

nCounter<sup>®</sup> CAR-T Characterization Panel - Gene and Probe Details

Official Symbol	Accession	Alias / Previous Symbol	Official Full Name	Other targets or Isoform Information
ACACA	NM_198834.1	ACACACACetyl-Coenzyme A carboxylase alpha	acetyl-CoA carboxylase alpha	
ACAD10	NM_001136538.1	acyl-Coenzyme A dehydrogenase family, member 10,acyl-CoA dehydrogenase family, member 10	acyl-CoA dehydrogenase family member 10	
ACAD9L	NM_027204471.1	acyl-Coenzyme A dehydrogenase, very long chain	acyl-CoA dehydrogenase very long chain	
ACOT2	NM_006821.4	acyl-CoA thioesterase 2	acyl-CoA thioesterase 2	
ACSF2	NM_001288968.1	acyl-CoA synthetase family member 2	acyl-CoA synthetase family member 2	
ACSL5	NM_203379.1	FACLS:fatty-acid-Coenzyme A ligase, long-chain 5	acyl-CoA synthetase long chain family member 5	
ACTN1	NM_001102.3	actinin alpha 1	actinin alpha 1	
ACVR1B	NM_02328.3	ACVR1K4:activin A receptor, type IB	activin A receptor type 1B	
ACVR1C	NM_145259.2	activin A receptor, type IC	activin A receptor type 1C	
ACVR2A	NM_001616.3	ACVR2:activin A receptor, type II,activin A receptor, type IIA	activin A receptor type 2A	
ADAR	NM_001111.3	IFH,G1P1:interferon-induced protein 4	adenosine deaminase, RNA specific	
ADD1	NM_001119.4	adducin 1 (alpha)	adducin 1	
ADORA2A	NM_000875.3	ADORA2	adenosine A2a receptor	
AFN	NM_01040000.2	MLLT4:myeloid/lymphoid or mixed-lineage leukemia; translocated to, 4	afadin, adherens junction formation factor	
AHR	NM_001621.3		aryl hydrocarbon receptor	
AKT1	NM_001014432.1	v-akt murine thymoma viral oncogene homolog 1	AKT serine/threonine kinase 1	
AKT2	NM_001626.4	v-akt murine thymoma viral oncogene homolog 2	AKT serine/threonine kinase 2	
ALDH1L1	NM_02190.2	FTFHD:formyltetrahydrofolate dehydrogenase,aldehyde dehydrogenase 1 family, member L1	aldehyde dehydrogenase 1 family member L1	
ALDH1L2	NM_001034173.3	aldehyde dehydrogenase 1 family, member L2	aldehyde dehydrogenase 1 family member L2	
ALDH3A2	NM_001031806.1	SLS,ALDH10:aldehyde dehydrogenase 3 family, member A2	aldehyde dehydrogenase 3 family member A2	
ALDH3A1	NM_001193480.1	aldehyde dehydrogenase 8 family, member A1	aldehyde dehydrogenase 8 family member A1	
ALDOA	NM_194041.2	aldolase A, fructose-bisphosphate	aldolase, fructose-bisphosphate A	LOC112694756 (NM_001365304;NM_001365305;NM_001365307)
ALDOC	NM_005165.2	aldolase C, fructose-bisphosphate	aldolase, fructose-bisphosphate C	
ANGPT2	NM_001147.2		angiopoietin 2	
APC	NM_000038.3	adenomatous polyposis coli,adenomatous polyposis coli	APC, WNT signaling pathway regulator	
ARAF	NM_001654.3	ARAF:v-raf murine sarcoma 3B11 viral oncogene homolog 1	A-Raf proto-oncogene, serine/threonine kinase	
AREG	NM_001657.2	SDGF:AREG:schwannoma-derived growth factor,amphiregulin B	amphiregulin	
ATG14	NM_014924.3	KIA0831;KIA0831;ATG14 autophagy related 14 (homolog (S. cerevisiae))	autophagy related 14	
ATG7	NM_001136031.2	APG7L;APG7-like (S. cerevisiae);ATG7 autophagy related 7 homolog (S. cerevisiae)	autophagy related 7	
ATP5F1	NM_004889.2	ATP5F2:ATP synthase, H+ transporting, mitochondrial FO complex, subunit F, isoform 2,ATP synthase, H+ transporting, mitochondrial FO complex, subunit F2,ATP synthase, H+ transporting, mitochondrial FO complex, subunit F2,ATP synthase, H+ transporting, mitochondrial FO complex subunit F2	ATP synthase membrane subunit f	
ATP5MF	NM_004889.2	ATP5F2:ATP synthase, H+ transporting, mitochondrial FO complex, subunit F, isoform 2,ATP synthase, H+ transporting, mitochondrial FO complex, subunit F2,ATP synthase, H+ transporting, mitochondrial FO complex, subunit F2,ATP synthase, H+ transporting, mitochondrial FO complex subunit F2	ATP synthase membrane subunit f	
ATP5MG	NM_006476.4	ATP5A:ATP synthase, H+ transporting, mitochondrial FO complex, subunit g,ATP synthase, H+ transporting, mitochondrial FO complex, subunit g,ATP synthase, H+ transporting, mitochondrial FO complex subunit G	ATP synthase membrane subunit g	
ATP5PD	NM_006356.2	ATP5A:ATP synthase, H+ transporting, mitochondrial FO complex, subunit d,ATP synthase, H+ transporting, mitochondrial FO complex, subunit d,ATP synthase, H+ transporting, mitochondrial FO complex subunit D	ATP synthase peripheral stalk subunit d	
ATPEV1F	NM_001198909.1	ATPase, H+ transporting, lysosomal 14kDa, V1 subunit F	ATPase H+ transporting V1 subunit F	
AURKA	NM_003600.2	STK15,STK6:serine/threonine kinase 15, serine/threonine kinase 6	aurora kinase A	
BIGAT1	NM_054025.2	CD57,IEU7,CD57 antigen	beta-1,3-glucuronyltransferase 1	
BATF	NM_004399.3	basic leucine zipper transcription factor, ATF-like	basic leucine zipper ATF-like transcription factor	
BATF3	NM_018664.2	basic leucine zipper transcription factor, ATF-like 3	basic leucine zipper ATF-like transcription factor 3	
BCL2	NM_000657.2	B-cell CLL/lymphoma 2	BCL2, apoptosis regulator	
BCL2L1	NM_138578.1		BCL2 like 1	
BCL6	NM_001706.2	ZNF51;zinc finger protein 51	B cell CLL/lymphoma 6	
BD1	NM_197966.1		BHS1 interacting domain death agonist	
BLK	NM_001715.2	B lymphoid tyrosine kinase	BLK proto-oncogene, Src family tyrosine kinase	
BTBD6	NM_033271.2	BTB (POZ) domain containing 6	BTB domain containing 6	
BUB1	NM_004336.3	BUB1, budding uninhibited by benzimidazoles 1 (yeast homolog), budding uninhibited by benzimidazoles 1 homolog (yeast)	BUB1 mitotic checkpoint serine/threonine kinase	
C3	NM_000642.2	complement component 3	complement C3	
CALM1	NM_006888.3	CALML2;calmodulin 1 (phosphorylase kinase, delta)	calmodulin 1	
CARD10	NM_014550.3	caspace recruitment domain family, member 10	caspace recruitment domain family member 10	
CASP3	NM_004346.3	caspace 3, apoptosis-related cysteine protease, caspace 3, apoptosis-related cysteine peptidase	caspace 3	
CASP8	NM_001228.4	caspace 8, apoptosis-related cysteine protease, caspace 8, apoptosis-related cysteine peptidase	caspace 8	
CBR4	NM_032783.4		carbonyl reductase 4	
CCL1	NM_002981.1	SCYA1;small inducible cytokine A1 (I-309, homologous to mouse Tca-3), chemokine (C-C motif) ligand 1	C-C motif chemokine ligand 1	
CCL11	NM_002986.2	SCYA11;small inducible cytokine subfamily A (Cys-Cys), member 11 (rotaxin), chemokine (C-C motif) ligand 11	C-C motif chemokine ligand 11	
CCL13	NM_005408.2	SCYA13;small inducible cytokine subfamily A (Cys-Cys), member 13, chemokine (C-C motif) ligand 13	C-C motif chemokine ligand 13	
CCL14	NM_032963.3	SCYA14;small inducible cytokine subfamily A (Cys-Cys), member 14, chemokine (C-C motif) ligand 14	C-C motif chemokine ligand 14	
CCL15	NM_032965.3	SCYA15;small inducible cytokine subfamily A (Cys-Cys), member 15, chemokine (C-C motif) ligand 15	C-C motif chemokine ligand 15	
CCL16	NM_004590.2	SCYA16;small inducible cytokine subfamily A (Cys-Cys), member 16, chemokine (C-C motif) ligand 16	C-C motif chemokine ligand 16	
CCL17	NM_002987.2	SCYA17;small inducible cytokine subfamily A (Cys-Cys), member 17, chemokine (C-C motif) ligand 17	C-C motif chemokine ligand 17	
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 chemoattractant protein 1, homologous to mouse Sig-1e), 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	
CCL25	NM_005624.2	SCYA25;small inducible cytokine subfamily A (Cys-Cys), member 25, chemokine (C-C motif) ligand 25	C-C motif chemokine ligand 25	
CCL26	NM_006072.4	SCYA26;small inducible cytokine subfamily A (Cys-Cys), member 26, chemokine (C-C motif) ligand 26	C-C motif chemokine ligand 26	
CCL27	NM_006664.2	SCYA27;small inducible cytokine subfamily A (Cys-Cys), member 27, chemokine (C-C motif) ligand 27	C-C motif chemokine ligand 27	
CCL28	NM_148672.2	chemokine (C-C motif) ligand 28	C-C motif chemokine ligand 28	
CCL3/11	NM_002983.2	SCYA3	C-C motif chemokine ligand 3	
CCL4/11	NM_002984.2	SCYA4	C-C motif chemokine ligand 4	
CCL5	NM_002985.2	D175136;SCYA5;small inducible cytokine A5 (RANTES), chemokine (C-C motif) ligand 5	C-C motif chemokine ligand 5	
CCL7	NM_006273.2	SCYA6;SCYA7;small inducible cytokine A7 (monocyte chemoattractant 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 chemoattractant protein 2), chemokine (C-C motif) ligand 8	C-C motif chemokine ligand 8	
CCNC	NM_005190.3		cyclin C	
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	
CCRS	NM_000579.1	CMKBR5;chemokine (C-C motif) receptor 5, chemokine (C-C motif) receptor 5 (gene/pseudogene)	C-C motif chemokine receptor 5 (gene/pseudogene)	
CCR6	NM_031409.2	STR122;chemokine (C-C motif) receptor 6	C-C motif chemokine receptor 6	
CCR7	NM_001838.2	CMKBR7;EB1;chemokine (C-C motif) receptor 7	C-C motif chemokine receptor 7	
CCR8	NM_005201.2	CMKBR12;CMKBR8;chemokine (C-C motif) receptor 8	C-C motif chemokine receptor 8	
CD14	NM_00591.2		CD14 molecule	
CD160	NM_007053.3	CD160 antigen	CD160 molecule	
CD163	NM_004244.4	CD163 antigen	CD163 molecule	
CD19	NM_01545981.1	CD19 antigen	CD19 molecule	
CD1A	NM_001763.2	CD1;CD1A antigen, a polypeptide, CD1a antigen	CD1a molecule	
CD1D	NM_001766.3	CD1D antigen, d polypeptide, CD1d antigen	CD1d molecule	
CD200	NM_005944.5	MOX1,MOX2;antigen identified by monoclonal antibody MRC_OX-2, CD200 antigen	CD200 molecule	
CD209	NM_001144899.1	CD209 antigen	CD209 molecule	
CD22	NM_001771.2	CD22 antigen	CD22 molecule	
CD244	NM_001166663.1	natural killer cell receptor 2B4, CD244 natural killer cell receptor 2B4, CD244 molecule, natural killer cell receptor 2B4	CD244 molecule	
CD247	NM_198053.2	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	POCD1G1;programmed cell death 1 ligand 1, CD274 antigen	CD274 molecule	
CD276	NM_001024736.1	CD276 antigen	CD276 molecule	
CD28	NM_001243078.1	CD28 antigen (Tp44)	CD28 molecule	
CD300C	NM_017024034.1	CD300c antigen	CD300c molecule	
CD300E	NM_181449.1	CD300E;CD300 antigen like family member E, CD300e antigen	CD300e molecule	
CD300F	NM_139018.3	CD300 antigen like family member F, CD300f molecule-like family member f	CD300 molecule like family member f	
CD33	NM_00117608.1	CD33 antigen (gp67)	CD33 molecule	
CD38	NM_001775.2	CD38 antigen (p45)	CD38 molecule	
CD3D	NM_000732.4	T30;CD3d antigen, delta polypeptide (T1T3 complex), CD3d molecule, delta (CD3-TCR complex)	CD3d molecule	
CD3E	NM_000733.2	CD3e antigen, epsilon polypeptide (T1T3 complex), CD3e molecule, epsilon (CD3-TCR complex)	CD3e molecule	
CD3G	NM_000732.2	CD3g antigen, gamma polypeptide (T1T3 complex), CD3g molecule, gamma (CD3-TCR complex)	CD3g molecule	
CD4	NM_000616.4	CD4 antigen (p55);T-cell surface glycoprotein CD4	CD4 molecule	
CD40	NM_001250.4	TNFRSF5;tumor necrosis factor receptor superfamily, member 5, CD40 molecule, TNF receptor superfamily member 5	CD40 molecule	

CD40LG	NM_000742	HGM1L,MD3,TNFSF5,tumor necrosis factor (ligand) superfamily, member 5 (hyper-IgM syndrome)	CD40 ligand
CD45RO	NM_002833.4		protein tyrosine phosphatase, receptor type C, isoform R0
CD45RA	NM_002833.4		protein tyrosine phosphatase, receptor type C, isoform RA
CD6	NM_001254751.1	CD6 antigen	CD6 molecule
CD68	NM_0012512.1	CD68 antigen	CD68 molecule
CD69	NM_001781.1	CD69 antigen (p60, early T-cell activation antigen)	CD69 molecule
CD7	NM_000137.6	CD7 antigen (p41)	CD7 molecule
CD80	NM_005191.3	CD28LG,CD28LG1,CD80 antigen (CD28 antigen ligand 1, B7-1 antigen),CD80 molecule	CD80 molecule
CD84	NM_001184879.1	CD84 antigen (leukocyte antigen),CD84 molecule	CD84 molecule
CD86	NM_175862.3	CD28LG2,CD86 antigen (CD28 antigen ligand 2, B7-2 antigen)	CD86 molecule
CD8A	NM_00176785.5	CD8,CD8 antigen, alpha polypeptide (p32),T-cell surface glycoprotein CD8 alpha chain	CD8A molecule
CD8B	NM_172099.2	CD8B1,CD8 antigen, beta polypeptide 1 (p37)	CD8B molecule
CD9	NM_001769.2	MIC3,CD9 antigen (p24)	CD9 molecule
CD96	NM_005816.4	CD96 antigen	CD96 molecule
CD99	NM_002414.4	MIC2,antigen identified by monoclonal antibodies 12E7, F21 and O13,CD99 antigen,CD99 molecule	CD99 molecule (Xg blood group)
CD26	NM_139286.3	C9orf17,C9orf17	cell division cycle 26
CD42	NM_001039802.1		cell division cycle 42
CDKN1A	NM_002389.2	CDKN1,cyclin-dependent kinase inhibitor 1A (p21, Cip1)	cyclin dependent kinase inhibitor 1A
CEACAM1	NM_0017123.3	BGP,carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein)	carcinoembryonic antigen related cell adhesion molecule 1
CEACAM3	NM_001815.3	CGM1,carcinoembryonic antigen-related cell adhesion molecule 3	carcinoembryonic antigen related cell adhesion molecule 3
CHMP3	NM_016079.3	VPS24,vacuolar protein sorting 24 (yeast),vacuolar protein sorting 24 homolog (S. cerevisiae)	charged multivesicular body protein 3
CHMP4A	NM_014169.2	C14orf123,chromosome 14 open reading frame 123,chromatin modifying protein 4A	charged multivesicular body protein 4A
CIT4	NM_002295.3	CIT4,transcription class II transactivator class II, major histocompatibility complex, transactivator	class II major histocompatibility complex transactivator
CK1A	NM_145071.2	cytokine inducible SH2-containing protein	cytokine inducible SH2 containing protein
CKAP5	NM_014756.2		cytoskeleton associated protein 5
CLCF1	NM_013246.2	CLRF1 associated cytokine-like factor 1	cardiotrophin like cytokine factor 1
CLDN1	NM_001101.3		claudin 1
CLDN23	NM_194284.2		claudin 23
CLDN3	NM_001306.3	C7orf1,CPETR2	claudin 3
CLDN4	NM_001305.3	CPETR,CPETR1	claudin 4
CLDN7	NM_001307.3	CEPTRL2,CEPTRL2	claudin 7
CLMP	NM_158399.2		c-Maf inducing protein
CKM1R1	NM_004072.1	chemokine-like receptor 1	chemerin chemokine-like receptor 1
COLECL1	NM_130386.2		collectin subfamily member 12
COX16	NM_001204090.1	C14orf112,chromosome 14 open reading frame 112,COX16 cytochrome c oxidase assembly homolog (S. cerevisiae),COX16, cytochrome c oxidase assembly homolog	cytochrome c oxidase assembly factor COX16
COX19	NM_001031617.2	COX19 cytochrome c oxidase assembly homolog (S. cerevisiae),cytochrome c oxidase assembly homolog 19 (S. cerevisiae),COX19, cytochrome c oxidase assembly factor	cytochrome c oxidase assembly factor COX19
COX4I1	NM_001318797.1	COX4,cytochrome c oxidase subunit IV,cytochrome c oxidase subunit IV isoform 1	cytochrome c oxidase subunit 4I1
COX5B	NM_001862.2	cytochrome c oxidase subunit Vb	cytochrome c oxidase subunit 5B
COX6B1	NM_001863.4	COX6B,cytochrome c oxidase subunit Vlb,cytochrome c oxidase subunit Vlb polypeptide 1 (ubiquitous),cytochrome c oxidase subunit Vlb polypeptide 1 (ubiquitous)	cytochrome c oxidase subunit 6B1
COX6C	NM_004374.2	cytochrome c oxidase subunit Vlc	cytochrome c oxidase subunit 6C
COX7A2	NM_001865.3	cytochrome c oxidase subunit VIIa polypeptide 2 (liver)	cytochrome c oxidase subunit 7A2
COX7B	NM_001866.2	cytochrome c oxidase subunit VIIb	cytochrome c oxidase subunit 7B
COX7C	NM_001867.2	cytochrome c oxidase subunit VIIc	cytochrome c oxidase subunit 7C
CPA3	NM_001870.2	carboxypeptidase A3 (mast cell)	carboxypeptidase A3
CP1A	NM_001876.3	CP1,carnitine palmitoyltransferase 1A (liver)	carnitine palmitoyltransferase 1A
CP1B	NM_004377.3	carnitine palmitoyltransferase 1B (muscle)	carnitine palmitoyltransferase 1B
CRB1	NM_002929.3		cAMP responsive element binding protein 1
CRF2	NM_022148.3		cytokine receptor like factor 2
CS	NM_004077.2		citrate synthase
CSF2	NM_000758.2	colony stimulating factor 2 (granulocyte-macrophage)	colony stimulating factor 2
CSF2RA	NM_006140.3	CSF2R,colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage)	colony stimulating factor 2 receptor alpha subunit
CSF3	NM_000759.3	GCSF,C17orf33,chromosome 17 open reading frame 33,colony stimulating factor 3 (granulocyte)	colony stimulating factor 3
CSF3R	NM_000760.3	CD114,colony stimulating factor 3 receptor (granulocyte)	colony stimulating factor 3 receptor
CTLA4	NM_00214.3	CTLA4,CD137,cellular disease 3,insulin-dependent diabetes mellitus 12	cytotoxic T-lymphocyte associated protein 4
CTNNA1	NM_001903.2	catenin (cadherin-associated protein), alpha 1 (112200)	catenin alpha 1
CTNNB1	NM_001098210.1	CTNBB,catenin (cadherin-associated protein), beta 1 (88kDa),catenin (cadherin-associated protein), beta 1	catenin beta 1
CTNND1	NM_001331.2	CTNND,catenin (cadherin-associated protein), delta 1	catenin delta 1
CTSD	NM_001903.3	CFSD,cathepsin D (lysosomal aspartyl protease)	cathepsin D
CTSW	NM_001335.3	cathepsin W (lysoglycopin)	cathepsin W
CXCL1	NM_002996.3	SCY1,small inducible cytokine subfamily D (Cys-X3-Cys), member 1 (fractalkine, neurotactin),chemokine (C-X3-C motif) ligand 1	C-X3-C motif chemokine ligand 1
CXCR1	NM_001337.3	GPR13,CMKBR11,chemokine (C-X3-C) receptor 1,chemokine (C-X3-C motif) receptor 1	C-X3-C motif chemokine receptor 1
CXCL1	NM_001511.1	MGSA,GRO1,FSP,GRO1 oncogene (melanoma growth stimulating activity, alpha),fibroblast secretory protein,chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	C-X-C motif chemokine ligand 1
CXCL10	NM_001565.2	IP10,SCY10,small inducible cytokine subfamily B (Cys-X-Cys), member 10,chemokine (C-X-C motif) ligand 10	C-X-C motif chemokine ligand 10
CXCL11	NM_005409.4	SCY8B,SCY11,small inducible cytokine subfamily B (Cys-X-Cys), member 11,chemokine (C-X-C motif) ligand 11	C-X-C motif chemokine ligand 11
CXCL12	NM_199168.3	SDF1A,SDF1B,SDF3,stromal cell-derived factor 1,chemokine (C-X-C motif) ligand 12	C-X-C motif chemokine ligand 12
CXCL13	NM_004419.2	SCY13,small inducible cytokine B subfamily (Cys-X-Cys motif), member 13 (B-cell chemottractant),chemokine (C-X-C motif) ligand 13	C-X-C motif chemokine ligand 13
CXCL14	NM_004887.4	SCY14,small inducible cytokine subfamily B (Cys-X-Cys), member 14 (BRAK),chemokine (C-X-C motif) ligand 14	C-X-C motif chemokine ligand 14
CXCL16	NM_001100811.1	chemokine (C-X-C motif) ligand 16	C-X-C motif chemokine ligand 16
CXCL2	NM_002098.3	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
CXCL5	NM_002994.3	SCY5,small inducible cytokine subfamily B (Cys-X-Cys), member 5 (epithelial-derived neutrophil-activating peptide 78),chemokine (C-X-C motif) ligand 5	C-X-C motif chemokine ligand 5
CXCL6	NM_002993.3	SCY6,small inducible cytokine subfamily B (Cys-X-Cys), member 6 (granulocyte chemotactic protein 2),chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2),chemokine (C-X-C motif) ligand 6	C-X-C motif chemokine ligand 6
CXCL8	NM_000584.2	IL8,interleukin 8,chemokine (C-X-C motif) ligand 8	C-X-C motif chemokine ligand 8
CXCL9	NM_002416.1	CMK,MIG,monokine induced by gamma interferon,chemokine (C-X-C motif) ligand 9	C-X-C motif chemokine ligand 9
CXCR3	NM_001509.1	GPR5,G protein-coupled receptor 5,chemokine (C-X-C motif) receptor 3	C-X-C motif chemokine receptor 3
CXCR4	NM_003467.2	chemokine (C-X-C motif), receptor 4 (fusin),chemokine (C-X-C motif) receptor 4	C-X-C motif chemokine receptor 4
CXCR5	NM_001716.3	BLR1,Burkitt lymphoma receptor 1, GTP-binding protein,Burkitt lymphoma receptor 1, GTP binding protein (chemokine (C-X-C motif) receptor 5),chemokine (C-X-C motif) receptor 5	C-X-C motif chemokine receptor 5
CXCR6	NM_005641.1	chemokine (C-X-C motif) receptor 6	C-X-C motif chemokine receptor 6
CYBB	NM_000397.3	CGD,chronic granulomatous disease,cytochrome b-245, beta polypeptide	cytochrome b-245 beta chain
DAP3	NM_004632.3		death associated protein 3
DDIT4	NM_019058.2	DNA-damage-inducible transcript 4	DNA damage inducible transcript 4
DECR1	NM_001359.1	DECR2,4-dienoyl-CoA reductase 1, mitochondrial	2,4-dienoyl-CoA reductase 1
DGUGUY	NM_001023699.2	C14orf159,chromosome 14 open reading frame 159	D-glutamate cyclase
DHFR2	NM_001195643.1	DHFRP4,DHFR11,dihydrofolate reductase pseudogene 4,dihydrofolate reductase-like 1,dihydrofolate reductase like 1	dihydrofolate reductase
DHRS4	NM_021004.2	dehydrogenase/reductase (SDR family) member 4	dehydrogenase/reductase 4
DIABLO	NM_189302.2	diablo, IAP-binding mitochondrial protein	DIABLO (NM_001193635;NM_001193637;NM_198083)
DL1	NM_005618.3	delta, IAP-binding mitochondrial protein	delta like canonical Notch ligand 1
DOCK2	NM_004946.2	dedicator of cytokinesis 2	dedicator of cytokinesis 2
DUSP1	NM_004417.2	PTPN10	dual specificity phosphatase 1
DVL2	NM_004422.2	dishvelled 2 (homologous to Drosophila dsh),dishvelled, dsh homolog 2 (Drosophila)	dishvelled segment polarity protein 2
EBI3	NM_000755.2		Epstein-Barr virus induced 3
EGF	NM_001963.4	epidermal growth factor (beta-urogastrone)	epidermal growth factor
EGR1	NM_001964.2		early growth response 1
ENTPD1	NM_001098175.1	CD39	ectonucleoside triphosphate diphosphohydrolase 1
ENTPD2	NM_208368.1	CD39L1	ectonucleoside triphosphate diphosphohydrolase 2
EDMES	NM_005442.2	eomesodermin (Xenopus laevis) homolog	eomesodermin
ERAP2	NM_001130140.1		endoplasmic reticulum aminopeptidase 2
FAM30A	NR_026800.2	C14orf110,KIAA0125,chromosome 14 open reading frame 110,KIAA0125	family with sequence similarity 30 member A
FAS	NM_000443.4	FASL,AP1,TNFRSF6,tumor necrosis factor receptor superfamily, member 6,Fas (TNF receptor superfamily, member 6)	Fas cell surface death receptor
FASLG	NM_000639.1	AP1L6L1,TNFSF6,tumor necrosis factor (ligand) superfamily, member 6,Fas ligand (TNF superfamily, member 6)	Fas ligand
FASN	NM_004104.4		fatty acid synthase
FCAR	NM_002000.2	Fc fragment of IgA receptor for FcGR3,FCG3,Fc fragment of IgG, low affinity	Fc fragment of IgA receptor
FCGR3A/B	NM_000570.4	IIb, receptor (CD16b)	Fc fragment of IgG receptor IIb
FcRL2	NM_001159488.1	SNAP1,SH2 domain-containing phosphatase anchor protein 1,Fc receptor-like 2	Fc receptor like 2
FM	NM_000143.2		fumarate hydratase
FCP3A	NM_000801.4	FKBP1,FK506-binding protein 1A (12kDa),FK506 binding protein 1A, 12kDa	FK506 binding protein 1A
FLCN	NM_144606.5		folliculin
FNP1	NM_001008738.2	v-fos FBI murine osteosarcoma viral oncogene homolog,FBI murine osteosarcoma viral oncogene homolog	folliculin interacting protein 1
FOS	NM_005251.2		Fos proto-oncogene, AP-1 transcription factor subunit
FOSB	NM_006732.1	FBI murine osteosarcoma viral oncogene homolog B	FosB proto-oncogene, AP-1 transcription factor subunit
FOXO1	NM_002015.3	FKHR,FOXO1A,forkhead homolog in rhabdomyosarcoma	forkhead box O1
FOXO3	NM_014009.3	IPDX,immune dysregulation, polyendocrinopathy, enteropathy, X-linked	forkhead box P3
FPRI	NM_002029.3		formyl peptide receptor 1
FTN	NM_000203.3	FTN oncogene related to SRC, FGR, YES	FTN proto-oncogene, Src family tyrosine kinase
GADD45B	NM_015675.2	MYD18,growth arrest and DNA-damage-inducible, beta	growth arrest and DNA damage inducible beta
GARS	NM_002047.2	CMT2D,Charcot-Marie-Tooth neuropathy 2D	glycyl-tRNA synthetase
GART	NM_000819.3	PRGS,PGFT	phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylmethanimidazole synthetase
GATA3	NM_001002955.1	GATA-binding protein 3	GATA binding protein 3
GFER	NM_005262.2	growth factor, erv1 (S. cerevisiae)-like (augmenter of liver regeneration)	growth factor, augmenter of liver regeneration
GFM1	NM_024996.5	G translation elongation factor, mitochondrial	G elongation factor mitochondrial 1
GLS	NM_014905.3		glutaminase

GLSD	NM_013267.2	glutaminase 2 (liver, mitochondrial)	glutaminase 2	
GLUD1/2	NM_012084.3	GLUDP1:glutamate dehydrogenase pseudogene 1	glutamate dehydrogenase 2	
GNAI2	NM_000017.2	GNAI2:guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2	G protein subunit alpha I2	
GNL10	NM_001017998.3	GNL10:guanine nucleotide binding protein (G protein), gamma 10	G protein subunit gamma 10	
GNLY	NM_012483.3	LAG2	granulysin	
GT01	NM_000079.2	transaminase 1, soluble	glutamic-oxaloacetic transaminase 1	
GPI	NM_00115.2	glucose phosphate isomerase	glucose-6-phosphate isomerase	
GRK2	NM_001619.2	ADRBK1:adrenergic, beta, receptor kinase 1	G protein-coupled receptor kinase 2	
GRK4	NM_001004057.1	GPRX2L:G protein-coupled receptor kinase 2-like (Drosophila)	G protein-coupled receptor kinase 4	
GRPEL1	NM_025196.2	GrpE-like 1, mitochondrial (E. coli)	GrpE like 1, mitochondrial	
GRMA	NM_00144.2	HSP. CTLA3:granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)	granzyme A	
GZMB	NM_004113.1	CTLA3:CD8:granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 3)	granzyme B	
GZMH	NM_033423.3	CTSLG2:granzyme H (cathepsin G-like 2, protein h-CCPX)	granzyme H	
GZMK	NM_002104.2	granzyme K (serine protease, granzyme 3; tryptase II; granzyme K (granzyme 3; tryptase II))	granzyme K	
GZMM	NM_005317.2	granzyme M (lymphocyte met-ase 1)	granzyme M	
HCDC4	NM_001010915.3	PTPLAD2:arsetin triosine phosphatase-like A domain containing 2	3-hydroxyacyl-CoA dehydratase 4	
HADHB	NM_000183.2	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A thiolase (trifunctional protein), beta subunit; hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/enoyl-CoA hydratase (trifunctional protein), beta subunit	hydroxyacyl-CoA dehydrogenase trifunctional multienzyme complex subunit beta	
HAVCR2	NM_020782.3		histone deacetylase 7	
HDAC7	NM_001098416.2	HDAC7A:histone deacetylase 7A	hepatitis A virus cellular receptor 2	
HDAC8	NM_018486.2	HDAC11,WTS,MRX56:histone deacetylase-like 1,Wilson-Turner X-linked mental retardation syndrome	histone deacetylase 8	
HDC	NM_000112.3		histidine decarboxylase	
HIF1A	NM_001201.2	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	hypoxia inducible factor 1 subunit alpha	
HK2	NM_000189.4		hexokinase 2	
HK3	NM_002115.1	hexokinase 3 (white cell)	hexokinase 3	
HLA-DQA1	NM_000122.3	HLA-DQA	major histocompatibility complex, class II, DQ alpha 1	
HLA-DRA	NM_001911.3	HLA-DRA1	major histocompatibility complex, class II, DR alpha	
HLA-DRB1	NM_002124.3	HLA-DRB1	major histocompatibility complex, class II, DR beta 1	HLA-DRB3 (NM_022555)
HLA-E	NM_005516.4		major histocompatibility complex, class I, E	
HMGCR	NM_000859.2	3-hydroxy-3-methylglutaryl-Coenzyme A reductase	3-hydroxy-3-methylglutaryl-CoA reductase	
HSD11B1	NM_005525.2	HSD11B:HSD11:hydrocortisone 11-beta dehydrogenase 1	hydrocortisone 11-beta dehydrogenase 1	
HSF1A9	NM_154294.4	HSP90:heat shock 70kDa protein 9 (mortalin-2); heat shock 70kDa protein 9 (mortalin)	heat shock protein family A (Hsp70) member 9	
HSPA1	NM_002157.2	heat shock 10kD protein 1 (chaperonin 10); heat shock 10kDa protein 1	heat shock protein family E (Hsp10) member 1	
ICAM1	NM_000201.2		intercellular adhesion molecule 1	
ICOS	NM_012092.2	inducible T-cell costimulator	inducible T cell costimulator	
ICOSLG	NM_015259.5	ICOS:inducible T-cell costimulator ligand	inducible T cell costimulator ligand	LOC102723996 (NM_001363770)
ID2	NM_002166.4	inhibitor of differentiation 2;inhibitor of DNA binding 2, dominant negative helix-loop-helix protein	inhibitor of DNA binding 2	
IDH3A	NM_005530.2	isocitrate dehydrogenase 3 (NAD+) alpha	isocitrate dehydrogenase 3 (NAD+) alpha	
IDO1	NM_002164.3	IDO:INDO:indoleamine-pyruvate 2,3-dioxygenase	indoleamine 2,3-dioxygenase 1	
IDO2	NM_154294.4	HSD11B:indoleamine-pyruvate 2,3-dioxygenase-like 1	indoleamine 2,3-dioxygenase 2	
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	
IFI6	NM_002038.3	G1P3:interferon, alpha-inducible protein (clone IFI-6-16)	interferon alpha inducible protein 6	
IFIT1	NM_001548.3	G10P1,IFI56,IFNA1:interferon-induced protein with tetratricopeptide repeats 1	interferon induced protein with tetratricopeptide repeats 1	
IFIT2	NM_001547.4	IFI54,G10P2:interferon-induced protein with tetratricopeptide repeats 2	interferon induced protein with tetratricopeptide repeats 2	
IFIT3	NM_00103188.2	IFIT4:interferon-induced protein with tetratricopeptide repeats 4;interferon-induced protein with tetratricopeptide repeats 3	interferon induced protein with tetratricopeptide repeats 3	
IFITM3	NM_021034.2	interferon induced transmembrane protein 3 (1-BU)	interferon induced transmembrane protein 3	
IFNA1	NM_024011.1		interferon alpha 1	
IFNAR1	NM_000629.2	IFNAR:interferon (alpha, beta and omega) receptor 1	interferon alpha and beta receptor subunit 1	
IFNB1	NM_002176.2	IFNB:interferon, beta 1, fibroblast	interferon beta 1	
IFNG	NM_000619.2		interferon gamma	
IFNGR1	NM_000416.2	IFNCR	interferon gamma receptor 1	
IFNGR2	NM_005534.3	IFNGT3:interferon gamma receptor 2 (interferon gamma transducer 1)	interferon gamma receptor 2	
IGF1R	NM_000875.4	insulin-like growth factor 1 receptor	insulin like growth factor 1 receptor	
IKBKE	NM_014002.2	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase epsilon	inhibitor of nuclear factor kappa B kinase subunit epsilon	
IKZF2	NM_001079562.1	ZNFN1A2:zinc finger protein, subfamily 1A, 2 (Helios);IKAROS family zinc finger 2 (Helios)	IKAROS family zinc finger 2	
IKZF4	NM_002465.3	ZNFN1A4:zinc finger protein, subfamily 1A, 4 (Eos);IKAROS family zinc finger 4 (Eos)	IKAROS family zinc finger 4	
IL10	NM_00572.2		interleukin 10	
IL10RA	NM_001558.2	IL10R:interleukin 10 receptor, alpha	interleukin 10 receptor subunit alpha	
IL11	NM_000641.2		interleukin 11	
IL12A	NM_000882.2	NKSF1:interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p55)	interleukin 12A	
IL12B	NM_002187.2	NKSF2:interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)	interleukin 12B	
IL2RB1	NM_005535.1	IL12RB:interleukin 12 receptor, beta 1	interleukin 12 receptor subunit beta 1	
IL2RB2	NM_001559.2	interleukin 12 receptor, beta 2	interleukin 12 receptor subunit beta 2	
IL3	NM_002188.2		interleukin 13	
IL5	NM_172174.1		interleukin 15	
IL6	NM_004513.4	interleukin 16 (lymphocyte chemoattractant factor)	interleukin 16	
IL7A	NM_002190.2	CTLA8,IL17:interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8)	interleukin 17A	
IL7C	NM_013276.3		interleukin 17C	
IL17F	NM_052872.3		interleukin 17F	
IL18	NM_001562.2	interleukin 18 (interferon-gamma-inducing factor)	interleukin 18	
IL18BP	NM_001039659.1		interleukin 18 binding protein	
IL19	NM_013371.3		interleukin 19	
IL1A	NM_000575.3	IL1	interleukin 1 alpha	
IL1B	NM_000576.2		interleukin 1 beta	
IL1F10	NM_032556.4	interleukin 1 family, member 10 (theta)	interleukin 1 family member 10	
IL1R1	NM_000320984.1	IL1R:IL1RA:interleukin 1 receptor, type I	interleukin 1 receptor type 1	
IL1RN	NM_000571.3		interleukin 1 receptor antagonist	
IL2	NM_000586.2		interleukin 2	
IL20	NM_018724.3		interleukin 20	
IL21	NM_021809.2		interleukin 21	
IL21R	NM_151079.4		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_181339.1	ST16	interleukin 24	FCMR (NM_001142473.NM_001193338.NM_005449)
IL25	NM_002789.2	IL17E:interleukin 17E	interleukin 25	
IL26	NM_184002.1		interleukin 26	
IL27	NM_145659.3	IL30:interleukin 30	interleukin 27	
IL2RA	NM_000417.1	IL2R:IDD10:insulin-dependent diabetes mellitus 10;interleukin 2 receptor, alpha	interleukin 2 receptor subunit alpha	
IL2RB	NM_000878.2	IL5RB:interleukin 15 receptor, beta;interleukin 2 receptor, beta	interleukin 2 receptor subunit beta	
IL2RG	NM_000206.1	SCDX1,MD4,CID: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_000421.4		interleukin 32	
IL33	NM_033439.2	C1orf26:chromosome 9 open reading frame 26 (NF-HEV)	interleukin 33	
IL36A	NM_014440.1	IL1F6:interleukin 1 family, member 6 (epsilon)	interleukin 36 alpha	
IL36B	NM_014438.3	IL1F8:interleukin 1 family, member 8 (eta)	interleukin 36 beta	
IL36G	NM_019618.3	IL1F9:interleukin 1 family, member 9	interleukin 36 gamma	
IL36RN	NM_012275.2	IL1F5:interleukin 1 family, member 5 (delta)	interleukin 36 receptor antagonist	
IL37	NM_014439.3	IL1F7:interleukin 1 family, member 7 (zeta)	interleukin 37	
IL3RA	NM_002183.2	interleukin 3 receptor, alpha (low affinity)	interleukin 3 receptor subunit alpha	
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	
IRF1	NM_002192.2		interferon regulatory factor 1	
IRF3	NM_001571.5		interferon regulatory factor 3	
IRF4	NM_002460.1	MUM1	interferon regulatory factor 4	
IRF5	NM_001098627.1		interferon regulatory factor 5	
IRF6	NM_006147.2	VWS:LPS:Van der Woude syndrome	interferon regulatory factor 6	
IRF7	NM_001572.3		interferon regulatory factor 7	
IRF8	NM_002163.2	ICSP1:interferon consensus sequence binding protein 1	interferon regulatory factor 8	
IRF9	NM_006084.4	ISGF3:interferon-stimulated transcription factor 3, gamma 48kDa	interferon regulatory factor 9	
ISG15	NM_005101.3	G1P2:interferon, alpha-inducible protein (clone IFI-15k)	EGS15 ubiquitin-like modifier	
ITGAM	NM_000632.3	CD3A,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	
ITGB2	NM_000211.2	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	
JAG1	NM_000214.2	AGS,JAGL1:Alagille syndrome	jagged 1	
JAK1	NM_002227.1	JAK1B	Janus kinase 1	
JAK2	NM_004972.3		Janus kinase 2	
JUN	NM_002231.3	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	
KIR3DL1/2	NM_012389.2	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1	killer cell immunoglobulin like receptor, three lg domains and long cytoplasmic tail 1	KIR2DS5 (NM_014513), KIR2DL1 (NM_014218)
KIR3DL1	NM_002258.2	IKR:killer cell lectin-like receptor subfamily B, member 1	killer cell lectin like receptor B1	
KIR3DL2	NM_002260.3	killer cell lectin-like receptor subfamily C, member 2	killer cell lectin like receptor C2	
KIR3DL3	NM_007334.2	CD94:killer cell lectin-like receptor subfamily D, member 1	killer cell lectin like receptor D1	
KIR3DL1	NM_016523.2	killer cell lectin-like receptor subfamily E, member 1	killer cell lectin like receptor F1	
KIR3DL1	NM_001329099.1	killer cell lectin-like receptor subfamily G, member 1	killer cell lectin like receptor G1	

KIRK1	NM_007360.1	D152489E,DNA segment on chromosome 12 (unique) 2489 expressed sequence,killer cell lectin-like receptor subfamily K, member 1	killer cell lectin like receptor K1
KYAT1	NM_004059.4	CBLL1:cystine conjugate beta lyase; cytoplasmic (glutamine transaminase K, kynurenine aminotransferase),cysteine conjugate beta lyase 1	kynurenine aminotransferase 1
LAC3	NM_002286.5	lymphocyte-activation gene 3	lymphocyte activating 3
LAI1	NM_002287.3	leukocyte-associated Ig-like receptor 1,leukocyte-associated immunoglobulin-like receptor 1	leukocyte associated immunoglobulin like receptor 1
LAMP1	NM_005561.3	lysosomal-associated membrane protein 1	lysosomal associated membrane protein 1
LAMP2	NM_002294.2	lysosomal-associated membrane protein 2	lysosomal associated membrane protein 2
LAMTOR1	NM_017907.2	C11orf59;chromosome 11 open reading frame 59	late endosomal/lysosomal adaptor, MAPK and MTOR activator 1
LAT	NM_001014987.1		linker for activation of T cells
LCK	NM_003356.2	lymphocyte-specific protein tyrosine kinase	LCK proto-oncogene, Src family tyrosine kinase
LDHA	NM_00165444.1		lactate dehydrogenase A
LDHC	NM_002301.2		lactate dehydrogenase C
LEF1	NM_016269.3	lymphoid enhancer-binding factor 1	lymphoid enhancer binding factor 1
LEFTY1	NM_020997.2	LEFTY:left-right determination, factor B	left-right determination factor 1
LEI	NM_002309.3	leukemia inhibitory factor	LIF, interleukin 6 family cytokine
LIR1A1	NM_001278318.1	leukocyte immunoglobulin like receptor, subfamily A (with TM domain), member 1	leukocyte immunoglobulin like receptor A1
LIR1A5	NM_181879.2	LIR1B;leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 5	leukocyte immunoglobulin like receptor A5
LIR1B2	NM_001278405.1	leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 2	leukocyte immunoglobulin like receptor B2
LIR1B3	NM_006864.3	leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3	leukocyte immunoglobulin like receptor B3
LIR1B4	NM_001278423.3	leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 4	leukocyte immunoglobulin like receptor B4
LIX1	NM_032622.2	LIX1:ligand of numb-protein X;ligand of numb-protein X 1, E3 ubiquitin protein ligase	ligand of numb-protein X 1
LPAR6	NM_005767.3	P2RY5;purinergic receptor P2Y, G-protein coupled, 5	lysophosphatidic acid receptor 6
LTA	NM_000959.2	TNF8;lymphotoxin alpha (TNF superfamily, member 1)	lymphotoxin alpha
LTB	NM_002341.1	TNFC	lymphotoxin beta
MAF	NM_003606.4	v-maf avian musculoaponeurotic fibrosarcoma oncogene homolog	MAF bZIP transcription factor
MAGE1	NM_006986.3	melanoma antigen family D1	MAGE family member D1
MAML2	NM_032427.2	mastermind (Drosophila)-like 2,mastermind-like 2 (Drosophila)	mastermind like transcriptional coactivator 2
MAML3	NM_018717.4	TNRC3;truncatoid repeat containing 3,mastermind-like 3 (Drosophila)	mastermind like transcriptional coactivator 3
MAP2K2	NM_030662.3	PRKMK2	mitogen-activated protein kinase kinase 2
MAP2K7	NM_145185.2	PRKMK7	mitogen-activated protein kinase kinase 7
MAP3K14	NM_003954.1		mitogen-activated protein kinase kinase kinase 14
MAP3K7	NM_145333.1	TAK1	mitogen-activated protein kinase kinase kinase 7
MAPK12	NM_002969.3	SAPK3	mitogen-activated protein kinase 12
MAPK3	NM_001005561.1	PRKX3	mitogen-activated protein kinase 3
MAX	NM_002382.3	MAX protein	MYC associated factor X
MCAT	NM_014507.3	malonyl CoA:ACP acyltransferase (mitochondrial)	malonyl-CoA-acyl carrier protein transacylase
MDIC	NM_199072.4		MyoD family inhibitor domain containing
MDH2	NM_005918.3	malate dehydrogenase 2, NAD (mitochondrial)	malate dehydrogenase 2
MDR2	NM_014824.3		mitofusin 2
MID1P1	NM_021242.4	MID1 interacting protein 1 (gastrulation specific G12-like (zebrafish))	MID1 interacting protein 1
MIF	NM_002415.1	GLF;macrophage migration inhibitory factor (glycosylation-inhibiting factor)	macrophage migration inhibitory factor
MINK1	NR_033757.2	C1orf151;chromosome 1 open reading frame 151	mitochondrial inner membrane organizing system 1
MK167	NM_002417.2	antigen identified by monoclonal antibody Ki-67	marker of proliferation Ki-67
MMP2	NM_004530.2	CLG4;CLG4;matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)	matrix metalloproteinase 2
MMP9	NM_004994.2	CLG4B;matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	matrix metalloproteinase 9
MP2	NM_001143674.1	BIF4;brain protein 44	mitochondrial pyruvate carrier 2
MS1	NM_001531.2	H3L5;major histocompatibility complex, class II-like sequence	major histocompatibility complex, class II-related
MS4A1	NM_152866.2	CD20;membrane-spanning 4-domains, subfamily A, member 1	membrane spanning 4-domains A1
		FCER1B;IGER;APY;IgE responsiveness (atopic);membrane-spanning 4-domains, subfamily A, member 2 (Fc fragment of IgE, high affinity I, receptor for; beta polypeptide);membrane-spanning 4-domains, subfamily A, member 2	membrane spanning 4-domains A2
MS4A2	NM_000139.3		membrane spanning 4-domains A2
MS4A4A	NM_024012.1		membrane spanning 4-domains A4A
MT2A	NM_005953.3		metallothionein 2A
MTFC1	NM_001018025.3	mature T-cell proliferation 1	mature T cell proliferation 1
MTHFD1	NM_005956.2	MTHFD1;5,6,7,8-methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methylenetetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	methylenetetrahydrofolate dehydrogenase, cyclohydrolase and formyltetrahydrofolate synthetase 1
MTHFD1L	NM_001242767.1	MTHFD1L;5,6,7,8-methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1 like	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1 like
			sub-maximal isoform coverage due to non-overlapping transcripts
MTHFD2	NM_006636.3		methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methylenetetrahydrofolate cyclohydrolase
MTHFR	NM_005957.4	5,10-methylenetetrahydrofolate reductase (NADPH,methylenetetrahydrofolate reductase (NAD[P]H)	methylenetetrahydrofolate reductase
MTHFS	NM_006441.2	5,10-methylenetetrahydrofolate synthetase (5-formyltetrahydrofolate cyclo-ligase)	methylenetetrahydrofolate synthetase
MTOR	NM_004958.3	FRAP;FRAP2;RAPA;FK506 binding protein 12-rapamycin associated protein 1,mechanistic target of rapamycin (serine/threonine kinase),mechanistic target of rapamycin	mechanistic target of rapamycin kinase
MX1	NM_002462.2	influenza virus 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
MYL9	NM_006097.3	myosin, light polypeptide 9, regulatory myosin, light chain 9, regulatory	myosin light chain 9
		NATS;N-acetyltransferase 5, ARD1 subunit (arrest-defective 1, S. cerevisiae), homolog;N-acetyltransferase 5 (ARD1 homolog, S. cerevisiae);N-acetyltransferase 5;N-acetyltransferase 5 (GCSN-related, putative)	N-alpha)acyltransferase 20, NatB catalytic subunit
NAA20	NM_016100.3		
NBL1	NM_182744.2	neuroblastoma, suppression of tumorigenicity 1,neuroblastoma 1, DAN family BMP antagonist	NBL1, DAN family BMP antagonist
NCAM1	NM_000615.5		neuronal cell adhesion molecule 1
NCAPD2	NM_014865.3	non-SMC condensin I complex, subunit D2	non-SMC condensin I complex subunit D2
NCAPG2	NM_017760.5	LUZP5;leucine zipper protein 5,non-SMC condensin II complex, subunit G2	non-SMC condensin II complex subunit G2
NCAPH	NM_015343.1	BRRN1;barren (Drosophila) homolog,barren homolog (Drosophila),barren homolog 1 (Drosophila),non-SMC condensin I complex, subunit H	non-SMC condensin I complex subunit H
NCRI	NM_004829.5	LY94;lymphocyte antigen 94 (mouse) homolog (activating NK-receptor; NK-p46)	natural cytotoxicity triggering receptor 1
NCR2	NM_004828.3	LY95;lymphocyte antigen 95 (activating NK-receptor; NK-p46)	natural cytotoxicity triggering receptor 2
NCR3	NM_147130.2	LY117;lymphocyte antigen 117	natural cytotoxicity triggering receptor 3
NDUFA1	NM_004541.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1 (7.5kD, MWFE),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa	NADH:ubiquinone oxidoreductase subunit A1
NDUFA2	NM_001185012.1	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2 (8kD)	NADH:ubiquinone oxidoreductase subunit A2
NDUFA4	NM_002489.2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4 (9kD, MLRQ),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kDa	NDUFA4, mitochondrial complex associated
NDUFA6	NM_002490.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (14kD, B14),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa	NADH:ubiquinone oxidoreductase subunit A6
NDUFA8	NM_005003.2	NADH dehydrogenase (ubiquinone) 1 alpha/beta subcomplex, 1 (8kD, SDAP),NADH dehydrogenase (ubiquinone) 1 alpha/beta subcomplex, 1, 8kDa	NADH:ubiquinone oxidoreductase subunit A8
NDUFB9	NM_005005.2	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kDa	NADH:ubiquinone oxidoreductase subunit B9
NEDD8	NM_006156.2	NMA (never in mitosis gene a)-related kinase 2	neuronal precursor cell expressed, developmentally down-regulated 8
NEK2	NM_002497.3	NMA (never in mitosis gene a)-related kinase 2	NEK related kinase 2
NFAT5	NM_173214.1	nuclear factor of activated T-cells 5,tonicity-responsive,nuclear factor of activated T-cells 5	nuclear factor of activated T cells 5
NFATC1	NM_172389.1	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1,nuclear factor of activated T-cells 1	nuclear factor of activated T cells 1
NFATC2IP	NM_032815.3	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 interacting protein,nuclear factor of activated T-cells 2 interacting protein	nuclear factor of activated T cells 2 interacting protein
NFIL3	NM_005384.2	IL3BP1	nuclear factor, interleukin 3 regulated
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_002529.1	NFKB;nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKB inhibitor alpha
NKG7	NM_002610.3	natural killer cell group 7 sequence	natural killer cell group 7 protein
NME1	NM_000269.2	non-metastatic cells 1, protein (NM23A) expressed in	NME/NM23 nucleoside diphosphate kinase 1
NME2	NM_001018137.2	non-metastatic cells 2, protein (NM23B) expressed in	NME/NM23 nucleoside diphosphate kinase 2
NMT1	NM_021079.3		N-methyltransferase 1
ND2	NM_001293557.1	IBD1;CARD15;caspace recruitment domain family, member 15	nucleotide binding oligomerization domain containing 2
NOTCH1	NM_017617.3	TAN1;Notch (Drosophila) homolog 1 (translocation-associated),Notch homolog 1, translocation-associated (Drosophila)	notch 1
NOTCH2	NM_024408.3	C16orf35;chromosome 16 open reading frame 35,nitrogen permease regulator-like 3 (S. cerevisiae),NPR3 like, GATORT1 complex subunit	notch 2
NPR3	NM_001039476.2	GRL;nuclear receptor subfamily 3, group C, member 1,nuclear receptor subfamily 3, group C, member 1 (elucorticoid receptor)	NPR3 like, GATORT1 complex subunit
NR3C1	NM_001018077.1		nuclear receptor subfamily 3 group C member 1
NRF1	NM_001040110.1		nuclear respiratory factor 1
NRL	NM_006177.3		neuronal retina leucine zipper
NSD	NM_007311.1	WHSC1;Wolf-Hirschhorn syndrome candidate 1	nuclear receptor binding SET domain protein 2
NTSE	NM_002526.2	NTS5;nucleotidase (CD73);5'-nucleotidase, ecto (CD73)	5'-nucleotidase ecto
OAS1	NM_001032409.1	OAS2;2'-5'-oligoadenylate synthetase 1 (40-46 kD);2'-5'-oligoadenylate synthetase 1, 40/46kDa	2'-5'-oligoadenylate synthetase 1
OAS2	NM_016817.2	2'-5'-oligoadenylate synthetase 2 (69-73 kD);2'-5'-oligoadenylate synthetase 2, 69/73kDa	2'-5'-oligoadenylate synthetase 2
OAS3	NM_004517.2	2'-5'-oligoadenylate synthetase 3 (100 kD);2'-5'-oligoadenylate synthetase 3, 100kDa	2'-5'-oligoadenylate synthetase 3
OASL	NM_198213.1	2'-5'-oligoadenylate synthetase-like	2'-5'-oligoadenylate synthetase like
OAT	NM_000274.3		ornithine aminotransferase
OMAI1	NM_145243.3	OMAI1 zinc metalloproteinase homolog (S. cerevisiae)	OMAI1 zinc metalloproteinase
OPA1	NM_130837.1	optic atrophy 1 (autosomal dominant)	OPA1, mitochondrial dynamin like GTPase
OPSM	NM_0178997.2	PPOL;ADPRT;ADP-ribosyltransferase (NAD+; poly (ADP-ribose) polymerase);poly (ADP-ribose) polymerase family, member 1	3'-oxoacyl-CoA synthase, mitochondrial
PARP1	NM_001618.3		poly(ADP-ribose) polymerase 1
PCCA	NM_000282.3	propionyl-Coenzyme A carboxylase, alpha polypeptide	propionyl-CoA carboxylase subunit alpha
PC2	NM_005612.3	phosphoenolpyruvate carboxykinase 2 (mitochondrial)	phosphoenolpyruvate carboxykinase 2, mitochondrial
PCDD1	NM_005018.2	SLEB2;systemic lupus erythematosus susceptibility 2	programmed cell death 1
PCDD1LG2	NM_025239.3		programmed cell death 1 ligand 2
PDGFRA	NM_006206.3	platelet-derived growth factor receptor, alpha polypeptide	platelet derived growth factor receptor alpha
PDR1A	NM_002843.3	PDHA;pyruvate dehydrogenase (lipoamide) alpha 1;pyruvate dehydrogenase alpha 1	pyruvate dehydrogenase E1 alpha 1 subunit
PDK1	NM_002610.3	pyruvate dehydrogenase kinase, isoenzyme 1;pyruvate dehydrogenase kinase, isozyme 1	pyruvate dehydrogenase kinase 1
PDK3	NM_005391.1	pyruvate dehydrogenase kinase, isoenzyme 3;pyruvate dehydrogenase kinase, isozyme 3	pyruvate dehydrogenase kinase 3
PDPN	NM_006474.4		podoplanin
PECAM1	NM_000442.3	platelet/endothelial cell adhesion molecule 1	platelet and endothelial cell adhesion molecule 1
PFKFB4	NM_004567.2		6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4
PKR	NM_001002021.1		phosphoprotein kinase, liver type
PKP	NM_002627.3		phosphofructokinase, platelet
PGAM1	NM_002629.2	PGAMA;phosphoglycerate mutase 1 (brain)	phosphoglycerate mutase 1
PGK1	NM_000291.2		phosphoglycerate kinase 1

PHGDH	NM_00623.2		phosphoglycerate dehydrogenase	
PIDD1	NM_145866.2	LRDD,PIDD:leucine-rich repeats and death domain containing_p53-induced death domain protein	p53-induced death domain protein 1	
PKC3C	NM_002647.2	phosphoinositide-3-kinase, class 3,phosphatidylinositol 3-kinase, catalytic subunit type 3	phosphatidylinositol 3-kinase catalytic subunit type 3	
PKR31	NM_181504.2	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	phosphoinositide-3-kinase regulatory subunit 1	
PKR32	NM_005027.2	phosphoinositide-3-kinase, regulatory subunit 2 (beta)	phosphoinositide-3-kinase regulatory subunit 2	
PKR33	NM_003629.3	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	phosphoinositide-3-kinase regulatory subunit 3	
PKM	NM_184271.1	PKM2:pyruvate kinase, muscle	pyruvate kinase M2	
PLA2G4B	NM_011463.1	phospholipase A2, group IVB (cytosolic)	phospholipase A2 group IVB	
PLCB2	NM_004573.2	phospholipase C, beta 2	phospholipase C beta 2	
PLCB3	NM_000932.2	phospholipase C, beta 3 (phosphatidylinositol-specific)	phospholipase C beta 3	
PLCG1	NM_001602.2	PLC1,phospholipase C, gamma 1 [formerly subtype 148],phospholipase C, gamma 1	phospholipase C gamma 1	
PLM	NM_002675.3		promyelocytic leukemia prepronociceptin	
PNOC	NM_001284244.1		peroxisome proliferator activated receptor alpha	
PPARA	NM_001001928.2	PPAR,peroxisome proliferative activated receptor, alpha,peroxisome proliferator-activated receptor alpha	peroxisome proliferator activated receptor alpha	
PPARD	NM_006238.4	peroxisome proliferative activated receptor, delta,peroxisome proliferator-activated receptor delta	peroxisome proliferator activated receptor delta	
PPARG1	NM_006238.4	PPARG1,peroxisome proliferative activated receptor, gamma, coactivator 1,peroxisome proliferative activated receptor, gamma, coactivator 1, alpha,peroxisome proliferator-activated receptor gamma, coactivator 1 alpha	PPARG coactivator 1 alpha	sub-maximal isoform coverage due to non-overlapping transcripts
PPARGCIA	NM_013261.3			
PPAT	NM_002703.3		phosphoribosyl pyrophosphate amidotransferase	
PP2A	NM_021130.3		peptidylprolyl isomerase A	PP2AL4 (NM_001143883), PP2ALAC (NM_001135789), PP2AL4E (NM_001144032), PP2AL4D (NM_001164261), PP2ALAG (NM_001123068)
PP2R5D	NM_00245.2	protein phosphatase 2, regulatory subunit B (B56), delta isoform	protein phosphatase 2 regulatory subunit B delta	
PPP3CA	NM_00944.4	CALN,CALN:protein phosphatase 3 [formerly 2B], catalytic subunit, alpha isoform,protein phosphatase 3, catalytic subunit, alpha isoform	protein phosphatase 3 catalytic subunit alpha	
PP2F	NM_001204103.1		palmitoyl-protein thioesterase 2	
PRDM1	NM_142907.1	BUMIP1,PR domain containing 1, with ZNF domain,PR domain 1	PRSET domain 1	
PRF1	NM_005041.3	perforin 1 (pore forming protein)	perforin 1	
PRICKLE3	NM_006150.3	LMO6, LIM domain only 6,prickle homolog 3 (Drosophila)	prickle planar cell polarity protein 3	
PRKAB2	NM_005399.3	protein kinase, AMP-activated, beta 2 non-catalytic subunit	protein kinase AMP-activated non-catalytic subunit beta 2	
PRKCB	NM_125295.1	PRKCB2,PRKCB,PRKCB1:protein kinase C, beta 1,protein kinase C, beta	protein kinase C beta	
PRKCD	NM_00254.3	protein kinase C, delta	protein kinase C delta	
PRKDC	NM_006404.3	protein C receptor, endothelial	protein C receptor	
PSAT1	NM_021154.3		phosphoserine aminotransferase 1	
PSMA2	NM_002787.4	proteasome (prosome, macropain) subunit, alpha type 2	proteasome subunit alpha 2	
PSMA3	NM_152121.1	proteasome (prosome, macropain) subunit, alpha type 3	proteasome subunit alpha 3	
PSMA6	NM_002791.1	proteasome (prosome, macropain) subunit, alpha type 6	proteasome subunit alpha 6	
PSMB10	NM_002801.2	MECL1,proteasome (prosome, macropain) subunit, beta type 10	proteasome subunit beta 10	
PSPH	NM_004577.3	PSP	phosphoserine phosphatase	
PTCD1	NM_015545.2		pentatricopeptide repeat domain 1	
PTGDR2	NM_004778.1	GPRA4,G protein-coupled receptor 44	pentatricopeptide D2 receptor 2	
PTGER2	NM_000956.2	prostaglandin E receptor 2 (subtype EP2), 53kDa,prostaglandin E receptor 2 (subtype EP2), 53kDa	prostaglandin E receptor 2	
PTGER4	NM_000958.2	prostaglandin E receptor 4 (subtype EP4)	prostaglandin E receptor 4	
PTGS1	NM_000962.2	prostaglandin-endoperoxide synthase 1 [prostaglandin G/H synthase and cyclooxygenase]	prostaglandin-endoperoxide synthase 1	
PTGS2	NM_000963.1	prostaglandin-endoperoxide synthase 2 [prostaglandin G/H synthase and cyclooxygenase]	prostaglandin-endoperoxide synthase 2	
PTK2B	NM_004103.3	FAK2,FAK2	protein tyrosine kinase 2 beta	
PTPN6	NM_002815.5		protein tyrosine phosphatase, non-receptor type 6	
PTPRC	NM_002921.2	CD45	protein tyrosine phosphatase, receptor type C	
PYRDL	NM_006907.2		pyrroline-5-carboxylate reductase 1	
PYCR2	NM_013328.2	pyrroline-5-carboxylate reductase family member 2	pyrroline-5-carboxylate reductase 2	
PYCR3	NM_023078.2	PYCR3,pyrroline-5-carboxylate reductase-like	pyrroline-5-carboxylate reductase 3	
RAC2	NM_002872.4	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	Rac family small GTPase 2	
RAE1	NM_005103.3	RAE1 (RNA export 3, S.pombe) homolog,RAE1 RNA export 1 homolog (S. pombe)	ribonucleic acid export 1	
RAC2	NM_005103.3	recombination activating gene 2	recombination activating 2	
RAI1	NM_030665.3	SMCR,Smith-Magenis syndrome chromosome region	retinoic acid induced 1	
RARB	NM_000965.3	retinoic acid receptor, beta	retinoic acid receptor beta	
RARG	NM_000966.3	retinoic acid receptor, gamma	retinoic acid receptor gamma	
RDX1	NM_012428.2		ring box 1	
RDH10	NM_127037.2	retinol dehydrogenase 10 (all-trans)	retinol dehydrogenase 10	
RDH14	NM_020905.3	retinol dehydrogenase 14 (all-trans and 9-cis),retinol dehydrogenase 14 (all-trans/9-cis/11-cis)	retinol dehydrogenase 14	
RDH5	NM_002905.3	RDH1,retinol dehydrogenase 5 (11-cis/9-cis)	retinol dehydrogenase 5	
RELA	NM_01975.3	NF-kB3,nuclear factor of kappa light polypeptide gene enhancer in B-cells 3,v-rel avian retroviral oncoprotein, viral oncogene homolog A	RELA proto-oncogene, NF-kB subunit	
RIMKA1	NM_173642.3	FAM80A,family with sequence similarity 80, member A	ribosomal modification protein rimk like family member A	
RNASL1	NM_021133.3	RNSA,PRCA1,prostate cancer 1,ribonuclease L (2',5'-oligoadenylate synthetase-dependent)	ribonuclease L	
RORA	NM_134261.2	RAR-related orphan receptor A	RAR related orphan receptor A	
RORC	NM_001015211.1	RAR-related orphan receptor C	RAR related orphan receptor C	
RPL23	NM_000978.3		ribosomal protein L23	
RPL3	NM_01013853.1		ribosomal protein L3	
RPTOR	NM_0020761.2	regulatory associated protein of MTOR, complex 1	regulatory associated protein of MTOR complex 1	
RUNX3	NM_004350.1	CBF3,runt-related transcription factor 3	runt related transcription factor 3	
S100A12	NM_005621.1	S100 calcium-binding protein A12 (calgranulin C)	S100 calcium binding protein A12	
SDC	NM_005063.4	SDCO5,stearyl-CoA desaturase opposite strand,stearyl-CoA desaturase (delta-9-desaturase)	stearyl-CoA desaturase	
SDHB	NM_003000.2	SDH1,SDH,succinate dehydrogenase complex, subunit B, iron sulfur (lp),succinate dehydrogenase complex subunit B, iron sulfur (lp)	succinate dehydrogenase complex iron sulfur subunit B	
SEC22B	NM_004892.5	SEC22L1,SEC22, vesicle trafficking protein (S. cerevisiae) like 1,SEC22 vesicle trafficking protein-like 1 (S. cerevisiae),SEC22 vesicle trafficking protein homolog B (S. cerevisiae),SEC22 vesicle trafficking protein homolog B (S. cerevisiae)	SEC22 homolog B, vesicle trafficking protein (gene/pseudogene)	
SELL	NR_028467.1	LYAM1,LNHR,lymphocyte adhesion molecule 1	selectin I ligand	
SELP6	NM_002066.3		selectin P ligand	
SERINC1	NM_020755.2	TDE2,tumor differentially expressed 2	serine incorporator 1	
SERINC3	NM_006811.2	TDE1,tumor differentially expressed 1	serine incorporator 3	
SERINC4	NM_001258031.1		serine incorporator 4	
SERPIN9	NM_004155.3	PI9,serpin (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 9,serpin peptidase inhibitor, clade B (ovalbumin), member 9	serpin family B member 9	
SGK3	NM_013257.3	SGK2,SGK,serum/glucocorticoid regulated kinase-like,serum/glucocorticoid regulated kinase family, member 3	serum/glucocorticoid regulated kinase family member 3	
SGO2	NM_152524.5	SGO2L2,shugoshin-like 2 (S. pombe)	shugoshin 2	
SH2D1A	NM_002361.4	MADS,LTP,lymphoproliferative syndrome,SH2 domain protein 1A	SH2 domain containing 1A	
SH3BP2	NM_003023.4	Cherubism	SH3 domain binding protein 2	
SHMT1	NM_148918.1	serine hydroxymethyltransferase 1 (soluble)	serine hydroxymethyltransferase 1	
SHMT2	NM_001166356.1	SHMT,serine hydroxymethyltransferase 2 (mitochondrial)	serine hydroxymethyltransferase 2	
SIGLEC5	NM_003830.3	CD33L2,sialic acid binding Ig-like lectin 5	sialic acid binding Ig like lectin 5	
SKI	NM_173554.2	SMF1,SKI,SKI like kinase	salt inducible kinase 1	
SKP1	NM_170679.2	SKP1A,S-phase kinase-associated protein 1A (p19A)	S-phase kinase associated protein 1	SK1B (NM_001206463)
SLAMF6	NM_001184714.1		SLAM family member 6	
SLAMF7	NM_021181.4		SLAM family member 7	
SLC25A20	NM_000387.5	CACT,solute carrier family 25 (carnitine)/acylcarnitine translocase, member 20	solute carrier family 25 member 20	
SLC25A6	NM_001636.3	ANT3,solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6	solute carrier family 25 member 6	
SLC27A3	NM_024330.1	GLUT1,GLUT7,TLR,CSE,human T-cell leukemia virus (I and II) receptor,choleathetosis/spasticity, episodic (paroxysmal choreoathetosis/spasticity),solute carrier family 27 (facilitated glucose transporter), member 1	solute carrier family 27 member 3	
SLC2A1	NM_005516.2		solute carrier family 2 member 1	
SLC2A11	NM_030807.4		solute carrier family 2 member 11	
SLC2A2	NM_003401.1	GLUT2,solute carrier family 2 (facilitated glucose transporter), member 2	solute carrier family 2 member 2	
SLC3A2	NM_001012662.2	MDU1,solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2,solute carrier family 3 (amino acid transporter heavy chain), member 2	solute carrier family 3 member 2	
SLC7A5	NM_003486.5		solute carrier family 7 member 5	
SMAD2	NM_005901.5	MADH2,MAD, mothers against decapentaplegic homolog 2 (Drosophila),SMAD, mothers against DPP homolog 2 (Drosophila)	SMAD family member 2	
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	
SMARCA4	NM_001128849.1	SMN2L4	SMN/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily A, member 4	
SMC2	NM_01042551.1	SMC2L1,SMC2 (structural maintenance of chromosomes 2, yeast) like 1,SMC2 structural maintenance of chromosomes 2-like 1 (yeast)	structural maintenance of chromosomes 2	
SMURF1	NM_181349.1		SMAD specific E3 ubiquitin protein ligase 1	
SOC32	NM_003877.3		suppressor of cytokine signaling 2	
SOC34	NM_199422.4	SOC37,suppressor of cytokine signaling 7	suppressor of cytokine signaling 4	
SOC35	NM_014011.4		suppressor of cytokine signaling 5	
SOS2	NM_006939.2	son of sevenless (Drosophila) homolog 2,son of sevenless homolog 2 (Drosophila)	SOS Ras/Rho guanine nucleotide exchange factor 2	
SP100	NM_003113.3	nuclear antigen SP100	SP100 nuclear antigen	
SPB	NM_003113.3	Sp1-B transcription factor (Sp1-1/P1.1 related)	Sp1-B transcription factor	
SRC	NM_005417.3	SRC1,v-src avian sarcoma (Schmidt-Ruppin A2) viral oncogene homolog	SRC proto-oncogene, non-receptor tyrosine kinase	
SRR	NM_021947.1		serine racemase	
STAM	NR_037774.1	signal transducing adaptor molecule (SH3 domain and ITAM motif) 1	signal transducing adaptor molecule	
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	
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_003152.2	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	
STH11	NM_004554.4	serine/threonine kinase 11 (Peutz-Jeghers syndrome)	serine/threonine kinase 11	
TAK1C	NM_004783.2		TAK1 kinase 2	
TBX21	NM_013351.1		T-box 21	
TCF7	NM_201633.2	transcription factor 7 (T-cell specific, HMG-box)	transcription factor 7	
TCL1A	NR_049726.1	T-cell leukemia/lymphoma 1A	T cell leukemia/lymphoma 1A	

TERT	NM_198253.1		telomerase reverse transcriptase
TE12	NM_001127208.2	KIAA1546;KIAA1546,tet oncogene family member 2	tet methyl-lysine dioxygenase 2
TFAM	NM_002601.1	TF6B,TF6L2	transcription factor A, mitochondrial
TFAM	NM_022360.2		transcription factor B, mitochondrial
TFDP1	NM_007111.4		transcription factor Dp-1
TFRC	NM_003234.1	transferrin receptor (p90, CD71)	transferrin receptor
TFGB1	NM_000660.3	TGFb,DPD1,transforming growth factor, beta 1	transforming growth factor beta 1
TCF81	NM_004612.2	MSSE,ESS1,multiple self-healing squamous epithelioma,transforming growth factor beta receptor 1	transforming growth factor beta receptor 1
TCF82	NM_001024847.1	MFS2,transforming growth factor, beta receptor II (70/80kDa),transforming growth factor beta receptor II	transforming growth factor beta receptor 2
TCF2	NM_010209.6	TGFb-induced factor 2 (TAE family homeobox),TGFb-induced factor homeobox 2	TGFb induced factor homeobox 2
TCAM1	NM_014261.1	tail-like receptor adaptor molecule 1	tail like receptor adaptor molecule 1
TGIF	NM_173799.2	VSIG9,VSTM3,VSIG9,VSTM3	T cell immunoreceptor with Ig and ITIM domains
TMM17A	NM_006335.2	translocase of inner mitochondrial membrane 17 homolog A (yeast)	translocase of inner mitochondrial membrane 17A
TMM23	NM_006327.2	translocase of inner mitochondrial membrane 23 homolog (yeast)	translocase of inner mitochondrial membrane 23
TIMP1	NM_003254.2	TIMP,CCG,tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor)	TIMP metalloproteinase inhibitor 1
TKT	NM_010164.2		transketolase
TLR2	NM_003264.3	toil-like receptor 2	toil like receptor 2
TLR4	NM_135544.2	toil-like receptor 4	toil like receptor 4
TLR9	NM_017442.2	toil-like receptor 9	toil like receptor 9
TNF	NM_00594.2	TNFa,tumor necrosis factor (TNF superfamily, member 2)	tumor necrosis factor
TNFRSF10B	NM_003842.3	tumor necrosis factor receptor superfamily, member 10b P082,LOH18CR1,tumor necrosis factor receptor superfamily, member 11a, activator of NFkB,Page1 disease of bone 2,loss of heterozygosity, 15, chromosomal region 1,tumor necrosis factor receptor superfamily, member 11a, NFkB activator	TNF receptor superfamily member 10b TNF receptor superfamily member 11a
TNFRSF11A	NM_003839.3		
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
TNFRSF4	NM_003327.3	TNFRP4,tumor necrosis factor receptor superfamily, member 4	TNF receptor superfamily member 4
TNFRSF9	NM_001561.4	IL1A,tumor necrosis factor receptor superfamily, member 9	TNF receptor superfamily member 9
TNFRSF13B	NM_00145645.2	TNFRSF20,tumor necrosis factor (ligand) superfamily, member 13b	TNF superfamily member 13b
TNFRSF9	NM_003811.3	tumor necrosis factor (ligand) superfamily, member 9	TNF superfamily member 9
TOLLIP	NM_019009.2		toil interacting protein
TCOM6	NM_001134931.1	translocase of outer mitochondrial membrane 6 homolog (yeast)	translocase of outer mitochondrial membrane 6
TCX	NM_014729.2		thymocyte selection associated high mobility group box
TP53	NM_000546.2		tumor protein p53
TPR	NM_003292.2	translocated promoter region (to activated MET oncogene)	translocated promoter region, nuclear basket protein
TPS41/02	NM_005441.3	TPS81,TP51,TP52	tryptase beta 1
TRAC	ENST00000611116.1		T cell receptor alpha constant
TRAF3	NM_145725.2		TNF receptor associated factor 3
TRAF5	NM_001033910.2		TNF receptor associated factor 5
TRAF6	NM_145803.2	TNF receptor-associated factor 6, E3 ubiquitin protein ligase	TNF receptor associated factor 6
TRAF1	NM_001588.2	TRAF1,TRAF1	TNF receptor associated transmembrane adaptor 1
TRAV1-1	TCRVA_001.1		T cell receptor alpha variable 1-1
TRAV1-2	TCRVA_002.1		T cell receptor alpha variable 1-2
TRAV10	TCRVA_016.1		T cell receptor alpha variable 10
TRAV11	TCRVA_017.1		T cell receptor alpha variable 11 (pseudogene)
TRAV12-1	TCRVA_018.1		T cell receptor alpha variable 12-1
TRAV12-2	TCRVA_019.1		T cell receptor alpha variable 12-2
TRAV12-3	TCRVA_020.1		T cell receptor alpha variable 12-3
TRAV13-1	TCRVA_021.1		T cell receptor alpha variable 13-1
TRAV13-2	TCRVA_022.1		T cell receptor alpha variable 13-2
TRAV14	TCRVA_023.1		T cell receptor alpha variable 14
TRAV16	TCRVA_024.1		T cell receptor alpha variable 16
TRAV17	TCRVA_025.1		T cell receptor alpha variable 17
TRAV18	TCRVA_026.1		T cell receptor alpha variable 18
TRAV19	TCRVA_027.1		T cell receptor alpha variable 19
TRAV2	TCRVA_003.1		T cell receptor alpha variable 2
TRAV20	TCRVA_028.1		T cell receptor alpha variable 20
TRAV21	TCRVA_029.1		T cell receptor alpha variable 21
TRAV22	TCRVA_030.1		T cell receptor alpha variable 22
TRAV23	TCRVA_031.1		T cell receptor alpha variable 23
TRAV24	TCRVA_032.1		T cell receptor alpha variable 24
TRAV25	TCRVA_033.1		T cell receptor alpha variable 25
TRAV26-1	TCRVA_034.1		T cell receptor alpha variable 26-1
TRAV26-2	TCRVA_035.1		T cell receptor alpha variable 26-2
TRAV27	TCRVA_036.1		T cell receptor alpha variable 27
TRAV29	TCRVA_037.1		T cell receptor alpha variable 29
TRAV3	TCRVA_004.1		T cell receptor alpha variable 3 (gene/pseudogene)
TRAV10	TCRVA_038.1		T cell receptor alpha variable 30
TRAV34	TCRVA_039.1		T cell receptor alpha variable 34
TRAV35	TCRVA_040.1		T cell receptor alpha variable 35
TRAV36	TCRVA_041.1		T cell receptor alpha variable 36
TRAV38-1	TCRVA_042.1		T cell receptor alpha variable 38-1
TRAV38-2	TCRVA_043.1		T cell receptor alpha variable 38-2
TRAV39	TCRVA_044.1		T cell receptor alpha variable 39
TRAV4	TCRVA_005.1		T cell receptor alpha variable 4
TRAV40	TCRVA_045.1		T cell receptor alpha variable 40
TRAV41	TCRVA_046.1		T cell receptor alpha variable 41
TRAV5	TCRVA_006.1		T cell receptor alpha variable 5
TRAV6	TCRVA_007.1	TCRAV5S1;TCRAV5S1	T cell receptor alpha variable 6
TRAV7	TCRVA_008.1		T cell receptor alpha variable 7
TRAV8-1	TCRVA_009.1		T cell receptor alpha variable 8-1
TRAV8-2	TCRVA_010.1		T cell receptor alpha variable 8-2
TRAV8-3	TCRVA_011.1		T cell receptor alpha variable 8-3
TRAV8-6	TCRVA_013.1		T cell receptor alpha variable 8-6
TRAV9-1	TCRVA_014.1		T cell receptor alpha variable 9-1
TRAV9-2	TCRVA_015.1		T cell receptor alpha variable 9-2
TRBC1/2	ENST00000466254.1	T cell receptor beta constant 2	T cell receptor beta constant 2
TRBV10-1	ENST00000390364.1		T cell receptor beta variable 10-1 (gene/pseudogene)
TRBV10-2	TCRVB_027.1		T cell receptor beta variable 10-2
TRBV10-3	TCRVB_028.1		T cell receptor beta variable 10-3
TRBV11-1	TCRVB_029.1		T cell receptor beta variable 11-1
TRBV11-2	TCRVB_030.1		T cell receptor beta variable 11-2
TRBV11-3	TCRVB_031.1		T cell receptor beta variable 11-3
TRBV12-3	TCRVB_032.1		T cell receptor beta variable 12-3
TRBV12-5	TCRVB_034.1		T cell receptor beta variable 12-5
TRBV13	TCRVB_035.1		T cell receptor beta variable 13
TRBV14	TCRVB_036.1		T cell receptor beta variable 14
TRBV15	TCRVB_037.1		T cell receptor beta variable 15
TRBV16	TCRVB_038.1		T cell receptor beta variable 16 (gene/pseudogene)
TRBV18	TCRVB_039.1		T cell receptor beta variable 18
TRBV19	TCRVB_040.1		T cell receptor beta variable 19
TRBV2	TCRVB_001.1		T cell receptor beta variable 2
TRBV20-1	TCRVB_041.1		T cell receptor beta variable 20-1
TRBV24-1	TCRVB_042.1		T cell receptor beta variable 24-1
TRBV25-1	TCRVB_043.1		T cell receptor beta variable 25-1
TRBV27	TCRVB_044.1		T cell receptor beta variable 27
TRBV28	TCRVB_045.1		T cell receptor beta variable 28
TRBV29-1	TCRVB_046.1		T cell receptor beta variable 29-1
TRBV3-1	TCRVB_002.1		T cell receptor beta variable 3-1
TRBV30	TCRVB_047.1		T cell receptor beta variable 30 (gene/pseudogene)
TRBV4-1	TCRVB_003.1		T cell receptor beta variable 4-1
TRBV4-2	TCRVB_004.1		T cell receptor beta variable 4-2
TRBV4-3	TCRVB_005.1		T cell receptor beta variable 4-3
TRBV5-1	TCRVB_006.1		T cell receptor beta variable 5-1
TRBV5-4	TCRVB_007.1		T cell receptor beta variable 5-4
TRBV5-5	TCRVB_008.1		T cell receptor beta variable 5-5
TRBV5-6	TCRVB_009.1		T cell receptor beta variable 5-6
TRBV5-8	TCRVB_010.1		T cell receptor beta variable 5-8
TRBV6-1	TCRVB_011.1		T cell receptor beta variable 6-1
TRBV6-2	TCRVB_012.1		T cell receptor beta variable 6-2 (gene/pseudogene)
TRBV6-4	TCRVB_013.1		T cell receptor beta variable 6-4
TRBV6-5	TCRVB_014.1		T cell receptor beta variable 6-5
TRBV6-6	ENST00000390371.1		T cell receptor beta variable 6-6
TRBV6-8	TCRVB_016.1		T cell receptor beta variable 6-8
TRBV6-9	TCRVB_017.1		T cell receptor beta variable 6-9
TRBV7-2	TCRVB_018.1		T cell receptor beta variable 7-2
TRBV7-3	TCRVB_019.1		T cell receptor beta variable 7-3
TRBV7-4	TCRVB_020.1		T cell receptor beta variable 7-4 (gene/pseudogene)
TRBV7-6	TCRVB_021.1		T cell receptor beta variable 7-6
TRBV7-7	TCRVB_022.1		T cell receptor beta variable 7-7
TRBV7-8	TCRVB_023.1		T cell receptor beta variable 7-8
TRBV7-9	TCRVB_024.1		T cell receptor beta variable 7-9
TRBV9	TCRVB_025.1		T cell receptor beta variable 9
TRDC	ENST00000390477.1		T cell receptor delta constant
TRDV1	ENST00000390452.1		T cell receptor delta variable 1
TRDV2	ENST00000390469.1		T cell receptor delta variable 2
TRDV3	ENST00000355880.1		T cell receptor delta variable 3
TREM1	NM_001242589.1		triggering receptor expressed on myeloid cells 1
TRGC1	ENST00000443402.1	TCRGC1;TCRGC1	T cell receptor gamma constant 1
TRGC2	ENST00000436911.1	TCRGC2;TCRGC2	T cell receptor gamma constant 2
TRGV2	ENST00000426902.1	TCRGV2;TCRGV2	T cell receptor gamma variable 2
TRGV3/5	ENST00000390346.1	V153;TCRGV3	T cell receptor gamma variable 3
TRGV4	ENST00000390345.1	TCRGV4;TCRGV4	T cell receptor gamma variable 4

TRGV8	ENST00000390343.1	TCRGV8;TCRGV8	T cell receptor gamma variable 8
TRGV9	ENST00000444775.1	TCRGV9;TCRGV9	T cell receptor gamma variable 9
TRIM10	NM_006778.3	RNF9;tripartite motif-containing 10	tripartite motif containing 10
TRIM22	NM_006074.3	tripartite motif-containing 22	tripartite motif containing 22
TRIM25	NM_005082.4	ZNF147;zinc finger protein 147 (estrogen-responsive finger protein);tripartite motif-containing 25	tripartite motif containing 25
TRIM26	NM_001242783.1	ZNF173;tripartite motif-containing 26	tripartite motif containing 26
TRIM31	NM_007028.3	tripartite motif-containing 31	tripartite motif containing 31
TRIM33	NM_015906.3	tripartite motif-containing 33	tripartite motif containing 33
TRIM34	NM_130390.2	RNF21;tripartite motif-containing 34	tripartite motif containing 34
TSC2	NM_000548.3	TSC4;tuberous sclerosis 2	TSC complex subunit 2
TYK2	NM_003311.4		tyrosine kinase 2
TYROBP	NM_003332.3	PIDS	TYRO protein tyrosine kinase binding protein
UBAS	NM_198329.2	UBE1DC1;ubiquitin-activating enzyme E1-domain containing 1;ubiquitin-like modifier activating enzyme 5	ubiquitin like modifier activating enzyme 5
UBE2F	NM_080678.1	ubiquitin-conjugating enzyme E2F (putative)	ubiquitin conjugating enzyme E2 F (putative)
UBE2I	NM_194260.2	ubiquitin-conjugating enzyme E2I (homologous to yeast UBC9);ubiquitin-conjugating enzyme E2I	ubiquitin conjugating enzyme E2 I
UBE2V1	NM_001257397.1	UBE2V;ubiquitin-conjugating enzyme E2 variant 1	ubiquitin conjugating enzyme E2 V1 sub-maximal isoform coverage due to non-overlapping transcripts
UQCRI0	NM_001003684.1		ubiquinol-cytochrome c reductase, complex III subunit X
UQCRI1	NM_014402.4	ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa	ubiquinol-cytochrome c reductase complex III subunit VII
USP15	NM_001252078.1	ubiquitin specific protease 15	ubiquitin specific peptidase 15
USP18	NM_017414.3	ubiquitin specific protease 18	ubiquitin specific peptidase 18
VAV1	NM_005428.2	VAV;vav 1 oncogene;vav 1 guanine nucleotide exchange factor	vav guanine nucleotide exchange factor 1
VAV3	NM_001079874.1	vav 3 oncogene;vav 3 guanine nucleotide exchange factor	vav guanine nucleotide exchange factor 3
V5IR	NM_021153.1	C10orf54;chromosome 10 open reading frame 54	V-set immunoregulatory receptor
WAS	NM_000377.2	IMD2;THC;thrombocytopenia 1 [X-linked];Wiskott-Aldrich syndrome (eczema-thrombocytopenia)	Wiskott-Aldrich syndrome
WDR45	NM_007075.3	WDRX1;WD repeat domain, X-linked 1	WD repeat domain 45
XAP1	NM_199139.2		XAP associated factor 1
XCL1/2	NM_002995.2	LTN;SCY1;small inducible cytokine subfamily C, member 1 (lymphotactin);chemokine (C motif) ligand 1;LPN;ATAC;SCM-1a;SCM-1;lymphotactin	X-C motif chemokine ligand 1
ZAP70	NM_001079.3	SRK;SRK	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
<b>Interactome Reference Genes</b>			
ABC1	NM_001090.2	ABC50;ATP-binding cassette, sub-family F (GCN20), member 1	ATP binding cassette subfamily F member 1
G6PD	NM_000402.4		glucose-6-phosphate dehydrogenase
NRDE2	NM_017970.3	C14orf102;chromosome 14 open reading frame 102	NRDE-2, necessary for RNA interference, domain containing
OAZ1	NM_004152.2	OAZ	ornithine decarboxylase antizyme 1
POLR2A	NM_000937.2	POLR2;polymerase (RNA) II (DNA directed) polypeptide A, 220kDa	RNA polymerase II subunit A
SDHA	NM_004168.3	SDH2;succinate dehydrogenase complex, subunit A, flavoprotein (Fp);succinate dehydrogenase complex subunit A, flavoprotein (Fp)	succinate dehydrogenase complex flavoprotein subunit A
SRK11P	NM_052902.2		serine/threonine kinase 11 interacting protein
TBC1D10B	NM_015527.3	TBC1 domain family, member 10B	TBC1 domain family member 10B
TBP	NM_001172085.1	GTf2D1;SCA17	TATA-box binding protein
TBB	NM_018955.3		ubiquitin B