Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Protein family
1 AAKB1_HUMAN	PRKAB1 (AMPK)	Q9Y478	5'-AMP-activated protein kinase subunit beta-1 (AMPK beta-1 chain) (AMPKb)	cytoplasm; fatty acid biosynthetic process; nucleus; protein binding; signal transduction	protein kinase beta subunit
2 ABCA5_HUMAN	ABCA5 (KIAA1888)	Q8WWZ7	ATP-binding cassette sub-family A member 5	ATP binding; ATPase activity; Golgi membrane; integral to membrane; late endosome membrane; lysosomal	family ABC transporter family, ABCA subfamily
3 ABCF1_HUMAN	ABCF1 (ABC50)	Q8NE71	ATP-binding cassette sub-family F member 1 (ATP-binding cassette 50) (TNF-alpha- stimulated ABC protein)	membrane: transport ATP binding; ATPase activity, coupled to transmembrane movement of substances; inflammatory response; translation; translation factor	ABC transporter family, EF3 subfamily
4 ABLM3_HUMAN	ABLIM3 (KIAA0843) (HMFN1661)	094929	Actin-binding LIM protein 3 (Actin-binding LIM protein family member 3) (abLIM-3)	activitv. nucleic acid bindina actin binding; cytoplasm; cytoskeleton organization; zinc ion binding	
5 ACTG_HUMAN	ACTG1 (ACTB) (ACTG)	P63261	Actin, cytoplasmic 2 (Gamma-actin) [Cleaved into: Actin, cytoplasmic 2, N-terminally processed]	ATP binding; cell motion; cytoplasm; cytoskeleton; identical protein binding; sensory perception of sound; structural	Actin family
6 ACTH_HUMAN	ACTG2 (ACTA3) (ACTL3) (ACTSG)	P63267	Actin, gamma-enteric smooth muscle (Smooth muscle gamma-actin) (Gamma-2-actin) (Alpha actin-3)		Actin family
7 ACTN1_HUMAN	ACTN1	P12814	Alpha-actinin-1 (Alpha-actinin cytoskeletal isoform) (Non-muscle alpha-actinin-1) (F-actin cross-linking protein)	adhesion; focal adhesion formation; integrin binding; negative regulation of cell motion; nucleolus; pseudopodium; regulation of	Alpha-actinin family
8 ACTN3_HUMAN	ACTN3	Q08043	Alpha-actinin-3 (Alpha-actinin skeletal muscle isoform 3) (F-actin cross-linking protein)	anontosis: vinculin bindina actin binding; actin filament; calcium ion binding; focal adhesion; focal adhesion formation; integrin binding; protein homodimerization activity; pseudopodium; regulation of apoptosis; structural constituent of muscle	Alpha-actinin family
9 ADAM9_HUMAN	ADAM9 (KIAA0021) (MCMP) (MDC9) (MLTNG)	Q13443	Disintegrin and metalloproteinase domain- containing protein 9 (ADAM 9) (EC 3.4.24) (Metalloprotease/disintegrin/cysteine-rich protein 9) (Myeloma cell metalloproteinase) (Meltrin-gamma) (Cellular disintegrin-related protein)	PMA-inducible membrane protein ectodomain proteolysis; SH3 domain binding; activation of MAPKK activity; cell-cell adhesion mediated by integrin; cell-matrix adhesion; collagen binding; extracellular space; integral to membrane; integrin binding; integrin-mediated signaling pathway; intrinsic to external side of plasm amembrane; keratinocyte differentiation; laminin binding; metalloendopeptidase activity; monocyte activation; phosphate binding; positive regulation of cell adhesion mediated by integrin; positive regulation of keratinocyte migration; positive regulation of macrophage fusion; positive regulation of protein secretion; protein kinase C binding; response to calcium ion; response to glucocorticoid stimulus; response to thydrogen peroxide; response to tumor necrosis factor; transforming growth factor beta recentor sianalina	
IO ADCY6_HUMAN	ADCY6 (KIAA0422)	O43306	Adenylate cyclase type 6 (EC 4.6.1.1) (Adenylate cyclase type VI) (ATP pyrophosphate-lyase 6) (Adenylyl cyclase 6) (Ca(2+)-inhibitable adenylyl cyclase)	ATP binding; adenylate cyclase activity; cAMP biosynthetic process; integral to membrane; intracellular signaling cascade; magnesium ion binding	Adenylyl cyclas class-4/guanyly cyclase family
L1 ADDA_HUMAN	ADD1 (ADDA)	P35611	Alpha-adducin (Erythrocyte adducin subunit alpha)	F-actin capping protein complex; actin filament binding; actin filament bundle formation; barbed-end actin filament capping; calmodulin binding; cytosol; metal ion binding; nucleus; plasma membrane; positive regulation of protein binding; protein heterodimerization activity; protein homodimerization activity; spectrin binding; transcription factor binding	Aldolase class I family, Adducin subfamily

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12 ADDG_HUMAN	ADD3 (ADDL)	Q9UEY8	Gamma-adducin (Adducin-like protein 70)	actin binding; calmodulin binding; cytoplasm; cytoskeleton; metal ion binding; plasma membrane; structural constituent of cytoskeleton	Aldolase class I family, Adducin subfamily
13 AFAP1_HUMAN	AFAP1 (AFAP)	Q8N556	Actin filament-associated protein 1 (110 kDa actin filament-associated protein) (AFAP-110)	actin binding; cytoplasm; cytoskeleton	
14 ALDOA_HUMAN	ALDOA (ALDA)	P04075	Fructose-bisphosphate aldolase A (EC 4.1.2.13) (Muscle-type aldolase) (Lung cancer antigen NY-LU-1)	ATP biosynthetic process; I band; actin binding; actin cytoskeleton; actin filament organization; extracellular vesicular exosome; fructose 1,6-bisphosphate metabolic process; fructose binding; fructose-bisphosphate aldolase activity; glycolysis; identical protein binding; muscle maintenance; nucleus; regulation of cell shape; striated muscle	bisphosphate aldolase family
15 AMPD2_HUMAN	AMPD2	Q01433	AMP deaminase 2 (EC 3.5.4.6) (AMP deaminase isoform L)	AMP deaminase activity; purine base metabolic process; purine ribonucleoside monophosphate biosynthetic process	Adenosine and AMP deaminase family
16 ANLN_HUMAN	ANLN	Q9NQW6	Actin-binding protein anillin	actin binding; contractile ring; cytokinesis; mitosis; nucleus; regulation of exit from mitosis; septin ring assembly	
17 APOL1_HUMAN	APOL1 (APOL)	014791	Apolipoprotein L1 (Apolipoprotein L-I) (ApoL-I) (Apolipoprotein L) (Apo-L) (ApoL)		Apolipoprotein family
18 ARAP1_HUMAN	ARAP1 (CENTD2) (KIAA0782)	Q96P48	Arf-GAP, Rho-GAP domain, ANK repeat and PH domain-containing protein 1 (Centaurin-delta- 2) (Cnt-d2)		
19 ARHG6_HUMAN	ARHGEF6 (COOL2) (KIAA0006) (PIXA)	Q15052	Rho guanine nucleotide exchange factor 6 (Rac/Cdc42 guanine nucleotide exchange factor 6) (PAK-interacting exchange factor alpha) (Alpha-Pix) (COOL-2)	GTPase activator activity; JNK cascade; Rho guanyl-nucleotide exchange factor activity; apoptosis; cytoplasm; regulation of Rho protein signal transduction	
20 ARRB1_HUMAN	ARRB1 (ARR1)	P49407	Beta-arrestin-1 (Arrestin beta-1)	cytoplasm; enzyme inhibitor activity; membrane fraction; plasma membrane; protein binding; signal transduction;	Arrestin family
21 ASAP1_HUMAN	ASAP1 (DDEF1) (KIAA1249)	Q9ULH1	Arf-GAP with SH3 domain, ANK repeat and PH domain-containing protein 1 (130 kDa phosphatidylinositol 4,5-biphosphate- dependent ARF1 GTPase-activating protein) (PIP2-dependent ARF1 GAP) (ADP-ribosylation factor-directed GTPase-activating protein 1) (ARF GTPase-activating protein 1) (Development and differentiation-enhancing factor 1) (Differentiation-enhancing factor 1) (DFF-1)	soluble fraction ARF GTPase activator activity; cytoplasm; membrane; protein binding; regulation of ARF GTPase activity; zinc ion binding	
22 ASAP2_HUMAN	ASAP2 (DDEF2) (KIAA0400)	O43150	Arf-GAP with SH3 domain, ANK repeat and PH domain-containing protein 2 (Development and differentiation-enhancing factor 2) (Pyk2 C-terminus-associated protein) (PAP) (Paxillin- associated protein with ARFGAP activity 3) (PAG3)	Golgi cisterna membrane; plasma membrane; protein binding;	
23 AT2A2_HUMAN	ATP2A2 (ATP2B)	P16615	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2 (SERCA2) (EC 3.6.3.8) (Calcium pump 2) (Calcium-transporting ATPase sarcoplasmic reticulum type, slow twitch skeletal muscle isoform) (SR Ca(2+)-ATPase 2) (Endoplasmic reticulum class 1/2 Ca(2+) ATPase)	ATP binding; ATP biosynthetic process; S100 alpha binding; calcium ion binding; calcium- transporting ATPase activity; cell adhesion; epidermis development; integral to plasma membrane; magnesium ion binding; microsome; sarcoplasmic reticulum calcium ion transport; sarcoplasmic reticulum membrane	Cation transpo ATPase (P-type family, Type II subfamily

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24 BCAT1_HUMAN	BCAT1 (BCT1) (ECA39)	P54687	Branched-chain-amino-acid aminotransferase, cytosolic (BCAT(c)) (EC 2.6.1.42) (Protein ECA39)	G1/S transition of mitotic cell cycle; branched chain family amino acid biosynthetic process; branched-chain-amino-acid transaminase activity; cell oroliferation	Class-IV pyridoxal phosphate- dependent aminotransferase family
25 BCL3_HUMAN	BCL3 (BCL4) (D19537)	P20749	B-cell lymphoma 3-encoded protein (Protein Bcl-3)	Bcl3-Bcl10 complex; Bcl3/NF- kappaB2 complex; DNA damage response, signal transduction by p53 class mediator resulting in induction of apotosis; I-kappaB kinase/NF-kappaB cascade; cytoplasm; maintenance of protein location in nucleus; negative regulation of apoptosis; negative regulation of apoptosis; nucleus; positive regulation of translation; protein binding, bridging; protein import into nucleus, translocation; regulation of DNA binding; regulation of NF- kappaB import into nucleus; response to UV-C; response to virus; transcription; transcription	
26 BET1L_HUMAN	BET1L (GS15)	Q9NYM9	BET1-like protein (Vesicle transport protein GOS15) (Golgi SNARE with a size of 15 kDa) (GOS-15) (GS15)	Golgi membrane; SNAP receptor activity; SNARE complex; endosome; integral to membrane; protein transport; retrograde transport, endosome to Golai	
27 BIN2_HUMAN	BIN2 (BRAP1)	Q9UBW5	Bridging integrator 2 (Breast cancer- associated protein 1)	cytoplasm; protein binding	
28 BNIP2_HUMAN	BNIP2 (NIP2)	Q12982	BCL2/adenovirus E1B 19 kDa protein- interacting protein 2	GTPase activator activity; anti- apoptosis; apoptosis; calcium ion binding; nuclear envelope; perinuclear region of cytoplasm; orotein bindina	
29 C2C2L_HUMAN	C2CD2L (KIAA0285) (TMEM24) (DLNB23)	014523	C2 domain-containing protein 2-like (Transmembrane protein 24)	integral to membrane	
30 CA062 HUMAN 31 CALD1_HUMAN	C1orf62 CALD1 (CAD) (CDM)	O5T1N1 Q05682	Uncharacterized protein C1orf62 Caldesmon (CDM)	actin binding; calmodulin binding; cell motion; cytoskeleton; muscle contraction; myosin binding; tropomyosin binding	Caldesmon family
32 CALX_HUMAN	CANX	P27824	Calnexin (Major histocompatibility complex class I antigen-binding protein p88) (p90) (IP90)	calcium ion binding; endoplasmic reticulum membrane; integral to membrane; melanosome; protein folding; protein secretion; sugar	Calreticulin family
33 CAP1_HUMAN	CAP1 (CAP)	Q01518	Adenylyl cyclase-associated protein 1 (CAP 1)	binding; unfolded protein binding actin binding; activation of adenylate cyclase activity; establishment or maintenance of cell polarity; plasma membrane; sianal transduction	CAP family
34 CASS4_HUMAN	CASS4 (C20orf32) (HEFL)	Q9NQ75	Cas scaffolding protein family member 4 (HEF1-EFS-p130Cas-like protein) (HEPL) (HEF- like protein)	cell adhesion; cytoplasm;	CAS family
35 CCM2_HUMAN	CCM2 (C7orf22) (PP10187)	Q9BSQ5	Malcavernin (Cerebral cavernous malformations 2 protein)	cytoplasm; integrin-mediated signaling pathway; protein binding; stress-activated MAPK cascade: vasculogenesis	
36 CCNY_HUMAN	CCNY (C10orf9) (CBCP1) (CFP1)	Q8ND76	Cyclin-Y (Cyclin fold protein 1) (Cyclin box protein 1)	nucleus	Cyclin family, Cyclin Y subfamily
37 CD2AP_HUMAN	CD2AP	Q9Y5K6	CD2-associated protein (Cas ligand with multiple SH3 domains) (Adapter protein CMS)	SH3 domain binding; cell division; filamentous actin; mitosis; nucleolus; plasma membrane; protein complex assembly; ruffle; signal transduction; structural constituent of cytoskeleton; substrate-bound cell migration, cell extension	
38 CE170_HUMAN	CEP170 (FAM68A) (KAB) (KIAA0470)	Q5SW79	Centrosomal protein of 170 kDa (Cep170) (KARP-1-binding protein) (KARP1-binding protein)	centriole; microtubule	CEP170 family
39 CI167_HUMAN	C9orf167	Q9NXH8	Torsin family protein C9orf167	ATP binding; chaperone mediated protein folding requiring cofactor; endoplasmic reticulum; integral to membrane; nucleoside- tribhosohatase activitv	
40 CIP4_HUMAN	TRIP10 (CIP4) (STOT) (STP)	Q15642	Cdc42-interacting protein 4 (Thyroid receptor- interacting protein 10) (TRIP-10) (Protein Felic) (Salt tolerant protein) (hSTP)	Golgi apparatus; actin cytoskeleton organization; cell cortex; cytoskeleton; endocytosis; identical protein binding; lipid binding; lysosome; perinuclear region of cytoplasm; plasma membrane; signal transduction	FNBP1 family

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41 CKLF6_HUMAN	CMTM6 (CKLFSF6)	Q9NX76	CKLF-like MARVEL transmembrane domain- containing protein 6 (Chemokine-like factor	chemotaxis; cytokine activity; extracellular space; integral to	Chemokine-like factor family
42 CLP1_HUMAN	CLP1 (HEAB)	Q92989	superfamily member 6) Polyribonucleotide S'-hydroxyl-kinase Clp1 (EC 2.7.1.78) (Polynucleotide kinase Clp1) (Pre- mRNA cleavage complex II protein Clp1)	polydeoxyribonucleotide 5'- hydroxyl-kinase activity; ATP- dependent polyribonucleotide 5'- hydroxyl-kinase activity; GTP binding; RNA interference, siRNA loading onto RISC; RNA interference, targeting of mRNA for destruction; mRNA 3'-end processing; nuclear mRNA splicing, via spliceosome; tRNA splicing, via endonucleolytic cleavage and ligation; tRNA-	Clp1 family
43 CO4A3_HUMAN	COL4A3	Q01955	Collagen alpha-3(IV) chain (Goodpasture antigen) [Cleaved into: Tumstatin]	intron endonuclease complex activation of caspase activity; blood circulation; cell adhesion; cell proliferation; cell surface receptor linked signal transduction; collagen type IV; extracellular matrix structural constituent; extracellular space; induction of apoptosis; integrin binding; metalloendopeptidase inhibitor activity; negative regulation of angiogenesis; negative regulation of cell proliferation; sensory perception of sound	Type IV collager family
44 CSRP1_HUMAN	CSRP1 (CSRP) (CYRP)	P21291	Cysteine and glycine-rich protein 1 (Cysteine- rich protein 1) (CRP1) (CRP)	nucleus; zinc ion binding	
45 CXCL7_HUMAN	PPBP (CTAP3) (CXCL7) (SCYB7) (TGB1) (THBGB1)	P02775	Platelet basic protein (PBP) (C-X-C motif chemokine 7) (Small-inducible cytokine B7) (Leukocyte-derived growth factor) (LDGF) (Macrophage-derived growth factor) (MDGF) [Cleaved into: Connective tissue-activating peptide III (CTAP-III) (Low-affnity) platelet factor IV) (LA-PF4); TC-2; Connective tissue- activating peptide III(1-81) (CTAP-III(1-81)); Beta-thromboglobulin (Beta-TG); Neutrophil- activating peptide 2(74) (NAP-2(74)); Neutrophil-activating peptide 2(73) (NAP- 2(73)); Neutrophil-activating peptide 2 (1- 66) (NAP-2(1-65)); Neutrophil-activating nentride 27(1-63) (MaP-2(1-63))	cell proliferation; chemokine activity; chemotaxis; defense response to bacterium; extracellular space; glucose transmembrane transporter activity; glucose transport; growth factor activity; immune response; platelet alpha granule lumen	Intercrine alpha (chemokine CxG family
46 DAP1_HUMAN	DAP (DAP1)	P51397	Death-associated protein 1 (DAP-1)	apoptosis; induction of apoptosis by extracellular signals	
47 DAPP1_HUMAN	DAPP1 (BAM32) (HSPC066)	Q9UN19	Dual adapter for phosphotyrosine and 3- phosphotyrosine and 3-phosphoinositide (hDAPP1) (B-cell adapter molecule of 32 kDa) (B lymphocyte adapter protein Bam32)	phospholipid binding; protein amino acid dephosphorylation; protein binding; protein tyrosine phosphatase activity; signal transduction	
48 DBNL_HUMAN	DBNL (CMAP) (SH3P7) (PP5423)	Q9UJU6	Drebrin-like protein (Drebrin-F) (SH3 domain- containing protein 7) (Cervical SH3P7) (HPK1- interacting protein of 55 kba) (HP-55) (Cervical mucin-associated protein)	Rac protein signal transduction;	ABP1 family
49 DC1L1_HUMAN	DYNC1LI1 (DNCLI1)	Q9Y6G9	Cytoplasmic dynein 1 light intermediate chain 1 (Dynein light intermediate chain 1, cytosolic) (Dynein light chain A) (DLC-A)	ATP binding; dynein complex;	Dynein light intermediate chain family
50 DEMA_HUMAN	EPB49 (DMT)	Q08495	Dematin (Erythrocyte membrane protein band 4.9)	actin binding; actin cytoskeleton; actin filament bundle formation; barbed-end actin filament capping	Villin/gelsolin family
51 DEN2C_HUMAN 52 DNJC5_HUMAN	DENND2C DNAJC5 (CSP)	Q68D51 Q9H3Z4	DENN domain-containing protein 2C DnaJ homolog subfamily C member 5 (Cysteine string protein) (CSP)	heat shock protein binding; melanosome; membrane; protein folding: unfolded protein binding.	
53 DOK3_HUMAN	DOK3	Q7L591	Docking protein 3 (Downstream of tyrosine kinase 3)	folding; unfolded protein binding cytoplasm; insulin receptor binding; plasma membrane	DOK family, Typ
54 DREB_HUMAN	DBN1 (D0S117E)	Q16643	Drebrin (Developmentally-regulated brain protein)	binding; plasma membrane actin binding; actin filament organization; actomyosin; cytoplasm; dendrite; profilin binding; regulation of dendrite development; regulation of neuronal svnaptic olasticitv	A subfamily
55 DTD1_HUMAN	DTD1 (C20orf88) (HARS2)	Q8TEA8	D-tyrosyl-tRNA(Tyr) deacylase 1 (EC 3.1) (Histidyl-tRNA synthetase-related)	D-amino acid catabolic process; cytoplasm; hydrolase activity, acting on ester bonds	DTD family
56 DYR1A_HUMAN	DYRK1A (DYRK) (MNB) (MNBH)	Q13627	Dual specificity tyrosine-phosphorylation- regulated kinase 1A (EC 2.7.12.1) (Protein kinase minibrain homolog) (MNBH) (hMNB) (HP86) (Dual specificity YAK1-related kinase)	ATP binding; nervous system development; non-membrane spanning protein tyrosine kinase activity; nuclear speck; peptidyl- tyrosine phosphorylation; protein amino acid autophosphorylation; protein self-association; protein serine/threonine kinase activity	Protein kinase superfamily, CMGC Ser/Thr protein kinase family, MNB/DYI subfamily

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57 EF1B_HUMAN	EEF1B2 (EEF1B) (EF1B)	P24534	Elongation factor 1-beta (EF-1-beta)	cytosol; eukaryotic translation elongation factor 1 complex; protein binding; translation elongation factor activity; translational elongation	EF-1-beta/EF-1 delta family
58 EPHA6_HUMAN	ЕРНАб (ЕНК2)	Q9UF33	Ephrin type-A receptor 6 (EC 2.7.10.1) (Tyrosine-protein kinase receptor EHK-2) (EPH homology kinase 2)	ATP binding; ephrin receptor	Protein kinase superfamily, Ty protein kinase family, Ephrin receptor subfamily
59 EPS15_HUMAN	EPS15 (AF1P)	P42566	Epidermal growth factor receptor substrate 15 (Protein Eps15) (Protein AF-1p)	SH3 domain binding; calcium ion binding; cell proliferation; coated pit; cytosol; early endosome membrane; epidermal growth factor receptor signaling pathway; protein transport; vesicle organization	Subramiiv
60 ESAM_HUMAN	ESAM (UNQ220/PRO246)	Q96AP7	Endothelial cell-selective adhesion molecule	adherens junction; integral to membrane; protein binding; tight junction	
61 ESYT2_HUMAN	FAM62B (ESYT2) (KIAA1228)	A0FGR8	Extended synaptotagmin-2 (E-Syt2) (Chr2Syt) (Protein FAM62B)	integral to membrane; plasma membrane	Extended synaptotagmin family
62 EXOC7_HUMAN	EXOC7 (EXO70) (KIAA1067)	Q9UPT5	Exocyst complex component 7 (Exocyst complex component Exo70)	centriolar satellite; cytosol; exocyst; exocytosis; plasma membrane; protein transport	EXO70 family
63 F10A1_HUMAN	ST13 (FAM10A1) (HIP) (SNC6)	P50502	Hsc70-interacting protein (Hip) (Suppression of tumorigenicity protein 13) (Putative tumor suppressor ST13) (Protein FAM10A1) (Progesterone receptor-associated p48 protein) (Renal carcinoma antigen NY-REN-33)	cytoplasm; protein binding, bridging; protein folding	FAM10 family
64 FA5_HUMAN	F5	P12259	Coagulation factor V (Activated protein C cofactor) (Proaccelerin, labile factor) [Cleaved into: Coagulation factor V heavy chain; Coagulation factor V light chain]	blood coagulation; calcium ion binding; cell adhesion; copper ion binding; oxidoreductase activity; plasma membrane; platelet alpha granule lumen	Multicopper oxidase family
65 FA63A_HUMAN 66 FA65C_HUMAN 67 FARP2_HUMAN	FAM63A (KIAA1390) FAM65C (C20orf175) FARP2 (KIAA0793)	Q8N5J2 Q96MK2 O94887	Protein FAM63A Protein FAM65C FERM, RhoGEF and pleckstrin domain- containing protein 2 (FERM domain including RhoGEF) (FIR)	protein binding Rac protein signal transduction; Rho guanyl-nucleotide exchange factor activity; cytoplasm; cytoskeletan protein binding; cytoskeletan; extrinsic to membrane; neuron remodeling; regulation of Rho protein signal transduction	FAM63 family FAM65 family
68 FBP1L_HUMAN	FNBP1L (C1orf39) (TOCA1)	Q5T0N5	Formin-binding protein 1-like (Transducer of Cdc42-dependent actin assembly protein 1) (Toca-1)	cell cortex; cytoplasmic vesicle; cytoskeleton; endocytosis; lipid binding; plasma membrane	FNBP1 family
69 FCERG_HUMAN	FCER1G	P30273	High affinity immunoglobulin epsilon receptor subunit gamma (IgE Fc receptor subunit gamma) (FceRI gamma) (Fc-epsilon RI- aamma)	integral to plasma membrane	CD3Z/FCER1G family
70 FETUA_HUMAN	AHSG (FETUA) (PRO2743)	P02765	Alpha-2-HS-glycoprotein (Ba-alpha-2- glycoprotein) (Alpha-2-Zglobulin) (Fetuin-A) [Cleaved into: Alpha-2-HS-glycoprotein chain A; Alpha-2-HS-glycoprotein chain B]	acute-phase response; cysteine- type endopeptidase inhibitor activity; extracellular space; negative regulation of bone mineralization; negative regulation of insulin receptor signaling pathway; pinocytosis; positive regulation of phagocytosis; protein binding; regulation of inflammatory response	Fetuin family
71 FGD3_HUMAN	FGD3 (ZFYVE5)	Q5JSP0	FYVE, RhoGEF and PH domain-containing protein 3 (Zinc finger FYVE domain-containing protein 5)	Golgi apparatus; Rho guanyl- nucleotide exchange factor activity; actin cytoskeleton organization; cytoskeleton; filopodium assembly; lamellipodium; regulation of Cdc42 GTPase activity; regulation of cell shape; ruffle; small GTPase bindina: zinc ion bindina	
72 FHOD1_HUMAN	FHOD1 (FHOS) (FHOS1)	Q9Y613	FH1/FH2 domain-containing protein 1 (Formin homolog overexpressed in spleen 1) (FHOS) (Formin homology 2 domain-containing protein 1)	actin binding; actin cytoskeleton organization; cytoplasm; cytoskeleton; nucleus	Formin homolo family
73 FIBA_HUMAN	FGA	P02671	Fibrinogen alpha chain [Cleaved into: Fibrinopeptide A]	eukaryotic cell surface binding; external side of plasma membrane; fibrinogen complex; platelet activation; platelet alpha granule lumen; protein binding, bridging; protein polymerization; receptor binding; response to calcium ion: signal transduction	

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74 FINC_HUMAN	FN1 (FN)	P02751	Fibronectin (FN) (Cold-insoluble globulin) (CIG) [Cleaved into: Ugl-Y1; Ugl-Y2; Ugl-Y3]	ER-Golgi intermediate compartment; acute-phase response; cell migration; collagen binding; extracellular matrix structural constituent; fibrinogen complex; heparin binding; peptide cross-linking; platelet alpha granule lumen; proteinaceous extracellular matrix; regulation of cell shape; substrate adhesion-dependent cell spreading; transmembrane receptor protein tyrosine kinase sionalion oathwax	
75 FKB15_HUMAN	FKBP15 (KIAA0674)	Q5T1M5	FK506-binding protein 15	axon; cytoplasm; protein folding	FKBP-type PPIase family
76 FLNA_HUMAN	FLNA (FLN) (FLN1)	P21333	Filamin-A (Alpha-filamin) (Filamin-1) (Endothelial actin-binding protein) (Actin- binding protein 280) (ABP-280) (Non-muscle filamin)	Fc-gamma receptor I complex binding; GTP-Ral binding; Rac GTPase binding; actin crosslink formation; actin cytoskeleton; actin cytoskeleton reorganization; actin filament binding; cell cortex; cytoplasmic sequestering of protein (sealization; glycoprotein binding; inhibition of adenylate cyclase activity by dopamine receptor signaling pathway; negative regulation of protein catabolic process; negative regulation of transcription factor activity; nucleus; plasma membrane; positive regulation of I-kappaB kinase/NF-kappaB cascade; positive regulation of transcription factor import into nucleus; protein homodimerization activity; protein localization at cell surface; protein stabilization; receptor clustering; signal transducer activity; transcription factor binding	Filamin family
77 FRIH_HUMAN	FTH1 (FTH) (FTHL6) (OK/SW-cl.84) (PIG15)	P02794	Ferritin heavy chain (Ferritin H subunit) (EC 1.16.3.1) (Cell proliferation-inducing gene 15 protein)	cell proliferation; ferric iron binding; ferroxidase activity; immune response; intracellular ferritin complex; intracellular sequestering of iron ion; iron ion transport; negative regulation of cell proliferation; oxidation	Ferritin family
78 FRM4B_HUMAN	FRMD4B (KIAA1013)	Q9Y2L6	FERM domain-containing protein 4B (GRP1-	reduction: protein binding binding; cytoplasm; cytoskeleton	
79 FYB_HUMAN 80 G3P_HUMAN	FYB (SLAP130) GAPDH (GAPD) (CDABP0047) (OK/SW-cl.12)	O15117 P04406	binding protein GRSP1) FYN-binding protein (FYN-T-binding protein) (FYB-120/130) (p120/p130) (SLP-76- associated phosphoprotein) (SLAP-130) (Adhesion and degranulation promoting adaptor protein) (ADAP) Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) (EC 1.2.1.12)	NLS-bearing substrate import into nucleus; cytoplasm; immune response; nucleus; protein amino acid phosphorylation; protein binding; protein kinase cascade NAD or NADH binding; glyceraldehyde-3-phosphate dehydrogenase (phosphorylating)	Glyceraldehyde-3 phosphate dehydrogenase
81 G6B_HUMAN	G6B (C6orf25)	095866	Protein G6b	activity; glycolysis; membrane; oxidation reduction; perinuclear region of cytoplasm; protein bindina Golgi apparatus; endoplasmic	family
				reticulum; heparin binding; integral to membrane; plasma membrane; receptor activity	
82 GA2L1_HUMAN	GAS2L1 (GAR22)	Q99501	GAS2-like protein 1 (Growth arrest-specific protein 2-like 1) (GAS2-related protein on chromosome 22)	cell cycle arrest; cytoplasm; cytoskeleton	GAS2 family
83 GI24_HUMAN	C10orf54 (PP2135) (UNQ730/PRO1412)	Q9H7M9	Platelet receptor Gi24	integral to membrane; receptor activity	
84 GP1BA_HUMAN	GP1BA	P07359	Platelet glycoprotein Ib alpha chain (Glycoprotein Ibalpha) (GP-Ib alpha) (GPIb- alpha) (GPIbA) (Antigen CD42b-alpha) (CD antigen CD42b) [Cleaved into: Glycocalicin]	cell adhesion; cell surface receptor linked signal transduction; fibrinolysis; integral to plasma membrane; membrane fraction; platelet activation; platelet alpha granule membrane; protein binding; thrombin recentor activity	
85 GP1BB_HUMAN	GP1BB	P13224	Platelet glycoprotein Ib beta chain (GP-Ib beta) (GPIb-beta) (GPIbB) (Antigen CD42b- beta) (CD antigen CD42c)	cell adhesion; cell surface receptor linked signal transduction; integral to plasma membrane; platelet activation; platelet alpha granule membrane; protein binding; transmembrane	
86 GPSM3_HUMAN	GPSM3 (AGS4) (C6orf9) (G18)	Q9Y4H4	G-protein-signaling modulator 3 (Activator of	receptor activitv GTPase activator activity;	

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Protein family
87 GRAP2_HUMAN	GRAP2 (GADS) (GRB2L) (GRID)	075791	GRB2-related adapter protein 2 (Protein GAD5) (Growth factor receptor-binding protein) (GRBLG) (Grf40 adapter protein) (Grf4- 40) (GRB2-like protein) (GRB2) (GRBX) (P38) (Hematopoietic cell-associated adapter protein GrpL) (Adapter protein GRID) (SH3- SH2-SH3 adapter Mona)	Ras protein signal transduction; SH3/SH2 adaptor activity; cell- cell signaling; cytosol; nucleus	GRB2/sem-5/DRK family
88 GRK6_HUMAN	GRK6 (GPRK6)	P43250	Grpotein-coupled receptor kinase 6 (EC 2.7.11.16) (G protein-coupled receptor kinase GRK6)	ATP binding; G-protein coupled receptor kinase activity; membrane; protein amino acid phosphorylation; regulation of G- protein coupled receptor protein signaling pathway; signal transducer activity; signal transduction	Protein kinase superfamily, AGC Ser/Thr protein kinase family, GPRK subfamily
89 GRP2_HUMAN	RASGRP2 (CDC25L) (MCG7)	Q7LDG7	RAS guanyl-releasing protein 2 (Calcium and DAG-regulated guanine nucleotide exchange factor I) (CalDAG-GEFI) (F25B3.3 kinase-like protein) (Cdc25-like protein) (HCDC25L)	Ras protein signal transduction; calcium ion binding; cell junction; cytosol; diacylglycerol binding; guanyl-nucleotide exchange factor activity; regulation of cell growth; regulation of small GTPase mediated signal transduction; ruffle membrane; synapse; synaptosome; zinc ion bindino	RASGRP family
90 GSK3B_HUMAN	GSK3B	P49841	Glycogen synthase kinase-3 beta (GSK-3 beta) (EC 2.7.11.26)	ATP binding; Axin-APC-beta- catenin-GSK3B complex; ER overload response; NF-kappaB binding; Wnt receptor signaling pathway through beta-catenin; beta-catenin binding; beta- catenin destruction complex; cytosol; glycogen synthase kinase 3 activity; nucleus; p53 binding; peptidyl-serine phosphorylation; positive regulation of protein complex assembly; positive regulation of protein export from nucleus; protein kinase A catalytic subunit binding; tau-protein kinase	Protein kinase superfamily, CMGC Ser/Thr protein kinase family, GSK-3 subfamily
91 GTR3_HUMAN	SLC2A3 (GLUT3)	P11169	Solute carrier family 2, facilitated glucose transporter member 3 (Glucose transporter type 3, brain) (GLUT-3)	carbohydrate metabolic process; cytoplasm; glucose transmembrane transporter activity; glucose transport; integral to membrane; plasma membrane; sugar:hydrogen symporter activity;	Major facilitator superfamily, Sugar transporter (TC 2.A.1.1) family, Glucose transporter subfamily
92 H1BP3_HUMAN	HS1BP3	Q53T59	HCLS1-binding protein 3 (HS1-binding protein 3) (HSP1BP-3)	transmembrane transport cell communication; phosphoinositide binding; protein binding	
93 HMHA1_HUMAN	HMHA1 (KIAA0223)	Q92619	Minor histocompatibility protein HA-1 [Cleaved into: Minor histocompatibility antigen HA-1 (mHag HA-1)]	GTPase activator activity; diacylglycerol binding; intracellular; intracellular signaling cascade; zinc ion binding	
94 HS90A_HUMAN	HSP90AA1 (HSP90A) (HSPC1) (HSPCA)	P07900	Heat shock protein HSP 90-alpha (HSP 86) (Renal carcinoma antigen NY-REN-38)	ATP binding; TPR domain binding; cellular chaperone-mediated protein complex assembly; cytosol; melanosome; mitochondrial outer membrane translocase complex assembly; mitochondrial transport; nitric- oxide synthase regulator activity; positive regulation of nitric oxide biosynthetic process; protein homodimerization activity; protein refolding; response to unfolded protein; signal transduction; unfolded protein binding	Heat shock protein 90 family
95 HS90B_HUMAN	HSP90AB1 (HSP90B) (HSPC2) (HSPCB)	P08238	Heat shock protein HSP 90-beta (HSP 90) (HSP 84)	hinding ATP binding; TPR domain binding; melanosome; negative regulation of proteasomal ubiquitin- dependent protein catabolic process; nitric-oxide synthase regulator activity; positive regulator activity; positive regulator of nitric oxide biosynthetic process; protein folding; regulation of interferon- gamma-mediated signaling pathway; response to unfolded protein unfolded nortein binding	
96 HSP71_HUMAN	HSPA1A (HSPA1); HSPA1B	P08107	Heat shock 70 kDa protein 1 (HSP70.1) (HSP70-1/HSP70-2)	ATP binding; anti-apoptosis; endoplasmic reticulum; mRNA catabolic process; mitochondrion; nucleus; response to unfolded	Heat shock protein 70 family

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Protein family
97 HSPB1_HUMAN	HSPB1 (HSP27) (HSP28)	P04792	Heat shock protein beta-1 (HspB1) (Heat shock 27 kDa protein) (HSP 27) (Stress- responsive protein 27) (SRP27) (Estrogen- regulated 24 kDa protein) (28 kDa heat shock protein)	anti-apoptosis; cell death; cell motion; cell surface; cytoplasm; identical protein binding; nucleus; regulation of translational initiation; response to heat; response to unfolded protein;	Small heat shock protein (HSP20) family
98 HUWE1_HUMAN	HUWE1 (KIAA0312) (KIAA1578) (UREB1) (HSPC272)	Q7Z6Z7	E3 ubiquitin-protein ligase HUWE1 (EC 6.3.2) (HECT, UBA and WWE domain-containing protein 1) (Upstream regulatory element- binding protein 1) (URE-binding protein 1) (URE-B1) (McI-1 ubiquitin ligase E3) (Mule) (ARF-binding protein 1) (ARF-BP1) (Large structure of UREB1) (LASU1) (Homologous to E6AP carboxyl terminus homologous protein 9) (HertH9)	soindle DNA binding; cell differentiation; cytoplasm; histone ubiquitination; modification- dependent protein catabolic process; nucleus; protein binding; protein polyubiquitination; ubiquitin- protein ligase activity	TOM1/PTR1 family
99 IF2P_HUMAN	EIF5B (IF2) (KIAA0741)	O60841	Eukaryotic translation initiation factor 5B (eIF- 5B) (Translation initiation factor IF-2)	GTP binding; GTPase activity; cytoplasm; protein binding; regulation of translational initiation; translation; translation initiation factor activity	IF-2 family
100 ILK_HUMAN	ILK (ILK1) (ILK2)	Q13418	Integrin-linked protein kinase (EC 2.7.11.1) (ILK-1) (ILK-2) (59 kDa serine/threonine- protein kinase) (p59ILK)	Initiation factor activity ATP binding; cell proliferation; cell-matrix adhesion; cytoplasm; focal adhesion; integrin-mediated signaling pathway; protein amino acid phosphorylation; protein binding; protein serine/threonine kinase activity; regulation of signal transduction	Ser/Thr protein
101 INF2_HUMAN	INF2 (C14orf151) (C14orf173)	Q27J81	Inverted formin-2 (HBEBP2-binding protein C)	Rho GTPase binding; actin binding; actin cytoskeleton organization; endoplasmic reticulum: nucleus	Formin homology family
102 IPP2_HUMAN	PPP1R2 (IPP2)	P41236	Protein phosphatase inhibitor 2 (IPP-2)	glycogen metabolic process; protein binding; protein serine/threonine phosphatase inhibitor activity; regulation of phosphoprotein phosphatase activity; regulation of signal transduction	Protein phosphatase inhibitor 2 family
103 IQGA2_HUMAN	IQGAP2	Q13576	Ras GTPase-activating-like protein IQGAP2	GTPase inhibitor activity; Ras GTPase activator activity; actin binding; actin cytoskeleton; calmodulin binding; regulation of small GTPase mediated signal transduction; small GTPase	
104 ITB3_HUMAN	ITGB3 (GP3A)	P05106	Integrin beta-3 (Platelet membrane glycoprotein IIIa) (GPIIIa) (CD antigen CD61)	mediated signal transduction blood coagulation; cell-matrix adhesion; identical protein binding; integrin complex; integrin-mediated signaling pathway; interspecies interaction between organisms; negative regulation of foam cell differentiation; negative regulation of lipid storage; negative regulation of lipid transport; negative regulation of lipoprotein metabolic process; negative regulation of low-density lipoprotein receptor biosynthetic process; platelet alpha granule membrane; receptor activity	Integrin beta chain family
105 ITPR1_HUMAN	ITPR1 (INSP3R1)	Q14643	Inositol 1,4,5-trisphosphate receptor type 1 (Type 1 inositol 1,4,5-trisphosphate receptor) (Type 1 InsP3 receptor) (IP3 receptor isoform 1) (InsP3R1) (IP3R)	calcium ion binding; calcium ion transmembrane transporter activity; calcium ion transport; cell death; endoplasmic reticulum membrane; inositol 1,4,5- trisphosphate-sensitive calcium- release channel activity; inositol- 1,4,5-trisphosphate receptor activity; integral to membrane; platelet dense granule membrane; platelet dense tubular network membrane; protein binding; response to hypoxia; simal transduction	InsP3 receptor family
106 JAM1_HUMAN	F11R (JAM1) (JCAM) (UNQ264/PRO301)	Q9Y624	Junctional adhesion molecule A (JAM-A) (Junctional adhesion molecule 1) (JAM-1) (Platelet adhesion molecule 1) (PAM-1) (Platelet E11 cocontrol (CD antican CD321)	inflammatory response; integral to membrane; interspecies interaction between organisms; tiaht iunction	Immunoglobulin superfamily
107 KALRN_HUMAN	KALRN (DUET) (DUO) (HAPIP) (TRAD)	O60229	(Platelet F11 recentor) (CD anticen CD321) Kalirin (EC 2.7.11.1) (Huntingtin-associated protein-interacting protein) (Protein Duo) (Serine/threonine kinase with Dbl- and pleckstrin homology domain)	ATP binding; Rho guanyl- nucleotide exchange factor activity; actin cytoskeleton; cytoplasm; intracellular signaling cascade; magnesium ion binding; nervous system development; protein amino acid phosphorylation; protein serine/threonine kinase activity; regulation of Rho protein signal transduction; vesicle-mediated transnort	Protein kinase superfamily, CAMK Ser/Thr protein kinase family

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108 KAP2_HUMAN	PRKAR2A (PKR2) (PRKAR2)	P13861	cAMP-dependent protein kinase type II-alpha regulatory subunit	cAMP binding; cAMP-dependent protein kinase complex; cAMP- dependent protein kinase regulator activity; cytoplasm; hormone-mediated signaling; membrane fraction; plasma membrane; regulation of protein	CAMP-dependent kinase regulatory chain family
109 KAP3_HUMAN	PRKAR2B	P31323	cAMP-dependent protein kinase type II-beta regulatory subunit	amino acid nhosnhorvlation Golgi apparatus; cAMP binding; cAMP-dependent protein kinase complex; cAMP-dependent protein kinase regulator activity; centrosome; hormone-mediated signaling; mitochondrion; regulation of protein amino acid	CAMP-dependent kinase regulatory chain family
110 KAPCG_HUMAN	PRKACG	P22612	cAMP-dependent protein kinase catalytic subunit gamma (PKA C-gamma) (EC 2.7.11.11)	nhosnhorvlation ATP binding; cAMP-dependent protein kinase activity; hormone- mediated signaling; male gonad development; protein amino acid phosphorylation; protein kinase cascade: soermatogenesis	Protein kinase superfamily, AGC Ser/Thr protein kinase family, cAMP subfamily
111 KGP1B_HUMAN	PRKG1 (PRKG1B) (PRKGR1B)	P14619	cGMP-dependent protein kinase 1, beta isozyme (cGK 1 beta) (cGKI-beta) (EC 2.7.11.12)	ATP binding; actin cytoskeleton organization; cGMP binding; cGMP-dependent protein kinase activity; cytoplasm; nucleus; protein amino acid phosphorylation; signal transduction	Protein kinase superfamily, AGC Ser/Thr protein kinase family, cGMP subfamily
112 KIF11_HUMAN	KIF11 (EG5) (KNSL1) (TRIP5)	P52732	Kinesin-like protein KIF11 (Kinesin-related motor protein Eg5) (Kinesin-like spindle protein HKSP) (Thyroid receptor-interacting protein 5) (TRIP-5) (Kinesin-like protein 1)	ATP binding; cell division; chromatin remodeling complex; cytoplasm; kinesin complex; microtubule; microtubule motor activity; microtubule-based movement; mitosis; mitotic spindle organization; spindle; spindle body organization	Kinesin-like protein family, BimC subfamily
113 KNG1_HUMAN	KNG1 (BDK) (KNG)	P01042	Kininogen-1 (High molecular weight kininogen) (HMWK) (Williams-Fitzgerald-Flaujeac factor) (Fitzgerald factor) (Alpha-2-thiol proteinase inhibitor) [Cleaved into: Kininogen-1 heavy chair, T-kinin (Ile-Ser-Bradykinin); Bradykinin (Kallidin I); Lysyl-bradykinin (Kallidin II); Kininogen-1 light chain; Low molecular weight growth-promoting factor]	blood coagulation; centrosome; cysteine-type endopeptidase inhibitor activity; diuresis; elevation of cytosolic calcium ion	
114 KPCA_HUMAN	PRKCA (PKCA) (PRKACA)	P17252	Protein kinase C alpha type (PKC-alpha) (PKC-A) (EC 2.7.11.13)		Protein kinase superfamily, AGC Ser/Thr protein kinase family, PKC subfamily
115 KPCB_HUMAN	PRKCB (PKCB) (PRKCB1)	P05771	Protein kinase C beta type (PKC-beta) (PKC-B) (EC 2.7.11.13)	ATP binding; calcium ion binding; cytosol; diacylglycerol binding; intracellular signaling cascade; lipoprotein transport; plasma membrane; protein amino acid phosphorylation; protein binding; protein kinase C activity; zinc ion	Protein kinase superfamily, AGC Ser/Thr protein kinase family, PKC subfamily
116 KPCD_HUMAN	PRKCD	Q05655	Protein kinase C delta type (EC 2.7.11.13) (nPKC-delta)	bindina ATP binding; calcium-independent protein kinase C activity; cytosol; diacylglycerol binding; enzyme activator activity; enzyme binding; insulin receptor substrate binding; intracellular signaling cascade; membrane; negative regulation of insulin receptor signaling pathway; negative regulation of peptidyl- tyrosine phosphorylation; negative regulation of protein binding; nucleus; protein C- terminus binding; protein amino acid phosphorylation; protein stabilization; regulation of receptor activity; senescence; zinc ion binding	

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Protein family
117 KPCT_HUMAN	PRKCQ (PRKCT)	Q04759	Protein kinase C theta type (EC 2.7.11.13) (nPKC-theta)	ATP binding; diacylglycerol binding; intracellular; intracellular signaling cascade; magnesium ion binding; membrane protein ectodomain proteolysis; protein amino acid phosphorylation; protein binding; protein kinase C activity; regulation of cell growth; zinc ion binding	Ser/Thr protein kinase family, PKC subfamily
118 KPYM_HUMAN	PKM2 (PK2) (PK3) (PKM)	P14618	Pyruvate kinase isozymes M1/M2 (EC 2.7.1.40) (Pyruvate kinase muscle isozyme) (Pyruvate kinase 2/3) (Cytosolic thyroid	ATP binding; cytosol; glycolysis; magnesium ion binding; potassium ion binding; protein	Pyruvate kinase family
119 KSR1_HUMAN	KSR1 (KSR)	Q8IVT5	hormone-binding protein) (CTHBP) (THBP1) Kinase suppressor of Ras 1	binding; pyruvate kinase activity ATP binding; Ras protein signal transduction; cytoplasm; diacylglycerol binding; membrane; protein amino acid phosphorylation; protein binding; protein serine/threonine kinase activity; protein tyrosine kinase	Protein kinase superfamily, TKL Ser/Thr protein kinase family
120 LAT_HUMAN	LAT	043561	Linker for activation of T-cells family member 1 (36 kDa phospho-tyrosine adapter protein) (pp36) (p36-38)	activity: zinc ion bindina Ras protein signal transduction; SH3/SH2 adaptor activity; calcium-mediated signaling; immunological synapse; integral to membrane; integrin-mediated signaling pathway; mast cell degranulation; membrane raft; regulation of T cell activation	
121 LEGL_HUMAN 122 LRC47_HUMAN	GRP (HSPC159) LRRC47 (KIAA1185)	Q3ZCW2 Q8N1G4	Galectin-related protein Leucine-rich repeat-containing protein 47	intracellular; sugar binding RNA binding; phenylalanine-tRNA ligase activity; protein binding; translation	
123 LRMP_HUMAN	LRMP (JAW1)	Q12912	Lymphoid-restricted membrane protein (Protein Jaw1) [Cleaved into: Processed lymphoid-restricted membrane protein]	endoplasmic reticulum membrane; integral to plasma membrane; nucleus; vesicle	
124 LRRF2_HUMAN	LRRFIP2	Q9Y608	Leucine-rich repeat flightless-interacting	fusion; vesicle targeting LRR domain binding; Wnt	LRRFIP family
125 LY66F_HUMAN	LY6G6F (C6orf21) (G6F) (LY6G6D) (NG32)	Q5SQ64	protein 2 (LRR FLII-interacting protein 2) Lymphocyte antigen 6 complex locus protein G6f	receptor signaling pathway integral to membrane; plasma membrane	
126 LYN_HUMAN	LYN	P07948	Tyrosine-protein kinase Lyn (EC 2.7.10.2)	ATP binding; Golgi apparatus; erythrocyte differentiation; interspecies interaction between organisms; membrane raft; non- membrane spanning protein tyrosine kinase activity; nucleus; plasma membrane; positive regulation of cell proliferation; positive regulation of STAT protein; protein amino acid phosphorylation; protein binding; receptor signaling protein tyrosine kinase activity; response to hormone stimulus; signal transduction	Protein kinase superfamily, Tyr protein kinase family, SRC subfamily
127 M6PBP_HUMAN	M6PRBP1 (TIP47)	O60664	Mannose-6-phosphate receptor-binding protein 1 (Cargo selection protein TIP47) (47 kDa mannose 6-phosphate receptor-binding protein) (47 kDa MPR-binding protein) (Placental protein 17) (PP17)	Golgi apparatus; endosome membrane; monolayer- surrounded lipid storage body outer lipid monolayer; vesicle- mediated transport	Perilipin family
128 MAVS_HUMAN	MAVS (IPS1) (KIAA1271) (VISA)	Q7Z434	Mitochondrial antiviral-signaling protein (Interferon-beta promoter stimulator protein 1) (IPS-1) (Virus-induced-signaling adapter) (CARD adapter inducing interferon-beta) (Cardif) (Putative NF-kappa-B-activating protein 031N)	innate immune response; integral to membrane; interspecies interaction between organisms; mitochondrial outer membrane; positive regulation of I-kappaB kinase/NF-kappaB cascade; protein binding; response to virus: sional transducer activity	
129 MED7_HUMAN	MED7 (ARC34) (CRSP9)	043513	Mediator of RNA polymerase II transcription subunit 7 (Mediator complex subunit 7) (Cofactor required for Sp1 transcriptional activation subunit 9) (CRSP complex subunit 9) (Transcriptional coactivator CRSP33) (RNA polymerase transcriptional regulation mediator subunit 7 homolog) (hMED7) (Activator- recruited cofactor 34 kDa component) (ARC34)	RNA polymerase II transcription mediator activity; mediator complex; regulation of transcription from RNA polymerase II promoter;	Mediator complex subunit 7 family
130 MFSD6_HUMAN	MFSD6 (MMR2)	Q6ZSS7	Major facilitator superfamily domain- containing protein 6 (Macrophage MHC class I	integral to membrane	Major facilitator superfamily,
131 ML12B_HUMAN	MYL12B (MRLC2) (MYLC2B)	014950	receptor 2 homolog) Myosin regulatory light chain 12B (Myosin regulatory light chain MRLC2) (Myosin regulatory light chain 2-B, smooth muscle isoform) (MLC-2A) (MLC-2) (SHUJUN-1)	calcium ion binding; motor activity; myosin complex	MFSD6 family

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132 MOES_HUMAN	MSN	P26038	Moesin (Membrane-organizing extension spike protein)	apical plasma membrane; cell adhesion molecule binding; cytoplasm; cytoskeletal protein binding; cytoskeletal protein binding; cytoskeleton; extrinsic to membrane; filopodium; leukocyte adhesion; leukocyte migration; membrane to membrane docking; microvillus membrane; receptor binding; structural constituent of cytoskeleton	
133 MOL1B_HUMAN	MOBKL1B (C2orf6) (MOB4B) (MOBK1B)	Q9H8S9	Mps one binder kinase activator-like 1B (Mob1 homolog 1B) (Mob1 alpha) (Mob1A) (Protein Mob4B)	protein binding; zinc ion binding	MOB1/phocein family
134 MRVI1_HUMAN	MRVI1 (IRAG) (JAW1L)	Q9Y6F6	Protein MRVI1 (Inositol 1,4,5-triphosphate receptor-associated cGMP kinase substrate) (JAW1-related protein MRVI1)	endoplasmic reticulum membrane; integral to membrane; nucleus; perinuclear region of cytoplasm; sarcoplasmic reticulue	
135 MTPN_HUMAN	MTPN	P58546	Myotrophin (Protein V-1)	reticulum cell growth; cytoplasm; protein binding; regulation of striated muscle development; regulation of translation	Myotrophin family
136 MY18A_HUMAN	MYO18A (KIAA0216) (MYSPDZ)	Q92614	Myosin-XVIIIa (Myosin containing a PDZ domain) (Molecule associated with JAK3 N- terminus) (MAJN)	ATP binding; ER-Golgi intermediate compartment; anti- apoptosis; identical protein binding; motor activity; myosin complex	
137 MYCPP_HUMAN	DENND4A (IRLB) (MYCPBP)	Q7Z401	C-myc promoter-binding protein (DENN domain-containing protein 4A)	DNA binding; nucleus; protein binding; regulation of transcription, DNA-dependent; transcription	
138 MYCT1_HUMAN	MYCT1 (MTLC) (MTMC1)	Q8N699	Myc target protein 1 (Myc target in myeloid cells protein 1)	nucleus	MYCT1 family
139 MYH9_HUMAN	мүнэ	P35579	Myosin-9 (Myosin heavy chain 9) (Myosin heavy chain, non-muscle IIa) (Non-muscle myosin heavy chain IIa) (NMMHC II-a) (NMMHC-IIA) (Cellular myosin heavy chain, type A) (Non-muscle myosin heavy chain A) (NMMHC-A)	ADP binding; ATP binding; actin cytoskeleton reorganization; actin filament binding; actin filament- based movement; actin- dependent ATPase activity; angiogenesis; blood vessel endothelial cell migration; calmodulin binding; cleavage furrow; contractile ring; cytokinesis; cytosol; integrin- mediated signaling pathway; leukocyte migration; membrane protein ectodomain proteolysis; microfilament motor activity; monocyte differentiation; myosin complex; nucleus; platelet formation; protein anchor; protein homodimerization activity; protein transport; regulation of cell shape; ruffle; sensory perception of sound; transe fileme unpend.	
140 MYLK_HUMAN	MYLK (MLCK)	Q15746	Myosin light chain kinase, smooth muscle (MLCK) (EC 2.7.11.18) (Telokin) (Kinase- related protein) (KRP)	calmodulin binding; magnesium ion binding; myosin light chain kinase activity; protein amino acid phosphorylation	Protein kinase superfamily, CAMK Ser/Thr protein kinase family
141 MYPT1_HUMAN	PPP1R12A (MBS) (MYPT1)	014974	Protein phosphatase 1 regulatory subunit 12A (Myosin phosphatase-targeting subunit 1) (Myosin phosphatase target subunit 1) (Protein phosphatase myosin-binding subunit)	cytoplasm; protein binding; signal transducer activity	
142 NAAA_HUMAN	NAAA (ASAHL) (PLT)	Q02083	N-acylethanolamine-hydrolyzing acid amidase (EC 3.5.1) (N-acylsphingosine amidohydrolase-like) (ASAH-like protein) (Acid ceramidase-like protein)	process; lysosome	Acid ceramidase family
143 NBEL2_HUMAN	NBEAL2 (KIAA0540) (UNQ253/PRO290)	Q6ZNJ1	Neurobeachin-like protein 2	binding	WD repeat neurobeachin family
144 NEB2_HUMAN	PPP1R9B (PPP1R6)	Q96SB3	Neurabin-2 (Neurabin-II) (Spinophilin) (Protein phosphatase 1 regulatory subunit 9B)	RNA splicing; actin binding; cell cycle arrest; cell differentiation; cell junction; cytoskeleton; dendritic spine; negative regulation of cell growth; nervous system development; nucleoplasm; phosphoprotein phosphatase inhibitor activity; protein phosphatase 1 binding; protein phosphatase type 1 complex; regulation of cell growth by extracellular stimulus; regulation of cell proliferation; regulation of exit from mitosis; synapse	
145 NEXN_HUMAN	NEXN	Q0ZGT2	Nexilin (F-actin binding protein) (Nelin)	sunance actin filament binding; cell- substrate adherens junction; cytoplasm; cytoskeleton; regulation of cell migration; regulation of cytoskeleton organization	

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146 NFAC1_HUMAN	NFATC1 (NFAT2) (NFATC)	095644	Nuclear factor of activated T-cells, cytoplasmic 1 (NF-ATc1) (NFAT transcription complex cytosolic component) (NF-ATc) (NFATc)	FK506 binding; cytoplasm; intracellular signaling cascade; nucleus; regulation of transcription, DNA-dependent; transcription factivator activity; transcription factor activity; transcription from RNA polymerase II promoter	
147 NHRF1_HUMAN	SLC9A3R1 (NHERF) (NHERF1)	014745	Na(+)/H(+) exchange regulatory cofactor NHE RF1 (NHERF-1) (Ezrin-radixin-moesin-binding phosphoprotein 50) (EBP50) (Regulatory cofactor of Na(+)/H(+) exchanger) (Sodium- hydrogen exchanger regulatory factor 1) (Solute carrier family 9 isoform A3 regulatory factor 1)		
148 NP1L1_HUMAN	NAP1L1 (NRP)	P55209	Nucleosome assembly protein 1-like 1 (NAP-1- related protein) (hNRP)		Nucleosome assembly protein (NAP) family
149 NP1L4_HUMAN	NAP1L4 (NAP2)	Q99733	Nucleosome assembly protein 1-like 4 (Nucleosome assembly protein 2) (NAP2)	chromatin assembly complex; cytoplasm; nucleosome assembly; unfolded protein binding	Nucleosome assembly protein (NAP) family
150 NSF1C_HUMAN	NSFL1C (UBXN2C)	Q9UNZ2	NSFL1 cofactor p47 (p97 cofactor p47) (UBX domain-containing protein 2C)	Golgi stack; lipid binding; nucleus; protein binding	NSFL1C family
151 ODPA_HUMAN	PDHA1 (PHE1A)	P08559	Very and the second sec	glycolysis; mitochondrial matrix; oxidation reduction; protein binding; pyruvate dehydrogenase (acetyl-transferring) activity	
152 OSTF1_HUMAN	OSTF1	Q92882	Osteoclast-stimulating factor 1	cytoplasm; identical protein binding; ossification; signal transduction	
153 PA24A_HUMAN	PLA2G4A (CPLA2) (PLA2G4)	P47712	Cytosolic phospholipase A2 (CPLA2) (Phospholipase A2 group IVA) [Includes: Phospholipase A2 (EC 3.1.1.4) (Phosphatidylcholine 2-acylhydrolase); Lysophospholipase (EC 3.1.1.5)]	calcium ion binding; cytoplasmic vesicle; cytosol; icosanoid metabolic process; integral to membrane; lysophospholipase activity; phospholipase A2 activity; phospholipad catabolic process; platelet activating factor biosvnthetic process	
154 PAK2_HUMAN	PAK2	Q13177	Serine/threonine-protein kinase PAK 2 (EC 2.7.11.1) (p21-activated kinase 2) (PAK-2) (Gamma-PAK) (PAK65) (S6/H4 kinase) (p58) [Cleaved into: PAK-2p27 (p27); PAK-2p34 (p34) (C-t-PAK2)]	ATP binding; apoptosis; cytosol; identical protein binding; interspecies interaction between organisms; membrane; negative regulation of protein kinase activity; nucleus; perinuclear region of cytoplasm; protein amino acid autophosphorylation; protein serine/threonine kinase activity; regulation of growth;	Protein kinase superfamily, STE Ser/Thr protein kinase family, STE20 subfamily
155 PARD3_HUMAN	PARD3 (PAR3) (PAR3A)	Q8TEW0	Partitioning defective 3 homolog (PARD-3) (PAR-3) (Atypical PKC isotype-specific- interacting protein) (ASIP) (CTCL tumor antigen se2-5) (PAR3-alpha)	cinnal transduction activation of protein kinase C activity by G-protein coupled receptor protein signaling pathway; asymmetric cell division; axonogenesis; cell cortex; cell cycle; endomembrane system; establishment or maintenance of cell polarity; protein binding; protein complex assembly; tight junction	PAR3 family
156 PARVB_HUMAN	PARVB (CGI-56)	Q9HBI1	Beta-parvin (Affixin)	actin binding; cell adhesion; cytoplasm; cytoskeleton; focal adhesion	Parvin family
157 PDLI1_HUMAN	PDLIM1 (CLIM1) (CLP36)	000151	PDZ and LIM domain protein 1 (Elfin) (LIM domain protein CLP-36) (C-terminal LIM domain protein 1)	cytoplasm; cytoskeleton; response to oxidative stress; zinc ion binding	
158 PDLI5_HUMAN	PDLIM5 (ENH) (L9)	Q96HC4	PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	actin binding; actin cytoskeleton; actinin binding; cytosol; membrane fraction; protein kinase C binding; zinc ion binding	
159 PEAR1_HUMAN	PEAR1 (MEGF12)	Q5VY43	Platelet endothelial aggregation receptor 1 (hPEAR1) (Multiple epidermal growth factor- like domains 12) (Multiple EGF-like-domains	integral to membrane; plasma membrane	MEGF family
160 PGK1_HUMAN	PGK1 (PGKA) (MIG10) (OK/SW- cl.110)	P00558	12) Phosphoglycerate kinase 1 (EC 2.7.2.3) (Primer recognition protein 2) (PRP 2) (Cell migration-inducing gene 10 protein)	ATP binding; cytoplasm; glycolysis; phosphoglycerate kinase activity: phosphorylation	Phosphoglycerate kinase family
161 PGM2L_HUMAN	PGM2L1 (BM32A)	Q6PCE3	Glucose 1,6-bisphosphate synthase (EC 2.7.1.106) (Phosphoglucomutase-2-like 1) (PMMLP)	kinase activity; phosphorylation glucose metabolic process; glucose-1,6-bisphosphate synthase activity; intramolecular transferase activity,	Phosphohexose mutase family
162 PGRC1_HUMAN	PGRMC1 (HPR6.6) (PGRMC)	O00264	Membrane-associated progesterone receptor component 1 (mPR)	phosphotransferases cell surface; endoplasmic reticulum membrane; heme binding; integral to plasma membrane; microsome; nucleolus; protein binding; receptor activitv: steroid bindina	Cytochrome b5 family, MAPR subfamily

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Protein family
163 PGRC2_HUMAN	PGRMC2 (DG6) (PMBP)	015173	Membrane-associated progesterone receptor component 2 (Progesterone membrane- binding protein) (Steroid receptor protein DG6)	heme binding; integral to membrane; steroid binding; steroid hormone receptor activity	Cytochrome b5 family, MAPR subfamily
164 PIWL3_HUMAN	PIWIL3	Q7Z3Z3	Piwi-like protein 3	RNA binding; cell differentiation; cytoplasm; gene silencing by RNA; meiosis; multicellular organismal development; regulation of translation; soermatoaenesis	Argonaute family, Piwi subfamily
165 PKHO2_HUMAN	PLEKHO2 (PLEKHQ1) (PP9099)	Q8TD55	Pleckstrin homology domain-containing family O member 2 (Pleckstrin homology domain- containing family Q member 1)	Spermatouenesis	
166 PLEC1_HUMAN	PLEC1	Q15149	Plectin-1 (PLTN) (PCN) (Hemidesmosomal protein 1) (HD1)	actin binding; cytoplasm; cytoskeleton; plasma membrane; structural constituent of muscle	Plakin or cytolinker family
167 PLEK_HUMAN	PLEK (P47)	P08567	Pleckstrin (Platelet p47 protein)	actin cytoskeleton reorganization; cortical actin cytoskeleton organization; cytoplasm; hemopoietic progenitor cell differentiation; inhibition of phospholipase C activity involved in G-protein coupled receptor signaling pathway; integrin- mediated signaling pathway; regulation of calcium-mediated signaling; negative regulation of inositol phosphate biosynthetic process; phosphate binding; phosphatidylinositol-3,4- bisphosphate binding; phosphatidylinositide metabolic process; platelet aggregation; positive regulation of actin filament bundle formation; positive regulation of actin filament depolymerization; positive regulation of inositol- polyphosphate 5-phosphatase activity; positive regulation of integrin activation; positive; protein homodimerization activity; protein kinase C binding; protein kinase C signaling	
168 PP12C_HUMAN	PPP1R12C (LENG3) (MBS85)	Q9BZL4	Protein phosphatase 1 regulatory subunit 12C (Protein phosphatase 1 myosin-binding subunit of 85 kDa) (Protein phosphatase 1 myosin-binding subunit p85)	cascade: protein secretion by cytoplasm	
169 PP14A_HUMAN	PPP1R14A (CPI17) (PPP1INL)	Q96A00	Protein phosphatase 1 regulatory subunit 14A (17 kDa PKC-potentiated inhibitory protein of PP1) (CPI-17)	cytoplasm; phosphoprotein phosphatase inhibitor activity; protein binding; regulation of phosphorylation	PP1 inhibitor family
170 PPR3E_HUMAN 171 PSA3_HUMAN	PPP1R3E PSMA3 (PSC8)	Q9H7J1 P25788	Protein phosphatase 1 regulatory subunit 3E Proteasome subunit alpha type-3 (EC 3.4.25.1) (Proteasome component C8) (Macropain subunit C8) (Multicatalytic endopeptidase complex subunit C8)	glycogen metabolic process anaphase-promoting complex- dependent proteasomal ubiquitin- dependent proteasomal ubiquitin- process; cytoskeleton; cytosol; negative regulation of ubiquitin- protein ligase activity during mitotic cell cycle; nucleus; positive regulation of ubiquitin- protein ligase activity during mitotic cell cycle; proteasome core complex; protein binding; threonine-type endopeptidase artivity	Peptidase T1A family
172 PTN12_HUMAN	PTPN12	Q05209	Tyrosine-protein phosphatase non-receptor type 12 (EC 3.1.3.48) (Protein-tyrosine phosphatase G1) (PTPG1) (PTP-PEST)	SH3 domain binding; non- membrane spanning protein tyrosine phosphatase activity; protein amino acid dephosphorylation; soluble fraction	Protein-tyrosine phosphatase family, Non- receptor class 4 subfamily
1 73 PTN6_HUMAN	PTPN6 (HCP) (PTP1C)	P29350	Tyrosine-protein phosphatase non-receptor type 6 (EC 3.1.3.48) (Protein-tyrosine phosphatase 1C) (PTP-1C) (Hematopoietic cell protein-tyrosine phosphatase) (SH-PTP1) (Protein-tyrosine phosphatase SHP-1)	G-protein coupled receptor protein signaling pathway; apoptosis; cytosol; membrane; nucleus; protein amino acid dephosphorylation; protein binding; protein tyrosine phosphatase activity	Protein-tyrosine phosphatase family, Non- receptor class 2 subfamily
174 PTPRA_HUMAN	PTPRA (PTPA) (PTPRL2)	P18433	Receptor-type tyrosine-protein phosphatase alpha (Protein-tyrosine phosphatase alpha) (R- PTP-alpha) (EC 3.1.3.48)	integral to plasma membrane;	Protein-tyrosine phosphatase family, Receptor class 4 subfamily

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175 PURA_HUMAN	PURA (PUR1)	Q00577	Transcriptional activator protein Pur-alpha (Purine-rich single-stranded DNA-binding protein alpha)	DNA replication factor A complex; DNA replication initiation; DNA unwinding during replication; RNA polymerase II transcription factor activity, enhancer binding; double- stranded telomeric DNA binding; nuclear chromosome, telomeric region; single-stranded DNA binding; transcription; transcription;	protein family
176 PURB_HUMAN	PURB	Q96QR8	Transcriptional activator protein Pur-beta (Purine-rich element-binding protein B)	DNA replication factor A complex; mRNA binding; regulation of myeloid cell differentiation; single- stranded DNA binding; transcription; transcription factor binding	protein family
177 PXDC2_HUMAN	PLXDC2 (TEM7R)	Q6UX71	Plexin domain-containing protein 2 (Tumor	integral to membrane	Plexin family
178 RAB7A_HUMAN	(UNQ2514/PRO6003) RAB7A (RAB7)	P51149	endothelial marker 7-related protein) Ras-related protein Rab-7a	GTP binding; GTPase activity; Golgi apparatus; endocytosis; late endosome; lysosome; melanosome; phagocytic vesicle; protein binding; protein transport; small GTPase mediated	Small GTPase superfamily, Rab family
179 RGC32_HUMAN	RGC32 (C13orf15)	Q9H4X1	Response gene to complement 32 protein (RGC-32)	signal transduction cell cycle; centrosome; nucleus; regulation of cyclin-dependent	
180 RGS18_HUMAN	RGS18 (RGS13)	Q9NS28	Regulator of G-protein signaling 18 (RGS18)	protein kinase activity cytoplasm; negative regulation of signal transduction; signal transducer activity	
181 RHDF2_HUMAN	RHBDF2 (RHBDL5) (RHBDL6)	Q6PJF5	Rhomboid family member 2 (Rhomboid 5 homolog 2) (Rhomboid veinlet-like protein 5) (Rhomboid veinlet-like protein 6)	endoplasmic reticulum membrane; integral to membrane	Peptidase S54 family
182 RHG01_HUMAN	ARHGAP1 (CDC42GAP) (RHOGAP1)	Q07960	Rho GTPase-activating protein 1 (Rho-type GTPase-activating protein 1) (Rho-related small GTPase protein activator) (GTPase- activating protein rhoGGAP) (p50-RhoGAP)	Rho protein signal transduction; SH3 domain binding; SH3/SH2 adaptor activity; cytoplasm; intracellular membrane-bounded organelle	
183 RHG06_HUMAN	ARHGAP6 (RHOGAP6)	043182	(CDC42 GTPase-activating protein) Rho GTPase-activating protein 6 (Rho-type GTPase-activating protein 6) (Rho-type GTPase-activating protein RhoGAPX-1)	Rho GTPase activator activity; Rho protein signal transduction; SH3 domain binding; SH3/SH2 adaptor activity; actin filament; actin filament polymerization; cytoplasm; negative regulation of focal adhesion formation; negative regulation of stress fiber formation; regulation of GTPase activity	
184 RHG17_HUMAN	ARHGAP17 (RICH1) (MSTP066) (MSTP110)	Q68EM7	Rho GTPase-activating protein 17 (Rho-type GTPase-activating protein 17) (RhoGAP interacting with CIP4 homologs protein 1) (RICH-1)	GTPase activator activity; SH3 domain binding; cytoplasm; signal transduction; tight junction	
185 RHG18_HUMAN	ARHGAP18	Q8N392	Rho GTPase-activating protein 18 (Rho-type GTPase-activating protein 18) (MacGAP)	GTPase activator activity; intracellular; protein binding; signal transduction	
186 RICS_HUMAN	RICS (GRIT) (KIAA0712)	Α7ΚΑΧ9	Rho/Cdc42/Rac GTPase-activating protein RICS (p200RhoGAP) (p250GAP) (RhoGAP involved in the beta-catenin-N-catherin and NMDA receptor signaling) (Brain-specific Rho GTPase-activating protein) (GAB-associated Cdc42/Rac GTPase-activating protein) (GC- GAP) (GTPase regulator interacting with TrkA)	GTPase activator activity; Golgi membrane; cell cortex; cell junction; dendritic spine; endoplasmic reticulum membrane; endosome membrane; phosphoinositide binding; postsynaptic density; postsynaptic membrane; protein	PX domain- containing GAP family
187 RLA1_HUMAN	RPLP1 (RRP1)	P05386	60S acidic ribosomal protein P1	binding: signal transduction RNA binding; cytosolic large ribosomal subunit; protein binding; structural constituent of ribosome; translational elonaation	Ribosomal protein L12P family
188 RPGP2_HUMAN	GARNL4 (KIAA1039) (RAP1GA2)	Q684P5	Rap1 GTPase-activating protein 2 (Rap1GAP2) (GTPase-activating Rap/Ran-GAP domain-like protein 4)	GTPase activator activity; perinuclear region of cytoplasm; regulation of small GTPase	
189 RTN1_HUMAN	RTN1 (NSP)	Q16799	Reticulon-1 (Neuroendocrine-specific protein)	mediated signal transduction integral to endoplasmic reticulum membrane; neuron differentiation; signal transducer	
190 RTN4_HUMAN	RTN4 (KIAA0886) (NOGO) (My043) (SP1507)	Q9NQC3	Reticulon-4 (Neurite outgrowth inhibitor) (Nogo protein) (Foocen) (Neuroendocrine- specific protein) (NSP) (Neuroendocrine- specific protein C homolog) (RTN-x) (Reticulon- 5)	regulation of axon extension; nuclear envelope; protein binding; regulation of apoptosis;	
191 S39A9_HUMAN	SLC39A9 (ZIP9) (UNQ714/PRO1377)	Q9NUM3	Zinc transporter ZIP9 (Zrt- and Irt-like protein 9) (ZIP-9) (Solute carrier family 39 member 9)	reculation of cell micration Golgi apparatus; integral to membrane; metal ion transmembrane transporter activity; nucleolus; zinc ion biddin priorito transporter	ZIP transporter (TC 2.A.5) family
192 SAM14_HUMAN	SAMD14	Q8IZD0	Sterile alpha motif domain-containing protein 14	bindina: zinc ion transport	

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193 SCAM2_HUMAN	SCAMP2	015127	Secretory carrier-associated membrane protein 2 (Secretory carrier membrane protein 2)	integral to membrane; post-Golgi vesicle-mediated transport; protein binding; protein transport; recycling endosome membrane; trans-Golgi network membrane	SCAMP family
194 SDPR_HUMAN	SDPR	095810	Serum deprivation-response protein (Phosphatidylserine-binding protein) (PS-p68)	caveola; cytosol; phosphatidylserine binding; protein binding	PTRF/SDPR family
195 SEPT2_HUMAN	SEPT2 (DIFF6) (KIAA0158) (NEDD5)	Q15019	Septin-2 (Neural precursor cell expressed developmentally down-regulated protein 5) (NEDD-5)	GTP binding; cell division; mitosis; nucleus; protein binding; septin complex; spindle	Septin family
196 SEPT5_HUMAN	SEPT5 (PNUTL1)	Q99719	Septin-5 (Peanut-like protein 1) (Cell division control-related protein 1) (CDCrel-1)	GTP binding; GTPase activity; cell cycle; cytokinesis; plasma membrane; septin complex; structural molecule activity; synaptic vesicle; synaptic vesicle taraetino	Septin family
197 SEPT6_HUMAN	SEPT6 (KIAA0128) (SEP2)	Q14141	Septin-6	GTP binding; cell cycle; cytokinesis; nucleus; protein binding; septin complex	Septin family
198 SEPT7_HUMAN	SEPT7 (CDC10)	Q16181	Septin-7 (CDC10 protein homolog)	GTP binding; condensed chromosome kinetochore; cytokinesis; mitosis; nucleus; protein binding; protein heterooligomerization; septin complex; spindle; stress fiber; structural molecule activitv	Septin family
199 SFR19_HUMAN	SCAF1 (SFRS19) (SRA1)	Q9H7N4	Splicing factor, arginine/serine-rich 19 (Serine arginine-rich pre-mRNA splicing factor SR-A1) (SR-A1) (SR-related-CTD-associated factor) (SCAF)	RNA binding; RNA splicing; mRNA processing; nucleus	Splicing factor SR family
200 SKA2_HUMAN	FAM33A (SKA2)	Q8WVK7	(Protein FAM33A)	cell division; chromosome segregation; microtubule binding; mitotic anaphase; outer kinetochore of condensed chromosome; regulation of microtubule polymerization or depolymerization; spindle microtubule	SKA2 family
201 SKAP2_HUMAN	SKAP2 (PRAP) (RA70) (SAPS) (SCAP2) (SKAP55R)	075563	Src kinase-associated phosphoprotein 2 (Src family-associated phosphoprotein 2) (Src kinase-associated phosphoprotein 55-related protein) (SKAP55 homolog) (SKAP-55HOM) (SKAP-HOM) (Src-associated adapter protein with PH and SH3 domains) (Pyk2/RAFTK- associated protein) (Retinoic acid-induced protein 70)	B cell activation; SH3/SH2 adaptor activity; cytoplasm; plasma membrane; protein complex assembly; signal transduction	SKAP family
202 SKIV2_HUMAN	SKIV2L (DDX13) (SKI2W) (SKIV2) (W)	Q15477	Helicase SKI2W (EC 3.6.1) (Helicase-like protein) (HLP)	ATP binding; ATP-dependent RNA helicase activity; RNA binding; nucleus; protein binding	Helicase family, SKI2 subfamily
203 SL9A1_HUMAN	SLC9A1 (APNH1) (NHE1)	P19634	Sodium/hydrogen exchanger 1 (Na(+)/H(+) exchanger 1) (NHE-1) (Solute carrier family 9 member 1) (Na(+)/H(+) antiporter, amiloridesensitive) (APNH)	integral to membrane; regulation of pH; sodium ion binding; sodium ion transport	Monovalent cation:proton antiporter 1 (CPA1) transporter (TC 2.A.36) family
204 SL9A9_HUMAN	SLC9A9 (NHE9) (Nbla00118)	Q8IVB4	Sodium/hydrogen exchanger 9 (Na(+)/H(+) exchanger 9) (NHE-9) (Solute carrier family 9 member 9)	integral to membrane; late endosome membrane; recycling endosome; regulation of pH; sodium ion binding; sodium ion transport; sodium:hydrogen	Monovalent cation:proton antiporter 1 (CPA1) transporter (TC
205 SLAI2_HUMAN	SLAIN2 (KIAA1458)	Q9P270	SLAIN motif-containing protein 2	antiporter activitv	2.A.36) family SLAIN motif-
206 SLK_HUMAN	SLK (KIAA0204) (STK2)	Q9H2G2	STE20-like serine/threonine-protein kinase (STE20-like kinase) (hSLK) (EC 2.7.11.1) (STE20-related serine/threonine-protein kinase) (STE20-related kinase) (Serine/threonine-protein kinase 2) (CTCL tumor anticen se20-9)	ATP binding; DNA binding; apoptosis; cytoplasm; nuclease activity; nucleotide-excision repair; protein amino acid phosphorylation; protein serine/threonine kinase activity	containing family Protein kinase superfamily, STE Ser/Thr protein kinase family, STE20 subfamily
207 SNTB1_HUMAN	SNTB1 (SNT2B1)	Q13884	Beta-1-syntrophin (59 kDa dystrophin- associated protein A1 basic component 1) (DAPA1B) (Tax interaction protein 43) (TIP-43) (Syntrophin-2) (BSYN2)	actin binding; calcium ion binding; calmodulin binding; cell junction; cytoplasm; cytoskeleton; dystrophin- associated glycoprotein complex; muscle contraction: sarcolemma	Syntrophin family
208 SPAG1_HUMAN	SPAG1	Q07617	Sperm-associated antigen 1 (Infertility-related sperm protein Spag-1) (HSD-3.8)	GTP binding; cytoplasm; hydrolase activity; single fertilization	
209 SPTB2_HUMAN	SPTBN1 (SPTB2)	Q01082	Spectrin beta chain, brain 1 (Spectrin, non- erythroid beta chain 1) (Beta-II spectrin) (Fodrin beta chain)	M band; actin binding; barbed- end actin filament capping; calmodulin binding; nucleolus; plasma membrane; spectrin; structural constituent of cvtoskeleton	Spectrin family
210 SREC_HUMAN	SCARF1 (KIAA0149) (SREC)	Q14162	Endothelial cells scavenger receptor (Acetyl LDL receptor) (Scavenger receptor class F member 1)	cell adhesion; cholesterol catabolic process; integral to membrane; low-density lipoprotein binding; receptor- mediated endocytosis; scavenger receptor activity	

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211 STIM1_HUMAN	STIM1 (GOK)	Q13586	Stromal interaction molecule 1	activation of store-operated calcium channel activity; calcium ion binding; calcium ion transport; detection of calcium ion; integral to endoplasmic reticulum membrane; integral to plasma membrane; protein	
212 SYTL3_HUMAN	SYTL3 (SLP3)	Q4VX76	Synaptotagmin-like protein 3 (Exophilin-6)	hindina Rab GTPase binding; endomembrane system; intracellular protein transport;	
213 SYTL4_HUMAN	SYTL4	Q96C24	Synaptotagmin-like protein 4 (Exophilin-2) (Granuphilin)	membrane; zinc ion binding Rab GTPase binding; exocytosis; extrinsic to membrane; intracellular protein transport; neurexin binding; phospholipid binding; plasma membrane; secretory granule membrane; synaptic vesicle; transporter activity: zinc ion bindina	
214 T22D4_HUMAN	TSC22D4 (TILZ2)	Q9Y3Q8	TSC22 domain family protein 4 (TSC22-related inducible leucine zipper protein 2) (Tsc-22-like protein THG-1)	cytoplasm; nucleus; protein	TSC-22/Dip/Bun family
215 TA2R_HUMAN	TBXA2R	P21731	Thromboxane A2 receptor (TXA2-R) (Prostanoid TP receptor)	G-protein coupled receptor protein signaling pathway; integral to plasma membrane; thromboxane A2 receptor activity	G-protein coupled receptor 1 family
216 TAC2N_HUMAN	TC2N (C14orf47) (MTAC2D1)	Q8N9U0	Tandem C2 domains nuclear protein (Membrane targeting tandem C2 domain- containing protein 1) (Tandem C2 protein in nucleus) (Tac2-N)	nucleus	
217 TAGL2_HUMAN	TAGLN2 (KIAA0120) (CDABP0035)	P37802	Transgelin-2 (SM22-alpha homolog)	cytoskeleton; muscle organ development; nuclear membrane; plasma membrane; protein binding	Calponin family
218 TBA3C_HUMAN	TUBA3C (TUBA2); TUBA3D	Q13748	Tubulin alpha-3C/D chain (Alpha-tubulin 3C/D) (Tubulin alpha-2 chain) (Alpha-tubulin 2)	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein binding; protein complex; protein polymerization; structural molecule activity	Tubulin family
219 TBA4A_HUMAN	TUBA4A (TUBA1)	P68366	Tubulin alpha-4A chain (Tubulin alpha-1 chain) (Alpha-tubulin 1) (Testis-specific alpha- tubulin) (Tubulin H2-alpha)	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein binding; protein complex; protein polymerization; structural molecule activity	Tubulin family
220 TBB1_HUMAN	TUBB1	Q9H4B7	Tubulin beta-1 chain	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein complex; protein polymerization	Tubulin family
221 TBB3_HUMAN	TUBB3 (TUBB4)	Q13509	Tubulin beta-3 chain (Tubulin beta-III) (Tubulin beta-4)		Tubulin family
222 TBB4_HUMAN	TUBB4 (TUBB5)	P04350	Tubulin beta-4 chain (Tubulin 5 beta)	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein complex; protein polymerization; structural molecule activity	Tubulin family
223 TBB5_HUMAN	TUBB (TUBB5) (OK/SW-cl.56)	P07437	Tubulin beta chain (Tubulin beta-5 chain)		Tubulin family
224 TBB6_HUMAN	TUBB6	Q9BUF5	Tubulin beta-6 chain	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein complex; protein polymerization; structural molecule activity	Tubulin family
225 TBB8_HUMAN	TUBB8	Q3ZCM7	Tubulin beta-8 chain	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein complex; protein polymerization; structural molecule activity	Tubulin family
226 TEBP_HUMAN	PTGES3 (P23) (TEBP)	Q15185	Prostaglandin E synthase 3 (EC 5.3.99.3) (Cytosolic prostaglandin E2 synthase) (cPGES) (Telomerase-binding protein p23) (Hsp90 co- chaperone) (Progesterone receptor complex p23)	chromosome, telomeric region; cytoplasm; prostaglandin biosynthetic process; prostaglandin-E synthase activity; signal transduction; telomerase activity; telomerase holoenzyme complex; telomere maintenance; unfolded protein binding	P23/wos2 family
227 TENS1_HUMAN	TNS1 (TNS)	Q9HBL0	Tensin-1	actin binding; cytoplasm; cytoskeleton; focal adhesion	

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228 TGFI1_HUMAN	TGFB111 (ARA55)	043294	Transforming growth factor beta-1-induced transcript 1 protein (Hydrogen peroxide- inducible clone 5 protein) (Hic-5) (Androgen receptor-associated protein of 55 kDa)	I-SMAD binding; Wnt receptor signaling pathway; androgen receptor signaling pathway; androgen receptor signaling pathway; cell adhesion; cell differentiation; cytoplasm; cytoskeleton; focal adhesion; negative regulation of cell proliferation; negative regulation of transforming growth factor beta receptor signaling pathway; nuclear matrix; positive regulation of epithelial to mesenchymal transition; positive regulation of transforming prowth factor beta receptor signaling pathway; nuclear matrix; positive regulation of ransforming powth factor beta receptor signaling transcription coactivator activity; transcription coactivator activity; transcription from RNA polymerase II promoter; ubiquitin dependent SMAD protein catabolic process; zinc ion	
229 TJAP1_HUMAN	TJAP1 (PILT) (TJP4)	Q5JTD0	Tight junction-associated protein 1 (Tight junction protein 4) (Protein incorporated later into tight junctions)	Golgi apparatus; protein binding; tight junction	
230 TLN1_HUMAN	TLN1 (KIAA1027) (TLN)	Q9Y490	Talin-1	LIM domain binding; actin binding; cell motion; cell-cell junction; cell-cell junction assembly; cytoplasm; cytoskeletal anchoring at plasma membrane; cytoskeleton; focal adhesion; intracellular membrane- bounded organelle; ruffle membrane; structural constituent of cytoskeleton: vinculin bindina	
231 TMBI1_HUMAN	TMBIM1 (RECS1) (PP1201) (PSEC0158)	Q969X1	Transmembrane BAX inhibitor motif-containing protein 1 (Protein RECS1 homolog)	integral to membrane	BI1 family
232 TMM40_HUMAN 233 TMOD3_HUMAN	TMEM40 TMOD3	Q8WWA1 Q9NYL9	Transmembrane protein 40 Tropomodulin-3 (Ubiquitous tropomodulin) (U- Tmod)	integral to membrane actin binding; cytoplasm; cytoskeleton; tropomyosin binding	Tropomodulin family
234 TMX1_HUMAN	TMX1 (TMX) (TXNDC) (TXNDC1) (PSEC0085) (UNQ235/PRO268)	Q9H3N1	Thioredoxin-related transmembrane protein 1 (Thioredoxin domain-containing protein 1) (Transmembrane Trx-related protein)	DNA replication; ER to Golgi vesicle-mediated transport; anti- apoptosis; arsenate reductase (thioredoxin) activity; cell proliferation; cell redox homeostasis; disulfide oxidoreductase activity; electron transport chain; endoplasmic reticulum membrane; integral to membrane; leukocyte activation; membrane fraction; nucleus; positive regulation of transcription, DNA-dependent; response to stress; signal transduction	
235 TNIK_HUMAN	TNIK (KIAA0551)	Q9UKE5	TRAF2 and NCK-interacting protein kinase (EC 2.7.11.1)	ATP binding; JNK cascade; protein amino acid phosphorylation; protein binding; protein serine/threonine kinase activity; small GTPase regulator activity	Protein kinase superfamily, STE Ser/Thr protein kinase family, STE20 subfamily
236 TPC1_HUMAN	TPCN1 (KIAA1169) (TPC1)	Q9ULQ1	Two pore calcium channel protein 1 (Voltage- dependent calcium channel protein TPC1)	calcium channel activity; calcium ion binding; calcium ion transport; integral to membrane; voltage-gated ion channel activity	alpha-1 subunit (TC 1.A.1.11)
237 TPM1_HUMAN	TPM1 (C15orf13) (TMSA)	P09493	Tropomyosin alpha-1 chain (Tropomyosin-1) (Alpha-tropomyosin)	actin binding; bleb; cardiac muscle contraction; cell motion; cellular response to reactive oxygen species; muscle filament sliding; muscle thin filament tropomyosin; negative regulation of cell migration; positive regulation of cell migration; positive regulation of heart rate by epinephrine; positive regulation of stress fiber formation; regulation of muscle contraction; ruffle membrane; ruffle organization; sarcomere organization; structural constituent of cytoskeleton; structural constituent of muscle; ventricular cardiac muscle morphogenesis;	Tropomyosin family
				wound hoaling	
238 TRAD1_HUMAN	TRAFD1 (FLN29)	014545	TRAF-type zinc finger domain-containing	intracellular; protein binding; zinc	

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239 TRPC6_HUMAN	TRPC6 (TRP6)	Q9Y210	Short transient receptor potential channel 6 (TrpC6)	calcium ion binding; calcium ion transport; integral to membrane; plasma membrane; protein binding	Transient receptor family, STrpC subfamily
240 TSP1_HUMAN	THBS1 (TSP) (TSP1)	P07996	Thrombospondin-1	activation of MAPK activity; anti- apoptosis; calcium ion binding; cell adhesion; cell cycle arrest; cell migration; cell cycle arrest; cell migration; cell cycle arrest; cell antesion; cell cycle arrest; cell antesion; cell cycle arrest; cell antesion; cell cycle arrest; exponse; collagen V binding; engulfment of apoptotic cell; eukaryotic cell surface binding; external side of plasma membrane; extracellular matrix; fibrinogen binding; fibrinogen complex; fibroblast growth factor 2 binding; fibronectin binding; heparin binding; identical protein binding; immune response; integrin binding; laminin binding; low-density lipoprotein binding; negative regulation of angiogenesis; negative regulation of antigen processing and presentation of peptide or polysaccharide antigen via MHC class II; negative regulation of cGMP-mediated signaling; negative regulation of dendritic cell antigen processing and presentation; negative regulation of endothelial cell proliferation;	Thrombospondin family
241 TTC7B_HUMAN	ТТС7В (ТТС7L1)	Q86TV6	Tetratricopeptide repeat protein 7B (TPR repeat protein 7B) (Tetratricopeptide repeat protein 7-like-1)	negative regulation of fibrinolysis: binding	
242 TTL12_HUMAN	TTLL12 (KIAA0153)	Q14166	Tubulintyrosine ligase-like protein 12	protein modification process; tubulin-tyrosine ligase activity	
243 UBE20_HUMAN	UBE2O (KIAA1734)	Q9C0C9	Ubiquitin-conjugating enzyme E2 O (EC 6.3.2.19) (Ubiquitin-protein ligase O) (Ubiquitin carrier protein O) (Ubiquitin- conjugating enzyme E2 of 230 kDa) (E2-230K)	ATP binding; modification- dependent protein catabolic process; post-translational protein modification; regulation of protein metabolic process;	Ubiquitin- conjugating enzyme family
244 UBP24_HUMAN	USP24 (KIAA1057)	Q9UPU5	Ubiquitin carboxyl-terminal hydrolase 24 (EC 3.1.2.15) (Ubiquitin thioesterase 24) (Ubiquitin-specific-processing protease 24) (Deubiquitinating enzyme 24)	ubiquitin-protein liaase activity cysteine-type peptidase activity; ubiquitin thiolesterase activity; ubiquitin-dependent protein catabolic process	Peptidase C19 family
245 UN13D_HUMAN 246 URP2_HUMAN	UNC13D FERMT3 (KIND3) (MIG2B) (URP2)	Q70J99 Q86UX7	Protein unc-13 homolog D (Munc13-4) Fermitin family homolog 3 (Unc-112-related protein 2) (Kindlin-3) (MIG2-like protein)	cytoplasm; membrane cell adhesion; cytoplasm; plasma membrane; protein binding	Unc-13 family Kindlin family
247 VASP_HUMAN	VASP	P50552	Vasodilator-stimulated phosphoprotein (VASP)	SH3 domain binding; actin binding; actin cytoskeleton; cytoplasm; filopodium membrane; focal adhesion; lamellipodium membrane	Ena/VASP family
248 VINC_HUMAN	VCL	P18206	Vinculin (Metavinculin)	actin binding; actin cytoskeleton; alpha-catenin binding; apical junction assembly; cell adhesion; cell motion; cell-cell junction; costamere; focal adhesion; lamellipodium assembly; negative regulation of cell migration; oxidoreductase activity; protein complex; structural molecule activity	Vinculin/alpha- catenin family
249 WDR1_HUMAN	WDR1	075083	WD repeat-containing protein 1 (Actin- interacting protein 1) (AIP1) (NORI-1)	actin binding; cytoplasm; cytoskeleton; sensory perception of sound	WD repeat AIP1 family
250 WDR44_HUMAN	WDR44	Q5JSH3	WD repeat-containing protein 44 (Rabphilin- 11)	Golgi apparatus; cytosol; endosome membrane; perinuclear region of cytoplasm	
251 XRN1_HUMAN	XRN1 (SEP1)	Q8IZH2	5'-3' exoribonuclease 1 (EC 3.1.11) (Strand- exchange protein 1 homolog)	5'-3' exonuclease activity; DNA	5'-3' exonuclease family
252 ZCCHL_HUMAN 253 ZN185_HUMAN 254 ZO2_HUMAN	ZC3HAV1L (C7orf39) ZNF185 TJP2 (X104) (ZO2)	Q96H79 O15231 Q9UDY2	Zinc finger CCCH-type antiviral protein 1-like Zinc finger protein 185 (LIM domain protein ZNF185) (P1-A) Tight junction protein ZO-2 (Zonula occludens protein 2) (Zona occludens protein 2) (Tight junction protein 2)	cytoplasm; nucleus; plasma membrane; zinc ion binding adherens junction; cytoplasm; guanylate kinase activity; nucleus; protein binding; tight iunction	MAGUK family

Entry name	Gene names	Uniprot	Protein names	Gene Ontology	Protein family
		Accession			
255 ZYX_HUMAN	ZYX	Q15942	Zyxin (Zyxin-2)	cell adhesion; cell-cell adherens junction; cell-cell signaling; cytoplasm; focal adhesion; interspecies interaction between organisms; nucleus; protein binding; signal transduction; stress fiber: zinc ion binding	Zyxin/ajuba family
256 Q2NKW9_HUMAN	I EIF4G2	Q2NKW9	Eukaryotic translation initiation factor 4 gamma, 2	RNA metabolic process; protein binding; translation initiation factor activity	
257 Q5JV32_HUMAN		Q5JV32	Deleted.		
258 Q6NXR8_HUMAN	RPS3A	Q6NXR8	Ribosomal protein S3A	ribosome; structural constituent of ribosome; translation	Ribosomal protein S3Ae family
259 Q8N1V6_HUMAN	hCG_2032358	Q8N1V6	cDNA FLJ37514 fis, clone BRCAN2000639 (HCG2032358)		
260 Q96H99_HUMAN	CTTN (hCG_23463)	Q96H99	Cortactin (cDNA FLJ77423, highly similar to Homo sapiens cortactin (CTTN), transcript variant 2. mRNA) (Cortactin, isoform CRA c)		
261 Q9NWG2_HUMAN	l i	Q9NWG2	cDNA FLJ10044 fis, clone HEMBA1001088, moderately similar to PINCH PROTEIN	zinc ion binding	
262 Q9UBY6_HUMAN	MYLK (hCG_2022707)	Q9UBY6	Kinase-related protein (Kinase-related protein isoform 2) (Myosin light chain kinase) (Myosin, light polypeptide kinase, isoform CRA_e) (cDNA, FLJ95241, Homo sapiens myosin, light polypeptide kinase (MYLK), transcriptvariant 8, mRNA)		