

Supplementary Table 1

ID	VDD_Class	Symbol	Entrez Gene Name	Location	Type(s)
AARS	1	AARS	alanyl-tRNA synthetase	Cytoplasm	enzyme
ACAA2	1	ACAA2	acetyl-CoA acyltransferase 2	Cytoplasm	enzyme
ACADM	1	ACADM	acyl-CoA dehydrogenase, C-4 to C-12 straight chain	Cytoplasm	enzyme
ACAT1	-1	ACAT1	acyl-CoA acetyltransferase 1	Cytoplasm	enzyme
ACAT2	1	ACAT2	acyl-CoA acetyltransferase 2	Cytoplasm	enzyme
ACIN1	1	ACIN1	apoptotic chromatin condensation inducer 1	Nucleus	enzyme
ACSF3	-1	ACSF3	acyl-CoA synthetase family member 3	Cytoplasm	enzyme
ACTB	1	ACTB	actin, beta	Cytoplasm	other
ACTG1	1	ACTG1	actin, gamma 1	Cytoplasm	other
ACTN1	1	ACTN1	actinin, alpha 1	Cytoplasm	other
ADA	1	ADA	adenosine deaminase	Cytoplasm	enzyme
AHSG	1	AHSG	alpha-2-HS-glycoprotein	Extracellular Space	other
ERAF	1	AHSP	alpha hemoglobin stabilizing protein	Cytoplasm	other
AK1	-1	AK1	adenylyl kinase 1	Cytoplasm	kinase
ALAD	-1	ALAD	aminolevulinic dehydratase	Cytoplasm	enzyme
ALB	1	ALB	albumin	Extracellular Space	transporter
ALDH18A1	-1	ALDH18A1	aldehyde dehydrogenase 18 family, member A1	Cytoplasm	kinase
ALDH1L2	-1	ALDH1L2	aldehyde dehydrogenase 1 family, member L2	Cytoplasm	enzyme
ALDH2	1	ALDH2	aldehyde dehydrogenase 2 family (mitochondrial)	Cytoplasm	other
ANK1	1	ANK1	ankyrin 1, erythrocytic	Plasma Membrane	other
ANP32E	1	ANP32E	acidic (leucine-rich) nuclear phosphoprotein 32 family, member E	Nucleus	other
ANXA1	1	ANXA1	annexin A1	Plasma Membrane	other
ANXA2	-1	ANXA2	annexin A2	Plasma Membrane	other
ANXA2P2	1	ANXA2P2	annexin A2 pseudogene 2	Other	other
ANXA5	1	ANXA5	annexin A5	Plasma Membrane	other
APEH	-1	APEH	acylaminocarbonyl-peptide hydrolase	Cytoplasm	peptidase
APOA1	1	APOA1	apolipoprotein A-I	Extracellular Space	transporter
APOC3	1	APOC3	apolipoprotein C-III	Extracellular Space	transporter
APRT	1	APRT	adenine phosphoribosyltransferase	Cytoplasm	enzyme
ARPC3	1	ARPC3	actin related protein 2/3 complex, subunit 3, 21kDa	Cytoplasm	other
ARS4	1	ARS4	arylsulfatase A	Cytoplasm	enzyme
ASNS	-1	ASNS	asparagine synthetase (glutamine-hydrolyzing)	Cytoplasm	enzyme
ATP2A2	1	ATP2A2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	Cytoplasm	transporter
ATP5A1	-1	ATP5A1	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	Cytoplasm	transporter
ATP5J	-1	ATP5J	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F6	Cytoplasm	transporter
ATPIF1	1	ATPIF1	ATPase inhibitory factor 1	Cytoplasm	other
AZGP1	1	AZGP1	alpha-2-glycoprotein 1, zinc-binding	Extracellular Space	transporter
BASP1	1	BASP1	brain abundant, membrane attached signal protein 1	Nucleus	transcription regulator
BAZ1B	1	BAZ1B	bromodomain adjacent to zinc finger domain, 1B	Nucleus	transcription regulator
BCAP31	-1	BCAP31	B-cell receptor-associated protein 31	Other	other
MUTED	-1	BLOC1S5	biogenesis of lysosomal organelles complex-1, subunit 5, muted	Extracellular Space	other
BLVRB	1	BLVRB	biliverdin reductase B (flavin reductase (NADPH))	Cytoplasm	enzyme
BOLA2	-1	BOLA2/BOLA2B	bolA family member 2	Nucleus	transcription regulator
BTF3	1	BTF3	basic transcription factor 3	Other	other
C11orf54	1	C11orf54	chromosome 11 open reading frame 54	Nucleus	other
C11orf141	1	C11orf141	chromosome 1 open reading frame 141	Other	other
C9orf171	-1	C9orf171	chromosome 9 open reading frame 171	Other	other
CA1	1	CA1	carbonic anhydrase I	Cytoplasm	enzyme
CA2	1	CA2	carbonic anhydrase II	Cytoplasm	enzyme
CALML5	-1	CALML5	calmodulin-like 5	Plasma Membrane	other
CAP1	1	CAP1	CAP, adenylate cyclase-associated protein 1 (yeast)	Other	other
CCDC37	1	CCDC37	coiled-coil domain containing 37	Cytoplasm	kinase
CCT2	1	CCT2	chaperonin containing TCP1, subunit 2 (beta)	Cytoplasm	other
CCT3	1	CCT3	chaperonin containing TCP1, subunit 3 (gamma)	Cytoplasm	other
CCT4	1	CCT4	chaperonin containing TCP1, subunit 4 (delta)	Cytoplasm	other
CCT5	-1	CCT5	chaperonin containing TCP1, subunit 5 (epsilon)	Cytoplasm	other
CCT6A	-1	CCT6A	chaperonin containing TCP1, subunit 6A (zeta 1)	Cytoplasm	other
CCT8	-1	CCT8	chaperonin containing TCP1, subunit 8 (theta)	Cytoplasm	other
CD36	1	CD36	CD36 molecule (thrombospondin receptor)	Plasma Membrane	transmembrane receptor
CD44	1	CD44	CD44 molecule (Indian blood group)	Plasma Membrane	enzyme
CD59	1	CD59	CD59 molecule, complement regulatory protein	Plasma Membrane	other
CD9	1	CD9	CD9 molecule	Plasma Membrane	other
CDC42	1	CDC42	cell division cycle 42	Cytoplasm	enzyme
CDKN2AIP	-1	CDKN2AIP	CDKN2A interacting protein	Nucleus	transcription regulator
CEACAM6	-1	CEACAM6	carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen)	Plasma Membrane	other
CFL1	-1	CFL1	cofilin 1 (non-muscle)	Nucleus	other
CKB	-1	CKB	creatine kinase, brain	Cytoplasm	kinase
CLIC1	1	CLIC1	chloride intracellular channel 1	Nucleus	ion channel
CLPP	-1	CLPP	caseinolytic mitochondrial matrix peptidase proteolytic subunit	Cytoplasm	peptidase
CLPTM1L	-1	CLPTM1L	CLPTM1-like	Other	other
CNOT1	-1	CNOT1	CCR4-NOT transcription complex, subunit 1	Cytoplasm	other
COL1A2	-1	COL1A2	collagen, type I, alpha 2	Extracellular Space	other
COPA	1	COPA	coatomer protein complex, subunit alpha	Cytoplasm	transporter
COQ9	1	COQ9	coenzyme Q9	Cytoplasm	other
COTL1	1	COTL1	coactosin-like 1 (Dictyostelium)	Cytoplasm	other
COX4I1	-1	COX4I1	cytochrome c oxidase subunit IV isoform 1	Cytoplasm	enzyme
CS	-1	CS	citrate synthase	Cytoplasm	enzyme
CSTA	-1	CSTA	cystatin A (stefin A)	Cytoplasm	other
CSTB	1	CSTB	cystatin B (stefin B)	Cytoplasm	peptidase
CUL4B	-1	CUL4B	cullin 4B	Nucleus	other
CUTA	1	CUTA	cutA diivalent cation tolerance homolog (E. coli)	Other	other
CYB5B	1	CYB5B	cytochrome b5 type B (outer mitochondrial membrane)	Cytoplasm	enzyme
CYB5R1	1	CYB5R1	cytochrome b5 reductase 1	Cytoplasm	enzyme
CYB5R3	1	CYB5R3	cytochrome b5 reductase 3	Cytoplasm	enzyme
CYCS	-1	CYCS	cytochrome c, somatic	Cytoplasm	transporter
DAD1	1	DAD1	defender against cell death 1	Cytoplasm	enzyme
DAP3	-1	DAP3	death associated protein 3	Cytoplasm	other
DARS	-1	DARS	aspartyl-tRNA synthetase	Cytoplasm	enzymatic
DKC1	-1	DKC1	dyskeratosis congenita 1, dyskerin	Nucleus	other
DLAT	-1	DLAT	dihydrolipoamide S-acetyltransferase	Cytoplasm	enzyme
DLD	-1	DLD	dihydrolipoamide dehydrogenase	Cytoplasm	enzyme
DLST	-1	DLST	dihydrolipoamide S-Succinyltransferase (E2 component of 2-oxo-glutarate complex)	Cytoplasm	enzyme
DNAJB11	1	DNAJB11	DnaJ (Hsp40) homolog, subfamily B, member 11	Cytoplasm	other
DNAJC1	1	DNAJC1	DnaJ (Hsp40) homolog, subfamily C, member 1	Cytoplasm	other
DOCK4	1	DOCK4	dedicator of cytokinesis 4	Plasma Membrane	other
DPEP1	1	DPEP1	dipeptidase 1 (renal)	Cytoplasm	peptidase
DPP7	-1	DPP7	dipeptidyl-peptidase 7	Cytoplasm	peptidase
DSG1	-1	DSG1	desmoglein 1	Plasma Membrane	other
DSP	-1	DSP	desmoplakin	Plasma Membrane	other
DUS3L	1	DUS3L	dihydrouridine synthase 3-like (S. cerevisiae)	Other	other
DYNC1H1	-1	DYNC1H1	dynein, cytoplasmic 1, heavy chain 1	Cytoplasm	peptidase
EEF1A1	-1	EEF1A1	eukaryotic translation elongation factor 1 alpha 1	Cytoplasm	translation regulator
EEF1B2	1	EEF1B2	eukaryotic translation elongation factor 1 beta 2	Cytoplasm	translation regulator
EEF1D	-1	EEF1D	eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)	Cytoplasm	translation regulator
EFTUD2	-1	EFTUD2	elongation factor Tu GTP binding domain containing 2	Nucleus	enzyme
EIF2S2	-1	EIF2S2	eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa	Cytoplasm	translation regulator
EIF3B	1	EIF3B	eukaryotic translation initiation factor 3, subunit B	Cytoplasm	translation regulator
EIF3CL	-1	EIF3C/EIF3CL	eukaryotic translation initiation factor 3, subunit C	Cytoplasm	translation regulator
EIF4A1	1	EIF4A1	eukaryotic translation initiation factor 4A1	Cytoplasm	translation regulator
EIF5A	1	EIF5A	eukaryotic translation initiation factor 5A	Cytoplasm	translation regulator
ELAVL4	1	ELAVL4	ELAV-like neuron-specific RNA binding protein 4	Cytoplasm	other
EPN1	1	EPN1	epsin 1	Plasma Membrane	other
EPX	-1	EPX	eosinophil peroxidase	Cytoplasm	enzyme
ERAP1	-1	ERAP1	endoplasmic reticulum aminopeptidase 1	Extracellular Space	peptidase
ERP44	-1	ERP44	endoplasmic reticulum protein 44	Cytoplasm	enzyme
F2	1	F2	coagulation factor II (thrombin)	Extracellular Space	peptidase
FABP5	-1	FABP5	fatty acid binding protein 5 (psoriasis-associated)	Cytoplasm	transporter

FAM173B	1 FAM173B	family with sequence similarity 173, member B	Other	other
FBP1	1 FBP1	fructose-1,6-bisphosphatase 1	Cytoplasm	phosphatase
FEN1	-1 FEN1	flap structure-specific endonuclease 1	Nucleus	enzyme
FGA	1 FGA	fibrinogen alpha chain	Extracellular Space	other
FKBP2	-1 FKBP2	FK506 binding protein 2, 13kDa	Cytoplasm	enzyme
FKBP4	1 FKBP4	FK506 binding protein 4, 59kDa	Nucleus	enzymatic
FLG2	-1 FLG2	filaggrin family member 2	Cytoplasm	other
FLNA	1 FLNA	filamin A, alpha	Nucleus	enzymatic
FUBP1	1 FUBP1	far upstream element (FUSE) binding protein 1	Cytoplasm	other
G3BP1	1 G3BP1	GTPase activating protein (SH3 domain) binding protein 1	Nucleus	transcription regulator
GANAB	-1 GANAB	glucosidase, alpha; neutral AB	Cytoplasm	enzyme
GAPDH	1 GAPDH	glyceraldehyde-3-phosphate dehydrogenase	Cytoplasm	enzyme
GAR1	-1 GAR1	GAR1 ribonucleoprotein	Nucleus	ion channel
GART	-1 GART	phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase	Cytoplasm	enzyme
GC	1 GC	group-specific component (vitamin D binding protein)	Extracellular Space	transporter
GFER	1 GFER	growth factor, augmenter of liver regeneration	Nucleus	enzyme
GLO1	-1 GLO1	glyoxalase I	Cytoplasm	enzyme
GMPPA	1 GMPPA	GDP-mannose pyrophosphorylase A	Cytoplasm	enzyme
GMPPB	1 GMPPB	GDP-mannose pyrophosphorylase B	Cytoplasm	enzyme
GNAI2	1 GNAI2	guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2	Plasma Membrane	enzyme
GNB2L1	-1 GNB2L1	guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	Cytoplasm	enzyme
GOSR1	-1 GOSR1	golgi SNAc receptor complex member 1	Cytoplasm	transporter
GOT2	1 GOT2	glutamic-oxaloacetic transaminase 2, mitochondrial	Cytoplasm	enzyme
GP9	1 GP9	glycoprotein IX (platelet)	Plasma Membrane	other
GPI	-1 GPI	glucose-6-phosphate isomerase	Extracellular Space	enzyme
GSTK1	1 GSTK1	glutathione S-transferase kappa 1	Cytoplasm	enzyme
GSTP1	1 GSTP1	glutathione S-transferase pi 1	Cytoplasm	enzyme
GTF2I	-1 GTF2I	general transcription factor Iii	Nucleus	transcription regulator
GUSB	-1 GUSB	glucuronidase, beta	Cytoplasm	enzyme
H1FX	1 H1FX	H1 histone family, member X	Nucleus	other
H3F3A	-1 H3F3A/H3F3B	H3 histone, family 3A	Nucleus	other
HBA1	1 HBA1/HBA2	hemoglobin, alpha 1	Cytoplasm	transporter
HBB	1 HBB	hemoglobin, beta	Cytoplasm	transporter
HBD	1 HBD	hemoglobin, delta	Other	transporter
HBG1	-1 HBG1	hemoglobin, gamma A	Cytoplasm	other
HCFC1	1 HCFC1	host cell factor C1 (VP16-accessory protein)	Nucleus	transcription regulator
HCLS1	1 HCLS1	hemopoietic cell-specific Lyn substrate 1	Nucleus	other
HDDC3	-1 HDDC3	HD domain containing 3	Other	other
HDGF	1 HDGF	hepatoma-derived growth factor	Extracellular Space	growth factor
HINT1	1 HINT1	histidine triad nucleotide binding protein 1	Nucleus	enzyme
HIST1H1E	1 HIST1H1E	histone cluster 1, H1e	Nucleus	other
HIST1H2A	-1 HIST1H2AG (includes others)	histone cluster 1, H2ag	Nucleus	other
HIST1H2B	-1 HIST1H2BB	histone cluster 1, H2bb	Nucleus	other
HIST1H2B	-1 HIST1H2BN	histone cluster 1, H2bn	Nucleus	other
HIST1H4A	-1 HIST1H4A (includes others)	histone cluster 1, H4a	Nucleus	other
HLA-B	-1 HLA-B	major histocompatibility complex, class I, B	Plasma Membrane	transmembrane receptor
HMBS	-1 HMBS	hydroxymethylbilane synthase	Cytoplasm	enzyme
HMGB2	1 HMGB2	high mobility group box 2	Nucleus	transcription regulator
HNRNPA1	1 HNRNPA1	heterogeneous nuclear ribonucleoprotein A1	Nucleus	other
HNRNPA3	1 HNRNPA3	heterogeneous nuclear ribonucleoprotein A3	Nucleus	other
HNRNPC	1 HNRNPC	heterogeneous nuclear ribonucleoprotein C (C1/C2)	Nucleus	other
HNRNPF	-1 HNRNPF	heterogeneous nuclear ribonucleoprotein F	Nucleus	other
HNRNPH3	1 HNRNPH3	heterogeneous nuclear ribonucleoprotein H3 (2H9)	Nucleus	other
HNRNPM	1 HNRNPM	heterogeneous nuclear ribonucleoprotein M	Nucleus	other
HSD17B4	-1 HSD17B4	hydroxysteroid (17-beta) dehydrogenase 4	Cytoplasm	enzyme
HP90B1	1 HP90B1	heat shock protein 90kDa beta (Grp94), member 1	Cytoplasm	other
HSPA8	1 HSPA8	heat shock 70kDa protein 8	Cytoplasm	enzyme
HTATSF1	-1 HTATSF1	HIV-1 Tat specific factor 1	Nucleus	transcription regulator
ICAM3	1 ICAM3	intercellular adhesion molecule 3	Plasma Membrane	transmembrane receptor
IGHA2	-1 IGH2	immunoglobulin heavy constant alpha 2 (A2m marker)	Extracellular Space	other
IGHG4	-1 IGHG4	immunoglobulin heavy constant gamma 4 (G4m marker)	Extracellular Space	other
IGHV4-31	-1 IGHV4-31	immunoglobulin heavy variable 4-31	Other	other
IGJ	-1 IGJ	immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides	Extracellular Space	other
IGKV1-5	-1 IGKV1-5	immunoglobulin kappa variable 1-5	Extracellular Space	other
IGL@	-1 IGL	immunoglobulin lambda locus	Nucleus	other
IMMT	-1 IMMT	inner membrane protein, mitochondrial	Cytoplasm	other
IQGAP1	1 IQGAP1	IQ motif containing GTPase activating protein 1	Cytoplasm	other
ITGA2B	1 ITGA2B	integrin, alpha 2b (platelet glycoprotein Ib of IIb/IIIa complex, antigen CD41)	Plasma Membrane	transmembrane receptor
ITGB7	1 ITGB7	integrin, beta 7	Plasma Membrane	transmembrane receptor
ITGB8	-1 ITGB8	integrin, beta 8	Plasma Membrane	other
ITIH2	1 ITIH2	inter-alpha-trypsin inhibitor heavy chain 2	Extracellular Space	other
IVD	-1 IVD	isovaleryl-CoA dehydrogenase	Cytoplasm	enzyme
KIAA0368	1 KIAA0368	KIAA0368	Cytoplasm	other
KIAA0947	-1 KIAA0947	KIAA0947	Other	other
KRT1	1 KRT1	keratin 1	Cytoplasm	other
KRT10	1 KRT10	keratin 10	Extracellular Space	growth factor
LACRT	1 LACRT	lacritin	Plasma Membrane	enzyme
LAMP2	1 LAMP2	lysosomal-associated membrane protein 2	Cytoplasm	enzyme
LARS	-1 LARS	leucyl-tRNA synthetase	Cytoplasm	transporter
LASP1	1 LASP1	LIM and SH3 protein 1	Cytoplasm	transporter
LCN1	1 LCN1	lipocalin 1	Extracellular Space	transporter
LCP1	1 LCP1	lymphocyte cytosolic protein 1 (L-plastin)	Cytoplasm	other
LGALS3	-1 LGALS3	lectin, galactoside-binding, soluble, 3	Extracellular Space	other
LGALS7B	-1 LGALS7/LGALS7B	lectin, galactoside-binding, soluble, 7	Extracellular Space	other
LMAN1	1 LMAN1	lectin, mannose-binding, 1	Cytoplasm	other
LMNA	1 LMNA	lamin A/C	Nucleus	other
LMNB1	1 LMNB1	lamin B1	Nucleus	other
LOC44152	-1 LOC441528	uncharacterized LOC441528	Other	other
LONP1	1 LONP1	Ion peptidase 1, mitochondrial	Cytoplasm	peptidase
LPIN1	1 LPIN1	lipin 1	Nucleus	phosphatase
LPXN	-1 LPXN	leupaxin	Cytoplasm	transcription regulator
LYZ	1 LYZ	lysozyme	Extracellular Space	enzyme
MAGED2	1 MAGED2	melanoma antigen family D, 2	Plasma Membrane	other
MAN2A1	-1 MAN2A1	mannosidase, alpha, class 2A, member 1	Cytoplasm	enzyme
MAPRE1	1 MAPRE1	microtubule-associated protein, RP/EB family, member 1	Cytoplasm	other
MARS	-1 MARS	methionyl-tRNA synthetase	Cytoplasm	enzyme
MATR3	1 MATR3	matrin 3	Nucleus	other
MCM5	-1 MCM5	minichromosome maintenance complex component 5	Plasma Membrane	kinase
MET	-1 MET	met proto-oncogene	Cytoplasm	other
MI3	-1 MI3	melanoma inhibitory activity family, member 3	Extracellular Space	cytokine
MIF	1 MIF	macrophage migration inhibitory factor (glycosylation-inhibiting factor)	Extracellular Space	peptidase
MMP8	-1 MMP8	matrix metalloproteinase 8 (neutrophil collagenase)	Extracellular Space	peptidase
MMP9	-1 MMP9	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	Extracellular Space	peptidase
MNDA	1 MNDA	myeloid cell nuclear differentiation antigen	Nucleus	transcription regulator
MOGS	-1 MOGS	mannosyl-oligosaccharide glucosidase	Cytoplasm	enzymatic
MRPL14	-1 MRPL14	mitochondrial ribosomal protein L14	Cytoplasm	other
MRPL40	-1 MRPL40	mitochondrial ribosomal protein L40	Cytoplasm	other
MRPL43	-1 MRPL43	mitochondrial ribosomal protein L43	Cytoplasm	translation regulator
MRPS36	-1 MRPS36	mitochondrial ribosomal protein S36	Cytoplasm	other
MSN	1 MSN	moesin	Plasma Membrane	other
MT-CO2	-1 MT-CO2	cytochrome c oxidase subunit II	Cytoplasm	enzyme
MX1	1 MX1	myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)	Cytoplasm	enzyme
MYH9	1 MYH9	myosin, heavy chain 9, non-muscle	Cytoplasm	transporter
MYL6B	1 MYL6B	myosin, light chain 6B, alkali, smooth muscle and non-muscle	Cytoplasm	other
NAT5	1 NAA20	N(alpha)-acetyltransferase 20, NatB catalytic subunit	Cytoplasm	enzymatic
LSM8	1 NAA38	N(alpha)-acetyltransferase 38, NatC auxiliary subunit	Nucleus	other
NANS	-1 NANS	N-acetyleneuramic acid synthase	Cytoplasm	enzymatic
NAP1L1	1 NAP1L1	nucleosome assembly protein 1-like 1	Nucleus	other
NCALD	-1 NCALD	neurocalcin delta	Cytoplasm	other
NDUFA9	1 NDUFA9	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9, 39kDa	Cytoplasm	enzyme
NDUFAB1	-1 NDUFB1	NADH dehydrogenase (ubiquinone) 1, alpha/beta subcomplex, 1, 8kDa	Cytoplasm	enzyme

NDUFB10	-1 NDUFB10	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kDa	Cytoplasm	enzyme
NDUFB4	-1 NDUFB4	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa	Cytoplasm	transporter
NDUFB9	1 NDUFB9	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kDa	Cytoplasm	enzyme
NDUFS1	1 NDUFS1	NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)	Cytoplasm	enzyme
NDUFS3	1 NDUFS3	NADH dehydrogenase (ubiquinone) Fe-S protein 3, 30kDa (NADH-coenzyme Q reductase)	Cytoplasm	enzyme
NDUF57	-1 NDUF57	NADH dehydrogenase (ubiquinone) Fe-S protein 7, 20kDa (NADH-coenzyme Q reductase)	Cytoplasm	enzyme
NHP2	-1 NHP2	NHP2 ribonucleoprotein	Nucleus	other
NOMO2	-1 NOMO1 (includes others)	NOMO1 modulator 1	Plasma Membrane	other
NOP56	-1 NOP56	NOP56 ribonucleoprotein	Nucleus	other
NPM1	1 NPM1	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	Cytoplasm	transcription regulator
NSFL1C	-1 NSFL1C	NSFL1 (p97) cofactor (p47)	Nucleus	other
NUCB2	-1 NUCB2	nucleobindin 2	Cytoplasm	enzyme
OAS2	1 OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa	Cytoplasm	enzyme
OGDH	-1 OGDH	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	Cytoplasm	other
OSBPL2	1 OSBPL2	oxysterol binding protein-like 2	Cytoplasm	other
OTUB1	1 OTUB1	OTU domain, ubiquitin aldehyde binding 1	Cytoplasm	enzyme
PA2G4	-1 PA2G4	proliferation-associated 2G4, 38kDa	Nucleus	transcription regulator
PARP1	1 PARP1	poly (AD-ribose) polymerase 1	Nucleus	enzymatic
PBXIP1	1 PBXIP1	pre-B-cell leukemia homeobox interacting protein 1	Nucleus	transcription regulator
PCBP2	1 PCBP2	poly(C) binding protein 2	Nucleus	other
PCBP3	-1 PCBP3	poly(C) binding protein 3	Nucleus	other
PCK2	1 PCK2	phosphoenolpyruvate carboxykinase 2 (mitochondrial)	Cytoplasm	kinase
PDK1	-1 PDK1	pyruvate dehydrogenase kinase, isozyme 1	Cytoplasm	kinase
PDLM3	1 PDLM3	PDZ and LIM domain 3	Cytoplasm	other
PDSSB	1 PDSSB	PDSS, regulator of cohesion maintenance, homolog B (S. cerevisiae)	Nucleus	other
PDXK	1 PDXK	pyridoxal (pyridoxine, vitamin B6) kinase	Cytoplasm	kinase
PEPB1	1 PEBP1	phosphatidylethanolamine binding protein 1	Cytoplasm	other
PELP1	1 PELP1	proline, glutamate and leucine rich protein 1	Nucleus	other
PHB	-1 PHB	prohibitin	Nucleus	transcription regulator
PHGDH	1 PHGDH	phosphoglycerate dehydrogenase	Cytoplasm	enzymatic
PHPHT1	1 PHPHT1	phosphohistidine phosphatase 1	Cytoplasm	phosphatase
PIP	1 PIP	prolactin-induced protein	Extracellular Space	other
PM20D2	-1 PM20D2	peptidase M20 domain containing 2	Other	other
PNKD	-1 PNKD	paroxysmal nonketogenic dyskinesia	Nucleus	other
NP	1 NP	purine nucleoside phosphorylase	Nucleus	enzymatic
POLR1C	-1 POLR1C	polymerase (RNA) I polypeptide C, 30kDa	Nucleus	enzymatic
PPA1	1 PPA1	pyrophosphatase (inorganic) 1	Cytoplasm	enzymatic
PPIB	-1 PPIB	peptidyl/prolyl isomerase B (cyclophilin B)	Cytoplasm	enzymatic
PPP1R14B	1 PPP1R14B	protein phosphatase 1, regulatory (inhibitor) subunit 14B	Cytoplasm	phosphatase
PRDX2	1 PRDX2	peroxiredoxin 2	Cytoplasm	enzymatic
PRDX3	1 PRDX3	peroxiredoxin 3	Cytoplasm	enzymatic
PRDX4	1 PRDX4	peroxiredoxin 4	Cytoplasm	enzymatic
PRG2	-1 PRG2	proteoglycan 2, bone marrow (natural killer cell activator, eosinophil granule major basic protein) protein S (alpha)	Extracellular Space	other
PROS1	1 PROS1	pre-mRNA processing factor 6	Extracellular Space	other
PRPF6	-1 PRPF6	pre-mRNA processing factor 8	Nucleus	transcription regulator
PRPF8	1 PRPF8	protease, serine, 1 (trypsin 1)	Nucleus	other
PRSS1	1 PRSS1	phosphoserine aminotransferase 1	Extracellular Space	peptidase
PSAT1	-1 PSAT1	proteasome (prosome, macropain) subunit, alpha type, 4	Cytoplasm	enzymatic
PSMA4	-1 PSMA4	proteasome (prosome, macropain) subunit, alpha type, 6	Cytoplasm	peptidase
PSMA6	-1 PSMA6	proteasome (prosome, macropain) subunit, alpha type, 8	Cytoplasm	peptidase
PSMA8	1 PSMA8	proteasome (prosome, macropain) subunit, beta type, 2	Cytoplasm	peptidase
PSMB2	1 PSMB2	proteasome (prosome, macropain) 26S subunit, ATPase, 5	Cytoplasm	transcription regulator
PSMC5	1 PSMC5	proteasome (prosome, macropain) 26S subunit, non-ATPase, 7	Cytoplasm	other
PSMD7	-1 PSMD7	proteasome (prosome, macropain) activator subunit 1 (PA28 alpha)	Cytoplasm	other
PSME1	1 PSME1	paraspeckle component 1	Nucleus	other
PSPC1	1 PSPC1	polyprymidine tract binding protein 1	Nucleus	enzymatic
PTBP1	1 PTBP1	prostaglandin E synthase 3 (cytosolic)	Cytoplasm	enzymatic
PTGES3	-1 PTGES3	protothymosin, alpha	Nucleus	other
PTMA	-1 PTMA	RAB5C, member RAS oncogene family	Cytoplasm	enzyme
RAB5C	1 RAB5C	RAD51 associated protein 2	Other	other
RAD51AP2	-1 RAD51AP2	RAN binding protein 2	Nucleus	enzyme
RANBP2	-1 RANBP2	RAS p21 protein activator 4B	Other	other
RASA4B	1 RASA4B	RNA binding motif (RNP1, RRM) protein 3	Cytoplasm	other
RBM3	1 RBM3	RNA binding motif protein 4	Nucleus	other
RBM4	-1 RBM4	resistin	Extracellular Space	other
RETN	-1 RETN	ras homolog family member C	Plasma Membrane	enzymatic
RHOC	1 RHOC	regulator of microtubule dynamics 3	Cytoplasm	other
FAM82A2	-1 RMDN3	ribonuclease, RNase A family, 3	Extracellular Space	enzymatic
RNASE3	1 RNASE3	ribosomal protein L13	Cytoplasm	other
RPL13	-1 RPL13	ribosomal protein L14	Cytoplasm	other
RPL14	1 RPL14	ribosomal protein L19	Cytoplasm	other
RPL19	-1 RPL19	ribosomal protein L22	Nucleus	other
RPL22	-1 RPL22	ribosomal protein L27	Cytoplasm	other
RPL27	1 RPL27	ribosomal protein L31	Other	other
RPL31	1 RPL31	ribosomal protein, large, P0	Cytoplasm	other
RPLP0	1 RPLP0	ribophorin I	Cytoplasm	other
RPN1	-1 RPN1	ribosomal protein S12	Cytoplasm	enzyme
RPS12	-1 RPS12	ribosomal protein S15	Cytoplasm	other
RPS15	-1 RPS15	ribosomal protein S23	Cytoplasm	other
RPS23	-1 RPS23	ribosomal protein S24	Cytoplasm	translation regulator
RPS24	-1 RPS24	ribosomal protein S25	Cytoplasm	other
RPS25	-1 RPS25	ribosomal protein S3A	Cytoplasm	other
RPS3A	-1 RPS3A	ribosomal protein S6	Cytoplasm	other
RPS6	-1 RPS6	ribosomal protein S7	Cytoplasm	other
RPS7	-1 RPS7	ribosome binding protein 1	Cytoplasm	enzyme
RRBP1	-1 RRBP1	RNA 2',3'-cyclic phosphate and 5'-OH ligase	Cytoplasm	other
C22orf28	-1 RTCB	reticulin 4	Cytoplasm	other
RTN4	1 RTN4	RuvB-like AAA ATPase 2	Nucleus	transcription regulator
RUVBL2	-1 RUVBL2	S100 calcium binding protein A11	Cytoplasm	other
S100A11	1 S100A11	S100 calcium binding protein A7A	Cytoplasm	other
S100A7A	-1 S100A7A	S100 calcium binding protein A9	Cytoplasm	other
S100A9	1 S100A9	SAMM50 sorting and assembly machinery component	Cytoplasm	other
SAMM50	-1 SAMM50	SAP domain containing ribonucleoprotein	Nucleus	other
SARNP	1 SARNP	squamous cell carcinoma antigen recognized by T cells	Nucleus	other
SART1	-1 SART1	syndecan 1	Plasma Membrane	enzymatic
SDC1	1 SDC1	SEC11 homolog C (S. cerevisiae)	Cytoplasm	peptidase
SEC11C	-1 SEC11C	SEC13 homolog (S. cerevisiae)	Cytoplasm	transporter
SEC13	1 SEC13	SEC22 vesicle trafficking protein homolog B (S. cerevisiae) (gene/pseudogene)	Other	other
SEC22B	-1 SEC22B	Sec61 alpha 1 subunit (S. cerevisiae)	Cytoplasm	transporter
SEC61A1	-1 SEC61A1	SEC63 homolog (S. cerevisiae)	Cytoplasm	transporter
SEC63	1 SEC63	selelun binding protein 1	Cytoplasm	other
SELENBP1	-1 SELENBP1	SERPIN1 mRNA binding protein 1	Nucleus	other
SERBP1	-1 SERBP1	serpin peptidase inhibitor, clade B (ovalbumin), member 3	Cytoplasm	other
SERPINB3	-1 SERPINB3	SET nuclear oncogene	Nucleus	phosphatase
SET	1 SET	small glutamine-rich tetra-tricopeptide repeat (TPR)-containing, alpha	Cytoplasm	other
SGTA	1 SGTA	SH3 domain binding glutamic acid-rich protein like 3	Nucleus	other
SH3BGRL3	1 SH3BGRL3	shisa family member 6	Other	other
SHISA6	1 SHISA6	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3	Cytoplasm	transporter
SLC25A3	-1 SLC25A3	solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1	Plasma Membrane	other
SLC9A3R1	-1 SLC9A3R1	small nuclear ribonucleoprotein 200kDa (U5)	Nucleus	enzymatic
SNRNP20C	-1 SNRNP20C	small nuclear ribonucleoprotein 200kDa (U5)	Nucleus	other
SNRPD3	1 SNRPD3	small nuclear ribonucleoprotein D3 polypeptide 18kDa	Cytoplasm	enzymatic
SOD1	1 SOD1	superoxide dismutase 1, soluble	Cytoplasm	other
SPAG9	1 SPAG9	sperm associated antigen 9	Cytoplasm	other
SPCS2	-1 SPCS2	signal peptide cleavage complex subunit 2 homolog (S. cerevisiae)	Cytoplasm	other
SPTB	1 SPTB	spectrin, beta, erythrocytic	Plasma Membrane	other
SRP14	1 SRP14	signal recognition particle 14kDa (homologous Alu RNA binding protein)	Cytoplasm	other
STIM2	1 STIM2	stromal interaction molecule 2	Plasma Membrane	transporter
STOM	1 STOM	stomatin	Plasma Membrane	other
STT3A	-1 STT3A	STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	Plasma Membrane	enzyme
STX5	1 STX5	syntaxis 5	Cytoplasm	transporter

TAGLN2	1 TAGLN2	transgelin 2	Cytoplasm	other
TAP1	-1 TAP1	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	Cytoplasm	transporter
TAPBP	-1 TAPBP	TAP binding protein (tapasin)	Cytoplasm	transporter
TCP1	-1 TCP1	t-complex 1	Cytoplasm	other
TFG	1 TFG	TRK-fused gene	Cytoplasm	other
TGOLN2	1 TGOLN2	trans-golgi network protein 2	Cytoplasm	other
TJP1	1 TJP1	tight junction protein 1	Plasma Membrane	other
TLN1	1 TLN1	talin 1	Plasma Membrane	other
TMED10	-1 TMED10	transmembrane emp24-like trafficking protein 10 (yeast)	Cytoplasm	transporter
TMED7	-1 TMED7	transmembrane emp24 protein transport domain containing 7	Cytoplasm	transporter
TMED9	-1 TMED9	transmembrane emp24 protein transport domain containing 9	Cytoplasm	transporter
TMEM205	-1 TMEM205	transmembrane protein 205	Other	other
TMEM43	1 TMEM43	transmembrane protein 43	Nucleus	other
TMPO	1 TMPO	thymopoietin	Nucleus	other
TMX1	1 TMX1	thioredoxin-related transmembrane protein 1	Cytoplasm	enzyme
TOP2A	-1 TOP2A	topoisomerase (DNA) II alpha 170kDa	Nucleus	enzyme
TPM3	1 TPM3	tropomyosin 3	Cytoplasm	other
TPM4	1 TPM4	tropomyosin 4	Cytoplasm	other
TRIM28	-1 TRIM28	tripartite motif containing 28	Nucleus	transcription regulator
TROVE2	1 TROVE2	TROVE domain family, member 2	Nucleus	other
TUBA1C	-1 TUBA1C	tubulin, alpha 1c	Cytoplasm	other
TUBA4A	1 TUBA4A	tubulin, alpha 4a	Cytoplasm	other
TUBB	-1 TUBB	tubulin, beta class I	Cytoplasm	other
TUBB2C	-1 TUBB4B	tubulin, beta 4B class IVb	Cytoplasm	other
TXNDC5	-1 TXNDC5	thioredoxin domain containing 5 (endoplasmic reticulum)	Cytoplasm	enzyme
TXNL1	1 TXNL1	thioredoxin-like 1	Cytoplasm	enzyme
U2AF2	1 U2AF2	U2 small nuclear RNA auxiliary factor 2	Nucleus	other
UBE2NL	-1 UBE2NL	ubiquitin-conjugating enzyme E2N-like	Other	enzyme
UBQLN1	1 UBQLN1	ubiquilin 1	Cytoplasm	other
UBR4	-1 UBR4	ubiquitin protein ligase E3 component n-recognition 4	Nucleus	enzyme
UCHL1	1 UCHL1	ubiquitin carboxyl-terminal esterase L1 (ubiquitin thioesterase)	Cytoplasm	peptidase
UQCRC1	-1 UQCRC1	ubiquinol-cytochrome c reductase core protein I	Cytoplasm	enzyme
UQCRC2	-1 UQCRC2	ubiquinol-cytochrome c reductase core protein II	Cytoplasm	enzyme
UROD	-1 UROD	uroporphyrinogen decarboxylase	Cytoplasm	enzymatic
VAPA	1 VAPA	VAMP (vesicle-associated membrane protein)-associated protein A, 33kDa	Plasma Membrane	other
VARS	1 VARS	valyl-tRNA synthetase	Cytoplasm	enzyme
VCP	-1 VCP	valosin containing protein	Cytoplasm	enzyme
VDAC1	-1 VDAC1	voltage-dependent anion channel 1	Cytoplasm	ion channel
VDAC2	1 VDAC2	voltage-dependent anion channel 2	Cytoplasm	ion channel
VPS37B	-1 VPS37B	vacuolar protein sorting 37 homolog B (S. cerevisiae)	Cytoplasm	other
VPS41	-1 VPS41	vacuolar protein sorting 41 homolog (S. cerevisiae)	Cytoplasm	transporter
WAS	1 WAS	Wiskott-Aldrich syndrome	Cytoplasm	other
WBP11	-1 WBP11	WW domain binding protein 11	Nucleus	phosphatase
WDR1	1 WDR1	WAS/WASL interacting protein family, member 1	Extracellular Space	other
WIFP1	-1 WIFP1	X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)	Cytoplasm	other
XRCC5	-1 XRCC5	Y box binding protein 1	Nucleus	enzyme
YBX1	1 YBX1		Nucleus	transcription regulator
DKFZp761	1			
15kDa	1			
7kDa	1			
EEF1AL3	1			
FLJ37148	1			
FLJ51310	1			
FLJ53378	1			
FLJ58832	1			
FLJ59219	1			
FLJ59379	1			
LOC39038	1			
LOC65388	1			
LOC73175	1			
P180/ribos	1			
12kDa	-1			
13kDa	-1			
14kDa	-1			
27kDa	-1			
44kDa	-1			
FLI46889	-1			
FLJ46898	-1			
FLJ52843	-1			
FLJ52929	-1			
FLJ61039	-1			
LOC10013	-1			
LOC10029	-1			
LOC65356	-1			