

nCounter® Metabolic Pathways Panel - Gene and Probe Details

Official Symbol	Accession	Alias / Previous Symbol	Official Full Name	Other targets or Isoform Information
AZM	NM_00014.4		alpha-2-macroglobulin	
ADAT	NM_016228.3		aminoadipate aminotransferase	
AANAT	NM_001088.2	aryalkylamine N-acetyltransferase	aryalkylamine N-acetyltransferase	
ABL1	NM_005157.3	ABL_v-abl Abelson murine leukemia viral oncogene homolog 1, c-abl oncogene 1, receptor tyrosine kinase, c-abl oncogene 1, non-receptor tyrosine kinase	ABL proto-oncogene 1, non-receptor tyrosine kinase	
ACAA2	NM_006111.2	acetyl-Coenzyme A acyltransferase 2	acetyl-CoA acyltransferase 2	
ACACA	NM_198834.1	ACAC,ACC,acetyl-Coenzyme A carboxylase alpha	acetyl-CoA carboxylase alpha	
ACACB	NM_001093.3	acetyl-Coenzyme A carboxylase beta	acetyl-CoA carboxylase beta	
ACADL	NM_001608.3	acyl-Coenzyme A dehydrogenase, long chain	acyl-CoA dehydrogenase long chain	
ACAP2	NM_012287.5	CENTB2,centaurin, beta 2	ArfGAP with coiled-coil, ankyrin repeat and PH domains 2	
ACAT1	NM_000019.3	ACAT,acetyl-Coenzyme A acetyltransferase 1	acetyl-CoA acetyltransferase 1	
ACAT2	NM_005891.2	acetyl-Coenzyme A acetyltransferase 2 (acetocetyl Coenzyme A thiolase), acetyl-Coenzyme A acetyltransferase 2	acetyl-CoA acetyltransferase 2	
ACMSD	NM_138326.2		aminocarboxymuconate semialdehyde decarboxylase	
ACOT12	NM_130767.2		acyl-CoA thioesterase 12	
ACOX1	NM_004035.5	acyl-Coenzyme A oxidase 1, palmitoyl,acyl-CoA oxidase 1, palmitoyl	acyl-CoA oxidase 1	
ACSF3	NR_045667.2		acyl-CoA synthetase family member 3	
ACY1	NM_000666.2		aminoacylase 1	
ADA	NM_000022.2		adenosine deaminase	
ADAL	NM_001012969.2		adenosine deaminase like	
ADH1A	NM_000667.3	ADH1	alcohol dehydrogenase 1A (class I), alpha polypeptide	
ADH1B	NM_000668.4	ADH2	alcohol dehydrogenase 1B (class I), beta polypeptide	
ADH1C	NM_000669.3	ADH3	alcohol dehydrogenase 1C (class I), gamma polypeptide	
ADH4	NM_000670.3		alcohol dehydrogenase 4 (class II), pi polypeptide	
ADH6	NM_000672.3		alcohol dehydrogenase 6 (class V)	
ADH7	NM_000673.3		alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide	
ADK	NM_001123.2		adenosine kinase	
ADORA2A	NM_000675.3	ADORA2	adenosine A2a receptor	
AFMID	NM_001010982.4		arylformamidase	
AGXT	NM_000030.2	SPAT,serine:pyruvate aminotransferase,alanine-glyoxylate aminotransferase	alanine-glyoxylate and serine-pyruvate aminotransferase	
AGXT2	NM_031900.3	alanine-glyoxylate aminotransferase 2	alanine-glyoxylate aminotransferase 2	
AK3	NM_016282.2	AK6,AK3L1,adenylate kinase 6,adenylate kinase 3 like 1	adenylate kinase 3	
AKR1C4	NM_001818.2	C10R,ald0-keto reductase family 1, member C4 (chlorocone reductase; 3-alpha hydroxysteroid dehydrogenase, type 1, dihydrodiol dehydrogenase)	aldo-keto reductase family 1 member C4	
AKT1	NM_00104431.1	v-akt murine thymoma viral oncogene homolog 1	AKT serine/threonine kinase 1	
AKT1S1	NM_032375.3	AKT1 substrate 1 (proline-rich)	AKT1 substrate 1	
AKT2	NM_001626.4	v-akt murine thymoma viral oncogene homolog 2	AKT serine/threonine kinase 2	
AKT3	NM_005465.4	v-akt murine thymoma viral oncogene homolog 3	AKT serine/threonine kinase 3	
ALDH2	NM_000690.2	aldehyde dehydrogenase 2 family (mitochondrial)	aldehyde dehydrogenase 2 family member	
ALDOA	NM_184041.2	aldolase A, fructose-bisphosphate	aldolase, fructose-bisphosphate A	LOC112694756 (NM_001365304;NM_001365305;NM_001365307)
ALDOB	NM_000035.3	aldolase B, fructose-bisphosphate	aldolase, fructose-bisphosphate B	
ALOX12	NM_000697.1	arachidonate 12-lipoxygenase	arachidonate 12-lipoxygenase, 12S type	
ALOX15	NM_001140.3		arachidonate 15-lipoxygenase	
ALOX5	NM_000698.2		arachidonate 5-lipoxygenase	
AMDHD1	NM_152435.2		amidohydrolase domain containing 1	
AMPD1	NM_000036.2	adenosine monophosphate deaminase 1 (isoform M)	adenosine monophosphate deaminase 1	
AMPD2	NM_004037.6	adenosine monophosphate deaminase 2 (isoform L)	adenosine monophosphate deaminase 2	
AMPD3	NM_000480.2	adenosine monophosphate deaminase (isoform E)	adenosine monophosphate deaminase 3	
AOC1	NM_001091.2	ABP1,amloride binding protein 1 (amine oxidase (copper-containing))	amine oxidase copper containing 1	
AOC3	NM_001277731.1		amine oxidase copper containing 3	
AOX1	NM_001159.3		aldehyde oxidase 1	
AP2S1	NM_021575.2	CLAP52,HH3,hypocalciuric hypercalcemia 3 (Oklahoma type),adaptor related protein	adaptor related protein complex 2 subunit sigma 1	
APOA1	NM_000039.1	apolipoprotein A-I	apolipoprotein A1	
APOA2	NM_001543.1	apolipoprotein A-II	apolipoprotein A2	
APOA4	NM_000482.3	apolipoprotein A-IV	apolipoprotein A4	
APOB	NM_000384.2	apolipoprotein B (including Ag(x) antigen)	apolipoprotein B	
APOC2	NM_000483.3	apolipoprotein C-II	apolipoprotein C2	
APOC3	NM_000040.1	apolipoprotein C-III	apolipoprotein C3	
APOE	NM_000041.2	AD2;Alzheimer disease 2 (APOE*E4-associated, late onset)	apolipoprotein E	
APOM	NM_019101.2		apolipoprotein M	
APRT	NM_000485.2		adenine phosphoribosyltransferase	
AR	NM_000044.2	DHTR,SBMA,dihydrotestosterone receptor,spinal and bulbar muscular atrophy	androgen receptor	
ARF5	NM_001662.2		ADP ribosylation factor 5	
ARG1	NM_000045.3	arginase, liver	arginase 1	
ARID1A	NM_006015.4	C1orf4,SMARCF1;SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily f, member 1,AT rich interactive domain 1A (SWI-like),AT rich interactive domain 1A (SWI-like)	AT-rich interaction domain 1A	
ARID1B	NM_020732.3	AT rich interactive domain 1B (SWI1-like)	AT-rich interaction domain 1B	
ARID2	NM_152641.2	AT rich interactive domain 2 (ARID, RFX-like)	AT-rich interaction domain 2	
ARPC4	NM_005718.4	actin related protein 2/3 complex, subunit 4 (20 kD),actin related protein 2/3 complex subunit 4	actin related protein 2/3 complex subunit 4	
ASCL1	NM_004316.3	achaete-scute complex (Drosophila) homolog-like 1,achaete-scute complex-like 1 (Drosophila),achaete-scute complex homolog 1 (Drosophila)	achaete-scute family bHLH transcription factor 1	
ASH1L	NM_018489.2	ash1 (absent, small, or homeotic)-like (Drosophila)	ASH1 like histone lysine methyltransferase	
ASL	NM_000048.3		argininosuccinate lyase	
ASMT	NM_001171039.1		acetylserotonin O-methyltransferase	
ASNS	NM_183356.2	asparagine synthetase	asparagine synthetase (glutamine-hydrolyzing)	
ASPA	NM_000049.2	aspartoacylase (aminoacylase 2, Canavan disease)	aspartoacylase	
ASPG	NM_001080464.2	C1orf76;chromosome 14 open reading frame 76,asparaginase homolog (S. cerevisiae)	asparaginase	
ASS1	NM_000050.4	AS,argininosuccinate synthetase	argininosuccinate synthetase 1	
ATF4	NM_001075.2	TXREB,activating transcription factor 4 (tax-responsive enhancer element B57)	activating transcription factor 4	
ATF7	NM_001130060.1		activating transcription factor 7	
ATF7IP	NM_018179.3		activating transcription factor 7 interacting protein	
ATG101	NM_021934.4	C12orf44;chromosome 12 open reading frame 44	autophagy related 101	
ATG2B	NM_018036.5	C14orf103;chromosome 14 open reading frame 103,ATG2 autophagy related 2 homolog B (S. cerevisiae)	autophagy related 2B	
ATOX1	NM_004045.3	ATX1 (antioxidant protein 1, yeast) homolog 1,ATX1 antioxidant protein 1 homolog (yeast)	antioxidant 1 copper chaperone	
ATPSF1D	NM_001687.4	ATP5D,ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit	ATP synthase F1 subunit delta	
ATPSME	NM_007100.3	ATPS1,ATP synthase, H+ transporting, mitochondrial F0 complex, subunit e,ATP synthase, H+ transporting, mitochondrial F0 complex, subunit e,ATP synthase, H+ transporting, mitochondrial Fo complex, subunit E,ATP synthase, H+ transporting, mitochondrial Fo complex subunit E	ATP synthase membrane subunit e	
ATPEV1F	NM_001198909.1	ATPase, H+ transporting, lysosomal 14kDa, V1 subunit F	ATPase H+ transporting V1 subunit F	
ATXN7	NM_001128149.2	degeneration)	ataxin 7	
BAD	NM_004322.3		BCL2 associated agonist of cell death	
BCL2	NM_000657.2	B-cell CLL/lymphoma 2,BCL2, apoptosis regulator	BCL2 apoptosis regulator	
BCL2A1	NM_004049.2	HSPA1	BCL2 related protein A1	
BCL2L1	NM_138578.1		BCL2 like 1	
BHMT	NM_001712.2		betaine-homocysteine S-methyltransferase	
BHMT2	NM_001178005.1		betaine-homocysteine S-methyltransferase 2	
BIRC3	NM_182962.1	API2,baculoviral IAP repeat-containing 3	baculoviral IAP repeat containing 3	
BLK	NM_001715.2	B lymphoid tyrosine kinase	BLK proto-oncogene, Src family tyrosine kinase	
BRAF	NM_004333.3	v-raf murine sarcoma viral oncogene homolog B	B-Raf proto-oncogene, serine/threonine kinase	
BRCA1	NM_007294.3	breast cancer 1, early onset,breast cancer 1	BRCA1 DNA repair associated	
BRCA2	NM_000059.3	FANCD1,FACD,FANCD2,Fanconi anemia, complementation group D1,breast cancer 2, early onset,breast cancer 2	BRCA2 DNA repair associated	
BRCC3	NM_024332.3	CXorf53;chromosome X open reading frame 53,BRCA1/BRCA2-containing complex, subunit 3	BRCA1/BRCA2-containing complex subunit 3	
BRP1	NM_020431.1		BRCA1 interacting protein C-terminal helixase 1	
BTX	NM_000061.1	AGMK1,MD1,Bruton agammaglobulinemia tyrosine kinase	Bruton tyrosine kinase	
BUB1	NM_004336.3	BUB1,budding uninhibited by benzimidazoles 1 (yeast homolog),budding uninhibited by benzimidazoles 1 homolog (yeast)	BUB1 mitotic checkpoint serine/threonine kinase	
BUB1B	NM_001211.4	budding uninhibited by benzimidazoles 1 (yeast homolog),beta,budding uninhibited by benzimidazoles 1 homolog beta (yeast)	BUB1 mitotic checkpoint serine/threonine kinase B	
CA12	NM_001218.3	carbonic anhydrase XII	carbonic anhydrase 12	
CA9	NM_001216.2	carbonic anhydrase IX	carbonic anhydrase 9	
CAB39	NM_001130849.1		calcium binding protein 39	

CACNA1A	NM_001127221.1	CACNL1A4,SCA6,MHP1,MHP;calcium channel, voltage-dependent, P/Q type, alpha 1A subunit	calcium voltage-gated channel subunit alpha1 A
CACNA1E	NM_000721.2	CACNL1A6;calcium channel, voltage-dependent, R type, alpha 1E subunit,calcium voltage-gated channel subunit alpha1 E	calcium voltage-gated channel subunit alpha1 E
CACNB4	NM_000726.3	calcium channel, voltage-dependent, beta 4 subunit	calcium voltage-gated channel auxiliary subunit beta 4
CACNB2	NM_000539.3	calcium channel, voltage-dependent, gamma subunit 2	calcium voltage-gated channel auxiliary subunit gamma 2
CACNB3	NM_000539.2	calcium channel, voltage-dependent, gamma subunit 3	calcium voltage-gated channel auxiliary subunit gamma 3
CACNB7	NM_031896.3	calcium channel, voltage-dependent, gamma subunit 7	calcium voltage-gated channel auxiliary subunit gamma 7
CAD	NM_004341.3		carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
CARD11	NM_032415.2	caspace recruitment domain family, member 11	caspace recruitment domain family member 11
CAT	NM_001752.2		catalase
CBL	NM_005188.2	CBL2,Cas-Br-M (murine) ecotropic retroviral transforming sequence,Cbl proto-oncogene, E3 ubiquitin protein ligase	Cbl proto-oncogene
CBR4	NM_032783.4		carbonyl reductase 4
CCL13	NM_005408.2	SCYA13;small inducible cytokine subfamily A (Cys-Cys), member 13,chemokine (C-C motif) ligand 13	C-C motif chemokine ligand 13
CCL19	NM_006274.2	SCYA19;small inducible cytokine subfamily A (Cys-Cys), member 19,chemokine (C-C motif) ligand 19	C-C motif chemokine ligand 19
CCL4	NM_002984.2	LAG1,SCYA4;small inducible cytokine A4 (homologous to mouse Mip-1b),chemokine (C-C motif) ligand 4	C-C motif chemokine ligand 4
CCL5	NM_002985.2	D17S136E,SCYA5;small inducible cytokine A5 (RANTES),chemokine (C-C motif) ligand 5	C-C motif chemokine ligand 5
CCNA1	NM_003914.3		cyclin A1
CCNA2	NM_001237.2	CCNA,CCN1	cyclin A2
CCNB2	NM_004701.2		cyclin B2
CCNO1	NM_053056.2	BCL1,D11S287E,PRAD1;cyclin D1 (PRAD1: parathyroid adenomatosis 1)	cyclin D1
CD14	NM_000591.2	CD14 antigen	CD14 molecule
CD163	NM_004244.4	CD163 antigen	CD163 molecule
CD180	NM_005582.2	LY64;lymphocyte antigen 64 (mouse) homolog, radioprotective, 105kD,CD180 antigen	CD180 molecule
CD19	XM_011545981.1	CD19 antigen	CD19 molecule
CD209	NM_001144899.1	CD209 antigen	CD209 molecule
CD244	NM_001166663.1	natural killer cell receptor 2B4,CD244 natural killer cell receptor 2B4,CD244 molecule,	CD244 molecule
CD247	NM_000734.3	CD32,CD3z antigen, zeta polypeptide (TIT3 complex),CD247 antigen	CD247 molecule
CD27	NM_001262.4	TNFRSF7;tumor necrosis factor receptor superfamily, member 7	CD27 molecule
CD274	NM_014143.3	PCD1L1;programmed cell death 1 ligand 1,CD274 antigen	CD274 molecule
CD276	NM_001024736.1	CD276 antigen	CD276 molecule
CD28	NM_001243078.1	CD28 antigen (Tp44)	CD28 molecule
CD36	NM_000072.3	CD36 antigen (collagen type I receptor, thrombospondin receptor),CD36 molecule (thrombospondin receptor)	CD36 molecule
CD3D	NM_000732.4	T3D,CD3d antigen, delta polypeptide (TIT3 complex),CD3d molecule, delta (CD3-TCR complex)	CD3d molecule
CD3E	NM_000733.2	CD3e antigen, epsilon polypeptide (TIT3 complex),CD3e molecule, epsilon (CD3-TCR complex)	CD3e molecule
CD3G	NM_000073.2	CD3g antigen, gamma polypeptide (TIT3 complex),CD3g molecule, gamma (CD3-TCR complex)	CD3g molecule
CD4	NM_000616.4	CD4 antigen (p55),T-cell surface glycoprotein CD4	CD4 molecule
CD40LG	NM_000074.2	HIGM1,MD3,TNFSF5;tumor necrosis factor (ligand) superfamily, member 5 (hyper-IgM syndrome)	CD40 ligand
CD6	NM_001254751.1	CD6 antigen	CD6 molecule
CD63	NM_001780.4	MLA1;CD63 antigen (melanoma 1 antigen)	CD63 molecule
CD68	NM_001251.2	CD68 antigen	CD68 molecule
CD84	NM_001184879.1	CD84 antigen (leukocyte antigen),CD84 molecule	CD84 molecule
CD8A	NM_001768.6	CD8;CD8 antigen, alpha polypeptide (p32),T-cell surface glycoprotein CD8 alpha chain	CD8a molecule
CD8B	NM_172099.2	CD8B1;CD8 antigen, beta polypeptide 1 (p37)	CD8b molecule
CDA	NM_001785.2		cytidine deaminase
CDCC20	NM_001255.2	CDCC20 (cell division cycle 20, S. cerevisiae, homolog),CDC20 cell division cycle 20 homolog (S. cerevisiae),cell division cycle 20 homolog (S. cerevisiae)	cell division cycle 20
CDCA5	NM_080668.3		cell division cycle associated 5
CDCA8	NM_018101.2		cell division cycle associated 8
CDK9	NM_001261.2	CDK2L4;cyclin-dependent kinase 9 (CDC2-related kinase)	cyclin dependent kinase 9
CEACAM3	NM_001815.3	GM1;carcinoembryonic antigen-related cell adhesion molecule 3	carcinoembryonic antigen related cell adhesion molecule 3
CEPFA	NM_001042426.1	centromere protein A (17kD),centromere protein A, 17kDa	centromere protein A
CHMP2A	NM_014453.3	chromatin modifying protein 2A	charged multivesicular body protein 2A
CHMP6	NM_024591.4	chromatin modifying protein 6	charged multivesicular body protein 6
CLOCK	NM_004898.2	clock (mouse) homolog,clock homolog (mouse)	clock circadian regulator
CLSPN	NM_022111.2	claspin homolog (Xenopus laevis)	claspin
CMKLR1	NM_004072.2	chemokine-like receptor 1	chemerin chemokine-like receptor 1
COL4A1	NM_001845.4	collagen, type IV, alpha 1	collagen type IV alpha 1 chain
COL6A1	NM_001848.2	collagen, type VI, alpha 1	collagen type VI alpha 1 chain
COL6A3	NM_004369.3	collagen, type VI, alpha 3	collagen type VI alpha 3 chain
COP56	NM_006833.4	COP9 constitutive photomorphogenic homolog subunit 6 (Arabidopsis)	COP9 signalosome subunit 6
COX14	NM_001257133.1	C12orf62;chromosome 12 open reading frame 62,COX14 cytochrome c oxidase assembly homolog (S. cerevisiae),COX14, cytochrome c oxidase assembly factor	cytochrome c oxidase assembly factor COX14
COX4I1	NM_001318797.1	COX4;cytochrome c oxidase subunit IV,cytochrome c oxidase subunit IV isoform 1	cytochrome c oxidase subunit 4I1
COX5A	NM_004255.3	cytochrome c oxidase subunit Va	cytochrome c oxidase subunit 5A
COX5B	NM_001862.2	cytochrome c oxidase subunit Vb	cytochrome c oxidase subunit 5B
COX6A1	NM_004373.2	COX6A;cytochrome c oxidase subunit VIa polypeptide 1	cytochrome c oxidase subunit 6A1
COX6B1	NM_001863.4	COX6B;cytochrome c oxidase subunit Vlb,cytochrome c oxidase subunit Vlb polypeptide 1 (ubiquitous),cytochrome c oxidase subunit Vlb polypeptide 1	cytochrome c oxidase subunit 6B1
COX7B	NM_001866.2	cytochrome c oxidase subunit VIlb	cytochrome c oxidase subunit 7B
COX7C	NM_001867.2	cytochrome c oxidase subunit VIlc	cytochrome c oxidase subunit 7C
COX8A	NM_004074.2	COX8;cytochrome c oxidase subunit VIII,cytochrome c oxidase subunit VIIIA (ubiquitous)	cytochrome c oxidase subunit 8A
CPA3	NM_001870.2	carboxypeptidase A3 (mast cell)	carboxypeptidase A3
CP51	NM_001875.3	mitochondrial	carbamoyl-phosphate synthase 1
CPT1A	NM_001876.3	CPT1;carnitine palmitoyltransferase 1A (liver)	carnitine palmitoyltransferase 1A
CREB3L3	NM_001271995.1		cAMP responsive element binding protein 3 like 3
CS	NM_004077.2		citrate synthase
CSF3R	NM_000780.3	CD114;colony stimulating factor 3 receptor (granulocyte)	colony stimulating factor 3 receptor
CTCF	NM_001191022.1	CCCTC-binding factor (zinc finger protein)	CCCTC-binding factor
CTLA4	NM_005214.3	CEUAC3,IDDN12;celiac disease 3,msulin-dependent diabetes mellitus 12	cytotoxic T-lymphocyte associated protein 4
CTPS1	NM_001301237.1	CTPS,CTP synthase	CTP synthase 1
CTSA	NM_001127695.1	GSLPPGB;protective protein for beta-galactosidase (galactosialidosis)	cathepsin A
CTSD	NM_001909.3	CP5D;cathepsin D (lysosomal aspartyl protease)	cathepsin D
CTSL	NM_001912.4	CTSL1;cathepsin L1	cathepsin L
CTSS	NM_004079.3		cathepsin S
CTSW	NM_001335.3	cathepsin W (lymphopain)	cathepsin W
CTS2	NM_001336.3		cathepsin Z
CKL9	NM_002416.2	CMK,MIG;monokine induced by gamma interferon,chemokine (C-X-C motif) ligand 9	C-X-C motif chemokine ligand 9
CKR6	NM_006564.1	chemokine (C-X-C motif) receptor 6	C-X-C motif chemokine receptor 6
CYBB	NM_000397.3	CGD;chronic granulomatous disease,cytochrome b-245, beta polypeptide	cytochrome b-245 beta chain
CYP1A1	NM_000499.3	CYP1;cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 1	cytochrome P450 family 1 subfamily A member 1
CYP1A2	NM_000761.3	2,cytochrome P450, family 1, subfamily A, polypeptide 2	cytochrome P450 family 1 subfamily A member 2
CYP1B1	NM_000104.3	GLC3A;cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile),cytochrome P450, family 1, subfamily B, polypeptide 1	cytochrome P450 family 1 subfamily B member 1
CYP4A11	NM_000778.3	CYP4A2;cytochrome P450, subfamily IVA, polypeptide 11,cytochrome P450, family 4, subfamily A, polypeptide 11	cytochrome P450 family 4 subfamily A member 11
CYP4A22	NM_001010969.3	cytochrome P450, family 4, subfamily A, polypeptide 22	cytochrome P450 family 4 subfamily A member 22
CYP8B1	NM_004391.2	1,cytochrome P450, family 8, subfamily B, polypeptide 1	cytochrome P450 family 8 subfamily B member 1
D2HGDH	NM_00128749.1		D-2-hydroxyglutarate dehydrogenase
DAO	NM_001917.4		D-amino acid oxidase
DKC	NM_000788.2		deoxycytidine kinase
DDC	NM_000790.3		dopa decarboxylase
DEPTOR	NM_022783.2	DEPDC6;DEP domain containing 6	DEP domain containing MTOR interacting protein
DERA	NM_015954.2	2-deoxyribose-5-phosphate aldolase homolog (C. elegans)	deoxyribose-phosphate aldolase
DGLUCY	NM_001102369.2	C14orf159;chromosome 14 open reading frame 159	D-glutamate cyclase

CCL4L1 (NM_207007)

CD8B2 (NM_001349727;NM_001368307)

CYP4A11 (NM_001363587)

DGUOK	NM_080916.2		deoxyguanosine kinase
DMGDH	NM_013391.2		dimethylglycine dehydrogenase
DTL	NM_016448.2	denticleless homolog (Drosophila)	denticleless E3 ubiquitin protein ligase homolog
DUOX1	NM_175940.1		dual oxidase 1
DUOX2	NM_014080.4		dual oxidase 2
ECHS1	NM_004093.3	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial	enoyl-CoA hydratase, short chain 1
EEA1	NM_003566.3	early endosome antigen 1, 162kD	early endosome antigen 1
EFNA4	NM_005227.2	EPLG4;ephrin-A4	ephrin A4
EGFR	NM_201282.1	ERBB;epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog)	epidermal growth factor receptor
EHHADH	NM_001166415.1	ECHD;enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase	enoyl-CoA hydratase and 3-hydroxyacyl CoA dehydrogenase
EME1	XM_011524392.1	essential meiotic endonuclease 1 homolog 1 (S. pombe)	essential meiotic structure-specific endonuclease 1
ENO1	NM_001428.2	ENO1L1;MPB1;enolase 1, (alpha)	enolase 1
ENO3	NM_001976.4	enolase 3, (beta, muscle);enolase 3 (beta, muscle)	enolase 3
EOMES	NM_005442.2	eomesodermin (Xenopus laevis) homolog	eomesodermin
EPC1	NM_025209.2	enhancer of polycomb homolog 1 (Drosophila)	enhancer of polycomb homolog 1
ERCC6	NM_001277058.1	complementation group 6,excision repair cross-complementation group 6	ERCC excision repair 6, chromatin remodeling factor
ERN1	NM_001433.2	ER to nucleus signalling 1	endoplasmic reticulum to nucleus signaling 1
EXO1	NM_003686.3		exonuclease 1
EZH2	NM_001203247.1	enhancer of zeste (Drosophila) homolog 2,enhancer of zeste homolog 2 (Drosophila)	enhancer of zeste 2 polycomb repressive complex 2 subunit
FABP5	NM_001444.1	fatty acid binding protein 5 (psoriasis-associated)	fatty acid binding protein 5
FAH	NM_000171.1		fumarylacetoacetate hydrolase
FAHD1	NM_021206.1	C16orf36;chromosome 16 open reading frame 36	fumarylacetoacetate hydrolase domain containing 1
FAM30A	NR_026800.2	C14orf110,KIAA0125;chromosome 14 open reading frame 110,KIAA0125	family with sequence similarity 30 member A
FANCA	NM_000135.2	FACA,FANCD;Fanconi anemia complementation group A	FA complementation group A
FANCD2	NM_033084.3	FACD,FANCD;Fanconi anemia complementation group D2	FA complementation group D2
FANCI	NM_001113378.1	KIAA1794,KIAA1794;Fanconi anemia complementation group I	FA complementation group I
FASLG	NM_000639.1	APT1L1,TNFSF6;tumor necrosis factor (ligand) superfamily, member 6,Fas ligand (TNF superfamily, member 6)	Fas ligand
FASN	NM_004104.4		fatty acid synthase
FBP1	NM_000507.3	FBP;fructose-1,6-bisphosphatase 1	fructose-bisphosphatase 1
FCAR	NM_002002.2	Fc fragment of IgA, receptor for	Fc fragment of IgA receptor
FCRL2	NM_001159488.1	SPAP1,SH2 domain-containing phosphatase anchor protein 1,Fc receptor-like 2	Fc receptor like 2
FOX1	NM_004109.4	FOX	ferredoxin 1
FOXO	NM_004110.3	FOXO	ferredoxin reductase
FGF1	NM_033137.1	FGFA;fibroblast growth factor 1 (acidic)	fibroblast growth factor 1
FH	NM_000143.2		fumarate hydratase
FLT1	NM_002019.4	FLT;fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor),fms-related tyrosine kinase 1	fms related tyrosine kinase 1
FLT3	NM_004119.2	fms-related tyrosine kinase 3	fms related tyrosine kinase 3
FNIP1	NM_001008738.2		folliculin interacting protein 1
FNIP2	NM_002860.1		folliculin interacting protein 2
FOLH1	NM_004476.1	FOLH;folate hydrolase (prostate-specific membrane antigen) 1	folate hydrolase 1
FOLH1B	NM_153696.2	FOLH2;FOLHP;folate hydrolase 2	folate hydrolase 1B
FOLR1	NM_000802.2	FOLR;folate receptor 1 (adult)	folate receptor 1
FOLR3	NM_000804.2	folate receptor 3 (gamma)	folate receptor 3
FOXM1	NM_202002.1	FKHL16	forkhead box M1
FOXP3	NM_014009.3	IPEX;immune dysregulation, polyendocrinopathy, enteropathy, X-linked	forkhead box P3
FPR1	NM_002029.3		formyl peptide receptor 1
FTCD	NM_006657.2	formiminotransferase cyclodeaminase	formimidoyltransferase cyclodeaminase
GPCC	NM_000151.2	G6PT;glucose-6-phosphatase, catalytic (glycogen storage disease type 1, von Gierke disease)	glucose-6-phosphatase catalytic subunit
GABARAP	NM_007278.1	GABA(A) receptor-associated protein	GABA type A receptor-associated protein
GAD1	NM_000817.2	GAD;glutamate decarboxylase 1 (brain, 67kD),glutamate decarboxylase 1 (brain, 67kDa)	glutamate decarboxylase 1
GADL1	NM_207359.2	glutamate decarboxylase-like 1	glutamate decarboxylase like 1
GAPDH	NM_001256799.1	GAPD	glyceraldehyde-3-phosphate dehydrogenase
GAPDH5	NM_014364.4	GAPD5	glyceraldehyde-3-phosphate dehydrogenase, spermatogenic
GAPVD1	NM_001282679.1		GTase activating protein and VPS9 domains 1
GART	NM_000819.3	PRGS;PGFT	phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase
GATM	NM_001482.2		glycine amidinotransferase
GBA	NM_001005742.2	GLUC;glucosylceramidase,glucosidase, beta; acid (includes glucosylceramidase),glucosidase, beta, acid	glucosylceramidase beta
GCDH	NM_000159.2	glutaryl-Coenzyme A dehydrogenase	glutaryl-CoA dehydrogenase
GCK	NM_000162.4	MODY2;maturity onset diabetes of the young 2,glucokinase (hexokinase 4)	glucokinase
GCLC	NM_001498.2	GLCLC;GLCL;glutamate-cysteine ligase, catalytic subunit	glutamate-cysteine ligase catalytic subunit
GDA	NM_001242506.2		guanine deaminase
GLRX	NM_002064.2	glutaredoxin (thioltransferase)	glutaredoxin
GLS	NM_014905.3		glutaminase
GLS2	NM_013267.2	glutaminase 2 (liver, mitochondrial)	glutaminase 2
GLUD1	NM_005271.2	GLUD	glutamate dehydrogenase 1
GLUL	NM_001053044.2	GLNS;glutamate-ammonia ligase (glutamine synthase)	glutamate-ammonia ligase
GLYAT	NM_005838.3		glycine-N-acyltransferase
GLYCK	NR_026700.1		glycerate kinase
GMPR	NM_006877.3		guanosine monophosphate reductase
GMPR2	NM_001002001.2		guanosine monophosphate reductase 2
GMPS	NM_003875.2	guanine monophosphate synthetase	guanine monophosphate synthase
GNG12	NM_018841.3	guanine nucleotide binding protein (G protein), gamma 12	G protein subunit gamma 12
GNLY	NM_012483.2	LAG2	granulysin
GNS	NM_002076.3		glucosamine (N-acetyl)-6-sulfatase
GOT1	NM_002079.2	glutamic-oxaloacetic transaminase 1, soluble (aspartate aminotransferase 1),glutamic-oxaloacetic transaminase 1, soluble (aspartate aminotransferase 1)	glutamic-oxaloacetic transaminase 1
GOT2	NM_002080.2	glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2),glutamic-oxaloacetic transaminase 2, mitochondrial	glutamic-oxaloacetic transaminase 2
GPI	NM_000175.2	glucose phosphatase isomerase	glucose-6-phosphate isomerase
GPS1	NM_004127.4		G protein pathway suppressor 1
GPT	NM_005309.2	glutamic-pyruvate transaminase (alanine aminotransferase)	glutamic-pyruvic transaminase
GPX1	NM_000581.2		glutathione peroxidase 1
GPX4	NM_001039847.1	glutathione peroxidase 4 (phospholipid hydroperoxidase)	glutathione peroxidase 4
GRAP2	NM_001291826.1		GRB2 related adaptor protein 2
GRIN1	NM_000832.5	NMDAR1;N-methyl-D-aspartate receptor subunit NRI,glutamate receptor, ionotropic, N-methyl D-aspartate 1	glutamate ionotropic receptor NMDA type subunit 1
GSK3B	NM_002093.2		glycogen synthase kinase 3 beta
GTSE1	NM_016426.5	G-2 and S-phase expressed 1	G2 and S-phase expressed 1
GUSB	NM_000181.3	glucuronidase, beta	glucuronidase beta
GYS2	NM_021957.3	glycogen synthase 2 (liver)	glycogen synthase 2
GZMA	NM_006144.2	HFSP,CTLA3;granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)	granzyme A
GZMB	NM_004131.3	CTLA1,CSPB;granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)	granzyme B
GZMH	NM_033423.3	CTSG1;granzyme H (cathepsin G-like 2, protein h-CCPY)	granzyme H
HPD	NM_004285.3	GDH;glucose dehydrogenase,hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)	hexose-6-phosphate dehydrogenase/glucose 1-dehydrogenase
HAAO	NM_012205.2		3-hydroxyanthranilate 3,4-dioxygenase
HACD2	NM_198402.2	PTPLB;protein tyrosine phosphatase-like (proline instead of catalytic arginine), member b	3-hydroxyacyl-CoA dehydratase 2
HADH	NM_001184705.2	HADHSL;L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain,hydroxyacyl-Coenzyme A dehydrogenase	hydroxyacyl-CoA dehydrogenase
HDC	NM_002112.3		histidine decarboxylase
HECT1	NM_003922.3	hect (homologous to the E6-AP (UBE3A) carboxyl terminus) domain and RCC1 (CHC1)	HECT and RLD domain containing E3 ubiquitin protein ligase family member 1
HEXA	NM_000520.4	hexosaminidase A (alpha polypeptide)	hexosaminidase subunit alpha
HEXB	NM_000521.3	hexosaminidase B (beta polypeptide)	hexosaminidase subunit beta
HIF1A	NM_001530.2	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	hypoxia inducible factor 1 subunit alpha
HIF3A	NM_152796.2		hypoxia inducible factor 3 subunit alpha
HJURP	NM_018410.3		Holliday junction recognition protein
HK1	NM_000188.2		hexokinase 1
HK2	NM_000189.4		hexokinase 2
HK3	NM_002115.1	hexokinase 3 (white cell)	hexokinase 3
HLA-A	NM_002116.5		major histocompatibility complex, class I, A

SPRYD4 (NM_207344)

HLA-C	NM_002117.4	HLA-JY3,D6S204,PSORS1,psoriasis susceptibility 1	major histocompatibility complex, class I, C
HLA-DQA1	NM_002122.3	HLA-DQA	major histocompatibility complex, class II, DQ alpha 1
HLA-DRB1	NM_002124.3	HLA-DR18	major histocompatibility complex, class II, DR beta 1
HLA-E	NM_005516.5		major histocompatibility complex, class I, E
HMOX1	NM_002133.2	heme oxygenase (decycling) 1	heme oxygenase 1
HNF4A	NM_178850.1	TCF4,MODY,MODY1	hepatocyte nuclear factor 4 alpha
HFD	NM_002150.2	PPD	4-hydroxyphenylpyruvate dioxygenase
HPRT1	NM_000194.1	HPRT	hypoxanthine phosphoribosyltransferase 1
HRAS	NM_005343.2	HRAS1,v-Ha-ras Harvey rat sarcoma viral oncogene homolog,Harvey rat sarcoma viral oncogene homolog	HRAS proto-oncogene, GTPase
HSD11B1	NM_181755.1	HSD11B,HSD11,hydroxysteroid (11-beta) dehydrogenase 1	hydroxysteroid 11-beta dehydrogenase 1
HSD17B8	NM_014234.3	FABG1,FabG (beta-ketoacyl-[acyl-carrier-protein] reductase, E coli) like (E. coli),hydroxysteroid (17-beta) dehydrogenase 8	hydroxysteroid 17-beta dehydrogenase 8
HSF1	NM_011517006.1		heat shock transcription factor 1
HSF2	NM_001135564.1		heat shock transcription factor 2
HSPA2	NM_021979.3	heat shock 70kD protein 2,heat shock 70kDa protein 2	heat shock protein family A (Hsp70) member 2
HSPA4	NM_002154.3	heat shock 70kD protein 4,heat shock 70kDa protein 4	heat shock protein family A (Hsp70) member 4
HSPF1	NM_002157.2	heat shock 10kD protein 1 (chaperonin 10),heat shock 10kDa protein 1	heat shock protein family E (Hsp10) member 1
ICOS	NM_012092.2	inducible T-cell costimulator	inducible T cell costimulator
IDH1	NM_005896.3	isocitrate dehydrogenase 1 (NADP+),soluble,isocitrate dehydrogenase 1 (NADP+)	isocitrate dehydrogenase (NADP(+)) 1, cytosolic
IDH2	NM_002168.2	isocitrate dehydrogenase 2 (NADP+),mitochondrial	isocitrate dehydrogenase (NADP(+)) 2, mitochondrial
IDH3A	NM_005530.2	isocitrate dehydrogenase 3 (NAD+) alpha	isocitrate dehydrogenase 3 (NAD(+)) alpha
IDH3B	NM_001258384.1	isocitrate dehydrogenase 3 (NAD+) beta	isocitrate dehydrogenase 3 (NAD(+)) beta
IDH3G	NM_004135.2	isocitrate dehydrogenase 3 (NAD+) gamma	isocitrate dehydrogenase 3 (NAD(+)) gamma
IDNK	NM_001001551.3	C9orf103,chromosome 9 open reading frame 103,idnk, gluconokinase homolog (E. coli),IDNK, gluconokinase	IDNK gluconokinase
IDO1	NM_002164.5	IDO1,IDO,indoleamine-pyruole 2,3 dioxygenase	indoleamine 2,3-dioxygenase 1
IDO2	NM_194294.2	IDO1L,indoleamine-pyruole 2,3 dioxygenase-like 1	indoleamine 2,3-dioxygenase 2
IFNG	NM_000619.2		interferon gamma
IL10	NM_000572.2		interleukin 10
IL2	NM_000586.2		interleukin 2
IL21R	NM_021798.2		interleukin 21 receptor
IL2RA	NM_000417.1	IL2R,ITIM10,insulin-dependent diabetes mellitus 10,interleukin 2 receptor, alpha	interleukin 2 receptor subunit alpha
IL4	NM_000589.2		interleukin 4
IL4I1	NM_152899.1		interleukin 4 induced 1
IL5	NM_000600.3	IFNB2;interleukin 6 (interferon, beta 2)	interleukin 6
IL7	NM_000880.3		interleukin 7
IMPDH1	NM_000883.3	RP10;retinitis pigmentosa 10 (autosomal dominant),IMP (inosine 5'-monophosphate) dehydrogenase 1	inosine monophosphate dehydrogenase 1
IMPDH2	NM_000884.2	IMP (inosine 5'-monophosphate) dehydrogenase 2	inosine monophosphate dehydrogenase 2
INMT	NM_006774.4		indolethylamine N-methyltransferase
INSR	NM_000208.2		insulin receptor
IRF1	NM_002198.2		interferon regulatory factor 1
IRF4	NM_002460.1	MUM1	interferon regulatory factor 4
ITCH	NM_001257138.1	Itchy (mouse homolog) E3 ubiquitin protein ligase,itchy E3 ubiquitin protein ligase homolog (mouse)	itchy E3 ubiquitin protein ligase
ITGA1	NM_181501.1	integrin, alpha 1	integrin subunit alpha 1
ITGA11	NM_012211.3	integrin, alpha 11	integrin subunit alpha 11
ITGAM	NM_000632.3	CR3A,CD11B;integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide),integrin, alpha M (complement component 3 receptor 3 subunit)	integrin subunit alpha M
ITGB1	NM_002211.3	FNBR,MSK12,MDF2;integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	integrin subunit beta 1
ITGB2	NM_000211.2	CD18,MF17;integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit),integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)	integrin subunit beta 2
ITGB5	NM_002211.3	integrin, beta 5	integrin subunit beta 5
ITK	NM_005546.3	IL2-inducible T-cell kinase,IL2 inducible T-cell kinase	IL2 inducible T cell kinase
JAK2	NM_004972.3		Janus kinase 2
KANSL1	NM_001193465.1	KIAA1267,KIAA1267	KAT8 regulatory NSL complex subunit 1
KAT5A	NM_001099412.1	ZNF220,RUNXB2,MYST3;run-related transcription factor binding protein 2,MYST histone acetyltransferase (monocytic leukemia) 3,K(lysine) acetyltransferase 6A	lysine acetyltransferase 6A
KDM3B	NM_016604.3	C5orf7,JMJD18;chromosome 5 open reading frame 7,jumonji domain containing 18,lysine (K)-specific demethylase 3B	lysine demethylase 3B
KEAP1	NM_012289.3		kelch like ECH associated protein 1
KIF2C	NM_006845.3	KNSL6;kinesin-like 6 (mitotic centromere-associated kinesin)	kinesin family member 2C
KIR3DL1/2	NM_001322168.1	KIR,killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1/2
KIR3DL3	NM_153443.3	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 3	killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 3
KLRB1	NM_002258.2	NKR,killer cell lectin-like receptor subfamily B, member 1	killer cell lectin like receptor B1
KLRD1	NM_007334.2	CD94;killer cell lectin-like receptor subfamily D, member 1	killer cell lectin like receptor D1
KLRK1	NM_007360.1	D1S2489E;DNA segment on chromosome 12 (unique) 2489 expressed	killer cell lectin like receptor K1
KMO	NM_003679.3	sequence,killer cell lectin-like receptor subfamily K, member 1	kyurenine 3-monoxygenase
KMT2A	NM_005933.2	MLL,myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog),myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila),lysine (K)-specific methyltransferase 2A	lysine methyltransferase 2A
KMT2D	NM_003482.3	TNRC21,MLL2;trinucleotide repeat containing 21,myeloid/lymphoid or mixed-lineage leukemia 2,lysine (K)-specific methyltransferase 2D	lysine methyltransferase 2D
KMT2E	NM_018682.3	MLL5,myeloid/lymphoid or mixed-lineage leukemia 5 (trithorax homolog, Drosophila),lysine (K)-specific methyltransferase 2E	lysine methyltransferase 2E
KPN2A	NM_002266.2	RCH1;karyopherin alpha 2 (RAG cohort 1, importin alpha 1),karyopherin alpha 2	karyopherin subunit alpha 2
KRAS	NM_033360.2	KRAS2,v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog,v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog,Kirsten rat sarcoma viral oncogene homolog	KRAS proto-oncogene, GTPase
KRT1	NM_006121.2	EHK1;epidermolytic hyperkeratosis 1,keratin 1, type II	keratin 1
KYAT1	NM_004059.4	CCBL1;cysteine conjugate-beta lyase; cytoplasmic (glutamine transaminase K, kynurenine aminotransferase),cysteine conjugate beta lyase 1	kynurenine aminotransferase 1
KYAT3	NM_001008661.2	CCBL2;cysteine conjugate beta lyase 2	kynurenine aminotransferase 3
KYNU	NM_003937.2	kynureninase (L-kynurenine hydrolase)	kynureninase
L2GHDH	NM_024884.2	C14orf160;chromosome 14 open reading frame 160	L-2-hydroxyglutarate dehydrogenase
LAG3	NM_002286.5	lymphocyte-activation gene 3	lymphocyte activating 3
LAMA4	NM_001105209.1	laminin, alpha 4	laminin subunit alpha 4
LAMB1	NM_002291.2	CLM;cutis laxa with marfanoid phenotype,laminin, beta 1	laminin subunit beta 1
LAMB3	NM_002293.3	LAMB2;laminin, gamma 1 (formerly LAMB2)	laminin subunit gamma 1
LAMTOR2	NM_001145264.1	ROBLD3;roadblock domain containing 3	late endosomal/lysosomal adaptor, MAPK and MTOR activator 2
LAMTOR4	NM_001008395.2	C7orf59;chromosome 7 open reading frame 59	late endosomal/lysosomal adaptor, MAPK and MTOR activator 4
LAMTOR5	NM_006402.2	HBXIP;hepatitis B virus x interacting protein	late endosomal/lysosomal adaptor, MAPK and MTOR activator 5
LAT	NM_001014987.1		linker for activation of T cells
LCK	NM_005356.2	lymphocyte-specific protein tyrosine kinase	LCK proto-oncogene, Src family tyrosine kinase
LDHA	NM_001165414.1		lactate dehydrogenase A
LDHB	NM_001174097.1		lactate dehydrogenase B
LDHC	NM_002301.2		lactate dehydrogenase C
LEPR	NM_001003679.1		leptin receptor
LTA	NM_000595.2	TNF8;lymphotoxin alpha (TNF superfamily, member 1)	lymphotoxin alpha
LTA4H	NM_001256643.1		leukotriene A4 hydrolase
LTB	NM_002341.1	TNFC	lymphotoxin beta
LTC4S	NM_145867.1		leukotriene C4 synthase
LY86	NM_004271.3		lymphocyte antigen 86
LY96	NM_015364.2		lymphocyte antigen 96
MAP1LC3B	NM_022818.4		microtubule associated protein 1 light chain 3 beta
MAP2K1	NM_002755.2	PRKMK1	mitogen-activated protein kinase kinase 1
MAP2K2	NM_030662.3	PRKMK2	mitogen-activated protein kinase kinase 2
MAP2K3	NM_145109.1	PRKMK3	mitogen-activated protein kinase kinase 3
MAP3K12	NM_006301.2	ZPK	mitogen-activated protein kinase kinase kinase 12
MAPK1	NM_138957.2	PRKM2,PRKM1	mitogen-activated protein kinase 1
MAPK8	NM_002750.2	PRKM8	mitogen-activated protein kinase 8
MAPK8IP1	NM_005456.2	PRKM8IP	mitogen-activated protein kinase 8 interacting protein 1
MAPKAP1	NM_001006617.1		mitogen-activated protein kinase associated protein 1
MAPT	NM_016834.3	DDPAC,MAPT	microtubule associated protein tau
MAT1A	NM_000429.2	methionine adenosyltransferase I, alpha	methionine adenosyltransferase 1A
MAT2A	NM_005911.4	methionine adenosyltransferase II, alpha	methionine adenosyltransferase 2A
MCAAT	NM_014507.3	malonyl-CoA:ACP acyltransferase (mitochondrial)	malonyl-CoA-acyl carrier protein transacylase
ME2	NM_002396.3	malic enzyme 2, NAD(+)-dependent, mitochondrial	malic enzyme 2

MGST3	NM_004528.2		microsomal glutathione S-transferase 3
MKI67	NM_002417.2	antigen identified by monoclonal antibody Ki-67	marker of proliferation Ki-67
MLST8	NM_001199173.1	MTOR associated protein, LST8 homolog (<i>S. cerevisiae</i>)	MTOR associated protein, LST8 homolog
MLYCD	NM_012213.2		malonyl-CoA decarboxylase
MPC1	NM_016098.2	BRP44L;brain protein 44-like	mitochondrial pyruvate carrier 1
MPC2	NM_001143674.1	BRP44;brain protein 44	mitochondrial pyruvate carrier 2
MPO	NM_000250.1		myeloperoxidase
MRA5	NM_001085049.2		muscle RAS oncogene homolog
MSA1	NM_152866.2	CD20;membrane-spanning 4-domains, subfamily A, member 1	membrane spanning 4-domains A1
MSA2	NM_000139.3	FCER1B,IgE APY;IgE responsiveness (atopic),membrane-spanning 4-domains, subfamily A, member 2 (Fc fragment of IgE, high affinity 1), receptor for; beta polypeptide;membrane-spanning 4-domains, subfamily A, member 2	membrane spanning 4-domains A2
MS4A4A	NM_024021.2	MS4A4;membrane-spanning 4-domains, subfamily A, member 4;membrane-spanning 4-domains, subfamily A, member 4A	membrane spanning 4-domains A4A
MSH2	NM_000251.1	COCA1,mutS (<i>E. coli</i>) homolog 2 (colon cancer, nonpolyposis type 1),mutS homolog 2, colon cancer, nonpolyposis type 1 (<i>E. coli</i>)	mutS homolog 2
MSRB2	NM_012228.3	MSRB;methionine sulfoxide reductase B	methionine sulfoxide reductase B2
MTF1	NM_005955.2		metal regulatory transcription factor 1
MTOR	NM_004958.3	FRAP,FRAP2,FRAP1;FK506 binding protein 12-rapamycin associated protein 1,mechanistic target of rapamycin (serine/threonine kinase),mechanistic target of rapamycin	mechanistic target of rapamycin kinase
MYB	NM_001130173.1	v-myb avian myeloblastosis viral oncogene homolog	MYB proto-oncogene, transcription factor
MYBL1	NM_001080416.3	v-myb avian myeloblastosis viral oncogene homolog-like 1	MYB proto-oncogene like 1
MYBL2	NM_002466.2	v-myb avian myeloblastosis viral oncogene homolog-like 2	MYB proto-oncogene like 2
MYC	NM_002467.3	v-myc avian myelocytomatosis viral oncogene homolog	MYC proto-oncogene, bHLH transcription factor
MYCL	NM_001033081.2	MYCL1,v-myc avian myelocytomatosis viral oncogene homolog 1, lung carcinoma derived	MYCL proto-oncogene, bHLH transcription factor
MYCN	NM_005378.4	NMYC,v-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog myeloid differentiation primary response gene (88),myeloid differentiation primary response 88	MYCN proto-oncogene, bHLH transcription factor
MYD88	NM_002468.3		MYD88 innate immune signal transduction adaptor
NAALAD2	NM_005467.3		N-acetylated alpha-linked acidic dipeptide 2
NADK	NM_001198993.1	C5orf33,NADK1;chromosome 5 open reading frame 33,NADK kinase domain containing 1	NAD kinase
NADK2	NM_153013.3		NAD kinase 2, mitochondrial
NAGLU	NM_000283.3	N-acetylglucosaminidase, alpha	N-acetyl-alpha-glucosaminidase
NAT8L	NM_178557.3	N-acetyltransferase 8-like (GCN5-related, putative)	N-acetyltransferase 8 like
NCAPH	NM_015341.3	BRRN1;barren (<i>Drosophila</i>) homolog,barren homolog (<i>Drosophila</i>),barren homolog 1 (<i>Drosophila</i>),non-SMC condensin I complex, subunit H	non-SMC condensin I complex subunit H
NCOA2	NM_006540.2		nuclear receptor coactivator 2
NCOR1	NM_006311.3	nuclear receptor co-repressor 1	nuclear receptor corepressor 1
NCR1	NM_004829.5	LY94;lymphocyte antigen 94 (mouse) homolog (activating NK-receptor; NK-p46)	natural cytotoxicity triggering receptor 1
NDC1	NM_001168551.1	TMEM48;transmembrane protein 48	NDC1 transmembrane nucleoporin
NDUFA1	NM_004541.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1 (7.5kD, MWFE),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa	NADH:ubiquinone oxidoreductase subunit A1
NDUFA11	NM_175514.4	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 11, 14.7kDa	NADH:ubiquinone oxidoreductase subunit A11
NDUFA12	NM_018838.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12	NADH:ubiquinone oxidoreductase subunit A12
NDUFA13	NM_015965.6	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13	NADH:ubiquinone oxidoreductase subunit A13
NDUFA2	NM_001185012.1	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2 (8kD, B8),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2, 8kDa	NADH:ubiquinone oxidoreductase subunit A2
NDUFA3	NM_004542.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3 (9kD, B9),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3, 9kDa	NADH:ubiquinone oxidoreductase subunit A3
NDUFA4	NM_002489.2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4 (9kD, MLRQ),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kDa,NDUFA4, mitochondrial complex associated	NDUFA4 mitochondrial complex associated
NDUFA6	NM_002490.3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (14kD, B14),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa	NADH:ubiquinone oxidoreductase subunit A6
NDUFA7	NM_005001.2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (14.5kD, B14.5a),NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7, 14.5kDa	NADH:ubiquinone oxidoreductase subunit A7
NDUFB1	NM_004545.3	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 1 (7kD, MNLL),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 1, 7kDa	NADH:ubiquinone oxidoreductase subunit B1
NDUFB10	NM_004548.2	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10 (22kD, PDSW),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kDa	NADH:ubiquinone oxidoreductase subunit B10
NDUFB11	NM_001135998.1	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 11, 17.3kDa	NADH:ubiquinone oxidoreductase subunit B11
NDUFB2	NM_004546.2	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2 (8kD, AGGG),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2, 8kDa	NADH:ubiquinone oxidoreductase subunit B2
NDUFB4	NM_004547.4	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa	NADH:ubiquinone oxidoreductase subunit B4
NDUFB7	NM_004146.5	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7 (18kD, B18),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7, 18kDa	NADH:ubiquinone oxidoreductase subunit B7
NDUFB8	NM_001284367.1	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (19kD, ASH),NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa	NADH:ubiquinone oxidoreductase subunit B8
NDUF57	NM_024407.4	NADH dehydrogenase (ubiquinone) Fe-S protein 7 (20kD) (NADH-coenzyme Q reductase),NADH dehydrogenase (ubiquinone) Fe-S protein 7, 20kDa (NADH-coenzyme Q reductase)	NADH:ubiquinone oxidoreductase core subunit 57
NDUF58	NM_002496.3	NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase),NADH dehydrogenase (ubiquinone) Fe-S protein 8, 23kDa (NADH-coenzyme Q reductase)	NADH:ubiquinone oxidoreductase core subunit 58
NEDD8	NM_006156.2		neural precursor cell expressed, developmentally down-regulated 8
NEU1	NM_000434.3	NEU1;sialidase 1 (lysosomal sialidase),neuraminidase 1 (lysosomal sialidase)	neuraminidase 1
NFAT5	NM_173214.1	nuclear factor of activated T-cells 5,tonicity-responsive,nuclear factor of activated T-cells 5	nuclear factor of activated T cells 5
NFE2L2	NM_006164.3	nuclear factor (erythroid-derived 2)-like 2,nuclear factor, erythroid 2-like 2	nuclear factor, erythroid 2 like 2
NFKB1	NM_003998.2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	nuclear factor kappa B subunit 1
NFKB2	NM_002502.2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	nuclear factor kappa B subunit 2
NFX1	NM_021100.3	nitrogen fixation 1 (<i>S. cerevisiae</i> , homolog),NFX1 nitrogen fixation 1 homolog (<i>S. cerevisiae</i>)	NFX1 cysteine desulfurase
NGFR	NM_002507.3	nerve growth factor receptor (TNFR superfamily, member 16)	nerve growth factor receptor
NGK7	NM_005601.3	natural killer cell group 7 sequence	natural killer cell granule protein 7
NME1	NM_000269.2	non-metastatic cells 1, protein (NM23A) expressed in	NME/NM23 nucleoside diphosphate kinase 1
NME2	NM_001018137.2	non-metastatic cells 2, protein (NM23B) expressed in	NME/NM23 nucleoside diphosphate kinase 2
NOD2	NM_001293557.1	IBD1,CARD15;caspace recruitment domain family, member 15	nucleotide binding oligomerization domain containing 2
NOS1	NM_000620.4	NOS1;nitric oxide synthase 1 (neuronal)	nitric oxide synthase 1
NOS2	NM_000625.4	NOS2A;nitric oxide synthase 2A (inducible, hepatocytes),nitric oxide synthase 2, inducible	nitric oxide synthase 2
NOS3	NM_000603.4	nitric oxide synthase 3 (endothelial cell)	nitric oxide synthase 3
NOX1	NM_007054.2		NADPH oxidase 1
NOX3	NM_015718.2		NADPH oxidase 3
NOX4	NM_001143836.2		NADPH oxidase 4
NPM1	NM_002520.6	nucleophosmin (nucleolar phosphoprotein B23, numatrin),nucleophosmin	nucleophosmin 1
NPR1	NM_000906.3	ANPRA,NPRA;atriuretic peptide receptor A,natriuretic peptide receptor A	natriuretic peptide receptor 1
NPR2	NM_003995.3	ANPRB,NPRB,AMDM;acromesomelic dysplasia, Maroteaux type,atriuretic peptide receptor B,natriuretic peptide receptor B	natriuretic peptide receptor 2
NQO1	NM_000903.2	NMOR1,DIAD;diaphorase (NADH/NADPH) (cytochrome b-5 reductase),NAD(P)H dehydrogenase, quinone 1	NAD(P)H quinone dehydrogenase 1
NR2F1	NM_005654.4	ERBAL3,TECOUP1;nuclear receptor subfamily 2, group F, member 1	nuclear receptor subfamily 2 group F member 1
NRAS	NM_002524.3	neuroblastoma RAS viral (v-ras) oncogene homolog,neuroblastoma RAS viral oncogene homolog	NRAS proto-oncogene, GTPase
NRF1	NM_001040110.1		nuclear respiratory factor 1
NSD1	NM_022455.4	STO;Sotos syndrome	nuclear receptor binding SET domain protein 1
NT5E	NM_002526.2	NT5;5' nucleotidase (CD73),5'-nucleotidase, ecto (CD73)	5'-nucleotidase ecto
NUP205	NM_015135.1	C7orf14;chromosome 7 open reading frame 14,nucleoporin 205kDa	nucleoporin 205
NUP62	NM_016593.3	nucleoporin 62kDa	nucleoporin 62
OAT	NM_000274.3		ornithine aminotransferase
OGC1	NM_002598.1		ornithine decarboxylase 1
OGDH	NM_001003941.2	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	oxoglutarate dehydrogenase
OGDH5	NM_018245.2		oxoglutarate dehydrogenase like
OTC	NM_000531.5		ornithine carbamoyltransferase
PAH	NM_000277.1		phenylalanine hydroxylase
PKC1	NM_002591.2	phosphoenolpyruvate carboxylase 1 (soluble)	phosphoenolpyruvate carboxylase 1
PKC2	NM_004563.2	phosphoenolpyruvate carboxylase 2 (mitochondrial)	phosphoenolpyruvate carboxylase 2, mitochondrial
PCNA	NM_014736.5	KIAA0101,KIAA0101	PCNA clamp associated factor
PDCD1	NM_005018.2	SLEB2;systemic lupus erythematosus susceptibility 2	programmed cell death 1
PDCD1LG2	NM_025239.3		programmed cell death 1 ligand 2
PDGFB	NM_033016.2	SIS;platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog),platelet-derived growth factor beta polypeptide	platelet derived growth factor subunit B

PDGFRB	NM_002609.3	PDGFR,platelet-derived growth factor receptor, beta polypeptide	platelet derived growth factor receptor beta
PDHA1	NM_000284.3	PDHA,pyruvate dehydrogenase (lipoamide) alpha 1,pyruvate dehydrogenase alpha 1	pyruvate dehydrogenase E1 alpha 1 subunit
PDK1	NM_002610.3	pyruvate dehydrogenase kinase, isoenzyme 1,pyruvate dehydrogenase kinase, isozyme 1	pyruvate dehydrogenase kinase 1
PDK2	NM_002611.3	pyruvate dehydrogenase kinase, isoenzyme 2,pyruvate dehydrogenase kinase, isozyme 2	pyruvate dehydrogenase kinase 2
PDK3	NM_005391.1	pyruvate dehydrogenase kinase, isoenzyme 3,pyruvate dehydrogenase kinase, isozyme 3	pyruvate dehydrogenase kinase 3
PDK4	NM_002612.3	pyruvate dehydrogenase kinase, isoenzyme 4,pyruvate dehydrogenase kinase, isozyme 4	pyruvate dehydrogenase kinase 4
PDP1	NM_001161778.1	PFM2C,protein phosphatase 2C, magnesium-dependent, catalytic subunit	pyruvate dehydrogenase phosphatase catalytic subunit 1
PDPK1	NM_002613.3		3-phosphoinositide dependent protein kinase 1
PEBP1	NM_002567.2	PBP,prostatic binding protein	phosphatidylethanolamine binding protein 1
PENT	NM_148173.1		phosphatidylethanolamine N-methyltransferase
PFKB1	NM_002625.2	PFKFB1	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 1
PFKL	NM_001002021.1		phosphofructokinase, liver type
PFKM	NM_000289.5	PFKX,phosphofructokinase, polypeptide X	phosphofructokinase, muscle
PGAM2	NM_000290.3	phosphoglycerate mutase 2 (muscle)	phosphoglycerate mutase 2
PGD	NM_002631.2		phosphogluconate dehydrogenase
PGK1	NM_000291.2		phosphoglycerate kinase 1
PGM2	NM_018290.3		phosphoglucomutase 2
PHGDH	NM_006623.3		phosphoglycerate dehydrogenase
PIK3CA	NM_002645.1	phosphoinositide-3-kinase, class 2, alpha polypeptide,phosphatidylinositol-4-phosphate 3-kinase, catalytic subunit type 2 alpha	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha
PIK3CB	NM_006219.1	PIK3C1,phosphoinositide-3-kinase, catalytic, beta polypeptide,phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit beta	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta
PIK3CD	NM_005026.3	phosphoinositide-3-kinase, catalytic, delta polypeptide,phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit delta	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta
PIK3R1	NM_181504.2	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	phosphoinositide-3-kinase regulatory subunit 1
PIK3R2	NM_005027.2	phosphoinositide-3-kinase, regulatory subunit 2 (beta)	phosphoinositide-3-kinase regulatory subunit 2
PIK3R3	NM_003629.3	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	phosphoinositide-3-kinase regulatory subunit 3
PIK3R4	NM_016203.3	phosphoinositide-3-kinase, regulatory subunit 4	phosphoinositide-3-kinase regulatory subunit 4
PKLR	NM_181871.1	pyruvate kinase, liver and RBC	pyruvate kinase LR
PKM	NM_182471.1	PKM2,pyruvate kinase, muscle	pyruvate kinase M1/2
PLA2G15	NM_012320.3	LYPLA3,lysophospholipase 3 (lysosomal phospholipase A2),phospholipase A2, group XV	phospholipase A2 group XV
PLCG1	NM_002660.2	PLC1,phospholipase C, gamma 1 (formerly subtype 148),phospholipase C, gamma 1	phospholipase C gamma 1
PLK1	NM_005030.3	PLK,polo-like kinase (Drosophila),polo-like kinase 1	polo like kinase 1
PNOX	NM_001284244.1		preproenkephalin
PNP	NM_000270.2	NP,nucleoside phosphorylase	purine nucleoside phosphorylase
POLE	NM_006231.3	polymerase (DNA directed), epsilon,polymerase (DNA) epsilon, catalytic subunit	DNA polymerase epsilon, catalytic subunit
PPARG	NM_005037.5	peroxisome proliferative activated receptor, gamma,peroxisome proliferator-activated receptor gamma	peroxisome proliferator activated receptor gamma
PPARGC1	NM_013261.3	PPARGC1,peroxisome proliferative activated receptor, gamma, coactivator 1,peroxisome proliferative activated receptor, gamma, coactivator 1, alpha	PPARG coactivator 1 alpha
PPAT	NM_002703.3		phosphoribosyl pyrophosphate amidotransferase
PPM1A	NM_021003.4	protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform,protein phosphatase, Mg2+/Mn2+ dependent, 1A	protein phosphatase, Mg2+/Mn2+ dependent 1A
PRDX1	NM_002574.2	PAGA	peroxiredoxin 1
PRDX5	NM_012094.4		peroxiredoxin 5
PRF1	NM_005041.3	perforin 1 (pore forming protein)	perforin 1
PRIM1	NM_000946.2	primase, DNA, polypeptide 1 (49kDa),primase (DNA) subunit 1	DNA primase subunit 1
PRIM2	NM_001282488.1	PRIM2A,primase, polypeptide 2A (58kD),primase, polypeptide 2A, 58kDa,primase, DNA, polypeptide 2 (58kDa),primase (DNA) subunit 2	DNA primase subunit 2
PRKAA1	NM_006251.5	protein kinase, AMP-activated, alpha 1 catalytic subunit	protein kinase AMP-activated catalytic subunit alpha 1
PRKAA2	NM_006252.2	PRKAA,protein kinase, AMP-activated, alpha 2 catalytic subunit	protein kinase AMP-activated catalytic subunit alpha 2
PRKAB1	NM_006253.4	protein kinase, AMP-activated, beta 1 non-catalytic subunit	protein kinase AMP-activated non-catalytic subunit beta 1
PRKAB2	NM_005399.3	protein kinase, AMP-activated, beta 2 non-catalytic subunit	protein kinase AMP-activated non-catalytic subunit beta 2
PRKAG1	NM_002733.3	protein kinase, AMP-activated, gamma 1 non-catalytic subunit	protein kinase AMP-activated non-catalytic subunit gamma 1
PRKAG2	NM_016203.3	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	protein kinase AMP-activated non-catalytic subunit gamma 2
PRKCG	NM_002739.3	PKCG,SCA14,protein kinase C, gamma	protein kinase C gamma
PRKN	NM_004562.2	PARK2,Parkinson disease (autosomal recessive, juvenile) 2, parkin,parkinson protein	parkin RBR E3 ubiquitin protein ligase
PRODH2	NM_021232.1	2, E3 ubiquitin protein ligase (parkin)	proline dehydrogenase 2
PRPS1	NM_002764.3	DFN2,deafness, X-linked 2, perceptive, congenital	phosphoribosyl pyrophosphate synthetase 1
PRRS	NM_015366.3	proline rich 5 (renal)	proline rich 5
PSAT1	NM_021154.3		phosphoserine aminotransferase 1
PSMA3	NM_152132.1	proteasome (prosome, macropain) subunit, alpha type, 3	proteasome subunit alpha 3
PSMA7	NM_002792.2	proteasome (prosome, macropain) subunit, alpha type, 7	proteasome subunit alpha 7
PSMB1	NM_002793.2	proteasome (prosome, macropain) subunit, beta type, 1	proteasome subunit beta 1
PSMB10	NM_002801.3	MECL1,proteasome (prosome, macropain) subunit, beta type, 10	proteasome subunit beta 10
PSMB3	NM_002795.3	proteasome (prosome, macropain) subunit, beta type, 3	proteasome subunit beta 3
PSMC1	NM_002802.2	proteasome (prosome, macropain) 26S subunit, ATPase, 1	proteasome 26S subunit, ATPase 1
PSMD13	NM_175932.2	proteasome (prosome, macropain) 26S subunit, non-ATPase, 13	proteasome 26S subunit, non-ATPase 13
PSME2	NM_002818.2	proteasome (prosome, macropain) activator subunit 2 (PA28 beta)	proteasome activator subunit 2
PSPH	NM_004577.3	PSP	phosphoserine phosphatase
PTEN	NM_000314.3	B25,MHAM	phosphatase and tensin homolog
PTGER4	NM_000958.2	prostaglandin E receptor 4 (subtype EP4)	prostaglandin E receptor 4
PTGES	NM_004878.4	MSST11	prostaglandin H synthase
PTGS1	NM_000962.2	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	prostaglandin-endoperoxide synthase 1
PTGS2	NM_000963.1	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	prostaglandin-endoperoxide synthase 2
PTK2	NM_005607.4	PTK2 protein tyrosine kinase 2	protein tyrosine kinase 2
PTK6	NM_001256358.1	PTK6 protein tyrosine kinase 6	protein tyrosine kinase 6
PTPN5	NM_001039970.1	protein tyrosine phosphatase, non-receptor type 5 (striatum-enriched)	protein tyrosine phosphatase non-receptor type 5
PTPRC	NM_080923.2	CD45	protein tyrosine phosphatase receptor type C
PUDP	NM_001178135.1	FAM116AX,HDDH1A,HDDH1, family with sequence similarity 16, member A, X-linked,haloacid dehalogenase-like hydrolase domain containing 1A,haloacid dehalogenase-like hydrolase domain containing 1	pseudouridine 5'-phosphatase
PYCR1	NM_006907.2		pyrroline-5-carboxylate reductase 1
PYCR2	NM_013328.2	pyrroline-5-carboxylate reductase family member 2	pyrroline-5-carboxylate reductase 2
PYCR3	NM_023078.2	PYCR,pyrroline-5-carboxylate reductase-like	pyrroline-5-carboxylate reductase 3
RADS1	NM_133487.2	RADS1A,RECA,RADS1 (S. cerevisiae) homolog (E coli RecA homolog),RADS1 homolog (RecA homolog, E. coli) (S. cerevisiae),RADS1 homolog (S. cerevisiae)	RADS1 recombinase
RADS1AP1	NM_001130862.1		RADS1 associated protein 1
RANBP2	NM_006267.4	ANE1,lacune necrotizing encephalopathy 1 (autosomal dominant)	RAN binding protein 2
RBIC1	NM_001083617.1		RB1 inducible coiled-coil 1
RBBP5	NM_005057.2	retinoblastoma-binding protein 5,retinoblastoma binding protein 5	RB binding protein 5, histone lysine methyltransferase complex subunit
RBK1	NM_002128.2		ribokinase
RBPA	NM_006744.3	retinol-binding protein 4, plasma	retinol binding protein 4
RELA	NM_021975.3	NFKB3,nuclear factor of kappa light polypeptide gene enhancer in B-cells 3,v-rel avian reticuloendotheliosis viral oncogene homolog A	RELA proto-oncogene, NF-kB subunit
REST	NM_001193508.1	DFNA27,RE1-silencing transcription factor,deafness, autosomal dominant 27	RE1 silencing transcription factor
RGN	NM_152869.3	regucalcin (sensesence marker protein-30)	regucalcin
RICTOR	NM_152756.3	RPTOR independent companion of MTOR, complex 2	RPTOR independent companion of MTOR complex 2
RIMKLA	NM_173642.3	FAM80A, family with sequence similarity 80, member A	ribosomal modification protein rimK like family member A
RIMKB	NM_020734.2	FAM80B, family with sequence similarity 80, member B	ribosomal modification protein rimK like family member B
RPIA	NM_144583.2		ribose 5-phosphate isomerase A
RPL23	NM_000979.3		ribosomal protein L23
RPLP0	NM_001002.3	ribosomal protein, large, P0	ribosomal protein lateral stalk subunit P0
RPS6KA1	NM_002953.3	ribosomal protein S6 kinase, 90kD, polypeptide 1	ribosomal protein S6 kinase A1
RPS6KB1	NM_003161.2	STK14A,ribosomal protein S6 kinase, 70kD, polypeptide 1	ribosomal protein S6 kinase B1
RPS6KB2	NM_003952.2	ribosomal protein S6 kinase, 70kD, polypeptide 2	ribosomal protein S6 kinase B2
RPTOR	NM_020761.2	regulatory associated protein of MTOR, complex 1	regulatory associated protein of MTOR complex 1
RRAGC	NM_022157.2	Ras-related GTP binding C	Ras related GTP binding C
RRM1	NM_001033.3	ribonucleotide reductase M1 polypeptide	ribonucleotide reductase catalytic subunit M1
RRM2	NM_001034.1	ribonucleotide reductase M2 polypeptide	ribonucleotide reductase regulatory subunit M2
RUNX1	NM_001754.4	AML1,CBFA2,acute myeloid leukemia 1,runt-related transcription factor 1	runt related transcription factor 1
RUNX2	NM_001024630.3	CCD,CBFA1,CCD1,runt-related transcription factor 2	runt related transcription factor 2

sub-maximal isoform coverage due to non-overlapping variants

S100A1	NM_006271.1	S100A1;S100 calcium-binding protein A1	S100 calcium binding protein A1
S100A12	NM_005621.1	S100 calcium-binding protein A12 (calgranulin C)	S100 calcium binding protein A12
SCD	NM_005063.4	SCDO5;stearoyl-CoA desaturase opposite strand;stearoyl-CoA desaturase (delta-9-desaturase)	stearoyl-CoA desaturase
SDHB	NM_003000.2	SDH1,SDH;succinate dehydrogenase complex, subunit B, iron sulfur (lp),succinate dehydrogenase complex subunit B, iron sulfur (lp)	succinate dehydrogenase complex iron sulfur subunit B
SDHC	NM_001035511.1	SDH1,SDH;succinate dehydrogenase complex, subunit C, integral membrane protein, 15kDa	succinate dehydrogenase complex subunit C
SDS	NM_006843.2	serine dehydratase-like	serine dehydratase
SDSL	NM_138432.2	serine dehydratase-like	serine dehydratase like
SEC13	NM_001136026.2	D351231E,SEC13L1,SEC13 (S. cerevisiae)-like 1,SEC13-like 1 (S. cerevisiae),SEC13 homolog (S. cerevisiae)	SEC13 homolog, nuclear pore and COP11 coat complex component
SELENOK	NM_021237.3	SHFD1,SHFM1,C7orf76;split hand/foot malformation (ectrodactyly) type 1,chromosome 7 open reading frame 76;SEM1, 26S proteasome complex subunit	selenoprotein K
SEM1	NM_001201451.1	SEM1, 26S proteasome complex subunit	sub-maximal isoform coverage due to non-overlapping variants
SERINC1	NM_020755.2	TDE2;tumor differentially expressed 2	serine incorporator 1
SERINC2	NM_018565.3	TDE2L;tumor differentially expressed 2-like	serine incorporator 2
SERINC3	NM_006811.2	TDE1;tumor differentially expressed 1	serine incorporator 3
SERINC5	NM_001174071.2	C5orf12;chromosome 5 open reading frame 12	serine incorporator 5
SH2D1A	NM_002351.4	IMD5,LVP;lymphoproliferative syndrome,SH2 domain protein 1A	SH2 domain containing 1A
SHMT1	NM_148918.1	serine hydroxymethyltransferase 1 (soluble)	serine hydroxymethyltransferase 1
SHMT2	NM_001166356.1	SHMT;serine hydroxymethyltransferase 2 (mitochondrial)	serine hydroxymethyltransferase 2
SHGLCS	NM_003830.3	CD33L2;sialic acid binding Ig-like lectin 5	sialic acid binding Ig like lectin 5
SLC16A1	NM_003051.3	solute carrier family 16 (monocarboxylic acid transporters), member 1,solute carrier family 16, member 1 (monocarboxylic acid transporter 1),solute carrier family 16 (monocarboxylate transporter), member 1	solute carrier family 16 member 1
SLC16A11	NM_153357.1	solute carrier family 16 (monocarboxylic acid transporters), member 11,solute carrier family 16, member 11	solute carrier family 16 member 11
SLC16A13	NM_201566.2	solute carrier family 16 (monocarboxylic acid transporters), member 13,solute carrier family 16, member 13	solute carrier family 16 member 13
SLC16A2	NM_006517.3	DXS128,AHDS,MRX22;solute carrier family 16 (monocarboxylic acid transporters), member 2 (putative transporter),Allan-Herndon-Dudley syndrome,solute carrier family 16 (monocarboxylic acid transporters), member 2,mental retardation, X-linked 22,solute carrier family 16, member 2 (monocarboxylic acid transporter 8),solute carrier family 16, member 2 (thyroid hormone transporter)	solute carrier family 16 member 2
SLC16A3	NM_004207.2	solute carrier family 16 (monocarboxylic acid transporters), member 3,solute carrier family 16, member 3 (monocarboxylic acid transporter 4),solute carrier family 16 (monocarboxylate transporter), member 3	solute carrier family 16 member 3
SLC16A6	NM_001174166.1	solute carrier family 16 (monocarboxylic acid transporters), member 6,solute carrier family 16, member 6 (monocarboxylic acid transporter 7),solute carrier family 16, member 6	solute carrier family 16 member 6
SLC16A7	NM_001270623.1	solute carrier family 16 (monocarboxylic acid transporters), member 7,solute carrier family 16 (monocarboxylate transporter), member 7	solute carrier family 16 member 7
SLC16A8	NM_013356.2	solute carrier family 16 (monocarboxylic acid transporters), member 8,solute carrier family 16 (monocarboxylate transporter), member 8	solute carrier family 16 member 8
SLC1A5	NM_001145144.1	RDRC,M7V1;solute carrier family 1 (neutral amino acid transporter), member 5	solute carrier family 1 member 5
SLC25A1	NM_005984.2	SLC20A3;solute carrier family 20 (mitochondrial citrate transporter), member 3,solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	solute carrier family 25 member 1
SLC27A1	NM_198580.1	solute carrier family 27 (fatty acid transporter), member 1	solute carrier family 27 member 1
SLC2A1	NM_006516.2	GLUT1,GLUT,HTLVR,CSE;human T-cell leukemia virus (I and II) receptor,choreoathetosis/spasticity, episodic (paroxysmal choreoathetosis/spasticity),solute carrier family 2 (facilitated glucose transporter), member 1	solute carrier family 2 member 1
SLC2A14	NM_001286234.1	SLC2A3P3;solute carrier family 2 (facilitated glucose transporter), member 3	solute carrier family 2 member 14
SLC2A3	NM_006931.2	pseudogene 3,solute carrier family 2 (facilitated glucose transporter), member 14	solute carrier family 2 member 3
SLC2A5	NM_003039.2	GLUT5;solute carrier family 2 (facilitated glucose/fructose transporter), member 5	solute carrier family 2 member 5
SLC2A6	NM_001145099.1	solute carrier family 2 (facilitated glucose transporter), member 6	solute carrier family 2 member 6
SLC2A8	NM_014580.3	solute carrier family 2 (facilitated glucose transporter) member 8,solute carrier family 2 (facilitated glucose transporter), member 8	solute carrier family 2 member 8
SLC3A1	NM_000341.3	solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1,solute carrier family 3 (amino acid transporter heavy chain), member 1	solute carrier family 3 member 1
SLC3A2	NM_001012622.2	MDU1;solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2,solute carrier family 3 (amino acid transporter heavy chain), member 2	solute carrier family 3 member 2
SLC6A12	NM_003044.3	solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12,solute carrier family 6 (neurotransmitter transporter), member 12	solute carrier family 6 member 12
SLC6A18	NM_182632.2	solute carrier family 6 (neurotransmitter transporter), member 18,solute carrier family 6 (neutral amino acid transporter), member 18	solute carrier family 6 member 18
SLC6A19	NM_001003841.2	solute carrier family 6 (neutral amino acid transporter), member 19	solute carrier family 6 member 19
SLC7A11	NM_014331.3	solute carrier family 7 (anionic amino acid transporter light chain, xc- system), member 11	solute carrier family 7 member 11
SLC7A5	NM_003486.5	solute carrier family 7 (amino acid transporter light chain, L system), member 5	solute carrier family 7 member 5
SLC7A9	NM_014270.4	CSN3;solute carrier family 7 (amino acid transporter light chain, bo,+ system), member 9	solute carrier family 7 member 9
SMAD2	NM_005901.5	MADH2,MAD, mothers against decapentaplegic homolog 2 (Drosophila),SMAD, mothers against DPP homolog 2 (Drosophila)	SMAD family member 2
SMAD3	NM_005902.3	MADH3,MAD, mothers against decapentaplegic homolog 3 (Drosophila),SMAD, mothers against DPP homolog 3 (Drosophila)	SMAD family member 3
SMAD4	NM_005359.3	MADH4,MAD, mothers against decapentaplegic homolog 4 (Drosophila),SMAD, mothers against DPP homolog 4 (Drosophila)	SMAD family member 4
SNF8	NM_001317192.1	SNF8, ESCRT-II complex subunit, homolog (S. cerevisiae)	SNF8 subunit of ESCRT-II
SOD1	NM_000454.4	ALS,ALS1;amyotrophic lateral sclerosis 1 (adult),superoxide dismutase 1, soluble	superoxide dismutase 1
SOD2	NM_000636.2	superoxide dismutase 2, mitochondrial	superoxide dismutase 2
SOD3	NM_003102.2	superoxide dismutase 3, extracellular	superoxide dismutase 3
SOS1	NM_005633.2	GINGF;gingival fibromatosis, hereditary, 1,son of sevenless homolog 1 (Drosophila)	SOS Ras/Rac guanine nucleotide exchange factor 1
SOS2	NM_006939.2	son of sevenless (Drosophila) homolog 2,son of sevenless homolog 2 (Drosophila)	SOS Ras/Rho guanine nucleotide exchange factor 2
SOX2	NM_003106.2	SRY (sex determining region Y);box 2,SRY box 2	SRY-box 2
SPIB	NM_003121.3	Spi-B transcription factor (Spi-1/Pu.1 related)	Spi-B transcription factor
SOSTM1	NM_003900.3	PDB3,OSIL;Paget disease of bone 3,oxidative stress induced like	sequestosome 1
SREBF1	NM_001005291.1	sterol regulatory element binding transcription factor 1	sterol regulatory element binding transcription factor 1
SREBF2	NM_004599.2	sterol regulatory element binding transcription factor 2	sterol regulatory element binding transcription factor 2
SRM	NM_003132.2	SRML1	spermidine synthase
SRR	NM_021947.1	serine racemase	serine racemase
STAM2	NM_005843.4	signal transducing adaptor molecule (SH3 domain and ITAM motif) 2	signal transducing adaptor molecule 2
STAT1	NM_007315.3	signal transducer and activator of transcription 1, 91kDa,signal transducer and activator of transcription 1, 91kDa	signal transducer and activator of transcription 1
STAT3	NM_003150.3	signal transducer and activator of transcription 3 (acute-phase response factor)	signal transducer and activator of transcription 3
STAT5A	NM_003152.2	signal transducer and activator of transcription 5A	signal transducer and activator of transcription 5A
STAT6	NM_003153.3	signal transducer and activator of transcription 6, interleukin-4 induced	signal transducer and activator of transcription 6
STK11	NM_000455.4	serine/threonine kinase 11 (Peutz-Jeghers syndrome)	serine/threonine kinase 11
STK3	NM_006281.3	serine/threonine kinase 3 (Ste20, yeast homolog)	serine/threonine kinase 3
TALDO1	NM_006755.1	transaldolase 1	transaldolase 1
TBK1	NM_013254.2	TANK-binding kinase 1	TANK binding kinase 1
TBX21	NM_013351.1	T-box 21	T-box 21
TBXAS1	NM_001130966.2	thromboxane A synthase 1 (platelet, cytochrome P450, subfamily V),thromboxane A synthase 1 (platelet)	thromboxane A synthase 1
TCL1A	NR_049726.1	T-cell leukemia/lymphoma 1A	T cell leukemia/lymphoma 1A
TDO2	NM_005651.2	tryptophan 2,3-dioxygenase	tryptophan 2,3-dioxygenase
TECR	NR_038104.1	SC2,GPSN2;glycoprotein, synaptic 2	trans-2,3-enoyl-CoA reductase
TELO2	NM_016111.3	TE12, telomere maintenance 2, homolog (S. cerevisiae)	telomere maintenance 2
TET2	NM_001127208.2	KIAA1546,KIAA1546,tet oncogene family member 2	tet methylcytosine dioxygenase 2
TF	NM_001063.2	transferrin	transferrin
TFAM	NM_003201.1	TCF6,TCF6L2	transcription factor A, mitochondrial
TFRC	NM_003234.1	transferrin receptor (p90, CD71)	transferrin receptor
TH	NM_000360.3	tyrosine hydroxylase	tyrosine hydroxylase
THBS1	NM_003246.2	thrombospondin 1	thrombospondin 1
THBS2	NM_003247.2	thrombospondin 2	thrombospondin 2
TIGAR	NM_000375.2	C12orf5;chromosome 12 open reading frame 5	TFS3 induced glycolysis regulatory phosphatase
TIGIT	NM_173799.2	VSIG9,VSTM3;VSIG9, VSTM3	T cell immunoreceptor with Ig and ITIM domains

TIMELESS	NM_003920.2	timeless (Drosophila) homolog,timeless homolog (Drosophila)	timeless circadian regulator
TK1	NM_003258.1	thymidine kinase 1, soluble	thymidine kinase 1
TK2	NM_004614.3	thymidine kinase 2, mitochondrial	thymidine kinase 2
TKT	NM_001064.2		transketolase
TLR10	NM_030956.2	toll-like receptor 10	toll like receptor 10
TLR2	NM_003264.3	toll-like receptor 2	toll like receptor 2
TLR4	NM_138554.2	toll-like receptor 4	toll like receptor 4
TLR7	NM_016562.3	toll-like receptor 7	toll like receptor 7
TNF	NM_000594.2	TNFA,tumor necrosis factor (TNF superfamily, member 2)	tumor necrosis factor
TNFRSF17	NM_001192.2	BCMA,tumor necrosis factor receptor superfamily, member 17	TNF receptor superfamily member 17
TNFRSF4	NM_003327.3	TGFR1,tumor necrosis factor receptor superfamily, member 4	TNF receptor superfamily member 4
TP53	NM_000546.2		tumor protein p53
		TP73L,TP53L,TP53CP,tumor protein p73-like,tumor protein p53-like,tumor protein	
TP63	NM_003722.4	p53-competing protein	tumor protein p63
TPH1	NM_004179.1	TPH1,TPH4,tryptophan hydroxylase (tryptophan 5-monoxygenase)	tryptophan hydroxylase 1
TPR	NM_002922.2	translocated promoter region (to activated MET oncogene)	translocated promoter region, nuclear basket protein
TPSAB1/B2	NM_003294.3	TPS1,TP51,TP52,tryptase beta 1	tryptase alpha/beta 1
		C20orf2,C20orf1;chromosome 20 open reading frame 1,TPX2, microtubule-associated, homolog (Xenopus laevis),TPX2, microtubule-associated	
TPX2	NM_012112.4		TPX2 microtubule nucleation factor
TRAF1	NM_005658.3		TNF receptor associated factor 1
TRAF6	NM_145803.2	TNF receptor-associated factor 6, E3 ubiquitin protein ligase	TNF receptor associated factor 6
TRAT1	NM_016388.2	TCRIM,TCRIM	T cell receptor associated transmembrane adaptor 1
		AVID,ataxia (Friedreich-like) with vitamin E deficiency,tocopherol (alpha) transfer protein	
TTPA	NM_000370.3		alpha tocopherol transfer protein
TTR	NM_000371.3	PALB,CTSL,prealbumin, amyloidosis type I,carpal tunnel syndrome 1	transthyretin
TN	NM_003329.2		thioredoxin
TNX2	NM_012473.3		thioredoxin 2
TXNRD1	NM_001093771.1		thioredoxin reductase 1
TYMP	NM_001953.3	MNGIE,ECGF1;endothelial cell growth factor 1 (platelet-derived)	thymidine phosphorylase
TYMS	NM_001071.2	TS	thymidylate synthetase
UBE2C	NM_007019.2	ubiquitin-conjugating enzyme E2C	ubiquitin conjugating enzyme E2 C
UBE2T	NM_014176.3	ubiquitin-conjugating enzyme E2T	ubiquitin conjugating enzyme E2 T
UCK1	NM_031432.3		uridine-cytidine kinase 1
UCK2	NM_012474.3	UMPCK,uridine monophosphate kinase	uridine-cytidine kinase 2
UCKL1	NM_001193379.1	URKL1,uridine kinase-like 1,uridine-cytidine kinase 1-like 1	uridine-cytidine kinase 1 like 1
UMP5	NM_000373.2		uridine monophosphate synthetase
UPP1	NM_003364.2	UP,uridine phosphorylase	uridine phosphorylase 1
UPP2	NM_001135098.1		uridine phosphorylase 2
UQCRI0	NM_001003684.1		ubiquinol-cytochrome c reductase, complex III subunit X
UQCRI1	NM_006830.2	UQCRC,ubiquinol-cytochrome c reductase, 6.4kDa subunit	ubiquinol-cytochrome c reductase, complex III subunit XI
UQCRC	NM_014402.4	ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa	ubiquinol-cytochrome c reductase complex III subunit VII
USP8	NM_001128610.1	ubiquitin specific protease 8	ubiquitin specific peptidase 8
VEGFA	NM_001025366.1	VEGF,vascular endothelial growth factor	vascular endothelial growth factor A
		von Hippel-Lindau syndrome,von Hippel-Lindau tumor suppressor, E3 ubiquitin protein ligase	
VHL	NM_000551.2		von Hippel-Lindau tumor suppressor
		vacuolar protein sorting 28 (yeast),vacuolar protein sorting 28 homolog (S. cerevisiae),VPS28, ESCRT-I subunit	
VPS28	NM_016208.3		VPS28 subunit of ESCRT-I
WASHC4	NM_015275.1	KIAA1033,KIAA1033	WASH complex subunit 4
WDR45	NM_007075.3	WDRX1;WD repeat domain, X-linked 1	WD repeat domain 45
WNT1	NM_005430.2	INT1,wingless-type MMTV integration site family, member 1	Wnt family member 1
WNT2	NM_003391.2	INT1L1,wingless-type MMTV integration site family member 2	Wnt family member 2
WRN	NM_000553.4	Werner syndrome	Werner syndrome RecQ like helicase
		LTN,SCYC1;small inducible cytokine subfamily C, member 1 (lymphotactin),chemokine (C motif) ligand 1	
XCL1/2	NM_003175.3		X-C motif chemokine ligand 1/2
XDH	NM_000379.3	xanthine dehydrogenase	xanthine dehydrogenase
XRCC2	NM_005431.1	X-ray repair complementing defective repair in Chinese hamster cells 2	X-ray repair cross complementing 2
		YWHAZ;tyrosine 3-monoxygenase/tryptophan 5-monoxygenase activation protein, delta polypeptide,tyrosine 3-monoxygenase/tryptophan 5-monoxygenase	
YWHAZ	NM_003406.2	activation protein, zeta polypeptide	tyrosine 3-monoxygenase/tryptophan 5-monoxygenase activation protein zeta
ZAP70	NM_001079.3	SRK,SRK	zeta chain of T cell receptor associated protein kinase 70
ZNF100	NM_173531.3	zinc finger protein 100 (Y1)	zinc finger protein 100
ZNF136	NM_003437.2	zinc finger protein 136 (clone pHZ-20)	zinc finger protein 136
ZNF253	NM_021047.2	ZNF411;zinc finger protein 411	zinc finger protein 253
ZNF254	NM_203282.3	ZNF911,ZNF539;zinc finger protein 539	zinc finger protein 254
ZNF43	NM_003423.2	ZNF39L1;zinc finger protein 39-like 1 (KDX 27),zinc finger protein 43 (HTF6)	zinc finger protein 43
ZNF610	NM_00116427.1		zinc finger protein 610
ZNF675	NM_138330.2		zinc finger protein 675
ZNF682	NM_001077349.1		zinc finger protein 682
ZNF708	NM_021269.2	ZNF15,ZNF15L1,ZNF15, ZNF15L1	zinc finger protein 708
ZNF85	NM_001256171.1	zinc finger protein 85 (HPF4, HTF1)	zinc finger protein 85
ZNF91	NM_003430.2	zinc finger protein 91 (HPF7, HTF10)	zinc finger protein 91
ZNF93	NM_031218.3	ZNF505;zinc finger protein 505,zinc finger protein 93 (HTF34)	zinc finger protein 93
Internal Reference Genes			
ABCF1	NM_001090.2	ABCS0,ATP-binding cassette, sub-family F (GCN20), member 1	ATP binding cassette subfamily F member 1
AGK	NM_018238.3	MULK,multiple substrate lipid kinase	acylglycerol kinase
COG7	NM_153603.3		component of oligomeric golgi complex 7
		DDX16;DEAD/H (Asp-Glu-Ala-His) box polypeptide 16,DEAH (Asp-Glu-Ala-His) box	
DXH16	NM_001164239.1	polypeptide 16	DEAH-box helicase 16
DNAIC14	NM_032364.5	DnaJ (Hsp40) homolog, subfamily C, member 14	DnaJ heat shock protein family (Hsp40) member C14
		YJDC;yJef domain containing (E.coli),enhancer of mRNA decapping 3 homolog (S. cerevisiae)	
EDC3	NM_001142443.1		enhancer of mRNA decapping 3
		C14orf111;chromosome 14 open reading frame 111,FCF1 small subunit (SSU)	
FCF1	NM_015962.4		FCF1 rRNA-processing protein
G6PD	NM_000402.4		glucose-6-phosphate dehydrogenase
MRP55	NM_031902.3		mitochondrial ribosomal protein 55
NRDE2	NM_017970.3	C14orf102;chromosome 14 open reading frame 102	NRDE-2, necessary for RNA interference, domain containing
OAZ1	NM_004152.2	OAZ	ornithine decarboxylase antizyme 1
POLR2A	NM_000937.2	POLR2,polymerase (RNA) II (DNA directed) polypeptide A, 220kDa	RNA polymerase II subunit A
SAP130	NM_024545.3	sin3A-associated protein, 130kDa	Sin3A associated protein 130
		SDH2;succinate dehydrogenase complex, subunit A, flavoprotein (Fp),succinate dehydrogenase complex subunit A, flavoprotein (Fp)	
SDHA	NM_004168.3		succinate dehydrogenase complex flavoprotein subunit A
STK11IP	NM_052902.2		serine/threonine kinase 11 interacting protein
TBC1D10B	NM_015527.3	TBC1 domain family, member 10B	TBC1 domain family member 10B
TBP	NM_001172085.1	GTF2D1,SCA17	TATA-box binding protein
TLK2	XM_011524223.1	tousled-like kinase 2	tousled like kinase 2
UBB	NM_018955.3		ubiquitin B
USP39	NM_001256725.1	ubiquitin specific protease 39	ubiquitin specific peptidase 39