

nCounter® Mouse Immune Exhaustion Panel - Gene and Probe Details

Official Symbol	Accession	Alias / Previous Symbol	Official Full Name	Other targets or Isoform Information
9230019H11Rik	NM_001033977.2	A530025K05Rik, Acac, Acc1, Gm738, LOC327983, MGD-MRK-37495, MGI:2443466, MGI:2685584, RIKEN cDNA A530025K05 gene, acetyl-CoA carboxylase, acetyl-Coenzyme A carboxylase, gene model 738, (NCBI)	RIKEN cDNA 9230019H11 gene	
Acaca	NM_133360.2	AA960361, AU018452, C79855, LCAD, MGD-MRK-1023, MGI:2138138, MGI:2138418, MGI:2138684, expressed sequence	acetyl-Coenzyme A carboxylase alpha	
Acadl	NM_007381.3	AA960361, expressed sequence AU018452, expressed sequence C79855	acyl-Coenzyme A dehydrogenase, long-chain	
Acadvl	NM_017366.2	VLCAD	acyl-Coenzyme A dehydrogenase, very long chain	
Acat2	NM_009338.3	AW742799, MGD-MRK-1029, MGD-MRK-14817, MGD-MRK-14828, MGI:2147098, MGI:98537, Tcp-1x, Tcp1-rs1, expressed sequence	acetyl-Coenzyme A acetyltransferase 2	
Acot3	NM_134246.3	AW742799, l-complex protein 1, related sequence 1	acyl-CoA thioesterase 3	
Acs13	NM_001136222.1	AW108394, MGI:2145005, PTE-1a, Pte2a, expressed sequence	acyl-CoA synthetase long-chain family member 3	
Acs14	NM_207625.2	AW108394, peroxisomal acyl-CoA thioesterase 2A	acyl-CoA synthetase long-chain family member 4	
Acs16	NM_001033598.1	9430020A05Rik, ACS4, AU018108, FacI4, Lacs4, MGI:2147955, RIKEN cDNA 9430020A05 gene, expressed sequence AU018108, fatty acid-Coenzyme A ligase, long chain 4	acyl-CoA synthetase long-chain family member 6	
Adh1	NM_007409.3	A330035H04Rik, AW050338, FacI6, LacsI, MGI:2144490, MGI:2444956, RIKEN cDNA A330035H04 gene, expressed sequence AW050338, fatty acid Coenzyme A ligase, long chain 6, long-chain acyl-CoA synthetase-like	alcohol dehydrogenase 1 (class I)	
Adora2a	NM_009630.3	ADH-AA, AI194826, Adh-1, Adh-1-t, Adh-1e, Adh-1t, Adh1-e, Adh1-t, Adh1t, MGD-MRK-1111, MGD-MRK-1112, MGD-MRK-1113, MGD-MRK-1115, MGD-MRK-1120, MGD-MRK-1121, MGD-MRK-1123, MGD-MRK-1124, MGI:2139643, MGI:87922, MGI:87924, MGI:87925, alcohol dehydrogenase 1 complex, alcohol dehydrogenase 1 temporal, alcohol dehydrogenase 1 temporal, liver, alcohol dehydrogenase 1, electrophoretic, class I alcohol dehydrogenase, expressed sequence AI194826	adenosine A2a receptor	
Adora2b	NM_007413.4	A2AAR, A2a, Rs, A2aR, AA2AR, ARA2A, MGD-MRK-16163	adenosine A2b receptor	
Ahr	NM_013464.4	A2BAR, A2BR, A2b, A2b, Rs, AA2BR, AI480866, AI605384, ARA2B, MGD-MRK-16164, MGI:2144194, MGI:2144239, expressed sequence AI480866, expressed sequence AI605384	aryl-hydrocarbon receptor	
Aifm1	NM_012019.2	Ah, Ahh, Ahre, In, MGD-MRK-11402, MGD-MRK-1198, MGD-MRK-1219, MGD-MRK-32082, MGI:895073, aromatic hydrocarbon responsiveness, aryl hydrocarbon hydroxylase, bHLHe76, dioxin receptor, inflammatory reactivity	apoptosis-inducing factor, mitochondrion-associated 1	
Ak4	NM_009647.5	AIF, AIFsh2, Hq, MGD-MRK-10928, MGI:96222, Pdc8, apoptosis-inducing factor, harlequin, programmed cell death 8	adenylate kinase 4	
Akt1	NM_001165894.1	Ak-3, Ak-4, Ak31, D4Erd274e, DNA segment, Chr 4, ERATO Doi 274, expressed, MGD-MRK-1242, MGD-MRK-1243, MGD-MRK-1246, MGD-MRK-1247, MGI:1098752, MGI:87980, adenylate kinase 3-like 1	thymoma viral proto-oncogene 1	
Akt2	NM_001110208.1	Akt, MGD-MRK-1257, PKB, PKB/Akt, PKBalpha	thymoma viral proto-oncogene 2	
Akt3	NM_011785.3	2410016A19Rik, AW554154, MGD-MRK-28173, MGI:1923730, MGI:2142261, PKB, PKBbeta, RIKEN cDNA 2410016A19 gene, expressed sequence AW554154	thymoma viral proto-oncogene 3	
Aldh1a1	NM_013467.3	AI851531, D930002M15Rik, MGI:2138357, MGI:3628555, Nmf350, PKB gamma, RIKEN cDNA D930002M15 gene, expressed sequence	aldehyde dehydrogenase family 1, subfamily A1	
Aldh1a3	NM_053080.3	ALDH1, Ahd-2, Ahd2, Aldh1, E1, MGD-MRK-1206, MGD-MRK-1213, MGD-MRK-16383, MGI:99601, Raldh1, aldehyde dehydrogenase 1, liver cytosolic (class 1), aldehyde dehydrogenase 2, cytoplasmic	aldehyde dehydrogenase family 1, subfamily A3	
Aldh1b1	NM_028270.4	ALDH6, RALDH3, V1, retinaldehyde dehydrogenase 3	aldehyde dehydrogenase 1 family, member B1	
Aldh3a1	NM_007436.2	2700007F14Rik, RIKEN cDNA 2700007F14 gene	aldehyde dehydrogenase family 3, subfamily A1	
Aldh3b2	NM_001177438.1	Ahd-4, Ahd4, Aldh, Aldh3, MGD-MRK-1209, MGD-MRK-1216, MGD-MRK-1275, MGD-MRK-16381, MGI:87993, MGI:99599, aldehyde dehydrogenase, aldehyde dehydrogenase 3, stomach cytosolic (class 3), aldehyde dehydrogenase 4	aldehyde dehydrogenase 3 family, member B2	
Aldoa	NM_007438.4	AI848594, C130048D07Rik, RIKEN cDNA C130048D07 gene, expressed sequence AI848594	aldolase A, fructose-bisphosphate	Aldoat2 (NM_001277340)
Aldob	NM_144903.2	Aldo-1, Aldo1, MGD-MRK-1276, MGD-MRK-1278, aldolase 1 [Aldo-A isoform, skeletal muscle, brain]	aldolase B, fructose-bisphosphate	
Alox5	NM_009662.2	Aldo-2, Aldo2, BC016435, MGD-MRK-1277, MGD-MRK-1279, MGI:2387622, cDNA sequence BC016435	arachidonate 5-lipoxygenase	
Amh	NM_007445.2	5-LO, 5-LOX, 5LO, SLX, AI850497, MGD-MRK-1286, MGI:2141502, expressed sequence AI850497	anti-Mullerian hormone	
Anapc4	NM_024213.2	MGD-MRK-1297, MIS, Mullerian inhibiting substance	anaphase promoting complex subunit 4	
Angpt1	NM_009640.3	2610306D21Rik, APC4, D5Erd249e, DNA segment, Chr 5, ERATO Doi 249, expressed, MGI:1915174, RIKEN cDNA 2610306D21 gene	angiopoietin 1	
Aph1a	NM_146104.2	1110046O21Rik, Ang-1, Angiopoietin-1, MGD-MRK-37492, MGI:1916073, RIKEN cDNA 1110046O21 gene, ang1	aph1 homolog A, gamma secretase subunit	
Apob	NM_009693.2	6530402N02Rik, MGI:1923476, RIKEN cDNA 6530402N02 gene	apolipoprotein B	
Apoc3	NM_023114.3	AI315052, MGD-MRK-1370, MGI:2144785, apob-100, apob-48, expressed sequence AI315052	apolipoprotein C-III	
Aqp1	NM_007472.2	MGD-MRK-1371, MGD-MRK-1374	aquaporin 1	
Aqp7	NM_007473.4	CHIP28, MGD-MRK-24069	aquaporin 7	
Arg1	NM_007482.3	AQP7L, AQPap	arginase, liver	
Asb4	NM_023048.5	AI, AI256583, Arg-1, MGD-MRK-1392, MGD-MRK-1393, MGI:2143548, PGIF, expressed sequence AI256583	ankyrin repeat and SOCS box-containing 4	
Atf4	NM_009716.2	8430401O13Rik, AV117194, AW060255, MGI:1921773, MGI:2141620, MGI:2141641, RIKEN cDNA 8430401O13 gene, expressed sequence	activating transcription factor 4	
Atm	NM_007499.2	AV117194, expressed sequence AW060255	ataxia telangiectasia mutated	

Atp2a2	NM_001110140.3	9530097L16Rik,D5Wsu150e,DNA segment, Chr 5, Wayne State University 150, expressed, MGD-MRK-1463, MGD-MRK-35783, MGI:107317, MGI:2441754, RIKEN cDNA 9530097L16 gene, SERCA2, SERCA2B, Serca2a, sarco/endoplasmic reticulum Ca2+-ATPase 2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
Atp6v1g3	NM_177397.3		ATPase, H+ transporting, lysosomal V1 subunit G3
Atp7a	NM_001109757.2	Blo, MGD-MRK-12339, MGD-MRK-1578, MGD-MRK-16161, MNK, Menkes protein, Mo, blotchy, br, mottled	ATPase, Cu++ transporting, alpha polypeptide
Atr	NM_019864.1	MGD-MRK-37064	ataxia telangiectasia and Rad3 related
B4galt1	NM_022305.4	AA407245, B-1, 4-GalT1, GalT, Ggtb, Ggtb2, MGD-MRK-10067, MGI:2140118, MGI:891991, b1, 4-Galactosyltransferase I, beta 1, 4-Galactosyltransferase I, beta-1, 4-GalT1, expressed sequence	UDP-Gal:betaGlcNAc beta 1, 4-galactosyltransferase, polypeptide 1
Bak1	NM_007523.2	Bak, N-Bak	BCL2-antagonist/killer 1
Batf	NM_016767.2	B-ATF, SFA-2	basic leucine zipper transcription factor, ATF-like
Bax	NM_007527.3	MGD-MRK-16487	BCL2-associated X protein
Bcl2	NM_009741.3	AW986256, Bcl-2, C430015F12Rik, D630044D05Rik, D830018M01Rik, MGD-MRK-1524, MGD-MRK-1526, MGI:2138629, MGI:2442315, MGI:2444619, MGI:2444682, RIKEN cDNA C430015F12 gene, RIKEN cDNA D630044D05 gene, RIKEN cDNA D830018M01 gene, expressed sequence AW986256	B cell leukemia/lymphoma 2
Bcl2l1	NM_009743.4	Bcl(XL), Bcl-XL, Bcl-Xs, BclX, MGD-MRK-1527, bcl-x	BCL2-like 1
Bcl6	NM_009744.3	B-cell leukemia/lymphoma 5, Bcl5, MGD-MRK-35648, MGI:1277984	B cell leukemia/lymphoma 6
Bid	NM_007544.3	2700049M22Rik, A1875481, AU022477, MGD-MRK-37130, MGI:1919829, MGI:2141512, MGI:2141571, RIKEN cDNA 2700049M22 gene, expressed sequence A1875481, expressed sequence AU022477	BH3 interacting domain death agonist
Blk	NM_007549.2	MGD-MRK-1577	B lymphoid kinase
Bmp2	NM_007553.2	A1467020, Bmp2a, MGD-MRK-1593, MGD-MRK-1595, MGI:2138975, bone morphogenetic protein 2a, expressed sequence A1467020	bone morphogenetic protein 2
Bmp8b	NM_007559.5	MGD-MRK-35801, Op3	bone morphogenetic protein 8b
Bpi	NM_177850.3	9230105K17Rik, Bpifd1, RIKEN cDNA 9230105K17 gene	bactericidal permeability increasing protein
Brwd1	NM_176928.1	5330419I02Rik, D530019K2ORik, G1-403-16, MGI:1926107, MGI:2442152, MGI:3512790, RIKEN cDNA 5330419I02 gene, RIKEN cDNA D530019K20 gene, WD repeat domain 9, Wdr9, repro5, reproductive mutant 5, JAX Reproductive Mutagenesis Program	bromodomain and WD repeat domain containing 1
Bst2	NM_198095.2	2310015I10Rik, Bst-2, C87040, GREG, MGI:2142879, RIKEN cDNA 2310015I10 gene, expressed sequence C87040	bone marrow stromal cell antigen 2
Btk	NM_013482.2	A1528679, Bruton's tyrosine kinase, MGD-MRK-15473, MGD-MRK-1683, MGI:2147899, X-linked immune deficiency, expressed sequence A1528679, xid	Bruton agammaglobulinemia tyrosine kinase
Btla	NM_001037719.2		B and T lymphocyte associated
Btrc	NM_009771.3	Beta-Trcp1, Fbw1a, SCF b-TRCP, Slimb, beta-TrCP	beta-transducin repeat containing protein
Cacnb2	NM_023116.3	AW060387, BC056183, Cavbeta2, Cchb2, MGD-MRK-24068, MGI:103200, MGI:2139283, MGI:3583767, cDNA sequence BC056183, calcium channel, B2 subunit, expressed sequence AW060387	calcium channel, voltage-dependent, beta 2 subunit
Cacnb4	NM_146123.3	3110038O15Rik, Cchb4, MGD-MRK-11801, MGD-MRK-24185, MGI:1920370, RIKEN cDNA 3110038O15 gene, calcium channel, B4 subunit, lethargic, lh	calcium channel, voltage-dependent, beta 4 subunit
Calm1	NM_009790.5	A1256814, A1327027, A1461935, A1024000, MGD-MRK-1734, MGI:2144778, MGI:2144797, MGI:2144834, MGI:2144926, expressed sequence A1256814, expressed sequence A1327027, expressed sequence A1461935, expressed sequence A1024000	calmodulin 1
Camk2d	NM_001025439.1	2810011D23Rik, 8030469K03Rik, CaMK II, MGC:60852, MGI:1923610, MGI:1924420, RIKEN cDNA 2810011D23 gene, RIKEN cDNA 8030469K03 gene	calcium/calmodulin-dependent protein kinase II, delta
Card11	NM_175362.2	0610008L17Rik, 2410011D02Rik, BIMP3, CARMA1, MGI:1915575, RIKEN cDNA 0610008L17 gene, RIKEN cDNA 2410011D02 gene	caspace recruitment domain family, member 11
Casp3	NM_009810.2	A830040C14Rik, AC-3, Apopain, CC3, CPP32, Caspase-3, MGD-MRK-36315, MGI:2442726, MGI:3717434, RIKEN cDNA A830040C14 gene, Yama, melody, mldy	caspace 3
Casp8	NM_009812.2	Caspase-8, FLICE, MACH, Mch5	caspace 8
Casp9	NM_015733.5	A1115399, AW493809, Caspase-9, ICE-LAP6, MGI:2140188, MGI:2140578, Mch6, expressed sequence A1115399, expressed sequence AW493809	caspace 9
Cbl	NM_007619.2	4732447J05Rik, Casitas B-lineage lymphoma 2, Cbl-2, MGD-MRK-1779, MGD-MRK-1780, MGD-MRK-1782, MGI:2443367, RIKEN cDNA 4732447J05 gene, c-Cbl	Casitas B-lineage lymphoma
Cblb	NM_001033238.1	A1429560, A1851073, Cbl-b, MGI:2146506, expressed sequence A1429560, expressed sequence A1851073	Casitas B-lineage lymphoma b
Ccl12	NM_011331.2	MCP-5, MGD-MRK-37263, Scya12, small inducible cytokine A12	chemokine (C-C motif) ligand 12
Ccl2	NM_011333.3	A1323594, HC11, MCAF, MCP-1, MCP1, MGD-MRK-14333, MGD-MRK-14413, MGI:2144120, SMC-CF, Scya2, Sigle, expressed sequence A1323594, monocyte chemoattractant protein-1, monocyte chemoattractant protein, small inducible cytokine A2, small inducible gene JE	chemokine (C-C motif) ligand 2
Ccl20	NM_016960.1	CKb4, MIP-3A, MIP-3[a], MIP3A, ST38, Scya20, exodus-1, small inducible cytokine subfamily A20	chemokine (C-C motif) ligand 20
Ccl21a/b/c	NM_011124.4		chemokine (C-C motif) ligand 21a/b/c (serine)
Ccl22	NM_009137.2	ABCD-1, MDC, Scya22, small inducible cytokine subfamily A22	chemokine (C-C motif) ligand 22
Ccl3	NM_011337.2	A1323804, G0519-1, LD78alpha, MGD-MRK-12241, MGD-MRK-14334, MGI:2144123, MIP-1 alpha, MIP-1alpha, MIP1-(a), MIP1-alpha, Mip1a, Scya3, expressed sequence A1323804, macrophage inflammatory protein-1 alpha, macrophage inflammatory protein-1alpha, small inducible cytokine A3	chemokine (C-C motif) ligand 3
Ccl4	NM_013652.1	AT744.1, Act-2, MGD-MRK-12242, MGD-MRK-14335, MIP-1 beta, MIP-1B, Mip1b, Scya4, macrophage inflammatory protein-1 beta, small inducible cytokine A4	chemokine (C-C motif) ligand 4
			Gm10591 (NM_001193668), LOC100041504 (NM_001374239), Gm13304 (NM_001193666), Ccl21d (NM_001270360), Gm1987 (NM_001193667), LOC100041593 (NM_001378661)

Ccl5	NM_013653.1	MGD-MRK-14336,MuRantes,RANTES,S1Sd,Scya5,TCP228,small inducible cytokine A5	chemokine (C-C motif) ligand 5
Ccna1	NM_007628.3	MGD-MRK-37078	cyclin A1
Ccnb1	NM_172301.3	Ccnb1-rs13,Cybc-4,MGC:18763,MGD-MRK-1814,MGD-MRK-2269,cyclin B1, related sequence 13,cyclin B4	cyclin B1
Ccnb3	NM_183015.3		cyclin B3
Ccnc	NM_016746.4	AI451004,AU020987,MGI:2140293,MGI:2140460,expressed sequence AI451004,expressed sequence AU020987	cyclin C
Ccnt1	NM_001368702.1	2810478G24Rik,AI115585,Cyct1,MGI:1920080,MGI:2145948,RIKEN cDNA 2810478G24 gene,expressed sequence AI115585	cyclin T1
Ccnt2	NM_028399.1	2900041118Rik,C81304,Cyct2,MGI:2148067,RIKEN cDNA 2900041118 gene,expressed sequence C81304	cyclin T2
Ccr1	NM_009912.4	Cmkbr1,MGD-MRK-26055,chemokine (C-C) receptor 1	chemokine (C-C motif) receptor 1
Ccr2	NM_009915.2	CC-CR-2,CCR2A,CCR2B,CKR2,CKR2A,CKR2B,Cmkbr2,MGD-MRK-33876	chemokine (C-C motif) receptor 2
Ccr5	NM_009917.5	CD195,Cmkbr5,MGD-MRK-35643,chemokine (C-C) receptor 5	chemokine (C-C motif) receptor 5
Ccr7	NM_007719.2	CD197,Cmkbr7,Eb11,Eb11h,Epstein-Barr virus induced gene 1 homolog,MGD-MRK-23848,chemokine (C-C) receptor 7	chemokine (C-C motif) receptor 7
Cd101	NM_001167906.1	Gm1016,Gm734,Igsf2,LOC381460,MGI:2685580,gene model 1016,(NCBI),gene model 734,(NCBI),immunoglobulin superfamily, member 2	CD101 antigen
Cd14	NM_009841.3	MGD-MRK-1831	CD14 antigen
Cd160	NM_001163496.1	AU045688,By55,MGI:2139919,expressed sequence AU045688	CD160 antigen
Cd163	NM_053094.2		CD163 antigen
Cd180	NM_008533.2	Ly78,RP105,lymphocyte antigen 78	CD180 antigen
Cd19	NM_009844.2	AW495831,MGD-MRK-1833,MGI:2142241,expressed sequence AW495831	CD19 antigen
Cd200r1	NM_021325.3	CD200R,Mox2r,OX2R,antigen identified by monoclonal antibody MRC OX-2 receptor	CD200 receptor 1
Cd209e	NM_130905.2	SIGNR4,mSIGNR4	CD209e antigen
Cd22	NM_001043317.2	B-lymphocyte antigen 8,Lyb-8,Lyb8,MGD-MRK-12060,MGD-MRK-12066,MGD-MRK-1839	CD22 antigen
Cd226	NM_001039149.1	BC051526,DNAM-1,DNAM1,Pta1,TLISA1	CD226 antigen
Cd244a	NM_018729.2	2B4,C9.1,CD244 molecule,CD244 natural killer cell receptor 2B4,Cd244,F730046O15Rik,MGD-MRK-38339,MGI:2442562,Nmrk,RIKEN cDNA F730046O15 gene,non MHC restricted killing associated	CD244 molecule A
Cd27	NM_001042564.1	MGD-MRK-1844,S152,Tnfrsf7,Tp55,tumor necrosis factor receptor superfamily, member 7	CD27 antigen
Cd274	NM_021893.2	B7-H1,PD-L1,Pdcd1lg1,programmed cell death 1 ligand 1	CD274 antigen
Cd276	NM_133983.4	6030411F23Rik,AU016588,B7 homolog 3,B7-H3,B7RP-2,B7h3,MGI:2143194,RIKEN cDNA 6030411F23 gene,expressed sequence AU016588	CD276 antigen
Cd28	NM_007642.4	MGD-MRK-1845	CD28 antigen
Cd33	NM_001111058.1	MGD-MRK-16204,Siglec-3,gp67	CD33 antigen
Cd38	NM_007646.5	CD38 antigen, related sequence 1,Cd38-rs1,MGD-MRK-1851,MGD-MRK-36041	CD38 antigen
Cd3d	NM_013487.2	MGD-MRK-14696,MGD-MRK-1852,T3-delta chain,T3d	CD3 antigen, delta polypeptide
Cd3e	NM_007648.4	AI504783,CD3,CD3epsilon,MGD-MRK-14697,MGD-MRK-1853,MGI:2143086,T3-epsilon chain,T3e,expressed sequence AI504783	CD3 antigen, epsilon polypeptide
Cd3g	NM_009850.2	Ctg-3,Ctg3,MGD-MRK-14698,MGD-MRK-1854,MGD-MRK-2212,MGD-MRK-2213,T3-gamma chain,T3g	CD3 antigen, gamma polypeptide
Cd4	NM_013488.2	L3T4,Ly-4,MGD-MRK-11981,MGD-MRK-1858,lymphocyte antigen 4	CD4 antigen
Cd40	NM_011611.2	AI326936,Bp50,MGD-MRK-1859,MGI:2138913,Tnfrsf5,expressed sequence AI326936,p50,tumor necrosis factor receptor superfamily, member 5	CD40 antigen
Cd40lg	NM_011616.2	CD154,CD40 antigen ligand,Cd40L,Cd40l,HIGM1,IMD3,Ly-62,Ly62,MGD-MRK-12004,MGD-MRK-12047,MGD-MRK-1860,T-BAM,Tnfrsf5,gp39,lymphocyte antigen 62,tumor necrosis factor (ligand) superfamily, member 5	CD40 ligand
Cd48	NM_007649.4	AI449234,AW610730,B-cell membrane protein 1,BCM1,BLAST-1,Bcm-1,MGD-MRK-1529,MGD-MRK-1865,MGI:2138248,MGI:2138623,Sgp-60,expressed sequence AI449234,expressed sequence AW610730	CD48 antigen
Cd5	NM_007650.3	Ly-1,Ly-12,Ly-A,Lyt-1,MGD-MRK-11947,MGD-MRK-11950,MGD-MRK-12073,MGD-MRK-1866,T-lymphocyte antigen 1,lymphocyte antigen 1,lymphocyte antigen 12	CD5 antigen
Cd6	NM_001037801.2	MGD-MRK-24451	CD6 antigen
Cd68	NM_001291058.1	Lamp4,MGD-MRK-1868,Scard1,gp110,macrosialin	CD68 antigen
Cd69	NM_001033122.3	5830438K24Rik,AI452015,AIM,EST AI452015,MGD-MRK-1869,MGI:1889838,MGI:1923299,RIKEN cDNA 5830438K24 gene,VEA CD27LG,Ki-24 antigen,Tnfrsf7,tumor necrosis factor (ligand) superfamily, member 7	CD69 antigen
Cd70	NM_011617.1	B-lymphocyte antigen 2,Ly-19,Ly-32,Ly-m19,Lyb-2,MGD-MRK-11957,MGD-MRK-11973,MGD-MRK-12012,MGD-MRK-12054,MGD-MRK-1871,lymphocyte antigen 19,lymphocyte antigen 32,lymphocyte antigen m19	CD70 antigen
Cd72	NM_001110320.1	B29,Ig-beta,Igb,Igbeta,MGD-MRK-11225,immunoglobulin-associated beta	CD72 antigen
Cd79b	NM_008339.2		CD79B antigen
Cd80	NM_009855.2	B7-1,B7.1,CD28 antigen ligand,Cd28l,Ly-53,Ly53,MGD-MRK-11996,MGD-MRK-12039,MGD-MRK-1846,MGD-MRK-18582,lymphocyte antigen 53	CD80 antigen
Cd84	NM_001252472.1	A130013D22Rik,Cdw84,MGI:2444272,RIKEN cDNA A130013D22 gene,SLAMF5	CD84 antigen
Cd86	NM_019388.3	B7-2,B7.2,B70,CD28 antigen ligand,Cd28l2,Ly-58,Ly58,MB7-2,MGD-MRK-12000,MGD-MRK-12043,MGD-MRK-18572,MGD-MRK-18580,lymphocyte antigen 58	CD86 antigen
Cd8a	NM_001081110.2	BB154331,Ly-2,Ly-35,Ly-B,Lyt-2,MGD-MRK-11958,MGD-MRK-11976,MGD-MRK-12074,MGD-MRK-1872,MGI:2141733,T-lymphocyte antigen 2,expressed sequence BB154331,lymphocyte antigen 2,lymphocyte antigen 35	CD8 antigen, alpha chain
Cd8b1	NM_009858.2	Ly-3,Ly-C,Lyt-3,MGD-MRK-11970,MGD-MRK-12075,MGD-MRK-1873,T-lymphocyte antigen 3,lymphocyte antigen 3	CD8 antigen, beta chain 1
Cd96	NM_032465.2	1700109112Rik,MGI:1920816,RIKEN cDNA 1700109112 gene,Tactile	CD96 antigen
Cdc14b	NM_172587.3	2810432N10Rik,A530086E13Rik,AA472821,MGI:1919423,MGI:3034490,RIKEN cDNA 2810432N10 gene,RIKEN cDNA A530086E13 gene,expressed sequence AA472821	CDC14 cell division cycle 14B
Cdc16	NM_027276.2	270007112Rik,2810431D22Rik,MGI:1919860,RIKEN cDNA 270007112 gene,RIKEN cDNA 2810431D22 gene	CDC16 cell division cycle 16

Cdc20	NM_023223.2	2310042N09Rik,C87100,MGI:1913810,MGI:2146726,RIKEN cDNA 2310042N09 gene,expressed sequence C87100,p55CDC	cell division cycle 20
Cdc25a	NM_007658.3	D9Ertcd393e,DNA segment, Chr 9, ERATO Doi 393, expressed,MGD-MRK-24066,MGI:1196333	cell division cycle 25A
Cdc42	NM_009861.1	A1747189,AU018915,MGD-MRK-33903,MGI:2140354,MGI:2140443,expressed sequence A1747189,expressed sequence AU018915	cell division cycle 42
Cdh1	NM_009864.2	AA960649,E-cad,E-cadherin,Ecad,L-CAM,MGD-MRK-15349,MGD-MRK-1881,MGD-MRK-19360,MGI:2142457,UM,Um,expressed sequence AA960649,uvomorulin	cadherin 1
Cdkn1c	NM_009876.4	AL024410,CDKI,Kip2,MGD-MRK-25998,MGI:2142098,expressed sequence AL024410,p57Kip2	cyclin-dependent kinase inhibitor 1C (P57)
Cdkn2c	NM_007671.2	C77269,INK4c,MGD-MRK-33058,MGI:2140654,expressed sequence C77269,p18,p18INK4c	cyclin dependent kinase inhibitor 2C
Cdyl	NM_001123386.1	AI325931,MGI:2145214,expressed sequence AI325931	chromodomain protein, Y chromosome-like
Ceacam1	NM_001039185.1	Bgp,Bgp1,C-CAM,CD66a,Ccl,Cea-1,Cea-7,Cea1,Cea7,Hv-2,Hv2,MGD-MRK-11017,MGD-MRK-11019,MGD-MRK-12228,MGD-MRK-1555,MGD-MRK-16442,MGD-MRK-1902,MGD-MRK-1908,MGD-MRK-1909,MGD-MRK-1915,MGI:88366,MGI:88372,MGI:96289,MGI:99657,MHVR1,Mhv-1,biliary glycoprotein,biliary glycoprotein 1,carcinoembryonic antigen 1,carcinoembryonic antigen 7,hepatitis virus (MHV-4) susceptibility,mCEA1,mmCGM1,mmCGM2,resistance to MHV (A59) replication in macrophages	carcinoembryonic antigen-related cell adhesion molecule 1
Ceacam2	NM_007543.4	AI267129,Bgp2,MGD-MRK-16441,MGI:2141896,MGI:99656,biliary glycoprotein 2,expressed sequence AI267129	carcinoembryonic antigen-related cell adhesion molecule 2
Ceacam3	NM_054059.1	EG384557,MGI:1891356,Psq24,cea12,predicted gene, EG384557,pregnancy-specific glycoprotein 24	carcinoembryonic antigen-related cell adhesion molecule 3
Cebp	NM_009883.4	C/EBP BETA,C/EBPbeta,CRP2,IL-6DBP,LAP,LIP,MGD-MRK-12827,MGD-MRK-1917,MGI:97310,NI-IL6,NF-M,Nfl6,nuclear protein Ii6	CCAAT/enhancer binding protein (C/EBP), beta
Cebpd	NM_007679.4	MGD-MRK-24458	CCAAT/enhancer binding protein (C/EBP), delta
Cer1	NM_009887.2	Cerberus-like,Cer1,Cer1,Cerr1,MGI:894319,cer-1,cerberus-related 1 2310024N18Rik,A430105C05Rik,AI646576,AU021929,Cash,Casper,Flip,MGI:1096876,MGI:1916820,MGI:1925024,MGI:2138307,MGI:2138466,RIKEN cDNA 2310024N18 gene,RIKEN cDNA A430105C05 gene,c-Flip,caspase homolog,expressed sequence AI646576,expressed sequence AU021929	cerberus 1, DAN family BMP antagonist
Cflar	NM_207653.3		CASP8 and FADD-like apoptosis regulator
Chk1	NM_007691.5	C85740,Chk1,MGI:2143427,expressed sequence C85740	checkpoint kinase 1
Chrd	NM_009893.2	Chd	chordin
Chrdl1	NM_001114385.1	BB139951,CHL1,MGI:2148039,Nrln1,VOPT,expressed sequence BB139951,neuralin 1,ventroptin-alpha,ventroptin-beta	chordin-like 1
Chuk	NM_001162410.1	AI256658,Chuk1,IKK[a],IKKalpha,IkappaB kinase alpha,MGD-MRK-16258,MGI:2147493,expressed sequence AI256658	conserved helix-loop-helix ubiquitous kinase
Ciita	NM_007575.2	C2ta,EG669998,Gm9475,MGD-MRK-37489,MGI:3712178,predicted gene 9475,predicted gene, EG669998	class II transactivator
Cish	NM_009895.4	AI385595,CIS1,Cis,F23,MGD-MRK-24025,MGI:2143029,cytokine-inducible SH2 protein,expressed sequence AI385595	cytokine inducible SH2-containing protein
Clca1	NM_017474.2	Clca3,chloride channel calcium activated 3,gob-5,gob5	chloride channel accessory 1
Cldf1	NM_019952.3	B-cell stimulating factor 3,Bsf3,CLC,NNT-1/BSF-3	cardiotrophin-like cytokine factor 1
Cmlkr1	NM_008153.3	Chemr23,G-protein coupled receptor 27,Gpcr27,MGD-MRK-39602	chemokine-like receptor 1
Cntf	NM_170786.2	AI429687,MGD-MRK-2043,MGI:2147531,expressed sequence AI429687	ciliary neurotrophic factor
Cpa3	NM_007753.2	MC-CPA,MGD-MRK-2103,mMC-CPA,mast cell carboxypeptidase A 1110019K20Rik,AV009555,MGI:2141609,RIKEN cDNA 1110019K20 gene,expressed sequence AV009555	carboxypeptidase A4
Cpa4	NM_027926.2	9630004I06Rik,CPT I-C,MGI:2442291,RIKEN cDNA 9630004I06 gene	carnitine palmitoyltransferase 1c
Cpt1c	NM_001252470.1	C3DR,CD21,CD35,Cr-1,Cr-2,Cr1,MGD-MRK-2122,MGD-MRK-2123,MGD-MRK-2124,MGD-MRK-2125,complement receptor 1	complement receptor 2
Cr2	NM_007758.2	BBF2H7,C530025K05Rik,RIKEN cDNA C530025K05 gene	cAMP responsive element binding protein 3-like 2
Creb3l2	NM_178661.4	9430076C15Rik,Crebpa,D430026C09Rik,MGI:2443551,RIKEN cDNA 9430076C15 gene,RIKEN cDNA D430026C09 gene	cAMP responsive element binding protein 5
Creb5	NM_172728.2		
Crebbp	NM_001025432.1	AW558298,CBP,KAT3A,MGI:2146668,expressed sequence AW558298	CREB binding protein
Crif1	NM_018827.2	CLF-1,CRLM3,cytokine receptor like molecule 3	cytokine receptor-like factor 1
Crif2	NM_001164735.1	Ly114,MGI:1355298,Tpte2,Tslpr,lymphocyte antigen 114,thymic stromal-derived lymphopoietin, receptor,transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	cytokine receptor-like factor 2
Crtam	NM_019465.2	class I-restricted T cell-associated molecule	cytotoxic and regulatory T cell molecule
Csf1	NM_001113530.1	C87615,CSF-1,Csfm,M-CSF,MGD-MRK-13034,MGD-MRK-2191,MGI:2140102,MGI:88534,colony stimulating factor, macrophage,colony-stimulating factor-1,expressed sequence C87615,op,osteopetrosis	colony stimulating factor 1 (macrophage)
Csf1r	NM_001037859.2	AI323359,CD115,CSF-1R,Csfmr,Fim-2,Fim2,Fms,Friend MuLV integration site 2,M-CSFR,MGD-MRK-2192,MGD-MRK-9798,MGD-MRK-9845,MGI:2147208,MGI:88535,c-fms oncogene,expressed sequence AI323359	colony stimulating factor 1 receptor
Csf2	NM_009969.4	Csfgm,GM-CSF,Gm-CSF,MGD-MRK-2187,MGI-IGM,MGI:88531,colony stimulating factor, granulocyte macrophage	colony stimulating factor 2 (granulocyte-macrophage)
Csf3	NM_009971.1	Csfg,G-CSF,MGD-MRK-2186,MGI-IG,MGI:88530,colony stimulating factor, granulocyte	colony stimulating factor 3 (granulocyte)
Csf3r	NM_001252651.1	Cd114,Csfgr,G-CSFR,MGD-MRK-2190,MGI:88533,colony stimulating factor, granulocyte receptor	colony stimulating factor 3 receptor (granulocyte)
Ctbp2	NM_001170744.1	AA407280,D7Ertd45e,DNA segment, Chr 7, ERATO Doi 45, expressed,Gtrge06,MGI:1098619,MGI:2141805,MGI:894664,Ribeye,expressed sequence AA407280, gene trap ROSA b-geo 6	C-terminal binding protein 2
Ctf1	NM_007795.1	CT-1,MGD-MRK-32155	cardiotrophin 1
Ctla4	NM_009843.4	CD152 antigen,Cd152,Ctla-4,Ly-56,MGD-MRK-2224,MGD-MRK-2234,cytotoxic T lymphocyte-associated protein 4	cytotoxic T-lymphocyte-associated protein 4
Ctsw	NM_009985.4	lymphopain	cathepsin W
Cul1	NM_012042.3	1300003D18Rik,4932411N15Rik,AI327301,MGI:1922970,MGI:2147215,RIKEN cDNA 1300003D18 gene,RIKEN cDNA 4932411N15 gene,expressed sequence AI327301	cullin 1
Cul2	NM_029402.3	Fsp,GRO1 oncogene,Gro1,KC,KC/GRO-alpha,MGD-MRK-12226,MGD-MRK-37105,MGD-MRK-9878,Mgsa,N51,Scyb1,fibroblast secretory protein,melanoma growth stimulatory activity	chemokine (C-X-C motif) ligand 1
Cxcl1	NM_008176.3	H174,I-TAC,IP9,ITAC,SCYB9B,Scyb11,b-R1,betaR1,small inducible cytokine subfamily B (Cys-X-Cys), member 11	chemokine (C-X-C motif) ligand 11
Cxcl11	NM_019494.1		

		CINC-2a, GROb, Gro2, MGD-MRK-12243, MGD-MRK-14338, MGI:96991, MGI:98264, MIP-2, MIP-2a, Mgsa-b, Mip2, Scyb, Scyb2, macrophage inflammatory protein 2, small inducible cytokine B subfamily, small inducible cytokine subfamily, member 2	chemokine (C-X-C motif) ligand 2
Cxcl2	NM_009140.2		
Cxcl3	NM_203320.2	Dc1p1, Gm1960, gene model 1960, (NCBI) BB139920, CMK, MGD-MRK-33048, MGI:105379, MGI:2141267, Mig, Scyb9, crg-10, expressed sequence BB139920, monokine induced by gamma interferon, small inducible cytokine B subfamily (Cys-X-Cys), member 9	chemokine (C-X-C motif) ligand 3
Cxcl9	NM_008599.4		
Cxcr3	NM_009910.2	Cd183, Cmkar3, chemokine (C-X-C) receptor 3	chemokine (C-X-C motif) receptor 3
Cxcr6	NM_030712.4	BB217514, BONZO, MGI:2143371, STRL33, expressed sequence BB217514 2010013M14RIK, 2900009M21RIK, C130039D01RIK, CYLD1, MGI:1920125, MGI:2445104, RIKEN cDNA 2010013M14 gene, RIKEN cDNA 2900009M21 gene, RIKEN cDNA C130039D01 gene, mKIAA0849	chemokine (C-X-C motif) receptor 6
Cyld	NM_001276279.1	Cyp26, MGC:13860, P450RA, P450RAI, RAH, cytochrome P450, 26, retinoic acid, retinoic acid hydrolase	CYLD lysine 63 deubiquitinase
Cyp26a1	NM_007811.2		
Cyp26c1	NM_001105201.1	EG546726, MGI:3643384, predicted gene, EG546726	cytochrome P450, family 26, subfamily a, polypeptide 1
Cyp4a12a/b	NM_177406.3		
Cyp4a31/32	NM_001100181.1		
Cyp7a1	NM_007824.2	MGD-MRK-33776, cholesterol 7 alpha hydroxylase	cytochrome P450, family 4, subfamily a, polypeptide 12a/b
Cyp8b1	NM_010012.3	sterol 12-alpha-hydrolase	cytochrome P450, family 4, subfamily a, polypeptide 31/32
Dapp1	NM_011932.3	Bam32	cytochrome P450, family 7, subfamily a, polypeptide 1
Dcn	NM_007833.4	DC, MGD-MRK-8811, SLRR1B	cytochrome P450, family 8, subfamily b, polypeptide 1
Dctn6	NM_011722.3	AU044699, MGI:2142720, WS-3, expressed sequence AU044699, p27 AW146112, Dagk1, MGD-MRK-23787, MGI:2143820, expressed sequence AW146112	dual adaptor for phosphotyrosine and 3-phosphoinositides 1 decorin dynactin 6
Dgka	NM_016811.2		
Dgkz	NM_001166597.1	E130307B02RIK, MGI:2445090, RIKEN cDNA E130307B02 gene, mDGK[z]	diacylglycerol kinase alpha
Dhrs3	NM_011303.6	Rsdrl, retSDR1	diacylglycerol kinase zeta
Diablo	NM_023232.3	0610041G12RIK, 1700006L01RIK, AU040403, MGI:1923950, MGI:2141076, RIKEN cDNA 0610041G12 gene, RIKEN cDNA 1700006L01 gene, Smac, expressed sequence AU040403	dehydrogenase/reductase (SDR family) member 3
Dld	NM_007861.4	AI315664, AI746344, MGD-MRK-35921, MGI:2144786, MGI:2144881, branched chain alpha-keto acid dehydrogenase complex subunit E3, dihydrolipoyl dehydrogenase, expressed sequence AI315664, expressed sequence AI746344	diablo, IAP-binding mitochondrial protein
Dli3	NM_007866.2	MGD-MRK-13690, MGI:97819, pu, pudgy	dihydroliipoamide dehydrogenase
Dli4	NM_019454.3	Delta4	delta like canonical Notch ligand 3
Dnm1	NM_001025947.1	6330417M19RIK, AI450666, Dnmlp1, Drp1, MGI:1195987, MGI:2146435, RIKEN cDNA 6330417M19 gene, dynamin-like protein 1, expressed sequence AI450666, python	delta like canonical Notch ligand 4
Dnmt3a	NM_007872.4	AU015806, MGI:2144939, MGI:2145138, W91664, expressed sequence AU015806, expressed sequence W91664	dynamin 1-like
Dnmt3l	NM_001081695.2	D6Erd14e, DNA segment, Chr 6, ERATO Doi 14, expressed, MGI:1098798, ecat7	DNA methyltransferase 3A
Drap1	NM_024176.1	2310074H19RIK, RIKEN cDNA 2310074H19 gene AI449438, BC044798, MGI:2147542, RNF155, cDNA sequence BC044798, expressed sequence AI449438	DNA (cytosine-5-)-methyltransferase 3-like
Dtx4	NM_172442.3	3CH134, MGD-MRK-32161, MGI:2147160, MKP1, Ptpn16, U19515, erp, expressed sequence U19515, mkp-1, protein tyrosine phosphatase, non-receptor type 16	Dr1 associated protein 1 (negative cofactor 2 alpha)
Dusp1	NM_013642.3		
Dusp9	NM_029352.3	Mpk4, Pyst3	deltex 4, E3 ubiquitin ligase
Dvl1	NM_010091.3	MGD-MRK-8919	
Dydc1	NM_027094.1	1700029M23RIK, RIKEN cDNA 1700029M23 gene	dual specificity phosphatase 1
E2f1	NM_007891.4	E2F-1, MGD-MRK-18775, MGI:5485025	dual specificity phosphatase 9
E2f2	NM_177733.7		
E2f5	NM_007892.2	AU024671, E2F-5, MGD-MRK-32131, MGI:2139902, expressed sequence AU024671	dishevelled segment polarity protein 1
Echs1	NM_053119.2	C80529, MGI:2142345, expressed sequence C80529	DPY30 domain containing 1
EfnA1	NM_010107.4	AI325262, b61, EFL-1, Epl1, Eplg1, LERK-1, Lerk1, MGD-MRK-24110, MGI:2139679, eph-related receptor tyrosine kinase ligand 1, expressed sequence AI325262	E2F transcription factor 1
Egf	NM_010113.3	AI790464, MGD-MRK-9315, MGI:2139798, expressed sequence AI790464 9030024I15RIK, AI552599, Erbb, ErbB1, MGD-MRK-15422, MGD-MRK-15424, MGD-MRK-9322, MGD-MRK-9570, MGI:1890525, MGI:2144221, RIKEN cDNA 9030024I15 gene, Wa5, avian erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian erythroblastosis oncogene B, expressed sequence AI552599, wa-2, wa2, waved 2, waved 5	E2F transcription factor 2
Egfr	NM_207655.2	1300002P22RIK, HD, L-PBE, L-bifunctional enzyme, MFP, MFP1, MGI:1921397, RIKEN cDNA 1300002P22 gene 2310046H11RIK, AL024095, C85189, MGD-MRK-9338, MGI:1922955, MGI:2146118, MGI:2146304, RIKEN cDNA 2310046H11 gene, expressed sequence AL024095, expressed sequence C85189	E2F transcription factor 5
Ehhadh	NM_023737.3		
Eif4b	NM_145625.3		
Elovl2	NM_019423.2	AI317360, MGI:2145206, Ssc2, expressed sequence AI317360	E2F transcription factor 5
Elovl3	NM_007703.2	CIN-2, Cig30, cold inducible glycoprotein 30	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial
Elovl4	NM_148941.2		
Elovl7	NM_029001.5	9130013K24RIK, AI840082, MGI:2145289, RIKEN cDNA 9130013K24 gene, expressed sequence AI840082	ephrin A1
Entpd1	NM_001304721.1	2610206B08RIK, AA408691, CD39 antigen, Cd39, MGD-MRK-19713, MGI:1919726, MGI:2147438, NTPDase-1, RIKEN cDNA 2610206B08 gene, ectoapyrase, expressed sequence AA408691	epidermal growth factor
Entpd2	NM_009849.2	CD39 antigen-like 1, Cd39I1, NTPDase2 C77258, MGI:1313283, MGI:2143384, T-box brain gene 2, Tbr2, expressed sequence C77258	epidermal growth factor receptor
Eya1	NM_010136.3		
Eya4	NM_010167.5	MGD-MRK-38389, MGI:1891212, bor, branchiootorenal dysplasia B130023L16RIK, MGI:2442271, RIKEN cDNA B130023L16 gene	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase
Fabp1	NM_017399.4	Fabpl, L-FABP, MGC:13855, MGD-MRK-9706, fatty acid binding protein liver	eukaryotic translation initiation factor 4B
Fabp4	NM_024406.3	422/aP2, ALBP/aP2, Ap2, Lbpl, MGD-MRK-1345, MGD-MRK-36068, MGI:107500, adipocyte protein aP2, lipid binding protein-like	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 2

Fadd	NM_010175.6	MGD-MRK-38369,Mort1/FADD	Fas (TNFRSF6)-associated via death domain
Fas	NM_007987.2	AI196731,APO-1,CD95,MGD-MRK-11878,MGD-MRK-9711,MGI:2147489,TNF receptor superfamily member 6,TNFR6,Tnfrsf6,expressed sequence AI196731,lpr,lymphoproliferation APT1LG1,CD178,CD95L,Fas antigen ligand,Fas-L,MGD-MRK-10104,MGD-MRK-16013,Tnfrsf6,generalized lymphoproliferative disease,gld,tumor necrosis factor (ligand) superfamily, member 6	Fas (TNF receptor superfamily member 6)
FasL	NM_010177.3	AI595406,expressed sequence AI595406	Fas ligand (TNF superfamily, member 6)
Fbll1	NM_001004147.3	AI595406,expressed sequence AI595406	fibrillarlin-like 1
Fbp2	NM_007994.3	FBPase muscle,Fbp-1,MGD-MRK-9719,MGD-MRK-9721,fructose bisphosphatase 1	fructose bisphosphatase 2
Fbxw4	NM_013907.2	Dac,Fbw4,MGD-MRK-8791,MGI:94857,dactylaplasia,dactylin,dactylyn AI573376,Fc epsilon high affinity receptor gamma,Fc-gamma,FcR[g],FcRgamma,Fce1g,FcepsilonRI,Ly-50,MGD-MRK-11993,MGD-MRK-9726,MGD-MRK-9730,MGI:2138290,expressed sequence AI573376,lymphocyte antigen 50	F-box and WD-40 domain protein 4
Fcer1g	NM_010185.4	CD23,FC epsilon RII,Fc epsilon low affinity receptor (IgE),Fce2,Ly-42,MGD-MRK-11984,MGD-MRK-9727,MGD-MRK-9731,low-affinity IgE receptor,lymphocyte antigen 42	Fc receptor, IgE, high affinity I, gamma polypeptide
Fcer2a	NM_001253737.1	AI323638,AV092959,CD64,FcgammaRI,MGD-MRK-9732,MGI:2139673,MGI:2139933,expressed sequence AI323638,expressed sequence AV092959	Fc receptor, IgE, low affinity II, alpha polypeptide
Fcgr1	NM_010186.5	AI528646,CD32,F630109E10RIK,Fc gamma RIIB,Fc receptor, IgG, low affinity II,Fc receptor, IgG, low affinity IIA,Fc-gamma receptor 2,Fc-gamma receptor 3,Fc[gamma]RII,Fc[gamma]RIIIFc[gamma]RIIB,Fcgr2,Fcgr2a,Fcr-2,Fcr-3,Ly-17,Ly-m20,LyM-1,Lym-1,MGD-MRK-11955,MGD-MRK-12013,MGD-MRK-12069,MGD-MRK-12070,MGD-MRK-9733,MGD-MRK-9734,MGD-MRK-9735,MGD-MRK-9739,MGD-MRK-9740,MGI:2138286,MGI:2445072,RIKEN cDNA F630109E10 gene,expressed sequence AI528646,lymphocyte antigen 17,lymphocyte antigen m20	Fc receptor, IgG, high affinity I
Fcgr2b	NM_001077189.1	4833442P21RIK,CD16-2,Fc fragment of IgG, low affinity IIIa, receptor,FcgammaRIV,Fcgr3a,MGI:2443436,RIKEN cDNA 4833442P21 gene	Fc receptor, IgG, low affinity IIb
Fcgr4	NM_144559.1	FREB-2,FREB2,Fc receptor related Y,FcRL2,Fcry,mFCRL2	Fc receptor, IgG, low affinity IV
Fcrlb	NM_001029984.2	AI303526,ENSMUSG00000059807,Fib,MGI:2139659,MGI:3642492,expressed sequence AI303526,predicted gene, ENSMUSG00000059807	Fc receptor-like B
Fga	NM_010196.3	AEY17,BB213776,FGF-10,Gsfaey17,MGI:2145479,MGI:3529962,expressed sequence BB213776,gsf abnormal eyes 17	fibrinogen alpha chain
Fgf10	NM_008002.3	BB213776,gsf abnormal eyes 17	fibroblast growth factor 10
Fgf15	NM_008003.2	FGF19	fibroblast growth factor 15
Fgf18	NM_008005.1	D130055P09RIK,FGF-18,MGI:2441946,RIKEN cDNA D130055P09 gene	fibroblast growth factor 18
Fgf2	NM_008006.2	Fgf-2,Fgfb,MGD-MRK-9761,MGD-MRK-9767,MGD-MRK-9774,bFGF, fibroblast growth factor, basic	fibroblast growth factor 2
Fgf22	NM_023304.1	2210414E06RIK,RIKEN cDNA 2210414E06 gene	fibroblast growth factor 22
Fos	NM_010234.2	D12R1j1,DNA segment, Chr 12, Russel F. Jacoby 1,MGD-MRK-19548,MGD-MRK-9866,c-fos,cFos	FBJ osteosarcoma oncogene
Foxo1	NM_019739.3	AI876417,Afxh,FKHR,Fkhr1,Foxo1a,MGI:2139839,expressed sequence AI876417	forkhead box O1
Foxo3	NM_019740.2	1110048B16RIK,2010203A17RIK,C76856,FKHRL1,Fkhr2,Foxo3a,MGI:1916006,MGI:1917519,MGI:2143914,RIKEN cDNA 1110048B16 gene,RIKEN cDNA 2010203A17 gene,expressed sequence C76856	forkhead box O3
Foxp3	NM_054039.2	JM2,MGD-MRK-14368,MGI:98281,scurfin,scurfy,sf	forkhead box P3
Fpr1	NM_013521.2	FPR,MGD-MRK-35914,IMLF-R	formyl peptide receptor 1
Fut4	NM_010242.3	3-fucosyl-N-acetyl-lactosamine epitope,AI451562,FAL,FucT-IV,LeX,MGD-MRK-9894,MGI:2143062,SSEA-1,Ssea1,expressed sequence AI451562 AI448320,AW552119,MGD-MRK-9909,MGI:2143602,MGI:2143864,Src Kinase p59,expressed sequence AI448320,expressed sequence AW552119	fucosyltransferase 4
Fyn	NM_008054.2	AW456835,Fz10,MGI:2144531,Mfz10,Mfz10a,expressed sequence AW456835	Fyn proto-oncogene
Fzd2	NM_020510.2	AW456835	frizzled class receptor 2
Fzd7	NM_008057.3	Fz7,MGD-MRK-37614	frizzled class receptor 7
Gadd45a	NM_007836.1	AA545191,DNA-damage inducible transcript 1,Ddit1,MGD-MRK-36376,MGI:2141368,expressed sequence AA545191	growth arrest and DNA-damage-inducible 45 alpha
Gapdhs	NM_008085.1	Gapd-s,Gapds,MGD-MRK-9980,MGD-MRK-9981	glyceraldehyde-3-phosphate dehydrogenase, spermatogenic
Gata3	NM_008091.3	Gata-3,MGD-MRK-10000,MGD-MRK-10004,MGI:2181648,jal,juvenile alopecia	GATA binding protein 3
Gata6	NM_010258.3	AA410133,MGD-MRK-36086,MGI:2147171,expressed sequence AA410133	GATA binding protein 6
Gbp2	NM_010260.1	MGD-MRK-19679	guanylate binding protein 2
Gbp2b	NM_010259.2	Gbp-1,Gbp1,MGD-MRK-10008,MGD-MRK-10009,MGD-MRK-12400,MGD-MRK-12402,MGI:97071,Mag-1,Mpa-1,Mpa1,guanylate binding protein 1,macrophage activation 1	guanylate binding protein 2b
Gckr	NM_144909.1	GKRP,MGC:19300	glucokinase regulatory protein
Gdf6	NM_013526.1	BMP13,MGD-MRK-10042	growth differentiation factor 6
Gh	NM_008117.2	MGD-MRK-10069	growth hormone
Ghr	NM_001048147.1	AA986417,GHBP,GHR/BP,MGD-MRK-10070,MGI:2145937,expressed sequence AA986417	growth hormone receptor
Gk	NM_008194.3	D930012N15RIK,Gyk,MGD-MRK-35050,MGI:2442000,RIKEN cDNA D930012N15 gene	glycerol kinase
Gls	NM_001113383.1	AI314027,B230365M23RIK,MGD-MRK-10135,MGI:2138193,MGI:2444416,RIKEN cDNA B230365M23 gene,expressed sequence AI314027	glutaminase
Gls2	NM_001033264.3	A330074B06RIK,AI195532,Lga,RIKEN cDNA A330074B06 gene,expressed sequence AI195532	glutaminase 2 (liver, mitochondrial)
Glud1	NM_008133.4	AI118167,Gdh-X,Glud,Glud1,MGD-MRK-10046,MGD-MRK-10136,MGD-MRK-10139,MGI:2145599,anonymous DNA segment, Chr 14,expressed sequence AI118167,glutamate dehydrogenase like sequence	glutamate dehydrogenase 1

		5530400H20Rik,A930027G11Rik,C130027O20Rik,G alpha s,Galphas,Gnas1,Gnasxl,Gs alpha,Gs protein, alpha chain (stim. reg. adenylate cyclase),Gs-alpha,Gsa,MGD-MRK-10189,MGD-MRK-10282,MGI:1336163,MGI:1336215,MGI:1918608,MGI:1925540,MGI:1931436,MGI:2183280,MGI:2442318,Nesp,Nesp5,Nespl,Oedsml,P1,P2,P3,RIKEN cDNA 5530400H20 gene,RIKEN cDNA A930027G11 gene,RIKEN cDNA C130027O20 gene,SCG6,XLalphas,guanine nucleotide binding protein, alpha stimulating, extra large,neuroendocrine secretory protein,neuroendocrine secretory protein-like,neuroendocrine-specific Golgi protein p55 isoform 1,oedematous-small	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus	sub-maximal isoform coverage due to non-overlapping transcript variants
Gnas	NM_010309.3			
		2010305F15Rik,AA536815,AI115529,AI314170,AI842738,EST AA536815,EST AI115529,EST AI314170,MGI:1889368,MGI:1889384,MGI:1889807,MGI:1919361,MGI:2141487,RIKEN cDNA 2010305F15 gene,expressed sequence AI842738	guanine nucleotide binding protein (G protein), gamma 12	
Gng12	NM_001177559.1			
		AL022787,FABP-pm,Got-2,Kyat4,MGD-MRK-10214,MGD-MRK-10216,MGI:2142656,expressed sequence AL022787,mAspAT,mitochondrial aspartate aminotransferase,plasma membrane fatty acid binding protein	glutamic-oxaloacetic transaminase 2, mitochondrial	
Got2	NM_010325.2			
		GRAP-2,GRB2L,GRID,Gads,Grb2-related adaptor downstream of Sch,GrbX,Grf40,GripL,Mona,P38,monocytic adaptor	GRB2-related adaptor protein 2	
Grap2	NM_001289442.1			
		5730571D09Rik,AI325020,MGD-MRK-24105,MGI:1915227,MGI:2144128,Meg1,RIKEN cDNA 5730571D09 gene,expressed sequence AI325020,mKIAA0207,maternally expressed gene 1	growth factor receptor bound protein 10	
Grb10	NM_010345.4			
		AA408164,MGD-MRK-10242,MGI:2143976,expressed sequence AA408164	growth factor receptor bound protein 2	
Grb2	NM_008163.4			
		Prdc,gremlin 2,protein related to DAN and cerberus	gremlin 2, DAN family BMP antagonist	
Grem2	NM_011825.1			
		7330414F15Rik,8430431H08Rik,C86142,GSK-3,GSK-3beta,GSK3,MGI:1914056,MGI:1925394,MGI:2146721,RIKEN cDNA 7330414F15 gene,RIKEN cDNA 8430431H08 gene,expressed sequence C86142	glycogen synthase kinase 3 beta	
Gsk3b	NM_019827.3			
		BC021322,LGS,MGC:29379,cDNA sequence BC021322,glycogen synthase, liver	glycogen synthase 2	
Gys2	NM_145572.2			
		AW494114,BLT esterase,Ctla-3,Ctla3,H factor,Hanukah factor,Hf,MGD-MRK-10699,MGD-MRK-2223,MGD-MRK-2233,MGD-MRK-38311,MGI:2145434,SE1,TSP-1,TSP1,cytotoxic T lymphocyte-associated protein 3,expressed sequence AW494114,serine esterase 1	granzyme A	
Gzma	NM_010370.2			
		AI553453,CCP-1/C11,CCP1,Ctla-1,Ctla1,GZB,MGD-MRK-2219,MGD-MRK-2229,MGD-MRK-38312,MGI:2145670,cytotoxic T lymphocyte-associated protein 1,expressed sequence AI553453	granzyme B	
Gzmb	NM_013542.2			
		AI323531,CCP2,Ctla-5,Ctla5,MGD-MRK-2235,MGD-MRK-38301,MGI:2145616,cytotoxic T lymphocyte-associated protein 5,expressed sequence AI323531	granzyme C	
Gzmc	NM_010371.2			
		CCP5,Ctla-5,Ctla5,MGD-MRK-2235,MGD-MRK-38300,cytotoxic T lymphocyte-associated protein 5	granzyme D	
Gzmd	NM_010372.2			
		CCP3,Ctla-6,Ctla6,MCSF-2,MGD-MRK-2226,MGD-MRK-2236,MGD-MRK-38310,cytotoxic T lymphocyte-associated protein 6	granzyme E	
Gzme	NM_010373.3			
		CCP4,CTL serine protease 3,Ctla-7,Ctla7,MCSF-3,MGD-MRK-2227,MGD-MRK-2237,MGD-MRK-38299,cytotoxic T lymphocyte-associated protein 7,granzyme G	granzyme F	
Gzmf	NM_010374.3			
		Ctla-7,Ctla7,MGD-MRK-2237,MGD-MRK-38298,cytotoxic T lymphocyte-associated protein 7	granzyme G	
Gzmg	NM_010375.2			
		Gzmk	granzyme K	
Gzmk	NM_008196.1			
		Gzmm	granzyme M (lymphocyte met-ase 1)	
Gzmm	NM_008504.2			
		Gzmn	granzyme N	
Gzmn	NM_153052.1			
		A alpha,Aalpha,H-2Aa,I region-associated antigen 1,I-Aalpha,Ia-1,Ia1,MGD-MRK-10377,MGD-MRK-10490,MGD-MRK-11044,MGD-MRK-11049,histocompatibility 2, class II antigen A alpha	histocompatibility 2, class II antigen A, alpha	
H2-Aa	NM_010378.2			
		A beta,AI845868,Abeta,H-2Ab,H2-Ab,I-A,I-Abeta,I-region-associated antigen 2,IAb,ia-2,ia2,MGD-MRK-10378,MGD-MRK-10491,MGD-MRK-11045,MGD-MRK-11050,MGD-MRK-23932,MGI:1890696,MGI:2146934,Rmcs1,expressed sequence AI845868,histocompatibility 2, class II antigen A, beta,response to metastatic cancers 1	histocompatibility 2, class II antigen A, beta 1	
H2-Ab1	NM_207105.2			
		H-2D,MGD-MRK-10379,MGD-MRK-10492	histocompatibility 2, D region locus 1	H2-L (NM_001267808)
H2-D1	NM_010380.3			
		H-2Ma,H2-M alpha,H2-Ma,MGD-MRK-10405,MGD-MRK-10517,histocompatibility 2, class II, locus Ma	histocompatibility 2, class II, locus DMA	
H2-DMa	NM_010386.3			
		AI385589,H-2Mb1,H2-M beta1,H2-Mb1,MGD-MRK-10406,MGD-MRK-10518,MGI:2146833,expressed sequence AI385589	histocompatibility 2, class II, locus Mb1	
H2-DMb1	NM_010387.3			
		H-2Mb2,H2-M beta2,H2-Mb2,MGD-MRK-10407,MGD-MRK-10519	histocompatibility 2, class II, locus Mb2	
H2-DMb2	NM_010388.4			
		H-2Eb,I region-associated antigen 4,Ia-4,Ia4,MGD-MRK-10384,MGD-MRK-10497,MGD-MRK-11047,MGD-MRK-11052	histocompatibility 2, class II antigen E beta	
H2-Eb1	NM_010382.2			
		H-2K,MGD-MRK-10388,MGD-MRK-10500	histocompatibility 2, K1, K region	
H2-K1	NM_001001892.2			
		H-2M3,Hmt,MGD-MRK-10400,MGD-MRK-10511,MGD-MRK-10801,R4B2	histocompatibility 2, M region locus 3	
H2-M3	NM_013819.2			
		A-beta-2,A-beta2,H-2I,H-2Ob,H2-Ab,H2-Ab2,H2-IAb2,MGD-MRK-10378,MGD-MRK-10409,MGD-MRK-10491,MGD-MRK-10521,MGD-MRK-23933,MGI:3573871,Ob,histocompatibility 2, class II antigen A, beta,histocompatibility 2, class II antigen A beta 2,vic1,virus infectivity controller 1	histocompatibility 2, O region beta locus	
H2-Ob	NM_010389.3			
		MGD-MRK-32355	histocompatibility 2, P region alpha locus	
H2-Pa	ENSMUST00000182803.1			
		15006,H-2Q1,MGD-MRK-10412,MGD-MRK-10524,MGD-MRK-13708,MGD-MRK-13718,MGD-MRK-13736,MGI:3779428,Q1,Q1b,Q1d,Q1k,predicted gene, 15006	histocompatibility 2, Q region locus 1	
H2-Q1	NM_010390.3			
		H-2Q10,MGD-MRK-10413,MGD-MRK-10525,MGD-MRK-13707,MGD-MRK-13719,Q region gene 10,Q10,Qa lymphocyte antigen 10,Qa10	histocompatibility 2, Q region locus 10	
H2-Q10	NM_010391.4			
		BE136769,ENSMUSG00000079507,Gm11132,H-2Q2,MGD-MRK-10414,MGD-MRK-10527,MGI:3035350,MGI:3779387,expressed sequence BE136769,predicted gene 11132,predicted gene, ENSMUSG00000079507	histocompatibility 2, Q region locus 2	
H2-Q2	NM_010392.2			
		37b,37c,H-2T23,MGD-MRK-10439,MGD-MRK-10553,Qa-1,Qa1,Qed-1,T18c,T18c(37),T23b,T23d	histocompatibility 2, T region locus 23	H2-T-ps (NM_001271005)
H2-T23	NM_010398.3			
		4930479F15Rik,MGI:1922043,Mtpb,RIKEN cDNA 4930479F15 gene	hydroxycyl-CoA dehydrogenase trifunctional multienzyme complex subunit beta	
Hadhb	NM_145558.1			
		T-cell immunoglobulin and mucin domain containing 3,TIM-3,Tim3,Timd3	hepatitis A virus cellular receptor 2	
Havcr2	NM_134250.2			
		DAP10,KAP10	hematopoietic cell signal transducer	
Hcst	NM_011827.3			

Hdac7	NM_001204275.1	5830434K02Rik,Hdac7a,MGI:2443780,RIKEN cDNA 5830434K02 gene	histone deacetylase 7
		AV022454,D030072B18Rik,HDRP,Hdac7b,MEF2-interacting transcription repressor,MGI:2144976,MGI:3036283,Mitr,RIKEN cDNA D030072B18 gene,expressed sequence AV022454,histone deacetylase 7B	histone deacetylase 9
Hdac9	NM_024124.2	AW108189,Hdc-a,Hdc-c,Hdc-e,Hdc-s,L-histidine decarboxylase,MGD-MRK-10682,MGD-MRK-10683,MGD-MRK-10684,MGD-MRK-10685,MGD-MRK-10686,MGI:2139302,MGI:96063,MGI:96064,MGI:96065,MGI:96066,expressed sequence AW108189,histidine decarboxylase concentration (kidney),histidine decarboxylase estrogen response,histidine decarboxylase testosterone response,histidine decarboxylase, structural (kidney)	histidine decarboxylase
Hdc	NM_008230.4	A730039N16Rik,D030049F17Rik,Gm971,MGI:2442222,Ned12,RIKEN cDNA A730039N16 gene,RIKEN cDNA D030049F17 gene, gene model 971, (NCBI),mKIAA1301	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2
Hecw2	NM_001001883.3	A1316788,A1414254,CHF2,HRT1,Herp2,Hesr1,MGI:2139670,MGI:2139691,bHLHb31,expressed sequence A1316788,expressed sequence A1414254,hesr-1	hairly/enhancer-of-split related with YRPW motif 1
Hey1	NM_010423.2	CHF1,Herp1,Hesr2,Hrt2,MGI:1353481,bHLHb32,hairy-related transcription factor 2	hairly/enhancer-of-split related with YRPW motif 2
Hey2	NM_013904.1	C230052L06Rik,HGF/SF,MGD-MRK-10704,MGI:2443459,NK1,NK2,RIKEN cDNA C230052L06 gene,SF,HGF,scatter factor	hepatocyte growth factor
Hgf	NM_010427.5	1110062K04Rik,MGI:1916099,Myak,RIKEN cDNA 1110062K04 gene	homeodomain interacting protein kinase 1
Hipk1	NM_010432.2	DEF,HMG-1,Hmg1,MGD-MRK-10748,SBP-1,amphoterin,high mobility group protein 1,p30	high mobility group box 1
Hmgb1	NM_010439.4	A1323641,HNF1,HNF1-alpha,HNF1[a],Hnf-1,Hnf1alpha,LFB1,MGD-MRK-10803,MGD-MRK-14747,MGD-MRK-14753,MGI:2140832,Tcf-1,Tcf1,expressed sequence A1323641,hepatic nuclear factor 1,hepatocyte nuclear factor 1,transcription factor 1	HNF1 homeobox A
Hnf1a	NM_009327.3	H-ras,Ha-ras,Harvey rat sarcoma virus oncogene 1,Harvey-ras,Hras-1,Hras1,MGD-MRK-10930,MGD-MRK-10931,c-H-ras,c-rasHa	Harvey rat sarcoma virus oncogene
Hras	NM_001130443.1	11beta-HSD-1,11beta-hydroxysteroid dehydrogenase type 1,MGD-MRK-24447	hydroxysteroid 11-beta dehydrogenase 1
Hsd11b1	NM_001044751.1	78kDa,AL022860,AU019543,Bip,D2Wsu141e,D2Wsu17e,DNA segment, Chr 2, Wayne State University 141, expressed,DNA segment, Chr 2, Wayne State University 17, expressed,Grp78,Hsce70,MGD-MRK-10275,MGD-MRK-10943,MGD-MRK-1560,MGD-MRK-34244,MGD-MRK-35815,MGI:106550,MGI:107349,MGI:2139125,MGI:2139181,MGI:4889058,Sez7,XAP-1 antigen,baffled,expressed sequence AL022860,expressed sequence AU019543,glucose regulated protein, 78 kDa,glucose-regulated protein (78 kDa),mBIP	heat shock protein 5
Hspa5	NM_022310.3	CD54,Icam-1,Ly-47,MALA-2,MGC:6195,MGD-MRK-11146,MGD-MRK-11148,MGD-MRK-11989,lymphocyte antigen 47	intercellular adhesion molecule 1 inducible T cell co-stimulator
Icam1	NM_010493.3	AU044799,B7-H2,B7RP-1,B7h,BG071784,EST BG071784,GL50,GL50-B,ICOS-L,LICOS,MGI:2143770,MGI:2652130,expressed sequence AU044799	icos ligand
Icos	NM_015790.3	A1255428,C78922,Idb2,MGD-MRK-11154,MGI:2144775,MGI:2145094,bHLHb26,expressed sequence A1255428,expressed sequence C78922,inhibitor of differentiation 2	inhibitor of DNA binding 2
Id2	NM_010496.3	Ido,Indo,MGD-MRK-11186,indole 2,3-dioxygenase,indole 2,4-dioxygenase,indoleamine-pyrrole 2,3 dioxygenase	indoleamine 2,3-dioxygenase 1
Ido1	NM_008324.1	A1265623,C230043N17Rik,Indo1,MGC:31194,RIKEN cDNA C230043N17 gene,expressed sequence A1265623,indoleamine-pyrrole 2,3 dioxygenase-like 1	indoleamine 2,3-dioxygenase 2
Ido2	NM_145949.2	ISG56,IFi56,MGD-MRK-16219,interferon inducible protein 56	interferon-induced protein with tetratricopeptide repeats 1
Ifit1	NM_008331.2	NM_010501.2	interferon-induced protein with tetratricopeptide repeats 3/3b
Ifit3/3b	NM_010501.2	Ifna1,MGD-MRK-11201,MGD-MRK-36243	interferon alpha 1
Ifna1	NM_010502.2	IFN-gamma,ifg,MGD-MRK-11214,MGD-MRK-36231	interferon gamma
Ifng	NM_008337.3		interferon kappa
Ifnk	NM_199157.2	IgA,Igh-2,MGD-MRK-11241,immunoglobulin heavy chain 2 (serum IgA)	immunoglobulin heavy constant alpha
Igha	ENSMUST00000178282.1	AU044919,expressed sequence AU044919	immunoglobulin heavy chain (gamma polypeptide)
Ighg	ENSMUST00000103420.1	A1326478,BCR,Ig mu,IgM,Igh-6,Igh-m,Igh6,MGD-MRK-11245,MGD-MRK-11260,MGI:2144796,expressed sequence A1326478,immunoglobulin heavy chain 6 (heavy chain of IgM),immunoglobulin heavy chain	immunoglobulin heavy constant mu
Ighm	ENSMUST00000103426.1	mu,muH,muMT	immunoglobulin heavy variable 3
Ighv3	ENSMUST00000103478.3	Igk-C,MGD-MRK-11293,immunoglobulin kappa chain, constant region Clambda1,Igl-C1,MGD-MRK-16324,immunoglobulin lambda chain, constant region 1	immunoglobulin kappa constant
Igkc	ENSMUST00000103410.1	5832432G11Rik,Ikaros,LyF-1,MGD-MRK-11345,MGI:2442667,MGI:96535,RIKEN cDNA 5832432G11 gene,Zfpn1a1,early lymphoid specific transcription factor,zinc finger protein,subfamily 1A,1 (Ikaros)	immunoglobulin lambda constant 1
Iglc1	ENSMUST00000200568.1	IL-10,IL-10,MGD-MRK-11347,MGD-MRK-11361,cytokine synthesis inhibitory factor	interleukin 10
Il10	NM_010548.2	AW553859,CDw210,Il10r,MGD-MRK-11362,MGI:2143329,expressed sequence AW553859,interleukin 10 receptor,mIL-10R	interleukin 10 receptor, alpha
Il10ra	NM_001324486.1	6620401D04Rik,AIS28744,CRF2-4,Crfb4,D16H21558,D21558h,DNA segment, Chr 16, human D21558,Il10r2,MGD-MRK-38425,MGD-MRK-4247,MGD-MRK-5726,MGI:1918692,MGI:2146455,MGI:90448,RIKEN cDNA 6620401D04 gene,cytokine receptor family 2, member 4, expressed sequence AIS28744	interleukin 10 receptor, beta
Il10rb	NM_008349.5	IL-11,MGD-MRK-36187	interleukin 11
Il11	NM_008350.2		Gm13305 (NM_001099348), Gm2002 (NM_001100596), LOC100861969 (NM_001378674)
Il11ra1/2	NM_010549.3	IL-12p35,IL-12a,MGD-MRK-11348,MGD-MRK-11363,p35	interleukin 12a
Il12a	NM_008351.1	IL-12 p40,IL-23 subunit p40,IL-12b,IL-12p40,MGD-MRK-11349,MGD-MRK-11364	interleukin 12b
Il12b	NM_001303244.1	CD212,IL-12R[b],MGD-MRK-26013	interleukin 12 receptor, beta 1
Il12rb1	NM_008353.2	IL-13,MGD-MRK-11350,MGD-MRK-11365	interleukin 13
Il13	NM_008355.3		

Il13ra1	NM_133990.4	AI882074,CD213a1,MGD-MRK-32091,MGI:2147937,expressed sequence AI882074	interleukin 13 receptor, alpha 1
Il15	NM_008357.2	AI503618,MGD-MRK-23851,MGI:2142577,expressed sequence AI503618	interleukin 15
Il16	NM_010551.3		interleukin 16
Il17a	NM_010552.3	Ctla-8,Ctla8,IL-17A,Il17,MGD-MRK-2228,MGD-MRK-2238,MGD-MRK-35831,cytotoxic T lymphocyte-associated protein 8,interleukin 17	interleukin 17A
Il18	NM_008360.1	Igjf,Il-18,MGD-MRK-36516,interferon gamma inducing factor	interleukin 18
Il1a	NM_010554.4	Il-1a,MGD-MRK-11351,MGD-MRK-11366	interleukin 1 alpha
Il1b	NM_008361.3	IL-1B,IL-1beta,IL-1b,MGD-MRK-11352,MGD-MRK-11367	interleukin 1 beta
Il1f9	NM_153511.2		interleukin 1 family, member 9
Il1r1	NM_001123382.1	CD121a,IL-1 receptor alpha chain,IL-1R1,IL-IR,Il1r-1,MGD-MRK-11369,MGD-MRK-11371	interleukin 1 receptor, type I
Il1r2	NM_010555.4	CD121b,IL-1 receptor beta chain,Il1r-2,MGD-MRK-11370,MGD-MRK-11372	interleukin 1 receptor, type II
Il1rap1	NM_001160403.1	6330532G10RIK,IL1R8,IL1RAPL,MGI:1923412,MRX34,OPHN4,RIKEN cDNA 6330532G10 gene,TIGIRR-2	interleukin 1 receptor accessory protein-like 1
Il1rf1	NM_001025602.2	DER4,Fit-1,Ly84,MGD-MRK-14615,MGD-MRK-16618,MGI:99831,ST2,ST2L,ST2,ST2-rs1,T1,T1 gene,T1/ST2,lymphocyte antigen 84,signal transduction protein 2,signal transduction protein 2, related sequence 1	interleukin 1 receptor-like 1
Il1rf2	NM_133193.3	AI481289,AW551444,MGI:2138277,MGI:2138611,expressed sequence AI481289,expressed sequence AW551444	interleukin 1 receptor-like 2
Il1rn	NM_031167.5	F630041P17RIK,IL-1ra,MGD-MRK-11373,MGI:2443250,RIKEN cDNA F630041P17 gene	interleukin 1 receptor antagonist
Il2	NM_008366.3	IL-2,IL-2,MGD-MRK-11353,MGD-MRK-11374	interleukin 2
Il21	NM_021782.2		interleukin 21
Il21r	NM_021887.1	NILR	interleukin 21 receptor
Il24	NM_053095.2	FISP,Mda-7	interleukin 24
Il27ra	NM_016671.3	IL-27R,T cell cytokine receptor,Tccr,WXS-1	interleukin 27 receptor, alpha
Il2ra	NM_008367.2	CD25,IL-2R alpha chain,Il2r,Ly-43,MGD-MRK-11375,MGD-MRK-11376,MGD-MRK-11985,interleukin 2 receptor,lymphocyte antigen 43	interleukin 2 receptor, alpha chain
Il3	NM_010556.4	BPA,Csfmu,HCGF,IL-3,MCGF,MGD-MRK-11354,MGD-MRK-11379,MGD-MRK-2193,PSF,colony stimulating factor, multi (contains Il-3)	interleukin 3
Il31	NM_029594.1	1700013B14RIK,RIKEN cDNA 1700013B14 gene	interleukin 31
Il31ra	NM_139299.2	GLM-R,GPL	interleukin 31 receptor A
Il4	NM_021283.1	Il-4,MGD-MRK-11355,MGD-MRK-11385	interleukin 4
Il5	NM_010558.1	Il-5,MGD-MRK-11356,MGD-MRK-11387	interleukin 5
Il6	NM_031168.1	Il-6,MGD-MRK-11357,MGD-MRK-11391	interleukin 6
Il6ra	NM_010559.3	CD126,IL-6 receptor alpha chain,IL-6R,Il6r,MGD-MRK-11392,MGD-MRK-32345,interleukin 6 receptor	interleukin 6 receptor, alpha
Il6st	NM_010560.2	5133400A03RIK,AA389424,BB405851,CD130,D13Ert699e,DNA segment, Chr 13, ERATO Doi 699, expressed, MGD-MRK-11393,MGI:1277187,MGI:1918567,MGI:3034594,MGI:3034705,RIKEN cDNA 5133400A03 gene,expressed sequence AA389424,expressed sequence BB405851,gp130	interleukin 6 signal transducer
Il7	NM_008371.5	A630026I06RIK,Il-7,MGD-MRK-11358,MGD-MRK-11394,MGI:2441812,MGI:3575125,RIKEN cDNA A630026I06 gene,heart, lung and blood 368,hlb368	interleukin 7
Il7r	NM_008372.3	CD127,IL-7 receptor alpha chain,IL-7Ralpha,MGD-MRK-11395	interleukin 7 receptor
Il9	NM_008373.1	Il-9,MGD-MRK-11359,MGD-MRK-11397,P40	interleukin 9
Il9r	NM_001134458.1	MGD-MRK-11398	interleukin 9 receptor
Inpp5d	NM_001110192.1	AI323613,MGD-MRK-35823,MGI:2138207,SHIP,SHIP-1,SHIP1,Src homology 2 domain-containing inositol-5-phosphatase,expressed sequence AI323613,s-SHIP	inositol polyphosphate-5-phosphatase D
Inpp1	NM_010567.2	SHIP2	inositol polyphosphate phosphatase-like 1
Ins1	NM_008386.4	Ins-1,Ins2-rs1,MGD-MRK-11410,MGD-MRK-11413,MGD-MRK-11415,insulin 2, related sequence 1,insulin I or insulin pseudogene	insulin I
Irak3	NM_028679.4	4833428C18RIK,AI563835,IRAK-M,MGI:2143647,RIKEN cDNA 4833428C18 gene,expressed sequence AI563835	interleukin-1 receptor-associated kinase 3
Irak4	NM_029926.5	8430405M07RIK,9330209D03RIK,IRAK-4,MGI:1918735,MGI:1924812,NY-REN-64,RIKEN cDNA 8430405M07 gene,RIKEN cDNA 9330209D03 gene	interleukin-1 receptor-associated kinase 4
Irf2	NM_008391.2	9830146E22RIK,AI646973,Irf-2,MGD-MRK-11466,MGI:2142602,MGI:2443654,RIKEN cDNA 9830146E22 gene,expressed sequence AI646973	interferon regulatory factor 2
Irf4	NM_013674.1	AI385587,IRF-4,MGD-MRK-29048,MGI:104895,MGI:2145221,Sfp1/PU.1 interaction partner,Spip,expressed sequence AI385587	interferon regulatory factor 4
Irf8	NM_008320.4	AI893568,ICSBP,IRF-8,Icsbp1,MGD-MRK-11151,MGI:2142648,MGI:3574547,Myls,expressed sequence AI893568,interferon consensus sequence binding protein	interferon regulatory factor 8
Irs1	NM_010570.4	1,myeloproliferative syndrome	insulin receptor substrate 1
Itch	NM_008395.2	6720481N21RIK,8030492O04RIK,AIP4,C230047C07RIK,MGI:1924982,MGI:2441729,MGI:2443666,RIKEN cDNA 6720481N21 gene,RIKEN cDNA 8030492O04 gene,RIKEN cDNA C230047C07 gene	itchy, E3 ubiquitin protein ligase
Itga10	NM_001081053.1		integrin, alpha 10
Itga6	NM_008397.3	5033401O05RIK,AI115430,Cd49f,MGD-MRK-11484,MGI:1923212,MGI:2138837,RIKEN cDNA 5033401O05 gene,expressed sequence AI115430	integrin alpha 6
Itgae	NM_008399.1	CD103,alpha-E1	integrin alpha E, epithelial-associated
Itgal	NM_008400.2	CD11a antigen,Cd11a,LFA-1,Ly-15,Ly-21,MGD-MRK-11485,MGD-MRK-11953,MGD-MRK-11960,MGD-MRK-1830,lymphocyte antigen 15,lymphocyte antigen 21	integrin alpha L
Itgav	NM_008402.2	1110004F14RIK,2610028E01RIK,CD51,D430040G12RIK,MGD-MRK-11487,MGI:1923548,MGI:1923608,MGI:2445000,RIKEN cDNA 1110004F14 gene,RIKEN cDNA 2610028E01 gene,RIKEN cDNA D430040G12 gene,alphav-integrin,vitronectin receptor alpha polypeptide (VNRA)	integrin alpha V
Itgax	NM_021334.2	AI449405,CD11c (p150) alpha polypeptide,Cd11c,MGD-MRK-11488,MGI:2141963,expressed sequence AI449405	integrin alpha X
Itgb3	NM_016780.2	CD61,MGD-MRK-11491,platelet glycoprotein IIIa (GP3A)	integrin beta 3
Itgb8	NM_177290.3	4832412O06RIK,MGI:2445021,RIKEN cDNA 4832412O06 gene	integrin beta 8

Itpr1	NM_010585.2	D6Pas2,DNA segment, Chr 6, Pasteur Institute 2,IP3R1,InsP3R type I,Ip3r,Itpr-1,MGD-MRK-11506,MGD-MRK-11508,MGD-MRK-13043,MGD-MRK-13182,MGD-MRK-13185,MGD-MRK-16179,MGD-MRK-7700,MGI:4437431,MGI:93795,MGI:97507,P400,Pcp-1,Pcp1,Purkinje cell protein 1,inositol 1,4,5-triphosphate binding protein,opisthonus,opt,wblo,wobbly locomotion	inositol 1,4,5-triphosphate receptor 1
Itpr2	NM_010586.1	AI649341,Ip3r2,Itpr5,MGD-MRK-11439,MGD-MRK-16180,MGD-MRK-18668,MGI:101846,MGI:2141462,expressed sequence	inositol 1,4,5-triphosphate receptor 2
Jag1	NM_013822.2	ABE2,Gsfabe2,Headturner,Htu,MGI:1891333,MGI:2664252,MGI:353080	jagged 1
Jak1	NM_146145.2	0,Ozz,Serrate-1,gsf abnormal behavior 2,headturner,ozy AA960307,BAPO04,C130039L05Rik,MGD-MRK-11516,MGI:2140180,MGI:2443062,MGI:5425487,RIKEN cDNA C130039L05 gene,bone alkaline phosphatase mutant 004,expressed sequence AA960307	Janus kinase 1
Jak2	NM_008413.2	AI504024,C81284,MGD-MRK-11517,MGI:2147569,MGI:2147795,expressed sequence	Janus kinase 2
Jak3	NM_010589.5	AI504024,expressed sequence C81284	Janus kinase 3
Jarid2	NM_021878.2	MGD-MRK-16730,MGI:3584392,MGI:3584403,wil,willow AI317256,AU045941,C79929,C79931,Jmj,MGD-MRK-28107,MGI:2139495,MGI:2145204,MGI:2145380,MGI:2145512,expressed sequence AI317256,expressed sequence AU045941,expressed sequence C79929,expressed sequence C79931,jumonji	jumonji, AT rich interactive domain 2
Jun	NM_010591.2	Jun-C oncogene,Junc,MGD-MRK-11538,MGD-MRK-11540,c-jun	jun proto-oncogene
Junb	NM_008416.1	MGD-MRK-11539	jun B proto-oncogene
Jund	NM_010592.5	Jun-D oncogene,MGD-MRK-11541,MGD-MRK-11542	jun D proto-oncogene
Kcnk2	NM_001159850.1	AI848635,MGD-MRK-38411,MGI:2138348,TREK-1,expressed sequence AI848635	potassium channel, subfamily K, member 2
Kdm3a	NM_001038695.3	1700105C21Rik,C230043E16Rik,Jmjd1,Jmjd1a,MGD-MRK-15272,MGI:1920820,MGI:2444882,RIKEN cDNA 1700105C21 gene,RIKEN cDNA C230043E16 gene,Tsgaj,jumonji domain containing 1,jumonji domain containing 1A,mKIAA0742,testis specific gene A	lysine (K)-specific demethylase 3A
Kir3dl1/2	NM_177749.4		killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1/2
Klf2	NM_008452.2	Lklf,MGD-MRK-27042,MGI:104679,lung Kruppel-like factor 100043861,4930431A04Rik,Gm4696,Ly-55,Ly55,MGD-MRK-11998,MGD-MRK-12041,MGI:1914651,MGI:3782876,Nkrp1g,RIKEN cDNA 4930431A04 gene,lymphocyte antigen 55,predicted gene	Kruppel-like factor 2 (lung)
Klrb1	NM_00109918.1	4696,predicted gene, 100043861	killer cell lectin-like receptor subfamily B member 1
Klrb1a	NM_001159902.1	Ly55a,MGD-MRK-36110,NKR-P1A,Nkrp1-a,lymphocyte antigen 55 complex, locus A	killer cell lectin-like receptor subfamily B member 1A
Klrc1	NM_001136068.1	CD159a,NKG2A,NKG2B	killer cell lectin-like receptor subfamily C, member 1
Klrd1	NM_010654.2	CD94	killer cell lectin-like receptor, subfamily D, member 1
Klrg1	NM_016970.1	2F1-Ag	killer cell lectin-like receptor subfamily G, member 1
Klrk1	NM_001083322.1	D6H12S2489E,DNA Segment, Chr 6, human D12S2489E,NKG2-D,Nkg2d AI929937,K-ras,Ki-ras,Kirsten rat sarcoma oncogene 2, expressed,Kras-2,Kras2,MGD-MRK-11597,MGD-MRK-11601,MGI:2141518,expressed sequence AI929937	killer cell lectin-like receptor subfamily K, member 1
Kras	NM_021284.6		Kirsten rat sarcoma viral oncogene homolog
Lag3	NM_008479.1	CD223,LAG-3,Ly66,MGD-MRK-35044,lymphocyte antigen 66 5133400011Rik,BB115266,D7Bwg0421e,DNA segment, Chr 7, Brigham & Women's Genetics 0421 expressed,Lair-1,MGD-MRK-33164,MGI:1918474,MGI:2142289,RIKEN cDNA 5133400011 gene,expressed sequence BB115266,mLair-1	lymphocyte-activation gene 3
Lair1	NM_001113474.1	AI196048,CD107a,Lamp-1,MGD-MRK-11740,MGD-MRK-11742,MGI:2142479,Perk,expressed sequence AI196048	leukocyte-associated Ig-like receptor 1
Lamp1	NM_010684.2	AW556229,MAPK scaffold protein 1,MEK binding partner 1,MGI:2140008,Map2k1ip1,Mapksp1,Mp1,expressed sequence AW556229,mitogen-activated protein kinase kinase 1 interacting protein 1	lysosomal-associated membrane protein 1
Lamtor3	NM_019920.2	Hck-3,MGD-MRK-10669,MGD-MRK-11758,hemopoietic cell kinase 3,p56<ck>	late endosomal/lysosomal adaptor, MAPK and MTOR activator 3
Lck	NM_010693.2		lymphocyte protein tyrosine kinase
LCMV	LCMV5Sgp1.1		Lymphocytic choriomeningitis virus
Lcp2	NM_010696.4	AI323664,BB11688,MGI:2144122,MGI:2144608,MGI:3584401,MGI:5491499,SLP-76,SLP76,expressed sequence AI323664,expressed sequence BB11688,m1Khoe,mutation 1, Kasper Hoebe,t-wimp,twm	lymphocyte cytosolic protein 2
Ldha	NM_010699.1	LDH-A,Ldh-1,Ldh1,MGD-MRK-11762,MGD-MRK-11768,MGI:1890511,I7R2,lactate dehydrogenase-A,lethal, Chr 7, Oak Ridge 2	lactate dehydrogenase A
Ldhal6b	NM_175349.2	4933402015Rik,AI326310,LDHAL,RIKEN cDNA 4933402015 gene,expressed sequence AI326310	lactate dehydrogenase A-like 6B
Lef1	NM_001276402.1	AI451430,Lef-1,MGD-MRK-11782,MGD-MRK-11783,MGI:2139722,expressed sequence AI451430,lymphoid enhancer factor 1	lymphoid enhancer binding factor 1
Lefty1	NM_010094.3	AI450052,Ebaf,Leftb,Lefty,MGD-MRK-35873,MGD-MRK-36501,MGI:107921,MGI:2138250,Stra3,Tgfb4,expressed sequence AI450052,left-right determination, factor B,lefty-1,stimulated by retinoic acid gene 3,transforming growth factor, beta 4	left right determination factor 1
Lepr	NM_010704.2	LEPROT,Leprb,MGD-MRK-12969,MGD-MRK-31066,MGD-MRK-8799,Modb1,OB-RGRP,ObR,db,diabetes,leptin receptor gene-related protein,obese-like,obl	leptin receptor
Lgals9	NM_010708.1	AA407335,AI194909,AI265545,LGALS5,Lgals5,MGD-MRK-24103,MGD-MRK-39495,MGI:103231,MGI:2143968,MGI:2144080,MGI:2144105,expressed sequence AA407335,expressed sequence AI194909,expressed sequence AI265545,gal-9,galectin-9,lectin, galactose binding, soluble 5	lectin, galactose binding, soluble 9
Lif	NM_008501.2	MGD-MRK-11807	leukemia inhibitory factor
Lifr	NM_001113386.1	A230075M04Rik,AW061234,MGD-MRK-11808,MGI:2146188,MGI:2442497,RIKEN cDNA A230075M04 gene,expressed sequence AW061234,soluble differentiation-stimulating factor receptor	LIF receptor alpha
Lilra5	NM_001081239.2	EG232801,Gm4878,predicted gene 4878,predicted gene, EG232801	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 5
Lilra6	NM_011090.2	7M1,Pira3,paired-Ig-like receptor A3	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 6

		AI326300,Edg2,G-protein coupled receptor 26,Gpcr26,Kdt1,LPA1,MGD-MRK-26047,MGD-MRK-37473,MGI:104610,MGI:2140243,endothelial differentiation, lysophosphatidic acid G-protein-coupled receptor, 2, expressed sequence AI326300,kidney cell line derived transcript 2,vzg-	
Lpar1	NM_010336.2		lysophosphatidic acid receptor 1
Lpl	NM_008509.2	MGD-MRK-11871,O 1-4-5	lipoprotein lipase
Lrp6	NM_008514.3	Cd,Gw,MGD-MRK-1829,MGI:3043025,MGI:3577498,MGI:88317,crooked,gwazi,ska26,skac<m26lus>,skax26,skeletal/axial 26	low density lipoprotein receptor-related protein 6
Lrrk2	NM_025730.3	4921513020Rik,9330188809Rik,AW561911,D630001M17Rik,Gm927,LOC381026,MGI:1930800,MGI:2442391,MGI:2685773,RIKEN cDNA 4921513020 gene,RIKEN cDNA 9330188809 gene,RIKEN cDNA D630001M17 gene,cDNA sequence, clone 3-75,cl-46, gene model 927, (NCBI)	leucine-rich repeat kinase 2
Ltpb1	NM_019919.2	9430031G15Rik,LTBP-1,Ltpb1L,MGD-MRK-38195,MGI:1924572,MGI:5316769,Mutant line 1000,RIKEN cDNA 9430031G15 gene,b2b1000Clo	latent transforming growth factor beta binding protein 1
Lyn	NM_010747.2	AA407514,Hck-2,MGD-MRK-10668,MGD-MRK-12071,MGI:2140121,Yamaguchi sarcoma viral (v-yes-1) oncogene homolog,expressed sequence AA407514,hemopoietic cell kinase 2	LYN proto-oncogene, Src family tyrosine kinase
Magi2	NM_015823.3	Acvrin1,Magi-2,S-SCAM,activin receptor interacting protein 1,mKIAA0705	membrane associated guanylate kinase, WW and PDZ domain containing 2
Malt1	NM_172833.2	D430033E09Rik,Pcasp1,RIKEN cDNA D430033E09 gene,paracaspase AV234550,BC049812,MGI:2139941,MGI:3055089,cDNA sequence	MALT1 paracaspase
Mami3	NM_001004176.2	BC049812,expressed sequence AV234550	mastermind like transcriptional coactivator 3
Map2k2	NM_023138.5	AA589381,MAP kinase/Erk kinase,MEK2,MGD-MRK-18661,MGI:101840,MGI:2143493,Prkmk2,expressed sequence	mitogen-activated protein kinase kinase 2
Map3k13	NM_172821.3	AA589381,protein kinase, mitogen activated, kinase 2, p45 C130026N12Rik,RIKEN cDNA C130026N12 gene	mitogen-activated protein kinase kinase 13
Map3k8	NM_007746.2	Cot,Cot/Tip2,MGD-MRK-15201,MGD-MRK-2095,MGI:88472,MGI:98808,Tip-2,Tip2,c-COT,cancer Osaka thyroid, oncogene tumor progression locus 2	mitogen-activated protein kinase kinase kinase 8
Mapk1	NM_011949.3	9030612K14Rik,AA407128,AU018647,C78273,Erk2,MAPK2,MGD-MRK-33596,MGD-MRK-9584,MGI:105919,MGI:1921796,MGI:2146330,MGI:2146551,MGI:2146700,Prkm1,RIKEN cDNA 9030612K14 gene,elk related tyrosine kinase 2, expressed sequence AA407128, expressed sequence AU018647, expressed sequence C78273,p42mapk,protein kinase, mitogen activated kinase 1	mitogen-activated protein kinase 1
Mapk10	NM_001081567.1	C230008H04Rik,JNK3,MGD-MRK-36125,MGI:107554,MGI:2442453,RIKEN cDNA C230008H04 gene,SAPK/Erk/kinase 2,Serk2,p493f12	mitogen-activated protein kinase 10
Mapk11	NM_011161.5	P38b,Prkm11,Sapk2,p38beta,protein kinase, mitogen activated kinase, 11, p38beta	mitogen-activated protein kinase 11
Mapk13	NM_011950.1	MGI:1195258,SAPK/Erk/kinase 4,SAPK4,Serk4,p38 delta MAP kinase	mitogen-activated protein kinase 13
Mapk14	NM_011951.3	CDC2-related kinase 1,CSBP2,Crk1,Csbp1,MGD-MRK-2145,MGI:1338028,MGI:88502,Mxi2,cytokine suppressive anti-inflammatory drug binding protein 1,p38,p38 MAP Kinase,p38 MAP kinase alpha,p38 MAPK,p38 alpha,p38-alpha,p38MAPK,p38a,p38alpha Erk-1,Erk1,Esrk1,MGD-MRK-12586,MGD-MRK-33597,MGD-MRK-9583,MGD-MRK-9654,MGI:105920,MGI:95451,MGI:97176,Mtap2k,Prkm3,elk related tyrosine kinase 1,extra cellular signal regulated kinase 1,microtubule-associated protein 2 kinase,microtubule-associated protein-2 kinase,p44 MAP kinase,p44erk1,p44mapk,protein kinase, mitogen activated kinase 3	mitogen-activated protein kinase 14
Mapk3	NM_011952.2	AI849689,JNK1,MGI:1328367,MGI:2145699,Prkm8,c-Jun N-terminal kinase, expressed sequence AI849689, protein kinase mitogen-activated	mitogen-activated protein kinase 3
Mapk8	NM_016700.3	AI851083,JNK/SAPK alpha,JNK2,MGI:1202396,MGI:2144306,Prkm9,c-Jun N-terminal kinase, expressed sequence AI851083, protein kinase, mitogen-activated	mitogen-activated protein kinase 8
Mapk9	NM_207692.1	AI181826,AU019209,MGI:2143531,MGI:2143734, expressed sequence AI181826, expressed sequence AU019209	mitogen-activated protein kinase 9
Mbd3	NM_013595.2	AW556805,MGD-MRK-18576,MGI:2140009,Mcl-1, expressed sequence AW556805	methyl-CpG binding domain protein 3
Mcl1	NM_008562.3	AA617332,AI324988,AL033333,Cdc46,MGD-MRK-24065,MGI:2142437,MGI:2142508,MGI:2142670,Mcmd5,cell division cycle 46 (S. cerevisiae), expressed sequence AA617332, expressed sequence AI324988, expressed sequence AL033333, mCD46,mini chromosome maintenance deficient 5 (S. cerevisiae)	myeloid cell leukemia sequence 1
Mcm5	NM_001302540.1	Mcmd7,mCD47,minichromosome maintenance deficient 7 (S. cerevisiae)	minichromosome maintenance complex component 5
Mcm7	NM_008568.2	Glif,MGD-MRK-12232,MGD-MRK-16214,MGI:99446, glycosylation inhibiting factor	minichromosome maintenance complex component 7
Mif	NM_010798.3	AI325305,MGD-MRK-18727,MGI:2145621,MGI:3717409,MT1-MMP,Membrane type 1-MMP, expressed sequence AI325305,sabe,small and bugged-eyed	macrophage migration inhibitory factor (glycosylation-inhibiting factor)
Mmp14	NM_008608.3	MGD-MRK-12280,MGD-MRK-14627,SLN-1,SLN1,STR-1,Stmy1,Str1,progelatinase,stromelysin 1,stromelysin-1	matrix metalloproteinase 14 (membrane-inserted)
Mmp3	NM_010809.1	AW743869,B/MMP9,Clg4b,Gel B,Gelatinase B,MGD-MRK-12281,MGD-MRK-2014,MGI:2139414,MMP-9,collagenase IVB, basement membrane, 92 kDa, expressed sequence AW743869, gelatinase B	matrix metalloproteinase 3
Mmp9	NM_013599.2	2900078C09Rik,AI326250,MGI:1920303,MGI:2143025,RIKEN cDNA 2900078C09 gene, expressed sequence AI326250	muscle and microspikes RAS
Mras	NM_008624.3	AA960661,CD20 antigen,Cd20,Ly-44,MGD-MRK-11986,MGD-MRK-1838,MGI:2147465, expressed sequence AA960661, lymphocyte antigen 44	muscle and microspikes RAS
Ms4a1	NM_007641.5	Fc epsilon high affinity receptor beta,Fc receptor, IgE, high affinity I, beta polypeptide,FCRB,Fce1b,Fcer1b,FcRbeta,MGD-MRK-9725,MGD-MRK-9729	membrane-spanning 4-domains, subfamily A, member 1
Ms4a2	NM_001276330.1	EG666907,predicted gene, EG666907	membrane-spanning 4-domains, subfamily A, member 2
Ms4a4a	XM_003086124.1	CDw136,Friend virus susceptibility 2,Fv-2,Fv2,MGD-MRK-16399,MGD-MRK-9896,MGD-MRK-9902,MGI:95596,PTK8,Ron,STK,friend virus susceptibility 2,receptor protein tyrosine kinase, c-met-related	membrane-spanning 4-domains, subfamily A, member 4A
Mst1r	NM_009074.1		macrophage stimulating 1 receptor (c-met-related tyrosine kinase)

Mx1	NM_010846.1	AI893580, MGD-MRK-12725, MGD-MRK-12726, MGD-MRK-12728, MGI:2146518, Mx, Mx-1, expressed sequence AI893580, myxovirus (influenza) resistance 1 polypeptide	MX dynamin-like GTPase 1
Mx2	NM_013606.1	AI528749, MGD-MRK-12727, MGD-MRK-12729, MGI:2146454, Mx-2, expressed sequence AI528743	MX dynamin-like GTPase 2
Mysm1	NM_177239.2	C130067A03Rik, C530050H10Rik, MGI:2442057, RIKEN cDNA C130067A03 gene, RIKEN cDNA C530050H10 gene	myb-like, SWIRM and MPN domains 1
Naa50	NM_028108.3	2600005K24Rik, 2810441M03Rik, AW112078, MGI:2146622, Mak3, Mak3 homolog (S. cerevisiae), Mak3p, Mak3p homolog (S. cerevisiae), N-acetyltransferase 13, Nat13, Nat5, RIKEN cDNA 2600005K24 gene, RIKEN cDNA 2810441M03 gene, San, expressed sequence AW112078	N(alpha)-acetyltransferase 50, NatE catalytic subunit
Nbea	NM_030595.1	mkIAA1544	neurobeachin
Ncf4	NM_008677.2	AI451400, MGD-MRK-38230, MGI:2146016, expressed sequence AI451400, p40phox	neutrophil cytosolic factor 4
Ncr1	NM_010746.3	Ly94, MAR1 (mouse activating receptor 1), NKp46, lymphocyte antigen 94 AI225870, B130038B15Rik, MGI:2142481, MGI:2442693, OREBP, RIKEN cDNA B130038B15 gene, TonEBP, expressed sequence	natural cytotoxicity triggering receptor 1
Nfat5	NM_133957.3	AI225870, mkIAA0827, nfatz	nuclear factor of activated T cells 5
Nfat1	NM_016791.4	2210017P03Rik, AI449492, AV076380, MGD-MRK-19306, MGI:1919614, MGI:2147226, MGI:2147334, NF-ATc, NFAT2, NFATc, RIKEN cDNA 2210017P03 gene, expressed sequence AI449492, expressed sequence AV076380	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 1
Nfat2	NM_001037177.1	AI607462, MGD-MRK-12824, MGD-MRK-19300, MGI:2139019, NFAT1, NFAT1-D, NFATp, NFatp, expressed sequence AI607462, nuclear factor of activated T-cell phosphoprotein C80703, D8Ert281e, DNA segment, Chr 8, ERATO Doi 281, expressed, MGD-MRK-	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2
Nfat3	NM_010901.2	24179, MGI:1098734, MGI:2142861, NFAT4, NFATx, expressed sequence C80703	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 3
Nfat4	NM_023699.3	3110041H08Rik, AW107667, AW546455, MGI:2145795, MGI:2145827, RIKEN cDNA 3110041H08 gene, expressed sequence AW107667, expressed sequence AW546455	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 4
Nfe2l2	NM_010902.3	AI194320, MGD-MRK-37463, MGI:2138857, Nrf2, expressed sequence AI194320	nuclear factor, erythroid derived 2, like 2
Nfil3	NM_017373.3	AV225605, E48P4, MGD-MRK-39494, MGI:2145396, expressed sequence AV225605	nuclear factor, interleukin 3, regulated
Nfkb1	NM_008689.2	MGD-MRK-12829, NF kappaB1, NF-kappaB, NF-kappaB p50, nuclear factor kappaB p50, p50, p50 subunit of NF kappaB, p50/p105	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105
Nfkb2	NM_019408.2	NF kappaB2, p52	nuclear factor of kappa light polypeptide gene enhancer in B cells 2, p49/p100
Nfkbia	NM_010907.2	AI462015, I(Kappa)B(alpha), I-kappaBalpha, I-kappaBalpha, MGD-MRK-12830, MGD-MRK-28032, MGI:2144835, Nfkb1, expressed sequence AI462015, nuclear factor of kappa light chain gene enhancer in B-cells inhibitor	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha
Nfkbib	NM_010908.4	IKappaBbeta, Ikb, MGD-MRK-28043	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, beta
Nfkbie	NM_008690.3		nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, epsilon
Nkg7	NM_024253.4	2500004F03Rik, MGI:1919560, RIKEN cDNA 2500004F03 gene	natural killer cell group 7 sequence
Nos2	NM_010927.3	MGD-MRK-12910, MGD-MRK-12913, NOS-II, Nos-2, Nos2a, iNOS, nitric oxide synthase-2 (brain)	nitric oxide synthase 2, inducible
Notch2	NM_010928.1	AI853703, MGD-MRK-12916, MGI:2139830, Motch B, N2, expressed sequence AI853703	notch 2
Npepps	NM_008942.2	MGI:2144698, MGI:2673208, MP100, Psa, R74825, expressed sequence R74825, goku, puromycin-sensitive aminopeptidase	aminopeptidase puromycin sensitive
Npri3	NM_181569.3	-14 gene, HS-26, HS-40, MGD-MRK-35141, MGD-MRK-38303, MGI:106682, Mare, Phg, Prox1, alpha globin regulatory element containing gene, m(alpha)RE, proximal locus to the hemoglobin alpha chain complex	nitrogen permease regulator-like 3
Nr4a1	NM_010444.1	GFRP1, Gfrp, Hbr-1, Hbr1, Hmr, MGD-MRK-10057, MGD-MRK-10641, MGD-MRK-10642, MGI:95699, MGI:96029, N10, NGFI-B, NP10, Nur77, TIS1, TR3, growth factor response protein, hormone binding receptor 1, hormone receptor	nuclear receptor subfamily 4, group A, member 1
Nras	NM_010937.2	AV095280, MGD-MRK-12932, MGI:2139934, N-ras, expressed sequence AV095280	neuroblastoma ras oncogene
Nrl	NM_008736.3	AW492574, D14H14546E, DNA segment, Chr 14, human D14546E, MGD-MRK-19449, MGD-MRK-3718, MGI:2145817, expressed sequence AW492574	neural retina leucine zipper gene
Nt5e	NM_011851.3	2210401F01Rik, 5' nucleotidase, AI447961, CD73, MGD-MRK-16568, MGI:1921492, MGI:2143050, Nt5, RIKEN cDNA 2210401F01 gene, ecto-5'-nucleotidase, expressed sequence AI447961	5' nucleotidase, ecto
Ntf3	NM_008742.2	AI316846, AI835689, EST AI316846, MGD-MRK-12937, MGD-MRK-12939, MGI:1353664, MGI:2141474, NT-3, NT3, Ntf-3, expressed sequence AI835689	neurotrophin 3
Nup54	NM_183392.2	3110079L04Rik, 54kDa, RIKEN cDNA 3110079L04 gene	nucleoporin 54
Oas1a	NM_145211.2	L3	2'-5' oligoadenylate synthetase 1A
Oas2	NM_145227.3	2'-5' oligoadenylate synthetase-like 11, Oasl11	2'-5' oligoadenylate synthetase 2
Oas3	NM_145226.2	2'-5' oligoadenylate synthetase-like 10, Oasl10	2'-5' oligoadenylate synthetase 3
Oat	NM_016978.2	AI194874, MGD-MRK-12964, MGD-MRK-13865, MGI:2141877, MGI:97913, expressed sequence AI194874, retarded hair growth, rhg	ornithine aminotransferase
Orc2	NM_008765.2	AU041563, MGD-MRK-32127, MGI:105087, MGI:2138491, Orc2l, expressed sequence AU041563, origin recognition complex, subunit 2 (Saccharomyces) homolog-like, origin recognition complex, subunit 2 homolog (S. cerevisiae), origin recognition complex, subunit 2-like (S. cerevisiae)	origin recognition complex, subunit 2
Orc4	NM_001355296.1	Orc4P, Orc4l, mMmORC4, origin recognition complex, subunit 4-like (S. cerevisiae)	origin recognition complex, subunit 4
Osm	NM_001013365.2	MGD-MRK-28040, OncoM	oncostatin M
Osmr	NM_011019.3	OSMRB	oncostatin M receptor
Pbx1	NM_008783.2	2310056B04Rik, AI848790, AU015730, D230003C07Rik, MGD-MRK-13163, MGD-MRK-	pre B cell leukemia homeobox 1
Pbx3	NM_016768.1	13164, MGI:1917652, MGI:2138350, MGI:2138411, MGI:2444643, Pbx-1, Pbx1a, Pbx1b, RIKEN cDNA 2310056B04 gene, RIKEN cDNA D230003C07 gene, expressed sequence AI848790, expressed sequence AU015730	pre B cell leukemia homeobox 3

Pck1	NM_011044.2	AI265463, MGD-MRK-13174, MGD-MRK-13175, MGI:2138871, PEPCK, Pck-1, expressed sequence AI265463	phosphoenolpyruvate carboxykinase 1, cytosolic
Pcpt	NM_008796.3	MGD-MRK-35842, PC-TP, StarD2	phosphatidylcholine transfer protein
Pdcd1	NM_008798.2	MGD-MRK-13206, MGD-MRK-29032, PD-1, Pdc1, programmed cell death B7-DC, Btdc, F730015O22Rik, MGI:2442044, PD-L2, RIKEN cDNA F730015O22 gene	programmed cell death 1
Pdcd1lg2	NM_021396.2	1110003I09Rik, RIKEN cDNA 1110003I09 gene	programmed cell death 1 ligand 2
Pdgfd	NM_027924.2	AI115593, CD140a, MGD-MRK-13215, MGD-MRK-13216, MGI:2140805, Pdgfr-2, expressed sequence AI115593	platelet-derived growth factor, D polypeptide
Pdgfra	NM_011058.2	AI528809, CD140b, MGD-MRK-13214, MGD-MRK-13217, MGI:2147240, Pdgfr, expressed sequence AI528809, platelet derived growth factor receptor	platelet derived growth factor receptor, alpha polypeptide
Pdgfrb	NM_008809.1	2610103L06Rik, AL024199, C81408, MGI:2145717, MGI:2145868, RIKEN cDNA 2610103L06 gene, expressed sequence AL024199, expressed sequence C81408	platelet derived growth factor receptor, beta polypeptide
Pdhhb	NM_024221.3	AV005916, MGI:2141608, expressed sequence AV005916	pyruvate dehydrogenase (lipoamide) beta
Pdk4	NM_013743.2	C85791, CD31 antigen, Cd31, MGD-MRK-13226, MGD-MRK-1848, MGI:2144682, PECAM-1, expressed sequence C85791	pyruvate dehydrogenase kinase, isoenzyme 4
Pecam1	NM_008816.2	2900068C24Rik, DEAD/H (Asp-Glu-Ala-Asp/His) box binding protein 1, Ddxbp1, GBP, MGI:1920216, RIKEN cDNA 2900068C24 gene	platelet/endothelial cell adhesion molecule 1
Pglyrp2	NM_001271478.1	C730002N09Rik, MGI:2444214, PGRP-L, Pglyrpl, RIKEN cDNA C730002N09 gene, peptidoglycan recognition protein-like, tagL, tagL-alpha, tagL-beta	peptidoglycan recognition protein 2
Pglyrp3	NM_207247.4	Gm420, LOC242100, Pglyrpla, gene model 420, (NCBI)	peptidoglycan recognition protein 3
Phc3	NM_153421.1	E030046K01Rik, EDR3, HPH3, MGI:2442424, RIKEN cDNA E030046K01 gene	polyhomeotic 3
Pias1	NM_019663.3	6330408K17Rik, AI462206, ARIP3, AU018068, Dib, MGI:1917978, MGI:2147235, MGI:2147299, Miz1, Mx-interacting-zinc finger, PIASxalpa, PIASxb, PIASxbeta, RIKEN cDNA 6330408K17 gene, expressed sequence AI462206, expressed sequence AU018068	protein inhibitor of activated STAT 1
Pias2	NM_001164167.1	1810044J04Rik, BCAP, MGI:1919285, RIKEN cDNA 1810044J04 gene	protein inhibitor of activated STAT 2
Pik3ap1	NM_031376.3	6330412C24Rik, MGI:1917992, RIKEN cDNA 6330412C24 gene, caPI3K, p110alpha	phosphoinositide-3-kinase adaptor protein 1
Pik3ca	NM_008839.1	1110001J02Rik, AI447572, MGI:2143049, RIKEN cDNA 1110001J02 gene, expressed sequence AI447572, p110beta	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha
Pik3cb	NM_029094.3	2410099E07Rik, 2610208K16Rik, AWS45373, MGI:1917688, MGI:1925744, MGI:2140589, RIKEN cDNA 2410099E07 gene, RIKEN cDNA 2610208K16 gene, expressed sequence AWS45373, p110delta	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta
Pik3cd	NM_001029837.2	AA414921, MGD-MRK-13305, MGI:2145159, PI3K, expressed sequence AA414921, p50alpha, p55alpha, p85alpha	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta
Pik3r1	NM_001024955.2	AA414954, MGD-MRK-38322, MGI:2140152, expressed sequence AA414954, p55, p55pik	phosphoinositide-3-kinase regulatory subunit 1
Pik3r2	NM_008841.3		phosphoinositide-3-kinase regulatory subunit 2
Pik3r3	NM_001355585.1		phosphoinositide-3-kinase regulatory subunit 3
Pira1	NM_001371068.1	6M21, Ly89, MGI:1098675, PIR-A1, Pir, paired immunoglobulin-like receptor	Pira2 (NM_011089; NM_001379689), Pira7 (NM_011094), Pirb (NM_001357394; NM_011095), Pira4 (NM_011091), Pira11 (NM_011088), Gm14548 (NM_001384210; NM_001166672)
Pirb	NM_011095.2	Gp91, Liltrb3, glycoprotein 91, leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3, paired-Ig-like receptor B	paired-Ig-like receptor A1
Pitx2	NM_001042502.1	9430085M16Rik, Brx1a, Brx1b, MGD-MRK-37449, MGD-MRK-38385, MGI:108406, MGI:2443452, Munc30, Otx2, Pitx2a, Pitx2b, Pitx2c, Pt x2, RIKEN cDNA 9430085M16 gene, Rieg, Rieger syndrome	paired-Ig-like receptor B
Pknox1	NM_023058.3	AW209059, MGI:2147053, Myt1, expressed sequence AW209059	protein kinase, membrane associated tyrosine/threonine 1
Pkn2	NM_178654.4	6030436C20 gene, Stk7, expressed sequence AI507382, protein kinase C-like 2, serine/threonine kinase 7	protein kinase N2
Plcg1	NM_021280.3	AI894140, Cded, MGD-MRK-13350, MGD-MRK-13353, MGD-MRK-13355, MGI:1329022, MGI:2139113, Plc-1, Plc-gamma1, Plcg-1, cell differentiation and embryonic development, expressed sequence AI894140, phospholipase C, subtype 148	protein kinase C, gamma 1
Plcg2	NM_172285.1	MGC:38590, MGD-MRK-13354, MGD-MRK-13356, PLCgamma2, Plcg-2	phospholipase C, gamma 2
Plscr1	NM_011636.2	MGI:893574, MmTRA1a, MmTRA1b, MuPLSCR2, NOR1, TRA1, Tras1, Tras2, t ransplantability associated gene 1, transplantability associated gene 2	phospholipid scramblase 1
Pmepa1	NM_022995.3	2210418I02Rik, AW455466, MGI:1917408, MGI:2139348, N4wbp4, RIKEN cDNA 2210418I02 gene, STAG1, Tmepai, expressed sequence AW455466, transmembrane, prostate androgen induced RNA	prostate transmembrane protein, androgen induced 1
Pml	NM_008884.5	1200009E24Rik, AI661194, MGD-MRK-26102, MGI:2143109, MGI:2443400, RIKEN cDNA 1200009E24 gene, Trim19, expressed sequence AI661194	promyelocytic leukemia
Pnoc	NM_001205075.1	MGD-MRK-32349, N/OFQ, N23K, Npnc1, OFQ/N, neuropeptide nociceptin 1, proorphanin	prepronociceptin
Pparg	NM_011146.1	MGD-MRK-13589, Nr1c3, PPAR-gamma, PPARgamma, PPARgamma2, Ppar-gamma2	peroxisome proliferator activated receptor gamma
Pparg1a	NM_008904.2	A830037N07Rik, ENSMUSG00000079510, Gm11133, MGI:1203734, MGI:2443650, MGI:3779388, PPAR Gamma Coactivator-1, PPAR gamma coactivator 1, Pgc-1alpha, Pgc-1alphaa, Pgc1, Pgc1, RIKEN cDNA A830037N07 gene, predicted gene 11133, predicted gene, ENSMUSG00000079510	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha
Ppm1a	NM_008910.3	2310003C21Rik, 2900017D14Rik, AI427932, AU017636, MGD-MRK-16669, MGI:1916736, MGI:1920167, MGI:2144816, MGI:2144943, MMPa-2, MMPa-1, Mpp alpha, RIKEN cDNA 2310003C21 gene, RIKEN cDNA 2900017D14 gene, expressed sequence AI427932, expressed sequence AU017636	protein phosphatase 1A, magnesium dependent, alpha isoform
Ppm1f	NM_176833.4	1110021B16Rik, 4933427B07Rik, MGC:25978, MGI:1915856, RIKEN cDNA 1110021B16 gene, RIKEN cDNA 4933427B07 gene, mKIAA0015	protein phosphatase 1F (PP2C domain containing)
Ppp1cb	NM_172707.3	MGD-MRK-28170	protein phosphatase 1 catalytic subunit beta
Ppp2ca	NM_019411.4	MGI:2144711, PP2A, R75353, expressed sequence R75353	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform
Ppp2cb	NM_017374.3	AI115466, D8ErtD766e, DNA segment, Chr 8, ERATO Doi 766, expressed, MGI:1289237, MGI:2142462, PP2Ac, expressed sequence AI115466	protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform

Ppp2r1a	NM_016891.3	6330556D22Rik,MGI:1923432,PP2A,PR65,RIKEN cDNA 6330556D22 gene,protein phosphatase PP2A	protein phosphatase 2, regulatory subunit A, alpha	
Ppp2r1b	NM_028614.3	2410091N08Rik,AI790395,MGI:2143121,RIKEN cDNA 2410091N08 gene,expressed sequence AI790395	protein phosphatase 2, regulatory subunit A, beta	
Ppp2r5a	NM_144880.4		protein phosphatase 2, regulatory subunit B', alpha	
Ppp2r5b	NM_198168.3	B'beta,BC026670,MGI:2446182,cDNA sequence BC026670 2610043M05Rik,2700063L20Rik,AI060890,AW545884,B56/PP2A gamma,Band 8A,C85228,D12Bwg0916e,DNA segment, Chr 12, Brigham & Women's Genetics 0916 expressed,MGD-MRK-34036,MGI:106344,MGI:1917494,MGI:1922861,MGI:2144759,MGI:2145038,MGI:3034420,RIKEN cDNA 2610043M05 gene,RIKEN cDNA 2700063L20 gene,expressed sequence AI060890,expressed sequence AW545884,expressed sequence C85228,mKIAA0044	protein phosphatase 2, regulatory subunit B', gamma	sub-maximal isoform coverage due to non-overlapping transcript variants
Ppp2r5c	NM_001135001.1	4633401M22Rik,AI449017,B56beta,MGI:1913952,MGI:2144826,RIKEN cDNA 4633401M22 gene,expressed sequence AI449017,protein phosphatase 2A subunit beta	protein phosphatase 2, regulatory subunit B', epsilon	
Ppp2r5e	NM_012024.2		protein phosphatase 2, regulatory subunit B', epsilon	
Ppp3ca	NM_008913.5	2900074D19Rik,AI841391,AW413465,CN,Caln,Calna,CnA,MGD-MRK-1735,MGD-MRK-1736,MGD-MRK-35625,MGI:1920287,MGI:2139807,MGI:2139982,PP2B alpha 1,PP2BA alpha,RIKEN cDNA 2900074D19 gene,calcineurin,calcineurin, alpha subunit,expressed sequence AI841391,expressed sequence AW413465	protein phosphatase 3, catalytic subunit, alpha isoform	
Ppp3cc	NM_008915.2	Calnc,MGD-MRK-1738,MGD-MRK-35623,PP2BA gamma,calcineurin C, type 3	protein phosphatase 3, catalytic subunit, gamma isoform protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type 1)	
Ppp3r1	NM_024459.2	CaNB1,Cnb1,MGD-MRK-35633,PP2B beta 1 9530043G02Rik,AA960502,C77813,CLN1,D4Erttd184e,DNA segment, Chr 4, ERATO Doi 184, expressed,MGI:1196214,MGI:1925934,MGI:2140181,MGI:2140662,RIKEN cDNA 9530043G02 gene,expressed sequence AA960502,expressed sequence C77813	protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type 1)	
Ppt1	NM_008917.3		palmitoyl-protein thioesterase 1	
Prdm1	NM_007548.3	B lymphocyte induced maturation protein,Blimp-1,Blimp1,MGD-MRK-16440,MGI:5446148,Mutant line 1765,PRDI-BF1,b2b1765C10 5730557K01Rik,MGI:3576005,Mel1,RIKEN cDNA 5730557K01 gene,cleft secondary palate 1, csp1, line 27	PR domain containing 1, with ZNF domain	
Prdm16	NM_027504.3		PR domain containing 16	
Prf1	NM_011073.2	MGD-MRK-13251,MGD-MRK-13605,Pfn,Ppf,Prf-1,perforin,perforin 1,pore forming protein	perforin 1 (pore forming protein)	
Prkaa1	NM_001013367.3	AI194361,AI450832,AL024255,AMPKalpha1,C130083N04Rik,MGI:2146014,MGI:2146120,RIKEN cDNA C130083N04 gene,expressed sequence AI194361,expressed sequence AI450832,expressed sequence AL024255	protein kinase, AMP-activated, alpha 1 catalytic subunit	
Prkaa2	NM_178143.2	231000811Rik,AMPKalpha2,MGI:1913766,RIKEN cDNA 231000811 gene	protein kinase, AMP-activated, alpha 2 catalytic subunit	
Prkag3	NM_153744.3	AMPKgamma3,AMPKgamma3L,AMPKgamma3S A130082F03Rik,MGD-MRK-13328,MGI:2442598,PKC-Beta,Pkcb,Prkcb1,Prkcb2,RIKEN cDNA A130082F03 gene,protein kinase C, beta 1	protein kinase, AMP-activated, gamma 3 non-catalytic subunit	
Prkcb	NM_001316672.1		protein kinase C, beta	
Prkcz	NM_001355178.1	AI098070,C80388,MGD-MRK-13334,MGI:2140186,MGI:2140684,MGI:2140714,Pkcz,R74924,aPKCzeta ,expressed sequence AI098070,expressed sequence C80388,expressed sequence R74924,zetaPKC	protein kinase C, zeta	
Prkdc	NM_011159.2	AI326420,AU019811,DNA-PK,DNA-PKcs,DNAPDCs,DOXNPH,MGD-MRK-14312,MGD-MRK-28071,MGI:2146417,MGI:2146554,MGI:3574416,XRCC7,doxorubicin nephropathy,dxnp,expressed sequence AI326420,expressed sequence AU019811,scid,severe combined immunodeficiency,slip	protein kinase, DNA activated, catalytic polypeptide	
Prl	NM_011164.1	AV290867,MGD-MRK-13613,MGI:2145398,Prl1a1,expressed sequence AV290867	prolactin	
Prlr	NM_011169.5	AI987712,MGD-MRK-13598,MGD-MRK-13599,MGD-MRK-13614,MGD-MRK-13615,MGI:2146103,MGI:97764,Pr-1,Pr-3,Prir-rs1,expressed sequence AI987712,prolactin receptor 1,prolactin receptor 3,prolactin receptor related sequence 1	prolactin receptor	
Psm1	NM_011965.2	C2,HC2,Pros-30	proteasome subunit alpha 1	
Psm6	NM_011968.3		proteasome subunit alpha 6	
Psm10	NM_013640.3	Medc1,Medc1	proteasome (prosome, macropain) subunit, beta type 10	
Psm9	NM_013585.2	Lmp-2,Lmp2,MGD-MRK-11821,MGD-MRK-11823,MGI:96797,large multifunctional protease 2,low molecular weight polypeptide 2	proteasome (prosome, macropain) subunit, beta type 9 (large multifunctional peptidase 2)	
Psmc6	NM_025959.3	2300001E01Rik,AI451058,MGI:2145653,RIKEN cDNA 2300001E01 gene,expressed sequence AI451058	proteasome (prosome, macropain) 26S subunit, ATPase, 6	
Psmc6	NM_025550.2	2400006A19Rik,RIKEN cDNA 2400006A19 gene	proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	
Psm2/2b	NM_001029855.1		proteasome (prosome, macropain) activator subunit 2/2B	
Ptafr	NM_001081211.1	MGD-MRK-33750,PAF receptor,PAFR	platelet-activating factor receptor	
Ptger4	NM_008965.1	EP4,MGD-MRK-25639,Ptgerp4,prostaglandin E receptor EP4 subtype 2510002C21Rik,Ltb4dh,RIKEN cDNA 2510002C21 gene,Zadh3,leukotriene B4 12-hydroxydehydrogenase	prostaglandin E receptor 4 (subtype EP4)	
Ptgr1	NM_025968.3		prostaglandin reductase 1	
Ptgs2	NM_011198.3	COX2,Cox-2,MGD-MRK-13665,PGHS-2,PHS-2,Pghs2,Tis10,cyclooxygenase 2,cyclooxygenase-2,prostaglandin G/H synthase	prostaglandin-endoperoxide synthase 2	
Ptk2b	NM_001162365.1	CAKbeta,E430023O05Rik,MGD-MRK-29062,MGI:2444305,PKY2,RIKEN cDNA E430023O05 gene,Raftk,calcium-dependent tyrosine kinase,cellular adhesion kinase beta,proline-rich tyrosine kinase 2,related adhesion focal tyrosine kinase	PTK2 protein tyrosine kinase 2 beta	
Ptpn11	NM_011202.3	2700084A17Rik,AW536184,MGD-MRK-16288,MGI:1919896,MGI:2141206,PTP1D,PTP2C,RIKEN cDNA 2700084A17 gene,SH-PTP2,SH2 domain-containing protein tyrosine phosphatase-2,SHP-2,Shp2,Syp,expressed sequence AW536184	protein tyrosine phosphatase, non-receptor type 11	
Ptpn18	NM_011206.2	FLP1,HSCF,MGD-MRK-37453,PTP-HSCF,PTP-K1,Ptpk1	protein tyrosine phosphatase, non-receptor type 18	
Ptpn2	NM_001127177.1	AI325124,MGD-MRK-13675,MGD-MRK-13686,MGI:2147211,Ptpt,TC-PTP,expressed sequence AI325124,protein tyrosine phosphatase, T-cell 70zpep,MGD-MRK-35631,Ptpn8,protein tyrosine phosphatase, non-receptor type 8	protein tyrosine phosphatase, non-receptor type 2	
Ptpn22	NM_008979.1		protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	
Ptpn6	NM_013545.2	Hcph,MGD-MRK-10672,MGD-MRK-12181,Ptp1C,SHP-1,Spin,hcp,hemopoietic cell phosphatase,me,motheaten	protein tyrosine phosphatase, non-receptor type 6	
Ptpn7	NM_177081.4	BTPP-4,C920001D21Rik,LC-PTP,MGI:2443461,RIKEN cDNA C920001D21 gene	protein tyrosine phosphatase, non-receptor type 7	

Ptprc	NM_011210.3	B220,CD45,CD45 antigen,Cd45,Ly-5,Lyt-4,MGD-MRK-11992,MGD-MRK-12076,MGD-MRK-13679,MGD-MRK-1864,MGI:3584395,T-lymphocyte antigen 4,T200,lymphocyte antigen 5	protein tyrosine phosphatase, receptor type, C
Ptprj	NM_001135657.1	A1450271,Byp,CD148,DEP-1,MGD-MRK-14303,MGD-MRK-14304,MGD-MRK-26008,MGI:2138959,MGI:98238,RPTPj,Sec-1,Sccl,colon tumor susceptibility 1,expressed sequence A1450271	protein tyrosine phosphatase, receptor type, J
Ptprk	NM_008983.2	A1853699,MGD-MRK-24194,MGI:2143696,PTPK,RPTKkappa,expressed sequence A1853699	protein tyrosine phosphatase, receptor type, K
Ptprs	NM_011218.2	AL022616,MGD-MRK-13684,MGI:2146946,PTP-NU3,PTPsigma,Ptp9,RPTPsigma,expressed sequence AL022616	protein tyrosine phosphatase, receptor type, S
Pvrig	XM_011240963.2	Gm36869,predicted gene, 36869	poliovirus receptor related immunoglobulin domain containing
Pycr1	NM_144795.3	MGC:11688	pyrroline-5-carboxylate reductase 1
Pycr2	NM_133705.2	1810018M05Rik,MGI:1916301,P5cr2,RIKEN cDNA 1810018M05 gene,pyrroline-5-carboxylate reductase	pyrroline-5-carboxylate reductase family, member 2
Rac1	NM_009007.2	AL023026,D5Erttd559e,DNA segment, Chr 5, ERATO Doi 559, expressed,MGD-MRK-13748,MGI:1261850,MGI:2141016,expressed sequence AL023026	Rac family small GTPase 1
Rag1	NM_009019.2	MGD-MRK-13753,MGD-MRK-13755,Rag-1,recombination activating gene 1	recombination activating 1
Rara	NM_001177302.1	MGD-MRK-13766,RAR alpha 1,RARalpha1	retinoic acid receptor, alpha
Rarb	NM_011243.2	Hap,MGD-MRK-10620,MGD-MRK-13767,RAR beta 2,RARbeta2	retinoic acid receptor, beta
Rasgr1	NM_011245.2	A1844718,CD25,CD25Mm,Grf1,Grfbeta,MGD-MRK-16479,MGI:1347052,MGI:2143138,expressed sequence	RAS protein-specific guanine nucleotide-releasing factor 1
Rasgrp1	NM_011246.2	A1844718,guanine nucleotide releasing factor 1	RAS guanyl releasing protein 1
Rasgrp3	NM_001166493.1	BC066069,Gm327,LOC240168,MGC:74365,MGI:2685173,cDNA sequence BC066069, gene model 327, (NCBI)	RAS, guanyl releasing protein 3
Rbi2	NM_011250.4	MGD-MRK-32125,Rb2,p130,retinoblastoma-like 2	RB transcriptional corepressor like 2
Rbx1	NM_019712.3	1500002P15Rik,AA517855,MGI:1913478,MGI:2145915,RIKEN cDNA 1500002P15 gene,ROC1,expressed sequence AA517855	ring-box 1
Rela	NM_009045.4	MGD-MRK-24172,p65,p65 NF kappaB	v-rel reticuloendotheliosis viral oncogene homolog A (avian)
Rein	NM_011261.2	MGD-MRK-13895,MGD-MRK-23859,reeler,rl	reelin
Rgs16	NM_011267.3	MGD-MRK-37450,MGI:1098207,Rgsr,regulator of G-protein signaling-retinal specific	regulator of G-protein signaling 16
Rgs2	NM_009061.2	GOS8	regulator of G-protein signaling 2
Rheb	NM_053075.3	MGD-MRK-13864,Rheb1	Ras homolog enriched in brain
Rictor	NM_030168.3	4921505C17Rik,6030405M08Rik,AW492497,D530039E11Rik,MGI:192409,MGI:1925833,MGI:2146218,RIKEN cDNA 4921505C17 gene,RIKEN cDNA 6030405M08 gene,RIKEN cDNA D530039E11 gene,expressed sequence AW492497	RPTOR independent companion of MTOR, complex 2
Rimk1a	NM_177572.4	BC057371,NAAGS-II,Rimk,cDNA sequence BC057371	ribosomal modification protein rimk-like family member A
Rnf213	XM_006534633.1	D11Ert759e,DNA segment, Chr 11, ERATO Doi 759, expressed	ring finger protein 213
Rock1	NM_009071.2	1110055K06Rik,MGD-MRK-36507,MGI:1916035,RIKEN cDNA 1110055K06 gene,Rock-1	Rho-associated coiled-coil containing protein kinase 1
Rora	NM_013646.1	9530021D13Rik,MGD-MRK-14383,MGD-MRK-26101,MGI:2442931,MGI:2670426,MGI:3054678,Nr1f1,RIKEN cDNA 9530021D13 gene,Tennessee Mouse Genome Consortium	sub-maximal isoform coverage due to non-overlapping transcript variants
Rorg	NM_011281.3	26,neuroscience mutagenesis facility, 267,nmf267,sg,staggerer,tmgc26	RAR-related orphan receptor alpha
Rorgt	NM_001293734.1		RAR-related orphan receptor gamma
Rragc	NM_017475.2	AU041672,Gtr2,MGI:2140480,T1B929,YGR163W,expressed sequence AU041672,small GTPase, homolog (S. cerevisiae)	RAR-related orphan receptor gamma t
Rras	NM_009101.2	A1573426,MGD-MRK-14208,MGI:2142000,Rras1,expressed sequence A1573426	Rorc (NM_011281)
Rsd2	NM_021384.4	2510004L01Rik,MGI:1919695,RIKEN cDNA 2510004L01 gene,Vigl1,cjg5,viperin	Rorc (NM_001293734)
Rxrg	NM_001159731.1	MGD-MRK-14266,Nr2b3	Ras-related GTP binding C
S1pr1	NM_007901.4	A1849002,Edg1,MGI:2139817,S1P,S1P1,endothelial differentiation sphingolipid G-protein-coupled receptor 1,endothelial differentiation sphingolipid G-protein-coupled receptor 1,expressed sequence A1849002	related RAS viral (r-ras) oncogene
Scn2a	NM_001099298.2	A230052E19Rik,MGD-MRK-14321,MGI:2444703,Nav1.2,RIKEN cDNA A230052E19 gene,Scn2a1,sodium channel, voltage-gated, type II, alpha 1	radical S-adenosyl methionine domain containing 2
Scp2	NM_011327.4	AA409774,AA409893,C76618,C79031,MGD-MRK-14327,MGI:2140147,MGI:2140148,MGI:2140647,MGI:2140673,NSL-TP,SCP-2,SCPx,expressed sequence AA409774,expressed sequence AA409893,expressed sequence C76618,expressed sequence C79031,nonspecific lipid transfer protein,ns-LTP	retinoid X receptor gamma
Sel1l	NM_011344.2	AW493766,MGI:2145030,Sel1 (suppressor of lin-12) 1 homolog (C. elegans),Sel1h,expressed sequence AW493766	sterol carrier protein 2, liver
Sele	NM_011345.2	CD62E,E-selectin,Elam,MGD-MRK-14357,MGD-MRK-9356,endothelial adhesion molecule	sel-1 suppressor of lin-12-like (C. elegans)
Sell	NM_001164059.1	A1528707,CD62L,L-selectin,LECAM-1,Lnhr,Ly-22,Ly-m22,Lyam-1,Lyam1,MGD-MRK-11841,MGD-MRK-11961,MGD-MRK-12014,MGD-MRK-12052,MGD-MRK-12053,MGD-MRK-14358,MGI:2138287,expressed sequence A1528707,lymph node homing receptor,lymphocyte adhesion molecule 1,lymphocyte antigen 22,lymphocyte antigen m22	selectin, endothelial cell
Sema4d	NM_013660.3	CD100,M-sema G,MGD-MRK-38289,MGI:895064,Semacl2,Semaj,Semcl2,coil-4,semaphorin C-like 2,semaphorin H,semaphorin J	selectin, lymphocyte
Sesn1	NM_001013370.2	1110002G11Rik,AU044290,MGI:1915788,MGI:2143767,PA26,RIKEN cDNA 1110002G11 gene,SEST1,expressed sequence AU044290	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D
Sesn2	NM_144907.1	5630400E15Rik,BC003348,MGC:7182,MGI:1933128,RIKEN cDNA 5630400E15 gene,SEST3,cDNA sequence BC003348	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D
Sesn3	NM_030261.4	2810001M05Rik,AA409119,MGI:1100839,MGI:1923833,MGI:2138089,Prp10,RIKEN cDNA 2810001M05 gene,SAP155,SF3b155,Targ4,expressed sequence AA409119,transforming growth factor alpha regulated gene 4	sestrin 1
Sf3b1	NM_031179.2	14-3-3,14-3-3 sigma,Er,MGD-MRK-9568,MGI:95409,MME1,Ywhas,repeated epilation,tyrosine 3-monoxygenase/tryptophan 5-monoxygenase activation protein,	sestrin 2
Sfn	NM_018754.2	2210415K03Rik,AW011917,AW107218,AW742929,MGI:1919612,MGI:2142743,MGI:2142757,MGI:2142814,RIKEN cDNA 2210415K03 gene,expressed sequence AW011917,expressed sequence AW107218,expressed sequence AW742929,sFRP-1	sestrin 3
Sfrp1	NM_013834.3	AW107218,expressed sequence AW742929,sFRP-1	splicing factor 3b, subunit 1
			sigma polypeptide
			secreted frizzled-related protein 1

Sftpa1	NM_023134.4	MGD-MRK-14377, MGD-MRK-14380, MGD-MRK-39517, SP-A, Sftp-1, Sftp1, surfactant pulmonary associated protein A1, surfactant-associated protein 1	surfactant associated protein A1
Sh2d1a	NM_011364.4	Duncan disease homolog, SAP 6230417E10Rik, 9930029B02Rik, Gm685, LOC271849, MGI:2685531, RIKEN cDNA 6230417E10 gene, RIKEN cDNA 9930029B02 gene, gene model 685, (NCBI)	SH2 domain containing 1A
Shc4	NM_199022.2		SHC (Src homology 2 domain containing) family, member 4
Siglec1	NM_011426.3	CD169, MGD-MRK-16453, Siglec-1, Sn, sialoadhesin	sialic acid binding Ig-like lectin 1, sialoadhesin
SiglecF	NM_145581.1	Siglec5, mSiglec-F, sialic acid binding Ig-like lectin 5	sialic acid binding Ig-like lectin F
SiglecH	NM_178706.4	6430529G09Rik, RIKEN cDNA 6430529G09 gene, Siglec-H	sialic acid binding Ig-like lectin H
Slamf6	NM_030710.2	KAL1, KAL1b, Ly108, NTB-A, SF2000, lymphocyte antigen 108	SLAM family member 6
Slc2a12	NM_178934.4	GLUT-12, Glut12	solute carrier family 2 (facilitated glucose transporter), member 12
Slc2a3	NM_011401.4	AA408729, AL023014, AL024341, AU040424, C78366, EST AA408729, EST C78366, Glut-3, Glut3, MGD-MRK-10157, MGD-MRK-10161, MGI:1353648, MGI:1889340, MGI:2141536, MGI:2141541, MGI:2141583, expressed sequence AL023014, expressed sequence AL024341, expressed sequence AU040424, glucose transporter 3, brain	solute carrier family 2 (facilitated glucose transporter), member 3
Slc2a6	NM_172659.2	F630103L12Rik, Glut6, RIKEN cDNA F630103L12 gene	solute carrier family 2 (facilitated glucose transporter), member 6
Slc7a5	NM_011404.3	DOH16S474E, DNA segment, human S474E, Gm42049, LAT1, MGI:5624934, TA1, predicted gene, 42049 AI852629, AV344025, D930008O12Rik, MGD-MRK-36536, MGI:2146942, MGI:2147028, MGI:2441999, Ncx1, RIKEN cDNA D930008O12 gene, expressed sequence AI852629, expressed sequence AV344025	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5
Slc8a1	NM_011406.3	7120426M23Rik, MAD homolog 2, (Drosophila), MGD-MRK-37087, MGI:2442937, Madh2, Madr2, RIKEN cDNA 7120426M23 gene, Smad 2	solute carrier family 8 (sodium/calcium exchanger), member 1
Smad2	NM_010754.4	AU022421, MGI:2143216, Madh3, Smad 3, expressed sequence AU022421	SMAD family member 2
Smad3	NM_016769.4	AW743858, D18Wsu70e, DNA segment, Chr 18, Wayne State University 70, expressed, DPC4, Dpc4, MGD-MRK-33955, MGI:106263, MGI:2147379, Madh4, Smad 4, expressed sequence AW743858	SMAD family member 3
Smad4	NM_008540.2		SMAD family member 4
Smad9	NM_019483.5	MADH6, Madh9, SMAD8A, SMAD8B	SMAD family member 9
Smarca4	NM_011417.2	Brg1, MGD-MRK-1622, MGI:5313994, MGI:5316763, Mutant line 508, subline 1, Mutant line 692, SNF2beta, SWI/SNF, b2b508.1Clo, b2b692Clo, brahma related gene 1	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
Smc3	NM_007790.3	Bamacan, Cspg6, MGI:1261435, Max dimerization protein member-interacting protein 1, Mmp1, SmcD, chondroitin sulfate proteoglycan 6	structural maintenance of chromosomes 3
Snai2	NM_011415.2	Slug, Slugh, Snail2, slug, chicken homolog	snail family zinc finger 2
Snw1	NM_025507.2	2310008B08Rik, AW048543, MGI:2144995, NCoA-62, RIKEN cDNA 2310008B08 gene, SKI interacting protein, SKIP, Skiiip, expressed sequence AW048543	SNW domain containing 1
Socs1	NM_009896.2	Cish1, Cish7, JAB, JAK-binding protein, JAK2-binding protein, MGI:1276585, SOCS-1, SSI-1, STAT-induced STAT inhibitor 1, cytokine inducible SH2-containing protein 1	suppressor of cytokine signaling 1
Socs2	NM_001168655.1	AI527257, AW108012, CIS2, Cish2, D130043N08Rik, JAB, MGD-MRK-10702, MGI:2143636, MGI:2143807, MGI:96077, RIKEN cDNA D130043N08 gene, SOCS-2, SSI-2, STAT-induced STAT inhibitor 2, cytokine inducible SH2-containing protein 2, cytokine-inducible SH2 protein 2, expressed sequence AI527257, expressed sequence AW108012, hg, high growth	suppressor of cytokine signaling 2
Socs3	NM_007707.2	CIS3, Cish3, E2a-Pbx1 target gene in fibroblasts 10, EF-10, SOCS-3, SSI-3, STAT-induced STAT inhibitor 3, cytokine inducible SH2-containing protein 3, cytokine-inducible SH2 protein 3	suppressor of cytokine signaling 3
Sos1	NM_009231.2	4430401P03Rik, AI449023, MGD-MRK-14489, MGI:1918028, MGI:2146862, RIKEN cDNA 4430401P03 gene, expressed sequence AI449023	SOS Ras/Rac guanine nucleotide exchange factor 1
Sos2	NM_001135559.1	MGD-MRK-14490	SOS Ras/Rho guanine nucleotide exchange factor 2
Sp100	NM_013673.3	A430075G10Rik, MGD-MRK-39560, MGI:2443000, RIKEN cDNA A430075G10 gene	nuclear antigen Sp100
Spag9	NM_027569.2	3110018C07Rik, 4733401I23Rik, 4831406C20Rik, AW552012, JIP4, JLP, MGI:1920413, MGI:1924388, MGI:2144568, Mapk8ip4, RIKEN cDNA 3110018C07 gene, RIKEN cDNA 4733401I23 gene, RIKEN cDNA 4831406C20 gene, expressed sequence AW552012, syd1	sperm associated antigen 9
Spib	NM_019866.1	Spi-B	Spi-B transcription factor (Spi-1/PU.1 related)
St3gal6	NM_018784.2	1700023B24Rik, AI930218, AW552396, MGI:1922763, MGI:2146521, MGI:2146659, RIKEN cDNA 1700023B24 gene, ST3Gal VI, Siat10, expressed sequence AI930218, expressed sequence AW552396, sialyltransferase 10 (alpha-2,3-sialyltransferase VI)	ST3 beta-galactoside alpha-2,3-sialyltransferase 6
Stag2	NM_001077712.1	9230105L23Rik, B230112I07Rik, MGI:1925327, MGI:1925692, RIKEN cDNA 9230105L23 gene, RIKEN cDNA B230112I07 gene, SA-2, SAP2, nuclear protein SA2	stromal antigen 2
Stat1	NM_009283.3	2010005J02Rik, AA408197, MGD-MRK-23925, MGI:1923977, MGI:2138078, RIKEN cDNA 2010005J02 gene, expressed sequence AA408197	signal transducer and activator of transcription 1
Stat3	NM_213659.2	1110034C02Rik, AW109958, Aprf, MGD-MRK-23900, MGI:1915983, MGI:2144497, RIKEN cDNA 1110034C02 gene, expressed sequence AW109958	signal transducer and activator of transcription 3
Stat4	NM_011487.4	MGD-MRK-23924	signal transducer and activator of transcription 4
Stat5a/b	NM_011488.3		signal transducer and activator of transcription 5A/B
Stc1	NM_009285.3	MGD-MRK-38175	stanniocalcin 1
Stc2	NM_011491.3	AW125853, MGI:1316647, MGI:2144507, Stc2, expressed sequence AW125853, mustc2, stanniocalcin 2-like	stanniocalcin 2
Stim1	NM_009287.4	MGD-MRK-36043, MGD-MRK-37442, MGI:108400, SIM	stromal interaction molecule 1
Sumo1	NM_009460.2	PIC1, SENTRIN, Smt3C, Ubl1, ubiquitin-like 1	small ubiquitin-like modifier 1
Syk	NM_001198977.1	MGD-MRK-16292, Sykb 1110030N06Rik, A530078N03Rik, MGI:2442803, Map3k7ip2, RIKEN cDNA 1110030N06 gene, RIKEN cDNA A530078N03 gene, Tak1 binding protein 2, mKIAA0733, mitogen-activated protein kinase kinase kinase 7 interacting protein 2	spleen tyrosine kinase
Tab2	NM_138667.2	2810417N14Rik, BB223262, C530024J06Rik, MGI:1922868, MGI:3035057, PAF65A, RIKEN cDNA 2810417N14 gene, RIKEN cDNA C530024J06 gene, expressed sequence BB223262	TGF-beta activated kinase 1/MAP3K7 binding protein 2
Taf6l	NM_001177798.1		TATA-box binding protein associated factor 6 like

Tapbp	NM_009318.2	D17Wsu91e,DNA segment, Chr 17, Wayne State University 91, expressed,MGD-MRK-33974,MGI:106282,TPN,tapasin 120003111Rik,1700069121Rik,AA930106,D6Erd404e,D6Erd772e,DNA segment, Chr 6, ERATO Doi 404, expressed,DNA segment, Chr 6, ERATO Doi 772, expressed,EST AA930106,MGI:1196306,MGI:1889378,MGI:1914122,MGI:1920756,RIKEN cDNA 1200003111 gene,RIKEN cDNA 1700069121 gene,T6BP,TXBP151	TAP binding protein
Tax1bp1	NM_025816.3	1200008805Rik,AI462036,AW048562,MGI:1914699,MGI:2143617,MGI:2143800,RIKEN cDNA 1200008805 gene,expressed sequence	Tax1 (human T cell leukemia virus type I) binding protein 1
Tbk1	NM_019786.4	AI462036,expressed sequence AW048562	TANK-binding kinase 1
Tbl1xr1	NM_030732.3	8030499H02Rik,A630076E03Rik,AWS39987,C21,C23008912Rik,DC42,Ira1,MGI:2139993,MGI:2444715,RIKEN cDNA 8030499H02 gene,RIKEN cDNA A630076E03 gene,RIKEN cDNA C23008912 gene,TBLR1,expressed sequence AWS39987	transducin (beta)-like 1X-linked receptor 1
Tbx21	NM_019507.2	T-bet,TBT1,Tbet,Tblym	T-box 21
Tcf7	XM_006532802.2	AI465550,MGD-MRK-14759,MGI:2144188,T cell factor-1,T-cell factor 1,TCF-1,Tcf1,expressed sequence AI465550	transcription factor 7, T cell specific
Tcl1	NM_009337.3		T cell lymphoma breakpoint 1
Tdrd1	XM_006527473.1	MTR-1	tudor domain containing 1
Telo2	NM_001163661.1	1200003M09Rik,AI415602,MGI:2164847,RIKEN cDNA 1200003M09 gene,expressed sequence AI415602	telomere maintenance 2
Tert	NM_009354.1	TR	telomerase reverse transcriptase
Tgfb1	NM_011577.1	MGD-MRK-15063,MGD-MRK-15064,MGD-MRK-15067,TGF-beta 1,TGF-beta1,TGFbeta1,Tgfb,Tgfb-1	transforming growth factor, beta 1
Tgfb2	NM_009367.1	BB105277,MGD-MRK-15065,MGD-MRK-15068,MGI:2138633,Tgfbeta2,Tgfb-2,expressed sequence BB105277	transforming growth factor, beta 2
Ticam1	NM_174989.4	AW046014,AW547018,MGI:2147076,TICAM-1,Trif,expressed sequence AW046014,expressed sequence AW547018	toll-like receptor adaptor molecule 1
Tigit	NM_001146325.1	ENSMUSG00000071552,V-set and transmembrane domain containing 3,Vstm3,predicted gene, ENSMUSG00000071552	T cell immunoreceptor with Ig and ITIM domains
Timp1	NM_011593.2	Cigi,MGC:7143,MGD-MRK-15110,MGD-MRK-2015,TIMP-1 5730411M05Rik,AA792082,Bce1,EST X83332,EST X83333,ESTM13,ESTM14,Grg4,MGD-MRK-26070,MGD-MRK-28129,MGD-MRK-28130,MGI:104835,MGI:104836,MGI:1917740,MGI:1930703,MGI:2147460,RIKEN cDNA 5730411M05 gene,X83332,X83333,expressed sequence AA792082,expressed sequence tag mouse EST 13,expressed sequence tag mouse EST 14	tissue inhibitor of metalloproteinase 1
Tle4	NM_011600.3		transducin-like enhancer of split 4
Tlr1	NM_030682.1		toll-like receptor 1
Tlr2	NM_011905.3	Ly105	toll-like receptor 2
Tlr7	NM_133211.3		toll-like receptor 7
Tmed2	NM_019770.2	1110032D12Rik,1810020N21Rik,MGI:1916364,MGI:1923572,RIKEN cDNA 1110032D12 gene,RIKEN cDNA 1810020N21 gene,Sid394,p24beta1	transmembrane p24 trafficking protein 2
Tnf	NM_013693.2	DIF,MGD-MRK-15151,MGD-MRK-28090,TNF alpha,TNF-alpha,TNFalpha,Tnfa,Tnfsf1a,tumor necrosis factor, alpha,tumor necrosis factor-alpha	tumor necrosis factor
Tnfr1	NM_009397.2	A20,Tnfr3,tumor necrosis factor induced protein 3,zinc finger protein A20	tumor necrosis factor, alpha-induced protein 3
Tnfrsf10b	NM_020275.4	DR5,KILLER,Killer/Dr5,Ly98,TRAIL-R2,TRAILR2,TRICK2A,TRICK2B,TRICKB,Trail Receptor	tumor necrosis factor receptor superfamily, member 10b
Tnfrsf14	NM_178931.2	Atar,HveA,Hvem	tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator)
Tnfrsf17	NM_011608.1	BCM,BCMA,Tnfrsf13,Tnfrsf13a	tumor necrosis factor receptor superfamily, member 17
Tnfrsf18	NM_009400.3	Gitr,glucocorticoid-induced tumor necrosis factor related gene CD120a,MGD-MRK-15155,MGD-MRK-15156,MGI:98781,TNF receptor alpha chain,TNF-R-1,TNF-R1,TNF-R55,TNF-alpha-R1,TNF-alphaR1,TNFAR,TNFR60,TNFR1,TNFRp55,TNFAlfa-R1,Tnfr-2,Tnfr1,p55,p55-R,tumor necrosis factor receptor 1,tumor necrosis factor receptor 2	tumor necrosis factor receptor superfamily, member 1a
Tnfrsf1a	NM_011609.2	CD120b,MGD-MRK-15154,MGD-MRK-15157,MGI:98782,TNF-R-II,TNF-R2,TNF-R75,TNF-alphaR2,TNFRB,TNFR80,TNFR1,TNFAlfa-R2,Tnfr-1,Tnfr2,p75,TNFR,tumor necrosis factor receptor 1,tumor necrosis factor receptor 2	tumor necrosis factor receptor superfamily, member 1b
Tnfrsf1b	NM_011610.3	ACT35,CD134,MGD-MRK-13094,MGD-MRK-25943,Ox-40 T-cell antigen,Ox40,Txgp1,tax-transcriptionally activated glycoprotein 1 4-1BB,A93004011Rik,AA408498,AI325004,CD antigen 137,CDw137,Cd137,ILA,Ly63,MGI:1925690,MGI:2140130,MGI:2140239,RIKEN cDNA A93004011 gene,expressed sequence	tumor necrosis factor receptor superfamily, member 9
Tnfrsf9	NM_001077509.1	AA408498,expressed sequence AI325004,lymphocyte antigen 63 A330042I21Rik,AI448571,APO-2L,MGD-MRK-35883,MGI:2139709,RIKEN cDNA A330042I21 gene,TNF-related apoptosis inducing ligand,Trail,expressed sequence AI448571	tumor necrosis factor (ligand) superfamily, member 10
Tnfsf10	NM_009425.2	GITR ligand,GitrI	tumor necrosis factor (ligand) superfamily, member 18
Tnfsf18	NM_183391.3	Ath-1,Ath1,CD134L,MGD-MRK-1447,MGD-MRK-1450,MGD-MRK-18700,MGD-MRK-25942,MGI:88098,OX40L,OX40 ligand,OX40L,TXGP1,Txgp1,atherosclerosis 1,gp34,tax-transcriptionally activated glycoprotein 1 ligand	tumor necrosis factor (ligand) superfamily, member 4
Tnfsf4	NM_009452.2	4-1BB ligand,4-1BB-L,4-1BBL,AI848817,CD antigen 137 ligand,Cd137,Ly63,MGI:2146938,expressed sequence	tumor necrosis factor (ligand) superfamily, member 9
Tnfsf9	NM_009404.3	AI848817,lymphocyte antigen 63 ligand	tumor necrosis factor (ligand) superfamily, member 9
Tox	NM_145711.4	1700007F02Rik,MGI:1923819,RIKEN cDNA 1700007F02 gene AI851523,AV026525,BI987407,LOC269389,MGI:2139084,MGI:2139242,RxHMG1,expressed sequence AI851523,expressed sequence	thymocyte selection-associated high mobility group box
Tox2	NM_001098799.1	AV026525,expressed sequence BI987407	TOX high mobility group box family member 2
Tox3	NM_172913.3	500-9,BC052044,C230068E13,CAGF9,DNA segment, 500-9,MGI:3573728,Tnrc9,cDNA sequence BC052044,trinucleotide repeat containing 9	TOX high mobility group box family member 3
Tox4	NM_023434.3	5730589K01Rik,AA410149,MGI:2138093,RIKEN cDNA 5730589K01 gene,expressed sequence AA410149	TOX high mobility group box family member 4
Tpp2	NM_009418.2	MGD-MRK-19628,TppII	tripeptidyl peptidase II
Tpsab1	NM_031187.4	MGD-MRK-12149,MGD-MRK-12157,MMCP-7,Mcp-7,Mcpt7,mast cell protease 7	tryptase alpha/beta 1
Tpsb2	NM_010781.3	AV011504,MGD-MRK-12148,MGD-MRK-12156,MGI:2147011,MMCP-6,Mcp-6,Mcp6,Mcpt6,expressed sequence AV011504,mast cell protease 6	tryptase beta 2
Trac	Tcr_104.1	Gm16914,MGD-MRK-14846,MGI:98554,T-cell receptor alpha, constant region,Tcr-C,predicted gene, 16914	T cell receptor alpha constant

Traf2	NM_009422.2	AI325259, MGD-MRK-18656, MGI:2138907, expressed sequence AI325259	TNF receptor-associated factor 2
Trat1	NM_198297.4	C030046M14Rik, RIKEN cDNA C030046M14 gene, T-cell receptor interacting molecule, Tcrim, Trim	T cell receptor associated transmembrane adaptor 1
Trbc1/2	Tcr_320.1		T cell receptor beta, constant region 1/2
Trdc	Tcr_167.1	MGD-MRK-14904, Tcrd-C	T cell receptor delta, constant region
Trdv1	Tcr_038.1	Gm13895, OTTMUSG00000015027, predicted gene 13895, predicted gene, OTTMUSG00000015027	T cell receptor delta variable 1
Trdv2-1/2-2	Tcr_162.1		T cell receptor delta variable 2-1/2-2
Trdv3	Tcr_276.1		T cell receptor delta variable 3
Trdv4	Tcr_298.1		T cell receptor delta variable 4
Trdv5	Tcr_224.1	EG626545, Gm6683, predicted gene 6683, predicted gene, EG626545	T cell receptor delta variable 5
Trem2	NM_031254.2	MGI:1932924, MGI:1932925, Trem2a, Trem2b, Trem2c, triggering receptor expressed on myeloid cells 2a, triggering receptor expressed on myeloid cells 2b, triggering receptor expressed on myeloid cells 2c	triggering receptor expressed on myeloid cells 2
Trgc1/2/3	ENSMUST00000103558.2		T cell receptor gamma, constant 1/2/3
Trgc4	Tcr_004.1	MGD-MRK-14920, Tcrg-C4	T cell receptor gamma, constant 4
Trgv1/Trgv2/Trgv3	Tcr_317.1		T cell receptor gamma, variable 1/2/3
Trgv4	Tcr_316.1	AI528624, MGD-MRK-14926, MGI:2145267, Tcrg-V4, expressed sequence AI528624	T cell receptor gamma, variable 4
Trgv5	Tcr_050.1	MGD-MRK-14927, Tcrg-V5	T cell receptor gamma, variable 5
Trgv6	Tcr_067.1	MGD-MRK-14928, Tcrg-V6	T cell receptor gamma, variable 6
Trgv7	Tcr_229.1	MGD-MRK-14929, Tcrg-V7	T cell receptor gamma, variable 7
Trim2	NM_001271725.1	narf, neural activity-related ring finger protein 1110047J21Rik, 2810431N19Rik, 4732461M22Rik, A1119726, MGI:1916090, MGI:1923499, MGI:2142983, RIKEN cDNA 1110047J21 gene, RIKEN cDNA 2810431N19 gene, RIKEN cDNA 4732461M22 gene, expressed sequence A1119726	tripartite motif-containing 2
Trim29	NM_023655.2	8030451N04Rik, AI413936, Ecto, MGI:2139690, MGI:2444632, RIKEN cDNA 8030451N04 gene, Tif1g, ectodermin, expressed sequence AI413936, mKIAA1113	tripartite motif-containing 29
Trim33	NM_001079830.2	0710005M05Rik, A430106H13Rik, AWO46487, Hls5, MGI:1925036, MGI:2145786, Mair, RIKEN cDNA 0710005M05 gene, RIKEN cDNA A430106H13 gene, expressed sequence AWO46487, mKIAA1098	tripartite motif-containing 33
Trim35	NM_029979.3	D18Wsu100e, DNA segment, Chr 18, Wayne State University 100, expressed, Haprin, MGD-MRK-33956	tripartite motif-containing 35
Trim36	NM_001170855.1	AI385631, MGI:2139686, TRFIC, expressed sequence AI385631	tripartite motif-containing 36
Trim46	NM_001039466.1	AI835002, C030048G07Rik, MGI:1924734, MGI:2144887, RIKEN cDNA C030048G07 gene, expressed sequence AI835002, mKIAA0282	tripartite motif-containing 46
Trim9	NM_001110202.1		tripartite motif-containing 9
Trpc1	NM_011643.2	MGD-MRK-39527, Mtrp1, Trp1, Trp1, transient receptor protein 1 AV025995, MGD-MRK-39522, MGI:2143254, Trp6, expressed sequence AV025995, mtrp6, transient receptor protein 6	transient receptor potential cation channel, subfamily C, member 1
Trpc6	NM_013838.2	2310022G15Rik, 4833414K03Rik, 5033407022Rik, CHAK, CHAK1, LTRPC7, Ltp7, MGI:1921848, MGI:1923209, MGI:1924250, RIKEN cDNA 2310022G15 gene, RIKEN cDNA 4833414K03 gene, RIKEN cDNA 5033407022 gene, TRP-PLIK	transient receptor potential cation channel, subfamily C, member 6
Trpm7	NM_021450.2		transient receptor potential cation channel, subfamily M, member 7
Tslp	NM_021367.2		thymic stromal lymphopoietin
Ttk	NM_009445.2	AL022661, Esk1, MGI:2143170, Mps1, expressed sequence AL022661 1190001E22Rik, AA407686, Fus1, MGI:1916182, MGI:2142910, PDGFA associated protein 2, Pdap2, RIKEN cDNA 1190001E22 gene, expressed sequence AA407686	Ttk protein kinase
Tusc2	NM_019742.4	AA960487, M-Twist, MGD-MRK-15305, MGI:1890569, MGI:2144752, MGI:3038444, Pde, Pluridigite, Ska10, Ska<m10Jus>, bHLHa38, charlie chaplin, expressed sequence AA960487, ptd, polydactyly EMS, skeletal/axial 10	tumor suppressor 2, mitochondrial calcium regulator
Twist1	NM_011658.2	JTK1	twist basic helix-loop-helix transcription factor 1
Tyk2	NM_001205312.1		tyrosine kinase 2
Tyrobp	NM_011662.2	DAP12, KARAP, killer cell activating receptor associated protein	TYRO protein tyrosine kinase binding protein
Ube2d1	NM_145420.2	MGC:28550, UBCH5	ubiquitin-conjugating enzyme E2D 1
Ube2i	NM_011665.4	5830467E05Rik, MGD-MRK-35832, MGI:1923335, Mmubc9, RIKEN cDNA 5830467E05 gene, UBC9, Ubce9	ubiquitin-conjugating enzyme E2I
Ucp1	NM_009463.2	AI385626, MGD-MRK-15339, MGI:2142517, Slc25a7, expressed sequence AI385626	uncoupling protein 1 (mitochondrial, proton carrier)
Uhrf1	NM_001111078.1	AL022808, ICBP90, MGI:2146950, Np95, expressed sequence AL022808, nuclear protein 95	ubiquitin-like, containing PHD and RING finger domains, 1
Ulbp1	NM_029975.2	A430108B07Rik, MULT1, RIKEN cDNA A430108B07 gene 4921514G19Rik, AI327321, E430033I05Rik, Gcap18, MGD-MRK-18681, MGI:1918171, MGI:2143588, RIKEN cDNA 4921514G19 gene, RIKEN cDNA E430033I05 gene, expressed sequence AI327321, granule cell antiserum positive 18, mKIAA0529	UL16 binding protein 1
Usp15	NM_027604.3	1200004E02Rik, 2810483I07Rik, 6330514E22Rik, MGI:1920049, MGI:1923414, RIKEN cDNA 1200004E02 gene, RIKEN cDNA 2810483I07 gene, RIKEN cDNA 6330514E22 gene, UBP-M	ubiquitin specific peptidase 15
Usp16	NM_024258.2	2810040F13Rik, AI847175, MGD-MRK-19622, MGI:1919946, MGI:2139071, RIKEN cDNA 2810040F13 gene, expressed sequence AI847175	ubiquitin specific peptidase 16
Vav2	NM_009500.1	A530094I06Rik, AA986410, Id18.1, MGI:2139612, MGI:2444834, MGI:5288360, RIKEN cDNA A530094I06 gene, expressed sequence AA986410, insulin dependent diabetes 18.1	vav 2 oncogene
Vav3	NM_146139.2		vav 3 oncogene
Vcam1	NM_011693.2	CD106, MGD-MRK-15384, MGD-MRK-15385, Vcam-1	vascular cell adhesion molecule 1
Vdac1	NM_011694.4	AL033343, MGD-MRK-35380, MGI:2144363, Vdac5, expressed sequence AL033343	voltage-dependent anion channel 1
Vegfa	NM_009505.4	MGD-MRK-24046, VEGF-A, VEGF120, VEGF164, VEGF188, VPF, Vegf, vascular endothelial growth factor	vascular endothelial growth factor A
Vsir	NM_028732.4	4632428N05Rik, Dies1, PD-1H, RIKEN cDNA 4632428N05 gene, VISTA	V-set immunoregulatory receptor
Vtcrn1	NM_178594.3	B7-H4, B7x, BC032925, cDNA sequence BC032925	V-set domain containing T cell activation inhibitor 1
Wnt11	NM_009519.2	MGD-MRK-18782	wingless-type MMTV integration site family, member 11
Wnt2	NM_023653.5	2610510E18Rik, Int-1-related protein, Int11, Irp, MGD-MRK-11475, MGD-MRK-15439, MGD-MRK-15449, MGI:1919406, Mirp, RIKEN cDNA 2610510E18 gene, Wnt-2, Wnt2a, m-irp	wingless-type MMTV integration site family, member 2
Wnt3	NM_009521.2	Int-4, MGD-MRK-11421, MGD-MRK-15440, MGD-MRK-15450, Wnt-3, mammary tumor integration site 4	wingless-type MMTV integration site family, member 3
Wnt3a	NM_009522.2	MGD-MRK-15417, MGD-MRK-15441, MGD-MRK-15451, Wnt-3a, vestigial tail, vt	wingless-type MMTV integration site family, member 3A
Wnt4	NM_009523.1	MGD-MRK-15442, MGD-MRK-15452, Wnt-4	wingless-type MMTV integration site family, member 4
Wnt6	NM_009526.3	AA409270, MGD-MRK-15445, MGD-MRK-15455, MGI:2138090, Wnt-6, expressed sequence AA409270	wingless-type MMTV integration site family, member 6

Xaf1	NM_001037713.3	AI661682,ATAC,LTN,Lptn,MGD-MRK-26027,MGI:2138317,SCM-1,SCM-1a,Scyc1,expressed sequence AI661682,lymphotactin,small inducible cytokine subfamily C, member 1 (lymphotactin)	XIAP associated factor 1
Xcl1	NM_008510.1	1110015C02Rik,Aipa,Api3,Birc4,IAP3,ILP-1,MGD-MRK-36144,MGI:1922024,RIKEN cDNA 1110015C02 gene,apoptosis inhibitor 3,apoptosis inhibitory protein A,baculoviral IAP repeat-containing 4	chemokine (C motif) ligand 1
Xiap	NM_009688.2	AI323763,MGD-MRK-15844,MGI:2140834,Yamaguchi sarcoma viral (v-yes) oncogene homolog,Yes,expressed sequence AI323763	X-linked inhibitor of apoptosis
Yes1	NM_001205132.1	111001311Rik,14-3-3 zeta,AI596267,AL022924,AU020854,MGD-MRK-39483,MGI:1915893,MGI:2146042,MGI:2146113,MGI:2146160,RIKEN cDNA 111001311 gene,expressed sequence AI596267,expressed sequence AL022924,expressed sequence AU020854	YES proto-oncogene 1, Src family tyrosine kinase
Ywhaz	NM_011740.2	AW488674,MGD-MRK-15848,MGI:2145026,NF-E1,UCRBP transcription factor,Yin Yang 1,delta transcription factor,expressed sequence AW488674	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide
Yy1	NM_009537.3	AI327364,MGD-MRK-16398,MGI:2138217,MGI:3584397,MGI:3584398,Srk,TZK,ZAP-70,expressed sequence AI327364,mr t-less,mrtle,mur,murdoch,syk related kinase	YY1 transcription factor
Zap70	NM_009539.2	AI467657,Green's luxoid,MGD-MRK-11929,MGD-MRK-24092,MGI:2143075,MGI:96851,PLZF,Zfp145,expressed sequence AI467657,Iu,luxoid,zinc finger protein 145	zeta-chain (TCR) associated protein kinase
Zbtb16	NM_001033324.3	Bf12,ERF2,MGD-MRK-36525,Tis11d	zinc finger and BTB domain containing 16
Zfp3612	NM_001001806.2	6m13060,Hobit,OTTMUSG00000010217,predicted gene	zinc finger protein 36, C3H type-like 2
Zfp683	ENSMUST00000105884.1	13060,predicted gene, OTTMUSG00000010217	zinc finger protein 683
Internal Reference Genes			
Abcf1	NM_013854.1	AU041969,Abc50,D17Wsu166e,DNA segment, Chr 17, Wayne State University 166, expressed,GCN20,MGD-MRK-36426,MGI:107849,MGI:2147001,expressed sequence AU041969	ATP-binding cassette, sub-family F (GCN20), member 1
G6pdx	NM_008062.3	G28A,G6pd,Gpdx,MGD-MRK-10225,MGD-MRK-33659,MGD-MRK-9915,glucose-6-phosphate dehydrogenase 1 X-linked 6720454P05Rik,BC002230,MGI:2443747,RIKEN cDNA 6720454P05 gene,cDNA sequence BC002230	glucose-6-phosphate dehydrogenase X-linked
Nrde2	NM_183155.2	AZ-1,AZ1,Antizyme,MGD-MRK-38478,antizyme 1	nrde-2 necessary for RNA interference, domain containing ornithine decarboxylase antizyme 1
Oaz1	NM_008753.4	MGD-MRK-13258,MGD-MRK-13266,Pgk-1	phosphoglycerate kinase 1
Pgk1	NM_008828.2	220kDa,MGD-MRK-14111,RNA polymerase II 1,Rpo2-1	polymerase (RNA) II (DNA directed) polypeptide A
Polr2a	NM_001291068.1	Cphn,Cyp-18,CypA,MGD-MRK-13591,MGD-MRK-2108,cyclophilin,cyclophilin A	peptidylprolyl isomerase A
Ppia	NM_008907.1	2310034D06Rik,C81073,FP,MGI:2145519,RIKEN cDNA 2310034D06 gene,SDH2,SDHF,expressed sequence C81073	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)
Sdha	NM_023281.1	1200014D22Rik,BB131189,LIP1,LKB1IP,MGI:2138637,RIKEN cDNA 1200014D22 gene,expressed sequence BB131189	serine/threonine kinase 11 interacting protein
Stk11p	NM_027886.3	1110003P22Rik,C87963,MGI:2142375,RIKEN cDNA 1110003P22 gene,expressed sequence C87963	TBC1 domain family, member 10b
Tbc1d10b	NM_144522.5	Gtf2d,MGD-MRK-18659,MGD-MRK-24009,general transcription factor IID	TATA box binding protein
Tbp	NM_013684.3	AL033289,MGD-MRK-15326,MGD-MRK-33606,MGI:2141542,Ubb2,expressed sequence AL033289,ubiquitin 2	ubiquitin B
Ubb	NM_011664.4		

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