

**Supplementary Table S3.** List of the 1,252 nominated essential gene candidates

Gene	Refseq ID	Description	H score	Qualified by H score	p-val
AADACL1	NM_020792	arylacetamide deacetylase-like 1	100	✓	
ABCB1	NM_000927	ATP-binding cassette, sub-family B (MDR/TAP), member 1	100	✓	
ABCB5	NM_178559	ATP-binding cassette, sub-family B (MDR/TAP), member 5	100	✓	
ABCB7	NM_004299	ATP-binding cassette, sub-family B (MDR/TAP), member 7	100	✓	
ABCB8	NM_007188	ATP-binding cassette, sub-family B, member 8	80	✓	
ABCC1	NM_004996	ATP-binding cassette, sub-family C (CFTR/MRP), member 1	60	✓	
ABCC10	NM_033450	ATP-binding cassette, sub-family C (CFTR/MRP), member 10	100	✓	
ABCC11	NM_032583	ATP-binding cassette, sub-family C (CFTR/MRP), member 11	100	✓	
ABCC13	NM_138726	ATP-binding cassette, sub-family C (CFTR/MRP), member 13	100	✓	
ABCC8	NM_000352	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	100	✓	
ABCD2	NM_005164	ATP-binding cassette, sub-family D (ALD), member 2	100	✓	
ABCD3	NM_002858	ATP-binding cassette, sub-family D (ALD), member 3	100	✓	
ABCG8	NM_022437	ATP-binding cassette, sub-family G (WHITE), member 8	80	✓	
ABHD3	NM_138340	abhydrolase domain containing 3	100	✓	
ABLIM1	NM_002313	actin binding LIM protein 1	100	✓	
ACF	NM_138933	apobec-1 complementation factor	100	✓	
ACP5	NM_001611	acid phosphatase 5, tartrate resistant	60	✓	
ACTL6A	NM_177989	actin-like 6A	100	✓	
ACYP1	NM_001107	acylphosphatase 1, erythrocyte (common) type	60	✓	
ADAMDEC1	NM_014479	ADAM-like, decysin 1	100	✓	
ADAMTS4	NM_005099	ADAM metallopeptidase with thrombospondin type 1 motif	80	✓	
ADIPOR1	NM_015999	adiponectin receptor 1	100	✓	
ADORA2B	NM_000676	adenosine A2b receptor	100	✓	
AFM	NM_001133	afamin	80	✓	
AGER	NM_001136	advanced glycosylation end product-specific receptor	100	✓	
AGPAT1	NM_006411	1-acylglycerol-3-phosphate O-acyltransferase 1 (lysophosphatidic acid acyltransferase, alpha)	80	✓	
AGPAT2	NM_006412	1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase, beta)	60	✓	
AGTRAP	NM_020350	angiotensin II receptor-associated protein	80	✓	
AIFL	NM_144704	apoptosis-inducing factor like	100	✓	
AIFM1	NM_004208	apoptosis-inducing factor, mitochondrion-associated, 1	100	✓	
AIFM2	NM_032797	apoptosis-inducing factor, mitochondrion-associated, 2	100	✓	
ALB	NM_000477	albumin (ALB)	100	✓	
ALDH16A1	NM_153329	aldehyde dehydrogenase 16 family, member A1	100	✓	
ALF	NM_006872	TFIIA-alpha/beta-like factor	100	✓	
ALG8	NM_024079	asparagine-linked glycosylation 8 homolog (yeast, alpha-1,3-glucosyltransferase)	80	✓	
ALKBH2	NM_001001655	alkB, alkylation repair homolog 2	100	✓	
ALKBH3	NM_139178	alkB, alkylation repair homolog 3	100	✓	
ALOXE3	NM_021628	arachidonate lipoxygenase 3	80	✓	
ANK2	NM_001148	ankyrin 2, neuronal	100	✓	
ANKFY1	NM_020740	ankyrin repeat and FYVE domain containing 1	100	✓	
ANKH	NM_054027	ankylosis, progressive homolog	80	✓	
ANKRD37	NM_181726	ankyrin repeat domain 37	100	✓	

ANKRD49	NM_017704	ankyrin repeat domain 49	60	✓	
ANTXR1	NM_018153	anthrax toxin receptor 1	80	✓	
ANTXR2	NM_058172	anthrax toxin receptor 2	100	✓	
AP1B1	NM_001127	adaptor-related protein complex 1, beta 1 subunit	100	✓	
AP1G1	NM_001128	adaptor-related protein complex 1, gamma 1 subunit	100	✓	
AP1G2	NM_003917	adaptor-related protein complex 1, gamma 2 subunit	100	✓	
AP1M1	NM_032493	adaptor-related protein complex 1, mu 1 subunit	100	✓	
AP1S3	NM_178814	adaptor-related protein complex 1, sigma 3 subunit	80	✓	
AP2A1	NM_014203	adaptor-related protein complex 2, alpha 1 subunit	100	✓	
AP2A2	NM_012305	adaptor-related protein complex 2, alpha 2 subunit	100	✓	
AP3B1	NM_003664	adaptor-related protein complex 3, beta 1 subunit	100	✓	
AP3D1	NM_003938	adaptor-related protein complex 3, delta 1 subunit	100	✓	
AP3M1	NM_012095	adaptor-related protein complex 3, mu 1 subunit	100	✓	
AP3M2	NM_006803	adaptor-related protein complex 3, mu 2 subunit	100	✓	
APBB1IP	NM_019043	amyloid beta (A4) precursor protein-binding, family B, member 1 interacting protein	100	✓	
API5	NM_006595	apoptosis inhibitor 5	100	✓	
APOB	NM_000384	apolipoprotein B	100	✓	
APOM	NM_019101	apolipoprotein M	100	✓	
APOO	NM_024122	apolipoprotein O	80	✓	
APPBP2	NM_006380	amyloid beta precursor protein (cytoplasmic tail) binding protein 2	100	✓	
AQP2	NM_000486	aquaporin 2 (collecting duct)	60	✓	
AQP5	NM_001651	aquaporin 5	100	✓	
AQP8	NM_001169	aquaporin 8	80	✓	
ARCN1	NM_001655	archain 1	60	✓	
ARD1A	NM_003491	ARD1 homolog A, N-acetyltransferase	100	✓	
ARFIP2	NM_012402	ADP-ribosylation factor interacting protein 2	100	✓	
ARHGEF9	XM_377014	Cdc42 guanine nucleotide exchange factor 9	60	✓	
ARL13B	NM_182896	ADP-ribosylation factor-like 13B	100	✓	
ARL9	NM_206919	ADP-ribosylation factor-like 9	80	✓	
ASGR2	NM_001181	asialoglycoprotein receptor 2	80	✓	
ATIC	NM_004044	5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase	60	✓	
ATP4A	NM_000704	ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, alpha polypeptide	75	✓	
ATRN	NM_012070	attractin	80	✓	
ATRNL1	NM_207303	attractin-like 1	100	✓	
AUP1	NM_012103	ancient ubiquitous protein 1	60	✓	
B3GAT3	NM_012200	beta-1,3-glucuronyltransferase 3 (glucuronosyltransferase I)	80	✓	
B3GNT2	NM_006577	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	60	✓	
B4GALT1	NM_001497	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	80	✓	
B4GALT7	NM_007255	xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase I)	60	✓	
BAG5	NM_004873	BCL2-associated athanogene 5	60	✓	
BBOX1	NM_003986	butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) 1	100	✓	
BCAT2	NM_001190	branched chain aminotransferase 2	80	✓	
BCDO2	NM_031938	beta-carotene dioxygenase 2	100	✓	
BCMO1	NM_017429	beta-carotene 15,15'-monooxygenase 1	100	✓	
BDNF	NM_001709	brain-derived neurotrophic factor	100	✓	
BICD2	NM_015250	bicaudal D homolog 2	60	✓	

BID	NM_001196	BH3 interacting domain death agonist	100	✓	
BIRC6	NM_016252	baculoviral IAP repeat-containing 6	60	✓	
BMP6	NM_001718	bone morphogenetic protein 6	100	✓	
BMP8A	NM_181809	bone morphogenetic protein 8a	100	✓	
BRE	NM_004899	brain and reproductive organ-expressed	100	✓	
BRWD1	NM_018963	bromodomain and WD repeat domain containing 1	100	✓	
BTN1A1	NM_001732	butyrophilin, subfamily 1, member A1	100	✓	
BTN3A2	NM_007047	butyrophilin, subfamily 3, member A2	100	✓	
BTNL3	NM_006707	butyrophilin-like 3	100	✓	
BZRAP1	NM_004758	benzodiazapine receptor (peripheral) associated protein 1	100	✓	
C10ORF33	NM_032709	chromosome 10 open reading frame 33	100	✓	
C11ORF71	NM_019021	chromosome 11 open reading frame 71	100	✓	
C12ORF24	NM_013300	chromosome 12 open reading frame 24	100	✓	
C13ORF1	NM_020456	chromosome 13 open reading frame 1	100	✓	
C14ORF108	NM_018229	chromosome 14 open reading frame 108	100	✓	
C16ORF61	NM_020188	chromosome 16 open reading frame 61	100	✓	
C18ORF24	NM_145060	chromosome 18 open reading frame 24	60	✓	
C19ORF61	NM_019108	chromosome 19 open reading frame 61	80	✓	
C1ORF103	NM_018372	chromosome 1 open reading frame 103	100	✓	
C1ORF141	XM_375738	chromosome 1 open reading frame 141	100	✓	
C1ORF183	NM_019099	chromosome 1 open reading frame 183	100	✓	
C1ORF41	NM_016126	chromosome 1 open reading frame 41	80	✓	
C1ORF9	NM_014283	chromosome 1 open reading frame 9	100	✓	
C1QB	NM_000491	complement component 1, q subcomponent, B chain	100	✓	
C6	NM_000065	complement component 6	60	✓	
C6ORF192	NM_052831	chromosome 6 open reading frame 192	80	✓	
C7	NM_000587	complement component 7	100	✓	
C7ORF16	NM_006658	chromosome 7 open reading frame 16	80	✓	
C8G	NM_000606	complement component 8, gamma polypeptide	57		0.001
C8ORF13	NM_053279	chromosome 8 open reading frame 13	80	✓	
C9ORF131	NM_203299	chromosome 9 open reading frame 131	100	✓	
CABP2	NM_016366	calcium binding protein 2	80	✓	
CALN1	NM_031468	calneuron 1	60	✓	
CAPNS2	NM_032330	calpain, small subunit 2	60	✓	
CASC3	NM_007359	cancer susceptibility candidate 3	100	✓	
CASP8AP2	NM_012115	CASP8 associated protein 2	100	✓	
CAT	NM_001752	catalase	80	✓	
CBLN1	NM_004352	cerebellin 1 precursor	80	✓	
CBX1	NM_006807	chromobox homolog 1	100	✓	
CBX5	NM_012117	chromobox homolog 5	100	✓	
CC2D1A	NM_017721	coiled-coil and C2 domain containing 1A	100	✓	
CCAR1	NM_018237	cell division cycle and apoptosis regulator 1	60	✓	
CCDC28A	NM_015439	coiled-coil domain containing 28A	100	✓	
CCDC5	NM_138443	coiled-coil domain containing 5	100	✓	
CCDC76	NM_019083	coiled-coil domain containing 76	80	✓	
CCDC93	NM_019044	coiled-coil domain containing 93	100	✓	

CCL11	NM_002986	chemokine (C-C motif) ligand 11	100	✓	
CCL14	NM_004166	chemokine (C-C motif) ligand 14	100	✓	
CCL15	NM_004167	chemokine (C-C motif) ligand 15	80	✓	
CCL16	NM_004590	chemokine (C-C motif) ligand 16	100	✓	
CCL25	NM_005624	chemokine (C-C motif) ligand 25	80	✓	
CCL27	NM_006664	chemokine (C-C motif) ligand 27	100	✓	
CCL3	NM_002983	chemokine (C-C motif) ligand 3	80	✓	
CCL4L1	NM_001001435	chemokine (C-C motif) ligand 4-like 1	100	✓	
CCL7	NM_006273	chemokine (C-C motif) ligand 7	100	✓	
CCL8	NM_005623	chemokine (C-C motif) ligand 8	100	✓	
CCT6A	NM_001762	chaperonin containing TCP1, subunit 6A (zeta 1)	100	✓	
CD151	NM_004357	CD151 molecule (Raph blood group)	80	✓	
CD160	NM_007053	CD160 molecule	100	✓	
CD163L1	NM_174941	CD163 molecule-like 1	83	✓	
CD164	NM_006016	CD164 molecule, sialomucin	100	✓	
CD1B	NM_001764	CD1b molecule	60	✓	
CD2	NM_001767	CD2 molecule	80	✓	
CD200	NM_001004196	CD200 molecule	60	✓	
CD22	NM_001771	CD22 molecule	60	✓	
CD226	NM_006566	CD226 molecule	100	✓	
CD247	NM_000734	CD247 molecule	80	✓	
CD2BP2	NM_006110	CD2 (cytoplasmic tail) binding protein 2	80	✓	
CD300C	NM_006678	CD300c molecule	80	✓	
CD33	NM_001772	CD33 molecule	100	✓	
CD3D	NM_000732	CD3d molecule, delta (CD3-TCR complex)	100	✓	
CD3G	NM_000073	CD3g molecule, gamma (CD3-TCR complex)	60	✓	
CD40LG	NM_000074	CD40 ligand	80	✓	
CD44	NM_000610	CD44 molecule (Indian blood group)	100	✓	
CD46	NM_002389	CD46 molecule, complement regulatory protein	60	✓	
CD5	NM_014207	CD5 molecule	80	✓	
CD52	NM_001803	CD52 molecule	80	✓	
CD59	NM_000611	CD59 molecule, complement regulatory protein	60	✓	
CD5L	NM_005894	CD5 molecule-like	100	✓	
CD72	NM_001782	CD72 molecule	100	✓	
CD80	NM_005191	CD80 molecule	100	✓	
CD81	NM_004356	CD81 molecule	100	✓	
CD84	NM_003874	CD84 molecule	100	✓	
CD8B	NM_004931	CD8b molecule	100	✓	
CDCA4	NM_145701	cell division cycle associated 4	80	✓	
CDCP2	NM_201546	CUB domain containing protein 2	100	✓	
CDK10	NM_003674	cyclin-dependent kinase 10	33		0.001
CDK2AP1	NM_004642	CDK2-associated protein 1	100	✓	
CEACAM6	NM_002483	carcinoembryonic antigen-related cell adhesion molecule 6	100	✓	
CEACAM8	NM_001816	carcinoembryonic antigen-related cell adhesion molecule 8	100	✓	
CENPA	NM_001809	centromere protein A	100	✓	
CENPF	NM_016343	centromere protein F	100	✓	

CENPJ	NM_018451	centromere protein J	80	✓	
CEP250	NM_007186	centrosomal protein 250kDa	100	✓	
CEP55	NM_018131	centrosomal protein 55kDa	80	✓	
CEP78	XM_095991	centrosomal protein 78kDa	100	✓	
CEPT1	NM_006090	choline/ethanolamine phosphotransferase 1	60	✓	
CFD	NM_001928	complement factor D (adipsin)	75	✓	
CHAT	NM_020549	choline acetyltransferase	60	✓	
CHRD	NM_003741	chordin	100	✓	
CHRFAM7A	NM_139320	CHRNA7 & FAM7A fusion	60	✓	
CHRNA1	NM_000079	cholinergic receptor, nicotinic, alpha 1	100	✓	
CHRNA10	NM_020402	cholinergic receptor, nicotinic, alpha 10	100	✓	
CHRNA2	NM_000742	cholinergic receptor, nicotinic, alpha 2	60	✓	
CHRNA6	NM_004198	cholinergic receptor, nicotinic, alpha 6	80	✓	
CHRNA7	NM_000746	cholinergic receptor, nicotinic, alpha 7	100	✓	
CHRNA9	NM_017581	cholinergic receptor, nicotinic, alpha 9	100	✓	
CHRNB1	NM_000747	cholinergic receptor, nicotinic, beta 1	100	✓	
CHRNB4	NM_000750	cholinergic receptor, nicotinic, beta 4	100	✓	
CHRND	NM_000751	cholinergic receptor, nicotinic, delta	60	✓	
CIRH1A	NM_032830	cirrhosis, autosomal recessive 1A	60	✓	
CKAP5	NM_014756	cytoskeleton associated protein 5	60	✓	
CKLF	NM_181641	chemokine-like factor	100	✓	
CLEC11A	NM_002975	C-type lectin domain family 11, member A	80	✓	
CLEC12A	NM_138337	C-type lectin domain family 12, member A	80	✓	
CLEC1A	NM_016511	C-type lectin domain family 1, member A	100	✓	
CLEC1B	NM_016509	C-type lectin domain family 1, member B	100	✓	
CLEC2D	NM_013269	C-type lectin domain family 2, member D	100	✓	
CLEC3B	NM_003278	C-type lectin domain family 3, member B	75	✓	
CLEC4G	NM_198492	C-type lectin superfamily 4, member G	100	✓	
CNOT6	NM_015455	CCR4-NOT transcription complex, subunit 6	60	✓	
CNTF	NM_000614	ciliary neurotrophic factor	100	✓	
CNTNAP1	NM_003632	contactin associated protein 1	100	✓	
COG2	NM_007357	component of oligomeric golgi complex 2	100	✓	
COL1A1	NM_000088	collagen, type I, alpha 1	80	✓	
COLEC10	NM_006438	collectin sub-family member 10 (C-type lectin)	100	✓	
COPA	NM_004371	coatamer protein complex, subunit alpha	100	✓	
COPB2	NM_004766	coatamer protein complex, subunit beta 2	100	✓	
COPE	NM_007263	coatamer protein complex, subunit epsilon	80	✓	
COPS6	NM_006833	COP9 constitutive photomorphogenic homolog subunit 6	100	✓	
COPZ1	NM_016057	coatamer protein complex, subunit zeta 1	80	✓	
COPZ2	NM_016429	coatamer protein complex, subunit zeta 2	100	✓	
COQ2	NM_015697	coenzyme Q2 homolog, prenyltransferase	100	✓	
COQ6	NM_182476	coenzyme Q6 homolog, monoxygenase	100	✓	
CPT1B	NM_004377	carnitine palmitoyltransferase 1B	100	✓	
CRAT	NM_000755	carnitine acetyltransferase	100	✓	
CRLF3	NM_015986	cytokine receptor-like factor 3	100	✓	
CRYL1	NM_015974	crystallin, lambda 1	80	✓	

CSDC2	NM_014460	cold shock domain containing C2, RNA binding	80	✓	
CSF1	NM_000757	colony stimulating factor 1	100	✓	
CSF3R	NM_000760	colony stimulating factor 3 receptor	100	✓	
CSNK1E	NM_152221	casein kinase 1, epsilon	32		0.000
CTF1	NM_001330	cardiotrophin 1	100	✓	
CTHRC1	NM_138455	collagen triple helix repeat containing 1	80	✓	
CTNNA1	NM_001903	catenin (cadherin-associated protein), alpha 1	100	✓	
CTNS	NM_004937	cystinosis, nephropathic	100	✓	
CTR9	NM_014633	Ctr9, Paf1/RNA polymerase II complex component, homolog	60	✓	
CTSA	NM_000308	cathepsin A	60	✓	
CTSZ	NM_001336	cathepsin Z	75	✓	
CXADR	NM_001338	coxsackie virus and adenovirus receptor	100	✓	
CXCL1	NM_001511	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	80	✓	
CXCL11	NM_005409	chemokine (C-X-C motif) ligand 11	100	✓	
CXCL14	NM_004887	chemokine (C-X-C motif) ligand 14	80	✓	
CYB561	NM_001915	cytochrome b-561	100	✓	
CYB561D1	NM_182580	cytochrome b-561 domain containing 1	100	✓	
CYB5A	NM_001914	cytochrome b5 type A (microsomal)	100	✓	
CYB5B	NM_030579	cytochrome b5 type B	100	✓	
CYBA	NM_000101	cytochrome b-245, alpha polypeptide	60	✓	
CYBASC3	NM_153611	cytochrome b, ascorbate dependent 3	100	✓	
CYBB	NM_000397	cytochrome b-245, beta polypeptide	60	✓	
CYCS	NM_018947	cytochrome c, somatic	100	✓	
CYLC2	NM_001340	cylicin, basic protein of sperm head cytoskeleton 2	100	✓	
CYP11A1	NM_000781	cytochrome P450, family 11, subfamily A, polypeptide 1	80	✓	
CYP11B1	NM_000497	cytochrome P450, family 11, subfamily B, polypeptide 1	80	✓	
CYP11B2	NM_000498	cytochrome P450, family 11, subfamily B, polypeptide 2	100	✓	
CYP17A1	NM_000102	cytochrome P450, family 17, subfamily A, polypeptide 1	100	✓	
CYP19A1	NM_000103	cytochrome P450, family 19, subfamily A, polypeptide 1	100	✓	
CYP1A1	NM_000499	cytochrome P450, family 1, subfamily A, polypeptide 1	100	✓	
CYP1A2	NM_000761	cytochrome P450, family 1, subfamily A, polypeptide 2	100	✓	
CYP1B1	NM_000104	cytochrome P450, family 1, subfamily B, polypeptide 1	100	✓	
CYP20A1	NM_020674	cytochrome P450, family 20, subfamily A, polypeptide 1	100	✓	
CYP21A2	NM_000500	cytochrome P450, family 21, subfamily A, polypeptide 2	100	✓	
CYP24A1	NM_000782	cytochrome P450, family 24, subfamily A, polypeptide 1	100	✓	
CYP26A1	NM_000783	cytochrome P450, family 26, subfamily A, polypeptide 1	100	✓	
CYP26B1	NM_019885	cytochrome P450, family 26, subfamily B, polypeptide 1	80	✓	
CYP26C1	NM_183374	cytochrome P450, family 26, subfamily C, polypeptide 1	80	✓	
CYP27A1	NM_000784	cytochrome P450, family 27, subfamily A, polypeptide 1	100	✓	
CYP27B1	NM_000785	cytochrome P450, family 27, subfamily B, polypeptide 1	80	✓	
CYP2A13	NM_000766	cytochrome P450, family 2, subfamily A, polypeptide 13	100	✓	
CYP2A6	NM_000762	cytochrome P450, family 2, subfamily A, polypeptide 6	100	✓	
CYP2A7	NM_000764	cytochrome P450, family 2, subfamily A, polypeptide 7	100	✓	
CYP2B6	NM_000767	cytochrome P450, family 2, subfamily B, polypeptide 6	60	✓	
CYP2C18	NM_000772	cytochrome P450, family 2, subfamily C, polypeptide 18	100	✓	
CYP2C19	NM_000769	cytochrome P450, family 2, subfamily C, polypeptide 19	100	✓	

CYP2C8	NM_000770	cytochrome P450, family 2, subfamily C, polypeptide 8	100	✓	
CYP2C9	NM_000771	cytochrome P450, family 2, subfamily C, polypeptide 9	80	✓	
CYP2D6	NM_000106	cytochrome P450, family 2, subfamily D, polypeptide 6	100	✓	
CYP2D7P1	NM_001002910	cytochrome P450, family 2, subfamily D, polypeptide 7 pseudogene 1	80	✓	
CYP2E1	NM_000773	cytochrome P450, family 2, subfamily E, polypeptide 1	60	✓	
CYP2F1	NM_000774	cytochrome P450, family 2, subfamily F, polypeptide 1	80	✓	
CYP2J2	NM_000775	cytochrome P450, family 2, subfamily J, polypeptide 2	100	✓	
CYP2R1	NM_024514	cytochrome P450, family 2, subfamily R, polypeptide 1	80	✓	
CYP2U1	NM_183075	cytochrome P450, family 2, subfamily U, polypeptide 1	75	✓	
CYP2W1	NM_017781	cytochrome P450, family 2, subfamily W, polypeptide 1	100	✓	
CYP39A1	NM_016593	cytochrome P450, family 39, subfamily A, polypeptide 1	100	✓	
CYP3A4	NM_017460	cytochrome P450, family 3, subfamily A, polypeptide 4	100	✓	
CYP3A43	NM_022820	cytochrome P450, family 3, subfamily A, polypeptide 43	100	✓	
CYP3A5	NM_000777	cytochrome P450, family 3, subfamily A, polypeptide 5	100	✓	
CYP3A7	NM_000765	cytochrome P450, family 3, subfamily A, polypeptide 7	100	✓	
CYP4B1	NM_000779	cytochrome P450, family 4, subfamily B, polypeptide 1	100	✓	
CYP4F11	NM_021187	cytochrome P450, family 4, subfamily F, polypeptide 11	80	✓	
CYP4F12	NM_023944	cytochrome P450, family 4, subfamily F, polypeptide 12	80	✓	
CYP4F2	NM_001082	cytochrome P450, family 4, subfamily F, polypeptide 2	100	✓	
CYP4F22	NM_173483	cytochrome P450, family 4, subfamily F, polypeptide 22	100	✓	
CYP4F3	NM_000896	cytochrome P450, family 4, subfamily F, polypeptide 3	100	✓	
CYP4X1	NM_178033	cytochrome P450, family 4, subfamily X, polypeptide 1	100	✓	
CYP4Z1	NM_178134	cytochrome P450, family 4, subfamily Z, polypeptide 1	100	✓	
CYP51A1	NM_000786	cytochrome P450, family 51, subfamily A, polypeptide 1	80	✓	
CYP7A1	NM_000780	cytochrome P450, family 7, subfamily A, polypeptide 1	100	✓	
CYP7B1	NM_004820	cytochrome P450, family 7, subfamily B, polypeptide 1	80	✓	
CYP8B1	NM_004391	cytochrome P450, family 8, subfamily B, polypeptide 1	100	✓	
CYTH1	NM_004762	cytohesin 1	100	✓	
CYTH2	NM_017457	cytohesin 2	100	✓	
D2HGDH	NM_152783	D-2-hydroxyglutarate dehydrogenase	80	✓	
DAB1	NM_021080	disabled homolog 1 (Drosophila) (DAB1)	80	✓	
DBI	NM_020548	diazepam binding inhibitor (GABA receptor modulator, acyl-Coenzyme A binding protein)	80	✓	
DBN1	NM_004395	drebrin 1	100	✓	
DCBLD2	NM_080927	discoidin, CUB and LCCL domain containing 2	100	✓	
DCLRE1B	NM_022836	DNA cross-link repair 1B	100	✓	
DCTN1	NM_004082	dynactin 1	100	✓	
DDIT4	NM_019058	DNA-damage-inducible transcript 4	80	✓	
DDOST	NM_005216	dolichyl-diphosphooligosaccharide-protein glycosyltransferase	60	✓	
DEGS1	NM_003676	degenerative spermatocyte homolog 1, lipid desaturase	100	✓	
DEPDC1B	NM_018369	DEP domain containing 1B	80	✓	
DERL1	NM_024295	Der1-like domain family, member 1	80	✓	
DGAT2L3	XM_088691	diacylglycerol O-acyltransferase 2-like 3	60	✓	
DGKE	NM_003647	diacylglycerol kinase, epsilon 64kDa	60	✓	
DHRS13	NM_144683	dehydrogenase/reductase (SDR family) member 13	100	✓	
DHX34	NM_014681	DEAH (Asp-Glu-Ala-His) box polypeptide 34	60	✓	
DIABLO	NM_019887	diablo homolog	60	✓	

DKFZP434A0131	NM_018991	DKFZp434A0131 protein	100	✓	
DLEU1	NM_005887	deleted in lymphocytic leukemia 1	100	✓	
DLEU2	NM_006021	deleted in lymphocytic leukemia 2	100	✓	
DLGAP5	NM_014750	discs, large (Drosophila) homolog-associated protein 5	100	✓	
DNAJC16	XM_497656	DnaJ (Hsp40) homolog, subfamily C, member 16	60	✓	
DOCK5	NM_024940	dedicator of cytokinesis 5	60	✓	
DPM2	NM_003863	dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	67	✓	
DSCAM	NM_001389	Down syndrome cell adhesion molecule	80	✓	
DUS2L	NM_017803	dihydrouridine synthase 2-like, SMM1 homolog	100	✓	
DUSP12	NM_007240	dual specificity phosphatase 12	60	✓	
DUSP21	NM_022076	dual specificity phosphatase 21	60	✓	
DYNLL1	NM_003746	dynein, light chain, LC8-type 1	100	✓	
DYNLT1	NM_006519	dynein, light chain, Tctex-type 1	60	✓	
E2F5	NM_001951	E2F transcription factor 5, p130-binding	80	✓	
EARS2	NM_133451	glutamyl-tRNA synthetase 2	60	✓	
EBAG9	NM_004215	estrogen receptor binding site associated, antigen, 9	80	✓	
EBI3	NM_005755	Epstein-Barr virus induced gene 3	75	✓	
EBNA1BP2	NM_006824	EBNA1 binding protein 2	100	✓	
EDA	NM_001005609	ectodysplasin A	100	✓	
EEF1E1	NM_004280	eukaryotic translation elongation factor 1 epsilon 1	100	✓	
EFHD1	NM_025202	EF-hand domain family, member D1	60	✓	
EFNA2	NM_001405	ephrin-A2	80	✓	
EFNA3	NM_004952	ephrin-A3	100	✓	
EFNA4	NM_005227	ephrin-A4	100	✓	
EFNA5	NM_001962	ephrin-A5	100	✓	
EFNB2	NM_004093	ephrin-B2	60	✓	
EHHADH	NM_001966	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase	100	✓	
EIF1	NM_005801	eukaryotic translation initiation factor 1	80	✓	
EIF1AX	NM_001412	eukaryotic translation initiation factor 1A, X-linked	100	✓	
EIF3G	NM_003755	eukaryotic translation initiation factor 3, subunit G	80	✓	
EIF4A3	NM_014740	eukaryotic translation initiation factor 4A, isoform 3	80	✓	
EIF4B	NM_001417	eukaryotic translation initiation factor 4B	60	✓	
EIF4E	NM_001968	eukaryotic translation initiation factor 4E	100	✓	
EIF4EBP1	NM_004095	eukaryotic translation initiation factor 4E binding protein 1	80	✓	
EIF4EBP3	NM_003732	eukaryotic translation initiation factor 4E binding protein 3	80	✓	
EIF5A	NM_001970	eukaryotic translation initiation factor 5A	100	✓	
EIF5B	NM_015904	eukaryotic translation initiation factor 5B	80	✓	
EMP2	NM_001424	epithelial membrane protein 2	100	✓	
EMR4	XM_377506	PREDICTED: egf-like module containing, mucin-like, hormone receptor-like 4	60	✓	
ENC1	NM_003633	ectodermal-neural cortex (with BTB-like domain)	80	✓	
EPB41L4B	NM_019114	erythrocyte membrane protein band 4.1 like 4B	100	✓	
EPOR	NM_000121	erythropoietin receptor	80	✓	
EPS8L3	NM_024526	EPS8-like 3	100	✓	
ERAP1	NM_016442	endoplasmic reticulum aminopeptidase 1	100	✓	
ERBB2IP	NM_018695	erbb2 interacting protein	100	✓	
ERGIC1	NM_020462	endoplasmic reticulum-golgi intermediate compartment	100	✓	



ERLIN1	NM_006459	ER lipid raft associated 1	60	✓	
ERVWE1	NM_014590	endogenous retroviral family W, env(C7), member 1	100	✓	
ETAA1	NM_019002	Ewing tumor-associated antigen 1	60	✓	
ETFA	NM_000126	electron-transfer-flavoprotein, alpha polypeptide	100	✓	
ETFB	NM_001985	electron-transfer-flavoprotein, beta polypeptide	100	✓	
EXOC5	NM_006544	exocyst complex component 5	100	✓	
EXOC6	NM_019053	exocyst complex component 6	100	✓	
EXOSC2	NM_014285	exosome component 2	60	✓	
EXOSC4	NM_019037	exosome component 4	60	✓	
EYA4	NM_004100	eyes absent homolog 4	60	✓	
F11R	NM_016946	F11 receptor	100	✓	
F3	NM_001993	coagulation factor III	100	✓	
FABP3	NM_004102	fatty acid binding protein 3, muscle and hear	100	✓	
FABP5	NM_001444	fatty acid binding protein 5 (psoriasis-associated)	80	✓	
FABP6	NM_001445	fatty acid binding protein 6, ileal (gastrotropin)	100	✓	
FADS1	NM_013402	fatty acid desaturase 1	100	✓	
FADS2	NM_004265	fatty acid desaturase 2	100	✓	
FADS3	NM_021727	fatty acid desaturase 3	100	✓	
FADS6	NM_178128	fatty acid desaturase domain family, member 6	100	✓	
FAHD1	NM_031208	fumarylacetoacetate hydrolase domain containing 1	80	✓	
FAM33A	NM_182620	family with sequence similarity 33, member A	60	✓	
FAM64A	NM_019013	family with sequence similarity 64, member A	100	✓	
FAM89B	NM_152832	family with sequence similarity 89, member B	100	✓	
FAT	NM_005245	FAT tumor suppressor homolog 1	100	✓	
FBXL19	NM_019085	F-box and leucine-rich repeat protein 19	60	✓	
FCAMR	NM_032029	Fc receptor, IgA, IgM, high affinity	100	✓	
FCER1G	NM_004106	Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide	80	✓	
FCGBP	NM_003890	Fc fragment of IgG binding protein	100	✓	
FCRL3	NM_052939	Fc receptor-like 3	100	✓	
FCRL4	NM_031282	Fc receptor-like 4	60	✓	
FCRL5	NM_031281	Fc receptor-like 5	60	✓	
FCRLA	NM_032738	Fc receptor-like A	80	✓	
FDPS	NM_002004	farnesyl diphosphate synthase	60	✓	
FEM1A	NM_018708	fem-1 homolog a	100	✓	
FEM1B	NM_015322	fem-1 homolog b	100	✓	
FEZ1	NM_005103	fasciculation and elongation protein zeta 1	100	✓	
FEZ2	NM_005102	fasciculation and elongation protein zeta 2	80	✓	
FGF1	NM_033137	fibroblast growth factor 1	100	✓	
FGF10	NM_004465	fibroblast growth factor 10	100	✓	
FGF13	NM_004114	fibroblast growth factor 13	100	✓	
FGF21	NM_019113	fibroblast growth factor 21	60	✓	
FGF22	NM_020637	fibroblast growth factor 22	80	✓	
FGF23	NM_020638	fibroblast growth factor 23	100	✓	
FGF5	NM_004464	fibroblast growth factor 5	100	✓	
FGF8	NM_006119	fibroblast growth factor 8	100	✓	
FKBP3	NM_002013	FK506 binding protein 3, 25kDa	60	✓	

FLJ10404	NM_019057	hypothetical protein FLJ10404	100	✓	
FLJ20152	NM_019000	hypothetical protein FLJ20152	100	✓	
FLJ20323	NM_019005	hypothetical protein FLJ20323	80	✓	
FLJ20674	NM_019086	hypothetical protein FLJ20674	100	✓	
FLJ38482	NM_152681	hypothetical protein FLJ38482	60	✓	
FLNA	NM_001456	filamin A, alpha (actin binding protein 280)	100	✓	
FLNB	NM_001457	filamin B, beta (actin binding protein 278)	100	✓	
FLNC	NM_001458	filamin C, gamma (actin binding protein 280)	100	✓	
FLRT2	NM_013231	fibronectin leucine rich transmembrane protein 2	100	✓	
FLVCR1	NM_014053	feline leukemia virus subgroup C cellular receptor 1	80	✓	
FMO1	NM_002021	flavin containing monooxygenase 1	80	✓	
FMO2	NM_001460	flavin containing monooxygenase 2	50		0.000
FMO3	NM_001002294	flavin containing monooxygenase 3	100	✓	
FMO4	NM_002022	flavin containing monooxygenase 4	100	✓	
FMO5	NM_001461	flavin containing monooxygenase 5	100	✓	
FOLR2	NM_000803	folate receptor 2 (fetal)	100	✓	
FOXF1	NM_001451	forkhead box F1	60	✓	
FOXRED2	NM_024955	FAD-dependent oxidoreductase domain containing 2	100	✓	
FRAT1	NM_005479	frequently rearranged in advanced T-cell lymphomas	80	✓	
FRS3	NM_006653	fibroblast growth factor receptor substrate 3	100	✓	
FST	NM_006350	follistatin	60	✓	
FUT11	NM_173540	fucosyltransferase 11 (alpha (1,3) fucosyltransferase)	60	✓	
FUT8	NM_004480	fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	60	✓	
GABARAPL1	NM_031412	GABA(A) receptor-associated protein like 1	100	✓	
GABPB1	NM_002041	GA binding protein transcription factor, beta subunit 2	60	✓	
GABRB1	NM_000812	gamma-aminobutyric acid (GABA) A receptor, beta 1	80	✓	
GABRG3	NM_033223	gamma-aminobutyric acid (GABA) A receptor, gamma 3	80	✓	
GABRP	NM_014211	gamma-aminobutyric acid (GABA) A receptor, pi	100	✓	
GABRQ	NM_018558	gamma-aminobutyric acid (GABA) receptor, theta	80	✓	
GABRR1	NM_002042	gamma-aminobutyric acid (GABA) receptor, rho 1	60	✓	
GABRR2	NM_002043	gamma-aminobutyric acid (GABA) receptor, rho 2	60	✓	
GDF15	NM_004864	growth differentiation factor 15	100	✓	
GDF2	NM_016204	growth differentiation factor 2	60	✓	
GDF3	NM_020634	growth differentiation factor 3	100	✓	
GDF5	NM_000557	growth differentiation factor 5	100	✓	
GDF9	NM_005260	growth differentiation factor 9	100	✓	
GFOD2	NM_030819	glucose-fructose oxidoreductase domain containing 2	80	✓	
GFRA2	NM_001495	GDNF family receptor alpha 2	100	✓	
GFRA4	NM_022139	GDNF family receptor alpha 4	100	✓	
GGA2	NM_015044	golgi associated, gamma adaptin ear containing, ARF binding protein 2	100	✓	
GGA3	NM_014001	golgi associated, gamma adaptin ear containing, ARF binding protein 3	100	✓	
GH1	NM_000515	growth hormone 1	100	✓	
GJA3	NM_021954	gap junction protein, alpha 3	80	✓	
GJA4	NM_002060	gap junction protein, alpha 4	60	✓	
GJB1	NM_000166	gap junction protein, beta 1	100	✓	
GJB2	NM_004004	gap junction protein, beta 2	60	✓	

GLRA3	NM_006529	glycine receptor, alpha 3	100	✓	
GLRX	NM_002064	glutaredoxin (thioltransferase)	80	✓	
GLRX2	NM_016066	glutaredoxin 2	100	✓	
GLRX3	NM_006541	glutaredoxin 3	100	✓	
GNG8	NM_033258	guanine nucleotide binding protein (G protein), gamma 8	60	✓	
GNRHR2	NM_057163	gonadotropin-releasing hormone (type 2) receptor 2	60	✓	
GOLGA4	NM_002078	golgi autoantigen, golgin subfamily a, 4	60	✓	
GP6	NM_016363	glycoprotein VI	100	✓	
GPA33	NM_005814	glycoprotein A33	100	✓	
GPBAR1	NM_170699	G protein-coupled bile acid receptor 1	60	✓	
GPR107	NM_020960	G protein-coupled receptor 107	100	✓	
GPR119	NM_178471	G protein-coupled receptor 119	80	✓	
GPR152	NM_206997	G protein-coupled receptor 152	100	✓	
GPR153	NM_207370	G protein-coupled receptor 153	80	✓	
GPR158	NM_020752	G protein-coupled receptor 158	100	✓	
GPR180	NM_180989	G protein-coupled receptor 180	60	✓	
GRASP	NM_181711	GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	100	✓	
GRB10	NM_001001549	growth factor receptor-bound protein 10	100	✓	
GRB14	NM_004490	growth factor receptor-bound protein 14	100	✓	
GRB7	NM_005310	growth factor receptor-bound protein 7	80	✓	
GRID1	XM_043613	glutamate receptor, ionotropic, delta 1	100	✓	
GRID2	NM_001510	glutamate receptor, ionotropic, delta 2	100	✓	
GRIK1	NM_000830	glutamate receptor, ionotropic, kainate 1	100	✓	
GRIK2	NM_021956	glutamate receptor, ionotropic, kainate 2	100	✓	
GRIK3	NM_000831	glutamate receptor, ionotropic, kainate 3	100	✓	
GRIK4	NM_014619	glutamate receptor, ionotropic, kainate 4	100	✓	
GRIK5	NM_002088	glutamate receptor, ionotropic, kainate 5	100	✓	
GRIN1	NM_000832	glutamate receptor, ionotropic, N-methyl D-aspartate 1	100	✓	
GRIN2A	NM_000833	glutamate receptor, ionotropic, N-methyl D-aspartate 2A	100	✓	
GRIN2B	NM_000834	glutamate receptor, ionotropic, N-methyl D-aspartate 2B	100	✓	
GRIN2C	NM_000835	glutamate receptor, ionotropic, N-methyl D-aspartate 2C	100	✓	
GRIN2D	NM_000836	glutamate receptor, ionotropic, N-methyl D-aspartate 2D	100	✓	
GRIN3A	NM_133445	glutamate receptor, ionotropic, N-methyl-D-aspartate 3A	100	✓	
GRINA	XM_291268	glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1	100	✓	
GUCA1A	NM_000409	guanylate cyclase activator 1A	100	✓	
GUCY1A3	NM_000856	guanylate cyclase 1, soluble, alpha 3	100	✓	
GUCY1B3	NM_000857	guanylate cyclase 1, soluble, beta 3	100	✓	
H2AFZ	NM_002106	H2A histone family, member Z	100	✓	
H3F3B	NM_005324	H3 histone, family 3B	100	✓	
HAO	NM_012205	3-hydroxyanthranilate 3,4-dioxygenase	80	✓	
HBE1	NM_005330	hemoglobin, epsilon 1	100	✓	
HBEGF	NM_001945	heparin-binding EGF-like growth factor	100	✓	
HBG2	NM_000184	hemoglobin, gamma G	80	✓	
HBQ1	NM_005331	hemoglobin, theta 1	100	✓	
HDAC1	NM_004964	histone deacetylase 1	40		0.000
HEMK1	NM_016173	HemK methyltransferase family member 1	60	✓	

HEPH	NM_014799	hephaestin	100	✓	
HERPUD2	NM_022373	HERPUD family member 2	60	✓	
HERV-FRD	NM_207582	HERV-FRD provirus ancestral Env polyprotein	80	✓	
HEY2	NM_012259	hairy/enhancer-of-split related with YRPW motif 2	60	✓	
HFE	NM_000410	hemochromatosis	100	✓	
HGFAC	NM_001528	HGF activator	80	✓	
HINT2	NM_032593	histidine triad nucleotide binding protein 2	60	✓	
HLA-B	NM_005514	major histocompatibility complex, class I, B	100	✓	
HLA-C	NM_002117	major histocompatibility complex, class I, C	100	✓	
HLA-DMA	NM_006120	major histocompatibility complex, class II, DM alpha	75	✓	
HLA-DMB	NM_002118	major histocompatibility complex, class II, DM beta	100	✓	
HLA-DOA	NM_002119	major histocompatibility complex, class II, DO alpha	100	✓	
HLA-DPA1	NM_033554	major histocompatibility complex, class II, DP alpha 1	60	✓	
HLA-DQB1	NM_002123	major histocompatibility complex, class II, DQ beta 1	100	✓	
HLA-DQB2	NM_182549	major histocompatibility complex, class II, DQ beta 2	60	✓	
HLA-DRA	NM_019111	major histocompatibility complex, class II, DR alpha	80	✓	
HLA-DRB3	NM_022555	major histocompatibility complex, class II, DR beta 3	75	✓	
HLA-DRB4	NM_021983	major histocompatibility complex, class II, DR beta 4	100	✓	
HLA-DRB5	NM_002125	major histocompatibility complex, class II, DR beta 5	100	✓	
HLA-E	NM_005516	major histocompatibility complex, class I, E	100	✓	
HLA-G	NM_002127	HLA-G histocompatibility antigen, class I, G	100	✓	
HMGCLL1	NM_019036	3-hydroxymethyl-3-methylglutaryl-Coenzyme A lyase-like 1	100	✓	
HN1L	NM_144570	hematological and neurological expressed 1-like	80	✓	
HNRNPA1	NM_002136	heterogeneous nuclear ribonucleoprotein A1	80	✓	
HNRNPK	NM_002140	heterogeneous nuclear ribonucleoprotein K	100	✓	
HNRNPM	NM_005968	heterogeneous nuclear ribonucleoprotein M	60	✓	
HOXD3	NM_006898	homeobox D3 (HOXD3)	60	✓	
HPD	NM_002150	4-hydroxyphenylpyruvate dioxygenase	100	✓	
HRAS	NM_176795	v-Ha-ras Harvey rat sarcoma viral oncogene homolog	38		0.000
HRC	NM_002152	histidine rich calcium binding protein (HRC)	60	✓	
HS6ST1	NM_004807	heparan sulfate 6-O-sulfotransferase 1	60	✓	
HSDL2	NM_032303	hydroxysteroid dehydrogenase like 2	100	✓	
HSPC111	NM_016391	hypothetical protein HSPC111	80	✓	
HSPE1	NM_002157	heat shock 10kDa protein 1	60	✓	
HTR1D	NM_000864	5-hydroxytryptamine (serotonin) receptor 1D	100	✓	
HTR1E	NM_000865	5-hydroxytryptamine (serotonin) receptor 1E	80	✓	
HTR3C	NM_130770	5-hydroxytryptamine (serotonin) receptor 3, family member C	100	✓	
HTR6	NM_000871	5-hydroxytryptamine (serotonin) receptor 6	80	✓	
HYAL1	NM_007312	hyaluronoglucosaminidase 1	100	✓	
HYAL2	NM_003773	hyaluronoglucosaminidase 2	100	✓	
HYAL3	NM_003549	hyaluronoglucosaminidase 3	100	✓	
HYLS1	NM_145014	hydrolethalus syndrome 1	80	✓	
ICK	NM_014920	intestinal cell (MAK-like) kinase	60	✓	
ICOSLG	NM_015259	inducible T-cell co-stimulator ligand	60	✓	
IFNAR2	NM_000874	interferon (alpha, beta and omega) receptor 2	80	✓	
IFNGR1	NM_000416	interferon gamma receptor 1	80	✓	

IFNK	NM_020124	interferon, kappa	100	✓	
IFRD2	NM_006764	interferon-related developmental regulator 2	100	✓	
IFT57	NM_018010	intraflagellar transport 57 homolog	80	✓	
IGF2	NM_000612	insulin-like growth factor 2	44		0.000
IGFBP2	NM_000597	insulin-like growth factor binding protein 2	80	✓	
IGFBP3	NM_000598	insulin-like growth factor binding protein 3	100	✓	
IGFBP4	NM_001552	insulin-like growth factor binding protein 4	67	✓	
IGFBP5	NM_000599	insulin-like growth factor binding protein 5	100	✓	
IGFBP6	NM_002178	insulin-like growth factor binding protein 6	80	✓	
IGSF10	NM_178822	immunoglobulin superfamily, member 10	60	✓	
IL10RA	NM_001558	interleukin 10 receptor, alpha	100	✓	
IL12A	NM_000882	interleukin 12A	100	✓	
IL12RB2	NM_001559	interleukin 12 receptor, beta 2	80	✓	
IL13RA1	NM_001560	interleukin 13 receptor, alpha 1	80	✓	
IL13RA2	NM_000640	interleukin 13 receptor, alpha 2	100	✓	
IL15	NM_000585	interleukin 15	75	✓	
IL16	NM_004513	interleukin 16 (lymphocyte chemoattractant factor)	100	✓	
IL17C	NM_013278	interleukin 17C	100	✓	
IL17F	NM_052872	interleukin 17F (IL17F)	100	✓	
IL17RE	NM_144640	interleukin 17 receptor E	100	✓	
IL18	NM_001562	interleukin 18 (interferon-gamma-inducing factor)	60	✓	
IL18BP	NM_005699	interleukin 18 binding protein	80	✓	
IL19	NM_013371	interleukin 19	80	✓	
IL1F6	NM_014440	interleukin 1 family, member 6 (epsilon)	100	✓	
IL1F7	NM_173204	interleukin 1 family, member 7 (zeta)	100	✓	
IL1F9	NM_019618	interleukin 1 family, member 9 (IL1F9)	100	✓	
IL1R2	NM_004633	interleukin 1 receptor, type II	80	✓	
IL1RAP	NM_002182	interleukin 1 receptor accessory protein	80	✓	
IL1RAPL1	NM_014271	interleukin 1 receptor accessory protein-like 1	100	✓	
IL1RL2	NM_003854	interleukin 1 receptor-like 2	80	✓	
IL2	NM_000586	interleukin 2	60	✓	
IL23R	NM_144701	interleukin 23 receptor	100	✓	
IL24	NM_006850	interleukin 24	100	✓	
IL26	NM_018402	interleukin 26	60	✓	
IL27	NM_145659	interleukin 27	100	✓	
IL27RA	NM_004843	interleukin 27 receptor, alpha	60	✓	
IL28A	NM_172138	interleukin 28A (interferon, lambda 2)	100	✓	
IL2RA	NM_000417	interleukin 2 receptor, alpha	100	✓	
IL3	NM_000588	interleukin 3 (colony-stimulating factor, multiple)	80	✓	
IL4	NM_000589	interleukin 4	80	✓	
IL4I1	NM_152899	interleukin 4 induced 1	100	✓	
IL5RA	NM_000564	interleukin 5 receptor, alpha	80	✓	
IL6ST	NM_002184	interleukin 6 signal transducer	100	✓	
IL7	NM_000880	interleukin 7	80	✓	
IL7R	NM_002185	interleukin 7 receptor	60	✓	
IL9R	NM_002186	interleukin 9 receptor	100	✓	

IMP4	NM_033416	IMP4, U3 small nucleolar ribonucleoprotein, homolog	100	✓	
IMPG2	NM_016247	interphotoreceptor matrix proteoglycan 2	80	✓	
INA	NM_032727	internexin neuronal intermediate filament protein, alpha	100	✓	
INHA	NM_002191	inhibin, alpha	60	✓	
INHBB	NM_002193	inhibin, beta B	100	✓	
IPO4	NM_024658	importin 4	100	✓	
IRF2BP2	NM_182972	interferon regulatory factor 2 binding protein 2	60	✓	
IRS4	NM_003604	insulin receptor substrate 4	80	✓	
ISCU	NM_014301	iron-sulfur cluster scaffold homolog	60	✓	
ITGAE	NM_002208	integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide	75	✓	
ITIH1	NM_002215	inter-alpha (globulin) inhibitor H1	100	✓	
ITM2B	NM_021999	integral membrane protein 2B	100	✓	
ITPR3	NM_002224	inositol 1,4,5-triphosphate receptor, type 3	100	✓	
IYD	NM_203395	iodotyrosine deiodinase	80	✓	
JPH4	NM_032452	junctophilin 4	60	✓	
JTV1	NM_006303	JTV1 gene	100	✓	
KDEL1	NM_006801	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1	80	✓	
KDEL2	NM_006854	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2	100	✓	
KDEL3	NM_006855	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3	100	✓	
KIAA0090	NM_015047	KIAA0090	80	✓	
KIAA0195	NM_014738	KIAA0195	100	✓	
KIAA0701	NM_015054	KIAA0701 protein	60	✓	
KIAA1128	NM_018999	KIAA1128	80	✓	
KIAA1333	NM_017769	KIAA1333	60	✓	
KIAA1344	XM_051699	KIAA1344	80	✓	
KIF5A	NM_004984	kinesin family member 5A	100	✓	
KIR2DL1	NM_014218	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1	80	✓	
KIR2DL2	NM_014219	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 2	100	✓	
KIR2DL3	NM_014511	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 3	80	✓	
KIR2DS5	NM_014513	killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 5	60	✓	
KIR3DL2	NM_006737	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 2	100	✓	
KIR3DL3	NM_153443	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 3	100	✓	
KLHL2	NM_007246	kelch-like 2, Mayven (Drosophila)	80	✓	
KLRB1	NM_002258	killer cell lectin-like receptor subfamily B, member 1	80	✓	
KLRC1	NM_002259	killer cell lectin-like receptor subfamily C, member 1	100	✓	
KLRC2	NM_002260	killer cell lectin-like receptor subfamily C, member 2	80	✓	
KLRC3	NM_002261	killer cell lectin-like receptor subfamily C, member 3	100	✓	
KLRC4	NM_013431	killer cell lectin-like receptor subfamily C, member 4	100	✓	
KLRF1	NM_016523	killer cell lectin-like receptor subfamily F, member 1	100	✓	
KLRG1	NM_005810	killer cell lectin-like receptor subfamily G, member 1	60	✓	
KMO	NM_003679	kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)	100	✓	
KPNA1	NM_002264	karyopherin alpha 1 (importin alpha 5)	100	✓	
KPNA2	NM_002266	karyopherin alpha 2 (RAG cohort 1, importin alpha 1)	80	✓	
KPNA3	NM_002267	karyopherin alpha 3 (importin alpha 4)	100	✓	
KPNA4	NM_002268	karyopherin alpha 4 (importin alpha 3)	60	✓	
KPNA5	NM_002269	karyopherin alpha 5 (importin alpha 6)	100	✓	

KRAS	NM_033360	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	45		0.000
KRR1	NM_007043	KRR1, small subunit (SSU) processome component, homolog	100	✓	
KRT1	NM_006121	keratin 1 (epidermolytic hyperkeratosis)	100	✓	
KRT19	NM_002276	keratin 19	100	✓	
KRT8	NM_002273	keratin 8	100	✓	
KRTAP13-4	NM_181600	keratin associated protein 13-4	80	✓	
KSR1	XM_290793	kinase suppressor of ras 1	60	✓	
KTN1	NM_182926	kinectin 1 (kinesin receptor)	100	✓	
L1CAM	NM_000425	L1 cell adhesion molecule	100	✓	
L1TD1	NM_019079	LINE-1 type transposase domain containing 1	100	✓	
L2HGDH	NM_024884	L-2-hydroxyglutarate dehydrogenase	100	✓	
LAIR1	NM_002287	leukocyte-associated immunoglobulin-like receptor 1	80	✓	
LAT1-3TM	NM_031211	SLC7A5 pseudogene	80	✓	
LAX1	NM_017773	lymphocyte transmembrane adaptor 1	60	✓	
LAYN	NM_178834	layilin	100	✓	
LCK	NM_005356	lymphocyte-specific protein tyrosine kinase	44		0.011
LCN10	NM_001001712	lipocalin 10	100	✓	
LCP1	NM_002298	lymphocyte cytosolic protein 1	60	✓	
LDLR	NM_000527	low density lipoprotein receptor	60	✓	
LDLRAP1	NM_015627	low density lipoprotein receptor adaptor protein 1	80	✓	
LENG8	NM_052925	leukocyte receptor cluster (LRC) member 8	80	✓	
LENG9	NM_198988	leukocyte receptor cluster (LRC) member 9	100	✓	
LEP	NM_000230	leptin (LEP)	100	✓	
LEPR	NM_002303	leptin receptor	100	✓	
LEPREL1	NM_018192	leprecan-like 1	80	✓	
LGALS1	NM_002305	lectin, galactoside-binding, soluble, 1	80	✓	
LGALS4	NM_006149	lectin, galactoside-binding, soluble, 4	60	✓	
LGALS9	NM_002308	lectin, galactoside-binding, soluble, 9	60	✓	
LGI1	NM_005097	leucine-rich, glioma inactivated 1	80	✓	
LGR6	NM_021636	leucine-rich repeat-containing G protein-coupled receptor 6	80	✓	
LGTN	NM_006893	ligatin	100	✓	
LILRA3	NM_006865	leukocyte immunoglobulin-like receptor, subfamily A (without TM domain), member 3	60	✓	
LILRA4	NM_012276	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 4	67	✓	
LILRA5	NM_021250	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 5	60	✓	
LILRP2	NM_024317	leukocyte immunoglobulin-like receptor pseudogene 2	80	✓	
LMAN1	NM_005570	lectin, mannose-binding, 1	100	✓	
LMBR1L	NM_018113	limb region 1 homolog (mouse)-like	100	✓	
LMNA	NM_170707	lamin A/C	100	✓	
LMNB2	NM_032737	lamin B2	100	✓	
LOC339483	NM_178546	hypothetical LOC339483	60	✓	
LOC339879	XM_291054	hypothetical LOC339879	60	✓	
LOC342897	NM_001001414	similar to F-box only protein 2	100	✓	
LOC389465	NM_003142	Sjogren syndrome antigen B (autoantigen La)	100	✓	
LOC399942	NM_006082	tubulin, alpha 1b	80	✓	
LRCH4	NM_002319	leucine-rich repeats and calponin homology (CH) domain containing 4	100	✓	
LRP10	NM_014045	low density lipoprotein receptor-related protein 10	60	✓	

LRP3	NM_002333	low density lipoprotein receptor-related protein 3	100	✓	
LRRRC40	NM_017768	leucine rich repeat containing 40	75	✓	
LSAMP	NM_002338	limbic system-associated membrane protein	80	✓	
LSM3	NM_014463	LSM3 homolog, U6 small nuclear RNA associated	100	✓	
LSM4	NM_012321	LSM4 homolog, U6 small nuclear RNA associated	80	✓	
LSM5	NM_012322	LSM5 homolog, U6 small nuclear RNA associated	60	✓	
LSM6	NM_007080	LSM6 homolog, U6 small nuclear RNA associated	80	✓	
LTBR	NM_002342	lymphotoxin beta receptor	100	✓	
LY6H	NM_002347	lymphocyte antigen 6 complex, locus H	80	✓	
LY75	NM_002349	lymphocyte antigen 75	100	✓	
LY96	NM_015364	lymphocyte antigen 96	80	✓	
LYAR	NM_017816	Ly1 antibody reactive homolog	100	✓	
LYRM1	NM_020424	LYR motif containing 1	60	✓	
LYRM2	NM_020466	LYR motif containing 2	80	✓	
LYRM4	NM_020408	LYR motif containing 4	80	✓	
LYRM5	NM_001001660	LYR motif containing 5	100	✓	
LYRM7	NM_181705	Lyrm7 homolog	60	✓	
MAGOHB	NM_018048	mago-nashi homolog B	100	✓	
MAGT1	NM_032121	magnesium transporter 1	100	✓	
MAP3K7IP1	NM_006116	mitogen-activated protein kinase kinase kinase 7 interacting protein 1	100	✓	
MAPK15	NM_139021	mitogen-activated protein kinase 15	46		0.000
MAPRE1	NM_012325	microtubule-associated protein, RP/EB family, member 1	100	✓	
MARVELD2	NM_144724	MARVEL domain containing 2 (MARVELD2)	80	✓	
MBNL1	NM_021038	muscleblind-like (Drosophila) (MBNL1)	60	✓	
MCF2	NM_005369	MCF.2 cell line derived transforming sequence	60	✓	
MCM6	NM_005915	minichromosome maintenance complex component 6	60	✓	
MCTS1	NM_014060	malignant T cell amplified sequence 1	100	✓	
MDK	NM_002391	midkine (neurite growth-promoting factor 2)	100	✓	
ME1	NM_002395	malic enzyme 1, NADP(+)-dependent, cytosolic	100	✓	
ME2	NM_002396	malic enzyme 2, NAD(+)-dependent, mitochondrial	100	✓	
MECR	NM_016011	mitochondrial trans-2-enoyl-CoA reductase	100	✓	
MED30	NM_080651	mediator complex subunit 30	100	✓	
METRNL	NM_024042	meteorin, glial cell differentiation regulator	80	✓	
MFSD1	NM_022736	major facilitator superfamily domain containing 1	80	✓	
MGAT4B	NM_014275	mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme B	60	✓	
MGC19604	NM_080665	similar to RIKEN cDNA B230118G17 gene	100	✓	
MGC4172	NM_024308	short-chain dehydrogenase/reductase	100	✓	
MICA	NM_000247	MHC class I polypeptide-related sequence A	100	✓	
MICALL1	NM_033386	MICAL-like 1	100	✓	
MICB	NM_005931	MHC class I polypeptide-related sequence B	100	✓	
MIER3	NM_152622	mesoderm induction early response 1, family member 3	60	✓	
MIST	NM_052964	mast cell immunoreceptor signal transducer	100	✓	
MKRN1	NM_013446	makorin, ring finger protein, 1	60	✓	
MKRN4	NM_030757	makorin, ring finger protein, 4	100	✓	
MLC1	NM_015166	megalencephalic leukoencephalopathy with subcortical cysts 1	100	✓	
MLF1IP	NM_024629	MLF1 interacting protein	80	✓	



MMD	NM_012329	monocyte to macrophage differentiation-associated	100	✓	
MMD2	NM_198403	monocyte to macrophage differentiation-associated 2	100	✓	
MOBP	NM_006501	myelin-associated oligodendrocyte basic protein	100	✓	
MPL	NM_005373	myeloproliferative leukemia virus oncogene	100	✓	
MPPED2	NM_001584	metallophosphoesterase domain containing 2	60	✓	
MR1	NM_001531	major histocompatibility complex, class I-related	80	✓	
MRPL12	NM_002949	mitochondrial ribosomal protein L12	100	✓	
MRPL37	NM_016491	mitochondrial ribosomal protein L37	100	✓	
MRPS16	NM_016065	mitochondrial ribosomal protein S16	80	✓	
MRTO4	NM_016183	mRNA turnover 4 homolog	80	✓	
MS4A10	NM_206893	membrane-spanning 4-domains, subfamily A, member 10	80	✓	
MS4A3	NM_006138	membrane-spanning 4-domains, subfamily A, member 3	80	✓	
MS4A5	NM_023945	membrane-spanning 4-domains, subfamily A, member 5	100	✓	
MS4A6A	NM_022349	membrane-spanning 4-domains, subfamily A, member 6A	100	✓	
MS4A6E	NM_139249	membrane-spanning 4-domains, subfamily A, member 6E	100	✓	
MS4A8B	NM_031457	membrane-spanning 4-domains, subfamily A, member 8B	100	✓	
MSI1	NM_002442	musashi homolog 1	60	✓	
MSN	NM_002444	moesin	100	✓	
MSR1	NM_002445	macrophage scavenger receptor 1	100	✓	
MSRB3	NM_198080	methionine sulfoxide reductase B3	100	✓	
MT1F	NM_005949	metallothionein 1F	100	✓	
MT3	NM_005954	metallothionein 3	100	✓	
MTO1	NM_012123	mitochondrial translation optimization 1 homolog	100	✓	
MTSS1	NM_014751	metastasis suppressor 1	100	✓	
MTUS1	NM_001001924	mitochondrial tumor suppressor 1	100	✓	
MTX1	NM_002455	metaxin 1	80	✓	
MYO18A	NM_078471	myosin XVIIIa	80	✓	
NARF	NM_012336	nuclear prelamin A recognition factor	80	✓	
NCBP2	NM_007362	nuclear cap binding protein subunit 2	100	✓	
NCF1	NM_000265	neutrophil cytosolic factor 1, (chronic granulomatous disease, autosomal 1)	80	✓	
NCF4	NM_000631	neutrophil cytosolic factor 4, 40kDa	100	✓	
NCL	NM_005381	nucleolin	100	✓	
NCLN	NM_020170	nicalin homolog	100	✓	
NCOA7	NM_181782	nuclear receptor coactivator 7	100	✓	
NCOR2	NM_006312	nuclear receptor co-repressor 2	100	✓	
NCR1	NM_004829	natural cytotoxicity triggering receptor 1	100	✓	
NCR2	NM_004828	natural cytotoxicity triggering receptor 2	100	✓	
NCR3	NM_147130	natural cytotoxicity triggering receptor 3	80	✓	
NDST4	NM_022569	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 4	60	✓	
NDUFA12	NM_018838	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12	100	✓	
NDUFA13	NM_015965	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13	100	✓	
NDUFAF2	NM_174889	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 2	100	✓	
NDUFB2	NM_004546	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2, 8kDa	80	✓	
NDUFS1	NM_005006	NADH dehydrogenase (ubiquinone) Fe-S protein 1	100	✓	
NEIL2	NM_145043	nei like 2	100	✓	
NETO1	NM_138966	neuropilin (NRP) and tolloid (TLL)-like 1	100	✓	

NEURL	NM_004210	neuralized homolog	60	✓	
NEUROG1	NM_006161	neurogenin 1	100	✓	
NGB	NM_021257	neuroglobin	100	✓	
NGF	NM_002506	nerve growth factor	80	✓	
NGFR	NM_002507	nerve growth factor receptor (TNFR superfamily, member 16)	100	✓	
NGFRAP1	NM_014380	nerve growth factor receptor (TNFRSF16) associated protein 1	100	✓	
NHLRC2	NM_198514	NHL repeat containing 2	75	✓	
NODAL	NM_018055	nodal homolog	100	✓	
NOG	NM_005450	noggin	60	✓	
NOLA2	NM_017838	nucleolar protein family A, member 2 (H/ACA small nucleolar RNPs)	100	✓	
NOTCH2NL	NM_203458	Notch homolog 2	80	✓	
N-PAC	NM_032569	cytokine-like nuclear factor n-pac	100	✓	
NPM1	NM_002520	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	100	✓	
NPSR1	NM_207172	neuropeptide S receptor 1	80	✓	
NPTN	NM_012428	neuroplastin	100	✓	
NPTXR	NM_014293	neuronal pentraxin receptor	60	✓	
NR2F2	NM_021005	nuclear receptor subfamily 2, group F, member 2	80	✓	
NRAS	NM_002524	neuroblastoma RAS viral (v-ras) oncogene homolog	60	✓	
NRBF2	NM_030759	nuclear receptor binding factor 2	100	✓	
NRG1	NM_004495	neuregulin 1	60	✓	
NRG2	NM_004883	neuregulin 2	100	✓	
NRIP2	NM_031474	nuclear receptor interacting protein 2	80	✓	
NRP1	NM_003873	neuropilin 1	100	✓	
NRP2	NM_003872	neuropilin 2	100	✓	
NRXN3	NM_004796	neurexin 3	80	✓	
NT5C2	NM_012229	5'-nucleotidase, cytosolic II	60	✓	
NTF3	NM_002527	neurotrophin 3	80	✓	
NTF4	NM_006179	neurotrophin 4	100	✓	
NUDT13	NM_015901	nudix (nucleoside diphosphate linked moiety X)-type motif 13	60	✓	
NUMBL	NM_004756	numb homolog	100	✓	
NUP205	XM_371954	nucleoporin 205kDa	100	✓	
NUP35	NM_138285	nucleoporin 35kDa	100	✓	
NUP85	NM_024844	nucleoporin 85kDa	100	✓	
NUP93	NM_014669	nucleoporin 93kDa	100	✓	
NXN	NM_022463	nucleoredoxin	100	✓	
NXNL1	NM_138454	nucleoredoxin-like 1	100	✓	
OGFOD2	NM_024623	2-oxoglutarate and iron-dependent oxygenase domain containing 2	100	✓	
OGFR	NM_007346	opioid growth factor receptor	100	✓	
OMA1	NM_145243	OMA1 homolog, zinc metallopeptidase	100	✓	
OPRS1	NM_005866	opioid receptor, sigma 1	75	✓	
OR10R2	NM_001004472	olfactory receptor, family 10, subfamily R, member 2	100	✓	
OR10S1	NM_001004474	olfactory receptor, family 10, subfamily S, member 1	100	✓	
OR10X1	NM_001004477	olfactory receptor, family 10, subfamily X, member 1	80	✓	
OR13A1	NM_001004297	olfactory receptor, family 13, subfamily A, member 1	80	✓	
OR13D1	NM_001004484	olfactory receptor, family 13, subfamily D, member 1	80	✓	
OR14A16	NM_001001966	olfactory receptor, family 14, subfamily A, member 16	100	✓	

OR1B1	NM_001004450	olfactory receptor, family 1, subfamily B, member 1	100	✓	
OR1S1	NM_001004458	olfactory receptor, family 1, subfamily S, member 1	100	✓	
OR1S2	NM_001004459	olfactory receptor, family 1, subfamily S, member 2	100	✓	
OR2C3	NM_198074	olfactory receptor, family 2, subfamily C, member 3	100	✓	
OR2D3	NM_001004684	olfactory receptor, family 2, subfamily D, member 3	100	✓	
OR2G2	NM_001001915	olfactory receptor, family 2, subfamily G, member 2	100	✓	
OR2G3	NM_001001914	olfactory receptor, family 2, subfamily G, member 3	100	✓	
OR2K2	NM_205859	olfactory receptor, family 2, subfamily K, member 2	100	✓	
OR2L3	NM_001004687	olfactory receptor, family 2, subfamily L, member 3	100	✓	
OR2T1	XM_060316	olfactory receptor, family 2, subfamily T, member 1	100	✓	
OR2T27	NM_001001824	olfactory receptor, family 2, subfamily T, member 27	80	✓	
OR2T4	NM_001004696	olfactory receptor, family 2, subfamily T, member 4	80	✓	
OR2T5	NM_001004697	olfactory receptor, family 2, subfamily T, member 5	100	✓	
OR4C3	NM_001004702	olfactory receptor, family 4, subfamily C, member 3	100	✓	
OR4D1	NM_012374	olfactory receptor, family 4, subfamily D, member 1	100	✓	
OR4D11	NM_001004706	olfactory receptor, family 4, subfamily D, member 11	100	✓	
OR4K17	NM_001004715	olfactory receptor, family 4, subfamily K, member 17	80	✓	
OR51D1	NM_001004751	olfactory receptor, family 51, subfamily D, member 1	80	✓	
OR51V1	NM_001004760	olfactory receptor, family 51, subfamily V, member 1	100	✓	
OR52B2	XM_171528	olfactory receptor, family 52, subfamily B, member 2	100	✓	
OR52B6	NM_001005162	olfactory receptor, family 52, subfamily B, member 6	100	✓	
OR52L1	NM_001005173	olfactory receptor, family 52, subfamily L, member 1	100	✓	
OR56B1	NM_001005180	olfactory receptor, family 56, subfamily B, member 1	100	✓	
OR5C1	XM_373316	olfactory receptor, family 5, subfamily C, member 1	100	✓	
OR5M1	NM_001004740	olfactory receptor, family 5, subfamily M, member 1	100	✓	
OR5M10	NM_001004741	olfactory receptor, family 5, subfamily M, member 10	100	✓	
OR6B3	NM_173351	olfactory receptor, family 6, subfamily B, member 3	100	✓	
OR6V1	NM_001001667	olfactory receptor, family 6, subfamily V, member 1	100	✓	
OR8G5	NM_001005198	olfactory receptor, family 8, subfamily G, member 5	100	✓	
OR8S1	NM_001005203	olfactory receptor, family 8, subfamily S, member 1	100	✓	
OR9Q2	XM_166915	olfactory receptor, family 9, subfamily Q, member 2	100	✓	
ORM2	NM_000608	orosomuroid 2	100	✓	
OSCAR	NM_130771	osteoclast associated, immunoglobulin-like receptor	100	✓	
OSMR	NM_003999	oncostatin M receptor	80	✓	
P4HA3	NM_182904	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide III	100	✓	
PAEP	NM_002571	progesterone-associated endometrial protein	80	✓	
PAFAH1B1	NM_000430	platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit 45kDa	60	✓	
PAGE4	NM_007003	P antigen family, member 4	60	✓	
PAN2	NM_014871	PAN2 polyA specific ribonuclease subunit homolog	60	✓	
PAQR5	NM_017705	progesterone and adipoQ receptor family member V	100	✓	
PAQR6	NM_024897	progesterone and adipoQ receptor family member VI	100	✓	
PCDH1	NM_002587	protocadherin 1	60	✓	
PCDH11Y	NM_032971	protocadherin 11 Y-linked	80	✓	
PCDHGA8	NM_014004	protocadherin gamma subfamily A, 8	80	✓	
PCLO	NM_033026	piccolo (presynaptic cytomatrix protein)	60	✓	
PCSK7	NM_004716	proprotein convertase subtilisin/kexin type 7	80	✓	

PDAP1	NM_014891	PDGFA associated protein 1	100	✓	
PDC	NM_002597	phosducin	100	✓	
PDCC1LG2	NM_025239	programmed cell death 1 ligand 2	100	✓	
PDCL	NM_005388	phosducin-like	100	✓	
PDE5A	NM_001083	phosphodiesterase 5A, cGMP-specific	80	✓	
PDGFD	NM_025208	platelet derived growth factor D	100	✓	
PDILT	NM_174924	protein disulfide isomerase-like protein of the testis	100	✓	
PDZK1	NM_002614	PDZ domain containing 1	80	✓	
PEA15	NM_003768	phosphoprotein enriched in astrocytes 15	100	✓	
PECAM1	NM_000442	platelet/endothelial cell adhesion molecule	100	✓	
PFDN6	NM_014260	prefoldin subunit 6	80	✓	
PHB2	NM_007273	prohibitin 2	100	✓	
PHKG1	NM_006213	phosphorylase kinase, gamma 1	60	✓	
PIAS1	NM_016166	protein inhibitor of activated STAT, 1	60	✓	
PIB5PA	NM_001002837	phosphatidylinositol (4,5) bisphosphate 5-phosphatase, A	60	✓	
PIGX	NM_017861	phosphatidylinositol glycan anchor biosynthesis	100	✓	
PILRA	NM_013439	paired immunoglobulin-like type 2 receptor alpha	100	✓	
PITPNA	NM_006224	phosphatidylinositol transfer protein, alpha	80	✓	
PITPNM2	NM_020845	phosphatidylinositol transfer protein, membrane-associated 2	60	✓	
PITPNM3	NM_031220	PITPNM family member 3	60	✓	
PKD2L1	NM_016112	polycystic kidney disease 2-like 1	60	✓	
PLA2R1	NM_007366	phospholipase A2 receptor 1	80	✓	
PLCL1	NM_006226	phospholipase C-like 1	80	✓	
PLG	NM_000301	plasminogen	100	✓	
PLK1	NM_005030	polo-like kinase 1	17		0.001
PLOD1	NM_000302	procollagen-lysine 1, 2-oxoglutarate 5-dioxygenase 1	100	✓	
PLOD3	NM_001084	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3	100	✓	
PLXDC1	NM_020405	plexin domain containing 1	80	✓	
PLXDC2	NM_032812	plexin domain containing 2	100	✓	
PLXNA1	NM_032242	plexin A1	60	✓	
PLXND1	NM_015103	plexin D1	100	✓	
PNN	NM_002687	pinin, desmosome associated protein	80	✓	
PNRC1	NM_006813	proline-rich nuclear receptor coactivator 1	80	✓	
PNRC2	NM_017761	proline-rich nuclear receptor coactivator 2	100	✓	
POFUT1	NM_015352	protein O-fucosyltransferase 1	60	✓	
POLA1	NM_016937	polymerase (DNA directed), alpha 1, catalytic subunit	57		0.003
POLG	NM_002693	polymerase (DNA directed), gamma	60	✓	
POLR2A	NM_000937	polymerase (RNA) II (DNA directed) polypeptide A	60	✓	
POLR2I	NM_006233	polymerase (RNA) II (DNA directed) polypeptide I	80	✓	
POM121	NM_172020	POM121 membrane glycoprotein	100	✓	
PPP2R2D	NM_001003656	protein phosphatase 2, regulatory subunit B, delta isoform	80	✓	
PPP3R2	NM_147180	protein phosphatase 3 (formerly 2B), regulatory subunit B, beta isoform	60	✓	
PPRC1	NM_015062	peroxisome proliferator-activated receptor gamma, coactivator-related 1	100	✓	
PRDX2	NM_005809	peroxiredoxin 2	100	✓	
PRIM2	NM_000947	primase, DNA, polypeptide 2	60	✓	
PRKCZ	NM_002744	protein kinase C, zeta	70	✓	

PRKD3	NM_005813	protein kinase D3	80	✓	
PROCR	NM_006404	protein C receptor	60	✓	
PROM1	NM_006017	prominin 1	80	✓	
PROS1	NM_000313	protein S (alpha)	60	✓	
PRPF18	NM_003675	PRP18 pre-mRNA processing factor 18 homolog	80	✓	
PSMA2	NM_002787	proteasome (prosome, macropain) subunit, alpha type, 2	80	✓	
PSMB3	NM_002795	proteasome (prosome, macropain) subunit, beta type, 3	80	✓	
PSMB5	NM_002797	proteasome (prosome, macropain) subunit, beta type, 5	80	✓	
PSMD1	NM_002807	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1	80	✓	
PSMD11	NM_002815	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11	100	✓	
PSMD12	NM_174871	proteasome (prosome, macropain) 26S subunit, non-ATPase, 12	100	✓	
PSMD13	NM_002817	proteasome (prosome, macropain) 26S subunit, non-ATPase, 13	60	✓	
PSMD3	NM_002809	proteasome (prosome, macropain) 26S subunit, non-ATPase, 3	80	✓	
PSMD4	NM_002810	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4	67	✓	
PSMD6	NM_014814	proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	60	✓	
PSMD7	NM_002811	proteasome (prosome, macropain) 26S subunit, non-ATPase, 7	100	✓	
PSME1	NM_006263	proteasome (prosome, macropain) activator subunit 1	60	✓	
PSME3	NM_005789	proteasome (prosome, macropain) activator subunit 3	80	✓	
PTCRA	NM_138296	pre T-cell antigen receptor alpha	60	✓	
PTDSR	NM_015167	phosphatidylserine receptor	100	✓	
PTGFRN	NM_020440	prostaglandin F2 receptor negative regulator	80	✓	
PTPRM	NM_002845	protein tyrosine phosphatase, receptor type, M	60	✓	
PVALB	NM_002854	parvalbumin	60	✓	
PVR	NM_006505	poliovirus receptor	100	✓	
PVRL1	NM_002855	poliovirus receptor-related 1	100	✓	
PVRL2	NM_002856	poliovirus receptor-related 2	100	✓	
PXDNL	NM_144651	peroxidasin homolog (Drosophila)-like	100	✓	
PYCARD	NM_013258	PYD and CARD domain containing	100	✓	
PYROXD1	NM_024854	pyridine nucleotide-disulphide oxidoreductase domain 1	80	✓	
QSOX1	NM_001004128	quiescin Q6 sulfhydryl oxidase 1	100	✓	
QSOX2	NM_181701	quiescin Q6 sulfhydryl oxidase 2	100	✓	
QTRT1	NM_031209	queuine tRNA-ribosyltransferase 1	100	✓	
RAB33A	NM_004794	RAB33A, member RAS oncogene family	100	✓	
RAB43	NM_198490	RAB43, member RAS oncogene family	100	✓	
RAC1	NM_006908	ras-related C3 botulinum toxin substrate 1	60	✓	
RAMP2	NM_005854	receptor (G protein-coupled) activity modifying protein 2	100	✓	
RAN	NM_006325	RAN, member RAS oncogene family	60	✓	
RARRES1	NM_002888	retinoic acid receptor responder (tazarotene induced) 1	80	✓	
RARRES2	NM_002889	retinoic acid receptor responder (tazarotene induced) 2	80	✓	
RARRES3	NM_004585	retinoic acid receptor responder (tazarotene induced) 3	60	✓	
RASA2	NM_006506	RAS p21 protein activator 2	100	✓	
RASA4	NM_006989	RAS p21 protein activator 4	100	✓	
RBMX	NM_002139	RNA binding motif protein, X-linked	100	✓	
RBMXL1	NM_019610	RNA binding motif protein, X-linked-like 1	60	✓	
RBP1	NM_002899	retinol binding protein 1, cellular	100	✓	
RBP2	NM_004164	retinol binding protein 2, cellular	100	✓	

RBP5	NM_031491	retinol binding protein 5, cellular	80	✓	
RDX	NM_002906	radixin	100	✓	
REEP4	NM_025232	receptor accessory protein 4	67	✓	
REG1A	NM_002909	regenerating islet-derived 1 alpha	60	✓	
RETSAT	NM_017750	retinol saturase (all-trans-retinol 13,14-reductase)	100	✓	
RFC3	NM_181558	replication factor C (activator 1) 3	80	✓	
RFESD	NM_173362	Rieske (Fe-S) domain containing	100	✓	
RFFL	NM_057178	ring finger and FYVE-like domain containing 1	80	✓	
RHBDF1	NM_022450	rhomboid 5 homolog 1	60	✓	
RHBG	NM_020407	Rh family, B glycoprotein	80	✓	
RHCE	NM_020485	Rh blood group, CcEe antigens	100	✓	
RHCG	NM_016321	Rh family, C glycoprotein	100	✓	
RHO	NM_000539	rhodopsin	60	✓	
RIMS3	NM_014747	regulating synaptic membrane exocytosis 3	60	✓	
RIN2	NM_018993	Ras and Rab interactor 2	100	✓	
RIPK2	NM_003821	receptor-interacting serine-threonine kinase 2	60	✓	
RNF135	NM_032322	ring finger protein 135	60	✓	
RNF144B	NM_182757	ring finger 144B	60	✓	
RNFT2	NM_032814	ring finger protein, transmembrane 2	60	✓	
ROBO1	NM_002941	roundabout, axon guidance receptor, homolog 1	100	✓	
ROBO3	NM_022370	roundabout, axon guidance receptor, homolog 3	100	✓	
ROBO4	NM_019055	roundabout homolog 4, magic roundabout	100	✓	
ROD1	NM_005156	ROD1 regulator of differentiation 1	100	✓	
ROPN1	NM_017578	ropporin, rhophilin associated protein 1	60	✓	
ROR2	NM_004560	receptor tyrosine kinase-like orphan receptor 2	80	✓	
RP11-45J16.2	NM_138784	flavin-containing monooxygenase pseudogene	100	✓	
RPL10A	NM_007104	ribosomal protein L10a	60	✓	
RPL17	NM_000985	ribosomal protein L17	60	✓	
RPL18	NM_000979	ribosomal protein L18	80	✓	
RPL3	NM_000967	ribosomal protein L3	80	✓	
RPL31	NM_000993	ribosomal protein L31	80	✓	
RPL37	NM_000997	ribosomal protein L37	100	✓	
RPL4	NM_000968	ribosomal protein L4	60	✓	
RPL5	NM_000969	ribosomal protein L5	60	✓	
RPL6	NM_000970	ribosomal protein L6	100	✓	
RPL9	NM_000661	ribosomal protein L9	80	✓	
RPN1	NM_002950	ribophorin I	80	✓	
RPS18	NM_022551	ribosomal protein S18	60	✓	
RPS6	NM_001010	ribosomal protein S6	60	✓	
RRAGD	NM_021244	Ras-related GTP binding D	80	✓	
RTN4R	NM_023004	reticulon 4 receptor	100	✓	
RTN4RL1	NM_178568	reticulon 4 receptor-like 1	100	✓	
RUVBL2	NM_006666	RuvB-like 2	80	✓	
RWDD3	NM_015485	RWD domain containing 3	60	✓	
S100A14	NM_020672	S100 calcium binding protein A14	60	✓	
SALL1	NM_002968	sal-like 1	60	✓	

SASH3	NM_018990	SAM and SH3 domain containing 3	100	✓	
SBNO1	NM_018183	strawberry notch homolog 1	60	✓	
SCARA3	NM_016240	scavenger receptor class A, member 3	80	✓	
SCARF1	NM_003693	scavenger receptor class F, member 1	100	✓	
SCYL1	NM_020680	SCY1-like 1	60	✓	
SDC1	NM_002997	syndecan 1	80	✓	
SEC13L1	NM_030673	SEC13-like 1	100	✓	
SEC14L3	NM_174975	SEC14-like 3	100	✓	
SEC22A	NM_012430	SEC22 vesicle trafficking protein homolog A	100	✓	
SEC22C	NM_004206	SEC22 vesicle trafficking protein homolog C	80	✓	
SEC23A	NM_006364	Sec23 homolog A	100	✓	
SEC23IP	NM_007190	SEC23 interacting protein	100	✓	
SELL	NM_000655	selectin L	100	✓	
SELPLG	NM_003006	selectin P ligand	80	✓	
SELS	NM_018445	selenoprotein S	100	✓	
SEMA3C	NM_006379	sema domain, 3C	100	✓	
SEMA3D	NM_152754	sema domain, 3D	100	✓	
SEMA4C	NM_017789	sema domain, 4C	100	✓	
SEMA4D	NM_006378	sema domain, 4D	100	✓	
SEMA5A	NM_003966	sema domain,5A	100	✓	
SEMA5B	NM_018987	sema domain, 5B	100	✓	
SEMA6B	NM_020241	sema domain, 6B	60	✓	
SEMA6D	NM_020858	sema domain, 6D	80	✓	
SENP5	NM_152699	SUMO1/sentrin specific peptidase 5	100	✓	
SENP7	NM_020654	SUMO1/sentrin specific peptidase 7	80	✓	
SEPT2	NM_004404	septin 2	100	✓	
SEPT3	NM_019106	septin 3	100	✓	
SERGEF	NM_012139	secretion regulating guanine nucleotide exchange factor	60	✓	
SET	NM_003011	SET translocation (myeloid leukemia-associated)	60	✓	
SEZ6L2	NM_012410	seizure related 6 homolog (mouse)-like 2	100	✓	
SF3B3	NM_012426	splicing factor 3b, subunit 3	60	✓	
SFRP1	NM_003012	secreted frizzled-related protein 1	100	✓	
SFRS4	NM_005626	splicing factor, arginine/serine-rich 4	60	✓	
SFTPA1	NM_005411	surfactant, pulmonary-associated protein A1	100	✓	
SGCB	NM_000232	sarcoglycan, beta (43kDa dystrophin-associated glycoprotein)	100	✓	
SH3BP5L	NM_030645	SH3-binding domain protein 5-like	60	✓	
SH3TC1	NM_018986	SH3 domain and tetratricopeptide repeats 1	80	✓	
SHMT1	NM_004169	serine hydroxymethyltransferase 1 (soluble)	60	✓	
SIAH1	NM_003031	seven in absentia homolog 1	60	✓	
SIGLEC5	NM_003830	sialic acid binding Ig-like lectin 5	60	✓	
SIGLEC6	NM_001245	sialic acid binding Ig-like lectin 6	80	✓	
SIGLEC7	NM_014385	sialic acid binding Ig-like lectin 7	100	✓	
SIGLEC8	NM_014442	sialic acid binding Ig-like lectin 8	100	✓	
SKAP1	NM_003726	src kinase associated phosphoprotein 1	60	✓	
SLAMF9	NM_033438	SLAM family member 9	60	✓	
SLC22A3	NM_021977	solute carrier family 22	60	✓	

SLC35A1	NM_006416	solute carrier family 35	60	✓	
SMC1A	NM_006306	structural maintenance of chromosomes 1A	100	✓	
SMC2	NM_006444	structural maintenance of chromosomes 2	100	✓	
SNAPIN	NM_012437	SNAP-associated protein	100	✓	
SNED1	XM_059482	sushi, nidogen and EGF-like domains 1	80	✓	
SNRPA1	NM_003090	small nuclear ribonucleoprotein polypeptide A'	100	✓	
SNRPB	NM_198216	small nuclear ribonucleoprotein polypeptides B and B1	100	✓	
SNRPC	NM_003093	small nuclear ribonucleoprotein polypeptide C	100	✓	
SNRPD2	NM_004597	small nuclear ribonucleoprotein D2 polypeptide	60	✓	
SNRPE	NM_003094	small nuclear ribonucleoprotein polypeptide E	100	✓	
SNX15	NM_013306	sorting nexin 15	100	✓	
SNX2	NM_003100	sorting nexin 2	100	✓	
SORCS2	NM_020777	sortilin-related VPS10 domain containing receptor 2	100	✓	
SORCS3	NM_014978	sortilin-related VPS10 domain containing receptor 3	100	✓	
SORL1	NM_003105	sortilin-related receptor, L(DLR class) A repeats-containing	80	✓	
SOX30	NM_007017	SRY (sex determining region Y)-box 30	60	✓	
SPIN2	NM_019003	spindlin family, member 2	100	✓	
SPINK1	NM_003122	serine peptidase inhibitor, Kazal type 1	100	✓	
SPINK4	NM_014471	serine peptidase inhibitor, Kazal type 4	100	✓	
SPNS1	NM_032038	spinster homolog 1	100	✓	
SPRY3	NM_005840	sprouty homolog 3	80	✓	
SRGAP3	NM_014850	SLIT-ROBO Rho GTPase activating protein 3	60	✓	
SRPR	NM_003139	signal recognition particle receptor	80	✓	
SRPRB	NM_021203	signal recognition particle receptor, B subunit	100	✓	
SSR2	NM_003145	signal sequence receptor, beta (translocon-associated protein beta)	80	✓	
SSR3	NM_007107	signal sequence receptor, gamma (translocon-associated protein gamma)	100	✓	
ST13	NM_003932	suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	80	✓	
ST6GALNAC6	NM_013443	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6	80	✓	
ST8SIA1	NM_003034	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 1	67	✓	
ST8SIA2	NM_006011	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 2	60	✓	
STAP1	NM_012108	signal transducing adaptor family member 1	100	✓	
STC2	NM_003714	stanniocalcin 2	80	✓	
STEAP2	NM_152999	six transmembrane epithelial antigen of the prostate 2	100	✓	
STEAP3	NM_018234	STEAP family member 3	100	✓	
STEAP4	NM_024636	STEAP family member 4	80	✓	
STIL	NM_003035	SCL/TAL1 interrupting locus	60	✓	
STK16	NM_003691	serine/threonine kinase 16	60	✓	
STON2	NM_033104	stonin 2	100	✓	
STRN4	NM_013403	striatin, calmodulin binding protein 4	60	✓	
STX11	NM_003764	syntaxin 11	100	✓	
STX12	NM_177424	syntaxin 12	80	✓	
STX19	NM_001001850	syntaxin 19	80	✓	
STX1A	NM_004603	syntaxin 1A	80	✓	
STX1B	NM_052874	syntaxin 1B	80	✓	
STX2	NM_001980	syntaxin 2	100	✓	



STX3	NM_004177	syntaxin 3	100	✓	
STX4	NM_004604	syntaxin 4	100	✓	
STX6	NM_005819	syntaxin 6	80	✓	
STX7	NM_003569	syntaxin 7	80	✓	
STX8	NM_004853	syntaxin 8	100	✓	
STXBP2	NM_006949	syntaxin binding protein 2	100	✓	
SUPV3L1	NM_003171	suppressor of var1, 3-like 1	60	✓	
SURF1	NM_003172	surfeit 1	80	✓	
SV2A	NM_014849	synaptic vesicle glycoprotein 2A	100	✓	
SYNE2	NM_015180	spectrin repeat containing, nuclear envelope 2	100	✓	
SYTL2	NM_032379	synaptotagmin-like 2	100	✓	
TAPBPL	NM_018009	TAP binding protein-like	80	✓	
TAS2R38	NM_176817	taste receptor, type 2, member 38	100	✓	
TAS2R42	NM_181429	taste receptor, type 2, member 42	100	✓	
TAS2R49	NM_176889	taste receptor, type 2, member 49	100	✓	
TAS2R50	NM_176890	taste receptor, type 2, member 50	100	✓	
TBC1D16	NM_019020	TBC1 domain family, member 16	100	✓	
TCEA3	XM_114075	transcription elongation factor A (SII), 3	60	✓	
TDGF1	NM_003212	teratocarcinoma-derived growth factor 1	80	✓	
TDO2	NM_005651	tryptophan 2,3-dioxygenase	100	✓	
TEX101	NM_031451	testis expressed 101	100	✓	
TEX14	NM_031272	testis expressed 14	60	✓	
TFR2	NM_003227	transferrin receptor 2	100	✓	
TGFBI	NM_000358	transforming growth factor, beta-induced	100	✓	
TGM1	NM_000359	transglutaminase 1 (K polypeptide epidermal type I, protein-glutamine-gamma-glutamyltransferase)	60	✓	
TGM6	NM_198994	transglutaminase 6	80	✓	
THADA	NM_022065	thyroid adenoma associated	100	✓	
THPO	NM_000460	thrombopoietin	100	✓	
TIMM50	NM_001001563	translocase of inner mitochondrial membrane 50 homolog	80	✓	
TIMM8A	NM_004085	translocase of inner mitochondrial membrane 8 homolog A	80	✓	
TIPARP	NM_015508	TCDD-inducible poly(ADP-ribose) polymerase	60	✓	
TLR10	NM_030956	toll-like receptor 10	83	✓	
TLR3	NM_003265	toll-like receptor 3	60	✓	
TLR4	NM_003266	toll-like receptor 4	80	✓	
TLR9	NM_017442	toll-like receptor 9	100	✓	
TM7SF2	NM_003273	transmembrane 7 superfamily member 2	100	✓	
TM9SF1	NM_006405	transmembrane 9 superfamily member 1	80	✓	
TM9SF4	NM_014742	transmembrane 9 superfamily protein member 4	100	✓	
TMCO1	NM_019026	transmembrane and coiled-coil domains 1	80	✓	
TMED1	NM_006858	transmembrane emp24 protein transport domain containing 1	100	✓	
TMED2	NM_006815	transmembrane emp24 domain trafficking protein 2	100	✓	
TMED3	NM_007364	transmembrane emp24 protein transport domain containing 3	100	✓	
TMED5	NM_016040	transmembrane emp24 protein transport domain containing 5	100	✓	
TMED6	NM_144676	transmembrane emp24 protein transport domain containing 6	100	✓	
TMED7	NM_181836	transmembrane emp24 protein transport domain containing 7	100	✓	
TMED8	NM_213601	transmembrane emp24 protein transport domain containing 8	100	✓	

TMEM1	NM_001001723	transmembrane protein 1	100	✓	
TMEM48	NM_018087	transmembrane protein 48	80	✓	
TMEM9	NM_016456	transmembrane protein 9	60	✓	
TNFAIP3	NM_006290	tumor necrosis factor, alpha-induced protein 3	100	✓	
TNFRSF18	NM_004195	tumor necrosis factor receptor superfamily, member 18	60	✓	
TNFRSF1A	NM_001065	tumor necrosis factor receptor superfamily, member 1A	100	✓	
TNFRSF21	NM_014452	tumor necrosis factor receptor superfamily, member 21	100	✓	
TNFRSF25	NM_003790	tumor necrosis factor receptor superfamily, member 25	60	✓	
TNFRSF6B	NM_003823	tumor necrosis factor receptor superfamily, member 6b, decoy	100	✓	
TNFSF12	NM_153012	tumor necrosis factor (ligand) superfamily, member 12	100	✓	
TNFSF13B	NM_006573	tumor necrosis factor (ligand) superfamily, member 13b	100	✓	
TNFSF14	NM_003807	tumor necrosis factor (ligand) superfamily, member 14	100	✓	
TNFSF15	NM_005118	tumor necrosis factor (ligand) superfamily, member 15	100	✓	
TNFSF4	NM_003326	tumor necrosis factor (ligand) superfamily, member 4	100	✓	
TNFSF8	NM_001244	tumor necrosis factor (ligand) superfamily, member 8	100	✓	
TNXB	NM_019105	tenascin XB	100	✓	
TOLLIP	NM_019009	toll interacting protein	100	✓	
TOM1L2	NM_144678	target of myb1-like 2	80	✓	
TOMM22	NM_020243	translocase of outer mitochondrial membrane 22 homolog	100	✓	
TP53BP2	NM_005426	tumor protein p53 binding protein, 2	100	✓	
TPI1	NM_000365	triosephosphate isomerase 1	80	✓	
TPM1	NM_000366	tropomyosin 1 (alpha)	80	✓	
TPM2	NM_213674	tropomyosin 2 (beta)	100	✓	
TPR	NM_003292	translocated promoter region (to activated MET oncogene)	100	✓	
TPRKB	NM_016058	TP53RK binding protein	100	✓	
TRAF1	NM_005658	TNF receptor-associated factor 1	100	✓	
TRAF3IP1	NM_015650	TNF receptor-associated factor 3 interacting protein 1	100	✓	
TRAM1	NM_014294	translocation associated membrane protein 1	100	✓	
TRAPPC1	NM_021210	trafficking protein particle complex 1	100	✓	
TRAPPC2L	NM_016209	trafficking protein particle complex 2-like	80	✓	
TRAT1	NM_016388	T cell receptor associated transmembrane adaptor 1	100	✓	
TREML2	NM_024807	triggering receptor expressed on myeloid cells-like 2	100	✓	
TREML4	NM_198153	triggering receptor expressed on myeloid cells-like 4	100	✓	
TRIB1	NM_025195	tribbles homolog 1	60	✓	
TRIB3	NM_021158	tribbles homolog 3	50		0.001
TRIM14	NM_014788	tripartite motif-containing 14	80	✓	
TRIM59	NM_173084	tripartite motif-containing 59	100	✓	
TRIP10	NM_004240	thyroid hormone receptor interactor 10	100	✓	
TROAP	NM_005480	trophinin associated protein (tastin)	100	✓	
TSEN34	NM_024075	tRNA splicing endonuclease 34 homolog	80	✓	
TSPO	NM_000714	translocator protein	100	✓	
TSTA3	NM_003313	tissue specific transplantation antigen P35B	80	✓	
TTR	NM_000371	transthyretin	100	✓	
TUBA1C	NM_032704	tubulin, alpha 1c	60	✓	
TUBA3C	NM_006001	tubulin, alpha 3c	100	✓	
TUBA4A	NM_006000	tubulin, alpha 4a	60	✓	

TUBG1	NM_001070	tubulin, gamma 1	80	✓	
TXN	NM_003329	thioredoxin	100	✓	
TXN2	NM_012473	thioredoxin 2	80	✓	
TXNDC12	NM_015913	thioredoxin domain containing 12	100	✓	
TXNDC13	NM_021156	thioredoxin domain containing 13	100	✓	
TXNDC14	NM_015959	thioredoxin domain containing 14	100	✓	
TXNDC15	NM_024715	thioredoxin domain containing 15	100	✓	
TXNDC17	NM_032731	thioredoxin domain containing 17	100	✓	
TXNDC3	NM_016616	thioredoxin domain containing 3	100	✓	
TXNDC4	XM_376898	thioredoxin domain containing 4	80	✓	
TXNDC5	NM_022085	thioredoxin domain containing 5	100	✓	
TXNDC6	NM_178130	thioredoxin domain containing 6	100	✓	
TXNDC9	NM_005783	thioredoxin domain containing 9	100	✓	
TXNL1	NM_004786	thioredoxin-like 1	60	✓	
TXNL4A	NM_006701	thioredoxin-like 4A	80	✓	
TYMP	NM_001953	thymidine phosphorylase	100	✓	
U2AF1	NM_006758	U2 small nuclear RNA auxiliary factor 1	60	✓	
U2AF2	NM_007279	U2 small nuclear RNA auxiliary factor 2	80	✓	
UAP1	NM_003115	UDP-N-acetylglucosamine pyrophosphorylase 1	100	✓	
UBE3C	NM_014671	ubiquitin protein ligase E3C	60	✓	
UCP1	NM_021833	uncoupling protein 1	100	✓	
UCP2	NM_003355	uncoupling protein 2	100	✓	
UCP3	NM_003356	uncoupling protein 3	80	✓	
UHRF1BP1	NM_017754	UHRF1 (ICBP90) binding protein 1	100	✓	
UIMC1	NM_016290	ubiquitin interaction motif containing 1	100	✓	
ULBP1	NM_025218	UL16 binding protein 1	100	✓	
UNC5D	NM_080872	unc-5 homolog D	100	✓	
UNK	XM_290331	Unknown	80	✓	
UNK	XM_373028	Unknown	80	✓	
UNK	XM_377512	Unknown	60	✓	
UQCRQ	NM_014402	ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa	80	✓	
USO1	NM_003715	USO1 homolog, vesicle docking protein	100	✓	
USP34	NM_014709	ubiquitin specific peptidase 34	100	✓	
VAMP7	NM_005638	vesicle-associated membrane protein 7	100	✓	
VIL2	NM_003379	villin 2	80	✓	
VPS26A	NM_004896	vacuolar protein sorting 26 homolog A	80	✓	
VPS26B	NM_052875	vacuolar protein sorting 26 homolog B	80	✓	
VPS28	NM_016208	vacuolar protein sorting 28 homolog	60	✓	
VTA1	NM_016485	Vps20-associated 1 homolog	60	✓	
WDR44	NM_019045	WD repeat domain 44	80	✓	
WDR54	NM_032118	WD repeat domain 54	100	✓	
WDR86	NM_198285	WD repeat domain 86	80	✓	
WDR88	NM_173479	WD repeat domain 88	100	✓	
WNT5A	NM_003392	wingless-type MMTV integration site family, member 5A	60	✓	
WNT6	NM_006522	wingless-type MMTV integration site family, member 6	60	✓	
WNT7A	NM_004625	wingless-type MMTV integration site family, member 7A	80	✓	

WNT7B	NM_058238	wingless-type MMTV integration site family, member 7B	100	✓	
WNT8B	NM_003393	wingless-type MMTV integration site family, member 8B	100	✓	
WSB2	NM_018639	WD repeat and SOCS box-containing 2	100	✓	
XKR6	NM_173683	XK, Kell blood group complex subunit-related family, member 6	100	✓	
XPOT	NM_007235	exportin, tRNA (nuclear export receptor for tRNAs)	60	✓	
YWHAE	NM_006761	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide	60	✓	
ZBED1	NM_004729	zinc finger, BED-type containing 1	100	✓	
ZCCHC17	NM_016505	zinc finger, CCHC domain containing 17	80	✓	
ZEB1	NM_030751	zinc finger E-box binding homeobox 1	60	✓	
ZIC2	NM_007129	Zic family member 2	100	✓	
ZNF342	NM_145288	zinc finger protein 342	60	✓	
ZNF626	NM_145297	zinc finger protein 626	60	✓	
ZP2	NM_003460	zona pellucida glycoprotein 2	100	✓	
ZP3	NM_007155	zona pellucida glycoprotein 3	80	✓	
ZWILCH	NM_017975	Zwilch, kinetochore associated, homolog	80	✓	