

nCounter® Autoimmune Discovery Consortium Panel - Gene Details

Official Symbol	Accession	Alias / Previous Symbol	Official Full Name	Other targets or Isoform Information
AAMP	NM_001087.3		angio associated migratory cell protein	
ABHD6	NM_020676.5		abhydrolase domain containing 6	
ACKR2	NM_001296.3	CMKBR9,CCBP2;chemokine binding protein 2	atypical chemokine receptor 2	
ACOXL	NM_018308.1	acyl-Coenzyme A oxidase-like	acyl-CoA oxidase like	
ACSL6	NM_001009185.1	FACL6;fatty-acid-Coenzyme A ligase, long-chain 6	acyl-CoA synthetase long chain family member 6	
ADA	NM_000022.2		adenosine deaminase	
ADAM30	NM_021794.2	a disintegrin and metalloproteinase domain 30	ADAM metalloproteinase domain 30	
ADCY3	NM_004036.3		adenylate cyclase 3	
ADCY7	NM_001114.4		adenylate cyclase 7	
AF3	NM_001025108.1	LAF4;lymphoid nuclear protein related to AF4,AF4/FMR2 family, member 3	AF4/FMR2 family member 3	
AGAP2	NM_014770.3	CENTG1;centaurin, gamma 1	ArlGAP with GTPase domain, ankyrin repeat and PH domain 2	
AH1	NM_001134830.1	Abelson helper integration site	Abelson helper integration site 1	
AHR	NM_001621.3		aryl hydrocarbon receptor	
AHSA2	NM_152392.1	AHSA2;AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast);activator of HSP90 ATPase homolog 2	activator of HSP90 ATPase homolog 2, pseudogene	
AIRE	NM_000383.2	APECED;autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy)	autoimmune regulator	
AMIGO3	NM_198722.2		adhesion molecule with Ig like domain 3	
ANKRD55	NM_024669.2		ankyrin repeat domain 55	
ANTXR2	NM_058172.5		anthrax toxin receptor 2	
APFH	NM_001640.3	D3F1552,DNF1552,D3S48E;N-acylaminoacyl-peptide hydrolase	acylaminoacyl-peptide hydrolase	
APOBEC3G	NM_021822.2	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	apolipoprotein B mRNA editing enzyme catalytic subunit 3G	
ARG1	NM_000045.3		arginase 1	
ARHGAP30	NM_001025598.1		Rho GTPase activating protein 30	
ARID5B	NM_032199.1	AT rich interactive domain 5B (MRE1-like)	AT-rich interaction domain 5B	
ARPC2	NM_005731.2	actin related protein 2/3 complex, subunit 2 (34 kD);actin related protein 2/3 complex subunit 2, 34kDa	actin related protein 2/3 complex subunit 2	
ATF4	NM_001675.2	TXREB;activating transcription factor 4 (tax-responsive enhancer element B67)	activating transcription factor 4	
ATG16L1	NM_017974.3	APG16L,ATG16L;APG16 autophagy 16-like (S. cerevisiae);ATG16 autophagy related 16-like (S. cerevisiae);ATG16 autophagy related 16-like 1 (S. cerevisiae)	autophagy related 16 like 1	
ATG5	NM_004849.2	APG5L;APG5 (autophagy 5, S. cerevisiae)-like;APG5 autophagy 5-like (S. cerevisiae);ATG5 autophagy related 5 homolog (S. cerevisiae)	autophagy related 5	
ATM	NM_000051.3	ATA,ATDC,ATC,ATD;ataxia telangiectasia mutated (includes complementation groups A, C and D);ataxia telangiectasia mutated	ATM serine/threonine kinase	
B2M	NM_004048.2		beta-2-microglobulin	
B3GNT2	NM_006577.5	B3GNT1;UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	
BABAM2	NM_004899.3	BRE;brain and reproductive organ-expressed (TNFRSF1A modulator)	BRISIC and BRCA1 A complex member 2	
BACH2	NM_001170794.1	BTB and CNC homology 1, basic leucine zipper transcription factor 2	BTB domain and CNC homolog 2	
BAD	NM_004322.3		BCL2 associated agonist of cell death	
BANK1	NM_001083907.1		B-cell scaffold protein with ankyrin repeats 1	
BATF	NM_006399.3	basic leucine zipper transcription factor, ATF-like	basic leucine zipper ATF-like transcription factor	
BATF3	NM_186644.2	basic leucine zipper transcription factor, ATF-like 3	basic leucine zipper ATF-like transcription factor 3	
BCL10	NM_003921.2		B-cell CLL/lymphoma 10	
BCL3	NM_005178.2	D19S37,BCL4	B-cell CLL/lymphoma 3	
BCL6	NM_001706.2	ZNF51;zinc finger protein 51	B-cell CLL/lymphoma 6	
BID	NM_197966.2		BH3 interacting domain death agonist	
BLK	NM_001715.2	B lymphoid tyrosine kinase	BLK proto-oncogene, Src family tyrosine kinase	
BLNK	NM_013314.2		B-cell linker	
BORCS5	NM_058169.3	LOH12CR1;loss of heterozygosity, 12, chromosomal region 1	BLDC-1 related complex subunit 5	
BSN	NM_003458.3	ZNF231;basoon (presynaptic cytomatrix protein)	basoon presynaptic cytomatrix protein	
BTK	NM_000061.1	AGMX1,IMD1;Bruton agammaglobulinemia tyrosine kinase	Bruton tyrosine kinase	
BTLA	NM_181780.2		B and T lymphocyte associated	
BTNL2	NM_019602.1	butyrophilin-like 2 (MHC class II associated);butyrophilin-like 2	butyrophilin like 2	
CI0BP	NM_001212.3	HABP1;complement component 1, q subcomponent binding protein	complement C1q binding protein	
CIQTNF6	NM_031910.3	C1q and tumor necrosis factor related protein 6	C1q and TNF related 6	
C1orf106	NM_018265.3	C1orf106;chromosome 1 open reading frame 106	innate immunity activator	
C1orf53	NM_001024594.2		chromosome 1 open reading frame 53	
C5orf30	NM_033211.2		chromosome 5 open reading frame 30	
CALM3	NM_005184.2	calmodulin 3 (phosphorylase kinase, delta)	calmodulin 3	
CARD11	NM_032415.2	caspace recruitment domain family, member 11	caspace recruitment domain family member 11	
CARD14	NM_052819.2	PSORS2;psoriasis susceptibility 2,caspase recruitment domain family, member 14	caspace recruitment domain family member 14	
CARD9	NM_052814.3	caspace recruitment domain family, member 9	caspace recruitment domain family member 9	
CARM1	NM_199141.1		coactivator associated arginine methyltransferase 1	
CASP1	NM_001223.3	IL1BC;caspace 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase);caspace 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase);caspace 1, apoptosis-related cysteine peptidase	caspace 1	
CASP10	NM_001230.4	caspace 10, apoptosis-related cysteine protease,caspase 10, apoptosis-related cysteine peptidase	caspace 10	
CASP2	NM_032982.2	NEDD2;neural precursor cell expressed, developmentally down-regulated 2,caspase 2, apoptosis-related cysteine peptidase	caspace 2	
CASP3	NM_032991.2	caspace 3, apoptosis-related cysteine protease,caspase 3, apoptosis-related cysteine peptidase	caspace 3	
CASP8	NM_001228.4	caspace 8, apoptosis-related cysteine protease,caspase 8, apoptosis-related cysteine peptidase	caspace 8	
CAVIN1	NM_012232.4	PTRF;polymerase I and transcript release factor	caveolae associated protein 1	
CLB	NM_170662.3	Cas-Br-M (murine) ectropic retroviral transforming sequence b,Cas-Br-M (murine)	Cbl proto-oncogene B	
CCDC116	NM_152612.2	ectropic retroviral transforming sequence b,Cbl proto-oncogene B, E3 ubiquitin protein ligase	coiled-coil domain containing 116	
CCDC88B	NM_032251.5	CCDC88;coiled-coil domain containing 88	coiled-coil domain containing 88B	
CCL11	NM_002986.2	SCYA11;small inducible cytokine subfamily A (Cys-Cys), member 11	C-C motif chemokine ligand 11	
CCL13	NM_005408.2	(eotaxin),chemokine (C-C motif) ligand 13	C-C motif chemokine ligand 13	
CCL18	NM_002988.2	SCYA18;small inducible cytokine subfamily A (Cys-Cys), member 18, pulmonary and activation-regulated,chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated),chemokine (C-C motif) ligand 18	C-C motif chemokine ligand 18	
CCL19	NM_006274.2	SCYA19;small inducible cytokine subfamily A (Cys-Cys), member 19,chemokine (C-C motif) ligand 19	C-C motif chemokine ligand 19	
CCL2	NM_002982.3	SCYA2;small inducible cytokine A2 (monocyte chemotactic protein 1, homologous to mouse Sig-je),chemokine (C-C motif) ligand 2	C-C motif chemokine ligand 2	
CCL20	NM_004591.1	SCYA20;small inducible cytokine subfamily A (Cys-Cys), member 20,chemokine (C-C motif) ligand 20	C-C motif chemokine ligand 20	
CCL21	NM_002989.2	SCYA21;small inducible cytokine subfamily A (Cys-Cys), member 21,chemokine (C-C motif) ligand 21	C-C motif chemokine ligand 21	
CCL22	NM_002990.3	SCYA22;small inducible cytokine subfamily A (Cys-Cys), member 22,chemokine (C-C motif) ligand 22	C-C motif chemokine ligand 22	
CCL23	NM_005064.4	SCYA23;small inducible cytokine subfamily A (Cys-Cys), member 23,chemokine (C-C motif) ligand 23	C-C motif chemokine ligand 23	
CCL24	NM_002991.2	SCYA24;small inducible cytokine subfamily A (Cys-Cys), member 24,chemokine (C-C motif) ligand 24	C-C motif chemokine ligand 24	
CCL3	NM_002983.2	SCYA3;small inducible cytokine A3 (homologous to mouse Mip-1a),chemokine (C-C motif) ligand 3	C-C motif chemokine ligand 3	
CCL4	NM_002984.2	LAG1,SCYA4;small inducible cytokine A4 (homologous to mouse Mip-1b),chemokine (C-C motif) ligand 4	C-C motif chemokine ligand 4	CCL4L1 (NM_207007)
CCL5	NM_002985.2	D17S136E,SCYA5;small inducible cytokine A5 (RANTES),chemokine (C-C motif) ligand 5	C-C motif chemokine ligand 5	
CCL7	NM_006273.3	SCYA6,SCYA7;small inducible cytokine A7 (monocyte chemotactic protein 3),chemokine (C-C motif) ligand 7	C-C motif chemokine ligand 7	
CCL8	NM_005623.2	SCYA8;small inducible cytokine subfamily A (Cys-Cys), member 8 (monocyte chemotactic protein 2),chemokine (C-C motif) ligand 8	C-C motif chemokine ligand 8	
CCNY	NM_001282854.1	C10orf9;chromosome 10 open reading frame 9	cyclin Y	

CCR1	NM_001295.2	SCYAR1,CMKBR1;chemokine (C-C motif) receptor 1	C-C motif chemokine receptor 1	
CCR2	NM_001123041.2	CMKBR2;chemokine (C-C motif) receptor 2	C-C motif chemokine receptor 2	
CCR4	NM_005508.4	chemokine (C-C motif) receptor 4	C-C motif chemokine receptor 4	
		CMKBR5;chemokine (C-C motif) receptor 5,chemokine (C-C motif) receptor 5		
CCR5	NM_000579.1	(gene/pseudogene)	C-C motif chemokine receptor 5 (gene/pseudogene)	
CCR6	NM_031409.2	STRL22;chemokine (C-C motif) receptor 6	C-C motif chemokine receptor 6	
CCR7	NM_001838.2	CMKBR7,EBI1;chemokine (C-C motif) receptor 7	C-C motif chemokine receptor 7	
CD19	XM_011545981.1	CD19 antigen	CD19 molecule	
CD209	NM_001144899.1	CD209 antigen	CD209 molecule	
CD226	NM_006566.2	CD226 antigen	CD226 molecule	
		natural killer cell receptor 2B4,CD244 natural killer cell receptor 2B4,CD244		
CD244	NM_001166663.1	molecule, natural killer cell receptor 2B4	CD244 molecule	
CD247	NM_000734.3	CD32;CD3z antigen, zeta polypeptide (T1T3 complex),CD247 antigen	CD247 molecule	
CD27	NM_001242.4	TNFRSF7;tumor necrosis factor receptor superfamily, member 7	CD27 molecule	
CD274	NM_014143.3	PDCD1LG1;programmed cell death 1 ligand 1,CD274 antigen	CD274 molecule	
CD28	NM_001243078.1	CD28 antigen (T144)	CD28 molecule	
		TNFRSF5;tumor necrosis factor receptor superfamily, member 5,CD40 molecule,		
CD40	NM_001250.4	TNF receptor superfamily member 5	CD40 molecule	
		HIGM1,IMD3,TNFSF5;tumor necrosis factor (ligand) superfamily, member 5		
CD40LG	NM_000074.2	(hyper-IgM syndrome)	CD40 ligand	
		MICA,MDU2,MDU3;CD44 antigen (homing function and Indian blood group		
CD44	NM_001001392.1	system)	CD44 molecule (Indian blood group)	
CD45RO	NM_080921.3	CD45	protein tyrosine phosphatase, receptor type C	targets CD45RO isoform only
CD45RA	NM_002838.4	CD45	protein tyrosine phosphatase, receptor type C	targets CD45RA isoform only
CD45RB	ENST00000367367.1	CD45	protein tyrosine phosphatase, receptor type C	targets CD45RB isoform only
CD48	NM_001778.2	BCM1;CD48 antigen (B-cell membrane protein),CD48 molecule	CD48 molecule	
CD5	NM_014207.2	LEU1;CD5 antigen (p56-62)	CD5 molecule	
CD58	NM_001779.2	LFA3;CD58 antigen, (lymphocyte function-associated antigen 3)	CD58 molecule	
CD6	NM_001254751.1	CD6 antigen	CD6 molecule	
CD69	NM_001781.1	CD69 antigen (p60, early T-cell activation antigen)	CD69 molecule	
		CD28LG,CD28LG1;CD80 antigen (CD28 antigen ligand 1, B7-1 antigen),CD80		
CD80	NM_005191.3	molecule	CD80 molecule	
		CD83 antigen (activated B lymphocytes, immunoglobulin superfamily),CD83		
CD83	NM_004233.3	molecule	CD83 molecule	
CD86	NM_175862.3	CD28LG2;CD86 antigen (CD28 antigen ligand 2, B7-2 antigen)	CD86 molecule	
		CD37 (cell division cycle 37, S. cerevisiae, homolog),CD37 cell division cycle 37		
CDC37	NM_007065.3	homolog (S. cerevisiae),cell division cycle 37 homolog (S. cerevisiae)	cell division cycle 37	
CDK2	NM_001798.2		cyclin dependent kinase 2	
CDK6	NM_001259.6		cyclin dependent kinase 6	
CDKAL1	NM_017774.2	CDKS regulatory subunit associated protein 1-like 1	CDKS regulatory subunit associated protein 1 like 1	
CEBPB	NM_005194.2	TCF5;CCAAT/enhancer binding protein (C/EBP), beta	CCAAT/enhancer binding protein beta	
CEBPG	NM_001806.2	CCAAT/enhancer binding protein (C/EBP), gamma	CCAAT/enhancer binding protein gamma	
CENPD	NM_001199803.1		centromere protein D	
CEP250	NM_007186.5	CEP2;centrosomal protein 2,centrosomal protein 250kDa	centrosomal protein 250	
CEP57	NM_014679.3	centrosomal protein 57kDa	centrosomal protein 57	
CLAR	NM_001127183.1	CASP8A1;CASP8 and FADD-like apoptosis regulator	CASP8 and FADD like apoptosis regulator	sub-maximal variant coverage due to non-overlapping transcripts
CHUK	NM_001278.3	TRAF1	conserved helix-loop-helix ubiquitinous kinase	
		MHC2TA;MHC class II transactivator, class II, major histocompatibility complex,		
CIITA	NM_000246.3	transactivator	class II major histocompatibility complex transactivator	
		C10orf70,ZCD1;chromosome 10 open reading frame 70,zinc finger, CDGSH-type		
CISD1	NM_018464.3	domain 1	CDGSH iron sulfur domain 1	
CISH	NM_145071.2	cytokine inducible SH2-containing protein	cytokine inducible SH2 containing protein	
		KIAA0350,KIAA0350,C-type lectin domain family 16, member A,C-type lectin		
CLEC16A	NM_015226.1	domain family 16 member A	C-type lectin domain containing 16A	
		CLECF6;C-type (calcium dependent, carbohydrate-recognition domain) lectin,		
CLECA4	NM_194448.2	superfamily member 6,C-type lectin domain family 4, member A	C-type lectin domain family 4 member A	
		CLECF9;C-type (calcium dependent, carbohydrate-recognition domain) lectin,		
CLECAE	NM_014358.2	superfamily member 9,C-type lectin domain family 4, member E	C-type lectin domain family 4 member E	
		CLECF5;C-type (calcium dependent, carbohydrate-recognition domain) lectin,		
CLECA5	NM_013252.2	superfamily member 5,C-type lectin domain family 5, member A,C-type lectin	C-type lectin domain containing 5A	
		domain family 5 member A		
		CLECF10;C-type (calcium dependent, carbohydrate-recognition domain) lectin,		
CLECA6	NM_001007033.1	superfamily member 10,C-type lectin domain family 6, member A,C-type lectin	C-type lectin domain containing 6A	
		domain family 6 member A		
		CLECF12;C-type (calcium dependent, carbohydrate-recognition domain) lectin,		
CLECA7	NM_197954.2	superfamily member 12,C-type lectin domain family 7, member A,C-type lectin	C-type lectin domain containing 7A	
		domain family 7 member A		
CDG6	NM_001145079.1		component of oligomeric golgi complex 6	
CPEB4	NM_030627.2		cytoplasmic polyadenylation element binding protein 4	
CREM	NM_181571.2		cAMP responsive element modulator	sub-maximal variant coverage due to non-overlapping transcripts
CRTR3	NM_001042574.1		CREB regulated transcription coactivator 3	
CSF1	NM_000757.4	colony stimulating factor 1 (macrophage)	colony stimulating factor 1	
CSF1R	NM_005211.2	FMS;McDonough feline sarcoma viral (v-fms) oncogene homolog	colony stimulating factor 1 receptor	
CSF2	NM_000758.2	colony stimulating factor 2 (granulocyte-macrophage)	colony stimulating factor 2	
		IL3RB;colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-		
CSF2RB	NM_000395.2	macrophage)	colony stimulating factor 2 receptor beta common subunit	
		GCSF,G-CSF,C17orf33;chromosome 17 open reading frame 33,colony stimulating		
CSF3	NM_000759.3	factor 3 (granulocyte)	colony stimulating factor 3	
CSF3R	NM_000760.3	CD114;colony stimulating factor 3 receptor (granulocyte)	colony stimulating factor 3 receptor	
CSK	NM_004383.1	c-src tyrosine kinase,CSK, non-receptor tyrosine kinase	C-terminal Src kinase	
		CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small		
CTDSP1	NM_021198.1	phosphatase 1	CTD small phosphatase 1	
CTLA4	NM_005214.3	CELIAC3,DDM12;celiac disease 3,insulin-dependent diabetes mellitus 12	cytotoxic T-lymphocyte associated protein 4	
		CTNNB;catenin (cadherin-associated protein), beta 1 (88kD),catenin (cadherin-		
CTNNB1	NM_001098210.1	associated protein), beta 1, 88kDa,catenin (cadherin-associated protein), beta 1	catenin beta 1	
CTSH	NM_004390.3	CPSB	cathepsin H	
CTSW	NM_001335.3	cathepsin W (lymphopain)	cathepsin W	
CTS2	NM_001336.3		cathepsin Z	
		GPR13,CMKBR11;chemokine (C-X3-C) receptor 1,chemokine (C-X3-C motif)		
CX3CR1	NM_001337.3	receptor 1	C-X3-C motif chemokine receptor 1	
		MGSA,GRO1,FSP,GRO1 oncogene (melanoma growth stimulating activity,		
CXCL1	NM_001511.1	alpha),fibroblast secretory protein,chemokine (C-X-C motif) ligand 1 (melanoma	C-X-C motif chemokine ligand 1	
		growth stimulating activity, alpha)		
		INP10,SCYB10;small inducible cytokine subfamily B (Cys-X-Cys), member		
CXCL10	NM_001565.2	10,chemokine (C-X-C motif) ligand 10	C-X-C motif chemokine ligand 10	
		SCYB9B,SCYB11;small inducible cytokine subfamily B (Cys-X-Cys), member		
CXCL11	NM_005409.4	11,chemokine (C-X-C motif) ligand 11	C-X-C motif chemokine ligand 11	
		SCYB13;small inducible cytokine B subfamily (Cys-X-Cys motif), member 13 (B-cell		
CXCL13	NM_006419.2	chemoattractant),chemokine (C-X-C motif) ligand 13	C-X-C motif chemokine ligand 13	
CXCL2	NM_002089.3	GRO2;GRO2 oncogene,chemokine (C-X-C motif) ligand 2	C-X-C motif chemokine ligand 2	
CXCL3	NM_002090.2	GRO3;GRO3 oncogene,chemokine (C-X-C motif) ligand 3	C-X-C motif chemokine ligand 3	
		SCYB5;small inducible cytokine subfamily B (Cys-X-Cys), member 5 (epithelial-		
CXCL5	NM_002994.3	derived neutrophil-activating peptide 78),chemokine (C-X-C motif) ligand 5	C-X-C motif chemokine ligand 5	
CXCL8	NM_000584.2	IL8;interleukin 8,chemokine (C-X-C motif) ligand 8	C-X-C motif chemokine ligand 8	
		CMK,MIG;monokine induced by gamma interferon,chemokine (C-X-C motif)		
CXCL9	NM_002416.1	ligand 9	C-X-C motif chemokine ligand 9	
		CMKAR1,IL8RA;interleukin 8 receptor, alpha,chemokine (C-X-C motif) receptor 1		
CXCR1	NM_000634.2		C-X-C motif chemokine receptor 1	
CXCR2	NM_001557.3	IL8RB;interleukin 8 receptor, beta,chemokine (C-X-C motif) receptor 2	C-X-C motif chemokine receptor 2	
CXCR3	NM_001504.1	GPR9;G protein-coupled receptor 9,chemokine (C-X-C motif) receptor 3	C-X-C motif chemokine receptor 3	
		chemokine (C-X-C motif), receptor 4 (fusin),chemokine (C-X-C motif) receptor 4		
CXCR4	NM_003467.2		C-X-C motif chemokine receptor 4	
		BLR1,Burkitt lymphoma receptor 1, GTP-binding protein,Burkitt lymphoma		
CXCR5	NM_001716.3	receptor 1, GTP binding protein (chemokine (C-X-C motif) receptor 5),chemokine	C-X-C motif chemokine receptor 5	
CXCR6	NM_006564.1	(C-X-C motif) receptor 5	C-X-C motif chemokine receptor 6	
		chemokine (C-X-C motif) receptor 6		

CXorf21	NM_025159.2		chromosome X open reading frame 21
DAP	NM_004394.1		death associated protein
DBP	NM_001352.3	D site of albumin promoter (albumin D-box) binding protein	D-box binding PAR bZIP transcription factor
DCLRE1B	NM_022836.3	DNA cross-link repair 1B (PSO2 homolog, <i>S. cerevisiae</i> )	DNA cross-link repair 1B
DDAH1	NM_012137.2		dimethylarginine dimethylaminohydrolase 1
DDX58	NM_014314.3	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	DExD/H-box helicase 58
		HLR2;DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD);DEAD (Asp-Glu-Ala-Asp) box polypeptide 6;DEAD (Asp-Glu-Ala-Asp) box helicase 6	DEAD-box helicase 6
DDX6	NM_001257191.1		DEAD-box helicase 6
		FAM31B,C1orf218;family with sequence similarity 31, member B,chromosome 1 open reading frame 218,DENN/MADD domain containing 1B	DENN domain containing 1B
DENND1B	NM_001195216.1		DENN domain containing 1B
DEX1	NM_014015.3	Dexi homolog (mouse)	Dexi homolog
		DAGK,DAGK1;diacylglycerol kinase, alpha (80kD);diacylglycerol kinase, alpha 80kDa	diacylglycerol kinase alpha
DGKA	NM_001345.4		diacylglycerol kinase alpha
DHCR7	NM_001360.2	SLC5;Smith-Lemli-Opitz syndrome LAD;GCSL;diacylglycerol dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex)	7-dehydrocholesterol reductase
DLG	NM_001008.3		dihydrofolate dehydrogenase
DLK1	NM_002836.4	delta-like homolog (Drosophila),delta-like 1 homolog (Drosophila)	delta like non-canonical Notch ligand 1
DNASE1L3	NM_001256560.1	deoxyribonuclease I like 3	deoxyribonuclease I like 3
DNMT3A	NM_022552.4	DNA (cytosine-5-)-methyltransferase 3 alpha	DNA methyltransferase 3 alpha
DOK3	NM_001144876.1		docking protein 3
		CD26,ADCP2;dipeptidylpeptidase IV (CD26, adenosine deaminase complexing protein 2);adenosine deaminase complexing protein 2;dipeptidyl-peptidase 4	dipeptidyl peptidase 4
DPP4	NM_001935.3		dipeptidyl peptidase 4
DUSP4	NM_057158.2		dual specificity phosphatase 4
EBI3	NM_005755.2		Epstein-Barr virus induced 3
		C1orf22;chromosome 1 open reading frame 22,ER degradation enhancer, mannosidase alpha-like 3	ER degradation enhancing alpha-mannosidase like protein 3
EDEM3	NM_025191.3		ER degradation enhancing alpha-mannosidase like protein 3
EFR3B	NM_014971.1	KIAA0953;KIAA0953,EFR3 homolog B ( <i>S. cerevisiae</i> )	EFR3 homolog B
EGR1	NM_001964.2		early growth response 1
EGR2	NM_000399.3	KROX20;early growth response 2 (Krox-20 homolog, <i>Drosophila</i> )	early growth response 2
		EIF35B;eukaryotic translation initiation factor 3, subunit B, 110kDa,eukaryotic translation initiation factor 3, subunit C	eukaryotic translation initiation factor 3 subunit C
EIF3C	NM_001199142.1		eukaryotic translation initiation factor 3 subunit C
ELMO1	NM_014800.9	engulfment and cell motility 1 (ced-12 homolog, <i>C. elegans</i> )	engulfment and cell motility 1
		DYS,IKBKAP;dysautonomia (Riley-Day syndrome, hereditary sensory autonomic neuropathy type III);inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein	elongator complex protein 1
ELP1	NM_003640.3		elongator complex protein 1
EMSY	NM_020193.3	C1orf130;chromosome 11 open reading frame 30	EMSY, BRCA2 interacting transcriptional repressor
ENTPD1	NM_001098175.1	CD39	ectonucleoside triphosphate diphosphohydrolase 1
EDMES	NM_005442.2	eomesodermin ( <i>Xenopus laevis</i> ) homolog	eomesodermin
EPO	NM_000799.2		erythropoietin
EP515L1	NM_001252874.1	epidermal growth factor receptor pathway substrate 15-like 1	epidermal growth factor receptor pathway substrate 15 like 1
ERAP1	NM_001040458.1		endoplasmic reticulum aminopeptidase 1
ERAP2	NM_001130140.1		endoplasmic reticulum aminopeptidase 2
		LCCS2;lethal congenital contracture syndrome 2,v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 3	erb-b2 receptor tyrosine kinase 3
ERBB3	NM_001005915.1		erb-b2 receptor tyrosine kinase 3
ERF1	NM_018948.3		ERBB receptor feedback inhibitor 1
ESRRA	NM_004451.3	ESRL1	estrogen related receptor alpha
ETS1	NM_005238.3	EWSR2;v-ets avian erythroblastosis virus E26 oncogene homolog 1	ETS proto-oncogene 1, transcription factor
		v-ets erythroblastosis virus E26 oncogene homolog 2 (avian),v-ets avian erythroblastosis virus E26 oncogene homolog 2	ETS proto-oncogene 2, transcription factor
ETS2	NM_005239.4		ETS proto-oncogene 2, transcription factor
ETV7	NM_001207035.1	ets variant gene 7 (TEL2 oncogene)	ETS variant 7
EVIS	NM_005665.4		ectropic viral integration site 5
EXOC2	NM_018303.4	SEC5L1;SEC5-like 1 ( <i>S. cerevisiae</i> )	exocyst complex component 2
EXTL2	NM_001033025.2	exostosins (multiple)-like 2	exostosin like glycosyltransferase 2
F11R	NM_144503.1	JAM1;junctional adhesion molecule 1	F11 receptor
FADD	NM_003824.2	Fas (TNFRSF6)-associated via death domain	Fas associated via death domain
FADS1	NM_013402.3	LLCDL1	fatty acid desaturase 1
FADS2	NM_004265.2	LLCDL2	fatty acid desaturase 2
FADS3	NM_021727.3	LLCDL3	fatty acid desaturase 3
		C10orf58;chromosome 10 open reading frame 58,family with sequence similarity 213, member A	family with sequence similarity 213 member A
FAM213A	NM_032333.4		family with sequence similarity 213 member A
		C1orf93;chromosome 1 open reading frame 93,family with sequence similarity 213, member B	family with sequence similarity 213 member B
FAM213B	NM_152371.2		family with sequence similarity 213 member B
FAM98B	NM_173611.3	family with sequence similarity 98, member B	family with sequence similarity 98 member B
FAS	NM_000043.4	FAS1,APT1,TNFRSF6;tumor necrosis factor receptor superfamily, member 6,Fas (TNF receptor superfamily, member 6)	Fas cell surface death receptor
		APT1LG1,TNFRSF6;tumor necrosis factor (ligand) superfamily, member 6,Fas ligand (TNF superfamily, member 6)	Fas ligand
FASLG	NM_000639.1		Fas ligand
FBXL19	NM_001099784.2		F-box and leucine rich repeat protein 19
FCER1A	NM_002001.2	FCER1A;Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide	Fc fragment of IgE receptor Ia
FCER1G	NM_004106.1	Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide	Fc fragment of IgE receptor Ig
		Fc fragment of IgG, high affinity Ia, receptor for (CD64),Fc fragment of IgG, high affinity Ia, receptor (CD64)	Fc fragment of IgG receptor Ia
FCGR1A/B	NM_000566.3		Fc fragment of IgG receptor Ia
		Fc fragment of IgG, low affinity IIc, receptor for (CD32),Fc fragment of IgG, low affinity IIc, receptor for (CD32) (gene/pseudogene)	Fc fragment of IgG receptor IIc (gene/pseudogene)
FCGR2A/C	NM_201563.4		Fc fragment of IgG receptor IIc (gene/pseudogene)
		FCG2,FCGR2;Fc fragment of IgG, low affinity IIb, receptor for (CD32),Fc fragment of IgG, low affinity IIb, receptor (CD32)	Fc fragment of IgG receptor IIb
FCGR2B	NM_001002273.1		Fc fragment of IgG receptor IIb
		FCGR3,FCG3;Fc fragment of IgG, low affinity IIIa, receptor for (CD16),Fc fragment of IgG, low affinity IIIa, receptor (CD16a)	Fc fragment of IgG receptor IIIa
FCGR3A/B	NM_000569.6		Fc fragment of IgG receptor IIIa
FCGR7	NM_011526628.1	Fc fragment of IgG, receptor, transporter, alpha	Fc fragment of IgG receptor and transporter
FCMR	NM_005449.4	FAIM3;Fas apoptotic inhibitory molecule 3	Fc fragment of IgM receptor
FCRL1	NM_001159397.1	Fc receptor-like 1	Fc receptor like 1
FIGNL1	NM_022116.2	fidgetin-like 1	fidgetin like 1
FKBP5	NM_001145775.1	FK506-binding protein 5	FK506 binding protein 5
FLI1	NM_001167681.2	Friend leukemia virus integration 1	Flt-1 proto-oncogene, ETS transcription factor
FLRT1	NM_013280.4		fibronectin leucine rich transmembrane protein 1
		v-fos FBI murine osteosarcoma viral oncogene homolog,FBI murine osteosarcoma viral oncogene homolog	Fos proto-oncogene, AP-1 transcription factor subunit
FOS	NM_005252.2		Fos proto-oncogene, AP-1 transcription factor subunit
FOSL1	NM_005438.3	FOS like antigen 1	FOS like 1, AP-1 transcription factor subunit
FOSL2	NM_005253.3	FOS like antigen 2	FOS like 2, AP-1 transcription factor subunit
FOXO3	NM_001455.2	FKHRL1,FOXO3A	forkhead box O3
FOXP1	NM_032682.5		forkhead box P1
FOXP3	NM_014009.3	IPEX;immune dysregulation, polyendocrinopathy, enteropathy, X-linked	forkhead box P3
FUT2	NM_000511.5	SE;fucosyltransferase 2 (secretor status included)	fucosyltransferase 2
FYN	NM_002037.3	FYN oncogene related to SRC, FGR, YES	FYN proto-oncogene, Src family tyrosine kinase
GALC	NM_000153.2	galactosylceramidase (Krabbe disease)	galactosylceramidase
		PRGS,PGFT	phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase
GART	NM_000819.3		phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase
GATA3	NM_001002295.1	GATA-binding protein 3	GATA binding protein 3
		guanylate binding protein 1, interferon-inducible, 67kDa,guanylate binding protein 1, interferon-inducible	guanylate binding protein 1
GBP1	NM_002053.1		guanylate binding protein 1
GBP5	NM_052942.3		guanylate binding protein 5
GF11	NM_005263.2	ZNF163;growth factor independent 1	growth factor independent 1 transcriptional repressor
GLIS3	NM_001042413.1	ZNF151;zinc finger protein 151	GLIS family zinc finger 3
GMPPB	NM_013334.2		GDP-mannose pyrophosphorylase B
GNA12	NM_001282440.1	guanine nucleotide binding protein (G protein) alpha 12	G protein subunit alpha 12
GNLY	NM_006433.2	LAG2	granulysin
GPR18	NM_001098200.1		G protein-coupled receptor 18
		EBI2;Epstein-Barr virus induced gene 2 (lymphocyte-specific G protein-coupled receptor)	G protein-coupled receptor 183
GPR183	NM_004951.3		G protein-coupled receptor 183
GPR25	NM_005298.3		G protein-coupled receptor 25
GPR35	NM_005301.3		G protein-coupled receptor 35
GPR65	NM_003608.2		G protein-coupled receptor 65
GPX1	NM_000581.2		glutathione peroxidase 1
GPX4	NM_001039847.1	glutathione peroxidase 4 (phospholipid hydroperoxidase)	glutathione peroxidase 4

GSDMA	NM_178171.4	GSDM,GSDM1;gasdermin,gasdermin 1	gasdermin A
GSDMB	NM_001042471.1	GSDML;gasdermin-like	gasdermin B
GZMA	NM_006144.2	HFSP,CTLA3;granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)	granzyme A
GZMB	NM_004131.3	CTLA1,CSPB;granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)	granzyme B
GZMK	NM_002104.2	granzyme K (serine protease, granzyme 3; trypsin II);granzyme K (granzyme 3; trypsin II)	granzyme K
HCK	NM_002110.2	hemopoietic cell kinase	HCK proto-oncogene, Src family tyrosine kinase
HHAT	NM_001170587.1		hededgehog acyltransferase
HHEX	NM_002729.4	PRHX	hematopoietically expressed homeobox
HNF4A	NM_178850.1	TCF14,MODY,MODY1	hepatocyte nuclear factor 4 alpha
HSPA6	NM_002155.3	heat shock 70kD protein 6 (HSP70B1);heat shock 70kDa protein 6 (HSP70B1)	heat shock protein family A (Hsp70) member 6
ICAM1	NM_000201.2		intercellular adhesion molecule 1
ICAM2	NM_000873.3		intercellular adhesion molecule 2
ICAM3	NM_002162.3		intercellular adhesion molecule 3
ICAM4	NM_001544.3	LW;intercellular adhesion molecule 4, Landsteiner-Wiener blood group;Landsteiner-Wiener blood group,intercellular adhesion molecule 4 (LW blood group)	intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)
ICAM5	NM_003259.3	TLCN	intercellular adhesion molecule 5
ICOS	NM_012092.2		inducible T-cell costimulator
ICOSLG	NM_015259.5	ICOSL	inducible T-cell costimulator ligand
IDO1	NM_002164.3	IDO,INDO;indoleamine-pyrrrole 2,3 dioxygenase	indoleamine 2,3-dioxygenase 1
IFI16	NM_001206567.1		interferon gamma inducible protein 16
IFI30	NM_006332.3	interferon gamma inducible protein 30	IFI30, lysosomal thiol reductase
IFI35	NM_005533.3	interferon-induced protein 35	interferon induced protein 35
IFIH1	NM_022168.2	interferon induced with helicase C domain 1,interferon induced, with helicase C domain 1	interferon induced with helicase C domain 1
IFIT2	NM_001547.4	IFIS4,G1OP2;interferon-induced protein with tetratricopeptide repeats 2	interferon induced protein with tetratricopeptide repeats 2
IFITM1	NM_003641.3	IFI17;interferon induced transmembrane protein 1 (9-27)	interferon induced transmembrane protein 1
IFNA1/13	NM_024013.1		interferon alpha 1
IFNA2	NM_000605.3		interferon alpha 2
IFNAR1	NM_000629.2	IFNAR;interferon (alpha, beta and omega) receptor 1	interferon alpha and beta receptor subunit 1
IFNAR2	NM_000874.3	IFNABR;interferon (alpha, beta and omega) receptor 2	interferon alpha and beta receptor subunit 2
IFNB1	NM_002176.2	IFNB;interferon, beta 1, fibroblast	interferon beta 1
IFNG	NM_000619.2		interferon gamma
IFNGR1	NM_000416.2	IFNGR	interferon gamma receptor 1
IFNGR2	NM_005534.3	IFNGT1;interferon gamma receptor 2 (interferon gamma transducer 1)	interferon gamma receptor 2
IFNL1	NM_172140.1	IL29;interleukin 29,interleukin 29 (interferon, lambda 1)	interferon lambda 1
IFNL2/3	NM_172139.2	IL28B;interleukin 28B,interleukin 28B (interferon, lambda 3)	interferon lambda 3
IFNL3	NM_172065.1	IL28RA;interleukin 28 receptor, alpha,interleukin 28 receptor, alpha (interferon, lambda 3 receptor);interferon, lambda 3 receptor 1	interferon lambda 3 receptor 1
IGFBP1	NM_000596.2	IGFBP1;insulin-like growth factor binding protein 1	insulin like growth factor binding protein 1
IGFBP3	NM_000598.4	IGFBP3;insulin-like growth factor binding protein 3	insulin like growth factor binding protein 3
IKKB	NM_001556.1	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	inhibitor of nuclear factor kappa B kinase subunit beta
IKBE	NM_014002.2	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase epsilon	inhibitor of nuclear factor kappa B kinase subunit epsilon
IKBK	NM_003639.2	IP2,IP3;incontinentia pigmenti;inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma	inhibitor of nuclear factor kappa B kinase subunit gamma
IKZF1	NM_006060.4	ZNFN1A1;zinc finger protein, subfamily 1A, 1 (Ikaros),IKAROS family zinc finger 1 (Ikaros)	IKAROS family zinc finger 1
IKZF2	NM_001079526.1	ZNFN1A2;zinc finger protein, subfamily 1A, 2 (Helios),IKAROS family zinc finger 2 (Helios)	IKAROS family zinc finger 2
IKZF3	NM_183232.2	ZNFN1A3;zinc finger protein, subfamily 1A, 3 (Aiolos),IKAROS family zinc finger 3 (Aiolos)	IKAROS family zinc finger 3
IKZF4	NM_022465.3	ZNFN1A4;zinc finger protein, subfamily 1A, 4 (Eos),IKAROS family zinc finger 4 (Eos)	IKAROS family zinc finger 4
IL10	NM_000572.2		interleukin 10
IL10RB	NM_001558.2	IL10R;interleukin 10 receptor, alpha	interleukin 10 receptor subunit alpha
IL10RA	NM_000628.3	CRFB4,D21558,D21566;interleukin 10 receptor, beta	interleukin 10 receptor subunit beta
IL11RA	NM_147162.1	interleukin 11 receptor, alpha	interleukin 11 receptor subunit alpha
IL12A	NM_000882.2	NKSF1;interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35)	interleukin 12A
IL12B	NM_002187.2	NKSF2;interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)	interleukin 12B
IL12RB1	NM_005535.1	IL12RB;interleukin 12 receptor, beta 1	interleukin 12 receptor subunit beta 1
IL12RB2	NM_001559.2	interleukin 12 receptor, beta 2	interleukin 12 receptor subunit beta 2
IL13	NM_002188.2		interleukin 13
IL13RA1	NM_001560.2	interleukin 13 receptor, alpha 1	interleukin 13 receptor subunit alpha 1
IL15	NM_172174.1		interleukin 15
IL15RA	NM_002189.2	interleukin 15 receptor, alpha	interleukin 15 receptor subunit alpha
IL16	NM_001172128.1	interleukin 16 (lymphocyte chemoattractant factor)	interleukin 16
IL17A	NM_002190.2	CTLA8,IL17;interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8)	interleukin 17A
IL17B	NM_014443.2		interleukin 17B
IL17F	NM_052872.3		interleukin 17F
IL18	NM_001562.2	interleukin 18 (interferon-gamma-inducing factor)	interleukin 18
IL18R1	NM_003855.3		interleukin 18 receptor 1
IL18RAP	NM_003853.2		interleukin 18 receptor accessory protein
IL1A	NM_000575.3	IL1	interleukin 1 alpha
IL1B	NM_000576.2		interleukin 1 beta
IL1R1	NM_001320984.1	IL1R,IL1RA;interleukin 1 receptor, type I	interleukin 1 receptor type 1
IL1R2	NM_173343.1	IL1RB;interleukin 1 receptor, type II	interleukin 1 receptor type 2
IL1RAP	NM_134470.3		interleukin 1 receptor accessory protein
IL1RL1	NM_016232.4		interleukin 1 receptor like 1
IL1RN	NM_000577.3		interleukin 1 receptor antagonist
IL2	NM_000586.2		interleukin 2
IL2ORB	NM_144717.2	FNDC6;fibronectin type III domain containing 6,interleukin 20 receptor beta,interleukin 20 receptor beta subunit	interleukin 20 receptor subunit beta
IL21	NM_021803.2		interleukin 21
IL21R	NM_021798.2		interleukin 21 receptor
IL22	NM_020525.4		interleukin 22
IL23A	NM_016584.2	interleukin 23, alpha subunit p19	interleukin 23 subunit alpha
IL23R	NM_144701.2		interleukin 23 receptor
IL24	NM_001185156.1	ST16	interleukin 24
IL27	NM_145659.3	IL30;interleukin 30	interleukin 27
IL2RA	NM_000417.1	IL2R,DDM10;insulin-dependent diabetes mellitus 10,interleukin 2 receptor, alpha	interleukin 2 receptor subunit alpha
IL2RB	NM_000878.2	IL15RB;interleukin 15 receptor, beta,interleukin 2 receptor, beta	interleukin 2 receptor subunit beta
IL2RG	NM_000206.1	SCDX1,IMDA,CIDX;severe combined immunodeficiency,combined immunodeficiency, X-linked,interleukin 2 receptor, gamma	interleukin 2 receptor subunit gamma
IL3	NM_000588.3	interleukin 3 (colony-stimulating factor, multiple)	interleukin 3
IL31	NM_001014336.1		interleukin 31
IL32	NM_004221.4		interleukin 32
IL33	NM_033439.2	C9orf26;chromosome 9 open reading frame 26 (NF-HEV)	interleukin 33
IL4	NM_000589.2		interleukin 4
IL4R	NM_000418.3		interleukin 4 receptor
IL5	NM_000879.2	interleukin 5 (colony-stimulating factor, eosinophil)	interleukin 5
IL6	NM_000600.3	IFNB2;interleukin 6 (interferon, beta 2)	interleukin 6
IL6R	NM_000565.2		interleukin 6 receptor
IL6ST	NM_002184.2	interleukin 6 signal transducer (gp130, oncostatin M receptor)	interleukin 6 signal transducer
IL7	NM_000880.3		interleukin 7
IL7R	NM_002185.2		interleukin 7 receptor
IL9	NM_000590.1		interleukin 9
ILF3	NM_001137673.1	interleukin enhancer binding factor 3, 90kD,interleukin enhancer binding factor 3, 90kDa	interleukin enhancer binding factor 3
INPP5B	NM_005540.2	inositol polyphosphate-5-phosphatase, 75kD,inositol polyphosphate-5-phosphatase, 75kDa	inositol polyphosphate-5-phosphatase B

		inositol polyphosphate-5-phosphatase, 145kD,inositol polyphosphate-5-phosphatase, 145kDa	inositol polyphosphate-5-phosphatase D
INPP5D	NM_005541.3	phosphatase, 145kDa	inositol polyphosphate-5-phosphatase E
INPP5E	NM_019892.4	JBT51;Joubert syndrome 1,inositol polyphosphate-5-phosphatase, 72 kDa	inositol hexakisphosphate kinase 1
IP6K1	NM_153273.3	IHPK1;inositol hexaphosphate kinase 1	inositol hexakisphosphate kinase 2
IP6K2	NM_001005910.2	IHPK2;inositol hexaphosphate kinase 2	inositol polyphosphate multikinase
IPMK	NM_152230.4		IQ motif containing B1
IQCB1	NM_001023570.2	IQ calmodulin-binding motif containing 1	IQ motif containing GTPase activating protein 1
IQGAP1	NM_003870.3		interleukin 1 receptor associated kinase 1
IRAK1	NM_001569.3		interleukin 1 receptor associated kinase 2
IRAK2	NM_001570.3		interleukin 1 receptor associated kinase 3
IRAK3	NM_007199.1	interleukin-1 receptor-associated kinase 3	interleukin 1 receptor associated kinase 4
IRAK4	NM_016123.1		interferon regulatory factor 1
IRF1	NM_002198.1		interferon regulatory factor 3
IRF3	NM_001571.5		interferon regulatory factor 4
IRF4	NM_002460.1	MUM1	interferon regulatory factor 5
IRF5	NM_001098627.1		interferon regulatory factor 7
IRF7	NM_001572.3		interferon regulatory factor 8
IRF8	NM_002163.2	ICSBP1;interferon consensus sequence binding protein 1	
		GP2B;integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B);integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41)	integrin subunit alpha 2b
ITGA2B	NM_000419.3		integrin subunit alpha 4
ITGA4	NM_000885.4	CD49D;integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	integrin subunit alpha 5
ITGA5	NM_002205.2	FNRA;integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	integrin subunit alpha 6
ITGA6	NM_000210.1	integrin, alpha 6	
		integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide)	integrin subunit alpha E
ITGAE	NM_002208.4		
		CD11A;integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide)	integrin subunit alpha L
ITGAL	NM_002209.2		
		CR3A,CD11B;integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide);integrin, alpha M (complement component 3 receptor 3 subunit)	integrin subunit alpha M
ITGAM	NM_000632.3		
		CD11C;integrin, alpha X (antigen CD11C (p150), alpha polypeptide);integrin, alpha X (complement component 3 receptor 4 subunit)	integrin subunit alpha X
ITGAX	NM_000887.3		
		FNRB,MSK12,MDF2;integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	integrin subunit beta 1
ITGB1	NM_002211.3		
		CD18,MF17;integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit);integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)	integrin subunit beta 2
ITGB2	NM_000211.2		integrin subunit beta 7
ITGB7	NM_000889.1	integrin, beta 7	integrin subunit beta 8
ITGB8	NM_002214.2	integrin, beta 8	
		ITHL1;inter-alpha (globulin) inhibitor H4 (plasma kallikrein-sensitive glycoprotein);inter-alpha-trypsin inhibitor heavy chain family, member 4	inter-alpha-trypsin inhibitor heavy chain family member 4
ITIH4	NM_002218.3		
ITPKA	NM_002220.2	inositol 1,4,5-trisphosphate 3-kinase A	inositol-trisphosphate 3-kinase A
JAK1	NM_002227.1	JAK1B	Janus kinase 1
JAK2	NM_004972.3		Janus kinase 2
JAK3	NM_000215.2		Janus kinase 3
JAZF1	NM_175061.3		JAZF zinc finger 1
JRKL	NM_003772.3	jerky (mouse) homolog-like, jerky homolog-like (mouse)	JRK like
JUN	NM_002228.3	v-jun avian sarcoma virus 17 oncogene homolog, jun oncogene	Jun proto-oncogene, AP-1 transcription factor subunit
JUNB	NM_002229.2		JunB proto-oncogene, AP-1 transcription factor subunit
KCNJ2	NM_000891.2	potassium inwardly-rectifying channel, subfamily J, member 2	potassium voltage-gated channel subfamily J member 2
KEAP1	NM_012289.3		kelch like ECH associated protein 1
KIAA1841	NM_001129993.1		KIAA1841
KIF21B	NM_017596.2		kinesin family member 21B
			killer cell immunoglobulin like receptor, two lg domains and long cytoplasmic tail
KIR2D1	NM_014218.2	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1	KIR2DS1 (NM_014512), KIR2DS3 (NM_012313), KIR2DS5 (NM_014513), KIR2DS4 (NM_012314;NM_001281971;NM_001281972)
KLF4	NM_004235.4	Kruppel-like factor 4 (gut)	Kruppel like factor 4
LAG3	NM_002286.5	lymphocyte-activation gene 3	lymphocyte activating 3
LAMP3	NM_014398.3	lysosomal-associated membrane protein 3	lysosomal associated membrane protein 3
LAT	NM_001014987.1	linker for activation of T cells	linker for activation of T-cells
LBH	NM_030915.3	limb bud and heart development homolog (mouse)	limb bud and heart development
LCE3B	NM_178433.1		late cornified envelope 3B
LCE3D	NM_032563.1	SPRL6B,SPRL6A;small proline rich-like (epidermal differentiation complex) 6B	late cornified envelope 3D
LCK	NM_005356.2	lymphocyte-specific protein tyrosine kinase	LCK proto-oncogene, Src family tyrosine kinase
		SLP76;lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76kD);lymphocyte cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa)	lymphocyte cytosolic protein 2
LCP2	NM_005565.3		lymphoid enhancer binding factor 1
LGALS3	NM_0016269.3	lymphoid enhancer-binding factor 1	lymphoid enhancer binding factor 1
LGALS9	NM_001773888.1	LGALS2;lectin, galactoside-binding, soluble, 3	galectin 3
LILRB4	NM_002308.3	lectin, galactoside-binding, soluble, 9	galectin 9
LIF	NM_002309.3	leukemia inhibitory factor	LIF, interleukin 6 family cytokine
		leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 4	leukocyte immunoglobulin like receptor B4
LILRB4	NM_001278426.3		Lck interacting transmembrane adaptor 1
LIME1	NM_017806.2		lipopolysaccharide induced TNF factor
LITAF	NM_004862.3	lipopolysaccharide-induced TNF factor	leucyl and cystinyl aminopeptidase
LNPEP	NM_005575.2	leucyl/cystinyl aminopeptidase	leupaxin
LPXN	NM_004811.2		lymphocyte-specific protein 1
LSP1	NM_002339.2		leukocyte specific transcript 1
LST1	NM_007161.3		lymphotoxin alpha
LTA	NM_000595.2	TNFB;lymphotoxin alpha (TNF superfamily, member 1)	lymphotoxin beta
LTB	NM_002341.1	TNFC	leukotriene B4 receptor
LTBR	NM_181657.3	P2R7,GPR16,CMKRL1	leukotriene B4 receptor 2
LTBR2	NM_019839.4		lymphotoxin beta receptor
LTBR	NM_006718983.2	D125370	lysosomal trafficking regulator
LYST	NM_000081.3	CHS1;Chediak-Higashi syndrome 1	MAF bZIP transcription factor
MAF	NM_005360.4	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog	MALT1 paracaspase
MALT1	NM_006785.2	MLT;mucosa associated lymphoid tissue lymphoma translocation gene 1	mastermind like transcriptional coactivator 2
MAML2	NM_032427.2	mastermind (Drosophila)-like 2, mastermind-like 2 (Drosophila)	MEF2 activating motif and SAP domain containing transcriptional regulator
MAMSTR	NM_182574.2		mannosidase beta
MANBA	NM_005908.3	mannosidase, beta A, lysosomal	mitogen-activated protein kinase kinase kinase 14
MAP3K14	NM_003954.1		mitogen-activated protein kinase kinase kinase 7
MAP3K7	NM_145333.1	TAK1	mitogen-activated protein kinase kinase kinase 8
MAP3K8	NM_005204.2	COT,ESTF	mitogen-activated protein kinase kinase kinase 1
MAP4K1	NM_007181.3		mitogen-activated protein kinase kinase kinase 2
MAP4K2	NM_004579.2	RABBP1	mitogen-activated protein kinase kinase kinase 4
MAP4K4	NM_004834.3		mitogen-activated protein kinase 1
MAPK1	NM_138957.2	PRKM2,PRKM1	mitogen-activated protein kinase 11
MAPK11	NM_002751.6	PRKM11	mitogen-activated protein kinase 14
MAPK14	NM_001315.2	CSPB1,CSPB1,CSPB2	mitogen-activated protein kinase 3
MAPK3	NM_001040056.1	PRKM3	mitogen-activated protein kinase 8
MAPK8	NM_002750.2	PRKM8	mitogen-activated protein kinase-activated protein kinase 2
MAPKAPK2	NM_004759.3		macrophage receptor with collagenous structure
MARCO	NM_006770.3		methyl-CpG binding domain protein 2
MBD2	NM_003927.3		myelin basic protein
MBP	NM_002385.2		
		RTT,MRX16,MRX79;mental retardation, X-linked 16,mental retardation, X-linked 79, Rett syndrome, methyl CpG binding protein 2 (Rett syndrome), methyl CpG binding protein 2	methyl-CpG binding protein 2
MECP2	NM_001110792.1		mediator complex subunit 1
MED1	NM_004774.3	TRIP2,PPARGBP,PPARBP,PPAR binding protein	MER proto-oncogene, tyrosine kinase
MERTK	NM_006343.2	c-mer proto-oncogene tyrosine kinase	methyltransferase like 1
METTL1	NM_005371.5	C12orf1,methyltransferase-like 1	MHC class I polypeptide-related sequence B
MICB	NM_005931.3		macrophage migration inhibitory factor
MIF	NM_002415.1	GLIF;macrophage migration inhibitory factor (glycosylation-inhibiting factor)	mutL homolog 3
MLH3	NM_014381.2	mutL (E. coli) homolog 3, mutL homolog 3 (E. coli)	MLX, MAX dimerization protein
MLX	NM_170607.2	TCLF4;transcription factor-like 4, MAX-like protein X	membrane metalloendopeptidase like 1
MMEL1	NM_033467.3	MMEL2;membrane metallo-endopeptidase-like 2	

MMP3	NM_002422.3	STMY1,STMY;matrix metalloproteinase 3 (stromelysin 1, progelatinase),stromelysin 1	matrix metallopeptidase 3
MMP9	NM_004994.2	CLG4B;matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	matrix metallopeptidase 9
MPV17L2	NM_032683.2		MPV17 mitochondrial inner membrane protein like 2
MR1	NM_001531.2	HLAS;major histocompatibility complex, class I-like sequence	major histocompatibility complex, class I-related
MST1	NM_020998.3	D3F1552,HGFL,DNF1552;hepatocyte growth factor-like	macrophage stimulating 1
MST1R	NM_002447.1	RON,PTK8,PTK8 protein tyrosine kinase 8	macrophage stimulating 1 receptor
MSTO1	NM_018116.2	misato homolog 1 (Drosophila)	misato 1, mitochondrial distribution and morphology regulator
MTF1	NM_005955.2		metal regulatory transcription factor 1
MTMR3	NM_021090.3		myotubularin related protein 3
MUC1	NM_001018017.1	PUM,MCKD1; mucin 1, transmembrane, medullary cystic kidney disease 1 (autosomal dominant)	mucin 1, cell surface associated
MX1	NM_002462.2	myxovirus (influenza) resistance 1, homolog of murine (interferon-inducible protein p78), myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)	MX dynamin like GTPase 1
MYC	NM_002467.3	v-myc avian myelocytomatosis viral oncogene homolog	MYC proto-oncogene, bHLH transcription factor
MYD88	NM_002468.3	v-myc avian myelocytomatosis viral oncogene homolog	myeloid differentiation primary response gene 88
MYRF	NM_001127392.1	C11orf9; chromosome 11 open reading frame 9	myelin regulatory factor
NAA25	NM_024953.3	C12orf30; chromosome 12 open reading frame 30	N(alpha)-acetyltransferase 25, NatB auxiliary subunit
NADSYN1	NM_018161.4		NAD synthetase 1
NCF2	NM_000433.3	neutrophil cytosolic factor 2 (65kD, chronic granulomatous disease, autosomal 2)	neutrophil cytosolic factor 2
NCOA5	NM_020967.2		nuclear receptor coactivator 5
NDFIP1	NM_030571.3		Nedd4 family interacting protein 1
NDUFAF1	NM_016013.2	NADH dehydrogenase (ubiquinone) complex I, assembly factor 1	NADH:ubiquinone oxidoreductase complex assembly factor 1
NFATC1	NM_172389.1	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1	nuclear factor of activated T-cells 1
NFATC2	NM_012340.3	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2	nuclear factor of activated T-cells 2
NFATC3	NM_004555.2	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	nuclear factor of activated T-cells 3
NFIL3	NM_005384.2	IL3BP1	nuclear factor, interleukin 3 regulated 3
NFKB1	NM_003998.2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	nuclear factor kappa B subunit 1
NFKB2	NM_002502.2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	nuclear factor kappa B subunit 2
NFKBIA	NM_020529.1	NFKB1; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKB inhibitor alpha
NFKBIE	NM_004556.2	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	NFKB inhibitor epsilon
NFKBIL1	NM_005007.2	NFKB1L; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1	NFKB inhibitor like 1
NFKBIZ	NM_001005474.1	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	NFKB inhibitor zeta
NKX2-3	NM_145285.2	NKX2C; NK-2 (Drosophila) homolog C, NK2 transcription factor related, locus 3 (Drosophila)	NK2 homeobox 3
NLRP3	NM_017852.1	NALP2; NACHT, leucine rich repeat and PYD containing 2	NLR family pyrin domain containing 2
NLRP3	NM_001079821.2	C1orf7; CIAS1; cold autoinflammatory syndrome 1	NLR family pyrin domain containing 3
NOD1	NM_006092.2	CARD4; caspase recruitment domain family, member 4	nucleotide binding oligomerization domain containing 1
NOD2	NM_001293557.1	IBD1, CARD15; caspase recruitment domain family, member 15	nucleotide binding oligomerization domain containing 2
NOS2	NM_000625.4	NOS2A; nitric oxide synthase 2A (inducible, hepatocytes), nitric oxide synthase 2, inducible	nitric oxide synthase 2
NOTCH1	NM_017617.3	TAN1; Notch (Drosophila) homolog 1 (translocation-associated), Notch homolog 1, translocation-associated (Drosophila)	notch 1
NOTCH2	NM_020408.3	Notch (Drosophila) homolog 2, Notch homolog 2 (Drosophila)	notch 2
NPEPP5	NM_006310.3		aminopeptidase puromycin sensitive
NRP1	NM_003873.5		neuropilin 1
NUPR1	NM_012385.2		nuclear protein 1, transcriptional regulator
NUSAP1	NM_016359.4		nucleolar and spindle associated protein 1
NXP1	NM_152315.3	FAM55A; family with sequence similarity 55, member A, neurexophilin and PC-esterase domain family, member 1	neurexophilin and PC-esterase domain family member 1
NXPE4	NM_017678.2	C11orf33, FAM55D; chromosome 11 open reading frame 33, family with sequence similarity 55, member D, neurexophilin and PC-esterase domain family, member 4	neurexophilin and PC-esterase domain family member 4
ODF3B	NM_001014440.2		outer dense fiber of sperm tails 3B
ORSB21	NM_001005218.1	olfactory receptor, family 5, subfamily B, member 21	olfactory receptor family 5 subfamily B member 21
ORMDL3	NM_139280.1	ORM1 (S. cerevisiae)-like 3, ORM1-like 3 (S. cerevisiae)	ORMDL sphingolipid biosynthesis regulator 3
OSM	NM_020530.4		oncostatin M
OSMR	NM_003999.2		oncostatin M receptor
P2RY10	NM_014499.2	purinergic receptor P2Y, G-protein coupled, 10, purinergic receptor P2Y10	P2Y receptor family member 10
PADI4	NM_012387.2	PADI5; peptidyl arginine deiminase, type V, peptidyl arginine deiminase, type IV	peptidyl arginine deiminase 4
PARK7	NM_001123377.1	Parkinson disease (autosomal recessive, early onset) 7, parkinson protein 7	Parkinsonism associated deglycase
PAX5	NM_016734.1	paired box gene 5 (B-cell lineage specific activator protein), paired box gene 5 (B-cell lineage specific activator)	paired box 5
PDCD1	NM_005038.2	SLEB2; systemic lupus erythematosus susceptibility 2	programmed cell death 1
PDCD1LG2	NM_025239.3		programmed cell death 1 ligand 2
PDCD2	NM_144781.2		programmed cell death 2
PDLIM4	NM_003687.3		PDZ and LIM domain 4
PF4	NM_002619.3	platelet factor 4	platelet factor 4
PFKFB4	NM_004567.2		6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4
PHACTR2	NM_001100165.1	C6orf56; chromosome 6 open reading frame 56	phosphatase and actin regulator 2
PHGDH	NM_006623.2		phosphoglycerate dehydrogenase
PHRF1	NM_020901.2	RNF221	PHD and ring finger domains 1
PHTF1	NM_006608.2	PHTF	putative homeodomain transcription factor 1
PIGR	NM_002644.2		polymeric immunoglobulin receptor
PITPNM2	NM_020845.2	phosphatidylinositol transfer protein, membrane associated 2	phosphatidylinositol transfer protein membrane associated 2
PLAU	NM_002658.2		plasminogen activator, urokinase
PLAUR	NM_001005376.1		plasminogen activator, urokinase receptor
PLCG2	NM_002661.2	phospholipase C, gamma 2 (phosphatidylinositol-specific)	phospholipase C gamma 2
PLCH2	NM_014638.3	PLCL4; phospholipase C-like 4, phospholipase C, eta 2	phospholipase C eta 2
PLCL1	NM_006226.3	PLCE; phospholipase C, epsilon, phospholipase C-like 1, phospholipase C like 1	phospholipase C like 1 (inactive)
PLCL2	NM_015184.5	PLCE2; phospholipase C, epsilon 2, phospholipase C-like 2	phospholipase C like 2
PLD2	NM_001243108.1		phospholipase D2
PLEK	NM_002664.2		pleckstrin
PLEKHG5	NM_020631.3	pleckstrin homology domain containing, family G (with RhoGef domain) member 5	pleckstrin homology and RhoGEF domain containing G5
PLTP	NM_006227.2		phospholipid transfer protein
PMPCA	NM_015160.2	INPP5E; inositol polyphosphate-5-phosphatase, 72 kD, peptidase (mitochondrial processing) alpha	peptidase, mitochondrial processing alpha subunit
PNKD	NM_022572.4	paroxysmal nonkinetogenic dyskinesia	paroxysmal nonkinetogenic dyskinesia
PNMT	NM_002686.3	PENF	phenylethanolamine N-methyltransferase
POU1	NM_007195.2	RAD30B, RAD30B; polymerase (DNA directed) iota, polymerase (DNA) iota	DNA polymerase iota
POU3F1	NM_002699.3	OTF6; POU domain class 3, transcription factor 1	POU class 3 homeobox 1
PPARG	NM_005037.5	peroxisome proliferative activated receptor, gamma, peroxisome proliferator-activated receptor gamma	peroxisome proliferator activated receptor gamma
PPIL4	NM_139126.3	peptidylprolyl isomerase (cyclophilin)-like 4	peptidylprolyl isomerase like 4
PRDM1	NM_182907.1	BLIMP1; PR domain containing 1, with ZNF domain, PR domain 1	PR/SET domain 1
PRDX5	NM_012094.4		peroxiredoxin 5
PRF1	NM_005041.3	perforin 1 (pore forming protein)	perforin 1
PRKCB	NM_212535.1	PRKCB2, PKCB, PRKCB1; protein kinase C, beta 1, protein kinase C, beta	protein kinase C beta
PRKCD	NM_006254.3	protein kinase C, delta	protein kinase C delta
PRKCH	NM_006255.3	PRKCL; protein kinase C, eta	protein kinase C eta
PRKCK	NM_006257.2	protein kinase C, theta	protein kinase C theta
PRM3	NM_021247.1		protamine 3
PROCR	NM_006404.3	protein C receptor, endothelial	protein C receptor
PRSS53	NM_001039503.2		protease, serine 53
PTGDR2	NM_004778.1	GPR44; G protein-coupled receptor 44	prostaglandin D2 receptor 2
PTGER4	NM_000958.2	prostaglandin E receptor 4 (subtype EP4)	prostaglandin E receptor 4
PTGS2	NM_000963.1	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	prostaglandin-endoperoxide synthase 2

sub-maximal variant coverage due to non-overlapping transcripts

PTK2	NM_005607.4	PTK2 protein tyrosine kinase 2	protein tyrosine kinase 2
PTPN11	NM_002834.3	NS1; Noonan syndrome 1	protein tyrosine phosphatase, non-receptor type 11
PTPN2	NM_002828.3	PTP	protein tyrosine phosphatase, non-receptor type 2
PTPN22	NM_012411.5	PTPN22; protein tyrosine phosphatase, non-receptor type 8, protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	protein tyrosine phosphatase, non-receptor type 22
PTPN6	NM_002831.5		protein tyrosine phosphatase, non-receptor type 6
PTPRK	NM_001135648.1		protein tyrosine phosphatase, receptor type K
PVT1	NR_003367.1	pvt-1 (murine) oncogene homolog, MYC activator, Pvt1 oncogene homolog (mouse)	Pvt1 oncogene (non-protein coding)
PXK	NM_017771.2	PX domain containing serine/threonine kinase	PX domain containing serine/threonine kinase like
RABEP2	NM_024816.2		rabaptin, RAB GTPase binding effector protein 2
RAC2	NM_002872.3	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	Rac family small GTPase 2
RAD51B	NM_002877.5	RAD51L1; RAD51 (S. cerevisiae)-like 1, RAD51-like 1 (S. cerevisiae), RAD51 homolog B (S. cerevisiae)	RAD51 paralog B
RAF1	NM_002880.3	v-raf-1 murine leukemia viral oncogene homolog 1	Raf-1 proto-oncogene, serine/threonine kinase
RASGRP1	NM_005739.3	RAS guanyl releasing protein 1 (calcium and DAG-regulated)	RAS guanyl releasing protein 1
RASIP1	NM_017905.2		Ras interacting protein 1
RASSF5	NM_182663.2	Ras association (RalGDS/AF-6) domain family member 5	Ras association domain family member 5
RAVER1	NM_133452.2	ribonucleoprotein, PTB-binding 1	ribonucleoprotein, PTB binding 1
RBM17	NM_032905.3		RNA binding motif protein 17
RBPJ	NM_015874.3	IGKRB1, RBPJSU; recombining binding protein suppressor of hairless (Drosophila)	recombination signal binding protein for immunoglobulin kappa J region
RCAN1	NM_004414.5	DSCR1; Down syndrome critical region gene 1	regulator of calcineurin 1
REL	NM_002908.3	v-rel avian reticuloendotheliosis viral oncogene homolog	REL proto-oncogene, NF-kB subunit
RELA	NM_021975.3	NFKB3; nuclear factor of kappa light polypeptide gene enhancer in B-cells 3, v-rel avian reticuloendotheliosis viral oncogene homolog A	RELA proto-oncogene, NF-kB subunit
RELB	NM_006509.3	v-rel avian reticuloendotheliosis viral oncogene homolog B (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3)	RELB proto-oncogene, NF-kB subunit
REV3L	NM_002912.3	REV3 (yeast homolog)-like, catalytic subunit of DNA polymerase zeta, REV3-like, catalytic subunit of DNA polymerase zeta (yeast), REV3-like, polymerase (DNA directed), zeta, catalytic subunit	REV3 like, DNA directed polymerase zeta catalytic subunit
RGSI	NM_002922.3	IER1; regulator of G-protein signalling 1, regulator of G-protein signalling 1	regulator of G protein signalling 1
RGS14	NM_006480.4	regulator of G-protein signalling 14, regulator of G-protein signalling 14	regulator of G protein signalling 14
RIMBP3	NM_015672.1		RIMS binding protein 3
RIPK1	NM_003804.3	receptor (TNFRSF)-interacting serine-threonine kinase 1	receptor interacting serine/threonine kinase 1
RIPK2	NM_003821.5	receptor-interacting serine-threonine kinase 2	receptor interacting serine/threonine kinase 2
RT1	NM_006912.4	RIT; Ric (Drosophila)-like, expressed in many tissues	Ras like without CAAX 1
RM12	NM_152308.1	C16orf75; chromosome 16 open reading frame 75, RM12, RecQ mediated genome instability 2, homolog (S. cerevisiae)	RecQ mediated genome instability 2
RNASET2	NM_003730.4		ribonuclease T2
RNF114	NM_018683.3	ZNF313; zinc finger protein 313	ring finger protein 114
RNF186	NM_019062.1		ring finger protein 186
RNL5	NM_001031709.1	C10orf59; chromosome 10 open reading frame 59	reninase, FAD dependent amine oxidase
RORA	NM_134261.2	RAR-related orphan receptor A	RAR related orphan receptor A
RORC	NM_001001523.1	RAR-related orphan receptor C	RAR related orphan receptor C
RPS6KA2	NM_021135.4	ribosomal protein S6 kinase, 90kD, polypeptide 2	ribosomal protein S6 kinase A2
RPS6KA4	NM_003942.2	ribosomal protein S6 kinase, 90kD, polypeptide 4	ribosomal protein S6 kinase A4
RPS6KB1	NM_003161.2	STK14A; ribosomal protein S6 kinase, 70kD, polypeptide 1	ribosomal protein S6 kinase B1
RTEL1	NM_016434.3	C20orf41; chromosome 20 open reading frame 41	regulator of telomere elongation helicase 1
RTKN2	NM_145307.3	PLEKHK1; plectstrin homology domain containing, family K member 1	rhoteikin 2
RUNX1	NM_001754.4	AML1, CBFA2; acute myeloid leukemia 1, runt-related transcription factor 1	runt related transcription factor 1
RUNX3	NM_001031680.2	CBFA3; runt-related transcription factor 3	runt related transcription factor 3
S100A8	NM_002964.3	CAGA, CFAG; S100 calcium-binding protein A8 (calgranulin A), S100 calcium binding protein A8 (calgranulin A)	S100 calcium binding protein A8
S100A9	NM_002965.2	CAGB, CFAG; S100 calcium-binding protein A9 (calgranulin B), S100 calcium binding protein A9 (calgranulin B)	S100 calcium binding protein A9
S1PR1	NM_001400.3	EDG1; endothelial differentiation, sphingolipid G-protein-coupled receptor, 1	sphingosine-1-phosphate receptor 1
SBNO2	NM_014963.2	KIAA0963; KIAA0963, strawberry notch homolog 2 (Drosophila)	strawberry notch homolog 2
SCAMP3	NM_005698.2	C1orf3	secretory carrier membrane protein 3
SDCCAG3	NM_001039708.1		serologically defined colon cancer antigen 3
SEC16A	NM_001276418.1	KIAA0310; KIAA0310, SEC16 homolog A (S. cerevisiae)	SEC16 homolog A, endoplasmic reticulum export factor
SELE	NM_000450.2	ELAM1, ELAM; endothelial adhesion molecule 1	selectin E
SELL	NR_029467.1	LYAM1, LNHR; lymphocyte adhesion molecule 1	selectin L
SELPLG	NM_003006.3		selectin P ligand
SERINC3	NM_006811.2	TDE1; tumor differentially expressed 1	serine incorporator 3
SERPING1	NM_000062.2	C1NH; serine (or cysteine) proteinase inhibitor, clade G (C1 inhibitor), member 1, (angioedema, hereditary), serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	serpin family G member 1
SH2B1	NM_001145796.1		SH2B adaptor protein 1
SH2B3	NM_005475.2		SH2B adaptor protein 3
SIGIRR	NM_021805.2	single immunoglobulin and toll-interleukin 1 receptor (TIR) domain	single Ig and TIR domain containing
SKP1	NM_006930.3	SKP1A; S-phase kinase-associated protein 1A (p19A)	S-phase kinase associated protein 1
SLAMF1	NM_003037.2	SLAM; signaling lymphocytic activation molecule	signaling lymphocytic activation molecule family member 1
SLAMF7	NM_021181.4		SLAM family member 7
SLAMF8	NM_020125.2		SLAM family member 8
SLC10A4	NM_152679.3	solute carrier family 10, member 4	solute carrier family 10 member 4
SLC11A1	NM_000578.3	LSH, NRAMP, NRAMP1; solute carrier family 11 (proton-coupled divalent metal ion transporter), member 1	solute carrier family 11 member 1
SLC15A2	NM_001145998.1	solute carrier family 15 (H+/peptide transporter), member 2, solute carrier family 15 (oligopeptide transporter), member 2	solute carrier family 15 member 2
SLC15A4	NM_145648.3	solute carrier family 15, member 4, solute carrier family 15 (oligopeptide transporter), member 4	solute carrier family 15 member 4
SLC22A5	NM_003060.3	CDSP; solute carrier family 22 (organic cation/carnitine transporter), member 5	solute carrier family 22 member 5
SLC2A4RG	NM_020062.3		SLC2A4 regulator
SLC30A7	NM_001144884.1	solute carrier family 30 (zinc transporter), member 7	solute carrier family 30 member 7
SLC44A2	NM_020428.2	solute carrier family 44 (choline transporter), member 2	solute carrier family 44 member 2
SLC45A1	NM_001080397.1	DNB5; deleted in neuroblastoma 5, solute carrier family 45, member 1	solute carrier family 45 member 1
SLC9A8	NM_015266.1	solute carrier family 9 (sodium/hydrogen exchanger), isoform 8, solute carrier family 9 (sodium/hydrogen exchanger), member 8, solute carrier family 9, subfamily A (NHE8, cation proton antiporter 8), member 8	solute carrier family 9 member 8
SMAD3	NM_005902.3	MADH3; MAD, mothers against decapentaplegic homolog 3 (Drosophila), SMAD, mothers against DPP homolog 3 (Drosophila)	SMAD family member 3
SMAD5	NM_005903.5	MADH5; MAD, mothers against decapentaplegic homolog 5 (Drosophila), SMAD, mothers against DPP homolog 5 (Drosophila)	SMAD family member 5
SMAD7	NM_005904.3	MADH8; MADH7; MAD, mothers against decapentaplegic homolog 7 (Drosophila), SMAD, mothers against DPP homolog 7 (Drosophila)	SMAD family member 7
SMG7	NM_173156.2	C1orf16; chromosome 1 open reading frame 16, smg-7 homolog, nonsense mediated mRNA decay factor (C. elegans)	SMG7, nonsense mediated mRNA decay factor
SMIM20	NM_001145432.1	C4orf52; chromosome 4 open reading frame 52	small integral membrane protein 20
SMURF1	NM_181349.1		SMAD specific E3 ubiquitin protein ligase 1
SNAPC4	NM_003086.2	small nuclear RNA activating complex, polypeptide 4, 190kDa, small nuclear RNA activating complex, polypeptide 4, 190kDa	small nuclear RNA activating complex polypeptide 4
SNX32	NM_152760.2	SNX6B; sorting nexin 6B	sorting nexin 32
SOCS1	NM_003745.1		suppressor of cytokine signaling 1
SOCS3	NM_003955.3		suppressor of cytokine signaling 3
SRY	NM_014587.2	SRY (sex determining region Y)-box 8, SRY box 8	SRY-box 8
SP140	NM_001005176.2		SP140 nuclear body protein
SPHK2	NM_020126.3		sphingosine kinase 2
SPP1	NM_000582.2	BNSP, OPN; osteopontin, bone sialoprotein 1	secreted phosphoprotein 1
SPRED2	NM_001128210.1		sprouty related EVH1 domain containing 2
SPRY4	NM_030964.3	sprouty homolog 4 (Drosophila)	sprouty RTK signaling antagonist 4
STAT1	NM_139266.1	signal transducer and activator of transcription 1, 91kDa, signal transducer and activator of transcription 1, 91kDa	signal transducer and activator of transcription 1
STAT2	NM_005419.3	signal transducer and activator of transcription 2, 113kDa, signal transducer and activator of transcription 2, 113kDa	signal transducer and activator of transcription 2

STAT3	NM_003150.3	signal transducer and activator of transcription 3 (acute-phase response factor)	signal transducer and activator of transcription 3
STAT4	NM_003151.2		signal transducer and activator of transcription 4
STAT5A	NM_003152.3	STAT5	signal transducer and activator of transcription 5A
STAT5B	NM_012448.3		signal transducer and activator of transcription 5B
STAT6	NM_003153.3	signal transducer and activator of transcription 6, interleukin-4 induced	signal transducer and activator of transcription 6
STMN3	NM_015894.2	stathmin-like 3	stathmin 3
SULT1A1	NM_177534.2	STP,STP1,sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1	sulfotransferase family 1A member 1
SULT1A2	NM_001054.2	STP2,sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2	sulfotransferase family 1A member 2
SYK	NM_003177.5	spleen tyrosine kinase	spleen associated tyrosine kinase
SYNGR1	NM_145731.3		synaptoglycin 1
TAB1	NM_153497.2	MAP3K7/IP1;mitogen-activated protein kinase kinase kinase 7 interacting protein	TGF-beta activated kinase 1 (MAP3K7) binding protein 1
TAGAP	NM_152133.2	T-cell activation GTPase activating protein	T-cell activation RhoGTPase activating protein
TBK1	NM_013254.2	TANK-binding kinase 1	TANK binding kinase 1
TBKP1	NM_014726.2		TBK1 binding protein 1
TBX21	NM_013351.1		T-box 21
TCF7	NM_201633.2	transcription factor 7 (T-cell specific, HMG-box)	transcription factor 7
TEC	NM_003215.1		tec protein tyrosine kinase
TET2	NM_001127208.2	KIAA1546;KIAA1546,tet oncogene family member 2	tet methylcytosine dioxygenase 2
TGFB1	NM_000660.3	TGFB,DDP1;transforming growth factor, beta 1	transforming growth factor beta 1
TGFB2	NM_000358.2	CSO3,LCO1,CSD1,CSD2;transforming growth factor, beta-induced, 68kD,transforming growth factor, beta-induced, 68kDa	transforming growth factor beta induced
TGFB3	NM_004612.2	MSE,ESS1;multiple self-healing squamous epithelioma,transforming growth factor beta receptor I	transforming growth factor beta receptor 1
TGFB4	NM_001024847.1	MFS2;transforming growth factor, beta receptor II (70/80kDa),transforming growth factor beta receptor II	transforming growth factor beta receptor 2
THADA	NM_022065.4	thyroid adenoma associated	THADA, armadillo repeat containing
THMIS	NM_001010923.2	C6orf207,C6orf190,TSEPA;chromosome 6 open reading frame 207,chromosome 6 open reading frame 190,thymocyte selection pathway associated	thymocyte selection associated
TICAM1	NM_014261.1	tolllike receptor adaptor molecule 1	tolllike receptor adaptor molecule 1
TIGIT	NM_173799.2	VSIG9,VSTM3;V-set and immunoglobulin domain containing 9,V-set and transmembrane domain containing 3,T cell immunoreceptor with Ig and ITIM domains	T-cell immunoreceptor with Ig and ITIM domains
TIMMDC1	NM_016589.3	C3orf1;chromosome 3 open reading frame 1	translocase of inner mitochondrial membrane domain containing 1
TIRAP	NM_148910.2	Toll-interleukin 1 receptor (TIR) domain-containing adaptor protein	TIR domain containing adaptor protein
TLE3	NM_001051921.1	transducin-like enhancer of split 3 (E(sp1) homolog, Drosophila)	transducin like enhancer of split 3
TLR1	NM_003263.3	tolllike receptor 1	tolllike receptor 1
TLR2	NM_003264.3	tolllike receptor 2	tolllike receptor 2
TLR3	NM_003265.2	tolllike receptor 3	tolllike receptor 3
TLR4	NM_138554.2	tolllike receptor 4	tolllike receptor 4
TLR5	NM_003265.5	SLEB1;systemic lupus erythematosus susceptibility 1, toll-like receptor 5	tolllike receptor 5
TLR7	NM_016563.3	tolllike receptor 7	tolllike receptor 7
TLR8	NM_016610.2	tolllike receptor 8	tolllike receptor 8
TLR9	NM_017442.2	tolllike receptor 9	tolllike receptor 9
TMBIM1	NM_022152.4		transmembrane BAX inhibitor motif containing 1
TMEM50B	NM_006134.6	C21orf4;chromosome 21 open reading frame 4	transmembrane protein 50B
TNC	NM_002160.3	HXB,DFN56;hexabrachion (tenascin C, cytotactin),deafness, autosomal dominant 56	tenascin C
TNF	NM_000594.2	TNFA;tumor necrosis factor (TNF superfamily, member 2)	tumor necrosis factor
TNFAIP3	NM_006290.2	tumor necrosis factor, alpha-induced protein 3	TNF alpha induced protein 3
TNFAIP6	NM_007115.2	tumor necrosis factor, alpha-induced protein 6	TNF alpha induced protein 6
TNFRSF10C	NM_003841.3	tumor necrosis factor receptor superfamily, member 10C, decoy without an intracellular domain	TNF receptor superfamily member 10c
TNFRSF11A	NM_003839.3	PDB2,LOH18CR1;tumor necrosis factor receptor superfamily, member 11a, activator of NFKB,Paget disease of bone 2,loss of heterozygosity, 18, chromosomal region 1,tumor necrosis factor receptor superfamily, member 11a, NFKB activator	TNF receptor superfamily member 11a
TNFRSF13B	NM_012452.2	tumor necrosis factor receptor superfamily, member 13B	TNF receptor superfamily member 13B
TNFRSF13C	NM_052945.3	tumor necrosis factor receptor superfamily, member 13C	TNF receptor superfamily member 13C
TNFRSF14	NM_003820.3	tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator),tumor necrosis factor receptor superfamily, member 14	TNF receptor superfamily member 14
TNFRSF17	NM_001192.2	BCMA;tumor necrosis factor receptor superfamily, member 17	TNF receptor superfamily member 17
TNFRSF18	NM_148901.1	tumor necrosis factor receptor superfamily, member 18	TNF receptor superfamily member 18
TNFRSF1A	NM_001065.2	TNFR1;tumor necrosis factor receptor superfamily, member 1A	TNF receptor superfamily member 1A
TNFRSF1B	NM_001066.2	TNFR2;tumor necrosis factor receptor superfamily, member 1B	TNF receptor superfamily member 1B
TNFRSF4	NM_003327.3	TXGP1;tumor necrosis factor receptor superfamily, member 4	TNF receptor superfamily member 4
TNFRSF6B	NM_003823.3	tumor necrosis factor receptor superfamily, member 6b, decoy	TNF receptor superfamily member 6b
TNFRSF8	NM_152942.2	CD30,D15166E;tumor necrosis factor receptor superfamily, member 8	TNF receptor superfamily member 8
TNFRSF9	NM_001561.4	IL4;tumor necrosis factor receptor superfamily, member 9	TNF receptor superfamily member 9
TNFSF10	NM_003810.2	tumor necrosis factor (ligand) superfamily, member 10	TNF superfamily member 10
TNFSF11	NM_003701.2	tumor necrosis factor (ligand) superfamily, member 11	TNF superfamily member 11
TNFSF12	NM_003716.1	tumor necrosis factor (ligand) superfamily, member 12	TNF superfamily member 12
TNFSF13B	NM_001145645.2	TNFSF20;tumor necrosis factor (ligand) superfamily, member 13b	TNF superfamily member 13b
TNFSF14	NM_003807.3	tumor necrosis factor (ligand) superfamily, member 14	TNF superfamily member 14
TNFSF15	NM_001204344.1	tumor necrosis factor (ligand) superfamily, member 15	TNF superfamily member 15
TNFSF18	NM_005092.2	tumor necrosis factor (ligand) superfamily, member 18	TNF superfamily member 18
TNFSF4	NM_003326.2	TXGP1,tax- transcriptionally activated glycoprotein 1, 34kD,tumor necrosis factor (ligand) superfamily, member 4	TNF superfamily member 4
TNFSF8	NM_001244.3	CD30LG;tumor necrosis factor (ligand) superfamily, member 8	TNF superfamily member 8
TNIP1	NM_001252386.1		TNFAIP3 interacting protein 1
TNNI2	NM_003282.2	AMC2D2B;troponin I, skeletal, fast,arthrogryposis multiplex congenita, distal, type 2B,troponin I type 2 (skeletal, fast)	troponin I2, fast skeletal type
TNP2	NM_005425.4	transition protein 2 (during histone to protamine replacement)	transition protein 2
TNPO3	NM_012470.2	LGMD1F;limb girdle muscular dystrophy 1F (autosomal dominant)	transportin 3
TOLLIP	NM_019009.2		toll interacting protein
TPD52	NM_005079.2		tumor protein D52
TRADD	NM_003789.2	TNFRSF1A-associated via death domain	TNFRSF1A associated via death domain
TRAF1	NM_005658.3		TNF receptor associated factor 1
TRAF2	NM_021138.3		TNF receptor associated factor 2
TRAF3	NM_145725.2		TNF receptor associated factor 3
TRAF3IP2	NM_001164281.1	C6orf4,C6orf5,C6orf6,C6orf7;chromosome 6 open reading frame 5,chromosome 6 open reading frame 2	TRAF3 interacting protein 2
TRAF4	NM_004295.2		TRAF3 associated factor 4
TRAF5	NM_001033910.2		TNF receptor associated factor 5
TRAF6	NM_149803.2	TNF receptor-associated factor 6, E3 ubiquitin protein ligase	TNF receptor associated factor 6
TRIB1	NM_025195.2	tribbles homolog 1 (Drosophila)	tribbles pseudokinase 1
TRPT1	NM_001033678.3		tRNA phosphotransferase 1
TSMF	NM_001172697.1		Ts translation elongation factor, mitochondrial
TSPAN14	NM_001128309.1	TM4SF14;transmembrane 4 superfamily member 14	tetraspanin 14
TSPAN33	NM_178562.3		tetraspanin 33
TTYH3	NM_025250.2	twenty homolog 3 (Drosophila)	twenty family member 3
TUBD1	NM_016261.3	tubulin, delta 1	tubulin delta 1
TXK	NM_003328.1	PTK4;PTK4 protein tyrosine kinase 4	TXK tyrosine kinase
TXNDC11	NM_015914.5		thioredoxin domain containing 11
TYK2	NM_003331.4		tyrosine kinase 2
UBA7	NM_003335.2	UBE1L;ubiquitin-activating enzyme E1-like,ubiquitin-like modifier activating enzyme 7	ubiquitin like modifier activating enzyme 7
UBASH3A	NM_018961.3		ubiquitin associated and SH3 domain containing A
UBE2D1	NM_003338.4	SFT;stimulator of Fe transport,ubiquitin-conjugating enzyme E2D 1 (UBC4/5 homolog, yeast),ubiquitin-conjugating enzyme E2D 1	ubiquitin conjugating enzyme E2 D1
UBE2E3	NM_006357.2	ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5),ubiquitin-conjugating enzyme E2E 3 (UBC4/5 homolog, yeast),ubiquitin-conjugating enzyme E2E 3	ubiquitin conjugating enzyme E2 E3
UBE2L3	NR_028436.2	ubiquitin-conjugating enzyme E2L 3	ubiquitin conjugating enzyme E2 L3
UBQLN4	NM_020131.3	C1orf6;chromosome 1 open reading frame 6	ubiquilin 4
UCN	NM_003353.2		urocortin

UCN2	NM_033199.3		urocortin 2	
UHRF1BP1	NM_017754.3	C6orf107;chromosome 6 open reading frame 107 C20orf44,UQCC;chromosome 20 open reading frame 44,ubiquinol-cytochrome c reductase complex chaperone	UHRF1 binding protein 1	
UQCC1	NM_199487.2		ubiquinol-cytochrome c reductase complex assembly factor 1	
USF1	NM_007122.3		upstream transcription factor 1	
USP4	NM_003363.3	UNP;ubiquitin specific peptidase 4 (proto-oncogene)	ubiquitin specific peptidase 4	
VAMP3	NM_004781.3		vesicle associated membrane protein 3	
VCAM1	NM_001078.3		vascular cell adhesion molecule 1	
VDR	NM_000376.2	vitamin D (1,25- dihydroxyvitamin D3) receptor	vitamin D receptor	
VMP1	NM_030938.3	TMEM49;transmembrane protein 49	vacuole membrane protein 1	
VSIR	NM_022153.1	C10orf54;chromosome 10 open reading frame 54	V-set immunoregulatory receptor	
WDFY4	NM_020945.1	C10orf64;chromosome 10 open reading frame 64	WDFY family member 4	
WWOX	NM_016373.2	WW domain-containing oxidoreductase	WW domain containing oxidoreductase	
XBP1	NM_005080.2	XBP2	X-box binding protein 1	
YDJC	NM_001017964.1	YdjC homolog (bacterial)	YdjC chitooligosaccharide deacetylase homolog	
ZAP70	NM_001079.3	SRK,zeta-chain (TCR) associated protein kinase (70 kD),zeta-chain (TCR) associated protein kinase 70kDa,zeta chain of T cell receptor associated protein kinase 70kDa,zeta chain of T cell receptor associated protein kinase 70	zeta chain of T-cell receptor associated protein kinase 70	
ZBTB16	NM_006006.4	ZNF145;zinc finger protein 145 (Kruppel-like, expressed in promyelocytic leukemia)	zinc finger and BTB domain containing 16	
ZBTB46	NM_025224.3	ZNF340,BTBD4,BTB (POZ) domain containing 4	zinc finger and BTB domain containing 46	
ZC2HC1A	NM_016010.2	C8orf70,FAM164A;chromosome 8 open reading frame 70,family with sequence similarity 164, member A	zinc finger C2HC-type containing 1A	
ZEB1	NM_001128128.1	TCF8,PPCD3;transcription factor 8 (represses interleukin 2 expression),posterior polymorphous corneal dystrophy 3	zinc finger E-box binding homeobox 1	
ZFP36L1	NM_004926.2	BRF1;zinc finger protein, C3H type, 36-like 1,zinc finger protein 36, C3H type-like 1	ZFP36 ring finger protein like 1	
ZFP90	NM_133458.3	zinc finger protein 90 homolog (mouse)	ZFP90 zinc finger protein	
ZGPAT	NM_001083113.1	KIAA1847,KIAA1847,zinc finger CCCH-type with G-patch domain	zinc finger CCCH-type and G-patch domain containing	
ZMIZ1	NM_020338.3	RAI17;retinoic acid induced 17	zinc finger MIZ-type containing 1	
ZNF767P	NR_027789.1	ZNF767;zinc finger family member 767	zinc finger family member 767, pseudogene	
ZNF831	NM_178457.2	C20orf174;chromosome 20 open reading frame 174	zinc finger protein 831	
<b>Internal Reference Genes</b>				
ABCF1	NM_001090.2	ABCF5;ATP-binding cassette, sub-family F (GCN20), member 1	ATP binding cassette subfamily F member 1	
ALAS1	NM_000688.4	ALAS3,ALAS;aminolevulinatase, delta-, synthase 1	5'-aminolevulinatase synthase 1	
EEF1G	NM_001404.4		eukaryotic translation elongation factor 1 gamma	
G6PD	NM_000402.2		glucose-6-phosphate dehydrogenase	
GAPDH	NM_002046.3	GAPD	glyceraldehyde-3-phosphate dehydrogenase	
GUSB	NM_000181.3	glucuronidase, beta	glucuronidase beta	
HPRT1	NM_000194.1	HPRT	hypoxanthine phosphoribosyltransferase 1	
OAZ1	NM_004152.2	OAZ	ornithine decarboxylase antizyme 1	
POLR1B	NM_019014.3	polymerase (RNA) I polypeptide B, 128kDa	RNA polymerase I subunit B	
POLR2A	NM_000937.2	POLR2;polymerase (RNA) II (DNA directed) polypeptide A, 220kDa	RNA polymerase II subunit A	
PPIA	NM_021130.3		peptidylprolyl isomerase A	PPIAL4A (NM_001143883), PPIAL4C (NM_001135789), PPIAL4E (NM_001144032), PPIAL4D (NM_001164261), PPIAL4G (NM_001123068)
RPL19	NM_000981.3		ribosomal protein L19	
SDHA	NM_004168.1	SDH2;succinate dehydrogenase complex, subunit A, flavoprotein (Fp),succinate dehydrogenase complex subunit A, flavoprotein (Fp)	succinate dehydrogenase complex flavoprotein subunit A	
TBP	NM_001172085.1	GTF2D1,SCA17	TATA-box binding protein	
TUBB	NM_178014.2	tubulin, beta polypeptide,tubulin, beta,tubulin, beta class I	tubulin beta class I	