNG	USH1C
USH1G	USH2A	USP8	VAC14	VAMP1
VAPB	VARS2	VCL	VCP	VEGFA
VHL	VLDLR	VPS11	VPS13A	VPS13C
VPS13D	VPS33B	VPS35	VPS37A	VWA3B
WARS2	WAS	WASHC5	WDR35	WDR45
WDR45B	WDR48	WDR73	WDR81	WFS1
WHRN	WNK1	WNT10A	WRAP53	WRN
WT1	WWOX	XIAP	XK	XPA
XPC	XPR1	XRCC1	XYLT1	XYLT2
ZAP70	ZCCHC8	ZEB2	ZFHX3	ZFPM2
ZFR	ZFYVE26	ZFYVE27	ZIC3	ZMPSTE24
ZMYND10	ZMYND11	ZNF423	ZNF469	ZNF592