Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	Protein family
1 1433E_HUMAN	YWHAE	P62258	14-3-3 protein epsilon (14-3-3E)	enzyme binding; interspecies interaction between organisms; intracellular signaling cascade; melanosome	Cytoplasm. Melanosome.	14-3-3 family
<b>2</b> 1433F_HUMAN	YWHAH (YWHA1)	Q04917	14-3-3 protein eta (Protein AS1)	cytoplasm; enzyme binding; glucocorticoid catabolic process; glucocorticoid receptor binding; glucocorticoid receptor binding; glucocorticoid receptor signaling pathway; insulin-like growth factor receptor binding; intracellular protein transport; negative regulation of dendrite morphogenesis; positive regulation of transcription; protein domain specific binding; regulation of synaptic plasticity;		14-3-3 family
<b>3</b> 1433G_HUMAN	YWHAG	P61981	14-3-3 protein gamma (Protein kinase C inhibitor protein 1) (KCIP-1) [Cleaved into: 14- 3-3 protein gamma, N-terminally processed]	transcription activity cytoplasm; insulin-like growth - factor receptor binding; negative regulation of protein kinase activity; protein kinase C binding; protein kinase C inhibitor activity; regulation of neuron differentiation; regulation of signal transduction; regulation of synaptic plasticity		14-3-3 family
<b>4</b> 1433T_HUMAN	YWHAQ	P27348	14-3-3 protein theta (14-3-3 protein tau) (14- 3-3 protein T-cell) (Protein HS1)		Cytoplasm.	14-3-3 family
<b>5</b> 1433Z_HUMAN	YWHAZ	P63104	14-3-3 protein zeta/delta (Protein kinase C inhibitor protein 1) (KCIP-1)	anti-apoptosis; melanosome; signal transduction; transcription factor binding	Cytoplasm. Melanosome.	14-3-3 family
<b>6</b> 1A03_HUMAN	HLA-A (HLAA)	P04439	HLA class I histocompatibility antigen, A-3 alpha chain (MHC class I antigen A*3)	MHC class I protein complex; MHC class I proceptor activity; antigen processing and presentation of peptide antigen via MHC class I; immune response; integral to plasma membrane; interspecies interraction between organisms; protein binding	Membrane; Single-pass type I membrane protein.	MHC class I family
<b>7</b> 1B07_HUMAN	HLA-B (HLAB)	P01889	HLA class I histocompatibility antigen, B-7 alpha chain (MHC class I antigen B*7)	MHC class I protein complex; MHC class I receptor activity; antigen processing and presentation of peptide antigen via MHC class I; immune response; integral to plasma membrane; interspecies interaction between organisms	Membrane; Single-pass type I membrane protein.	MHC class I family
8 ACTB_HUMAN	ACTB	P60709	Actin, cytoplasmic 1 (Beta-actin) [Cleaved into: Actin, cytoplasmic 1, N-terminally processed]	ATP binding; NuA4 histone acetyltransferase complex; cell motion; histone methyltransferase complex; nitric- oxide synthase binding; sensory perception of sound; structural constituent of cytoskeleton	Cytoplasm ,cytoskeleton.	Actin family
9 ACTBM_HUMAN	ACTBL3 (FKSG30)	Q9BYX7	Beta-actin-like protein 3 (Kappa-actin)	ATP binding; cytoplasm; cytoskeleton; protein binding	Cytoplasm ,cytoskeleton.	Actin family
10 ACTN4_HUMAN	ACTN4	043707	Alpha-actinin-4 (Non-muscle alpha-actinin 4) (F-actin cross-linking protein)	actin filament binding; calcium ion binding; integrin binding; nucleolus; nucleoside binding; perinuclear region of cytoplasm; positive regulation of cytoplasm; positive regulation of sodium:hydrogen antiporter activity; protein complex; protein homodimerization activity; pseudopodium; regulation of apoptosis	Nucleus. Cytoplasm.	Alpha-actinin family
11 ALBU_HUMAN	ALB (GIG20) (GIG42) (PRO1903) (PRO1708) (PRO2044) (PRO2619) (PRO2619) (PRO2675) (UNQ696/PRO134 1)	P02768	Serum albumin	DNA binding; antioxidant activity; cellular response to starvation; copper ion binding; drug binding; extracellular space; fatty acid binding; hemolysis by symbiont of host erythrocytes; maintenance of mitochondrion location; negative regulation of apoptosis; platelet alpha granule lumen; protein binding; protein complex; pyridoxal phosphate binding; toxin binding; transport	Secreted.	ALB/AFP/VDB family
12 ALDOC_HUMAN	ALDOC (ALDC)	P09972	Fructose-bisphosphate aldolase C (EC 4.1.2.13) (Brain-type aldolase)	cytoskeletal protein binding; cytoskeleton; fructose 1,6- bisphosphate metabolic process; fructose-bisphosphate aldolase activity; glycolysis		Class I fructose- bisphosphate aldolase family

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13 ANGT_HUMAN	AGT (SERPINA8)	P01019	Angiotensinogen (Serpin A8) [Cleaved into: Angiotensin-1 (Angiotensin I) (Ang I); Angiotensin-2 (Angiotensin II) (Ang II); Angiotensin-3 (Angiotensin III) (Ang III) (Des- Asp[1]-angiotensin II)]	G-protein signaling, coupled to cGMP nucleotide second messenger; acetyltransferase activator activity; activation of phospholipase C activity by G- protein coupled receptor protein signaling pathway coupled to IP3 second messenger; blood vessel remodeling; cell-cell signaling; cytoplasm; extracellular space; growth factor activity; hormone activity; how-density lipoprotein particle remodeling; negative regulation of nerve growth factor receptor signaling pathway; nitric oxide mediated signal transduction; oxygen and reactive process; positive regulation of NAD(P)H oxidase activity; positive regulation of AF-kappaB transcription factor activity; positive regulation of apoptosis; positive regulation of cardiac muscle hypertrophy; positive regulation of cholesterol esterification; positive regulation of cytokine production; positive regulation of endothelial cell migration; positive regulation of epidermal growth factor receptor	Secreted.	Serpin family
14 APOA1_HUMAN	APOA1	P02647	Apolipoprotein A-I (Apo-AI) (ApoA-I) [Cleaved into: Apolipoprotein A-I(1-242)]	a fanala financia a fanta ser a santa ser a s	Secreted.	Apolipoprotein A1/A4/E family
15 APOC3_HUMAN	APOC3	P02656	Apolipoprotein C-III (Apo-CIII) (ApoC-III)	Cdc42 protein signal transduction; G-protein coupled receptor protein signaling pathway; cholesterol binding; cholesterol efflux; cholesterol homeostasis; chylomicron; chylomicron remnant clearance; high-density lipoprotein particle clearance; high-density lipoprotein particle remodeling; lintermediate-density lipoprotein particle; lipase inhibitor activity; lipoprotein metabolic process; lipoprotein receptor binding; low- density lipoprotein particle clearance; negative regulation of cholesterol transport; negative regulation of fatty acid biosynthetic process; negative regulation of triglyceride catabolic process; negative regulation of very-low-density lipoprotein particle clearance; negative regulation of very-low- density lipoprotein particle catabolic process; negative regulation of very-low-density lipoprotein particle clearance; negative regulation of very-low- density lipoprotein particle cholesterol transport; spherical	Secreted.	Apolipoprotein C3 family

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	Protein family
16 ARC1B_HUMAN	ARPC1B (ARC41)	015143	Actin-related protein 2/3 complex subunit 1B (Arp2/3 complex 41 kDa subunit) (p41-ARC)	Arp2/3 protein complex; actin binding; cell motion; cytoplasm; regulation of actin filament polymerization; structural constituent of cytoskeleton	Cytoplasm ,cytoskeleton.	WD repeat ARPC1 family
17 ARPC2_HUMAN	ARPC2 (ARC34) (PRO2446)	015144	Actin-related protein 2/3 complex subunit 2 (Arp2/3 complex 34 kDa subunit) (p34-ARC)	Arp2/3 protein complex; actin binding; cell motion; cell projection; cytoplasm; structural constituent of cytoskeleton	Cytoplasm ,cytoskeleton. Cell projection.	ARPC2 family
18 ATPB_HUMAN	ATP5B (ATPMB) (ATPSB)	P06576	ATP synthase subunit beta, mitochondrial (EC 3.6.3.14)		Mitochondrion. Mitochondrion inner membrane.	ATPase alpha/beta chains family
19 CALM_HUMAN	CALM1 (CALM) (CAM) (CAM1); CALM2 (CAM2) (CAM5); CALM3 (CALM12) (CAM3) (CAMC) (CAMII)	P62158	Calmodulin (CaM)	G-protein coupled receptor protein signaling pathway; N- terminal myristoylation domain binding; calcium ion binding; centrosome; cytosol; negative regulation of ryanodine-sensitive calcium-release channel activity; plasma membrane; positive calcium-release channel activity; protein domain specific binding; regulation of ryanodine-sensitive calcium-release of sequestered calcium ion into cytosol by sarcoplasmic reticulum; response to calcium ion; spindle microtubule; spindle pole; titin binding	Spindle.	Calmodulin family
20 CAPZB_HUMAN	CAPZB	P47756	F-actin-capping protein subunit beta (CapZ beta)	F-actin capping protein complex; actin binding; actin cytoskeleton organization; barbed-end actin filament capping; cell motion; cytoplasm	Cytoplasm ,cytoskeleton.	F-actin-capping protein beta subunit family
21 CAZA1_HUMAN	CAPZA1	P52907	F-actin-capping protein subunit alpha-1 (CapZ alpha-1)			F-actin-capping protein alpha subunit family
22 CDN1B_HUMAN	CDKN1B (KIP1)	P46527	Cyclin-dependent kinase inhibitor 1B (Cyclin- dependent kinase inhibitor p27) (p27Kip1)	G1/S transition of mitotic cell cycle; autophagic cell death; cell cycle arrest; cyclin-dependent protein kinase inhibitor activity; cytosol; induction of apoptosis; negative regulation of cell growth; negative regulation of cell proliferation; negative regulation of phosphorylation; nucleus; protein binding; regulation of cyclin-dependent protein kinase activity; transforming growth factor beta receptor, cytoplasmic mediator activity	Nucleus. Cytoplasm.	CDI family

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	Protein family
23 CH60_HUMAN	HSPD1 (HSP60)	P10809	60 kDa heat shock protein, mitochondrial (Heat shock protein 60) (HSP-60) (HSP60) (60 kDa chaperonin) (Chaperonin 60) (CPN60) (Mitochondrial matrix protein P1) (P60 lymphocyte protein) (HuCHA60)	'de novo' protein folding; ATP binding; ATPase activity; B cell cytokine production; B cell proliferation; DNA replication origin binding; MyD88-dependent toll-like receptor signaling pathway; T cell activation; activation of caspase activity; cell surface; cell surface binding; chaperone binding; chaperone- mediated protein complex assembly; coated pit; coated vesicle; cytosol; early endosome; extracellular space; interspecies interaction between organisms; liopolysaccharide binding; lipopolysaccharide binding; poslive regulation of apoptosis; p53 binding; positive regulation of T cell activation; positive regulation of titerferon- alpha production; positive regulation of interleation.10 production;	Mitochondrion matrix.	Chaperonin (HSP60) family
<b>24</b> CLH1_HUMAN	CLTC (CLH17) (CLTCL2) (KIAA0034)	Q00610	Clathrin heavy chain 1 (CLH-17)	clathrin coat of coated pit; clathrin coat of trans-Golgi network vesicle; intracellular protein transport; melanosome; protein binding; structural molecule activity; vesicle- mediated transport	Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Membrane ,coated pit; Peripheral membrane protein; Cytoplasmic side. Melanosome.	Clathrin heavy chain family
25 CLIC1_HUMAN	CLIC1 (NCC27)	O00299	Chloride intracellular channel protein 1 (Nuclear chloride ion channel 27) (NCC27) (Chloride channel ABP) (Regulatory nuclear chloride ion channel protein) (hRNCC)	brush border; chloride ion binding; chloride transport; integral to membrane; membrane fraction; nuclear membrane; plasma membrane; signal transduction; soluble fraction; voltage-gated chloride channel activity	Nucleus. Nucleus membrane; Single-pass	Chloride channel CLIC family
26 CLIC4_HUMAN	CLIC4	Q9Y696	Chloride intracellular channel protein 4 (Intracellular chloride ion channel protein p64H1)	actin cytoskeleton; cell differentiation; chloride ion binding; chloride transport; cytoplasmic vesicle membrane; integral to membrane; microvillus; negative regulation of cell migration; nucleus; plasma membrane; protein binding; soluble fraction; voltage-gated	Cytoplasm. Cytoplasmic vesicle membrane; Single- pass membrane protein. Nucleus. Cell membrane; Single-pass membrane protein.	Chloride channel CLIC family
27 CLUS_HUMAN	CLU (APOJ) (CLI) (KUB1) (AAG4)	P10909	Clusterin (Complement-associated protein SP- 40,40) (Complement cytolysis inhibitor) (CLI) (NA1/NA2) (Apolipoprotein J) (Apo-J) (Testosterone-repressed prostate message 2) (TRPM-2) (Ku70-binding protein 1) (Aging- associated gene 4 protein) [Cleaved into: Clusterin beta chain (ApoJaJaha) (Complement cytolysis inhibitor a chain); Clusterin alpha chain (ApoJbeta) (Complement cytolysis inhibitor b chain)]	chloride channel activity apoptosis; complement activation, classical pathway; innate immune response; lipid metabolic process; protein binding; reverse cholesterol transport; spherical high-density lipoprotein particle	Secreted.	Clusterin family
28 CO3_HUMAN	C3 (CPAMD1)	P01024	Complement C3 (C3 and PZP-like alpha-2- macroglobulin domain-containing protein 1) [Cleaved into: Complement C3 beta chain; Complement C3 alpha chain; C3a anaphylatoxin; Complement C3b alpha' chain; Complement C3c alpha' chain fragment 1; Complement C3d fragment; Complement C3g fragment; Complement C3d fragment; Complement C3f fragment; Complement C3c alpha' chain fragment 2]	G-protein coupled receptor protein signaling pathway; complement activation, alternative pathway; complement activation, classical pathway; endopeptidase inhibitor activity; extracellular space; receptor binding	Secreted.	
29 COF1_HUMAN 30 COTL1_HUMAN	CFL1 (CFL) COTL1 (CLP)	P23528 Q14019	Coactosin-like protein	actin binding; anti-apoptosis; nuclear matrix actin binding; cytoplasm;	Nucleus matrix. Cytoplasm ,cytoskeleton. Cytoplasm ,cytoskeleton.	Actin-binding proteins ADF family Actin-binding
				cytoskeleton; enzyme binding		proteins ADF family, Coactosin subfamily
31 CPNS1_HUMAN	CAPNS1 (CAPN4) (CAPNS)	P04632	Calpain small subunit 1 (CSS1) (Calcium- dependent protease small subunit 1) (Calcium- dependent protease small subunit) (CDPS) (Calpain regulatory subunit) (Calcium- activated neutral proteinase small subunit) (CANP small subunit)	calcium ion binding; calcium- dependent cysteine-type endopeptidase activity; cytoplasm; nucleus; plasma membrane; positive regulation of cell proliferation; protein binding	Cytoplasm. Cell membrane.	

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32 DUS3_HUMAN	DUSP3 (VHR)	P51452	Dual specificity protein phosphatase 3 (EC 3.1.3.48) (EC 3.1.3.16) (Dual specificity protein phosphatase VHR)	nucleoplasm; protein amino acid dephosphorylation; protein tyrosine phosphatase activity		Protein-tyrosin phosphatase family, Non- receptor class dual specificity subfamily
33 EHD3_HUMAN	EHD3 (EHD2) (PAST3)	Q9NZN3	EH domain-containing protein 3	ATP binding; GTP binding; GTPase activity; calcium ion binding; nucleic acid binding; nucleus; plasma membrane; recycling endosome membrane	Cell membrane; Peripheral membrane protein; Cytoplasmic side. Endosome membrane; Peripheral membrane protein. Recycling endosome membrane; Peripheral membrane protein.	
34 EMIL1_HUMAN	EMILIN1 (EMI)	Q9Y6C2	EMILIN-1 (Elastin microfibril interface-located protein 1) (Elastin microfibril interfacer 1)	cell adhesion; centrosome; extracellular space; nucleus; proteinaceous extracellular matrix	Secreted ,extracellular space ,extracellular	
35 ENDD1_HUMAN	ENDOD1 (KIAA0830)	094919	Endonuclease domain-containing 1 protein (EC 3.1.30)	endonuclease activity; extracellular region; metal ion binding; nucleic acid binding	Secreted.	DNA/RNA non- specific endonuclease family
36 ENOA_HUMAN	ENO1 (ENOIL1) (MBPB1) (MPB1)	P06733	Alpha-enolase (EC 4.2.1.11) (2-phospho-D- glycerate hydro-lyase) (Non-neural enolase) (NNE) (Enolase 1) (Phosphopyruvate hydratase) (C-myc promoter-binding protein) (MBP-1) (MPB-1) (Plasminogen-binding protein)	M band; glycolysis; magnesium ion binding; negative regulation of cell growth; negative regulation of transcription from RNA polymerase II promoter; nucleus; phosphopyruvate hydratase activity; phosphopyruvate hydratase complex; plasma membrane; serine-type endopeptidase activity; transcription; transcription factor activity	Cytoplasm. Cell membrane. Cytoplasm "myofibril "sarcomere "M- band. Nucleus.	Enolase family
37 ENPL_HUMAN	HSP90B1 (TRA1)	P14625	Endoplasmin (Heat shock protein 90 kDa beta member 1) (94 kDa glucose-regulated protein) (GRP94) (gp96 homolog) (Tumor rejection antigen 1)	ATP binding; RNA binding; anti- apoptosis; calcium ion binding; cytosol; endoplasmic reticulum lumen; endoplasmic reticulum membrane; low-density lipoprotein receptor binding; melanosome; microsome; perinuclear region of cytoplasm; protein folding; protein transport; response to hypoxia; sequestering of calcium ion; unfolded protein binding; virion binding	Endoplasmic reticulum lumen. Melanosome.	Heat shock protein 90 family
<b>38</b> F13A_HUMAN	F13A1 (F13A)	P00488	Coagulation factor XIII A chain (Coagulation factor XIIIa) (EC 2.3.2.13) (Protein-glutamine gamma-glutamyltransferase A chain) (Transglutaminase A chain)	congulation; calcium ion binding; cytoplasm; extracellular region; protein-glutamine gamma- qlutamyltransferase activity	Cytoplasm. Secreted.	Transglutamin se superfamily Transglutamin se family
<b>39</b> FIBB_HUMAN	FGB	P02675	Fibrinogen beta chain [Cleaved into: Fibrinopeptide B]	eukaryotic cell surface binding; external side of plasma membrane; fibrinogen complex; nucleus; platelet activation; platelet alpha granule lumen; protein binding, bridging; protein polymerization; receptor binding; response to calcium ion; signal transduction; soluble fraction	Secreted.	
40 FIBG_HUMAN	FGG (PRO2061)	P02679	Fibrinogen gamma chain	calcium ion binding; 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	Secreted.	
41 GANAB_HUMAN	GANAB (G2AN) (KIAA0088)	Q14697	Neutral alpha-glucosidase AB (EC 3.2.1.84) (Glucosidase II subunit alpha) (Alpha- glucosidase 2)	Golgi apparatus; carbohydrate metabolic process; endoplasmic reticulum; glucan 1,3-alpha- glucosidase activity;	Endoplasmic reticulum. Golgi apparatus. Melanosome.	Glycosyl hydrolase 31 family
42 GBB1_HUMAN	GNB1	P62873	Guanine nucleotide-binding protein G(1)/G(5)/G(T) subunit beta-1 (Transducin beta chain 1)	melanosome; protein binding GTPase activity; Ras protein signal transduction; hormone- mediated signaling; muscarinic acetylcholine receptor signaling pathway; signal transducer activity		WD repeat G protein beta family
<b>43</b> GDIA_HUMAN	GDI1 (GDIL) (OPHN2) (RABGDIA) (XAP4)	P31150	Rab GDP dissociation inhibitor alpha (Rab GDI alpha) (Guanosine diphosphate dissociation inhibitor 1) (GDI-1) (Oligophrenin-2) (Protein XAP-4)	GTPase activator activity; Rab GDP-dissociation inhibitor activity; cytoplasm; protein binding; protein transport; regulation of GTPase activity	Cytoplasm.	Rab GDI family

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44 GDIR2_HUMAN	ARHGDIB (GDIA2) (GDID4) (RAP1GN1)		Rho GDP-dissociation inhibitor 2 (Rho GDI 2) (Rho-GDI beta) (Ly-GDI)	GTPase activator activity; Rho GDP-dissociation inhibitor activity; Rho protein signal transduction; actin cytoskeleton organization; cell motion; cytoplasmic membrane-bounded vesicle; cytoskeleton; immune response; multicellular organismal development; negative regulation of cell adhesion	Cytoplasm.	Rho GDI family
45 GELS_HUMAN	GSN	P06396	Gelsolin (Actin-depolymerizing factor) (ADF) (Brevin) (AGEL)	actin binding; actin cytoskeleton; actin filament polymerization; actin filament severing; barbed- end actin filament capping; calcium ion binding; cytosol;	Cytoplasm ,cytoskeleton. Secreted.	Villin/gelsolin family
46 GMPR1_HUMAN	GMPR (GMPR1)	P36959	GMP reductase 1 (EC 1.7.1.7) (Guanosine 5'- monophosphate oxidoreductase 1) (Guanosine monophosphate reductase 1)	oxidation reduction; potassium		IMPDH/GMPR family
47 GPSM1_HUMAN	GPSM1 (AGS3)	Q86YR5	G-protein-signaling modulator 1 (Activator of G-protein signaling 3)	ion binding; response to cold GTPase activator activity; Golgi membrane; binding; cell differentiation; cytosol; endoplasmic reticulum membrane; nervous system development; plasma membrane; signal transduction	Cytoplasm, cytosol. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side.	GPSM family
48 GRP78_HUMAN	HSPA5 (GRP78)	P11021	78 kDa glucose-regulated protein (GRP 78) (Heat shock 70 kDa protein 5) (Immunoglobulin heavy chain-binding protein) (BiP) (Endoplasmic reticulum lumenal Ca(2+)- binding protein grp78)	ATP binding; ER-Golgi intermediate compartment; anti- apoptosis; calcium ion binding; caspase inhibitor activity; cell surface; cellular response to glucose starvation; endoplasmic reticulum lumen; integral to endoplasmic reticulum membrane; melanosome; negative regulation of caspase activity; nucleus; perinuclear region of cytoplasm; protein binding, bridging; unfolded	Endoplasmic reticulum Iumen. Melanosome.	Heat shock protein 70 family
<b>49</b> GSTP1_HUMAN	GSTP1 (FAEES3) (GST3)	P09211	Glutathione S-transferase P (EC 2.5.1.18) (GST class-pi) (GSTP1-1)	protein binding anti-apoptosis; central nervous system development; cytoplasm; glutathione transferase activity; metabolic process; protein binding		GST superfamily, Pi family
50 HCDH_HUMAN	HADH (HAD) (HADHSC) (SCHAD)	Q16836	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial (HCDH) (EC 1.1.1.35) (Short chain 3-hydroxyacyl-CoA dehydrogenase) (Medium and short chain L-3-hydroxyacyl-	3-hydroxyacyl-CoA dehydrogenase activity; coenzyme binding; fatty acid metabolic process; mitochondrial	Mitochondrion matrix.	3-hydroxyacyl- CoA dehydrogenase family
51 HPT_HUMAN	НР	P00738	coenzyme A dehydrogenase) Haptoglobin [Cleaved into: Haptoglobin alpha chain; Haptoglobin beta chain]	matrix; oxidation reduction cellular iron ion homeostasis; defense response; extracellular region; hemoglobin binding; proteolysis; serine-type endopeptidase activity	Secreted.	Peptidase S1 family
52 HSP76_HUMAN	HSPA6 (HSP70B')	P17066	Heat shock 70 kDa protein 6 (Heat shock 70 kDa protein B')	ATP binding; response to unfolded protein		Heat shock protein 70 family
53 HSP7C_HUMAN	HSPA8 (HSC70) (HSP73) (HSPA10)	P11142	Heat shock cognate 71 kDa protein (Heat shock 70 kDa protein 8)	ATP binding; ATPase activity, coupled; cell surface; melanosome; protein binding; protein folding; response to unfolded protein	Cytoplasm. Melanosome.	Heat shock protein 70 family
54 IDHP_HUMAN	IDH2	P48735	Isocitrate dehydrogenase [NADP], mitochondrial (IDH) (EC 1.1.1.42) (Oxalosucinate decarboxylase) (NADP(+)- specific ICDH) (IDP) (ICD-M)	NAD or NADH binding; glyoxylate cycle; isocitrate dehydrogenase (NADP+) activity; isocitrate metabolic process; magnesium ion binding; manganese ion binding; mitochondrion; oxidation reduction; tricarboxylic acid cycle		Isocitrate and isopropylmalate dehydrogenase s family
<b>55</b> ITA2B_HUMAN	ITGA2B (GP2B) (ITGAB)	P08514	Integrin alpha-IIb (Platelet membrane glycoprotein IIb) (GPalpha IIb) (GPIIb) (CD antigen CD41) [Cleaved into: Integrin alpha- IIb heavy chain; Integrin alpha-IIb light chain, form 1; Integrin alpha-IIb light chain, form 2]	calcium ion binding; cell adhesion; identical protein binding; integrin complex; integrin-mediated signaling pathway; platelet alpha granule mombrane, secenter activity.	Membrane; Single-pass type I membrane protein.	Integrin alpha chain family
56 ITA6_HUMAN	ITGA6	P23229	Integrin alpha-6 (VLA-6) (CD49 antigen-like family member F) (CD antigen CD49f) [Cleaved into: Integrin alpha-6 heavy chain; Integrin alpha-6 light chain]	membrane; receptor activity calcium ion binding; cell adhesion; cell-substrate junction assembly; integrin complex; integrin-mediated signaling pathway; protein binding; receptor activity	Membrane; Single-pass type I membrane protein.	Integrin alpha chain family

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	Protein family
57 ITB1_HUMAN	ITGB1 (FNRB) (MDF2) (MSK12)	P05556	Integrin beta-1 (Fibronectin receptor subunit beta) (Integrin VLA-4 subunit beta) (CD antigen CD29)	B cell differentiation; cell surface; cell-cell adhesion mediated by integrin; cell-matrix adhesion; cellular defense response; homophilic cell adhesion; identical protein binding; integrin complex; integrin-mediated signaling pathway; interspecies interaction between organisms; leukocyte adhesion; melanosome; neuromuscular junction; protein heterodimerization activity; receptor activity; ruffle; sarcolemma	Cell membrane; Single- pass type I membrane protein. Melanosome.	Integrin beta chain family
58 K1C9_HUMAN	KRT9	P35527	Keratin, type I cytoskeletal 9 (Cytokeratin-9) (CK-9) (Keratin-9) (K9)	cytoplasm; intermediate filament; intermediate filament organization; protein binding; skin development; structural		Intermediate filament family
59 K6PP_HUMAN	PFKP (PFKF)	Q01813	6-phosphofructokinase type C (EC 2.7.1.11) (Phosphofructokinase 1) (Phosphohexokinase) (Phosphofructo-1-kinase isozyme C) (PFK-C) (6-phosphofructokinase, platelet type)	constituent of cytoskeleton 6-phosphofructokinase activity; 6- phosphofructokinase complex; ATP binding; glycolysis; magnesium ion binding; protein binding		Phosphofructok nase family, Two domains subfamily
60 LIMS1_HUMAN	LIMS1 (PINCH) (PINCH1)	P48059	LIM and senescent cell antigen-like-containing domain protein 1 (Particularly interesting new Cys-His protein 1) (PINCH-1) (Renal carcinoma antigen NY-REN-48)		Cell junction ,focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side.	
61 LTBP1_HUMAN	LTBP1	Q14766	Latent-transforming growth factor beta- binding protein 1 (LTBP-1) (Transforming growth factor beta-1-binding protein 1) (TGF- beta1-BP-1)	calcium ion binding; cytoplasm; growth factor binding; nucleus; proteinaceous extracellular matrix; transforming growth	Secreted.	LTBP family
62 LYAM3_HUMAN	SELP (GMRP) (GRMP)	P16109	P-selectin (Granule membrane protein 140) (GMP-140) (PADGEM) (Leukocyte-endothelial cell adhesion molecule 3) (LECAM3) (CD62 antigen-like family member P) (CD antigen CD62P)	factor beta receptor activity defense response to Gram- negative bacterium; external side of plasma membrane; extracellular space; fucose binding; glycosphingolipid binding; glycosphingolipid binding; heparin binding; integral to plasma membrane; leukocyte adhesion; lipopolysaccharide binding; membrane fraction; oligosaccharide binding; platelet alpha granule membrane; positive regulation of platelet activation; protein binding; response to lipopolysaccharide; sialic acid binding; soluble fraction	Membrane; Single-pass type I membrane protein.	Selectin/LECAM family
63 MARE1_HUMAN	MAPRE1	Q15691	Microtubule-associated protein RP/EB family member 1 (APC-binding protein EB1) (End- binding protein 1) (EB1)	cell division; cell proliferation; cortical microtubule cytoskeleton; microtubule plus-end binding; mitosis; negative regulation of microtubule polymerization;	Cytoplasm.	MAPRE family
64 MARE2_HUMAN	MAPRE2 (RP1)	Q15555	Microtubule-associated protein RP/EB family member 2 (APC-binding protein EB2) (End- binding protein 2) (EB2)	protein C-terminus binding cell division; cell proliferation; cytoplasm; microtubule; microtubule binding; mitosis;	Cytoplasm.	MAPRE family
65 MLH1_HUMAN	MLH1 (COCA2)	P40692	DNA mismatch repair protein Mlh1 (MutL protein homolog 1)	signal transduction ATP binding; cell cycle; mismatch repair; mismatched DNA binding; negative regulation of cell cycle; multiple regulation of cell cycle;	Nucleus.	DNA mismatch repair mutL/hexB
66 MMRN1_HUMAN	MMRN1 (ECM) (EMILIN4) (GPIA*) (MMRN)	Q13201	Multimerin-1 (Endothelial cell multimerin) (EMILIN-4) (Elastin microfibril interface located protein 4) (Elastin microfibril interfacer 4) [Cleaved into: Platelet glycoprotein Ia*; 155 kDa platelet multimerin (p-155) (p155)]	nucleus; protein binding blood coagulation; cell adhesion; extracellular region; platelet alpha granule lumen	Secreted.	family
<b>67</b> MPPH1_HUMAN	MPHOSPH1 (KRMP1)	Q96Q89	M-phase phosphoprotein 1 (MPP1) (Kinesin- related motor interacting with PIN1) (Cancer/testis antigen 90) (CT90)	ATP binding; ATPase activity; WW domain binding; cell cycle arrest; cell division; centrosome; microtubule; microtubule-based movement; mitosis; nucleolus; nucleoplasm; regulation of mitosis	Cytoplasm. Nucleus.	Kinesin-like protein family
<b>68</b> MYH10_HUMAN	МҮН10	P35580	Myosin-10 (Myosin heavy chain 10) (Myosin heavy chain, non-muscle IIb) (Non-muscle myosin heavy chain IIb) (NMMHC II-b) (NMMHC-IIB) (Cellular myosin heavy chain, type B) (Non-muscle myosin heavy chain B) (NMMHC-B)	ADP binding; ATP binding; actin filament binding; actin filament- based movement; actin- dependent ATPase activity; calmodulin binding; cell cortex; cleavage furrow; cytokinesis after mitosis; microfilament motor activity; midbody; myosin complex; regulation of cell shape;		
<b>69</b> MYL6_HUMAN	MYL6	P60660	Myosin light polypeptide 6 (Smooth muscle and nonmuscle myosin light chain alkali 6) (Myosin light chain alkali 3) (Myosin light chain 3) (MLC-3) (LC17)	stress fiber actin-dependent ATPase activity; calcium ion binding; motor activity; muscle filament sliding; skeletal muscle tissue development; structural constituent of muscle; unconventional myosin complex		

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	Protein family
70 PDIA1_HUMAN	P4HB (ERBA2L) (PDI) (PDIA1) (PO4DB)	P07237	Protein disulfide-isomerase (PDI) (EC 5.3.4.1) (Prolyl 4-hydroxylase subunit beta) (Cellular thyroid hormone-binding protein) (p55)	ER-Golgi intermediate compartment; cell redox homeostasis; cell surface; endoplasmic reticulum; endoplasmic reticulum lumen; extracellular region; melanosome; peptidyl-proline hydroxylation to 4-hydroxy-L- proline; plasma membrane; procollagen-proline 4- dioxygenase activity; protein binding; protein disulfide	Endoplasmic reticulum lumen. Melanosome. Cell membrane; Peripheral membrane protein.	Protein disulfide isomerase family
<b>71</b> PDIA4_HUMAN	PDIA4 (ERP70) (ERP72)	P13667	Protein disulfide-isomerase A4 (EC 5.3.4.1) (Protein ERp-72) (ERp72)	isomerase activity cell redox homeostasis; endoplasmic reticulum; endoplasmic reticulum lumen; melanosome; protein binding; protein disulfide isomerase activity; protein secretion	Endoplasmic reticulum lumen. Melanosome.	Protein disulfide isomerase family
72 PECA1_HUMAN	PECAM1	P16284	Platelet endothelial cell adhesion molecule (PECAM-1) (EndoCAM) (GPIIA') (CD antigen CD31)	cell adhesion; cell recognition; extracellular space; integral to membrane; plasma membrane; platelet alpha granule membrane; protein binding; signal transduction	Membrane; Single-pass type I membrane protein.	
<b>73</b> PLF4_HUMAN	PF4 (CXCL4) (SCYB4)	P02776	Platelet factor 4 (PF-4) (C-X-C motif chemokine 4) (Oncostatin-A) (Iroplact) [Cleaved into: Platelet factor 4, short form]	chemokine activity; cytokine- mediated signaling pathway; extracellular space; heparin binding; immune response; leukocyte chemotaxis; negative regulation of MHC class II biosynthetic process; negative regulation of angiogenesis; negative regulation of cytolysis; negative regulation of megakaryocyte differentiation; platelet activation; platelet alpha granule lumen; positive regulation of foam cell differentiation; positive regulation of gene expression; positive regulation of tumor necrosis factor production	Secreted.	Intercrine alpha (chemokine CxC) family
74 PNPH_HUMAN	NP (PNP)	P00491	Purine nucleoside phosphorylase (PNP) (EC 2.4.2.1) (Inosine phosphorylase)	NAD biosynthesis via nicotinamide riboside salvage pathway; cytosol; drug binding; immune response; inosine catabolic process; nicotinamide riboside catabolic process; nucleoside binding; phosphate binding; positive regulation of T cell proliferation; positive regulation of alpha-beta T cell differentiation; purine binding; purine-nucleoside phosphorylase activity; response to drug; urate		PNP/MTAP phosphorylase family
<b>75</b> PP1A_HUMAN	PPP1CA (PPP1A)	P62136	Serine/threonine-protein phosphatase PP1- alpha catalytic subunit (PP-1A) (EC 3.1.3.16)	biosynthetic process cell cycle; cell division; cytoplasm; glycogen metabolic process; histone methyltransferase complex; iron ion binding; manganese ion binding; protein amino acid dephosphorylation; protein binding; protein serine/threonine phosphatase activity	Cytoplasm.	PPP phosphatase family, PP-1 subfamily
<b>76</b> PPIA_HUMAN	PPIA (CYPA)	P62937	Peptidyl-prolyl cis-trans isomerase A (PPIase A) (Rotamase A) (EC 5.2.1.8) (Cyclophilin A) (Cyclosporin A-binding protein)	priospiratase activity cytosol; extracellular region; initiation of viral infection; interspecies interaction between organisms; nucleus; peptide binding; peptidyl-prolyl cis-trans isomerase activity; protein folding; provirus integration; regulation of viral genome replication; unfolded protein binding; virion binding	Cytoplasm.	Cyclophilin-type PPIase family, PPIase A subfamily
77 PPIB_HUMAN	PPIB (CYPB)	P23284	Peptidyl-prolyl cis-trans isomerase B (PPIase) (Rotamase) (EC 5.2.1.8) (Cyclophilin B) (S- cyclophilin) (SCYLP) (CYP-S1)	binding; virion binding endoplasmic reticulum; endoplasmic reticulum lumen; melanosome; peptide binding; peptidyl-prolyl cis-trans isomerase activity; protein folding; unfolded protein binding	Endoplasmic reticulum lumen. Melanosome.	Cyclophilin-type PPIase family, PPIase B subfamily
78 PRAF3_HUMAN	ARL6IP5 (DERP11) (JWA) (PRA2) (PRAF3) (HSPC127)	075915	PRA1 family protein 3 (ADP-ribosylation factor- like protein 6-interacting protein 5) (ARL-6- interacting protein 5) (Aip-5) (Glutamate transporter EAAC1-interacting protein) (GTRAP3-18) (Prenylated Rab acceptor protein 2) (Protein JWa) (Dermal papilla-derived protein 11) (JM5) (Putative MAPK-activating protein PM27) (Cytoskeleton-related vitamin A responsive protein)	<ul> <li>L-glutamate transport; endoplasmic reticulum membrane; integral to membrane; protein binding</li> </ul>	Endoplasmic reticulum membrane; Multi-pass membrane protein. Cytoplasm.	PRA1 family

79 PRDX6 HUMAN		Accession				
	PRDX6 (AOP2) (KIAA0106)	P30041	Peroxiredoxin-6 (EC 1.11.1.15) (Antioxidant protein 2) (1-Cys peroxiredoxin) (1-Cys PRX) (Acidic calcium-independent phospholipase A2) (aiPLA2) (EC 3.1.1-) (Non-selenium glutathione peroxidase) (NSGPX) (EC 1.11.1.7) (24 kDa protein) (Liver 2D page spot		Cytoplasm. Lysosome. Cytoplasmic vesicle.	AhpC/TSA family, Rehydrin subfamily
80 PROF1_HUMAN	PFN1	P07737	40) (Red blood cells page spot 12) Profilin-1 (Profilin I)	response to oxidative stress actin binding; actin cytoskeleton; actin cytoskeleton organization; cytoplasm	Cytoplasm ,cytoskeleton.	Profilin family
1 PTN3_HUMAN	PTPN3 (PTPH1)	P26045	Tyrosine-protein phosphatase non-receptor type 3 (EC 3.1.3.48) (Protein-tyrosine phosphatase H1) (PTP-H1)	cytoplasm; cytoskeletal protein binding; cytoskeleton; extrinsic to membrane; negative regulation of membrane protein ectodomain proteolysis; plasma membrane; protein amino acid dephosphorylation; protein tyrosine phosphatase activity		Protein-tyrosine phosphatase family, Non- receptor class subfamily
2 PTPRJ_HUMAN	PTPRJ (DEP1)	Q12913	Receptor-type tyrosine-protein phosphatase eta (Protein-tyrosine phosphatase eta) (R-PTP- eta) (EC 3.1.3.48) (HPTP eta) (Protein- tyrosine phosphatase receptor type J) (Density enhanced phosphatase 1) (DEP-1) (CD antigen CD148)	cell junction; cell-cell signaling; integral to plasma membrane; nucleus; protein amino acid dephosphorylation; protein	Membrane; Single-pass type I membrane protein.	Protein-tyrosine phosphatase family, Receptor class 3 subfamily
3 QCR1_HUMAN	UQCRC1	P31930	Cytochrome b-c1 complex subunit 1, mitochondrial (Ubiquinol-cytochrome-c reductase complex core protein 1) (Core protein I) (Complex III subunit 1)	aerobic respiration; metalloendopeptidase activity; mitochondrial respiratory chain; protein binding; proteolysis; transport; ubiquinol-cytochrome- c reductase activity; zinc ion binding	Mitochondrion inner membrane.	Peptidase M16 family, UQCRC1/QCR1 subfamily
4 RAB32_HUMAN	RAB32	Q13637	Ras-related protein Rab-32	GTP binding; mitochondrion; protein transport; small GTPase mediated signal transduction	Mitochondrion.	Small GTPase superfamily, Rab family
<b>35</b> RAP1A_HUMAN	RAP1A (KREV1)	P62834	Ras-related protein Rap-1A (GTP-binding protein smg-p21A) (Ras-related protein Krev- 1) (C21KG) (G-22K)	GTP binding; GTPase activity; cell cycle; cytosol; negative regulation of cell cycle; plasma membrane	Cell membrane; Lipid- anchor.	Small GTPase superfamily, Ras family
6 RAP1B_HUMAN	RAP1B (OK/SW- cl.11)	P61224	Ras-related protein Rap-1b (GTP-binding protein smg p21B)	GTP binding; cytosol; plasma membrane; small GTPase mediated signal transduction	Cell membrane. Cytoplasm ,cytosol.	Small GTPase superfamily, Ras family
87 RHG08_HUMAN	ARHGAP8	P85298	Rho GTPase-activating protein 8 (Rho-type GTPase-activating protein 8)	GTPase activator activity; intracellular; signal transduction		
38 RSU1_HUMAN	RSU1 (RSP1)	Q15404	Ras suppressor protein 1 (Rsu-1) (RSP-1)	protein binding; signal transduction		
<b>39</b> SEP11_HUMAN	11-Se	p Q9NVA2	Septin-11	GTP binding; cell cycle; cell division; nucleus; protein binding; protein heterooligomerization; septin complex; stress fiber		Septin family
00 SNP23_HUMAN	SNAP23	000161	Synaptosomal-associated protein 23 (SNAP- 23) (Vesicle-membrane fusion protein SNAP- 23)	cell junction; cytoplasm; membrane fusion; nucleus; post- Golgi vesicle-mediated transport; protein binding; protein transport; synaptes; synaptosome; vesicle targeting		SNAP-25 family
91 SODC_HUMAN	SOD1	P00441	Superoxide dismutase [Cu-Zn] (EC 1.15.1.1)	DNA fragmentation involved in apoptosis; activation of MAPK activity; antioxidant activity; auditory receptor cell stereocilium organization; cell aging; cell soma; cellular iron ion homeostasis; chaperone binding; copper ion binding; cytoplasmic vesicle; cytosol; dendrite cytoplasm; double-strand break repair; embryo implantation; extracellular matrix; extracellular space; glutathione metabolic process; heart contraction; hydrogen peroxide biosynthetic process; locomotory behavior; mitochondrial matrix; muscle maintenance; myelin maintenance; myelin mointenance; myeloid cell homeostasis; negative regulation of cholesterol biosynthetic process; negative regulation of cholesterol biosynthetic process; negative regulation of neuron apoptosis; neurofilament cytoskeleton organization; nucleus; ovarian follicle development; positive regulation of apoptosis; positive regulation of apoptosis; positive regulation of apoptosis; positive regulation of apotosis; positive regulation of apoptosis; positive regulation of apoptosis; positive regulation of cytokine production; protein	Cytoplasm.	Cu-Zn superoxide dismutase family
				ULLY OKIDE DROUDCTION: DROTEIN		

Entry name	Gene names	Uniprot Accession	Protein names	Gene Ontology	Subcellular Localization	
93 SPRC_HUMAN	SPARC (ON)	P09486	SPARC (Secreted protein acidic and rich in cysteine) (Osteonectin) (ON) (Basement- membrane protein 40) (BM-40)	basement membrane; calcium ion binding; collagen binding; copper ion binding; extracellular space; ossification; platelet alpha granule lumen; transmembrane receptor protein tyrosine kinase signaling pathway		SPARC family
94 SRGN_HUMAN	SRGN (PRG) (PRG1)	P10124	Serglycin (Secretory granule proteoglycan core protein) (Platelet proteoglycan core protein) (P.PG) (Hematopoetic proteoglycan core protein)		Cytoplasmic granule. Secreted ,extracellular space. Golgi apparatus.	Serglycin family
95 SSF1_HUMAN	PPAN (SSF1)	Q9NQ55	Suppressor of SWI4 1 homolog (Ssf-1) (Peter Pan homolog)	RNA splicing; nucleolus; protein binding	Nucleus ,nucleolus.	
96 STOM_HUMAN	STOM (BND7) (EPB72)	P27105	Erythrocyte band 7 integral membrane protein (Stomatin) (Protein 7.2b)	cytoskeleton; integral to plasma membrane; melanosome; membrane raft; protein binding; protein homooligomerization	Cell membrane; Single- pass membrane protein; Cytoplasmic side. Cell membrane; Lipid-anchor; Cytoplasmic side. Melanosome.	Band 7/mec-2 family
97 SYUA_HUMAN	SNCA (NACP) (PARK1)	P37840	Alpha-synuclein (Non-A beta component of AD amyloid) (Non-A4 component of amyloid precursor) (NACP)	axon; cell cortex; cytosol; growth cone; histone binding; negative regulation of histone acetylation; negative regulation of monooxygenase activity; nucleus; plasma membrane; regulation of dopamine secretion; response to interferon-gamma	Nucleus.	Synuclein family
98 TBAL3_HUMAN	TUBAL3	A6NHL2	Tubulin alpha chain-like 3	GTP binding; GTPase activity; microtubule; microtubule-based movement; protein complex; protein polymerization; structural molecule activity		Tubulin family
99 TPM2_HUMAN	TPM2 (TMSB)	P07951	Tropomyosin beta chain (Tropomyosin-2) (Beta tropomyosin)	actin binding; muscle thin filament tropomyosin; regulation of ATPase activity; structural constituent of muscle	Cytoplasm ,cytoskeleton.	Tropomyosin family
100 TPM3_HUMAN	ТРМЗ	P06753	Tropomyosin alpha-3 chain (Tropomyosin-3) (Gamma-tropomyosin) (Tropomyosin-5) (hTM5)	actin binding; cell motion; muscle thin filament tropomyosin; regulation of muscle contraction	Cytoplasm ,cytoskeleton.	Tropomyosin family
101 TPM4_HUMAN	TPM4	P67936	Tropomyosin alpha-4 chain (Tropomyosin-4) (TM30p1)	actin binding; calcium ion binding; cell motion; muscle thin filament tropomyosin; structural constituent of muscle	Cytoplasm ,cytoskeleton.	Tropomyosin family
102 TYB4_HUMAN	TMSB4X (TB4X) (THYB4) (TMSB4)	P62328	Thymosin beta-4 (T beta-4) (Fx) [Cleaved into: Hematopoietic system regulatory peptide (Seraspenide)]	actin binding; actin cytoskeleton	Cytoplasm ,cytoskeleton.	Thymosin beta family
103 VDAC2_HUMAN	VDAC2	P45880	Voltage-dependent anion-selective channel protein 2 (VDAC-2) (hVDAC2) (Outer mitochondrial membrane protein porin 2)	anion transport; integral to membrane; mitochondrial nucleoid; mitochondrial outer membrane; nucleotide binding; protein binding; voltage-gated anion channel activity	Mitochondrion outer membrane.	Eukaryotic mitochondrial porin family
104 WASP_HUMAN	WAS (IMD2)	P42768	Wiskott-Aldrich syndrome protein (WASp)	actin cytoskeleton; blood coagulation; cytoplasm; defense response; epidermis development; identical protein binding; immune response; nucleus; small GTPase regulator activity	Cytoplasm ,cytoskeleton.	